Compact circuit-breaker NZM up to 1600 A Compact switch-disconnectors N, PN up to 1600 A

Safe energy control, switching and control in industrial settings, buildings and machinery construction: innovative protection concept coupled with diagnostic and communication functions make it possible.

The NZM circuit-breaker assortment offers an interface for the SmartWire-Darwin communication system. → Page 17/140

Model series NZM1 – NZM4
Only four compact switches cover all applications +++ 3- and 4-pole +++ Flexible mounting through modular functions groups +++ Complete nominal current up to 50 °C ambient temperature +++ Suitable for use worldwide→Page 17/4

Door coupling rotary handles
Very wide range of variants for each application +++ All applications have identical drilling template +++ Automatic centering +++ Shaft support for years of operational safety +++ Sidewall installation for space-saving main switch installation Page 17/118

Standard auxiliary contacts, trip-indicator auxiliary contacts from the Eaton command device program.
Favorably priced identical parts from the Titan program reduce variety of types and stockkeeping +++ Installation from front to same position +++ Easy clip-in reduces assembling costs→Page 17/106

Remote operators
Unified functions concept for all variants +++ Small closing delays from 60 – 100 ms +++ Can be locked and sealed to provide safety→ Page 17/134

Diagnostics software NZM-XPC-SOFT
Diagnostics in fault scenario +++ Error-free commissioning +++ Load analysis in operation → Page 138

Eaton After Sales Service
Testing switching devices in compliance with regulations applicable to this technology→S22/2

Compact circuit-breakers and switch-disconnectors up to 1600 A

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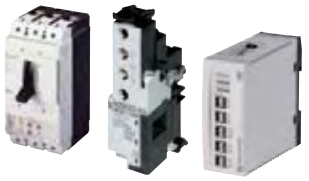

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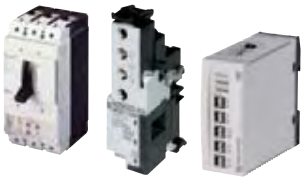

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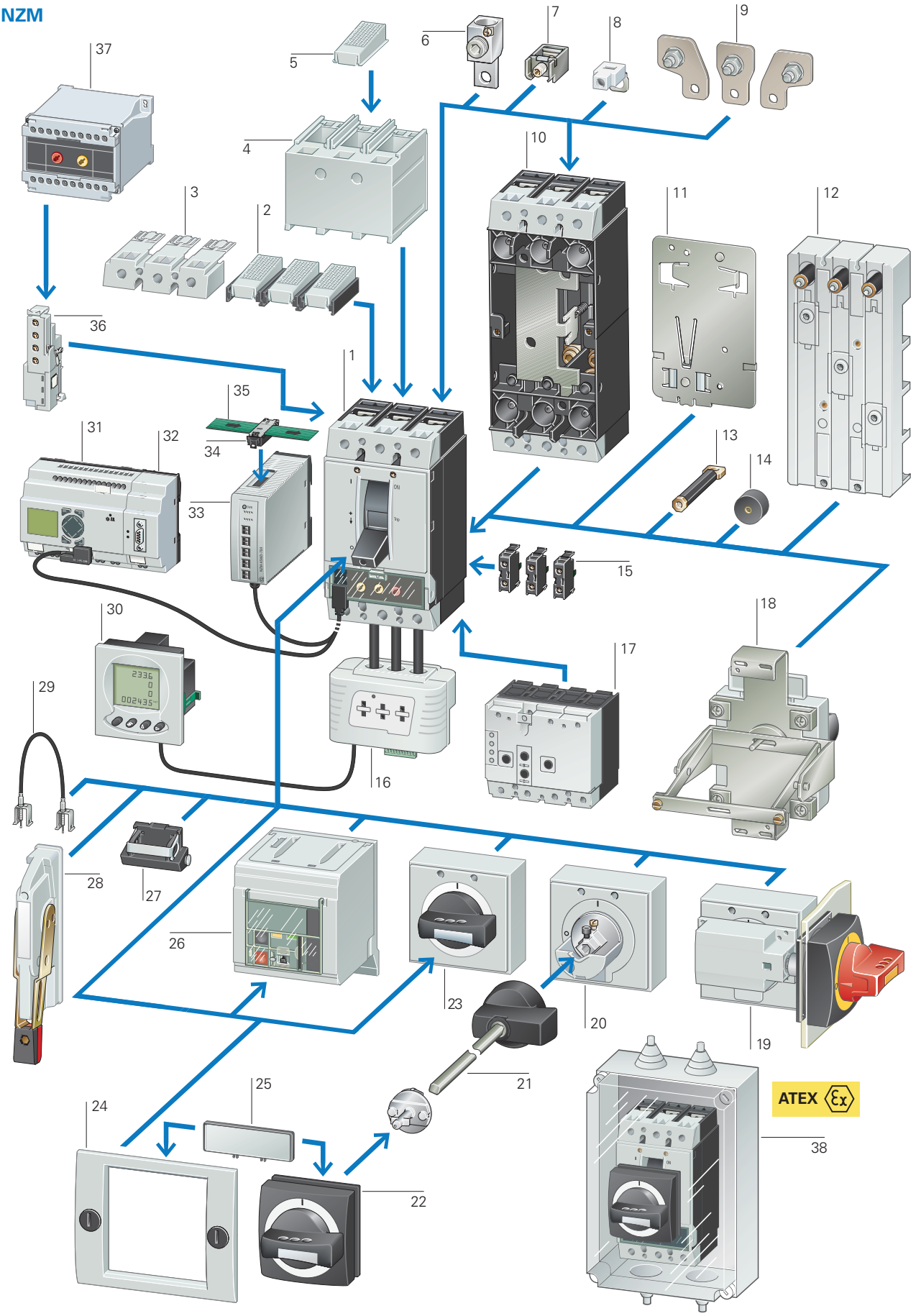
System overview

1 NZM



Basic devices

1

Rated uninterrupted current up to 1600A
Switching capacity 25, 36, 50, 150 kA at 415 V
Adjustable releases for overload and short-circuit
Adjustable time selectivity
Protection of systems, cables, motors, generators
3 and 4 pole; IEC/EN 60947

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Switch-disconnectors 1

Rated uninterrupted current up to 1600 A
Can be tripped remotely with undervoltage or shunt release
3 and 4 pole; IEC/EN 60947

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Circuit-breakers for North America 1

Rated uninterrupted current up to 1200 A
Switching capacity 25, 35, 100 kA at 480 V
Adjustable release for overload and short-circuit
Adjustable time selectivity
Protection of systems, cables, motors, generators
3 and 4 pole, UL 489/CSA 22.2 no. 5.1, IEC/EN 60947

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Molded case switches for North America 1

Rated uninterrupted current up to 1200 A
Can be tripped remotely with undervoltage or shunt release
3 pole, UL489/CSA 22.2 no. 5.1

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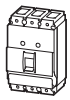
NZM1, NZM2, NZM3, NZM4

Circuit-breakers
With main switch characteristics to IEC/EN 60204 and Isolator characteristics to IEC/EN 60947, VDE 0660

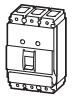


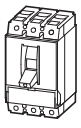
Rated uninterrupted current I_u= Rated current I_n Adjustable overload releases I_r Adjustable short-circuit releases I_i Delayed short-circuit releases I_{sd}	**Thermomagnetic releases System cable protection**					**Motor protection**			
	I_u A	I_u A	I_o A	I_r A	I_i A	I_u A	I_u A	I_r A	I_i A
Ambient temperature at 100% I_u min./max. -25/+50 °C	20	20	20	0.8 - 1xI_n	350	20	20	0.8 -1xI_n	350
	25	25	25	0.8 - 1xI_n	350	25	25	0.8 -1xI_n	350
	32	32	32	0.8 - 1xI_n	350	32	32	0.8 -1xI_n	10 - 14xI_n
	40	40	40	0.8 - 1xI_n	8 - 10xI_n	40	40	0.8 -1xI_n	8 - 14xI_n
	50	50	50	0.8 - 1xI_n	6 - 10xI_n	50	50	0.8 -1xI_n	8 - 14xI_n
	63	63	63	0.8 - 1xI_n	6 - 10xI_n	63	63	0.8 -1xI_n	8 - 14xI_n
	80	80	80	0.8 - 1xI_n	6 - 10xI_n	80	80	0.8 -1xI_n	8 - 14xI_n
	100	100	100	0.8 - 1xI_n	6 - 10xI_n	100	100	0.8 -1xI_n	NZM1:
	100	100	100	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 12.5xI_n
	100	100	100	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	NZM2:
	100	100	100	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 14xI_n
	125	125	125	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 14xI_n
	160	160	160	0.8 - 1xI_n	6 - 10xI_n		125	0.8 -1xI_n	8 – 14xI_n
	200	200	200	0.8 - 1xI_n	NZM1:8xI_n		160	0.8 -1xI_n	8 – 14xI_n
	250	250	250	0.8 - 1xI_n	6 - 10xI_n		200	0.8 -1xI_n	8 – 14xI_n
	320	320	320	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 14xI_n
	400	400	400	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 14xI_n
	500	500	500	0.8 - 1xI_n	6 - 10xI_n			0.8 -1xI_n	8 – 14xI_n

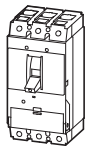
Basic switching capacity		**NZMB1-A...**		**NZMB2-A...**				**NZMB2-M...**		**NZMB2-M...**	
400/415V	kA/p.f	25	0.25	25	0.25			25	0.25	25	0.25
440V	kA/p.f	25	0.25	25	0.25			25	0.25	25	0.25
Comfort switching capacity		**NZMC1-A...**		**NZMC2-A...**		**NZMC3-A...**					
400/415V	kA/p.f	36	0.25	36	0.25	36	0.25				
440V	kA/p.f	30	0.25	30	0.25	30	0.25				
525V	kA/p.f	12	0.5	12	0.5	12	0.5				
690V	kA/p.f	8	0.5	8	0.5	8	0.5				
Normal switching capacity		**NZMN1-A...**		**NZMN2-A...**		**NZMN3-A...**		**NZMB2-M...**		**NZMB2-M...**	
400/415V	kA/p.f	50	0.25	50	0.25	50	0.25	50	0.25	50	0.25
440V	kA/p.f	35	0.25	35	0.25	35	0.25	35	0.25	35	0.25
525V	kA/p.f	20	0.30	20	0.25	20	0.25	20	0.30	20	0.25
690V	kA/p.f	10	0.50	10	0.30	10	0.30	10	0.50	10	0.30
High switching capacity		**NZMH1-A...**		**NZMH2-A...**		**NZMH3-A...**				**NZMH2-M...**	
400/415V	kA/p.f	100	0.20	150	0.20	150	0.20			150	0.20
440V	kA/p.f	35	0.25	130	0.20	130	0.20			130	0.20
525V	kA/p.f	20	0.30	50	0.25	65	0.20			50	0.25
690V	kA/p.f	10	0.50	20	0.30	35	0.25			20	0.30

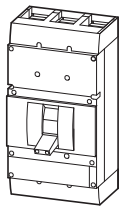
Notes The stated switching capacity values are rated ultimate short-circuit breaking capacities (I_{cu})

Switch-disconnectors
With main switch characteristics to IEC/EN 60204 and VDE 0113
Isolating characteristics to IEC/EN 60947, VDE 0660
without overload and short-circuit release

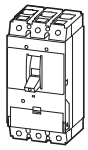
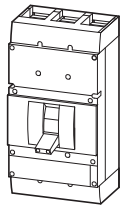








Rated uninterrupted current I_u= Rated current I_n		63 - 160		160 - 250		400 - 630		630 - 1600	
Type N can be triggered with U/A shunt release		**PN1-...**	**PN1-...**	**PN1-...**	**PN1-...**	**PN1-...**	**PN1-...**	**PN1-...**	**PN1-...**
Rated short-circuit making capacity I_{cm}	kA	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Rated short-time withstand current Icw(1s-1s-current$_{rms}$)	kA	2	2	2	2	2	2	2	2

Electronic releases
Systems,cable, selectivity and generator protection

I_u A	I_u A	I_o A	I_r A	I_i A	I_u A
100	250		0.5 - 1 x I_n	2 - 10 x I_r	2 - 12 x I_n
160	400				
250	630	630			
		800			
		1000			
		1250		2 - 6 x I_r	2 - 8 x I_r
		1600			

Motor protection

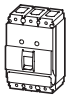
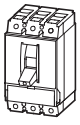
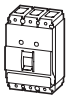
I_u A	I_r A	I_i A
90	0.5 - 1 x I_n	2 - 14 x I_r
140		
220		
350		
450		
550		
875		
1400		

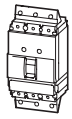
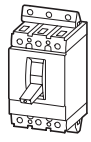
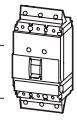
NZMN2-...E...		**NZMN3-...E...**		**NZMN4-...E...**		**NZMN2-ME...**		**NZMN3-ME...**		**NZMN4-ME...**	
50	0.25	50	0.25	50	0.25	50	0.25	50	0.25	50	0.25
35	0.25	35	0.25	35	0.25	35	0.25	35	0.25	35	0.25
25	0.25	25	0.25	25	0.25	25	0.25	25	0.25	25	0.25
20	0.30	20	0.30	20	0.30	20	0.30	20	0.30	20	0.30
NZMH2-...E...		**NZMH3-...E...**		**NZMH4-...E...**		**NZMH2-ME...**		**NZMH3-ME...**		**NZMH4-ME...**	
150	0.20	150	0.20	85[1)]	0.20	150	0.20	150	0.20	85[1)]	0.20
130	0.20	130	0.20	85	0.20	130	0.20	130	0.20	85	0.20
50	0.25	65	0.20	65	0.20	50	0.25	65	0.20	65	0.20
20	0.30	35	0.30	50	0.25	20	0.30	35	0.30	50	0.25

A selection of approved circuit-breakers and switch-disconnectors for world-wide use→Page 17/54
1)For higher switching capacity please inquire

Ordering

NZM...A

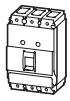
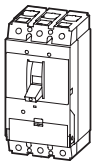
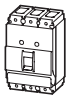
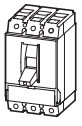
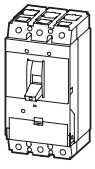
Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range Overload releases	Short-circuit releases Non-delayed	Fixed mounting with screw terminals **Part no.** Article no.	**Price** See price list	
I_{cu} kA	$I_n=I_u$ A	I_r A	$I_r=I_n$ X ...			
System and cable protection						
Basic switching capacity 	**25**	20	15-20	350A fixed	Screw terminals as accessories	
		5	20-25	350A fixed		
		32	25-32	350A fixed		
		40	32-40	8-10		
		50	40-50	6-10		
		63	50-63	6-10		
		80	63-80	6-10		
		100	80-1000	6-10		
		125	100-125	6-10		
		160	125-160	1280 A fixed		
Basic switching capacity 	**25**	160	125-160	6-10	**NZMB2-A160** 259088	S
		200	160-200	6-10	**NZMB2-A200** 259089	S
		250	200-250	6-10	**NZMB2-A250** 259090	S
		300	240-300	6-10	**NZMB2-A300** 107518	S
Comfort switching capacity 	**36**	20	15-20	350A fixed	Screw terminals as accessories	
		5	20-25	350A fixed		
		32	25-32	350A fixed		
		40	32-40	8-10		
		50	40-50	6-10		
		63	50-63	6-10		
		80	63-80	6-10		
		100	80-1000	6-10		
		125	100-125	6-10		
		160	125-160	1280 A fixed		

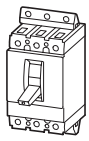
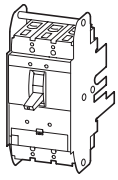
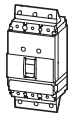
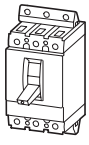
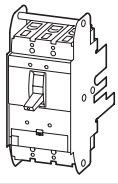
Fixed mounting with screw terminals			Plug-in units			
Part no. Article no.	**Price** See price list		**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
			Order base separately			
						B = box terminals **S = screw terminals** For further terminal types see accessories
NZMB1-A20 280987	B		**NZMB1-A20-SVE** 112733		1 off	IEC/EN 60947-2
NZMB1-A25 280988	B		**NZMB1-A25-SVE** 112734			
NZMB1-A32 280989	B		**NZMB1-A32-SVE** 112735			
NZMB1-A40 259075	B		**NZMB1-A40-SVE** 112703			
NZMB1-A50 259076	B		**NZMB1-A50-SVE** 112704			
NZMB1-A63 259077	B		**NZMB1-A63-SVE** 112705			
NZMB1-A80 259078	B		**NZMB1-A80-SVE** 112706			
NZMB1-A100 259079	B		**NZMB1-A100-SVE** 112707			
NZMB1-A125 259080	B		**NZMB1-A125-SVE** 112708			
NZMB1-A160 281230	B		–			
NZMB2-A160-BT 110215	B		**NZMB2-A160-SVE** 113193			
NZMB2-A200-BT 110216	B		**NZMB2-A200-SVE** 113194			
NZMB2-A250-BT 110217	B		**NZMB2-A250-SVE** 113195			
NZMB2-A300-BT 110214	B		–			
NZMC1-A20 283293	B		**NZMC1-A20-SVE** 112753		1 off	IEC/EN 60947-2
NZMC1-A25 283294	B		**NZMC1-A25-SVE** 112754			
NZMC1-A32 283295	B		**NZMC1-A32-SVE** 112755			
NZMC1-A40 271392	B		**NZMC1-A40-SVE** 112737			
NZMC1-A50 271393	B		**NZMC1-A50-SVE** 112738			
NZMC1-A63 271394	B		**NZMC1-A63-SVE** 112739			
NZMC1-A80 271395	B		**NZMC1-A80-SVE** 112740			
NZMC1-A100 271396	B		**NZMC1-A100-SVE** 112741			
NZMC1-A125 271397	B		**NZMC1-A125-SVE** 112742			
NZMC1-A160 283296	B		–			

NZM...A

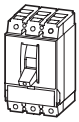
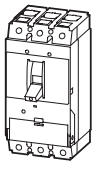
Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range		Fixed mounting with screw terminals	
		Overload releases	Short-circuit releases Non-delayed	**Part no.** Article no.	**Price** See price list
I_{cu} kA	$I_n=I_u$ A	I_r A	$I_i=I_n$ X ...		

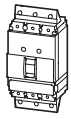
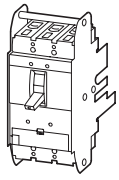
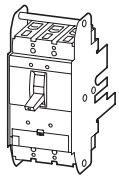
System and cable protection

Comfort switching capacity 	**36**	160	125-160	6-10	**NZMC2-A160** 271421	S
		200	160-200	6-10	**NZMC2-A200** 271422	S
		250	200-250	6-10	**NZMC2-A250** 271423	S
		300	240-300	6-10	**NZMC2-A300** 107519	S
	**36**	320	250-320	6-10	**NZMC3-A320** 109665	S
		400	320-400	6-10	**NZMC3-A400** 109666	S
		500	400-500	6-10	**NZMC3-A500** 109667	S
Normal switching capacity 	**50**	20	**20-25**	350 A fix de	Screw terminals as accessories	
		25	20-25	350 A fixde		
		32	25-32	350 A fixde		
		40	32-40	8-10		
		50	40-50	6-10		
		63	50-63	6-10		
		80	63-80	6-10		
		100	80-100	6-10		
		125	100-125	6-10		
		160	125-160	1280 A fixde		
	**50**	160	125-160	6-10	**NZMN2-A160** 259092	S
		200	160-200	6-10	**NZMN2-A200** 259093	S
		250	200-250	6-10	**NZMN2-A250** 259094	S
		300	240-300	6-10	**NZMN2-A300** 107580	S
	**50**	320	250-320	6-10	**NZMN3-A320** 109669	S
		400	320-400	6-10	**NZMN3-A400** 109670	S
		500	400-500	6-10	**NZMN3-A500** 109671	S

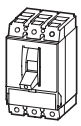
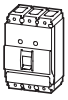
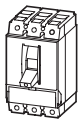
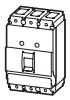
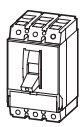
Fixed mounting with screw terminals Part no. Article no.		Price See price list		Plug-in units Part no. Article no. Order base separately	Price See price list	Std. pack	Notes B = box terminals S = screw terminals For further terminal types see accessories
NZMC2-A160-BT 110219	B			**NZMC2-A160-SVE** 113220		1 off	IEC/EN 60947-2
NZMC2-A200-BT 110280	B			**NZMC2-A200-SVE** 113221			
NZMC2-A250-BT 110281	B			**NZMC2-A250-SVE** 113222			
NZMC2-A300-BT 110218	B			–			
NZMC3-A320-BT 110299	B			**NZMC3-A320-AVE** 113509			
NZMC3-A400-BT 110300	B			**NZMC3-A320-AVE** 113510			
NZMC3-A500-BT 110301	B			**NZMC3-A500-AVE** 113511			
NZMN1-A20 281231	B			**NZMN1-A20-SVE** 112776		1 off	IEC/EN 60947-2
NZMN1-A25 281232	B			**NZMN1-A25-SVE** 112777			
NZMN1-A32 281233	B			**NZMN1-A32-SVE** 112778			
NZMN1-A40 259081	B			**NZMN1-A40-SVE** 112757			
NZMN1-A50 259082	B			**NZMN1-A50-SVE** 112758			
NZMN1-A63 259083	B			**NZMN1-A63-SVE** 112759			
NZMN1-A80 259084	B			**NZMN1-A80-SVE** 112760			
NZMN1-A100 259085	B			**NZMN1-A100-SVE** 112761			
NZMN1-A125 259086	B			**NZMN1-A125-SVE** 112762			
NZMN1-A160 281234	B			–			
NZMN2-A160-BT 110283	B			**NZMN2-A160-SVE** 113244			
NZMN2-A200-BT 110284	B			**NZMN2-A200-SVE** 113245			
NZMN2-A250-BT 110285	B			**NZMN2-A250-SVE** 113246			
NZMN2-A300-BT 110282	B			–			
NZMN3-A320-BT 110302	B			**NZMN2-A320-AVE** 110858			
NZMN3-A400-BT 110303	B			**NZMN3-A400-AVE** 110859			
NZMN3-A500-BT 110304	B			**NZMN3-A500-AVE** 110860			

NZM...A

	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range		Fixed mounting with screw terminals		
			Overload releases	Short-circuit releases	Part no.		Price
				Non-delayed	Article no.		See price list
	I_{cu}	$I_n=I_u$	I_r				
	kA	A	A	$I_i=I_n$ X ...			
System and cable protection							
High switching capacity	**100**	20	15-20	350 A fix de	Screw terminals as accessories		
		25	20-25	350 A fix de			
		32	25-32	350 A fix de			
		40	32-40	8-10			
		50	40-50	6-10			
		63	50-63	6-10			
		80	63-80	6-10			
		100	80-100	6-10			
		125	100-125	6-10			
		160	125-160	1280 A fix de			
	**150**	20	15-20	350 A fix de	**NZMH2-A20** 281281		S
		25	20-25	6-10	**NZMH2-A25** 281282		S
		32	25-32	350 A fixde	**NZMH2-A32** 281283		S
		40	32-40	8-10	**NZMH2-A40** 259095		S
		50	40-50	6-10	**NZMH2-A50** 259096		S
		63	50-63	6-10	**NZMH2-A63** 259097		S
		80	63-80	6-10	**NZMH2-A80** 259098		S
		100	80-100	6-10	**NZMH2-A100** 259099		S
		125	100-125	6-10	**NZMH2-A125** 259100		S
		160	125-160	6-10	**NZMH2-A160** 259101		S
		200	160-200	6-10	**NZMH2-A200** 259102		S
		250	200-250	6-10	**NZMH2-A250** 259103		S
		300	240-300	6-10	**NZMH2-A300** 107581		S
	**150**	320	250-320	6-10	**NZMH3-A320** 109673		S
		400	320-400	6-10	**NZMH3-A400** 109674		S
		500	400-500	6-10	**NZMH3-A500** 109675		S

Fixed mounting with screw terminals			**Plug-in units**			
Part no. Article no.	**Price** See price list		**Part no.** Article no. Order base separately	**Price** See price list	Std. pack	**Notes** **B = box terminals** **S = screw terminals** For further terminal types see accessories
NZMH1-A20 284376	B		**NZMH1-A20-SVE** 112795		1 off	IEC/EN 60947-2
NZMH1-A25 284377	B		**NZMH1-A25-SVE** 112796			
NZMH1-A32 284378	B		**NZMH1-A32-SVE** 112797			
NZMH1-A40 284379	B		**NZMH1-A40-SVE** 112798			
NZMH1-A50 284410	B		**NZMH1-A50-SVE** 112799			
NZMH1-A63 284411	B		**NZMH1-A63-SVE** 112800			
NZMH1-A80 284412	B		**NZMH1-A80-SVE** 112801			
NZMH1-A100 284413	B		**NZMH1-A100-SVE** 112802			
NZMH1-A125 284414	B		**NZMH1-A125-SVE** 112803			
NZMH1-A160 284415	B		–			
NZMH2-A20-BT 110296	B		**NZMH2-A20-SVE** 113351			
NZMH2-A25-BT 110297	B		**NZMH2-A25-SVE** 113352			
NZMH2-A32-BT 110298	B		**NZMH2-A32-SVE** 113353			
NZMH2-A40-BT 110287	B		**NZMH2-A40-SVE** 113328			
NZMH2-A50-BT 110288	B		**NZMH2-A50-SVE** 113329			
NZMH2-A63-BT 110289	B		**NZMH2-A63-SVE** 113330			
NZMH2-A80-BT 110290	B		**NZMH2-A80-SVE** 113331			
NZMH2-A100-BT 110291	B		**NZMH2-A100-SVE** 113332			
NZMH2-A125-BT 110292	B		**NZMH2-A125-SVE** 113333			
NZMH2-A160-BT 110293	B		**NZMH2-A160-SVE** 113334			
NZMH2-A200-BT 110294	B		**NZMH2-A200-SVE** 113335			
NZMH2-A250-BT 110295	B		**NZMH2-A250-SVE** 113336			
NZMH2-A250-BT 110286	B		–			
NZMH3-A320-BT 110305	B		**NZMH3-A320-AVE** 110861			
NZMH3-A400-BT 110306	B		**NZMH3-A320-AVE** 110862			
NZMH3-A500-BT 110307			**NZMH3-A500-AVE** 110863			

NZM...M

Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range		Rated operational power AC-3 50/60 Hz	Rated operational current	**Fixed mounting** with screw terminals	**Price** See price list
		Overload releases	Short-circuit releases Non-delayed			**Part no.** Article no.	
				400V	400V		
I_{cu} kA	$I_n=I_u$ A	I_r A	$I_i=I_n$ X ...	P W	I_e A		
							
Basic switching capacity 	**Motor protection** • NZM...1-M...: with phase failure sensitivity • Tripping class 10 A						
25	40	32-40	8-14	18.5	36	Screw terminals as accessories	
	50	40-50	8-14	22	41		
	63	50-63	8-14	30	55		
	80	63-80	8-14	37	68		
	100	80-100	8-12.5	45	81		
							
25	125	100-125	8-14	45	99	**NZMB2-M125** 265715	S
	160	125-160	8-14	75	134	**NZMB2-M160** 265716	S
	200	160-200	8-14	110	196	**NZMB2-M200** 265717	S
Comfort switching capacity 							
36	40	32-40	8-14	18.5	36	Screw terminals as accessories	
	50	40-50	8-14	22	41		
	63	50-63	8-14	30	55		
	80	63-80	8-14	37	68		
	100	80-100	8-12.5	45	81		
							
36	125	100-125	8-14	45	99	**NZMC2-M125** 271424	S
	160	125-160	8-14	75	134	**NZMC2-M160** 271425	S
	200	160-200	8-14	110	196	**NZMC2-M200** 271426	S
Normal switching capacity 							
50	40	32-40	8-14	18.5	36	Screw terminals asaccessories	
	50	40-50	8-14	22	41		
	63	50-63	8-14	30	55		
	80	63-80	8-14	37	68		
	100	80-100	8-12.5	45	81		
							
50	125	100-125	8-14	45	99	**NZMN2-M125** 265723	S
	160	125-160	8-14	75	134	**NZMN2-M160** 265724	S
	200	160-200	8-14	110	196	**NZMN2-M200** 265725	S

NZM...M

Fixed mounting
with screw terminals

Part no.
Article no.

Price
See price list

Plug-in units

Part no.
Article no.

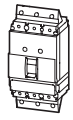
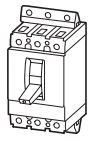
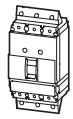
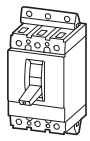
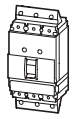
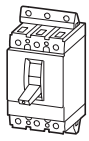
Order base separately

Price
See price list

Std. pack

Notes

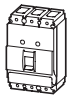
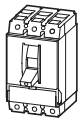
B = box terminals
S = screw terminals
For further terminal types see accessories

NZMB1-M40 265710	B		**NZMB1-M40-SVE** 112709	1 off	IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breakers fulfill all requirements for utilization category AC-3.
NZMB1-M50 265711	B		**NZMB1-M50-SVE** 112720		
NZMB1-M63 265712	B		**NZMB1-M63-SVE** 112721		
NZMB1-M80 265713	B		**NZMB1-M80-SVE** 112722		
NZMB1-M100 265714	B		**NZMB1-M100-SVE** 112723		
Terminals as accessory	B		**NZMB2-M125-SVE** 113196		
			NZMB2-M160-SVE 113197		
			NZMB2-M200-SVE 113198		
NZMC1-M40 271398	B		**NZMC1-M40-SVE** 112743		
NZMC1-M50 271399	B		**NZMC1-M50-SVE** 112744		
NZMC1-M63 271400	B		**NZMC1-M63-SVE** 112745		
NZMC1-M80 271401	B		**NZMC1-M80-SVE** 112746		
NZMC1-M100 271402	B		**NZMC1-M100-SVE** 112747		
Terminals as accessory	B		**NZMC2-M125-SVE** 113223		
			NZMC2-M160-SVE 113224		
			NZMC2-M200-SVE 113225		
NZMN1-M40 265718	B		**NZMN1-M40-SVE** 112763		
NZMN1-M50 265719	B		**NZMN1-M50-SVE** 112764		
NZMN1-M63 265720	B		**NZMN1-M63-SVE** 112765		
NZMN1-M80 265721	B		**NZMN1-M80-SVE** 112766		
NZMN1-M100 265722	B		**NZMN1-M100-SVE** 112767		
Terminals as accessory	B		**NZMN2-M125-SVE** 113250		
			NZMN2-M160-SVE 113251		
			NZMN2-M200-SVE 113252		

Tripping class	**Tripping time T_p with load on all poles of 7.2 times set current value.**
10A	2 s < T_p ≦ 10 s
10	4 s < T_p ≦ 10 s
20	6 s < T_p ≦ 20 s
30	9 s < T_p ≦ 30 s

1

NZM...M

Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range		Rated operational power AC-3 50/60 Hz	Rated operational current	**Fixed mounting** with screw terminals	**Price** See price list
		Overload releases	Short-circuit releases Non-delayed			**Part no.** Article no.	
				400V	400V		
I_{cu} kA	$I_n=I_u$ A	I_r A	$I_i=I_n$ X ...	P W	I_e A		
							
High switching capacity	**Motor protection**						
	• NZM...1-M...: with phase failure sensitivity • Tripping class 10 A						
							
100	40	32-40	8-14	18.5	36	Screw terminals as accessories	
	50	40-50	8-14	22	41		
	30	50-63	8-14	30	55		
	80	63-80	8-14	37	68		
	100	80-100	8-12.5	45	81		
	20	16-20	350 A fixed	7.5	16	**NZMH2-M20** 281299	S
	25	20-25	350 A fixed	11	21.7	**NZMH2-M25** 281300	S
	32	25-32	10-14	15	29.3	**NZMH2-M32** 281301	S
High switching capacity							
							
150	40	32-40	8-14	18.5	36	**NZMH2-M40** 281302	S
	50	40-50	8-14	22	41	**NZMH2-M50** 281303	S
	63	50-63	8-14	30	55	**NZMH2-M63** 281304	S
	80	63-80	8-14	37	68	**NZMH2-M80** 281305	S
	100	80-100	8-14	45	81	**NZMH2-M100** 281306	S
	125	100-125	8-14	45	99	**NZMH2-M125** 281307	S
	160	125-160	8-14	75	134	**NZMH2-M160** 281308	S
	200	160-200	8-14	110	196	**NZMH2-M200** 281309	S

Fixed mounting
with screw terminals

Part no.
Article no.

Price
See price list

Plug-in units

Part no.
Article no.

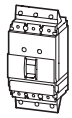
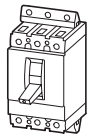
Order base separately

Price
See price list

Std. pack

Notes

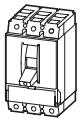
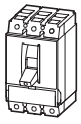
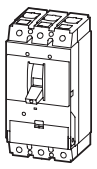
B = box terminals
S = screw terminals
For further terminal types see accessories

NZMH1-M40 115450	B		**NZMH1-M40-SVE** 115790	1 off	IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breakers fulfill all requirements for utilization category AC-3.
NZMH1-M50 115451	B		**NZMH1-M50-SVE** 115791		
NZMH1-M63 115452	B		**NZMH1-M63-SVE** 115792		
NZMH1-M80 115453	B		**NZMH1-M80-SVE** 115793		
NZMH1-M100 115454	B		**NZMH1-M100-SVE** 115794		
Terminals as accessory	B		**NZMH2-M20-SVE** 113354		
			NZMH2-M25-SVE 113355		
			NZMH2-M32-SVE 113356		
			NZMH2-M40-SVE 113357		
			NZMH2-M50-SVE 113358		
			NZMH2-M63-SVE 113359		
			NZMH2-M80-SVE 113360		
			NZMH2-M100-SVE 113361		
			NZMH2-M125-SVE 113362		
			NZMH2-M160-SVE 113363		
			NZMH2-M200-SVE 113364		

Tripping class	**Tripping time T_p with load on all poles of 7.2 times set current value.**
10A	$2\ s < T_p \leqq 10\ s$
10	$4\ s < T_p \leqq 10\ s$
20	$6\ s < T_p \leqq 20\ s$
30	$9\ s < T_p \leqq 30\ s$

NZM...M

Fixed mounting
with screw terminals

	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range	Rated operational power AC-3 50/60 Hz	Rated operational current	**Part no.** Article no.	**Price** See price list	
			Short-circuit releases	400V	400V			
	I_{cu} kA	$I_n=I_u$ A	Non-delayed $I_i=I_n$ X ...	P W	I_e A			
Short-circuit protection								
Motor protection in conjunction with overload relay • With short-circuit releases • Without overload releases I_r								
Basic switching capacity	**25**	40	8-14	18.5	max.36	Screw terminals as accessories		
		50	8-14	22	max.41			
		63	8-14	30	max.55			
		80	8-14	37	max.68			
		100	8-12.5	45	max.99			
	**25**	125	8-14	45	max.99	**NZMB2-S125** 265736		S
		160	8-14	75	max.134	**NZMB2-S160** 265737		S
		200	8-12.5	110	max.196	**NZMB2-S200** 265738		S
Comfort switching capacity	**36**	40	8-14	18.5	max.36	Screw terminals as accessories		
		50	8-14	22	max.41			
		63	8-14	30	max.55			
		80	8-14	37	max.68			
		100	8-12.5	45	max.99			
	**36**	125	8-14	45	max.99	**NZMC2-S125** 271427		S
		160	8-14	75	max.134	**NZMC2-S160** 271428		S
		200	8-12.5	110	max.196	**NZMC2-S200** 271429		S
	**36**	250	8-14	132	max.231	**NZMC3-S250** 109676		S
		320	8-14	160	max.279	**NZMC3-S320** 109677		S
		400	6-10	200	max.349	**NZMC3-S400** 109678		S
		500	6-10	250	max.437	**NZMC3-S500** 109679		S
Normal switching capacity	**50**	40	8-14	18.5	max.36	Screw terminals as accessories		S
		50	8-14	22	max.41			
		63	8-14	30	max.55			
		80	8-14	37	max.68			
		100	8-12.5	45	max.99			

Fixed mounting
with screw terminals

Part no.
Article no.

Price
See price list

Plug-in/withdrawable units

Part no.
Article no.

Price
See price list

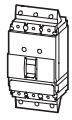
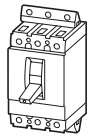
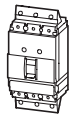
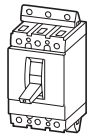
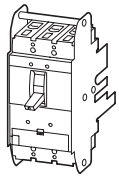
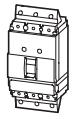
Std. pack

Notes

Order base separately

B = box terminals
S = screw terminals

For further terminal types see accessories

NZMB1-S40 265726	B		**NZMB1-S40-SVE** 112724	
NZMB1-S50 265727	B		**NZMB1-S50-SVE** 112725	
NZMB1-S63 265728	B		**NZMB1-S63-SVE** 112726	
NZMB1-S80 265729	B		**NZMB1-S80-SVE** 112727	
NZMB1-S100 265730	B		**NZMB1-S100-SVE** 112728	
Terminals as accessory			**NZMB2-S125-SVE** 113199	
			NZMB2-S160-SVE 113200	
			NZMB2-S200-SVE 113201	
NZMC1-S40 271403	B		**NZMC1-S40-SVE** 112748	
NZMC1-S50 271404	B		**NZMC1-S50-SVE** 112749	
NZMC1-S63 271405	B		**NZMC1-S63-SVE** 112750	
NZMC1-S80 271406	B		**NZMC1-S80-SVE** 112751	
NZMC1-S100 271407	B		**NZMC1-S100-SVE** 112752	
Terminals as accessory			**NZMC2-S125-SVE** 113226	
			NZMC2-S160-SVE 113227	
			NZMC2-S200-SVE 113228	
			**NZMC3-S250-AVE** 113512	
			NZMC3-S320-AVE 113513	
			NZMC3-S400-AVE 113514	
			NZMC3-S500-AVE 113515	
NZMC1-S40 271403	B		**NZMN1-S40-SVE** 112768	
NZMC1-S50 271404	B		**NZMN1-S50-SVE** 112769	
NZMC1-S63 271405	B		**NZMN1-S63-SVE** 112770	
NZMC1-S80 271406	B		**NZMN1-S80-SVE** 112771	
NZMC1-S100 271407	B		**NZMN1-S100-SVE** 112772	

IEC/EN 60947-4-1, IEC/EN 60947-2

The circuit-breakers fulfill all requirements for utilization category AC-3.

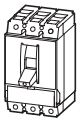
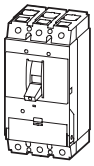
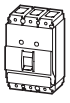
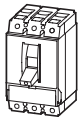
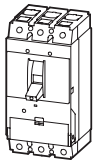
Tripping class	Tripping time T_p with load on all poles of 7.2 times set current value.
10A	$2\ s < T_p \leqq 10\ s$
10	$4\ s < T_p \leqq 10\ s$
20	$6\ s < T_p \leqq 20\ s$
30	$9\ s < T_p \leqq 30\ s$

Selection of circuit-breakers without overload release when combining for instance with ZEV electronic motor-protective relays:

The tripping response of the motor-protective relay is matched by setting the tripping class to match the starting behavior of the motor to be protected.

	I_n in A	Maximum permissible tripping class
NZM...1-S...	40	30
	50	30
	63	30
	80	20
	100	15
NZM...2-S...	40	30
	50	30
	63	30
	80	30
	100	30
	125	30
	160	20
	200	10
NZM...3-S...	250	30
	320	30
	400	30
	500	20

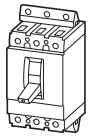
1 NZM...-S

						Fixed mounting with screw terminals		
	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range	Rated operational power AC-3 50/60 Hz	Rated operational current	Part no. Article no.		Price See price list
			Short-circuit releases	400V	400V			
	I_{cu} kA	$I_n=I_u$ A	Non-delayed $I_i=I_n$ X ...	P W	I_e A			
Short-circuit protection								
Motor protection in conjunction with overload relay								
• With short-circuit releases								
• Without overload releases I_r								
Normal switching capacity	**50**	125	8-14	45	max.99	**NZMN2-S125** 265739	S	
		160	8-14	75	max.134	**NZMN2-S160** 265740	S	
		200	8-12.5	110	max.196	**NZMN2-S200** 265741	S	
		250	8-14	132	max.231	**NZMN3-S250** 109680	S	
		320	8-14	160	max.279	**NZMN3-S320** 109681	S	
		400	6-10	200	max.349	**NZMN3-S400** 109682	S	
		500	6-10	250	max.437	**NZMN3-S500** 109683	S	
High switching capacity	**100**	40	8-14	18.5	max.36	Screw terminals as accessories		
		50	8-14	22	max.41			
		63	8-14	30	max.55			
		80	8-14	37	max.68			
		100	8-14	45	max.99			
	150	40	8-14	18.5	max.36	**NZMH2-S40** 265742	S	
		50	8-14	22	max.41	**NZMH2-S50** 265743	S	
		63	8-14	30 37	max.55	**NZMH2-S63** 265744	S	
		80	8-14	45	max.68	**NZMH2-S80** 265745	S	
		100	8-14	45	max.99	**NZMH2-S100** 265746	S	
		125	8-14	75	max.99	**NZMH2-S125** 265747	S	
		160	8-14	110	max.134	**NZMH2-S160** 265748	S	
		200	8-12.5	132	max.196	**NZMH2-S200** 265749	S	
		250	8-14		max.231	**NZMH3-S250** 109684	S	
		320	8-14	160	max.279	**NZMH3-S320** 109685	S	
		400	6-10	200	max.349	**NZMH3-S400** 109686	S	
		500	6-10	250	max.437	**NZMH3-S500** 109687	S	

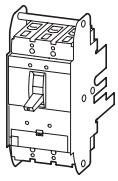
Fixed mounting with screw terminals **Part no.** Article no.	**Price** See price list		Plug-in/withdrawable units **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
			Order base separately			

B = box terminals
S = screw terminals
For further terminal types see accessories

Terminals as accessory



NZMN2-S125-SVE
113253
NZMN2-S160-SVE
113254
NZMN2-S200-SVE
113255



NZMN3-S250-AVE
113523
NZMN3-S320-AVE
113524
NZMN3-S400-AVE
113525
NZMN3-S500-AVE
113526

1 off

IEC/EN 60947-4-1, IEC/EN 60947-2

The circuit-breakers fulfill all requirements for utilization category AC-3.

Tripping class	Tripping time T_p with load on all poles of 7.2 times set current value.
10A	2 s < T_p ≦ 10 s
10	4 s < T_p ≦ 10 s
20	6 s < T_p ≦ 20 s
30	9 s < T_p ≦ 30 s

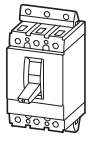
Selection of circuit-breakers without overload release when combining for instance with ZEV electronic motor-protective relays:

The tripping response of the motor-protective relay is matched by setting the tripping class to match the starting behavior of the motor to be protected.

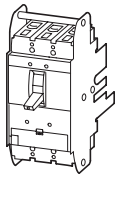
	I_n in A	Maximum permissible tripping class
NZM...1-S...	40	30
	50	30
	63	30
	80	20
	100	15
NZM...2-S...	40	30
	50	30
	63	30
	80	30
	100	30
	125	30
	160	20
	200	10
NZM...3-S...	250	30
	320	30
	400	30
	500	20

NZMH1-S40 284436	B		**NZMH1-S40-SVE** 112805	
NZMH1-S50 284437	B		**NZMH1-S50-SVE** 112806	1 off
NZMH1-S63 284438	B		**NZMH1-S63-SVE** 112807	
NZMH1-S80 284439	B		**NZMH1-S80-SVE** 112808	
NZMH1-S100 284440	B		**NZMH1-S100-SVE** 112809	

Terminals as accessory

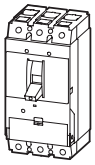
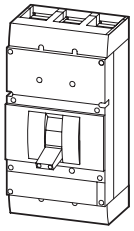
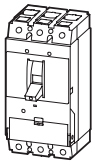
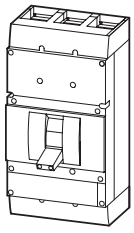
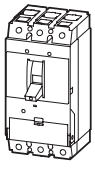


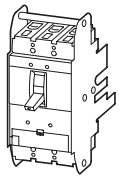
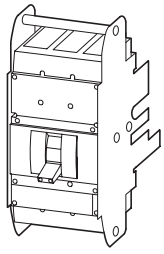
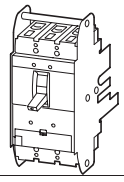
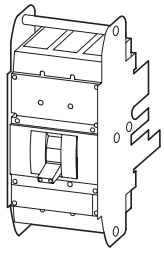
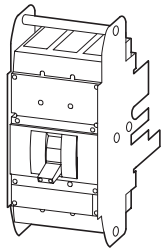
NZMH2-S40-SVE
113340
NZMH2-S50-SVE
113341
NZMH2-S63-SVE
113342
NZMH2-S80-SVE
113343
NZMH2-S100-SVE
113344
NZMH2-S125-SVE
113345
NZMH2-S160-SVE
113346
NZMH2-S200-SVE
113347



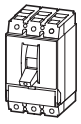
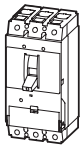
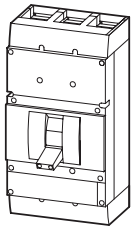
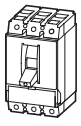
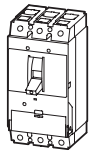
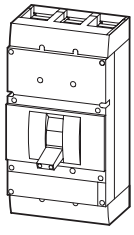
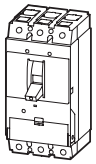
NZMH3-S250-AVE
113566
NZMH3-S320-AVE
113567
NZMH3-S400-AVE
113568
NZMH3-S500-AVE
113569

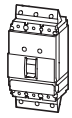
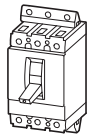
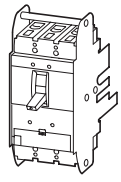
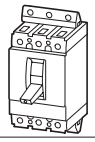
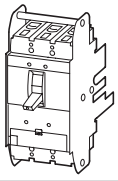
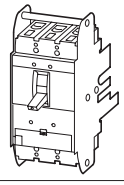
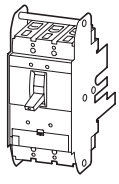
NZM...AE

	Switching capacity 400/415 V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range: Overload releases I_r A	Setting range: Short-circuit releases Non-delayed $I_i = I_n$ x ...	**Fixed mounting** with screw terminals **Part no.** Article no.	**Price** See price list
System and cable protection						
Normal switching capacity	50	630	315-630	2-8	**NZMN3-AE630** 259115	S
	50	630	315-630	2-12	**NZMN4-AE630** 265758	S
		800	400-800	2-12	**NZMN4-AE800** 265759	S
		1000	500-1000	2-12	**NZMN4-AE1000** 265760	S
		1250	630-1250	2-12	**NZMN4-AE1250** 265761	S
		1600	800-1600	2-12	**NZMN4-AE1600** 265762	S
						S
High switching capacity	150	630	315-630	2-8	**NZMH3-AE630** 259118	
	85	630	315-630	2-12	**NZMH4-AE630** 265763	S
		800	400-800	2-12	**NZMH4-AE800** 265764	S
		1000	500-1000	2-12	**NZMH4-AE1000** 265765	S
		1250	630-1250	2-12	**NZMH4-AE1250** 265766	S
		1600	800-1600	2-12	**NZMH4-AE1600** 265767	S
Earth fault protection	50	250	125-250	2-11	**NZMN3-AE250-T** 110888	S
		400	200-400	2-11	**NZMN3-AE400-T** 110889	S
		630	315-630	2-8	**NZMN3-AE630-T** 110890	S
	150	250	125-250	2-11	**NZMH3-AE250-T** 110894	S
		400	200-400	2-11	**NZMH3-AE400-T** 110895	S
		630	315-630	2-8	**NZMH3-AE630-T** 110896	S

Fixed mounting with box terminals **Part no.** Article no.	**Price** See price list		Withdrawable units **Part no.** Article no. Order base separately	**Price** See price list	Std. pack	**Notes**
						B = box terminals **S = screw terminals** For further terminal types see accessories
NZMN3-AE630-BT 111656	B		**NZMN3-AE630-AVE** 110842		1 off	IEC/EN 60947-2 R.m.s. value measurement and "thermal memory"
Terminals as accessory			**Withdrawable units as** accessories			
Terminals as accessory			**NZMH3-AE630-AVE** 110851		1 off	
			Withdrawable units as accessories			
Terminals as accessory			**NZMN3-AE250-T-AVE** 113527		1 off	
			NZMN3-AE400-T-AVE 113528			
			NZMN3-AE630-T-AVE 113093			
			NZMH3-AE250-T-AVE 113570			
			NZMH3-AE400-T-AVE 113571			
			NZMH3-AE630-T-AVE 113572			

1 NZM...VE

	Switching capacity 400/415 V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current $I_n=I_u$ A	Setting range Overload releases I_r A	Short-circuit releases Non-delayed $I_i=I_n$ X ...	Delayed $I_{sd}=I_r$ X ...	**Fixed mounting** with screw terminals **Part no.** Article no.	**Price** See price list
Systems protection, cable protection, selectivity, generator protection							
Normal switching capacity 	50	100	50-100	1200 A fixed	2-10	**NZMN2-VE100** 259122	S
		160	80-160	1920 A fixed	2-10	**NZMN2-VE160** 259123	S
		250	125-250	3000 A fixed	2-10	**NZMN2-VE250** 259124	S
		250	125-250	2-11	2-10	**NZMN3-VE250** 259131	S
		400	200-400	2-11	2-10	**NZMN3-VE400** 259132	S
		630	315-630	2-8	1.5-7	**NZMN3-VE630** 259133	S
		630	315-630	2-12	1.5-7	**NZMN4-VE630** 265768	S
		800	400-800	2-12	2-10	**NZMN4-VE800** 265769	S
		1000	500-1000	2-12	2-10	**NZMN4-VE1000** 265770	S
		1250	630-1250	2-12	2-10	**NZMN4-VE1250** 265771	S
		1600	800-1600	2-12	2-10	**NZMN4-VE1600** 265772	S
High switching capacity 	150	100	50-100	1200 A fixed	2-10	**NZMH2-VE100** 259125	S
		160	80-160	1920 A fixed	2-10	**NZMH2-VE160** 259126	S
		250	125-250	3000 A fixed	2-10	**NZMH2-VE250** 259127	S
		250	125-250	2-11	2-10	**NZMH3-VE250** 259134	S
		400	200-400	2-11	2-10	**NZMH3-VE400** 259135	S
		630	315-630	2-8	1.5-7	**NZMH3-VE630** 259136	S
	85	630	315-630	2-12	1.5-7	**NZMH4-VE630** 265773	S
		800	400-800	2-12	2-10	**NZMH4-VE800** 265774	S
		1000	500-1000	2-12	2-10	**NZMH4-VE1000** 265775	S
		1250	630-1250	2-12	2-10	**NZMH4-VE1250** 265776	S
		1600	800-1600	2-12	2-10	**NZMH4-VE1600** 265777	S
Earth fault protection 	50	250	125-250	2-11	2-10	**NZMN3-VE250-T** 110891	S
		400	200-400	2-11	2-10	**NZMN3-VE400-T** 110892	S
		630	315-630	2-8	1.5-7	**NZMN3-VE630-T** 110893	S
	150	250	125-250	2-11	2-10	**NZMH3-VE250-T** 110897	S
		400	200-400	2-11	2-10	**NZMH3-VE400-T** 110898	S
		630	315-630	2-8	1.5-7	**NZMH3-VE630-T** 110899	S

Fixed mounting with screw terminals				Withdrawable units			
Part no. Article no.	**Price** See price list			**Part no.** Article no. Order base separately	**Price** See price list	Std. pack	**Notes**
							B = box terminals **S = screw terminals** For further terminal types see accessories
Terminals as accessory				**NZMN2-VE100-SVE** 113247		1 off	IEC/EN 60947-2
				NZMN2-VE160-SVE 113248			R.m.s. value measurement and "thermal memory"
				NZMN2-VE250-SVE 113249			Adjustable delay setting t_r • 2 – 20 s at 6 x I_r and infinite (without overload release)
				**NZMN3-VE250-AVE** 110843			Adjustable delay t_{sd} • Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms
NZMN3-VE400-BT 111659	**1,467.37** 43	B		**NZMN3-VE400-AVE** 110844			
NZMN3-VE630-BT 111730	**1,914.22** 43	B		**NZMN3-VE630-AVE** 110845			i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable
Terminals as accessory							
Terminals as accessory				**NZMH2-VE100-SVE** 113337		1 off	
				NZMH2-VE160-SVE 113338			
				NZMH2-VE250-SVE 113339			
				**NZMH3-VE250-AVE** 110852			
NZMH3-VE400-BT 111731	**1,668.52** 43	B		**NZMH3-VE400-AVE** 110853			
NZMH3-VE630-BT 111732	**2,079.92** 43	B		**NZMH3-VE630-AVE** 110854			
Terminals as accessory				Withdrawable units as accessories			
Terminals as accessory				**NZMN3-VE250-T-AVE** 113529		1 off	
				NZMN3-VE400-T-AVE 113530			
				NZMN3-VE630-T-AVE 113531			
				NZMH3-VE250-T-AVE 113573			
				NZMH3-VE400-T-AVE 113574			
				NZMH3-VE630-T-AVE 113575			

1 **NZM...M**

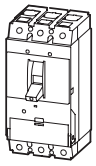
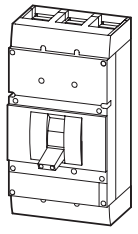
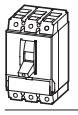
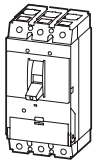
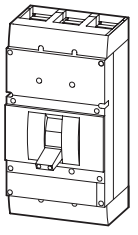
HPL17026EN

Fixed mounting
with screw terminals

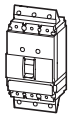
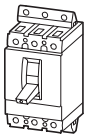
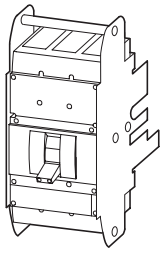
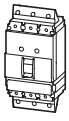
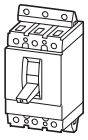
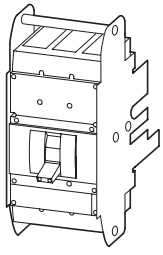
Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current	Setting range		Rated operational power AC-3 50/60 Hz		Rated operational current AC-3 50/60 Hz		**Part no.** Article no.	**Price** See price list	
		Overload releases	Short-circuit releases							
			Non-delayed	400V	690V	400V	690V			
I_{cu} kA	$I_n=I_u$ A	I_r A	$I_i=I_n$ X ...	P kW	P kW	I_e A	I_e A			

Motor protection

With phase-failure sensitivity

Normal switching capacity	**50**	90	45-90	2-14	45	75	81	78	**NZMN2-ME90**	S
		140	70-140	2-14	75	132	134	134	265778 **NZMN2-ME140**	S
		220	110-220	2-14	110	200	196	202	265779 **NZMN2-ME220**	S
		220	110-220	2-14	110	200	196	202	**NZMN3-ME220** 265781	S
		350	175-350	2-14	200	315	349	316	**NZMN3-ME350** 265782	S
		450	225-450	2-12	250	450	437	446	**NZMN3-ME450** 284468	S
		550	275-550	2-14	315	560	544	550	**NZMN4-ME550** 265783	S
		875	438-875	2-14	500	600	820	588	**NZMN4-ME875** 265784	S
		1400	700-1400	2-14	630	600	1066	588	**NZMN4-ME1400** 265785	S
High switching capacity	**150**	90	45-90	2-14	45	45	81	78	**NZMH2-ME90** 265786	S
		140	70-140	2-14	75	132	134	134	**NZMH2-ME140** 265787	S
		220	110-220	2-14	110	200	196	202	**NZMH2-ME220** 265788	S
		220	110-220	2-14	110	200	196	202	**NZMH3-ME220** 265789	S
		350	175-350	2-14	200	315	349	316	**NZMH3-ME350** 265790	S
		450	225-450	2-12	250	450	437	446	**NZMH3-ME450** 284469	S
	**85**	550	275-550	2-14	315	560	544	550	**NZMH4-ME550** 265791	S
		875	438-875	2-14	500	600	820	588	**NZMH4-ME875** 265792	S
		1400	700-1400	2-14	630	600	1066	588	**NZMH4-ME1400** 265793	S

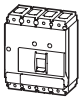
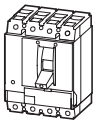
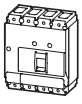
Plug-in units

	Part no. Article no.	**Price** See price list	Std. pack	**Notes**
	Order base separately			
				B = box terminals **S = screw terminals** For further terminal types see accessories
	**NZMN2-ME90-SVE** 113256		1 off	IEC/EN 60947-4-1, IEC/EN 60947-2
	NZMN2-ME140-SVE 113257			The circuit-breakers fulfill all requirements for utilization category AC-3
	NZMN2-ME220-SVE 113258			R.m.s. value measurement and "thermal memory"
	**NZMN3-ME220-AVE** 110846			Adjustable delay setting t, •2–20 s at 6 x I and infinite (without overload release)
	NZMN3-ME350-AVE 110847			
	NZMN3-ME450-AVE 110848			
	Withdrawable units as accessories			
	**NZMH2-ME90-SVE** 113348		1 off	
	NZMH2-ME140-SVE 113349			
	NZMH2-ME220-SVE 113350			
	**NZMH3-ME220-AVE** 110855			
	NZMH3-ME350-AVE 110856			
	NZMH3-ME450-AVE 110857			
	Withdrawable units as accessories			

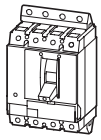
NZM...A

							Fixed mounting with screw terminals	
	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range			**Part no.** Article no.	**Price** See price list
		Phase conductors	Neutral conductor	Overload releases		Short-circuit releases		
					Phase conductors	Non-delayed		
	I_{cu}	$I_n = I_u$	I_r x % of phase conductor	I_r	I_r	$I_i = I_n$ x …		
	kA	A	%	A	A			

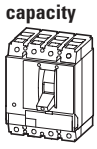
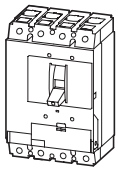
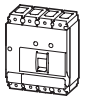
System and cable protection

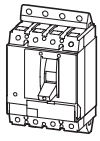
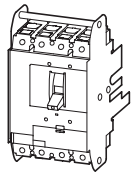
Basic switching capacity 	**25**	20	100	15-20	15…20	350 A fixed	Screw terminals as accessories	
		25	100	20-25	20…25	350 A fixed		
		32	100	25-32	25…32	350 A fixed		
		40	100	32-40	32…40	8-10		
		50	100	40-50	40…50	6-10		
		63	100	50-63	50…63	6-10		
		80	100	63-80	63…80	6-10		
		100	100	80-100	80…100	6-10		
		125	100	100-125	100…125	6-10		
		160	100	125-160	125…160	1280 A fixed		
Basic switching capacity 		160	100	125-160	125…160	6-10	**NZMB2-4-A160** 265849	S
		160	60	125-160	80…100	6-10	**NZMB2-4-A160/100** 265850	S
		200	100	160-200	160…200	6-10	**NZMB2-4-A200** 265852	S
		200	60	160-200	100…125	6-10	**NZMB2-4-A200/125** 265853	S
		250	100	200-250	200…250	6-10	**NZMB2-4-A250** 265855	S
		250	60	200-250	125…160	6-10	**NZMB2-4-A250/160** 265856	S
		300	100	240-300	240…300	6-10	**NZMB2-4-A300** 107582	S
		300	60	240-300	160…200	6-10	**NZMB2-4-A300/200** 107583	S
Comfort switching capacity 	**36**	20	100	15-20	15…20	350 A fixed	Screw terminals as accessories	
		25	100	20-25	20…25	350 A fixed		
		32	100	25-32	25…32	350 A fixed		
		40	100	32-40	32…40	8-10		
		50	100	40-50	40…50	6-10		
		63	100	50-63	50…63	6-10		
		80	100	63-80	63…80	6-10		
		100	100	80-100	80…100	6-10		
		125	100	100-125	100…125	6-10		
		160	100	125-160	125…160	1280 A fixed		

Fixed mounting with box terminals			Plug-in units			
Part no. Article no.	**Price** See price list		**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
			Order base separately			

					B = box terminals **S = screw terminals** For further terminal types see accessories
NZMB1-4-A20 281237	B	–	–	1 off	IEC/EN 60947-2
NZMB1-4-A25 281239	B		–		Set value for neutral conductor is same as set value I_r for main pole.
NZMB1-4-A32 281241	B		–		
NZMB1-4-A40 265799	B		–		
NZMB1-4-A50 265801	B		–		
NZMB1-4-A63 265803	B		–		
NZMB1-4-A80 265805	B		–		
NZMB1-4-A100 265807	B		–		
NZMB1-4-A125 265809	B		–		
NZMB1-4-A160 281243	B		–		
Terminals as accessory			**NZMB2-4-A160-SVE** 113209		
			NZMB2-4-A160/100-SVE 113210		
			NZMB2-4-A200-SVE 113212		
			NZMB2-4-A200/125-SVE 113213		
			NZMB2-4-A250-SVE 113215		
			NZMB2-4-A250/160-SVE 113216		
			–		
			–		
NZMC1-4-A20 283300	B	–	–	1 off	
NZMC1-4-A25 283302	B		–		
NZMC1-4-A32 283304	B		–		
NZMC1-4-A40 271408	B		–		
NZMC1-4-A50 271410	B		–		
NZMC1-4-A63 271412	B		–		
NZMC1-4-A80 271414	B		–		
NZMC1-4-A100 271416	B		–		
NZMC1-4-A125 271418	B		–		
NZMC1-4-A160 283306	B		–		

NZM...-4-A

	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range			Fixed mounting with screw terminals Part no. Article no.	Price See price list
				Overload releases		Short-circuit releases		
		Phase conductors	Neutral conductor		Phase conductors	Non-delayed		
	I_{cu}	$I_n = I_u$	I_r x % of phase conductor	I_r	I_r	$I_i = I_n$ x ...		
	kA	A	%	A	A			
								
System and cable protection								
Comfort switching capacity 	36	125	100	100-125	100...125	6-10	**NZMC2-4-A125** 271430	S
		160	100	125-160	125...160	6-10	**NZMC2-4-A160** 271432	S
		160	60	125-160	80...100	6-10	**NZMC2-4-A160/100** 271433	S
		200	100	160-200	160...200	6-10	**NZMC2-4-A200** 271435	S
		200	60	160-200	100...125	6-10	**NZMC2-4-A200/125** 271436	S
		250	100	200-250	200...250	6-10	**NZMC2-4-A250** 271438	S
		250	60	200-250	125...160	6-10	**NZMC2-4-A250/160** 271439	S
		300	100	240-300	240...300	6-10	**NZMC2-4-A300** 107584	S
		300	60	240-300	160...200	6-10	**NZMC2-4-A300/200** 107585	S
		320	100	250-320	250...320	6-10	**NZMC3-4-A320** 109688	S
		320	60	250-320	160...200	6-10	**NZMC3-4-A320/200** 109689	S
		400	100	320-400	320...400	6-10	**NZMC3-4-A400** 109690	S
		400	60	320-400	200...250	6-10	**NZMC3-4-A400/250** 109691	S
		500	100	400-500	400...500	6-10	**NZMC3-4-A500** 109692	S
		500	60	400-500	250...320	6-10	**NZMC3-4-A500/320** 109693	S
Normal switching capacity 	50	20	100	15-20	15...20	350 A fixed	Screw terminals as accessories	
		25	100	20-25	20...25	350 A fixed		
		32	100	25-32	25...32	350 A fixed		
		40	100	32-40	32...40	8-10		
		50	100	40-50	40...50	6-10		
		63	100	50-63	50...63	6-10		
		80	100	63-80	63...80	6-10		
		100	100	80-100	80...100	6-10		
		125	100	100-125	100...125	6-10		
		160	100	125-160	125...160	1280 A fixed		

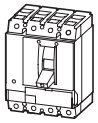
Fixed mounting with screw terminals **Part no.** Article no.	**Price** See price list		Plug-in units Part no. Article no. Order base separately	Price See price list	Std. pack	**Notes**
						B = box terminals **S = screw terminals** For further terminal types see accessories
Terminals as accessory			**NZMC2-4-A125-SVE** 113231	1 off		IEC/EN 60947-2
			NZMC2-4-A160-SVE 113233			Set value for neutral conductor is same as set value I_r for main pole.
			NZMC2-4-A160/100-SVE 113234			
			NZMC2-4-A200-SVE 113236			
			NZMC2-4-A200/125-SVE 113237			
			NZMC2-4-A250-SVE 113239			
			NZMC2-4-A250/160-SVE 113240			
			–			
			–			
			**NZMC3-4-A320-AVE** 113516			
			NZMC3-4-A320/200-AVE 113517			
			NZMC3-4-A400-AVE 113518			
			NZMC3-4-A400/250-AVE 113519			
			NZMC3-4-A500-AVE 113520			
			NZMC3-4-A500/320-AVE 113521			
NZMN1-4-A20 281245	B		–	1 off		
NZMN1-4-A25 281247	B		–			
NZMN1-4-A32 281249	B		–			
NZMN1-4-A40 265811	B		–			
NZMN1-4-A50 265813	B		–			
NZMN1-4-A63 265815	B		–			
NZMN1-4-A80 265817	B		–			
NZMN1-4-A100 265819	B		–			
NZMN1-4-A125 265821	B		–			
NZMN1-4-A160 281251	B		–			

NZM...-4-A

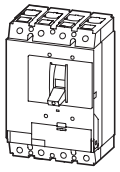
Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range Overload releases		Short-circuit releases Non-delayed	**Fixed mounting** with screw terminals	
	Phase conductors	Neutral conductor		Phase conductors		**Part no.** Article no.	**Price** See price list
I_{cu} kA	$I_n=I_u$ A	I_r x % of phase conductor %	I_r A	I_r A	$I_i=I_n$ X ...		

System and cable protection

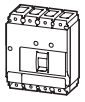
Normal switching capacity



50	160	100	125-160	125...160	6-10	**NZMN2-4-A160**	S
						265860	
	160	60	125-160	80...100	6-10	**NZMN2-4-A160/100**	S
						265861	
	200	100	160-200	160...200	6-10	**NZMN2-4-A200**	S
						265863	
	200	60	160-200	100...125	6-10	**NZMN2-4-A200/125**	S
						265864	
	250	100	200-250	200...250	6-10	**NZMN2-4-A250**	S
						265866	
	250	60	200-250	125...160	6-10	**NZMN2-4-A250/160**	S
						265867	
	300	100	240-300	240...300	6-10	**NZMN2-4-A300**	S
						107586	
	300	60	240-300	160...200	6-10	**NZMN2-4-A300/200**	S
						107587	
	320	100	250-320	250...320	6-10	**NZMN3-4-A320**	S
						109694	
	320	60	250-320	160...200	6-10	**NZMN3-4-A320/200**	S
						109695	
	400	100	320-400	320...400	6-10	**NZMN3-4-A400**	S
						109696	
	400	60	320-400	200...250	6-10	**NZMN3-4-A400/250**	S
						109697	
	500	100	400-500	400...500	6-10	**NZMN3-4-A500**	S
						109698	
	500	60	400-500	250...320	6-10	**NZMN3-4-A500/320**	S
						109699	



High switching capacity



100	20	100	15-20	15...20	350 A fixed	Screw terminals as accessories
	25	100	20-25	20...25	350 A fixed	
	32	100	25-32	25...32	350 A fixed	
	40	100	32-40	32...40	8-10	
	50	100	40-50	40...50	6-10	
	63	100	50-63	50...63	6-10	
	80	100	63-80	63...80	6-10	
	100	100	80-100	80...100	6-10	
	125	100	100-125	100...125	6-10	
	160	100	125-160	125...160	1280 A fixed	

NZM...-4-A

Fixed mounting with box terminals

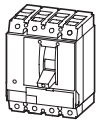
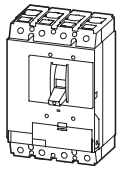
Plug-in units

Part no. Article no.	Price See price list		Part no. Article no.	Price See price list	Std. pack	Notes
			Order base separately			
						B = box terminals **S = screw terminals** For further terminal types see accessories
Terminals as accessory			**NZMN2-4-A160-SVE** 113266		1 off	IEC/EN 60947-2
			NZMN2-4-A160/100-SVE 113267			Set value for neutral conductor is same as set value I_r for main pole.
			NZMN2-4-A200-SVE 113269			
			NZMN2-4-A200/125-SVE 113270			
			NZMN2-4-A250-SVE 113272			
			NZMN2-4-A250/160-SVE 113273			
			–			
			–			
			NZMN3-4-A320-AVE 113532			
			NZMN3-4-A320/200-AVE 113533			
			NZMN3-4-A400-AVE 113534			
			NZMN3-4-A400/250-AVE 113535			
			NZMN3-4-A500-AVE 113536			
			NZMN3-4-A500/320-AVE 113537			
NZMH1-4-A20 284416	B		–		1 off	
NZMH1-4-A25 284418	B		–			
NZMH1-4-A32 284420	B		–			
NZMH1-4-A40 284422	B		–			
NZMH1-4-A50 284424	B		–			
NZMH1-4-A63 284426	B		–			
NZMH1-4-A80 284428	B		–			
NZMH1-4-A100 284430	B		–			
NZMH1-4-A125 284432	B		–			
NZMH1-4-A160 284434	B		–			

NZM...-4-A

	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range			Fixed mounting with screw terminals	
				Overload releases		Short-circuit releases	Part no. Article no.	Price See price list
		Phase conductors $I_n = I_u$	Neutral conductor I_r x % of phase conductor		Phase conductors	Non-delayed $I_i = I_n$ x ...		
	I_{cu}							
	kA	A	%	A	A			
								

System and cable protection

High switching capacity 	150	20	100	15-20	15...20	350 A fixed	**NZMH2-4-A20** 281287	S
		25	100	20-25	20...25	350 A fixed	**NZMH2-4-A25** 281289	S
		32	100	25-32	25...32	350 A fixed	**NZMH2-4-A32** 281291	S
		40	100	32-40	32...40	6-10	**NZMH2-4-A40** 265823	S
		50	100	40-50	40...50	6-10	**NZMH2-4-A50** 265825	S
		63	100	50-63	50...63	6-10	**NZMH2-4-A63** 265827	S
		80	100	63-80	63...80	6-10	**NZMH2-4-A80** 265829	S
		100	100	80-100	80...100	6-10	**NZMH2-4-A100** 265831	S
		125	100	100-125	100...125	6-10	**NZMH2-4-A125** 265833	S
		160	100	125-160	125...160	6-10	**NZMH2-4-A160** 265871	S
		160	60	125-160	80...100	6-10	**NZMH2-4-A160/100** 265872	S
		200	100	160-200	160...200	6-10	**NZMH2-4-A200** 265874	S
		200	60	160-200	100...125		**NZMH2-4-A200/125** 265875	S
		250	100	200-250	200...250	6-10	**NZMH2-4-A250** 265877	S
		250	60	200-250	125...160	6-10	**NZMH2-4-A250/160** 265878	S
		300	100	240-300	240...300	6-10	**NZMH2-4-A300** 107588	S
		300	60	240-300	160...200	6-10	**NZMH2-4-A300/200** 107589	S
	150	320	100	250-320	250...320	6-10	**NZMH3-4-A320** 109700	S
		320	60	250-320	160...200	6-10	**NZMH3-4-A320/200** 109701	S
		400	100	320-400	320...400	6-10	**NZMH3-4-A400** 109702	S
		400	60	320-400	200...250	6-10	**NZMH3-4-A400/250** 109703	S
		500	100	400-500	400...500	6-10	**NZMH3-4-A500** 109704	S
		500	60	400-500	250...320	6-10	**NZMH3-4-A500/320** 109705	S

Fixed mounting
with box terminals

Part no.
Article no.

Price
See price list

Plug-in units

Part no.
Article no.

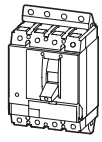
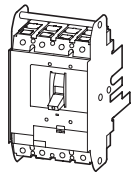
Price
See price list

Std. pack

Notes

Order base separately

B = box terminals
S = screw terminals
For further terminal types see accessories

Terminals as accessory		**NZMH2-4-A20-SVE** 113396	1 off	IEC/EN 60947-2 Set value for neutral conductor is same as set value I_r for main pole.
		NZMH2-4-A25-SVE 113398		
		NZMH2-4-A32-SVE 113400		
		NZMH2-4-A40-SVE 113367		
		NZMH2-4-A50-SVE 113369		
		NZMH2-4-A63-SVE 113371		
		NZMH2-4-A80-SVE 113373		
		NZMH2-4-A100-SVE 113375		
		NZMH2-4-A125-SVE 113377		
		NZMH2-4-A160-SVE 113379		
		NZMH2-4-A160/100-SVE 113380		
		NZMH2-4-A200-SVE 113382		
		NZMH2-4-A200/125-SVE 113383		
		NZMH2-4-A250-SVE 113385		
		NZMH2-4-A250/160-SVE 113386		
		–		
		–		
		**NZMH3-4-A320-AVE** 113578	1 off	
		NZMH3-4-A320/200-AVE 113579		
		NZMH3-4-A400-AVE 113580		
		NZMH3-4-A400/250-AVE 113581		
		NZMH3-4-A500-AVE 113582		
		NZMH3-4-A500/320-AVE 113583		

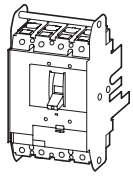
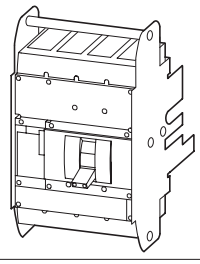
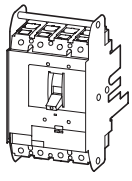
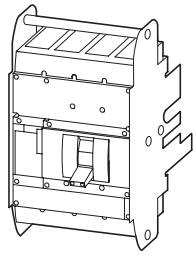
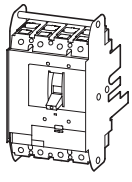
NZM...-4-AE

System and cable protection

Fixed mounting
with screw terminals
Part no.
Article no.

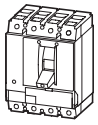
Price
See price list

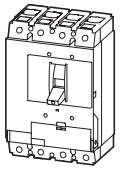
Switching capacity 400/415 V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current: Phase conductors $I_n = I_u$ A	Neutral conductor I_r x % of phase conductor %	Setting range Overload releases: Phase conductors I_r A	Short-circuit releases: Non-delayed $I_i = I_n$ x …	Delayed $I_{sd} = I_r$ x …		
Normal switching capacity							
50	630	100	315-630	315…630	2-8	–	**NZMN3-4-AE630** 265894	S
	630	60	315-630	200…400	2-8	–	**NZMN3-4-AE630/400** 265895	S
	800	100	400-800	400…800	2-12	–	**NZMN4-4-AE800** 265909	S
	800	60	400-800	250…500	2-12	–	**NZMN4-4-AE800/500** 265910	S
	1000	100	500-1000	500…1000	2-12	–	**NZMN4-4-AE1000** 265912	S
	1000	60	500-1000	315…630	2-12	–	**NZMN4-4-AE1000/630** 265913	S
	1250	100	630-1250	630…1250	2-12	–	**NZMN4-4-AE1250** 265915	S
	1250	60	630-1250	400…800	2-12	–	**NZMN4-4-AE1250/800** 265916	S
	1600	100	800-1600	800…1600	2-12	–	**NZMN4-4-AE1600** 265918	S
	1600	60	800-1600	500…1000	2-12	–	**NZMN4-4-AE1600/1000** 265919	S
High switching capacity							
150	630	100	315-630	315…630	2-8	–	**NZMH3-4-AE630** 265900	S
150	630	60	315-630	200…400	2-8	–	**NZMH3-4-AE630/400** 265901	S
85	800	100	400-800	400…800	2-12	–	**NZMH4-4-AE800** 265921	S
	800	60	400-800	250…500	2-12	–	**NZMH4-4-AE800/500** 265922	S
	1000	100	500-1000	500…1000	2-12	–	**NZMH4-4-AE1000** 265924	S
	1000	60	500-1000	315…630	2-12	–	**NZMH4-4-AE1000/630** 265925	S
	1250	100	630-1250	630…1250	2-12	–	**NZMH4-4-AE1250** 265927	S
	1250	60	630-1250	400…800	2-12	–	**NZMH4-4-AE1250/800** 265928	S
	1600	100	800-1600	800…1600	2-12	–	**NZMH4-4-AE1600** 265930	S
Earth fault protection							
50	1600	60	800-1600	500…1000	2-12	–	**NZMH4-4-AE1600/1000** 265931	S
	400	100	200-400	200…400	2-11	–	**NZMN3-4-AE400-T** 110902	S
	400	60	200-400	125…250	2-11	–	**NZMN3-4-AE400/250-T** 110903	S
	630	100	315-630	315…630	2-8	–	**NZMN3-4-AE630-T** 110904	S
	630	60	315-630	200…400	2-8	–	**NZMN3-4-AE630/400-T** 110905	S
150	400	100	200-400	200…400	2-11	–	**NZMH3-4-AE400-T** 110906	S
	400	60	200-400	125…250	2-11	–	**NZMH3-4-AE400/250-T** 110907	S
	630	100	315-630	315…630	2-8	–	**NZMH3-4-AE630-T** 110908	S
	630	60	315-630	200…400	2-8	–	**NZMH3-4-AE630/400-T** 110909	S

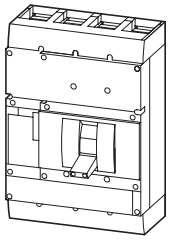
Fixed mounting with screw terminals			**Plug-in units**			
Part no. Article no.	**Price** See price list		**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
			Order base separately			
						B = box terminals **S = screw terminals**
NZMN3-4-AE630-BT 111658 Terminals as accessory	B		**NZMN3-4-AE630-AVE** 110875 **NZMN3-4-AE630/400-AVE** 113544	1 off		For further terminal types see accessories IEC/EN 60947-2 R.m.s. value measurement and "thermal memory"
			**Withdrawable units as** accessories			Set value for neutral conductor is same as set value I_r for main pole.
			**NZMH3-4-AE630-AVE** 110879 **NZMH3-4-AE630/400-AVE** 113590	1 off		
			**Withdrawable units as** accessories			
Terminals as accessory			**NZMN3-4-AE400-T-AVE** 113538 **NZMN3-4-AE400/250-T-AVE** 113539 **NZMN3-4-AE630-T-AVE** 113540 **NZMN3-4-AE630/400-T-AVE** 113541	1 off		
			NZMH3-4-AE400-T-AVE 113584 **NZMH3-4-AE400/250-T-AVE** 113585 **NZMH3-4-AE630-T-AVE** 113586 **NZMH3-4-AE630/400-T-AVE** 113587			

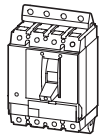
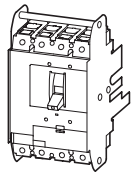
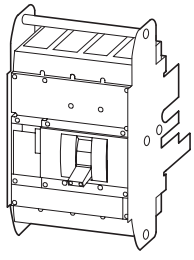
NZM...-4-VE

	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range Overload releases		Short-circuit releases		**Fixed mounting** with screw terminals **Part no.** Article no.	**Price** See price list	
		Phase conductors	Neutral conductor		Phase conductors	Non-delayed	Delayed			
	I_{cu} kA	$I_n=I_u$ A	I_r x % of phase conductor %	I_r A	I_r A	$I_i=I_n$ X ...	$I_{sd}=I_r$ x...			
Normal switching capacity	50	100	100	50-100	50...100	2-10		**NZMN2-4-VE100** 265933		S
		160	100	80-160	80...160	2-10		**NZMN2-4-VE160** 265935		S
		160	60	80-160	50...100	2-10		**NZMN2-4-VE160/100** 265936		S
		250	100	125-250	125...250	2-10		**NZMN2-4-VE250** 265938		S
		250	60	125-250	80...160	2-10		**NZMN2-4-VE250/160** 265939		S
		400	100	200-400	200...400	2-10		**NZMN3-4-VE400** 265957		S
		400	60	200-400	125...250	2-10		**NZMN3-4-VE400/250** 265958		S
		630	100	315-630	315...630	1.5-7		**NZMN3-4-VE630** 265960		S
		630	60	315-630	200...400	1.5-7		**NZMN3-4-VE630/400** 265961		S
		800	100	400-800	400...800	2-10		**NZMN4-4-VE800** 265975		S
		800	60	400-800	250...500	2-10		**NZMN4-4-VE800/500** 265976		S
		1000	100	500-1000	500...1000	2-10		**NZMN4-4-VE1000** 265978		S
		1000	60	500-1000	315...630	2-10		**NZMN4-4-VE1000/630** 265979		S
		1250	100	630-1250	630...1250	2-10		**NZMN4-4-VE1250** 265981		S
		1250	60	630-1250	400...800	2-10		**NZMN4-4-VE1250/800** 265982		S
		1600	100	800-1600	800...1600	2-10		**NZMN4-4-VE1600** 265984		S
		1600	60	800-1600	500...1000	2-10		**NZMN4-4-VE1600/1000** 265985		S



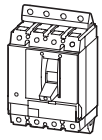
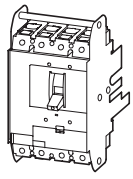
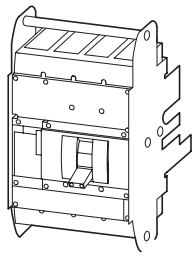
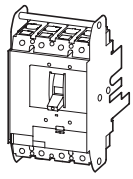




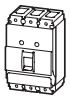
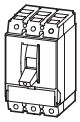
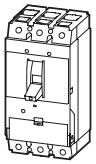
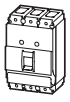
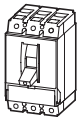
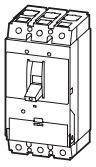
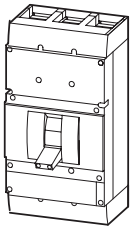
Fixed mounting with screw terminals			**Plug-in units**			
Part no. Article no.	**Price** See price list		**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
			Order base separately			
						B = box terminals **S = screw terminals** For further terminal types see accessories
Terminals as accessory			**NZMN2-4-VE100-SVE** 113275	1 off		IEC/EN 60947-2
			NZMN2-4-VE160-SVE 113277			Set value for neutral conductor is same as set value I_r for main pole.
			NZMN2-4-VE160/100-SVE 113278			
			NZMN2-4-VE250-SVE 113280			R.m.s. value measurement and "thermal memory"
			NZMN2-4-VE250/160-SVE 113281			
			**NZMN3-4-VE400-AVE** 110876			Adjustable delay setting t_r • 2 – 20 s at 6 x I_r and infinite (without overload release) – NZM...3-4-VE400(630): 2 – 14 s at 6 x I_r and infinite (without overload release)
			NZMN3-4-VE400/250-AVE 113546			
			NZMN3-4-VE630-AVE 110877			
			NZMN3-4-VE630/400-AVE 113548			Adjustable delay t_g • Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms
			Withdrawable units as accessories			i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable

1 NZM...-4-VE

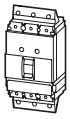
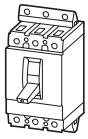
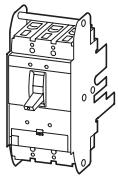
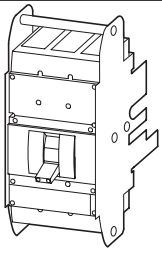
	Switching capacity 400/415 V 50/60 Hz	Rated current = Rated uninterrupted current		Setting range Overload releases		Short-circuit releases		**Part no.** Article no.	**Price** See price list	
		Phase conductors	Neutral conductor		Phase conductors	Non-delayed	Delayed			
	I_{cu} kA	$I_n=I_u$ A	I_r x % of phase conductor %	I_r A	I_r A	$I_i=I_n$ X ...	$I_{sd}=I_r$ x...			
High switching capacity	**150**	100	100	50-100	50...100	1200 A fixed	2-10	**NZMH2-4-VE100** 265941		S
		160	100	80-160	80...160	1920 A fixed	2-10	**NZMH2-4-VE160** 265943		S
		160	60	80-160	50...100	1920 A fixed	2-10	**NZMH2-4-VE160/100** 265944		S
		250	100	125-250	125...250	3000 A fixed	2-10	**NZMH2-4-VE250** 265946		S
		250	60	125-250	80...160	3000 A fixed	2-10	**NZMH2-4-VE250/160** 265947		S
		400	100	200-400	200...400	2-11	2-10	**NZMH3-4-VE400** 265963		S
		400	60	200-400	125...250	2-11	2-10	**NZMH3-4-VE400/250** 265964		S
		630	100	315-630	315...630	2-8	1.5-7	**NZMH3-4-VE630** 265966		S
		630	60	315-630	200...400	2-8	1.5-7	**NZMH3-4-VE630/400** 265967		S
	85	800	100	400-800	400...800	2-12	2-10	**NZMH4-4-VE800** 265987		S
		800	60	400-800	250...500	2-12	2-10	**NZMH4-4-VE800/500** 265988		S
		1000	100	500-1000	500...1000	2-12	2-10	**NZMH4-4-VE1000** 265990		S
		1000	60	500-1000	315...630	2-12	2-10	**NZMH4-4-VE1000/630** 265991		S
		1250	100	630-1250	630...1250	2-12	2-10	**NZMH4-4-VE1250** 265993		S
		1250	60	630-1250	400...800	2-12	2-10	**NZMH4-4-VE1250/800** 265994		S
		1600	100	800-1600	800...1600	2-12	2-10	**NZMH4-4-VE1600** 265996		S
		1600	60	800-1600	500...1000	2-12	2-10	**NZMH4-4-VE1600/1000** 265997		S
Earth fault protection	**50**	400	100	200-400	200...400	2-11	2-10	–		
		630	100	315-630	315...630	2-8	1.5-7	–		
	150	400	100	200-400	200...400	2-11	2-10	–		
		630	100	315-630	315...630	2-8	1.5-7	–		

Fixed mounting with screw terminals			Plug-in units				
Part no. Article no.	**Price** See price list		**Part no.** Article no.	**Price** See price list	Std. pack	**Notes**	
			Order base separately				
						B = box terminals	
						S = screw terminals	
						For further terminal types see accessories	
Terminals as accessory			**NZMH2-4-VE100-SVE** 113388	1 off		IEC/EN 60947-2	
			NZMH2-4-VE160-SVE 113390			Set value for neutral conductor is same as set value I_r for main pole.	
			NZMH2-4-VE160/100-SVE 113391				
			NZMH2-4-VE250-SVE 113393			R.m.s. value measurement and "thermal memory"	
			NZMH2-4-VE250/160-SVE 113394				
			**NZMH3-4-VE400-AVE** 110880			Adjustable delay setting t_r • 2 – 20 s at 6 x I_r and infinite (without overload release) – NZM...3-4-VE400(630): 2 – 14 s at 6 x I_r and infinite (without overload release)	
			NZMH3-4-VE400/250-AVE 113592				
			NZMH3-4-VE630-AVE 110881				
			NZMH3-4-VE630/400-AVE 113594			Adjustable delay t_{sd} • Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms	
			**Withdrawable units as** accessories	1 off		i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable	
–			**NZMN3-4-VE400-T-AVE** 119902	1 off			
–			**NZMN3-4-VE630-T-AVE** 119903				
–			**NZMH3-4-VE400-T-AVE** 119900				
–			**NZMH3-4-VE630-T-AVE** 119901				

PN..., N...

	Rated current = Rated uninterrupted current $I_n = I_u$ A	Short-circuit protection, max. fuse gL-characteristic A gL	Fixed mounting with screw terminals **Part no.** Article no.		**Price** See price list	Fixed mounting with box terminals **Part no.** Article no.	Price See price list
Switch-disconnectors							
2 switch positionsI , 0	63	125	Screw terminals as accessories			**PN1-63** 259140	B
	100	125				**PN1-100** 259141	B
	125	125				**PN1-125** 259142	B
	160	160				**PN1-160** 281235	B
	160	250	**PN2-160** 266005	S		**PN2-160-BT** 110308	B
	200	250	**PN2-200** 266006	S		**PN2-200-BT** 110309	B
	250	250	**PN2-250** 266007	S		**PN2-250-BT** 110310	B
	400	630	**PN3-400** 266017	S		**PN3-400-BT** 110314	B
	630	630	**PN3-630** 266018	S		**PN3-630-BT** 110315	B
3 switch positions I, +, 0 Can be remotely operated with shunt release XU/XA, remote operator XR, Can be equipped with trip-indicating auxiliary contact M22-K..							
	63	125	Screw terminals as accessories			**N1-63** 259143	B
	100	125				**N1-100** 259144	B
	125	125				**N1-125** 259145	B
	160	160				**N1-160** 281236	B
	160	250	**N2-160** 266008	S		**N2-160-BT** 110311	B
	200	250	**N2-200** 266009	S		**N2-200-BT** 110312	B
	250	250	**N2-250** 266010	S		**N2-250-BT** 110313	B
	400	630	**N3-400** 266019	S		**N3-400-BT** 110316	B
	630	630	**N3-630** 266020	S		**N3-630-BT** 110317	B
	800	1600	**N4-800** 266025	S		Terminals as accessory	
	1000	1600	**N4-1000** 266026	S			
	1250	1600	**N4-1250** 266027	S			
	1600	1600	**N4-1600** 266028	S			

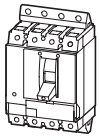
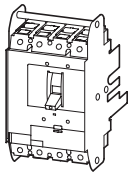
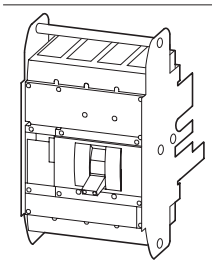
Plug-in/withdrawable units

Part no. Article no.		Price See price list	Std. pack	Notes
				B = box terminals **S = screw terminals** For further terminal types see accessories IEC/EN 60947-3
—	—		1 off	Main switch characteristics including positive operation to IEC/EN 60204, VDE 0113 Isolating characteristics to IEC/EN 60947-3, VDE 0660 Contact protection to VDE 0160 part 100
	**N1-63-SVE** 113729 **N1-100-SVE** 113730 **N1-125-SVE** 113731 –		1 off	
	**N2-160-SVE** 113733 **N2-200-SVE** 113734 **N2-250-SVE** 113735			
	**N3-400-AVE** 110768 **N3-630-AVE** 110769			
	Withdrawable units as accessories			

PN...-4, N...-4

Rated current = Rated uninterrupted current $I_n = I_u$ A	Short-circuit protection, max. fuse gL-characteristic A gL	Fixed mounting with screw terminals **Part no.** Article no.		**Price** See price list	Fixed mounting with box terminals **Part no.** Article no.	**Price** See price	
Switch-disconnectors							
2 switch positionsl, 0							
63	125	Screw terminals as accessories			**PN1-4-63** 265999		B
100	125				**PN1-4-100** 266000		B
125	125				**PN1-4-125** 266001		B
160	160				**PN1-4-160** 281253		B
160	250	**PN2-4-160** 266011		S	**PN2-4-160-BT** 118880		B
200	250	**PN2-4-200** 266012		S	**PN2-4-200-BT** 118881		B
250	250	**PN2-4-250** 266013		S	**PN2-4-250-BT** 118882		B
400	630	**PN3-4-400** 266021		S	**PN3-4-400-BT** 111653		B
630	630	**PN3-4-630** 266022		S	**PN3-4-630-BT** 111654		B
3 switch positions I, +, 0							
Can be remotely operated with shunt release XU/XA, remote operator XR, Can be equipped with trip-indicating auxiliary contact M22-K..							
63	125	Screw terminals as accessories			**N1-4-63** 266002		B
100	125				**N1-4-100** 266003		B
125	125				**N1-4-125** 266004		B
160	160				**N1-4-160** 281254		B
160	250	**N2-4-160** 266014		S	**N2-4-160-BT** 118883		B
200	250	**N2-4-200** 266015		S	**N2-4-200-BT** 118884		B
250	250	**N2-4-250** 266016		S	**N2-4-250-BT** 118885		B
400	630	**N3-4-400** 266023		S	**N3-4-400-BT** 111651		B
630	630	**N3-4-630** 266024		S	**N3-4-630-BT** 111652		B
800	1600	**N4-4-800** 266029		S	Terminals as accessory		
1000	1600	**N4-4-1000** 266030		S			
1250	1600	**N4-4-1250** 266031		S			
1600	1600	**N4-4-1600** 266032		S			

Plug-in units

	Part no. Article no. Order base separately	**Price** See price list	Std. pack	**Notes**
				B = box terminals **S = screw terminals** For further terminal types see accessories
	–		1 off	1IEC/EN 60947-3 Main switch characteristics including positive operation to IEC/EN 60204, VDE 0113 Isolating characteristics to IEC/EN 60947-3, VDE 0660 Contact protection to VDE 0160 part 100
	–			
	–			
	–			
	–			
	–			
	–			
	–			
	–		1 off	
	–			
	–			
	–			
	**N2-4-160-SVE** 113736			
	N2-4-200-SVE 113737			
	N2-4-250-SVE 113738			
	**N3-4-400-AVE** 110872			
	N3-4-630-AVE 110873			
	Withdrawable units as accessories			

1

NZM...-S1, N...-S1

With main switch characteristics to IEC/EN 60204 and isolating characteristics to IEC/EN 60947, VDE 660

Circuit-breakers for 1000 V AC, 3 pole

Switch-disconnectors for 1000 V DC, 2 pole
Without overload and short-circuit release

			System and cable protection				Selectivity protection		Motor protection			
Switching capacity												
1000 V	kA/p.f.	I_{cu}	10/0.5	15/0.5	20/0.3	10/0.5	20/0.3	15/0.5	20/0.3			
		I_{cs}	3/0.5	10/0.5	15/0.3	3/0.5	15/0.3	10/0.5	15/0.3			
Rated uninterrupted current I_u=			I_u	I_u	I_u	I_u	I_u	I_u	I_u	I_u	I_u	I_u
Rated current I_n												
Ambient air temperature at 100% I_u			A	A	A	A	A	A	A	A	A	A
min./max. –25/+50 °C												
N... S1-DC max. +70 °C												
			NZMH2-	NZMH3-	NZMH4-	NZMH2-	NZMH4-	NZMH3-	NZMH4-	N2-...-S1-	N3-...-S1-	N4-...-S1-
			A...-S1	AE...-S1	AE...-S1	VE...-S1	VE...-S1	ME...-S1		DC	DC	DC
			20	250	630	100	630	220	550	160	320	800
			25	400	800	160	800	350	875	200	400	1000
			32	630	1000	250	1000	450	1400		500	1250
			40		1250		1250					1400
			50		1600		1600					
			63									
			80									
			100									
			125									
			160									
			200									
			250									
			300									
Rated short-time withstand current I_{cw} ($0.1s\ current_{rms}$)		kA								3	6	25

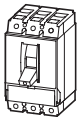
Switching capacity 1000 V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases Non-delayed $I_i = I_n$ x ...	Short-circuit releases Delayed $I_{sd} = I_r$ x ...	Fixed mounting Part no. Article no.	Price See price list	Std. pack
			I>	I>			
System and cable protection							
Thermomagnetic releases							
10	20	15-20	350 A fixed	–	**NZMH2-A20-S1** 290355	S	1 off
	25	20-25	350 A fixed	–	**NZMH2-A25-S1** 290356	S	
	32	25-32	350 A fixed	–	**NZMH2-A32-S1** 290357	S	
	40	32-40	8-10	–	**NZMH2-A40-S1** 290358	S	
	50	40-50	6-10	–	**NZMH2-A50-S1** 290359	S	
	63	50-63	6-10	–	**NZMH2-A63-S1** 290360	S	
	80	63-80	6-10	–	**NZMH2-A80-S1** 290361	S	
	100	80-100	6-10	–	**NZMH2-A100-S1** 290362	S	
	125	100-125	6-10	–	**NZMH2-A125-S1** 290363	S	
	160	125-160	6-10	–	**NZMH2-A160-S1** 290364	S	
	200	160-200	6-10	–	**NZMH2-A200-S1** 290365	S	
	250	200-250	6-10	–	**NZMH2-A250-S1** 290366	S	
	300	240-300	6-10	–	**NZMH2-A300-S1** 107577	S	
Electronic releases R.m.s. value measurement and "thermal memory"							
15	250	125-250	2-11	–	**NZMH3-AE250-S1** 119361	S	1 off
	400	200-400	2-11	–	**NZMH3-AE400-S1** 119362	S	
	630	315-630	2-8	–	**NZMH3-AE630-S1** 119363	S	
20	630	315-630	2-12	–	**NZMH4-AE630-S1** 290370	S	
	800	400-800	2-12	–	**NZMH4-AE800-S1** 290371	S	
	1000	500-1000	2-12	–	**NZMH4-AE1000-S1** 290372	S	
	1250	630-1250	2-12	–	**NZMH4-AE1250-S1** 290373	S	
	1600	800-1600	2-12	–	**NZMH4-AE1600-S1** 290374	S	

Notes

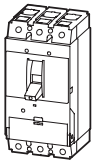
B = box terminals
S = screw terminals
IEC/EN 60947-2
Terminal type:
NZM2: Cover NZM2-XKSA required
NZM3: Cover NZM3-XKSA required
NZM4: Isolated bar connection (screw terminal NZM4-XKS)

	Switching capacity 1000 V 50/60 Hz I_{cu} kA	Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases Non-delayed $I_i = I_n$ x ...	Short-circuit releases Delayed $I_{sd} = I_r$ x ...	Fixed mounting Part no. Article no.	Price See price list	Std. pack

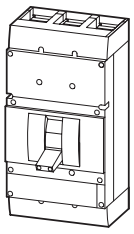
Systems protection, cable protection, selectivity, generator protection
IEC/EN 60947-2
R.m.s. value measurement and "thermal memory"
Adjustable delay setting t_r
- 2-20 s at 6 x I_r and infinite (without overload release)Adjustable delayt_{sd}
- Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms i^2t constant function
- NZM2 fixed OFF
- NZM3. NZM4 switchable



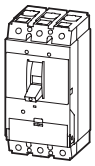
10	100	50-100	1200 A fixed	2-10	**NZMH2-VE100-S1** 100777	S	1 off
	160	80-160	1920 A fixed	2-10	**NZMH2-VE160-S1** 100778	S	
	250	125-250	3000 A fixed	2-10	**NZMH2-VE250-S1** 100779	S	



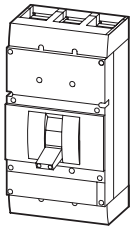
	400	200-400	2-11	2-10	**NZMH3-VE400-S1** 119367	S	
	630	315-630	2-8	1.5-7	**NZMH3-VE630-S1** 119368	S	



20	630	315-630	2-12	2-10	**NZMH4-VE630-S1** 290375	S	
	800	400-800	2-12	2-10	**NZMH4-VE800-S1** 290376	S	
	1000	500-1000	2-12	2-10	**NZMH4-VE1000-S1** 290377	S	
	1250	630-1250	2-12	2-10	**NZMH4-VE1250-S1** 290378	S	
	1600	800-1600	2-12	2-10	**NZMH4-VE1600-S1** 290379	S	



15	220	1 10-220	2-14	–	**NZMH3-ME220-S1** 119364	S	1 off
	350	175-350	2-14	–	**NZMH3-ME350-S1** 119365	S	
	450	225-450	2-12	–	**NZMH3-ME450-S1** 119366	S	



20	550	275-550	2-14	–	**NZMH4-ME550-S1** 290383	S	
	875	438-875	2-14	–	**NZMH4-ME875-S1** 290384	S	
	1400	700-1400	2-14	–	**NZMH4-ME1400-S1** 290385	S	

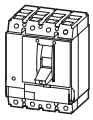
Notes

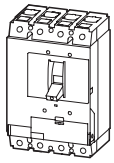
B = box terminals
S = screw terminals

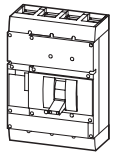
Terminal type:
NZM2: Cover NZM2-XKSA required
NZM3: Cover NZM3-XKSA required
NZM4: Isolated bus connection (screw terminal NZM4-XKS)

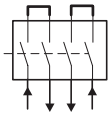
N...DC

Switch-disconnectors for 1000 V DC



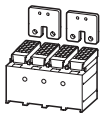
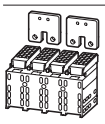
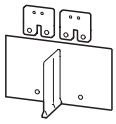
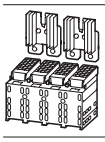
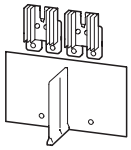
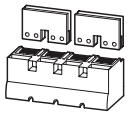
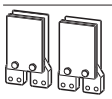




Rated current = Rated uninterrupted current $I_n = I_u$ A	Short-circuit protection, max. fuse gR-characteristic A g^R	Fixed mounting **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**
160	200	**N2-4-160-S1-DC** 127732	1 off	S	**B = box terminalsS = screw terminals**
200	200	**N2-4-200-S1-DC** 127733		S	Main switch characteristics including positive operation to IEC/EN 60204, VDE 0113. Isolating characteristics to IEC/EN 60947, VDE 0660. Protection against electric shock to VDE 0160 part 100. Switch-disconnectors N can, in addition, be combined with shunt releases NZM...-XU, NZM...-XA and auxiliary contacts as well as with remote operator NZM...-XR...
320	500	**N3-4-320-S1-DC** 127734		S	
400	500	**N3-4-400-S1-DC** 142267		S	
500	500	**N3-4-500-S1-DC** 142268		S	
800	1600	**N4-4-800-S1-DC** 119890		S	Connection types: For 2 pole switching, series connection of two poles each is required. See jumper kits under accessories 
1000	1600	**N4-4-1000-S1-DC** 119891		S	
1250	1600	**N4-4-1250-S1-DC** 119886		S	
1400	1400	**N4-4-1400-S1-DC** 119887		S	Terminals as accessory Switch can not be combined with plug-in/withdrawable

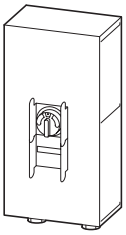
Jumper kits

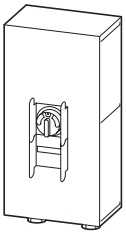
Model contains parts for upper switch side for 4 pole switches,N...-S1-DC that are used as 2 pole switches for DC
The jumpers each connect two current paths in series.Incomer and outgoer at bottom or top, freely selectable.
⩾1250 A: For 65 °C ambient air temperature connection at bottom through module plates NZM4-4-XKM2S-1600.

	Rated operational current I_n A	For use with	Number of poles	Degree of protection	**Part no.** Article no.	Price See price list	Std. pack
 Jumper kit with cover	200 at 65 °C 160 at 70 °C	N2-4-…S1-DC	4 pole/ 2 pole	IP2X	**NZM2-4-XKV2P** 131730		1 off
 Terminal jumpers with cover	400 at 70 °C	N3-320(400)-S1-DC	4 pole/ 2 pole	IP2X	**NZM3-4-XKV2P** 131731		
 Jumper kit with insulating plates	500 at 50 °C 400 at 70 °C	N3-400(500)-S1-DC	4 pole/ 2 pole	IP00	**NZM3-4-XKVI2P** 142269		
 Jumper kit with cover and heat sink	400 at 70 °C 500 at 55 °C 500 at 40 °C	N3-400(500)-S1-DC N3-500-S1-DC	4 pole/ 2 pole	IP1X IP2X	**NZM3-4-XKV2P-K** 142271		
 Jumper kit with insulating plates and heat sinks	500 at 65 °C		4 pole/ 2 pole	IP00	**NZM3-4-XKVI2P-K** 142270		
 Jumper kit with cover	1400 at 40 °C 1250 at 65 °C	N4-4-…S1-DC	4 pole/ 2 pole	IP2X	**NZM4-4-XKV2P** 119888		
 Jumper kit with heat sink	1400 at 65 °C	N4-4-1400-S1-DC	4 pole/ 2 pole	IP00	**NZM4-4-XKV2P-** 1400 119905		

1 PN...ATEX

Number of conductors	Rated current = Rated uninterrupted current $I_n = I_u$ A	Short-circuit protection, max. fuse gL-characteristic A gL	Fixed mounting **Part no.** Article no.	**Price** See price list	Std. pack
Switch-disconnectors for ATEX type					
2 switch positions I, 0					
3 pole	125	125	**PN1-125/HIV/DA-SVD-SW/ATEX22** 119386		1 off
	160	160	**PN1-160/HIV/DA-SVD-SW/ATEX22** 119387		
	200	250	**PN2-200/HIV/DA-SVD-SW/ATEX22** 119388		
	240	250	**PN2-250/HIV/DA-SVD-SW/ATEX22** 119389		
	400	630	**PN3-400/HIV/DA-SVD-SW/ATEX22** 119410		
	630	630	**PN3-630/HIV/DA-SVD-SW/ATEX22** 119411		
6 pole	160	160	**2PN1-160/HIV/DA-SVD-SW/ATEX22** 119418		
6 pole	250	250	**2PN2-250/HIV/DA-SVD-SW/ATEX22** 119419		
ATEX switches for EMC type					
3 pole	125	125	**PN1-125/HIV/DA-SVD-SW/EMV/ATEX22** 119412		
	160	160	**PN1-160/HIV/DA-SVD-SW/EMV/ATEX22** 119413		
	200	250	**PN2-200/HIV/DA-SVD-SW/EMV/ATEX22** 119414		
	240	250	**PN2-250/HIV/DA-SVD-SW/EMV/ATEX22** 119415		
	400	630	**PN3-400/HIV/DA-SVD-SW/EMV/ATEX22** 119416		
	630	630	**PN3-630/HIV/DA-SVD-SW/EMV/ATEX22** 119417		





Notes

Main switch characteristics including positive operation to IEC/EN 60204, VDE 0113.
Isolating characteristics to IEC/EN 60947-3, VDE 0660.
Protection against electric shock to VDE 0160 part 100.

ATEX = Atmosphères explosibles = explosive atmospheres
Eaton supplies switch-disconnectors PN1, PN2 and PN3 for a current range of up to 630 A as complete device according to ATEX Directive 94/9 EG (binding as of 06/2003).
The switches are approved for device group II, the application "everything, except for mining" and for category 3 (normal safety).
Switch-disconnectors in surface mounting enclosure with ATEX approval are used in potentially explosive dust-laden areas, such as mills, metal grinding works, wood processing operations, cement works, the aluminum industry, the foodstuffs industry, grain storage and processing plants, agriculture, and in the pharmaceuticals industry.

ATEX switches for EMC are suitable for use with screened cables.
For important general flush mounting and application notes, see the included installation instructions AWA1230-2480, which you can also download from our homepage www.moeller.net.

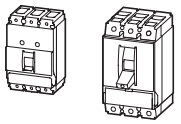
1 NZM1, NZM2, NZM3, NZM4

Circuit-breakers

UL/CSA approved to UL 489, CSA-C22.2 No. 5-09
as well as IEC/EN 60947

With main switch characteristics to IEC/EN 60204 and isolating characteristics to IEC/EN 60947, VDE 0660

Rated uninterrupted current I_u = Rated current I_n
Adjustable overload releases I_r
Adjustable short-circuit releases I_i
Delayed short-circuit releases I_{sd}

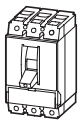
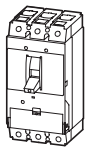
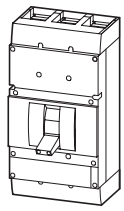


Thermomagnetic releases

Overload release							
Fixed			Adjustable			None	
I_u			I_u		I_r	I_u	
A			A		A	A	
NZM1		NZM2	NZM1	NZM2		NZM1	NZM2
15-**125**		15-**250**	20-**125**	20-**250**	0.8-1 x I_n	1.2-**100**	1.6-**250**

Basic switching capacity[1]			**NZMB2-...-NA**		**NZMB2-...-NA**	
NEMA Test Procedure	240 V 60 Hz	sym. rms kA	35		35	
SCCR	480 V 60 Hz	sym. rms kA	25[2]		25	
	600 V 60 Hz	sym. rms kA	–		18[4]	
IEC/EN 60947	400/415 V	kA/p.f	25	0.25	25	0.25
	440 V	kA/p.t	25	0.25	25	0.25
Normal switching capacity[1]			**NZMN1-. . .-NA**		**NZMN2-...-NA**	
NEMA Test Procedure	240 V 60 Hz	sym. rms kA	85		85	
SCCR	480 V 60 Hz	sym. rms kA	35[2]		35	
	600 V 60 Hz	sym. rms kA	–		25[4]	
IEC/EN 60947	400/415 V	kA/p.f.	50	0.25	50	0.25
	440 V	kA/p.f.	35	0.25	35	0.25
	525 V	kA/p.f.	20	0.30	25	0.25
	690 V	kA/p.f.	10	0.50	20	0.30
High switching capacity[1]					**NZMH2-..: NA**	
NEMA Test Procedure	240 V 60 Hz	sym. rms kA			150	
SCCR	480 V 60 Hz	sym. rms kA			100	
	600 V 60 Hz	sym. rms kA			65[3][4]	
IEC/EN 60947	400/415 V	kA/p.f.			150	0.20
	440 V	kA/p.f.			130	0.20
	525 V	kA/p.f.			50	0.25
	690 V	kA/p.f.			20	0.30

Notes
1) Switches correspond with both UL/CSA and IEC regulations
IEC switching performance values shown on type label.→Technical data
2) For NZM...1-...-NA 480Y/277V
3) For NZMH2>125 A: 50 kA
4) For NZM...2: 600Y/347 V

Electronic releases
Overload release

Short-circuit releases

Motor protection

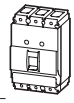
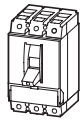
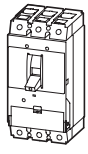
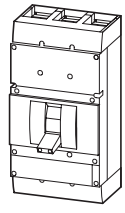
I_u A	I_u A	I_r A	I_u A	I_u A	I_u A	I_r A	I_u A	I_u A	I_u A	I_r A	I_{sd} A	I_i A	I_i A
150-**250**	100-**250**	0.5–1x1_n	90-**220**	250-**600**	250-**600**	0.5–1x1_n	220-**450**	600-**1200**	800-**1200**	0.5–1x1_n	2–10x1_n	2–12x1_n	2–14x1_n

NZMN2-...E...-NA		**NZMN3-...E...-NA**		**NZMN4-...E...-NA**	
85		85		85	
35		42		42	
25[4]		35		35	
50	0.25	50	0.25	50	0.25
35	0.25	35	0.25	35	0.25
25	0.25	25	0.25	25	0.25
20	0.30	20	0.30	20	0.30
NZMH2-...E...-NA		**NZMH3-...E...-NA**		**NZMH4-...E...-NA**	
150		150		125	
100		100		85	
50[4]		50		50	
150	0.20	150	0.20	85	0.20
130	0.20	130	0.20	85	0.20
50	0.25	65	0.25	65	0.25
20	0.30	35	0.25	50	0.25

The approved switches are suitable for world-wide use. The UL and CSA certificates can be found at www.ul.com and www.csa.com
UL certificates: File No.:E 31593(NZM1-4), E 148671 (NIS11-4)
CSA certificates: File No.165628(NZM1-4)

Molded case switch
UL/CSA approved to UL 489, CSA 22.2 No. 5-09
as well as IEC/EN 60947-2 Annex L

With main switch characteristics to IEC/EN 60204, VDE 0113
Isolating characteristics to IEC/EN 60947
Without overcurrent protection
With short-circuit release
Rated uninterrupted current $I_u = I_n$

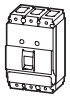
63		160		400	800
100		200		600	1000
125		**250**			**1200**

Switching capacity		**NS1-...-NA**	**NS1-...-NA**	**NS1-...-NA**	**NS1-...-NA**
according to UL 489, CSA 22.2	240 V	85	150	150	85
SCCR	480 V	35[1]	100	100	65
	600 V	–	50[4]	50	42
IEC/EN 60947	400/415 V	50	150	150	70
	440 V	35	130	130	65
	525 V	20	50	65	40
	690	10	20	35	35

Notes

[1] For NS1-...-NA: 480Y/277V
[4] For NZM...2: 600Y/347 V

NZM...AF...NA

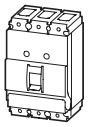
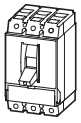
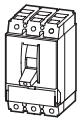
Switching capacity				Rated current =	Setting range		Fixed mounting	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases	Short-circuit releases	**Part no.** Article no.	**Price** See price list
I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ kA	Fixed I_r A	Non-delayed $I_i = I_n$ x ... A		
System and cable protection Fixed overload releases I_r								–
25	–	–	–	20	20	350 A fixed	Screw terminals as accessories	–
				25	25	350 A fixed		–
				30	30	350 A fixed		–
				35	35	Approx. 8-10		–
				40	40	Approx. 8-10		–
				45	45	Approx. 6-10		–
				50	50	Approx. 6-10		–
				60	60	Approx. 6-10		–
				70	70	Approx. 6-10		–
				80	80	Approx. 6-10		–
				90	90	Approx. 6-10		–
				100	100	Approx. 6-10		–
				110	110	Approx. 6-10		–
				125	125	Approx. 6-10		
Basic switching capacity 								
25	25	18	–	15	15	350 A fixed	**NZMB2-AF15-NA** 269142	S
				20	20	350 A fixed	**NZMB2-AF20-NA** 269143	S
				25	25	350 A fixed	**NZMB2-AF25-NA** 269144	S
				30	30	350 A fixed	**NZMB2-AF30-NA** 269145	S
				35	35	Approx. 8-10	**NZMB2-AF35-NA** 269146	S
				40	40	Approx. 8-10	**NZMB2-AF40-NA** 269147	S
				45	45	Approx. 6-10	**NZMB2-AF45-NA** 269148	S
				50	50	Approx. 6-10	**NZMB2-AF50-NA** 269149	S
				60	60	Approx. 6-10	**NZMB2-AF60-NA** 269160	S
				70	70	Approx. 6-10	**NZMB2-AF70-NA** 269161	S
				80	80	Approx. 6-10	**NZMB2-AF80-NA** 269162	S
				90	90	Approx. 6-10	**NZMB2-AF90-NA** 269163	S
				100	100	Approx. 6-10	**NZMB2-AF100-NA** 269164	S
				110	110	Approx. 6-10	**NZMB2-AF110-NA** 269165	S
				125	125	Approx. 6-10	**NZMB2-AF125-NA** 269166	S
				150	150	Approx. 6-10	**NZMB2-AF150-NA** 269167	S

Fixed mounting

with box terminals

Part no. Article no.	Price See price list	Std. pack	Information relevant for export to North America		Notes
NZMB1-AF20-NA 281554	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMB1-AF25-NA 281555	B		UL File No.	E31593	
NZMB1-AF30-NA 281556	B		UL CCN	DIVA	
NZMB1-AF35-NA 272204	B		CSA File No.	022086	
NZMB1-AF40-NA 272205	B		CSA Class No.	1432-01	
NZMB1-AF45-NA 272206	B		NA Certification	UL Listed, CSA certified	
NZMB1-AF50-NA 272207	B		Specially designed for NA	Yes	
NZMB1-AF60-NA 272208	B		Suitable for	Feeder circuits, branch circuits	
NZMB1-AF70-NA 272209	B		Current Limiting CB	Yes	
NZMB1-AF80-NA 272250	B		Max. Voltage Rating	480Y/277 V	
NZMB1-AF90-NA 272251	B		Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMB1-AF100-NA 272252	B				
NZMB1-AF110-NA 281557	B				
NZMB1-AF125-NA 281558	B				
NZMB2-AF15-BT-NA 107611	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMB2-AF20-BT-NA 107612	B		UL File No.	E31593	
NZMB2-AF25-BT-NA 107613	B		UL CCN	DIVA	
NZMB2-AF30-BT-NA 107614	B		CSA File No.	022086	
NZMB2-AF35-BT-NA 107615	B		CSA Class No.	1432-01	
NZMB2-AF40-BT-NA 107616	B		NA Certification	UL Listed, CSA certified	
NZMB2-AF45-BT-NA 107617	B		Specially designed for NA	Yes	
NZMB2-AF50-BT-NA 107618	B		Suitable for	Feeder circuits, branch circuits	
NZMB2-AF60-BT-NA 107619	B		Current Limiting CB	Yes	
NZMB2-AF70-BT-NA 107620	B		Max. Voltage Rating	600Y/347 V, 480 V	
NZMB2-AF80-BT-NA 107621	B		Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMB2-AF90-BT-NA 107622	B				
NZMB2-AF100-BT-NA 107623	B				
NZMB2-AF110-BT-NA 107624	B				
NZMB2-AF125-BT-NA 107625	B				
NZMB2-AF150-BT-NA 107626	B				

NZM...AF...NA

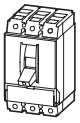
	Switching capacity				Rated current =	Setting range		Fixed mounting		
	SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases Fixed	Short-circuit releases Non-delayed	**Part no.** Article no.		**Price** See price list
	I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ kA	I_r A	$I_i = I_n$ x ... A			
System and cable protection										
Fixed overload releases I_r										
Basic switching capacity	25	25	18	–	175	175	Approx. 6-10	**NZMB2-AF175-NA** 269168	S	
					200	200	Approx. 6-10	**NZMB2-AF200-NA** 269169	S	
					225	225	Approx. 6-10	**NZMB2-AF225-NA** 271089	S	
					250	250	Approx. 6-10	**NZMB2-AF250-NA** 271100	S	
Normal switching capacity	35	–	–	–	20	20	350 A fixed	Screw terminals as accessories	S	
					25	25	350 A fixed		S	
					30	30	350 A fixed		S	
					35	35	Approx. 8-10			
					40	40	Approx. 8-10		S	
					45	45	Approx. 6-10		S	
					50	50	Approx. 6-10		S	
					60	60	Approx. 6-10		S	
					70	70	Approx. 6-10			
					80	80	Approx. 6-10			
					90	90	Approx. 6-10			
					100	100	Approx. 6-10			
					110	110	Approx. 6-10			
					125	125	Approx. 6-10			
	35	35	25	–	15	15	350 A fixed	**NZMN2-AF15-NA** 269170	S	
					20	20	350 A fixed	**NZMN2-AF20-NA** 269171	S	
					25	25	350 A fixed	**NZMN2-AF25-NA** 269172	S	
					30	30	350 A fixed	**NZMN2-AF30-NA** 269173	S	
					35	35	Approx. 8-10	**NZMN2-AF35-NA** 269174	S	
					40	40	Approx. 8-10	**NZMN2-AF40-NA** 269175	S	
					45	45	Approx. 6-10	**NZMN2-AF45-NA** 269176	S	
					50	50	Approx. 6-10	**NZMN2-AF50-NA** 269177	S	
					60	60	Approx. 6-10	**NZMN2-AF60-NA** 269178	S	
					70	70	Approx. 6-10	**NZMN2-AF70-NA** 269179	S	

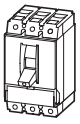
Fixed mounting
with box terminals

Part no. Article no.	Price See price list	Std. pack	Information relevant for export to North America		Notes
			B=box terminals **S=screw terminals**		
NZMB2-AF175-BT-NA 107627	B	1 off	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVA 022086 1432-01 UL Listed, CSA certified Yes Feeder circuits, branch circuits Yes 600Y/347 V, 480 V IEC: IP20: UL/CSA Tvoe:-	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMB2-AF200-BT-NA 107628	B				
NZMB2-AF225-BT-NA 107629	B				
NZMB2-AF250-BT-NA 107630	B				
NZMN1-AF20-NA 281565	B	1 off	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVA 022086 1432-01 UL Listed, CSA certified Yes Feeder circuits, branch circuits Yes 480Y/277 V IEC: IP20; UL/CSA Type:-	
NZMN1-AF25-NA 281566	B				
NZMN1-AF30-NA 281567	B				
NZMN1-AF35-NA 274220	B				
NZMN1-AF40-NA 274223	B				
NZMN1-AF45-NA 274230	B				
NZMN1-AF50-NA 274231	B				
NZMN1-AF60-NA 274232	B				
NZMN1-AF70-NA 274233	B				
NZMN1-AF80-NA 274234	B				
NZMN1-AF90-NA 274235	B				
NZMN1-AF100-NA 274236	B				
NZMN1-AF110-NA 281568	B				
NZMN1-AF125-NA 281569	B				
NZMN2-AF15-BT-NA 107631	B	1 off	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DIVA 022086 1432-01 UL Listed, CSA certified Yes Feeder circuits, branch circuits Yes 600Y/347 V, 480 V IEC: IP20; UL/CSA Type:-	
NZMN2-AF20-BT-NA 107632	B				
NZMN2-AF25-BT-NA 107633	B				
NZMN2-AF30-BT-NA 107634	B				
NZMN2-AF35-BT-NA 107635	B				
NZMN2-AF40-BT-NA 107636	B				
NZMN2-AF45-BT-NA 107637	B				
NZMN2-AF50-BT-NA 107638	B				
NZMN2-AF60-BT-NA 107639	B				
NZMN2-AF70-BT-NA 107640	B				

NZM...AF...NA

	Switching capacity				Rated current =	Setting range		Fixed mounting	
	SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases	Short-circuit releases	**Part no.**	**Price**
						Fixed	Non-delayed	Article no.	See price list
	I_{cu}	I_{cu}	I_{cu}	I_{cu}	$I_n = I_u$	I_r	$I_i = I_n$ x ...		
	kA	kA	kA	kA	kA	A	A		
System and cable protection									
Fixed overload releases I_r									
Basic switching capacity	35	35	25	–	80	80	Approx. 6-10	**NZMN2-AF80-NA** 269180	S
					90	90	Approx. 6-10	**NZMN2-AF90-NA** 269181	S
					100	100	Approx. 6-10	**NZMN2-AF100-NA** 269182	S
					110	110	Approx. 6-10	**NZMN2-AF110-NA** 269183	S
					125	125	Approx. 6-10	**NZMN2-AF125-NA** 269184	S
					150	150	Approx. 6-10	**NZMN2-AF150-NA** 269185	S
					175	175	Approx. 6-10	**NZMN2-AF175-NA** 269186	S
					200	200	Approx. 6-10	**NZMN2-AF200-NA** 269187	S
					225	225	Approx. 6-10	**NZMN2-AF225-NA** 271101	S
					250	250	Approx. 6-10	**NZMN2-AF250-NA** 271102	S
High switching capacity	25	25	18	–	15	15	350 A fixed	**NZMH2-AF15-NA** 269188	S
					20	20	350 A fixed	**NZMH2-AF20-NA** 269189	S
					25	25	350 A fixed	**NZMH2-AF25-NA** 269190	S
					30	30	350 A fixed	**NZMH2-AF30-NA** 269191	S
					35	35	Approx. 8-10	**NZMH2-AF35-NA** 269192	S
					40	40	Approx. 8-10	**NZMH2-AF40-NA** 269193	S
					45	45	Approx. 6-10	**NZMH2-AF45-NA** 269194	S
					50	50	Approx. 6-10	**NZMH2-AF50-NA** 269195	S
					60	60	Approx. 6-10	**NZMH2-AF60-NA** 269196	S
					70	70	Approx. 6-10	**NZMH2-AF70-NA** 269197	S
					80	80	Approx. 6-10	**NZMH2-AF80-NA** 269198	S
					90	90	Approx. 6-10	**NZMH2-AF90-NA** 269199	S
					100	100	Approx. 6-10	**NZMH2-AF100-NA** 269200	S
					110	110	Approx. 6-10	**NZMH2-AF110-NA** 269201	S
					125	125	Approx. 6-10	**NZMH2-AF125-NA** 269202	S
	100	100	50	–	150	150	Approx. 6-10	**NZMH2-AF150-NA** 269203	S
					175	175	Approx. 6-10	**NZMH2-AF175-NA** 269204	S
					200	200	Approx. 6-10	**NZMH2-AF200-NA** 269205	S
					225	225	Approx. 6-10	**NZMH2-AF225-NA** 271103	S
					250	250	Approx. 6-10	**NZMH2-AF250-NA** 271104	S





Fixed mounting
with box terminals

Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**	**Notes**
NZMN2-AF80-BT-NA 107641	B	1 off	Product Standards: UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking UL File No.: E31593 UL CCN: DIVA CSA File No.: 022086 CSA Class No.: 1432-01 NA Certification: UL Listed, CSA certified Specially designed for NA: Yes Suitable for: Feeder circuits, branch circuits Current Limiting CB: Yes Max. Voltage Rating: 600Y/347 V, 480 V Degree of Protection: IEC: IP20; UL/CSA Type:-	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMN2-AF90-BT-NA 107642	B			
NZMN2-AF100-BT-NA 107643	B			
NZMN2-AF110-BT-NA 107644	B			
NZMN2-AF125-BT-NA 107645	B			
NZMN2-AF150-BT-NA 107646	B			
NZMN2-AF175-BT-NA 107647	B			
NZMN2-AF200-BT-NA 107648	B			
NZMN2-AF225-BT-NA 107649	B			
NZMN2-AF250-BT-NA 107650	B			
NZMH2-AF15-BT-NA 107809	B	1 off	Product Standards: UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking UL File No.: E31593 UL CCN: DIVA CSA File No.: 022086 CSA Class No.: 1432-01 NA Certification: UL Listed, CSA certified Specially designed for NA: Yes Suitable for: Feeder circuits, branch circuits Current Limiting CB: Yes Max. Voltage Rating: 600Y/347 V, 480 V Degree of Protection: IEC: IP20; UL/CSA Type:-	
NZMH2-AF20-BT-NA 107810	B			
NZMH2-AF25-BT-NA 107811	B			
NZMH2-AF30-BT-NA 107812	B			
NZMH2-AF35-BT-NA 107813	B			
NZMH2-AF40-BT-NA 107814	B			
NZMH2-AF45-BT-NA 107815	B			
NZMH2-AF50-BT-NA 107816	B			
NZMH2-AF60-BT-NA 107817	B			
NZMH2-AF70-BT-NA 107818	B			
NZMH2-AF80-BT-NA 107819	B			
NZMH2-AF90-BT-NA 107820	B			
NZMH2-AF100-BT-NA 107821	B			
NZMH2-AF110-BT-NA 107822	B			
NZMH2-AF125-BT-NA 107823	B			
NZMH2-AF150-BT-NA 107824	B			
NZMH2-AF175-BT-NA 107825	B			
NZMH2-AF200-BT-NA 107826	B			
NZMH2-AF225-BT-NA 107827	B			
NZMH2-AF250-BT-NA 107828	B			

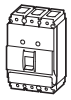
NZM...A...NA

Switching capacity				Rated current =	Setting range		Fixed mounting	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases Fixed	Short-circuit releases Non-delayed	**Part no.** Article no.	**Price** See price list
I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ kA	I_r A	$I_i = I_n$ x ... A		

System and cable protection

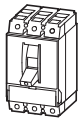
Fixed overload releases I_r

Basic switching capacity



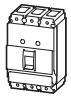
35	35	25	–	20	15-20	350 A fixed	Screw terminals as accessories	S
				25	20-25	350 A fixed		S
				32	25-32	350 A fixed		S
				40	32-40	8-10		S
				50	40-50	6-10		S
				63	50-63	6-10		S
				80	63-80	6-10		S
				100	80-100	6-10		S
				125	100-125	6-10		S

Basic switching capacity



25	25	18	–	20	15-20	350 A fixe	**NZMB2-A20-NA** 269206	S
				25	20-25	350 A fixe	**NZMB2-A25-NA** 269207	S
				32	25-32	350 A fixe	**NZMB2-A32-NA** 269208	S
				40	32-40	8-10	**NZMB2-A40-NA** 269209	S
				50	40-50	6-10	**NZMB2-A50-NA** 269210	S
				63	50-63	6-10	**NZMB2-A63-NA** 269211	S
				80	63-80	6-10	**NZMB2-A80-NA** 269212	S
				100	80-100	6-10	**NZMB2-A100-NA** 269213	S
				125	100-125	6-10	**NZMB2-A125-NA** 269214	S
				160	125-160	6-10	**NZMB2-A160-NA** 269215	S
				200	160-200	6-10	**NZMB2-A200-NA** 269216	S
				250	200-250	6-10	**NZMB2-A250-NA** 271105	S

Basic switching capacity

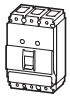
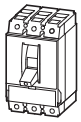
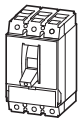


35	–	–	–	20	15-20	350 A fixed	Screw terminals as accessories	
				25	20-25	350 A fixed		
				32	25-32	350 A fixed		
				40	32-40	8-10		
				50	40-50	6-10		
				63	50-63	6-10		

Fixed mounting
with box terminals

Part no. Article no.	Price See price list		Std. pack	Information relevant for export to North America		Notes
NZMB1-A20-NA 281559		B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMB1-A25-NA 281560		B		UL File No.	E31593	
NZMB1-A32-NA 281561		B		UL CCN	DIVA	
NZMB1-A40-NA 272253		B		CSA File No.	022086	
NZMB1-A50-NA 272254		B		CSA Class No.	1432-01	
NZMB1-A63-NA 272255		B		NA Certification	UL Listed, CSA certified	
NZMB1-A80-NA 272256		B		Specially designed for NA	Yes	
NZMB1-A100-NA 272258		B		Suitable for	Feeder circuits, branch circuits	
NZMB1-A125-NA 281562		B		Current Limiting CB	Yes	
				Max. Voltage Rating	480Y/277 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMB2-A20-BT-NA 107773		B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMB2-A25-BT-NA 107774		B		UL File No.	E31593	
NZMB2-A32-BT-NA 107775		B		UL CCN	DIVA	
NZMB2-A40-BT-NA 107776		B		CSA File No.	022086	
NZMB2-A50-BT-NA 107777		B		CSA Class No.	1432-01	
NZMB2-A63-BT-NA 107778		B		NA Certification	UL Listed, CSA certified	
NZMB2-A80-BT-NA 107779		B		Specially designed for NA	Yes	
NZMB2-A100-BT-NA 107780		B		Suitable for	Feeder circuits, branch circuits	
NZMB2-A125-BT-NA 107781		B		Current Limiting CB	Yes	
NZMB2-A160-BT-NA 107782		B		Max. Voltage Rating	600Y/347 V, 480 V	
NZMB2-A200-BT-NA 107783		B		Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMB2-A250-BT-NA 107784		B				
NZMN1-A20-NA 281570		B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMN1-A25-NA 281571		B		UL File No.	E31593	
NZMN1-A32-NA 281572		B		UL CCN	DIVA	
NZMN1-A40-NA 274237		B		CSA File No.	022086	
NZMN1-A50-NA 274239		B		CSA Class No.	1432-01	
NZMN1-A63-NA 274240		B		NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Current Limiting CB	Yes	
				Max. Voltage Rating	600Y/347 V, 480 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	

NZM...A...NA

	Switching capacity				Rated current =	Setting range		Fixed mounting	
	SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases Fixed	Short-circuit releases Non-delayed	Part no. Article no.	Price See price list
	I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ kA	I_r A	$I_i = I_n$ x ... A		
System and cable protection Fixed overload releases I_r									
Basic switching capacity 	35	–	–	–	80	63-80	6-10	Screw terminals as accessories	
					100	80-100	6-10		
					125	100-125	6-10		
	35	35	25	–	20	15-20	350 A fixed	**NZMN2-A20-NA** 269217	S
					25	20-25	350 A fixed	**NZMN2-A25-NA** 269218	S
					32	25-32	350 A fixed	**NZMN2-A32-NA** 269219	S
					40	32-40	8-10	**NZMN2-A40-NA** 269220	S
					50	40-50	6-10	**NZMN2-A50-NA** 269221	S
					63	50-63	6-10	**NZMN2-A63-NA** 269222	S
					80	63-80	6-10	**NZMN2-A80-NA** 269223	S
					100	80-100	6-10	**NZMN2-A100-NA** 269224	S
					125	100-125	6-10	**NZMN2-A125-NA** 269225	S
					160	125-160	6-10	**NZMN2-A160-NA** 269226	S
					200	160-200	6-10	**NZMN2-A200-NA** 269227	S
					250	200-250	6-10	**NZMN2-A250-NA** 271106	S
High switching capacity 	150	150	65		20	15-20	350 A fixed	**NZMH2-A20-NA** 269228	S
					25	20-25	350 A fixed	**NZMH2-A25-NA** 269229	S
					32	25-32	350 A fixed	**NZMH2-A32-NA** 269230	S
					40	32-40	8-10	**NZMH2-A40-NA** 269231	S
					50	40-50	6-10	**NZMH2-A50-NA** 269232	S
					63	50-63	6-10	**NZMH2-A63-NA** 269233	S
					80	63-80	6-10	**NZMH2-A80-NA** 269234	S
					100	80-100	6-10	**NZMH2-A100-NA** 269235	S
					125	100-125	6-10	**NZMH2-A125-NA** 269236	S
	100	100	50		160	125-160	6-10	**NZMH2-A160-NA** 269237	S
					200	160-200	6-10	**NZMH2-A200-NA** 269238	S
					250	200-250	6-10	**NZMH2-A250-NA** 271107	S

Fixed mounting
with box terminals

Part no. Article no.	Price See price list	Std. pack	Information relevant for export to North America		Notes
			B=boxterminals **S=screw terminals**		
NZMN1-A80-NA 274241	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMN1-A100-NA 274242	B		Max. Voltage Rating	480Y/277 V	
NZMN1-A125-NA 281573	B		Other Standards as NZMN2... below		
NZMN2-A20-BT-NA 107785	B		Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMN2-A25-BT-NA 107786	B		UL File No.	E31593	
NZMN2-A32-BT-NA 107787	B		UL CCN	DIVA	
NZMN2-A40-BT-NA 107788	B		CSA File No.	022086	
NZMN2-A50-BT-NA 107789	B		CSA Class No.	1432-01	
NZMN2-A63-BT-NA 107790	B		NA Certification	UL Listed, CSA Certified	
NZMN2-A80-BT-NA 107791	B		Specially designed for NA	Yes	
NZMN2-A100-BT-NA 107792	B		Suitablefor	Feeder circuits, Branch Circuits	
NZMN2-A125-BT-NA 107793	B		Current Limiting CB	Yes	
NZMN2-A160-BT-NA 107794	B		Max. Voltage Rating	600Y/347 V,480 V	
NZMN2-A200-BT-NA 107795	B		Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMN2-A250-BT-NA 107796	B				
NZMH2-A20-BT-NA 107797	B				
NZMH2-A25-BT-NA 107798	B				
NZMH2-A32-BT-NA 107799	B				
NZMH2-A40-BT-NA 107800	B				
NZMH2-A50-BT-NA 107801	B				
NZMH2-A63-BT-NA 107802	B				
NZMH2-A80-BT-NA 107803	B				
NZMH2-A100-BT-NA 107804	B				
NZMH2-A125-BT-NA 107805	B				
NZMH2-A160-BT-NA 107806	B				
NZMH2-A200-BT-NA 107807	B				
NZMH2-A250-BT-NA 107808	B				

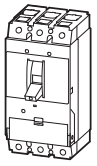
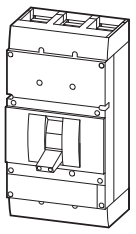
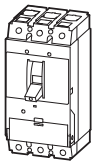
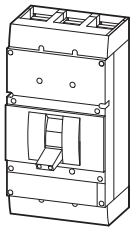
NZM...AF...NA

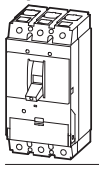
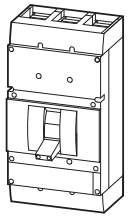
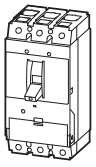
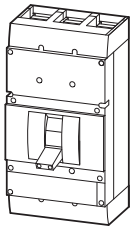
Switching capacity				Rated current =	Setting range		Fixed mounting		
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases	Short-circuit releases Non-delayed	**Part no.** Article no.	**Price** See price list	Std. pack
I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ A	I_r A	$I_i = I_n$ x ...			

System and cable protection

Fixed overload release I_r

R.m.s. value measurement and "thermal memory"

Normal switching capacity 	42	42	35	35	250	250	2-11	**NZMN3-AEF250-NA** 269275	S	1 off
					300	300	2-11	**NZMN3-AEF300-NA** 269276	S	
					350	350	2-11	**NZMN3-AEF350-NA** 269277	S	
					400	400	2-11	**NZMN3-AEF400-NA** 269278	S	
					450	450	2-8	**NZMN3-AEF450-NA** 269279	S	
					500	500	2-8	**NZMN3-AEF500-NA** 269280	S	
					550	550	2-8	**NZMN3-AEF550-NA** 269281	S	
					600	600	2-8	**NZMN3-AEF600-NA** 269282	S	
	42	42	35	35	600	600	2-12	**NZMN4-AEF600-NA** 271108	S	
					700	700	2-12	**NZMN4-AEF700-NA** 271109	S	
					800	800	2-12	**NZMN4-AEF800-NA** 271110	S	
					900	900	2-12	**NZMN4-AEF900-NA** 271111	S	
					1000	1000	2-12	**NZMN4-AEF1000-NA** 271112	S	
					1200	1200	2-12	**NZMN4-AEF1200-NA** 271113	S	
High switching capacity 	100	100	50	50	250	250	2-11	**NZMH3-AEF250-NA** 269283	S	1 off
					300	300	2-11	**NZMH3-AEF300-NA** 269284	S	
					350	350	2-11	**NZMH3-AEF350-NA** 269285	S	
					400	400	2-11	**NZMH3-AEF400-NA** 269286	S	
					450	450	2-8	**NZMH3-AEF450-NA** 269287	S	
					500	500	2-8	**NZMH3-AEF500-NA** 269288	S	
					550	550	2-8	**NZMH3-AEF550-NA** 269289	S	
	85	85	50	50	600	600	2-8	**NZMH3-AEF600-NA** 269290	S	
					600	600	2-12	**NZMH4-AEF600-NA** 271114	S	
					700	700	2-12	**NZMH4-AEF700-NA** 271115	S	
					800	800	2-12	**NZMH4-AEF800-NA** 271116	S	
					900	900	2-12	**NZMH4-AEF900-NA** 271117	S	
					1000	1000	2-12	**NZMH4-AEF1000-NA** 271118	S	
					1200	1200	2-12	**NZMH4-AEF1200-NA** 271119	S	

	Switching capacity				Rated current = Rated uninterrupted current	Setting range		Fixed mounting Part no. Article no.		Price See price list	Std. pack
	SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz		Overload releases	Short-circuit releases Non-delayed				
	I_{cu}	I_{cu}	I_{cu}	I_{cu}	$I_n = I_u$	I_r	$I_i = I_n$ x ...				
	kA	kA	kA	kA	A	A					
							I>				
System and cable protection											
Fixed overload release I_r											
R.m.s. value measurement and "thermal memory"											
Normal switching capacity	42	42	35	35	250	125-250	2-11	**NZMN3-AE250-NA** 269299	S		1 off
					400	200-400	2-11	**NZMN3-AE400-NA** 269300			
					600	300-600	2-8	**NZMN3-AE600-NA** 269301	S		
	42	42	35	35	800	400-800	2-12	**NZMN4-AE800-NA** 271120	S		
					1000	500-1000	2-12	**NZMN4-AE1000-NA** 271121	S		
					1200	600-1200	2-12	**NZMN4-AE1200-NA** 271122	S		
	100	100	50	50	250	125-250	2-11	**NZMH3-AE250-NA** 269302	S		1 off
					400	200-400	2-11	**NZMH3-AE400-NA** 269303	S		
					600	300-600	2-8	**NZMH3-AE600-NA** 269304	S		
					800	400-800	2-12				
	85	85	50	50	1000	500-1000	2-12	**NZMH4-AE800-NA** 271123	S		
					1200	600-1200	2-12	**NZMH4-AE1000-NA** 271124	S		
								NZMH4-AE1200-NA 271125	S		

Notes

Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.

B=boxterminals

S=screwterminals

Information relevant for export to North America

Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking
UL File No.	E31593
UL CCN	DIVQ
CSA File No.	022086
CSA Class No.	1432-01
NA Certification	UL Listed, CSA certified
Specially designed for NA	Yes
Suitable for	Feeder circuits, branch circuits
Current Limiting CB	1) Yes 2) No
Max. Voltage Rating	600 V
Degree of Protection	IEC: IP20; UL/CSA Type:-

NZM...VEF...NA

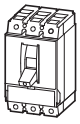
Fixed mounting

Switching capacity				Rated current =	Setting range			**Part no.** Article no.	**Price** See price list	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases Fixed	Short-circuit releases Non-delayed	Short-circuit releases Delayed			
I_{cu} kA	I_{cu} kA	I_{cu} kA	I_{cu} kA	$I_n = I_u$ A	I_r A	$I_i = I_n$ x...	$I_{sd} = I_r$ x ...			

Systems protection, cable protection, selectivity, generator protection

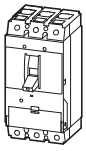
Fixed overload release I,
R.m.s. value measurement and "thermal memory"

Normal switching capacity



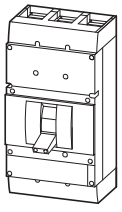
35	35	25	–	150	150	1800 A	2-10	**NZMN2-VEF150-NA** 271126	S
				175	175	2100 A	2-10	**NZMN2-VEF175-NA** 271127	S
				200	200	2400 A	2-10	**NZMN2-VEF200-NA** 271128	S
				225	225	2700 A	2-10	**NZMN2-VEF225-NA** 271129	S
				250	250	3000 A	2-10	**NZMN2-VEF250-NA** 271130	S

Normal switching capacity



42	42	35	35	250	250	2-11	2-10	**NZMN3-VEF250-NA** 269308	S
				300	300	2-11	2-10	**NZMN3-VEF300-NA** 269309	S
				350	350	2-11	2-10	**NZMN3-VEF350-NA** 269310	S
				400	400	2-11	2-10	**NZMN3-VEF400-NA** 269311	S
				450	450	2-8	1.5-7	**NZMN3-VEF450-NA** 269312	S
				500	500	2-8	1.5-7	**NZMN3-VEF500-NA** 269313	S
				550	550	2-8	1.5-7	**NZMN3-VEF550-NA** 269314	S
				600	600	2-8	1.5-7	**NZMN3-VEF600-NA** 269315	S

Normal switching capacity



42	42	35	35	600	600	2-12	2-10	**NZMN4-VEF600-NA** 271136	S
				700	700	2-12	2-10	**NZMN4-VEF700-NA** 271137	S
				800	800	2-12	2-10	**NZMN4-VEF800-NA** 271138	S
				900	900	2-12	2-10	**NZMN4-VEF900-NA** 271139	S
				1000	1000	2-12	2-10	**NZMN4-VEF1000-NA** 271140	S
				1200	1200	2-12	2-10	**NZMN4-VEF1200-NA** 271141	S

Fixed mounting
with box terminals

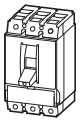
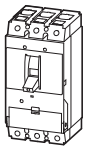
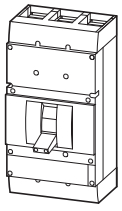
Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**		**Notes**
NZMN2-VEF150-BT-NA 107593	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label. Adjustable delay setting t_r • 2 – 20 s at 6 x I_r Adjustable delay t_{sd} • Steps 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable (ex-works OFF)
NZMN2-VEF175-BT-NA 107594	B				
NZMN2-VEF200-BT-NA 107595	B				
NZMN2-VEF225-BT-NA 107596	B				
NZMN2-VEF250-BT-NA 107597	B				
			UL File No.	E31593	
			UL CCN	DIVA	
			CSA File No.	022086	
			CSA Class No.	1432-01	
			NA Certification	UL Listed, CSA certified	
			Specially designed for NA	Yes	
			Suitable for	Feeder circuits, branch circuits	
			Current Limiting CB	Yes	
			Max. Voltage Rating	600Y/347 V,480 V	
			Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
			UL File No.	E31593	
			UL CCN	DIVA	
			CSA File No.	022086	
			CSA Class No.	1432-01	
			NA Certification	UL Listed, CSA certified	
			Specially designed for NA	Yes	
			Suitable for	Feeder circuits, branch circuits	
			Current Limiting CB	Yes	
			Max. Voltage Rating	600 V	
			Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory		1 off			

NZM...VEF...NA

Fixed mounting

Switching capacity				Rated current =	Setting range			**Part no.**	**Price**	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	Rated uninterrupted current	Overload releases	Short-circuit releases		Article no.	See price list	
					Fixed	Non-delayed	Delayed			
I_{cu}	I_{cu}	I_{cu}	I_{cu}	$I_n = I_u$	I_r	$I_i = I_n$ x ...	$I_{sd} = I_r$ x ...			
kA	kA	kA	kA	A	A					

Systems protection, cable protection, selectivity, generator protection
Fixed overload release I_r
R.m.s. value measurement and "thermal memory"

High switching capacity	100	100	50	–	150	150	1800 A fixed	2-10	**NZMH2-VEF150-NA** 271131	S
				–	175	175	2100 A fixed	2-10	**NZMH2-VEF175-NA** 271132	S
				–	200	200	2400 A fixed	2-10	**NZMH2-VEF200-NA** 271133	S
				–	225	225	2700 A fixed	2-10	**NZMH2-VEF225-NA** 271134	S
				–	250	250	3000 A fixed	2-10	**NZMH2-VEF250-NA** 271135	S
	100	100	50	50	250	250	2-11	2-10	**NZMH3-VEF250-NA** 269316	S
					300	300	2-11	2-10	**NZMH3-VEF300-NA** 269317	S
					350	350	2-11	2-10	**NZMH3-VEF350-NA** 269318	S
					400	400	2-11	2-10	**NZMH3-VEF400-NA** 269319	S
					450	450	2-8	1.5-7	**NZMH3-VEF450-NA** 269320	S
					500	500	2-8	1.5-7	**NZMH3-VEF500-NA** 269321	S
					550	550	2-8	1.5-7	**NZMH3-VEF550-NA** 269322	S
					600	600	2-8	1.5-7	**NZMH3-VEF600-NA** 269323	S
	85	85	50	50	600	600	2-12	2-10	**NZMH4-VEF600-NA** 271142	S
					700	700	2-12	2-10	**NZMH4-VEF700-NA** 271143	S
					800	800	2-12	2-10	**NZMH4-VEF800-NA** 271144	S
					900	900	2-12	2-10	**NZMH4-VEF900-NA** 271145	S
					1000	1000	2-12	2-10	**NZMH4-VEF1000-NA** 271146	S
					1200	1200	2-12	2-10	**NZMH4-VEF1200-NA** 271147	S

Fixed mounting
with box terminals

Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**		**Notes**
NZMH2-VEF150-BT-NA 107598	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	IEC switching performance values shown on type label. Adjustable delay setting t, • 2–20sat6xl, Adjustable delay tsd • Steps 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms izt constant function NZM2 fixed OFF • NZM3, NZM4 switchable (ex-works OFF)
NZMH2-VEF175-BT-NA 107599	B		UL File No.	E31593	
NZMH2-VEF200-BT-NA 107840	B		UL CCN	DIVA	
NZMH2-VEF225-BT-NA 107841	B		CSA File No.	022086	
NZMH2-VEF250-BT-NA 107842	B		CSA Class No.	1432-01	
			NA Certification	UL Listed, CSA certified	
			Specially designed for NA	Yes	
			Suitable for	Feeder circuits, branch circuits	
			Current Limiting CB	Yes	
			Max. Voltage Rating	600Y/347 V,480 V	
			Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
			UL File No.	E31593	
			UL CCN	DIVA	
			CSA File No.	022086	
			CSA Class No.	1432-01	
			NA Certification	UL Listed, CSA certified	
			Specially designed for NA	Yes	
			Suitable for	Feeder circuits, branch circuits	
			Current Limiting CB	Yes	
			Max. Voltage Rating	600 V	
			Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory					

NZM...VE...NA

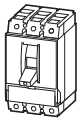
Fixed mounting

Switching capacity				Rated current = Rated uninterrupted current	Setting range			Part no. Article no.	Price See price list	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz		Overload releases	Short-circuit releases				
						Non-delayed	Delayed			
I_{cu}	I_{cu}	I_{cu}	I_{cu}	$I_n = I_u$	I_r	$I_i = I_n$ x ...	$I_{sd} = I_r$ x ...			
kA	kA	kA	kA	A	A					

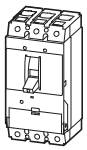
Systems protection, cableprotection, selectivity, generator protection

Adjustable overload release I_r
R.m.s. value measurement and "thermal memory"

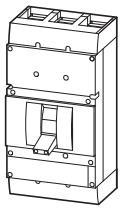
Normal switching capacity



35	35	25	–	100	50-100	1200 A fixed	2-10	NZMN2-VE100-NA 271148	S
			–	160	80-160	1920 A fixed	2-10	NZMN2-VE160-NA 271149	S
			–	250	125-250	3000 A fixed	2-10	NZMN2-VE250-NA 271150	S

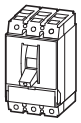


42	42	35	35	250	125-250	2-11	2-10	NZMN3-VE250-NA 269332	S
				400	200-400	2-11	2-10	NZMN3-VE400-NA 269333	S
				600	300-600	2-8	1.5-7	NZMN3-VE600-NA 269334	S

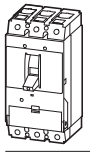


42	42	35	35	800	400-800	2-12	2-10	NZMN4-VE800-NA 271154	S
				1000	500-1000	2-12	2-10	NZMN4-VE1000-NA 271155	S
				1200	630-1200	2-12	2-10	NZMN4-VE1200-NA 271156	S

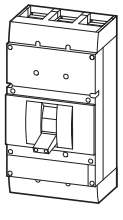
High switching capacity



100	100	50	–	100	50-100	1200 A fixed	2-10	NZMH2-VE100-NA 271151	S
				160	80-160	1920 A fixed	2-10	NZMH2-VE160-NA 271152	S
				250	125-250	3000 A fixed	2-10	NZMH2-VE250-NA 271153	S



100	100	50	50	250	125-250	2-11	2-10	NZMH3-VE250-NA 269335	S
				400	200-400	2-11	2-10	NZMH3-VE400-NA 269336	S
				600	300-600	2-8	1.5-7	NZMH3-VE600-NA 269337	S



85	85	50	50	800	400-800	2-12	2-10	NZMH4-VE800-NA 271157	S
				1000	500-1000	2-12	2-10	NZMH4-VE1000-NA 271158	S
				1200	630-1200	2-12	2-10	NZMH4-VE1200-NA 271159	S

Fixed mounting
with box terminals

Part no. Article no.		Price See price list	Std. pack	Information relevant for export to North America		Notes
NZMN2-VE100-BT-NA 107843	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label. Adjustable delay setting t, • 2–20sat6xh Adjustable delay tsd • Steps: 0, 20, 60, 100, 200, 300, 500, 750,1000 ms i^2t constant function • NZM2 fixed OFF • NZM3, NZM4 switchable (ex-works OFF)
NZMN2-VE160-BT-NA 107844	B			UL File No.	E31593	
NZMN2-VE250-BT-NA 107845	B			UL CCN	DIVA	
				CSA File No.	022086	
				CSA Class No.	1432-01	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Current Limiting CB	Yes	
				Max. Voltage Rating	600Y/347 V,480 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory				Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
				UL File No.	E31593	
				UL CCN	DIVA	
				CSA File No.	022086	
				CSA Class No.	1432-01	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Current Limiting CB	Yes	
				Max. Voltage Rating	600 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
NZMH2-VE100-BT-NA 107846	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMH2-VE160-BT-NA 107847	B			UL File No.	E31593	
NZMH2-VE250-BT-NA 107848	B			UL CCN	DIVA	
				CSA File No.	022086	
				CSA Class No.	1432-01	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Current Limiting CB	Yes	
				Max. Voltage Rating	600Y/347 V,480 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory				Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
				UL File No.	E31593	
				UL CCN	DIVA	
				CSA File No.	022086	
				CSA Class No.	1432-01	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Current Limiting CB	Yes	
				Max. Voltage Rating	600 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	

Circuit-breakers UL/CSA, IEC magnetic short-circuit releases, 3 pole

NZM...-S...CNA

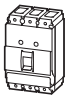
Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Short-circuit releases Non-delayed $I_i = I_n$ x ...	Fixed mounting with screw terminals **Part no.** Article no.	**Price** See price list

Short-circuit protection

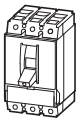
Motor protection in conjunction with contactor and overload relay

- With short-circuit release
- Without overload release I_r

Basic switching capacity



1.2	7-12	Screw terminals as accessories	
2	6-11		
3	6-11		
5	6-11		
8	6-11		
12	7-12		
18	7-12		
26	8-13		
33	8-14		
40	8-14		
50	8-14		
63	8-14		
80	8-14		
100	8-13		



1.6	8-14	**NZMB2-S1.6-CNA** 269472	S
2.4	8-14	**NZMB2-S2.4-CNA** 269473	S
5	6-11	**NZMB2-S5-CNA** 103034	S
8	6-11	**NZMB2-S8-CNA** 103035	S
12	7-12	**NZMB2-S12-CNA** 103036	S
18	7-12	**NZMB2-S18-CNA** 103037	S
26	8-13	**NZMB2-S26-CNA** 103038	S
33	8-14	**NZMB2-S33-CNA** 103039	S
40	8-14	**NZMB2-S40-CNA** 269243	S
50	8-14	**NZMB2-S50-CNA** 269244	S
63	8-14	**NZMB2-S63-CNA** 269245	S
80	8-14	**NZMB2-S80-CNA** 269246	S
100	8-14	**NZMB2-S100-CNA** 269247	S
125	8-14	**NZMB2-S125-CNA** 269248	S
160	8-14	**NZMB2-S160-CNA** 269249	S
200	8-13	**NZMB2-S200-CNA** 269250	S
250	8-10	**NZMB2-S250-CNA** 102478	S

Fixed mounting with box terminals Part no. Article no.		**Price** See price list	Std. pack	**Information relevant for export to North America**		**Notes**
						B = box terminals **S = screw terminals** For further terminal types see accessories
NZMB1-S1.2-CNA 102906	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMB1-S2-CNA 102907	B			UL File No.	E31593	
NZMB1-S3-CNA 102908	B			UL CCN	DKPU2	
NZMB1-S5-CNA 102909	B			CSA File No.	022086	
NZMB1-S8-CNA 103020	B			CSA Class No.	1432-01	
NZMB1-S12-CNA 103021	B			NA Certification	UL Recognized, CSA certified	
NZMB1-S18-CNA 103022	B			Conditions of Acceptability	Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay.	
NZMB1-S26-CNA 103023	B			Specially designed for NA		
NZMB1-S33-CNA 103024	B			Suitable for		
NZMB1-S40-CNA 281263	B			Max. Voltage Rating	Yes	
NZMB1-S50-CNA 281264	B			Degree of Protection	Branch circuits, feeder circuits 480Y/277 V IEC: IP20; UL/CSA Type:-	
NZMB1-S63-CNA 281265	B					
NZMB1-S80-CNA 281266	B					
NZMB1-S100-CNA 281267	B					
NZMB2-S1.6-BT-CNA 107651	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NZMB2-S2.4-BT-CNA 107652	B			UL File No.	E31593	
NZMB2-S5-BT-CNA 107653	B			UL CCN	DKPU2	
NZMB2-S8-BT-CNA 107654	B			CSA File No.	022086	
NZMB2-S12-BT-CNA 107655	B			CSA Class No.	1432-01	
NZMB2-S18-BT-CNA 107656	B			NA Certification	UL Recognized, CSA certified	
NZMB2-S26-BT-CNA 107657	B			Conditions of Acceptability	Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay.	
NZMB2-S33-BT-CNA 107658	B			Specially designed for NA	Yes	
NZMB2-S40-BT-CNA 107659	B			Suitable for	Branch circuits, feeder circuits 600Y/347 V, 480 V	
NZMB2-S50-BT-CNA 107660	B			Max. Voltage Rating	IEC: IP20; UL/CSA Type:-	
NZMB2-S63-BT-CNA 107661	B			Degree of Protection		
NZMB2-S80-BT-CNA 107662	B					
NZMB2-S100-BT-CNA 107663	B					
NZMB2-S125-BT-CNA 107664	B					
NZMB2-S160-BT-CNA 107665	B					
NZMB2-S200-BT-CNA 107666	B					
NZMB2-S250-BT-CNA 107667	B					

NZM...-S...CNA

Fixed mounting
with screw terminals

Part no.
Article no.

Price
See price list

Std. pack

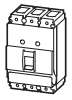
Rated current =
Rated uninterrupted current
$I_n = I_u$
A

Setting range
Short-circuit releases
Non-delayed
$I_i = I_n \times \ldots$

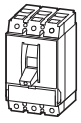
Short-circuit protection

Motor protection in conjunction with contactor and overload relay
- With short-circuit release
- Without overload release I_r

Normal switching capacity



1.2	7-12	1)	**NZMN1-S1.2-CNA** 103025	B	1 off
2	6-11		**NZMN1-S2-CNA** 103026	B	
3	6-11		**NZMN1-S3-CNA** 103027	B	
5	6-11		**NZMN1-S5-CNA** 103028	B	
8	6-11		**NZMN1-S8-CNA** 103029	B	
12	7-12		**NZMN1-S12-CNA** 103030	B	
18	7-12		**NZMN1-S18-CNA** 103031	B	
26	8-13		**NZMN1-S26-CNA** 103032	B	
33	8-14		**NZMN1-S33-CNA** 103033	B	
40	8-14		**NZMN1-S40-CNA** 281276	B	
50	8-14		**NZMN1-S50-CNA** 281277	B	
63	8-14		**NZMN1-S63-CNA** 281278	B	
80	8-14		**NZMN1-S80-CNA** 281279	B	
100	8-13		**NZMN1-S100-CNA** 281280	B	
1.6	8-14	2)	**NZMN2-S1.6-CNA** 269478	S	
2.4	8-14		**NZMN2-S2.4-CNA** 269479	S	
5	6-11		**NZMN2-S5-CNA** 103040	S	
8	6-11		**NZMN2-S8-CNA** 103041	S	
12	7-12		**NZMN2-S12-CNA** 103042	S	
18	7-12		**NZMN2-S18-CNA** 103043	S	
26	8-13		**NZMN2-S26-CNA** 103044	S	
33	8-14		**NZMN2-S33-CNA** 103045	S	
40	8-14		**NZMN2-S40-CNA** 269255	S	
50	8-14		**NZMN2-S50-CNA** 269256	S	
63	8-14		**NZMN2-S63-CNA** 269257	S	
80	8-14		**NZMN2-S80-CNA** 269258	S	
100	8-14		**NZMN2-S100-CNA** 269259	S	
125	8-14		**NZMN2-S125-CNA** 269260	S	
160	8-14		**NZMN2-S160-CNA** 269261	S	
200	8-13		**NZMN2-S200-CNA** 269262	S	
250	8-10		**NZMN2-S250-CNA** 102479	S	

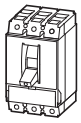


	Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Short-circuit releases Non-delayed $I_i = I_n$ x ...		Fixed mounting with screw terminals Part no. Article no.		Price See price list	Std. pack

Short-circuit protection

Motor protection in conjunction with contactor and overload relay

- With short-circuit release
- Without overload release I_r

High switching capacity 	1.6	8-14	2)	**NZMH2-S1.6-CNA** 269482	S	1 off	
	2.4	8-14		**NZMH2-S2.4-CNA** 269483	S		
	5	6-11		**NZMH2-S5-CNA** 103046	S		
	8	6-11		**NZMH2-S8-CNA** 103047	S		
	12	7-12		**NZMH2-S12-CNA** 103048	S		
	18	5-9		**NZMH2-S18-CNA** 103049	S		
	26	8-13		**NZMH2-S26-CNA** 103050	S		
	33	8-14		**NZMH2-S33-CNA** 103051	S		
	40	8-14		**NZMH2-S40-CNA** 269267	S		
	50	8-14		**NZMH2-S50-CNA** 269268	S		
	63	8-14		**NZMH2-S63-CNA** 269269	S		
	80	8-14		**NZMH2-S80-CNA** 269270	S		
	100	8-14		**NZMH2-S100-CNA** 269271	S		
	125	8-14		**NZMH2-S125-CNA** 269272	S		
	160	8-14		**NZMH2-S160-CNA** 269273	S		
	200	8-13		**NZMH2-S200-CNA** 269274	S		
	250	8-10		**NZMH2-S250-CNA** 102490	S		

Notes

B = box terminals
S = screw terminals

For further terminal types see accessories

Switches correspond with both UL/CSA and IEC regulations.
IEC switching performance values shown on type label.

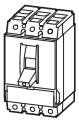
Information relevant for export to North America

Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking
UL File No.	E31593
UL CCN	DKPU2
CSA File No.	022086
CSA Class No.	1432-01
NA Certification	UL Recognized, CSA certified
Conditions of Acceptability	Only used in motor circuits in conjunction with suitable contactor and overload relay. SCCR value applies for complete combination starter only, consisting of instantaneous trip circuit breaker, contactor and overload relay.
Specially designed for NA	Yes
Suitablefor	Branch circuits, feeder circuits
Max. Voltage Rating	1) 480Y/277 V 2) 600Y/347 V, 480 V
Degree of Protection	IEC: IP20; UL/CSA Type:-

NZM...ME...NA, NZM...SE...CNA

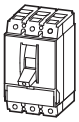
Switching capacity		Rated current =	Setting range		Motor power	Fixed mounting with screw terminals	
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	Rated uninterrupted current	Overload releases	Short-circuit releasess Non-delayed	460 V 480 V HP	**Part no.** Article no.	**Price** See Price list
I_{cu} kA	I_{cu} kA	$I_n = I_u$ A	I_r A	$I_i = I_n$ x ...			

Motor protection
100% rated
Adjustable overload releases
For use in motor circuits with contactor.
Additional motor protective characteristics (calibration) to UL508, CSA-C22.2 No. 14-05



35	35	90	45-90	2-14	60	**NZMN2-ME90-NA** 118964	S
		140	70-140	2-14	100	**NZMN2-ME140-NA** 118965	S
		200	100-200	2-14	150	**NZMN2-ME200-NA** 118966	S

High switching capacity



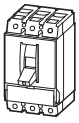
100	100	90	45-90	2-14	60	**NZMH2-ME90-NA** 118967	S
		140	70-140	2-14	100	**NZMH2-ME140-NA** 118968	S
		200	100-200	2-14	150	**NZMH2-ME200-NA** 118969	S

Rated current = Rated uninterrupted current	Setting range Short-circuit releases	**Fixed mounting** with screw terminals **Part no.** Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**	**Notes**
$I_n = I_u$ A	Non-delayed $I_i = I_n$ x ...					

Short-circuit protection
Motor protection in conjunction with contactor and overload relay
- With short-circuit release
- Without overload release ,,

B=boxterminals
S=screw terminals
Forfurtherterminaltypes see accessories

Normal switching capacity

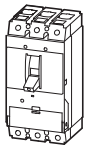


90	2-14	**NZMN2-SE90-CNA** 271160	S	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
140	2-14	**NZMN2-SE140-CNA** 271161	S		UL File No.	E31593	
220	2-14	**NZMN2-SE220-CNA** 271162	S		UL CCN	DKPU2	
					CSA File No.	022086	
					CSA Class No.	1432-01	
					NA Certification	UL Recognized, CSA certified	
					Conditions of Acceptability	Only used in motor circuits in conjunction with suitable contac- for and overload relay. SCCR value applies for complete combi- nation starter only, consisting of instanta- neous trip circuit breaker,contactor and overload relay.	
					Specially designed for NA	Yes	
					Suitable for	Branch circuits, feeder circuits 480 V	
					Max. Voltage Rating	IEC: IP20; UL/CSA	
					Degree of Protection	Type:-	

Fixed mounting

Part no. Article no.		Price See Price list	Std. pack	Information relevant for export to North America		Notes
						B = box terminals **S = screw terminals** For further terminal types see accessories
NZMN2-ME90-BT-NA 142421	S		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label. Adjustable delay setting t_r • 2 – 20 s at 6 x I_r
NZMN2-ME140-BT-NA 142422	S			UL CCN NA Certification Specially designed for NA	DIVA Request filed for UL and CSA Yes, additionally calibrated according to UL 508	
NZMN2-ME200-BT-NA 142423	S			Suitable for	Feeder circuits, branch circuits	
NZMH2-ME90-BT-NA 142424	S			Max. Voltage Rating Degree of Protection	480 V IEC: IP20; UL/CSA Type:-	
NZMH2-ME140-BT-NA 142425	S		1 off			
NZMH2-ME200-BT-NA 142426	S					

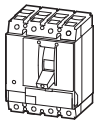
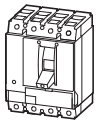
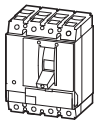
Fixed mounting
with screw terminals

Rated current = Rated uninterrupted current $I_n = I_u$ A	Setting range Short-circuit releases Non-delayed $I_i = I_n$ x …	Part no. Article no.	Price See price list	Std. pack	Information relevant for export to North America		Notes
Short-circuit protection Motor protection in conjunction with contactor and overload relay • With short-circuit release • Without overload release ,,					**B=boxterminals** **S=screw terminals** Forfurtherterminaltypes see accessories		
Normal switching capacity 	220	2-14	**NZMN3-SE220-CNA** 269341	S	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking E31593 DKPU2 022086	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
	350	2-14	**NZMN3-SE350-CNA** 269342	S				
	450	2-12	**NZMN3-SE450-CNA** 284465	S				
						UL File No. UL CCN CSA File No. CSA Class No. NA Certification	1432-01 UL Recognized, CSA certified Only used in motor circuits in conjunction with suitable contac-for and overload relay. SCCR value applies for complete combi-nation starter only, consisting of instanta-neous trip circuit breaker,contactor and overload relay.	
						Conditions of Acceptability		
						Specially designed for NA Suitable for	Yes Branch circuits, feeder circuits	
						Max. Voltage Rating Degree of Protection	480 V IEC: IP20; UL/CSA Type:-	

NZM...-4-AF...NA

Switching capacity				Rated current = Rated	Setting range		
SCCR 480Y/ 277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/ 347 V 60 Hz	SCCR 600 V 60 Hz	uninterrupted current	Overload releases	Neutral conductor	Short-circuit releases
						I_r × % of phase	Non-delayed
I_{cu}	I_{cu}	I_{cu}	I_{cu}	$I_n = I_u$	I_r	conductor	$I_i = I_n$ x ...
kA	kA	kA	kA	A	A	%	

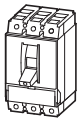
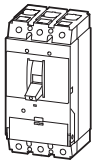
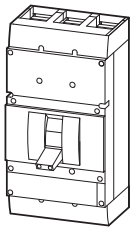
System and cable protection
Fixed overload releases I_r

Basic switching apacity 	25	25	–	–	125	125	100	Approx. 6 - 10
			–	–	150	150	100	Approx. 6 - 10
			–	–	175	175	100	Approx. 6 - 10
			–	–	200	200	100	Approx. 6 - 10
			–	–	225	225	100	Approx. 6 - 10
Normal switching capacity 	35	35	–	–	250	250	100	Approx. 6 - 10
			–	–	125	125	100	Approx. 6 - 10
			–	–	150	150	100	Approx. 6 - 10
			–	–	175	175	100	Approx. 6 - 10
			–	–	200	200	100	Approx. 6 - 10
			–	–	225	225	100	Approx. 6 - 10
High switching capacity 	150	150	–	–	250	250	100	Approx. 6 - 10
	100	100	–	–	125	125	100	Approx. 6 - 10
			–	–	150	150	100	Approx. 6 - 10
			–	–	175	175	100	Approx. 6 - 10
			–	–	200	200	100	Approx. 6 - 10
			–	–	225	225	100	Approx. 6 - 10
			–	–	250	250	100	Approx. 6 - 10

Fixed mounting
with box terminals

Part no. Article no.	**Price** See price list	Std. pack	**Information relevant for export to North America**		**Notes**
					B = box terminals **S = screw terminals** For further terminal types see accessories
NZMB2-4-AF125-BT-NA 113011	B	1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	Switches correspond with both UL/CSA and IEC regulations. IEC switching performance values shown on type label.
NZMB2-4-AF150-BT-NA 113012	B		UL File No.	E31593	
NZMB2-4-AF175-BT-NA 113013	B		UL CCN	DIVD	
NZMB2-4-AF200-BT-NA 113014	B		CSA File No.	UL Listed	
NZMB2-4-AF225-BT-NA 113015	B		CSA Class No.	Yes	
NZMB2-4-AF250-BT-NA 113016	B		NA Certification	Feeder circuits, branch circuits	
			Specially designed for NA	Yes	
			Suitable for	480 V	
			Current Limiting CB	IEC: IP20; UL/CSA Type:-	
			Max. Voltage Rating		
			Degree of Protection		
NZMN2-4-AF125-BT-NA 113005	B	1 off			
NZMN2-4-AF150-BT-NA 113006	B				
NZMN2-4-AF175-BT-NA 113007	B				
NZMN2-4-AF200-BT-NA 113008	B				
NZMN2-4-AF225-BT-NA 113009	B				
NZMN2-4-AF250-BT-NA 113010	B				
NZMH2-4-AF125-BT-NA 113017	B	1 off			
NZMH2-4-AF150-BT-NA 113018	B				
NZMH2-4-AF175-BT-NA 113019	B				
NZMH2-4-AF200-BT-NA 113020	B				
NZMH2-4-AF225-BT-NA 113021	B				
NZMH2-4-AF250-BT-NA 113022	B				

NS...NA

	Rated current = Rated uninterrupted current	Switching capacity SCCR 480Y/277 V 60 Hz	SCCR 480 V 60 Hz	SCCR 600Y/347 V 60 Hz	SCCR 600 V 60 Hz	Response value of short-circuit releases	Fixed mounting with screw terminals Part no. Article no.	Price See price list	
	$I^n = I^u$	I_{cu}	I_{cu}	I_{cu}	I_{cu}	I_i			
	A	kA	kA	kA	kA	A			
	**Molded case switches for North America** With permanently set short-circuit release (self-protection) 3 switch positions I, +, 0 Can be remotely operated with shunt release XU/XA, remote operator XR, Can be equipped with trip-indicating auxiliary contact M22-K..								
	63	35	–	–	–	1250	Screw terminals as accessories		
	100			–	–	1250			
	125			–	–	1250			
	160	100	100	50	–	2500	**NS2-160-NA** 102684	S	
	200					2500	**NS2-200-NA** 102685	S	
	250					2500	**NS2-250-NA** 102686	S	
	400	100	100	50	50	6600	**NS3-400-NA** 102687	S	
	600					6600	**NS3-600-NA** 102688	S	
	800	65	65	42	42		**NS4-800-NA** 102689	S	
	1000					25000	**NS4-1000-NA** 102690	S	
	1200					25000	**NS4-1200-NA** 102691	S	

Fixed mounting
with box terminals

Part no. Article no.		Price See price list	Std. pack	Information relevant for export to North America		Notes
						B = box terminals **S = screw terminals** For further terminal types see accessories
NS1-63-NA 102681	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	IEC/EN 60947-2: circuit-breaker without overcurrent protection (CBI-X) with main switch characteristics and isolating characteristics to IEC/EN 60204
NS1-100-NA 102682	B			UL File No.	E148671	
NS1-125-NA 102683	B			UL CCN	WJAZ	
				CSA File No.	022086	
				CSA Class No.	4652-06	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Max. Voltage Rating	480Y/277 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
NS2-160-BT-NA 107578	B		1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
NS2-200-BT-NA 107579	B			UL File No.	E148671	
NS2-250-BT-NA 107610	B			UL CCN	WJAZ	
				CSA File No.	022086	
				CSA Class No.	4652-06	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Max. Voltage Rating	480Y/277 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	
Terminals as accessory			1 off	Product Standards	UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking	
				UL File No.	E148671	
				UL CCN	WJAZ	
				CSA File No.	022086	
				CSA Class No.	4652-06	
				NA Certification	UL Listed, CSA certified	
				Specially designed for NA	Yes	
				Suitable for	Feeder circuits, branch circuits	
				Max. Voltage Rating	480Y/277 V	
				Degree of Protection	IEC: IP20; UL/CSA Type:-	

NZM1

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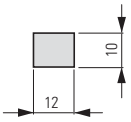
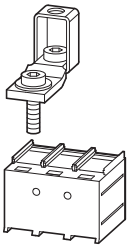
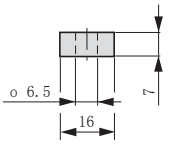
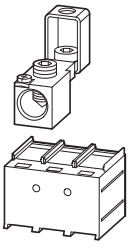
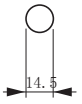
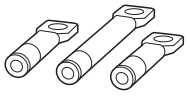
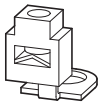
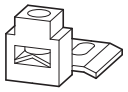
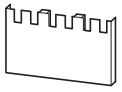
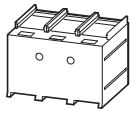
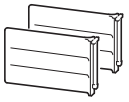
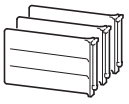
	Max. cable connection area	Number of poles	For use with	Terminal capacity Cable Cable lugs	Terminal capacity mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness mm	Copper bar width x thickness mm
Box terminal **Standard equipment** 		3 pole	NZM1, PN1, N(S)1	Copper cable	1 x 10 - 70 2 x 6 - 25 [1]	1 x 12 - 2/0	≧ 2 x 9 x 0.8	–
		4 pole	NZM1-4, PN1-4, N1-4		1 x 10 - 70 2 x 6 - 25 [1]	1 x 12 - 2/0	≧ 2 x 9 x 0.8	–
Screw terminals 		3 pole	NZM1, PN1, N(S)1	Copper cable lugs Aluminium cable lugs	1 x 10 - 70 2 x 6 - 25 1 x 10 - 35 2 x 10 - 35 [1]	1 x 12 - 2/0	–	≧12 x 5
		4 pole	NZM1-4, PN1-4, N1-4		1 x 10 - 70 2 x 6 - 25 1 x 10 - 35 2 x 10 - 35 [1]	1 x 12 - 2/0	–	≧12 x 5
Tunnel terminal 		3 pole	NZM1, PN1, N(S)1	Copper cable Aluminium cable	1 x 16 - 95 [1]	1 x 6 - 3/0	–	–
		4 pole	4 pole PN1-4, N1-4	NZM1-4,	1 x 16 - 95 [1]	1 x 6 - 3/0	–	–
Rear terminal bolts **Not UL/CSA approved** 		3 pole	NZM1, PN1, N1	Copper cable lugs	1 x 10-70 2 x 6-25 1 x 10-35 2 x 10-35 [1]	–	–	min. 12 x 5 max. 16 x 5
		4 pole	NZM1-4, PN1-4, N1-4	Aluminium cable lugs	1 x 10-70 2 x 6-25 1 x 10-35 2 x 10-35 [1]	–	–	min. 12 x 5 max. 16 x 5

Notes

[1] Up to 95 mm ² can be connected depending on make of cable.

Part no. Article no. when ordered separately	Price See price list	Std. pack	**Notes**	Information relevant for export to North America	
NZM1-XKC 260015		1 set	Standard connection with all NZM1, PN1 and N(S)1 switches. Conversion kit for circuit-breaker with screw terminal. Contains parts for a 3 or 4 pole switch side. Fitted within the switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Referto main component information
NZM1-4-XKC 267075		1 set			
NZM1-XKS 260019		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. Flush mounting outside the switch housing. Cover NZM1(-4)-XKSA must be fitted (included as standard).	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Referto main component information
NZM1-4-XKS 266725		1 set			
NZM1-XKA 266730		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. With control circuit terminal for 1 x 0.75 - 2.5 mm ^{2} (18 - 14 AWG) or 2 x 0.75 - 1.5 mm ^{2} (18 - 14 AWG) copper conductor. Flush mounting outside the switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM1(-4)-XKSA must be fitted (included as standard).	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Referto main component information
NZM1-4-XKA 266731					
NZM1-XKR 266734		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches.		
NZM1-4-XKR 266737					

NZM1

	Max. cable connection area	Number of poles	For use with	Connection	Terminal capacity[1] mm²	AWG/kcmil
Control cable terminals 	–	3 and 4 pole	NZM1(-4), PN1(-4), N(S)1(-4)	Screw terminals	1 x 0.75-2.5 2 x 0.75-1.5	1 x 18-14 2 x 18-16
	–	3 and 4 pole	NZM1(-4), PN1(-4), N(S)1(-4)	Box terminal	1 x 0.75-2.5 2 x 0.75-1.5	1 x 18-14 2 x 18-16
For box terminal 	**Terminal covers knockout Not UL/CSA approved**					
	–	3 pole	NZM1, PN1, N1	–	–	–
	–	4 pole	NZM1-4, PN1-4, N1-4	–	–	–
Cover 	–	3 pole	NZM1, PN1, N(S)1	–	–	–
	–	4 pole	NZM1-4, PN1-4, N1-4	–	–	–
For box terminal 	**IP2X protection against contact with finger**					
	–	3 pole	NZM1, PN1, N1	–	–	–
	–	4 pole	NZM1-4, PN1-4, N1-4	–	–	–
	**For covers NZM1(-4)-XKSA or NZM1…(C)NA, N(S)1…NA**					
	–	3 pole	NZM1, PN1, NS1	–	–	–
	–	4 pole	NZM1-4, PN1-4, N1-4	–	–	–
Phase isolators 	–	3 pole	NZM1, PN1, N(S)1	–	–	–
	–	4 pole	NZM1-4, PN1-4, N1-4	–	–	–

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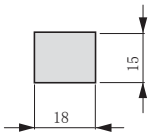
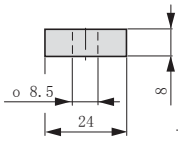
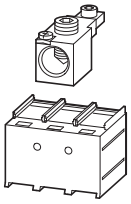
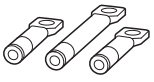
Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America	
NZM1-XSTS 260150		1 off	Containsfortwoterminallocationslocated attop or bottom for 3 or 4 pole circuit-breakers. Included as standard with tunnel terminal. Degree of protection IP1X Height orthickness of connections: 2 mm	ProductStandards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main compo- nent information
NZM-XSTK 266739		1 off	Containsfortwoterminallocationslocated attop or bottom for 3 or 4 pole circuit-breakers. Included as standard with tunnel terminal. Degree of protection IP1X Height orthickness of connections: 2 mm		
NZM1-XKSFA 100780		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection (simplified finger protection. Cannot be combined with NZM-XSTK control circuit terminal	UL/CSA certification not required –	
NZM1-4-XKSFA 100781		1 off			
NZM1-XKSA 260021		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection against direct contact where cable lugs, bars or tunnel terminals are used. Contained in the set with tunnel terminals and screwterminals. When using insulated conductor material to degree of protection IP1X.	ProductStandards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for –	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main compo- nent information
NZM1-4-XKSA 266741		1 off			
NZM1-XIPK 266744		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. Cannot be combined with NZM-XSTK control circuit terminal	–	
NZM1-4-XIPK 266745		1 set		–	
NZM1-XIPA 266748		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X.	UL/CSA certification not required –	
NZM1-4-XIPA 266749		1 set			
NZM1-XKP 119862		1 set	Contains parts, including insulating plate for mounting plate,fora terminal located attop or bottom for 3 or 4 pole circuit-breakers. Insulation protection up to a rated operating voltage Ua of 415 V AC when minimum distances are not maintained. Can not be combined with connection on rear NZM11-41-XKR.	UL/CSA certification not required	
NZM1-4-XKP 119863		1 set		–	

NZM2

Max. cable connection area	Number of poles	For use with	Terminal capacity Cable Cable lugs	Terminal capacity[1] mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness mm	Copper bar width x thickness mm
Box terminal							
	3 pole	NZM2, PN2, N(S)2 ≤160 A	Copper cable	1 x 10-185 2 x 4-70	1 x 12 - 350	≧2 x 9 x 0.8	–
		NZM2, PN2, N(S)2 > 160 A					
	4 pole	NZM2-4, PN2-4, N2-4 ≤160 A					
		NZM2-4, PN2-4, N2-4 > 160 A					
Screw terminals Standard equipment							
	3 pole	NZM2, PN2, N(S)2	Copper cable lugs Aluminium cable lugs	1 x 10 - 185 2 x 4 - 70 1 x 10 - 50 2 x 10 - 50	1 x 12 - 350	≧2 x 16 x 0.8	≧16 x 5
	4 pole	NZM2-4, PN2-4, N2-4					
Tunnel terminal							
	3 pole	NZM2, PN2, N(S)2	Copper cable Aluminium cable	1 x 16 - 185 1 x 16 - 185 Up to 240 mm² can be connected depending on the cable manufacturer.	1 x 6 - 350	–	–
	4 pole	NZM2-4, PN2-4, N2-4					
Rear terminal bolts							
	Not UL/CSA approved When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.						
–	3 pole	NZM2, PN2, N2	Copper cable lugs Aluminium cable lugs	1 x 10 - 185 2 x 4 - 70 1 x 10 - 50 2 x 10 - 50	–	≧2 x 16 x 0.8 ≦6 x 24 x 0.5	≧16 x 5 ≦20 x 5
	4 pole	NZM2-4, PN2-4, N2-4					

Notes

[1] Up to 240 mm² can be connected depending on the cable manufacturer.

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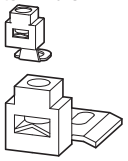
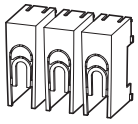
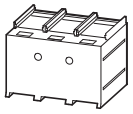
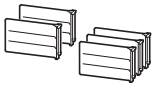
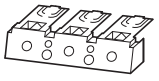
Part no. suffix Article no. for ordering with basic device	Price See price list	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America
+NZM2-160-XKCO 262218		**NZM2-160-XKC** 262240		1 set	Part no. suffix and part no.contain parts for a circuit-breaker side at top or bottom for 3 or 4 pole switches. Conversion kit for circuit-breaker with screw terminal. Fitted within the switch housing. 0=for fitting at the top U=for fitting at the bottom Ue ≧ 525 V AC: Use NZM21-41-XKSA cover Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Referto main component information
+NZM2-160-XKCU 262223		–		1 set		
+NZM2-250-XKCO 262242		**NZM2-250-XKC** 262244		1 set		
+NZM2-250-XKCU 262243		–		1 set		
+NZM2-4-160-XKCO 266751		**NZM2-4-160-XKC** 266755		1 set		–
+NZM2-4-160-XKCU 266753		–		1 set		
+NZM2-4-250-XKCO 266752		**NZM2-4-250-XKC** 266756		1 set		
+NZM2-4-250-XKCU 266754		–		1 set		
		NZM2-XKS 260030		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Standard connection with all NZM2, PN2 and N2 circuit-breakers. Conversion kitfor circuit-breakerwith box terminal. Use special cable lugs narrow version, →17/88 Fitted within the switch housing. If a bar is used, insulation (400 mm) e.g sleeving and a NZM21-41-XKSA cover are required. U0 - 525 V AC: With all other connection materials, e.g. cables and strips, use cover NZM21-41-XKSA.	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Referto main component information
		NZM2-4-XKS 266750		1 set		–
		NZM2-XKA 271457		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. With control circuitterminal for 1 x 0.75–2.5 mmz (18-14 AWG) or 2 x 0.75–1.5 mmz (18-16 AWG) copper conductor. Flush mounting outside the switch housing Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM21-4}-XKSA must be fitted (included as standardl.	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 022086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Referto main component information
		NZM2-4-XKA 271458		1 set		–
+NZM2-XKRO 266763		**NZM2-XKR** 266765		1 set	Part no. suffix and part no.contain parts for a circuit-breaker side at top or bottom for 3 or 4 pole switches. 0=for fitting at the top U=for fitting at the bottom	
+NZM2-XKRU 266764		–		1 set		
+NZM2-4-XKRO 266766		**NZM2-4-XKR** 266768		1 set		
+NZM2-4-XKRU 266767		–		1 set		

NZM2

	Number of poles	For use with	Terminal capacity Connection	Terminal capacity[1] mm²	AWG/kcmil	Part no. suffix Article no. for ordering with basic device	Price See price list
Control cable terminals 	3 and 4 pole	NZM2(-4), PN2(-4), N(S)2(-4)	Screw terminals	1 x 0.75 - 2.5 2 x 0.75 - 1.5	1 x 18 - 14 2 x 18 - 16	–	
	3 and 4 pole	NZM2(-4), PN2(-4), N(S)2(-4)	Box terminal	1 x 0.75 - 2.5 2 x 0.75 - 1.5	1 x 18 - 14 2 x 18 - 16	–	
Cable lug cover 	3 pole	NZM2, PN2, NS3	Copper cable lugs	1 x 10-185 2 x 4-70	–	–	
	4 pole	NZM2-4, PN2-4, N2-4	Aluminium cable lugs	1 x 10-50 2 x 10-50	–	–	
Cover 	3 pole	NZM2, PN2, NS2	–	–	–	–	
	4 pole	NZM2-4, PN2-4, N2-4	–	–	–	–	
Phase isolators 	3 pole	NZM2, PN2, N(S)2	–	–	–	–	
	4 pole	NZM2-4, PN2-4, N2-4	–	–	–	–	
Terminal covers, knockout 	3 pole	NZM2, PN2, N(S)2	–	–	–	**+NZM2-XKSFA0** 108269	
			–	–	–	**+NZM2-XKSFAU** 108270	
	4 pole	NZM2-4, PN2-4, N2-4	–	–	–	**+NZM2-4-XKSFA0** 108271	
			–	–	–	**+NZM2-4-XKSFAU** 108272	
For box terminal 	**IP2X protection against contact with finger**						
	3 pole	NZM2, PN2, N(S)2	–	–	–	–	
	4 pole	NZM2-4, PN2-4, N2-4	–	–	–	–	
	For covers NZM2(-4)-XKSA or NZM2(-4) or NZM2…(C)NA and N(S)2…NA						
	3 pole	NZM2, PN2, N(S)2	–	–	–	–	
	4 pole	NZM2-4, PN2-4, N2-4	–	–	–	–	
Copper cable lug 	**Not UL/CSA approved** **When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.**						
	3 and 4 pole	NZM2(-4), PN2(-4), N2(-4)	–	150 mm²	–	–	
			–	120 mm²	–	–	
			–	95 mm²	–	–	
			–	185 mm²	–	–	

Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America
NZM2-XSTS 260156		1 set	Contains parts for two terminal locations located at top or bottom for 3 or 4 pole switches. Included as standard with tunnel terminal. Degree of protection IP1X NZM-XSTK cannot be combined with NZM1(-4)-XIPK IP2X protection against contact with a finger. Height or thickness of connections: 2 mm	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947 UL File No. CE marking UL CCN E140305 CSA File No. DIHS CSA Class No. 022086 NA Certification 1437-01 Suitable for UL Listed, CSA certified Refer to main component information
NZM-XSTK 266739		1 set		
NZM2-XKSAE 119868		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs are used on screw terminals When using insulated conductor material, degree of protection IP2X	UL/CSA certification not required
NZM2-4-XKSAE 119870		1 set		–
NZM2-XKSA 260038		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs, bars or tunnel terminals are used. When using insulated conductor material, degree of protection IP1X	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947 UL File No. CE marking UL CCN E140305 CSA File No. DIHS CSA Class No. 022086 NA Certification 1437-01 Suitable for UL Listed, CSA certified Refer to main component information
NZM2-4-XKSA 266770		1 off		
NZM2-XKP 119864		1 set	Contains parts, including insulating plate for mounting plate, for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. Can not be combined with connection on rear NZM2(-4)-XKR. Insulation protection up to a rated operating voltage U_e of 415 V AC when minimum distances are not maintained.	UL/CSA certification not required
NZM2-4-XKP 119865		1 set		–
NZM2-XKSFA 104640		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection (simplified finger protection). O = for fitting at the top U = for fitting at the bottom	UL/CSA certification not required
NZM2-4-XKSFA 104641		1 off		
NZM2-XIPK 266773		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. Protection on grasping terminal chamber when connecting cables in box terminals. With two conductors maximum cross-section 25 mm² or AWG4. Can not be combined with control cable terminal NZM-XSTK.	UL/CSA certification not required
NZM2-4-XIPK 266774		1 set		–
NZM2-XIPA 266777		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. When fitting to NZM2-..-(C)NA or NZM...-NA: With 2 conductors maximum cross-section 25 mm² or AWG4.	UL/CSA certification not required
NZM2-4-XIPA 266778		1 set		–
KS150-NZM7 059777		3 off	Contains a cable lug for 3 or 4 pole switch. Special cable lug, narrow style	
KS120-NZM7 059776				
KS95-NZM7 059775				
NZM2-XKS185 260032				

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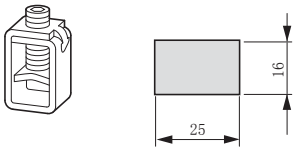
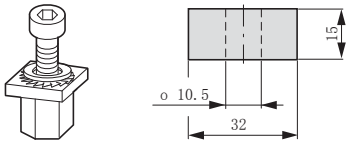
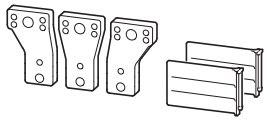
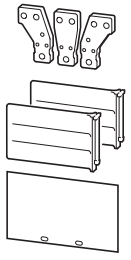
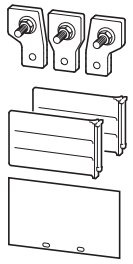
NZM3

HPL17090EN

Max. cable connection area	Number of poles	For use with	Rated current[1] I_n A	Terminal capacity: Cable / Cable lugs	Terminal capacities[1] mm²	AWG/kcmil	Terminal ca pa city: Copper strip No. of discs × width × disc thickness mm	Copper bar width x thickness mm
Box terminal								
	3 pole	NZM3(-4), PN3(-4), N(S)3(-4)	max. 500 400 UL/ CSA	Copper cable Copper cable	1 x 35 - 240 2 x 16 - 120	1 x 2 - 350	min. 6 x 16 x 0.8 max. 10 x 24 x 1.0 or max. 11 x 21 x 1	–
			630	Copper cable	1 x 35 - 240 2 x 16 - 120	1 x 2 - 350	10 x 24 x 1.0 + 5 x 24 x 1.0 or (2 x) 8 x 24 x 1.0	
	4 pole							
Screw connection, standard								
	3 pole	NZM3, PN3, N(S)3	630	Copper cable lugs	1 x 16 - 300 2 x 16 - 240	1 x 4 - 350 2 x 350	10 x 32 x 1.0 + 5 x 32 x 1.0	30 x 10 + 30 x 5
			Max. 400	Aluminium cable lugs	1 x 10 - 120 2 x 10 - 120	1 x 4 - 350 2 x 350		
	4 pole	NZM3-4, PN3-4, N(S)3-4						
Connection width extension								
One hole, for screws or terminals								
	3 pole	NZM3, PN3, N(S)3	630	Copper cable lugs Aluminium cable lugs	2 x 300	2 x 500	(2 x) 10 x 50 x 1.0	(2 x) 10 x 50
	4 pole	NZM3-4, PN3-4, N3-4						
Two holes, for screws or terminals								
 –	3 pole	NZM3,PN3, N(S)3	630	Copper cable lugs	NZM3-XKV70-2: 4 x 35 - 185 NZM3-XKV70-2 + NZM4-XKA: 4 x 50 - 240	NZM3-XKV70-2: 2 x 350 NZM3-XKV70-2 + NZM4-XKA: 4 x 500	NZM3-XKV70-2 + NZM4-XKB: ≧6 x 16 - 0.8 ≦(2 x) 10 x 32 x 1	(2 x) 10 x 50
	4 pole	NZM3-4, PN3-4, N3-4						
One threaded stud								
 –	3 pole	NZM3, PN3, N(S)3	630	Copper cable lugs	2 x 95-300	2 x 500	(2x) 10 x 32 x 1.0	(2 x) 10 x 40

NZM3

HPL17091EN

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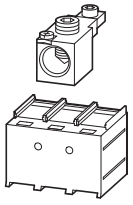
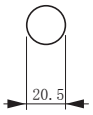
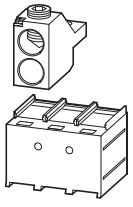
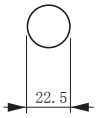
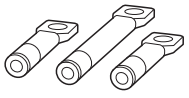
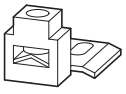
Part no. suffix Article no. for ordering with basic device	Price See price list	Part no. Article no. separately	Price See price list	Std. pack	Notes	Information relevant for exports to North America	
+NZM3-XKCO 262246 **+NZM3-XKCU** 262245		**NZM3-XKC** 260042 –		1 set	Part no. suffix and part no.contain parts for a circuit-breaker side at top or bottom for 3 or 4 pole switches. Conversion kit for circuit-breaker with screw terminal. Fitted within the switch housing. O = for fitting at the top U = for fitting at the bottom U_e ≧525 V AC: Use NZM3(-4)-XKSA cover. Use ferrules with flexible and highly flexible conductors. Observe limited cable cross-section through sleeve.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main component information
+NZM3-4-XKCO 266781 **+NZM3-4-XKCU** 266782		**NZM3-4-XKC** 266783 –		1 set			
–	–	**NZM3-XKS** 260039		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Standard connection with all NZM3, PN3 and N3 circuit-breakers. Conversion kit for circuit-breaker with box terminal. Use special cable lugs narrow version, ☒ 17/88 Fitted within the switch housing. If a bar is used, insulation (400 mm) heat-shrink tubing and a cover NZM3(-4)-XKSA are required. U_e ≧525 V AC: For all other connection types use cover NZM3(-4)-XKSA.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main component information
–	–	**NZM3-4-XKS** 266780		1 set		–	
–	–	**NZM3-XKV70** 100514		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Central drilling for e.g. up to 2 cable lugs per phase. For fitting to switches with screw terminal. Phase isolator and insulation plate are included as standard. Distance between pole centres with NZM3(-4)-XKV70: 70 mm Hole for control wire exists. Connection terminals NZM3(-4)-XK300 and NZM3(-4)-XK22X21 can be installed.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1432-01 UL Listed, CSA certified
–	–	**NZM3-4-XKV70** 100515		1 set		–	
–	–	**NZM3-XKV70-2** 119860		1 set	Contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Double hole fitting for up to four 185 mm^2 cable lugs, 50 mm bbar or large flat cable terminal NZM4-XKB or large tunnel terminal NZM4-XKA For fitting to switches with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1432-01 UL Listed, CSA certified
–	–	**NZM3-4-XKV70-2** 132673		1 set			
–	–	**NZM3-XKV70KB** 112884		1 set	Contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Threaded stud for cable lugs up to 2 × 300 mm^2 For fitting to switches with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied.	–	

1 NZM3

Max. cable connection area	Number of poles	For use with	Rated current[1] I_n A	Terminal capacity Cable Cable lugs	Terminal capacities[1] mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness m	Copper bar width x thickness m
Terminals for connection width extension								
	3 pole	NZM3, PN3, N(S)3	Max. 500	Copper cable	1 x 120 - 300	–	–	–
	4 pole	NZM3-4, PN3-4, N3-4						
Not UL/CSA approved								
	3 pole	NZM3, PN3, N(S)3	630	–	–	–	(2 ×) 11 x 21 x 1.0	–
	4 pole	NZM3-4, PN3-4, N3-4						
Tunnel terminal								
 	3 pole	NZM3, PN3, N(S)3	Max. 350	Copper cable Aluminium cable	1 x 16 - 185	1 x 6 - 350		
	4 pole	NZM3-4, PN3-4, N3-4						
 	3 pole	NZM3, PN3, N(S)3	Max. 630	Copper cable Aluminium cable	1 x 50-240 2 x 50-240	1 x 0-500 2 x 0-500		
	4 pole	NZM3-4, PN3-4, N3-4						
Rear terminal bolts Not UL/CSA approved								
	3 pole	NZM3, PN3, N3	Max. 630	Copper cable lugs	1 x 16-240 2 x 16-240		min. 6 x 16 x 0.8 max. 10 x 32 x 1.0	min. 20 x 5 max. 30 – 10
	4 pole	NZM3-4, PN3-4, N3-4	Max. 500	Aluminium cable lugs	1 x 10-120 2 x 10-120			
Control cable terminals								
	3 and 4 pole	NZM3, PN3, N(S)3		Screw terminals	1 x 0.75-2.5 2 x 0.75-1.5	1 x 18-14 2 x 18-16		
	3 and 4 pole	NZM3-4, PN3, N(S)3-4		Box terminal	1 x 0.75-2.5 2 x 0.75-1.5	1 x 18-14 2 x 18-16		

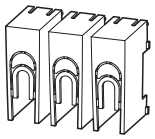
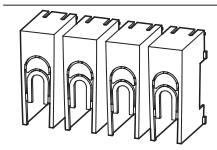
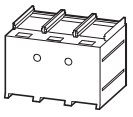
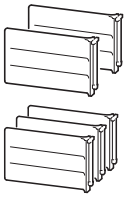
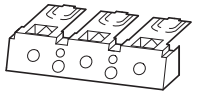
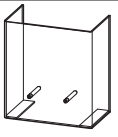
Notes

[1] The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.
The engineering standards which apply in each case must be observed.

NZM3

Part no. suffix Article no. for ordering with basic device	Price See price list	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America	
–		**NZM3-XK300** 100782		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Only in combination with connection width extension NZM3}-4}-XKV70. Use ferrules with flexible and highly flexible conductors. With control cable terminal for 1 x 0.75—2.5 mmz or 2 x 0.75—1.5 mmz copper conductor as standard.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1432-01 UL Listed, CSA certified Refer to main com-ponentinformation
–		**NZM3-4-XK300** 100783		1 set		–	
–		**NZM3-XK22X21** 100784		1 set		–	
–		**NZM3-4-XK22X21** 100785		1 set			
–		**NZM3-XKA1**[2)] 271459		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. With control cable terminal for 1 x 0.75–2.5 mmz (18–14 AWG) or 2 x 0.75–1.5 mmz (18–16 AWG) copper cable as standard. Fitting outside switch housing. Use ferrules with flexible and highly flexible conductors. Max. cross section shown can only be connected when flexible and without ferrules. Cover NZM31-4}-XKSA must be fitted (included as standard).	–	
–		**NZM3-4-XKA1**[2)] 271460		1 set			
–		**NZM3-XKA2** 271461		1 set		Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 N o.5-09;IEC60947, CE marking E31593 DIHS 022086 1432-01 UL Listed, CSA certified Referto main compo-nent information
–		**NZM3-4-XKA2** 271462		1 set		–	
+NZM3-XKRO 266790		NZM3-XKR 266792		1 set	Part no. suffix and part no.contain parts for a circuit-breaker side attop or bottom for 3 or 4 pole switches. 0=forfitting atthe top U=forfitting atthe bottom	–	
+NZM3-XKRU 266791		–		1 set			
+NZM3-4-XKRO 266793		**NZM3-4-XKR** 266795		1 set			
+NZM3-4-XKRU 266794		–		1 set			
		NZM3/4-XSTS 266797		1 set	Contains for two terminal locations located attop or bottom for 3 or 4 pole circuit-breakers. Included as standard with tunnel terminal. Degree of protection IP1X Height or thickness of connections: 2 mm	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 N o.5-09;IEC60947, CE marking E31593 DIHS 022086 1432-01 UL Listed, CSA certified Referto main compo-nent information
		NZM-XSTK 266739		1 set	Contains for two terminal locations located attop or bottom for 3 or 4 pole circuit-breakers. Included as standard with tunnel terminal. Degree of protection IP1X NZM-XSTK cannot be combined with NZM1}-4}-XIPK IP2X protection against contactwith a finger. Height or thickness of connections: 2 mm		

1 NZM3

		Max. cable connection area	Number of poles	For use with	**Part no.** Article no. when ordered separately	**Price** See price list	Std. pack
Cable lug cover							
	–	–	3 pole	NZM3, PN3, N(S)3	NZM3-XKSAE 119869		1 set
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XKSAE 119871		1 set
Cover	–	–	3 pole	NZM3, PN3, N(S)3	NZM3-XKSA 260045		1 off
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XKSA 266801		1 off
Phase isolators							
	–	–	3 pole	NZM3, PN3, N(S)3	NZM3-XKP 100512		1 set
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XKP 100513		1 set
Terminal covers, knockout							
	–	–	3 pole	NZM3, PN3, N(S)3	NZM3-XKSFA 104642		1 off
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XKSFA 104643		1 off
Large cover for connection width extension							
	–	–	3 pole	NZM3, PN3, N3 + NZM3-XKV70(-2)	NZM3-XKSAV 119858		1 off
			4 pole	NZM3-4, PN3-4, N3-4 + NZM3-4-XKV70	NZM3-4-XKSAV 132675		1 off
IP2X protection against contact with finger							
For box terminal							
	–	–	3 pole	NZM3, PN3, N3	NZM3-XIPK 266804		1 set
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XIPK 266805		1 set
For covers NZM3(-4)-XKSA or NZM3...(C)NA and N(S)3…NA							
	–	–	3 pole	NZM3, PN3, N(S)3	NZM3-XIPA 266808		1 set
	–	–	4 pole	NZM3-4, PN3-4, N3-4	NZM3-4-XIPA 266809		1 set
Copper cable lug							
Not UL/CSA approved							
When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.							
	185 mm²		3and4 pole	NZM3(-4), PN3(-4), N(S)3(-4)	NZM3-XKS185 260040		3 off
	240 mm²	–			NZM3-XKS240 260041		3 off

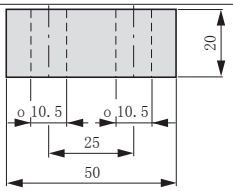
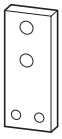
NZM3

Notes	Information relevant for export to North America
Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs are used on screw terminals When using insulated conductor material, degree of protection IP2X.	UL/CSA certification not required –
Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Insulation/protection against direct contact where cable lugs, bars or tunnel terminals are used. Included in set with tunnel terminals. When using insulated conductor material to degree of protection IP1X.	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E31593 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certified Suitable for: Refer to main component information
Contains parts, including insulating plate for mounting plate, for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. Included with the connection width extension. Cannot be combined with the NZM3(-4)-XKA tunnel terminal, NZM3(-4)-XKR connection on rear. Insulation protection where cable lugs, bars, or flat conductor are used.	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E31593 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certified Suitable for: Refer to main component information
Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection (simplified finger protection).	UL/CSA certification not required –
Contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Insulation protection/protection against direct contact for connection of cable lugs or bars to connection width extension. Can also be used fir connection width extension NZM3-XKV70 with terminals NZM3-XK300, NZM3-XK22x21 or NZM4-XKA. When using insulated conductor material, degree of protection IP2X.	–
Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. Enhanced contact protection to IP2X. Protection when reaching into the cable connection area with the connection of cables in the box terminal. with 2 conductors max. cross section 70 mm^2. Cannot be combined with NZM-XSTK control circuit terminal.	UL/CSA certification not required –
Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Enhanced contact protection to IP2X. When fitting to NZM3...-(C)NA or N3...-NA: with 2 conductors max. cross section 70 mm^2.	UL/CSA certification not required –
The part no. contains a cable lug for 3 or 4 pole switch. Special cable lug, narrow style	– –

1

NZM4

HPL17096EN

		Space requirement	Rated current[1] I_n A	Number of poles	For use with	Terminal capacity Cable Cable lugs	Terminal capacity mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness mm	Copper bar width x thickness mm
Screw terminals										
Threaded stud standard equipment Screws	2-hole		Max. 1600	3 and 4 pole	NZM4(-4) N4(-4) N(S)4	Copper cable lugs	1 x 120-185 4 x 50-185	1 x 250-350 4 x 0-350	(2 x) 10 x 50 x 1.0	(2 x) 50 x 10
				3 pole	NZM4, N(S)4					
				4 pole	NZM4-4, N4-4					
Module plate										
	1-hole	–	Max. 1250	3 pole	NZM4, N(S)4	Copper cable lugs	1 x 120-300 2 x 95-300	1 x 250-600 2 x 000-600	(2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0	(2 x) 40 x 10 (2 x) 50 x 10
				4 pole	NZM4-4, N4-4					
	2-hole	–	Max. 1400	3 pole	NZM4, N(S)4		2 x 95-185 4 x 35-185	2 x 000-350 4 x 2-350	(2 x) 10 x 50 x 1.0	(2 x) 50 x 10
				4 pole	NZM4-4, N4-4					
	2-hole	–	Max. 1250	3 pole	NZM4, N(S)4	Copper cable lugs	2 x 95-300	2 x 000-600	(2 x) 10 x 40 x 1.0 (2 x) 10 x 50 x 1.0	(2 x) 40 x 10 (2 x) 50 x 10
				4 pole	NZM4-4, N4-4					
		–	Max. 1600	3 pole	NZM4, N(S)4					
				4 pole	NZM4-4, N4-4					

NZM4

Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America	
			Double hole fitting with M10 threaded stud at 25 mm spacing. Use special cable lug narrow version.	–	
NZM4-XKS 127736		1 set	Double hole fitting with M10 screw at 25 mm spacing. Use special cable lug narrow version.	UL/CSA certification not required	
NZM4-4-XKS 127737		1 set		–	
NZM4-XKM1 266814		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. For M10 screws. Can be enlarged for M12 screws. Use special cable lug narrow version. Can be fitted to circuit-breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 22086 1432-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKM1 266815		1 set		–	
NZM4-XKM2 266820		1 set		Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 22086 1432-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKM2 266821		1 set		–	
NZM4-XKM2S-1250 284471		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole circuit-breakers. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 22086 1432-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKM2S-1250 284472		1 set		–	
NZM4-XKM2S-1600 284473		1 set		Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 22086 1432-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKM2S-1600 284474		1 set		–	

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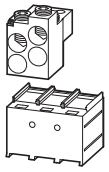
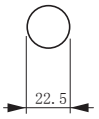
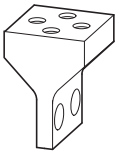
NZM4

	Rated current[1] I_n A	Number of poles	For use with	Terminal capacity Cable Cable lugs	Terminal capacity mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness mm	Copper bar width x thickness mm
Flat cable terminal								
	Max. 1100	3 pole	NZM4, N(S)4	–	–	–	min. 6 x 16 x 0.8 max. (2 x) 10 x 32 x 1.0	–
		4 pole	NZM4-4, N4-4	–	–	–	min. 6 x 16 x 0.8 max. (2 x) 10 x 32 x 1.0	–
Tunnel terminal								
	Max. 1100	3 pole	NZM4, N(S)4	Copper cable Aluminium cable	1 x 50-240 4 x 50-240	1 x 0-500 4 x 0-500	–	–
		4 pole	NZM4-4, N4-4				–	–
Rear terminal bolts								
Not UL/CSA approved 	Max. 1250	3 pole	NZM4, N4	Copper cable lugs Aluminium cable lugs	1 x 120-185 2 x 95-185 4 x 35-185 1 x 185 2 x 70-185 4 x 50-185	–	(2 x) 10 x 50 x 1.0	(2 x) 50 x 10
		4 pole	NZM4(-4), N4(-4)					

Notes

[1] The rated operationa l current values have been determ ined according to IEC/EN 60947 (switc hgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.
The engineering standards which apply in each case must be observed.

NZM4

Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America
NZM4-XKB 266829		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Conversion kit for circuit-breaker with screw terminal. Insulation using cover NZM4(-4)-XKSA or phase divider NZM4(-4)-XKP necessary. When the circuit-breaker is installed on a conductive mounting plate, cover NZM4(-4)-XKSA must be used With control circuit terminal for 1 x 0.75-2.5 mm ^{2} or 2x 0.75-1.5 mm ^{2} copper conductors as standard.	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking NA Certification Request filed for UL and CSA –
NZM4-4-XKB 266831		1 set		
NZM4-XKA 266836		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. With control circuit terminal for 1 x 0.75-2.5 mm ^{2} (18-14 AWG) or 2 x 0.75-1.5 mm ^{2} (18-16 AWG) copper cable as standard. Can be fitted to circuit-breaker with screw terminal. Use ferrules with flexible and highly flexible conductors. Cover NZM4(-4)-XKSA must be fitted (included as standard).	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E31593 UL CCN DIHS CSA File No. 22086 CSA Class No. 1432-01 NA Certification UL Listed, CSA certified Suitable for Refer to main component information –
NZM4-4-XKA 266837		1 set		
NZM4-XKR 266842		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Can also be retrofitted: Module plate NZM4...-XKM... or connection width extension NZM4-...-XKV...	–
NZM4-4-XKR 266843		1 set		–

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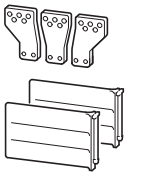
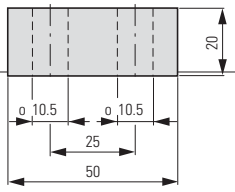
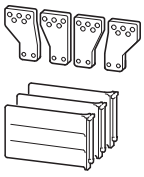
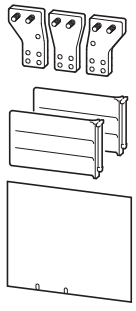
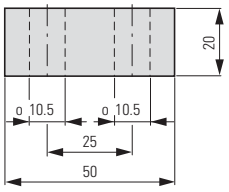
NZM4

	Space requirement	Rated current[1] I_n A	Number of poles	For use with	Terminal capacity Cable Cable lugs	Terminal capacity mm²	AWG/kcmil	Terminal capacity Copper strip No. of discs × width × disc thickness mm	Terminal capacity Copper bar width x thickness mm
Connection width extension									
	– 	Max. 1600	3 pole	NZM4, N(S)4	Copper cable lugs	4 x 300 6 x 95-240	4 x 600 6 x 000-500	max. (2 x) 10 x 80 x 1.0	max. (2 x) 80 x 10
	– –	Max. 1600	4 pole	NZM4-4, N4-4					
With two threaded studs									
	– 	1600	3 pole	NZM4, N(S)4	Copper cable lugs	4 x 95-300	4 x 500	(2x) 10 x 80 x 1.0	(2 x) 10 x 80

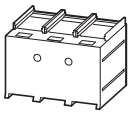
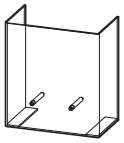
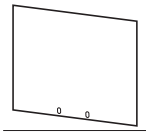
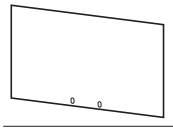
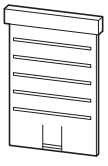
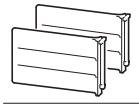
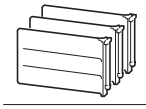
Notes

[1] The rated operational current values have been determined according to IEC/EN 60947 (switchgear standard). They generally relate to the max. defined cross-sections and are intended as a general guide.
The engineering standards which apply in each case must be observed.

NZM4

Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Information relevant for export to North America
NZM4-XKV95 281591		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Five-hole fitting, for example, for up to nine cable lugs per phase. Can be fitted to circuit-breaker with screw terminal. Phase isolator supplied. Distance between pole centres with NZM4(-4)-XKV95: 95 mm Installation conditions for current transformer up to 130 mm width with 80 mm bar width. Distance between pole centers with NZM4-XKV110: 107.5 mm Installation conditions for current transformer up to 135 mm width with 80 mm bar width. Distance between pole centers with NZM4-4-XKV120: 122 mm Installation conditions for current transformer up to 164 mm width with 80 mm bar width. 4 mm holes predrilled for control cable terminal. NZM4-XKV95 contains hole for large cover NZM4-XKSAV.	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E31593 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1432-01 NA Certification: UL Listed, CSA certified Suitable for: Refer to main component information
NZM4-XKV110 281593				
NZM4-4-XKV95 281592		1 set		–
NZM4-4-XKV120 281594				–
NZM4-XKV95-2KB 119861		1 set	Contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Threaded stud for cable lugs up to 4 × 300 mm ^{2} Can be fitted to circuit-breaker with screw terminal. Phase isolator, insulation plate and 2 control circuit terminals supplied.	

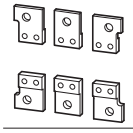
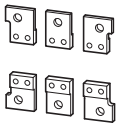
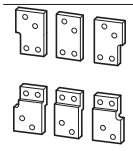
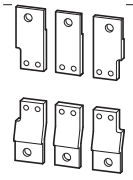
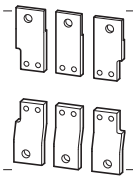
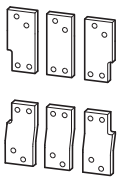
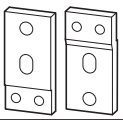
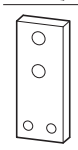
NZM4

	Number of poles	For use with	Terminal capacity Connection	Terminal capacity mm²	AWG/kcmil
Control cable terminals					
	3 and 4 poel	NZM3(-4), PN3, N(S)3(-4)	Screw terminals	1 x 0.75-2.5 2 x 0.75-1.5	1 x 18-14 2 x 18-16
Cover					
	3 pole	NZM4, N(S)4			
	4 pole	NZM4-4, N4-4			
Cover size					
For connection width extension					
	3 pole	NZM4, N(S)4 + NZM4-XKV95(KB)			
Insulation plate					
	3 pole	NZM4, N(S)4 + NZM4-XKV…			
	4 pole	NZM4(-4), N(S)4(-4) + NZM4-4-XKV…			
					
Terminal covers, knockout					
	3 pole	NZM4, N(S)4			
	4 pole	NZM4-4, N4-4			
Phase isolators					
	3 pole	NZM4 N(S)4			
	4 pole	NZM4-4, N4-4			
Cable lug					
Not UL/CSA approved When using cable lugs without NZM3(-4)-XKSA cover, they must be insulated.					
	3 and 4 pole	NZM41-41, NIS141-4)		185 mm²	
				240 mm²	

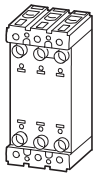
NZM4

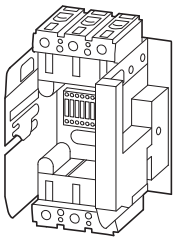
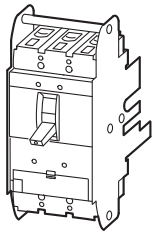
Part no. Article no. when	Price See price list	Std. pack	Notes	Information relevant for export to North America	
NZM3/4-XSTS 266797		1 off		Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main component information
NZM4-XKSA 266846		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Contact protection where cable lugs, bars, flat cable terminals or tunnel terminals are used. Included in set with tunnel terminals. When using insulated conductor material, degree of protection IP1X.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKSA 266847		1 off			
NZM4-XKSAV 119876		1 off	Contains parts for a terminal located at top or bottom for 3 pole circuit-breakers. Insulation protection/protection against direct contact for connection of cable lugs or bars to connection width extension. When using insulated conductor material, degree of protection IP2X.	UL/CSA certification not required	
NZM4-XISP 119866		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Insulation protection when minimum distance from mounting plate not observed. Included with the connection width extension.	Product Standards NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking Request filed for UL and CSA Refer to main component information
NZM4-4-XISP 119867		1 off			
NZM4-XKSFA 292193		1 off	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Increased contact protection with connection of insulated bars or flat band.	UL/CSA certification not required	
NZM4-4-XKSFA 292194		1 off			
NZM4-XKP 281595		1 set	Contains parts for a terminal located at top or bottom for 3 or 4 pole switches. Included with the connection width extension. Cannot be combined with tunnel terminal NZM4(-4)-XKA or rear connection NZM4-XKR. Insulation protection where cable lugs, bars, module plates or tunnel terminals are used.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking E31593 DIHS 022086 1432-01 UL Listed, CSA certified Refer to main component information
NZM4-4-XKP 281596		1 set			
NZM3-XKS185 260040		3 off	The part no. contains a cable lug for 3 or 4 pole switch. Special cable lug, narrow style		
NZM3-XKS240 260041					

NZM4

	Rated current I_n A	For use with		Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
	Adapter set N(ZM)4/N(ZM)12 Not UL/CSA approved						
	Max. 1000	N4	3 pole	**N4-XAS12-1000** 285609		1 set	Conversion kit from N(ZM)12 to N(ZM)4. With the terminal lugs of the replacement kit all three-pole NZM12 and N12 can be adapted to the connection dimensions of the NZM4 or N4 supplied from model year 1983. 4 pole basic devices, withdrawable units and basic devices with remote operator can not be replaced.
	Max. 1250	N4	3 pole	**N4-XAS12-1250** 285610		1 set	Contents of replacement kits N(ZM)4-XAS12…: 3 connection extensions on outlet side 3 connection extensions on trip block side 2 mounting brackets 4 fixing screws 4 phase isolators 6 fixing screws, nuts and washers Paper drilling template in the instructional leaflet (AWA) The replacement kits have the same dimensions as models N(ZM)12…, which correspond to production status 02/97 to the present.
	Max. 1600	N4	3 pole	**N4-XAS12-1600** 285611		1 set	
	Max. 1000	NZM4	3 pole	**NZM4-XAS12-1000** 285612		1 set	Special feature: Prior to 02/97 the N(ZM)12-800 was supplied with 10 mm instead of 8 mm terminal lugs. With these models the customer must determine the device's year of manufacture by measuring the thickness of the terminal lug and order replacement kit N(ZM)4-XAS12-1250. Example: N(ZM)12-800…(1000) > N(ZM)4-XAS12-1000 N(ZM)12-800 before 02/97 > N(ZM)4-XAS12-1250 N(ZM)12-1250 > N(ZM)4-XAS12-1250 N(ZM)12-1600 > N(ZM)4-XAS12-1600 Addition for devices constructed prior to 1983! Here the replacement kit for switch-disconnectors can be used in full. For circuit-breakers with "long" ZM design, the adapter fit only at the top! At the bottom the devices are about 65 mm longer and the lower connection is about 26 mm deeper. Consequently the bottom adapters are too short and the heights do not correspond.
	Max. 1250	NZM4	3 pole	**NZM4-XAS12-1250** 285613		1 set	
	Max. 1600	NZM4	3 pole	**NZM4-XAS12-1600** 285614		1 set	
	Max. 1250	NZM4, N4	3 pole	**NZM4-XAS14-1250** 283291		1 set	Conversion kit for NZM14 to NZM4. Same connections as NZM14. Contains for both sides of switch. 3 connection extensions on outlet side 3 connection extensions on trip block side. 1 long shroud for the outlet side Paper drilling template in the instructional leaflet (AWA) Cannot be combined with the module plate (NZM4-XKM...), flat cable terminal (NZM4-XKB), connection width extension (NZM4-XKV...), tunnel terminal(NZM4-XKA), connection on rear (NZM4-XKR) and withdrawable unit (NZM4-XAV...).
	1600	NZM4, N4	3 pole	**NZM4-XAS14-1600** 283292		1 set	

NZM1, NZM2, NZM3, NZM4

	For use with	Number of poles	Part no. Article no.	Price See Price List	Std. pack	Notes
Plug-in units For circuit-breakers NZM and switch-disconnectors N Not UL/CSA approved Not for U_e > 690 V						**B = box terminals** **S = screw terminals** For further terminal types see accessories
Plug-in socket						
	Completion through switches with plug-in insert NZM...-SVE...	NZM1 N1	3 pole	**NZM1-XSVS** 109777	B 1 off	$I_{nmax.}$ at: 20°C: 125 A (NZM1) 70°C: 100 A (NZM1) Mounting position: vertical, 90° right, 90° left Order control circuit plug unit separately!
		NZM2 N2	3 pole	**NZM2-XSVS** 266699	B 1 off	$I_{nmax.}$ at: 20°C: 250 A 40°C: 230 A (NZM…2-…) 250 A (NZM…2-E…) Mounting position: vertical, 90° right, 90° left Order control circuit plug unit separately!
		NZM2-4 N2-4	4 pole	**NZM2-4-XSVS** 266700	S 1 off	
Control circuit plug unit						
	–	NZM1, N1 NZM2(-4) N2(-4)	For auxiliary contact, shunt/over-voltage release	**NZM2-XSVHI** 266705	– 1 off	10 terminals
	–	NZM2(-4) N2(-4)	For remote operator	**NZM2-XSVR** 266706	– 1 off	

	For use with	Number of poles	Part no. suffix Article no. for order with basic	Price See Price List	Std. pack	Part no. Article no. for separate order	Price See Price List	Std. pack	Notes
Withdrawable unit For circuit-breakers NZM and switch-disconnectors N Not UL/CSA approved Not for U_e > 690 V Socket base For switches with withdrawable carrier. Also for reserved compartments.									
	**NZM3** N3	3 pole	–			**NZM3-XAVS** 266711		S 1 off	$I_{nmax.}$ at: 20 °C: 605 A (NZM3), 1600 A (NZM4) 40 °C: 550 A (NZM3), 1500 A (NZM4) Mounting position: NZM3: vertical, 90° left NZM4: vertica
	NZM3-4 N3-4	4 pole	–			**NZM3-4-XAVS** 266712		S 1 off	
	NZM4 N4	3 pole	–			**NZM4-XAVS** 266713		S 1 off	
	NZM4-4 N4-4	4 pole	–			**NZM4-4-XAVS** 266714		S 1 off	
Withdrawable carrier Suitable for socket base Only in combination with switch									3 positions:I Connected, test, disconnected
	**NZM4** N4	3 pole	+NZM4-XAVE 266717		1 off	–		–	Position indication is mechanical with pointers. Additional electrical indication with auxiliary contacts possible. One N/O or NC contact M22-(C)K01 or M22-(C)K10 each per position. Alternatively also double contacts M22-CK...
	NZM4-4 N4-4	4 pole	+NZM4-4-XAVE 266718		1 off	–		–	Complete with control circuit plug unit.
									All auxiliary contact (HIA, HIN, HIV) and shunt release connections to the control circuit plug unit are already present.
									Maximum configuration: 3 contacts HIN, 2 contacts HIA, 2 contacts HIV Cannot be combined with adapter set NZM4/NZM14 (NZM4-XSAS14-...) or N(ZM)4/N(ZM)12.

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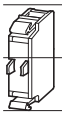
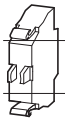
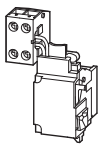
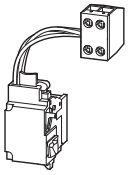
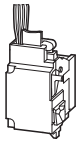
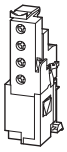
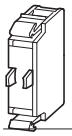
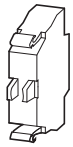
NZM1, M22-...

	For use with	Contact configuration: ⊖ = safety function by positive opening according to IEC/EN 60947-5-1 N/O = normally open contact	NC = normally closed contact	Contact sequences	**Part no.** Article no. when ordered separately	**Price** See price list	Std. pack
Auxiliary contacts							
Standard auxiliary contacts (HIN)[1] Switches with the main contacts. Used for indicating and interlocking tasks.							
	Single contact	NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4)	1 N/O			**M22-K10** 216376	20 off
		N(S)1(-4), 2(-4), 3(-4), 4(-4)		1 NC⊖		**M22-K01** 216378	
	Double contact	NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4)	1 N/O	1 NC⊖			
		N(S)1(-4), 2(-4), 3(-4), 4(-4)		2 NC⊖			
			2 N/O				
Early-make auxiliary contact[2] For interlocking and load shedding circuits, as well as for early make of the undervoltage release in main switch/emergency switching off applications							
	With clamp terminal on left switch side.	NZM1(-4) PN1(-4) N(S)1(-4)	2 N/O	–		**NZM1-XHIV** 259426	1 off
	With clamp terminal on right switch side.		2 N/O	–		**NZM1-XHIVR** 292195	
	With 3 m connection cable instead of screw connection.		2 N/O	–		**NZM1-XHIVL** 259432	
	–	NZM2(-4), 3(-4) PN2(-4), 3(-4) N(S)2(-4), 3(-4)	2 N/O	–		**NZM2/3-XHIV** 259430	
		NZM4(-4) N(S)4(-4)	2 N/O	–		**NZM4-XHIV** 266172	
Trip indicating auxiliary contact (HIA), (HIAFI)[1] General trip indication "+", when tripped by shunt release, overload release, short-circuit release or earth-fault release due to fault current.							
	Single contact	NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4)	1 N/O			**M22-K10** 216376	20 off
				1 NC ⊖		**M22-K01** 216378	20 off
	Double contact	NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4)	1 N/O	1 NC ⊖			
				2 NC ⊖			
			2 N/O				

Information relevant for export to North America

[1] Product Standards: IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
UL File No.: E29184
UL CCN: NKCR
CSA File No.: 012528
CSA Class No.: 3211-03
NA Certification: UL Listed, CSA certified
Degree of Protection: UL/CSA Part no.:

NZM1, M22-...

HPL17107EN

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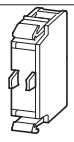
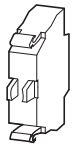
Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes	Notes
M22-CK10 216384	20 off		The following applies for the std. pack: M22-(C)K… : Std. pack = 20 off	The following can be clipped into the switch: • NZM1: one standard auxiliary contact • NZM2: up to two standard auxiliary contacts M22-(C)K... • NZM3: up to three standard auxiliary contacts M22-(C)K... • NZM4: up to three standard auxiliary contacts M22-(C)K... Any combinations of the auxiliary contact types are possible. Marking on switch: HIN On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.
M22-CK01 216385				
M22-CK11 107940				
M22-CK02 107899				
M22-CK20 107898				
				Not in conjunction with undervoltage release NZM…-XU… or shunt release NZM…-XA… Early make with switch on and switch off (manual actuation): approx. 20 ms
				Not in conjunction with undervoltage release NZM…-XU…, shunt release NZM…-XA… or remote operator NZM…-XR… Early make (manual operation): approx. 20...90 ms



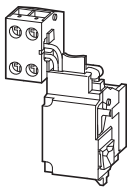
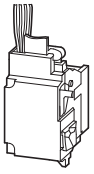


M22-CK10 216384	20 off		The following applies for the std. pack: M22-(C)K… : Std. pack = 20 off	The following can be clipped into the switch: • NZM1 - one trip-indicating auxiliary switch • NZM2 - one trip-indicating auxiliary switch M22-(C)K… • NZM3 - one trip-indicating auxiliary switch M22-(C)K… • NZM4 -up to two trip-indicating auxiliary switches M22 -(C)K…. Any combinations of the auxiliary contact types are possible. Not in combination with switch-disconnector PN… Marking on switch: HIA Labeling in residual-current block: HIAFI. If the trip-indicating auxiliary contacts are used in the residual-current block, the NC contacts operates as N/O contacts and the N/O contact operates as an NC contact.
M22-CK01 216385	20 off			
M22-CK11 107940	20 off			
M22-CK02 107899	20 off			
M22-CK20 107898	20 off			

[2] Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No. E140305
UL CCN DIHS

CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

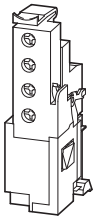
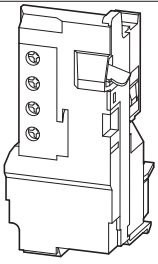
NZM1

		For use with	Rated control voltage U_s V	Part no. Article no. for separate order	Price See price list	Std. pack	Notes
Undervoltage releases							
Without auxiliary contacts Non-delayed disconnection of circuit-breaker NZM or switch-disconnector N when control voltage drops below 35 – 70% U_S. For use with emergency switching off devices in conjunction with emergency switching off button.							
	With clamp terminal on left switch side.	NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XU24AC** 259434		1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...
			48 V 50/60 Hz	**NZM1-XU48AC** 259436			
			60 V 50/60 Hz	**NZM1-XU60AC** 259438			
			110 V-130 V 50/60 Hz	**NZM1-XU110-130AC** 259440			
			208 V-240 V 50/60 Hz	**NZM1-XU208-240AC** 259442			
			380 V-440 V 50/60 Hz	**NZM1-XU380-440AC** 259444			
			480 V-525 V 50/60 Hz	**NZM1-XU480-525AC** 259446			
			600 V 50/60 Hz	**NZM1-XU600AC** 259448			
			12 V DC	**NZM1-XU12DC** 259450			
			24 V DC	**NZM1-XU24DC** 259452			
			110 V-130 V DC	**NZM1-XU110-130DC** 259458			
			220 V-250 V DC	**NZM1-XU220-250DC** 259460			
	With 3 m connection cable instead of screw terminal.	NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUL24AC** 259462		1 off	
			110 V-130 V 50/60 Hz	**NZM1-XUL110-130AC** 259468			
			208 V-240 V 50/60 Hz	**NZM1-XUL208-240AC** 259471			
			380 V-440 V 50/60 Hz	**NZM1-XUL380-440AC** 259473			
			480 V-525 V 50/60 Hz	**NZM1-XUL480-525AC** 259475			
			600 V 50/60 Hz	**NZM1-XUL600AC** 259477			
			12 V DC	**NZM1-XUL12DC** 259479			
			24 V DC	**NZM1-XUL24DC** 259481			
			110 V-130 V DC	**NZM1-XUL110-130DC** 259487			
			220 V-250 V DC	**NZM1-XUL220-250DC** 259489			

Information relevant for export to North America

Product Standards	UL489;CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified

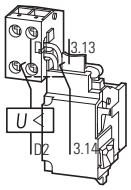
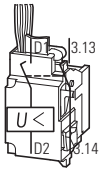
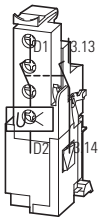
NZM2/3..., NZM4

	For use with	Rated control voltage U_s V	**Part no.** Article no. when ordered separately	**Price** See price list	Std. pack	**Notes**
Undervoltage releases						
Without auxiliary contacts Non-delayed disconnection of circuit-breaker NZM or switch-disconnector N when control voltage drops below 35 – 70% U_S. For use with emergency switching off devices in conjunction with emergency switching off button						
	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	24 V 50/60 Hz	**NZM2/3-XU24AC** 259491		1 off	When the undervoltage release is de-energized, accidental contact with the main switches of the switch during attempts to switch on is reliably prevented. Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XA...
		48 V 50/60 Hz	**NZM2/3-XU48AC** 259493			
		60 V 50/60 Hz	**NZM2/3-XU60AC** 259495			
		110 V-130 V 50/60 Hz	**NZM2/3-XU110-130AC** 259497			
		208 V-240 V 50/60 Hz	**NZM2/3-XU208-240AC** 259499			
		380 V-440 V 50/60 Hz	**NZM2/3-XU380-440AC** 259501			
		480 V-525 V 50/60 Hz	**NZM2/3-XU480-525AC** 259503			
		600 V 50/60 Hz	**NZM2/3-XU600AC** 259505			
		12 V DC	**NZM2/3-XU12DC** 259507			
		24 V DC	**NZM2/3-XU24DC** 259509			
		110 V-130 V DC	**NZM2/3-XU110-130DC** 259515			
		220 V-250 V DC	**NZM2/3-XU220-250DC** 259517			
	NZM4(-4), N(S)4(-4)	24 V 50/60 Hz	**NZM4-XU24AC** 266189		1 off	
		48 V 50/60 Hz	**NZM4-XU48AC** 266190			
		60 V 50/60 Hz	**NZM4-XU60AC** 266191			
		110 V-130 V 50/60 Hz	**NZM4-XU110-130AC** 266192			
		208 V-240 V 50/60 Hz	**NZM4-XU208-240AC** 266193			
		380 V-440 V 50/60 Hz	**NZM4-XU380-440AC** 266194			
		480 V-525 V 50/60 Hz	**NZM4-XU480-525AC** 266195			
		600 V 50/60 Hz	**NZM4-XU600AC** 266196			
		12 V DC	**NZM4-XU12DC** 266203			
		24 V DC	**NZM4-XU24DC** 266204			
		110 V-130 V DC	**NZM4-XU110-130DC** 266207			
		220 V-250 V DC	**NZM4-XU220-250DC** 266208			

Information relevant for export to North America

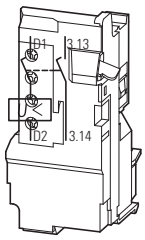
Product Standards	UL489;CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified

NZM1, NZM2/3

	For use with	Rated control voltage U_s V	**Part no.** Article no. for separate order	**Price** See price list	Std. pack	**Notes**
Undervoltage releases						
With two early-make auxiliary contacts,For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications. For use with emergency switching off devices in conjunction with emergency switching off button.						
						
With clamp terminal on left switch side.	NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUHIV24AC** 259531		1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... .
		48 V 50/60 Hz	**NZM1-XUHIV48AC** 259533			
		60 V 50/60 Hz	**NZM1-XUHIV60AC** 259535			
		110 V-130 V 50/60 Hz	**NZM1-XUHIV110-130AC** 259537			
		208 V-240 V 50/60 Hz	**NZM1-XUHIV208-240AC** 259539			
		380 V-440 V 50/60 Hz	**NZM1-XUHIV380-440AC** 259541			
		480 V-525 V 50/60 Hz	**NZM1-XUHIV480-525AC** 259543			
		12 V DC	**NZM1-XUHIV12DC** 259545			
		24 V DC	**NZM1-XUHIV24DC** 259547			
		110 V-130 V DC	**NZM1-XUHIV110-130DC** 259553			
		220 V-250 V DC	**NZM1-XUHIV220-250DC** 259555			
						
With 3 m connection cable instead of screw connection.	NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUHIVL24AC** 259557		1 off	
		110 V-130 V 50/60 Hz	**NZM1-XUHIVL110-130AC** 259563			
		208 V-240 V 50/60 Hz	**NZM1-XUHIVL208-240AC** 259565			
		380 V-440 V 50/60 Hz	**NZM1-XUHIVL380-440AC** 259567			
		480 V-525 V 50/60 Hz	**NZM1-XUHIVL480-525AC** 259569			
		12 V DC	**NZM1-XUHIVL12DC** 259571			
		24 V DC	**NZM1-XUHIVL24DC** 259573			
		110 V-130 V DC	**NZM1-XUHIVL110-130DC** 259579			
		220 V-250 V DC	**NZM1-XUHIVL220-250DC** 259581			
						
	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	24 V 50/60 Hz	**NZM2/3-XUHIV24AC** 259583		1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Cannot be used in conjunction with remote operator NZM...-XR.... Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA....
		48 V 50/60 Hz	**NZM2/3-XUHIV48AC** 259585			
		60 V 50/60 Hz	**NZM2/3-XUHIV60AC** 259587			
		110 V-130 V 50/60 Hz	**NZM2/3-XUHIV110-130AC** 259589			
		208 V-240 V 50/60 Hz	**NZM2/3-XUHIV208-240AC** 259591			
		380 V-440 V 50/60 Hz	**NZM2/3-XUHIV380-440AC** 259594			
		480 V-525 V 50/60 Hz	**NZM2/3-XUHIV480-525AC** 259598			
		12 V DC	**NZM2/3-XUHIV12DC** 259600			
		24 V DC	**NZM2/3-XUHIV24DC** 259602			
		110 V-130 V DC	**NZM2/3-XUHIV110-130DC** 259608			
		220 V-250 V DC	**NZM2/3-XUHIV220-250DC** 259610			

NZM1, NZM2/3..., NZM4

For use with	Rated operating voltage U_s V	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes



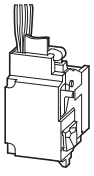
Undervoltage releases

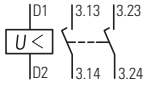
With two early-make auxiliary contacts

For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.

For use with emergency switching off devices in conjunction with emergency switching off button.

NZM4(-4), N(S)4(-4)	24 V 50/60 Hz	**NZM4-XUHIV24AC** 266217	1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented. Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms Cannot be used in conjunction with remote operator NZM...-XR.... Undervoltage release cannot be installed together with early-make auxiliary contact NZM…-XHIV… or shunt release NZM…-XA…
	48 V 50/60 Hz	**NZM4-XUHIV48AC** 266218		
	60 V 50/60 Hz	**NZM4-XUHIV60AC** 266219		
	110 V-130 V 50/60 Hz	**NZM4-XUHIV110-130AC** 266220		
	208 V-240 V 50/60 Hz	**NZM4-XUHIV208-240AC** 266221		
	380 V-440 V 50/60 Hz	**NZM4-XUHIV380-440AC** 266222		
	480 V-525 V 50/60 Hz	**NZM4-XUHIV480-525AC** 266223		
	12 V DC	**NZM4-XUHIV12DC** 266231		
	24 V DC	**NZM4-XUHIV24DC** 266232		
	110 V-130 V DC	**NZM4-XUHIV110-130DC** 266235		
	220 V-250 V DC	**NZM4-XUHIV220-250DC** 266236		

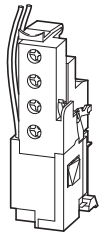


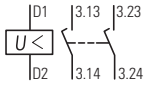


With 2 separate early-make auxiliary contacts

With 3 m connection cable instead of screw terminal.

NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUHIV20L24AC** 259612	1 off	When the undervoltage release is de-energized, accidental contact with the main switches of the switch during attempts to switch on is safely prevented. Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Cannot be used in conjunction with remote operator NZM...-XR.... Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...
	110 V-130 V 50/60 Hz	**NZM1-XUHIV20L110-130AC** 259620		
	208 V-240 V 50/60 Hz	**NZM1-XUHIV20L208-240AC** 259622		
	380 V-440 V 50/60 Hz	**NZM1-XUHIV20L380-440AC** 259624		
	24 V DC	**NZM1-XUHIV20L24DC** 259630		





Contacts 3.23 and 3.24 with separate 3 m connection cables.

NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	24 V 50/60 Hz	**NZM2/3-XUHIV2024AC** 259640	1 off	
	110 V-130 V 50/60 Hz	**NZM2/3-XUHIV20110-130AC** 259648		
	208 V-240 V 50/60 Hz	**NZM2/3-XUHIV20208-240AC** 259651		
	380 V-440 V 50/60 Hz	**NZM2/3-XUHIV20380-440AC** 259653		
	24 V DC	**NZM2/3-XUHIV2024DC** 259659		

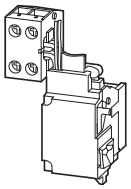
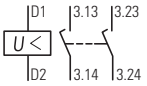
Information relevant for export to North America

Product Standards	UL489;CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified

NZM1, NZM2/3..., NZM4

For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes

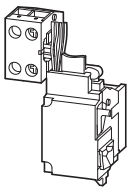
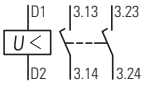
Undervoltage releases

With 2 separate early-make auxiliary contacts
For use with emergency switching off devices in conjunction with emergency switching off button.

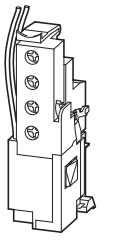
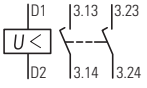
Coil connections wired to clamp terminals, auxiliary contact connections with 3 m loose connection cables.

NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUHIV20KL24AC** 284388	1 off	When the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is reliably prevented.
	110 V-130 V 50/60 Hz	**NZM1-XUHIV20KL110-130AC** 284389		
	208 V-240 V 50/60 Hz	**NZM1-XUHIV20KL208-240AC** 284400		
	24 V DC	**NZM1-XUHIV20KL24DC** 284387		

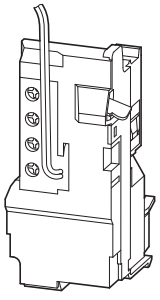
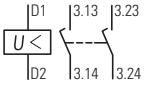



Coil connections with 3 m loose connection cables, auxiliary contact connections wired to clamp terminals.

NZM1(-4), N(S)1(-4)	24 V 50/60 Hz	**NZM1-XUHIV20LK24AC** 284402	1 off	Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms
	110 V-130 V 50/60 Hz	**NZM1-XUHIV20LK110-130AC** 284403		
	208 V-240 V 50/60 Hz	**NZM1-XUHIV20LK208-240AC** 284404		Cannot be used in conjunction with remote operator NZM...-XR....
	24 V DC	**NZM1-XUHIV20LK24DC** 284401		

NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	24 V 50/60 Hz	**NZM2/3-XUHIV20LK24AC** 285291	1 off	Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA...
	110 V-130 V 50/60 Hz	**NZM2/3-XUHIV20LK110-130AC** 284407		
	208 V-240 V 50/60 Hz	**NZM2/3-XUHIV20LK208-240AC** 284408		
	24 V DC	**NZM2/3-XUHIV20LK24DC** 284405		

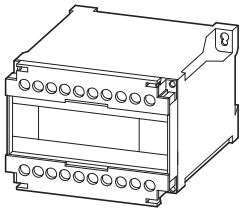



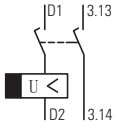
Contacts 3.23 and 3.24 with separate 3 m connection cables.

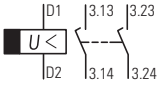
NZM4(-4), N(S)4(-4)	24 V 50/60 Hz	**NZM4-XUHIV2024AC** 266244	1 off	
	110 V-130 V 50/60 Hz	**NZM4-XUHIV20110-130AC** 266247		
	208 V-240 V 50/60 Hz	**NZM4-XUHIV20208-240AC** 266248		
	380 V-440 V 50/60 Hz	**NZM4-XUHIV20380-440AC** 266249		
	24 V DC	**NZM4-XUHIV2024DC** 266258		

Information relevant for export to North America

Product Standards	UL489;CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified







For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
Undervoltage releases, off-delayed				
Combination of separate delay unit and special releases. For use with emergency switching off devices in conjunction with emergency switching off button. Not UL/CSA approved				
Delay unit				
Voltage dips of less than 0.06 – 16 s do not cause disconnection of the NZM circuit-breaker or N switch-disconnector.				
NZM1(-4), 2(-4), 3(-4), 4(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4) 50/60 Hz 220 V-240 V 380 V-440 V 480 V-550 V DC/AC 24 V	**UVU-NZM** 260154		1 off	Delay time can be set from 70 ms – 4 s. With additional external capacitor: • 30,000µF ≧35 V up to 8 s • 90,000µF ≧35 V up to 16 s A special release is required. Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA... . Delay unit for separate installation (mounting: top-hat rail or screws). For other operating voltages use a control transformer.
Special trip block				
For combination with separate delay unit				
Without auxiliary contacts				
NZM1 with 3 m loose connection cables instead of screw terminal, NZM2, 3, and 4 with screw terminals				
NZM1(-4) N(S)1(-4)	**NZM1-XUVL** 271607		1 off	Delay unit UVU-NZM is additionally required. Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA....
NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	**NZM2/3-XUV** 259527			
NZM4(-4) N(S)4(-4)	**NZM4-XUV** 266588			
With two early-make auxiliary contacts				
NZM1(-4) N(S)1(-4)	**NZM1-XUVHIVL** 271608		1 off	Cannot be used in conjunction with remote operator NZM...-XR.... Delay unit UVU-NZM is additionally required. Cannot be installed simultaneously with separate early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XA.... NZM1, 2, 3: Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms. NZM4: Early make of auxiliary contacts on switching on (manual operation): approx. 90 ms.
NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	**NZM2/3-XUVHIV** 259684			
NZM4(-4) N(S)4(-4)	**NZM4-XUVHIV** 266596			
With two independently operating early-make auxiliary contacts				
NZM1 with 3 m separate connection cables instead of screw terminal, NZM2, 3, 4 with screw terminal, contact 3.23 and 3.24 with 3 m separate connection cables.				
NZM1(-4) N(S)1(-4)	**NZM1-XUVHIV20L** 271609		1 off	
NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	**NZM2/3-XUVHIV20** 259688			
NZM4(-4) N(S)4(-4)	**NZM4-XUVHIV20** 266604			

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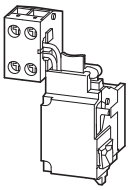
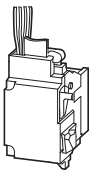
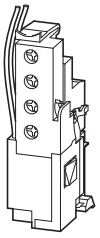
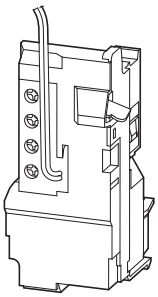
NZM1, NZM2/3, NZM4

	For use with	Rated cntrol voltage U_s V	Part no. Article no. when ordered	Price See price	Std. pack	Notes
Shunt releases						
Without auxiliary contacts						
Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.						
 	NZM1(-4), N(S)1(-4)	12 V AC/DC	**NZM1-XA12AC/DC** 259706		1 off	When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Undervoltage releases cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or shunt release NZM...-XU... .
With clamp terminal on left switch side.		24 V AC/DC	**NZM1-XA24AC/DC** 259708			
		48 V AC/DC	**NZM1-XA48AC/DC** 259720			
		60 V AC/DC	**NZM1-XA60AC/DC** 259722			
		110 V-130 V AC/DC	**NZM1-XA110-130AC/DC** 259724			
		208 V-250 V AC/DC	**NZM1-XA208-250AC/DC** 259726			
		380 V-440 V AC/DC	**NZM1-XA380-440AC/DC** 259728			
 	NZM1(-4), N(S)1(-4)	12 V AC/DC	**NZM1-XAL12AC/DC** 259734		1 off	
With 3 m connection cable instead of screw terminal.		24 V AC/DC	**NZM1-XAL24AC/DC** 259736			
		110 V-130 V AC/DC	**NZM1-XAL110-130AC/DC** 259742			
		208 V-250 V AC/DC	**NZM1-XAL208-250AC/DC** 259744			
		380 V-440 V AC/DC	**NZM1-XAL380-440AC/DC** 259746			
 	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	12 V AC/DC	**NZM2/3-XA12AC/DC** 259752		1 off	
		24 V AC/DC	**NZM2/3-XA24AC/DC** 259754			
		48 V AC/DC	**NZM2/3-XA48AC/DC** 259756			
		60 V AC/DC	**NZM2/3-XA60AC/DC** 259758			
		110 V-130 V AC/DC	**NZM2/3-XA110-130AC/DC** 259760			
		208 V-250 V AC/DC	**NZM2/3-XA208-250AC/DC** 259763			
		380 V-440 V AC/DC	**NZM2/3-XA380-440AC/DC** 259766			
 	NZM4(-4), N(S)4(-4)	12 V AC/DC	**NZM4-XA12AC/DC** 266446		1 off	When the shunt release is live, contact with the switch' s main contacts on switching on is reliably prevented. Early make of attxiliarv contact on switching on (manual operation):approx. 90 ms. Cannot be used in conjunction with remote operator NZM... -XR.... Undervoltage release cannot be installed simttltaneottslv with early-make attxiliarv contact NZM...-XHIV... or undervoltage release NZM... -XU...
		24 V AC/DC	**NZM4-XA24AC/DC** 266447			
		48 V AC/DC	**NZM4-XA48AC/DC** 266448			
		60 V AC/DC	**NZM4-XA60AC/DC** 266449			
		110 V-130 V AC/DC	**NZM4-XA110-130AC/DC** 266450			
		208 V-250 V AC/DC	**NZM4-XA208-250AC/DC** 266451			
		380 V-440 V AC/DC	**NZM4-XA380-440AC/DC** 266452			

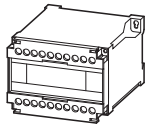
Information relevant for export to North America

Product Standards	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified

NZM...-XA...

With screw terminal

For use with	Part no. Article no.	Price See price list	Std. pack	Notes
	With screw terminal			



Shunt releases

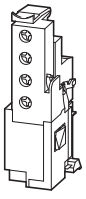
Capacitor unit 230 V 50/60 Hz in conjunction with shunt release NZM...-XA208-250 AC/DC Enclosure: degree of protection IP20 Not UL/CSA approved			Enables the reliable use of circuit-breakers as mesh network circuit-breakers in the range from U_n with 0 % constant switch-off time of 40 ms. If the mains voltage is absent, the installed capacitor supplies power for actuating the shunt release for at least 12 hours.
NZM1(-4), N(S)1(-4) NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM-XCM** 229413	1 off	The capacitor unit is arranged independently of the circuit-breaker. Connect NZM - XCM to the power feed side. Note on engineering: Connect a standard auxiliary contact (HIN) as N/O in series with the coil of the shunt release! Standard auxiliary contact not included as standard.

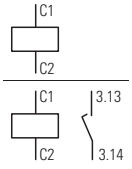
	Part no. Article no.	Price See price list	Std. pack	Notes
	With screw terminal			

Shunt releases

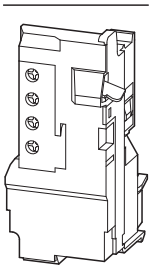
For mesh network circuit-breakers
For intermittent operation
Maximum On-time = 1 s
Operating range 10-110 % U_s
Not UL/CSA approved

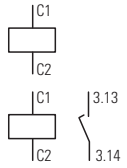
Rated control voltage
230 V AC
For use with
NZM3(-4), N3(-4) and NZM4(-4), N4(-4)
Cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU... .
Intermittent operation guaranteed by series connection of a make contact M22-(C)K10.
The maximum duty factor of the shunt releases for mesh network circuit-breakers is 1 s.



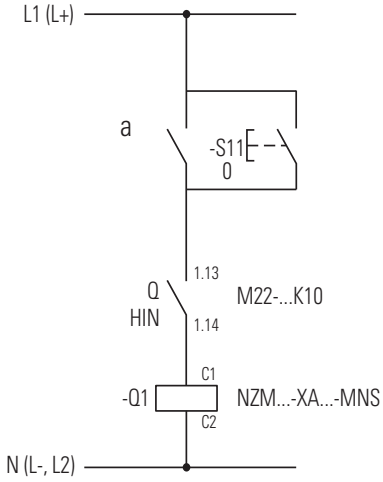


Without auxiliary contacts	**NZM3-XA-230AC-MNS** 274097	1 off
With early-make auxiliary contact	**NZM3-XAHIV-230AC-MNS** 274141	1 off





Without auxiliary contacts	**NZM4-XA-230AC-MNS** 274138	
With early-make auxiliary contact	**NZM4-XAHIV-230AC-MNS** 274143	1 off

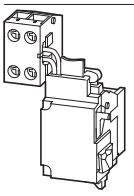
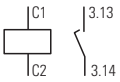
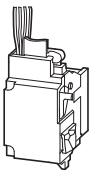
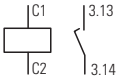
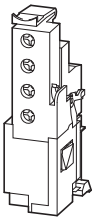
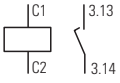
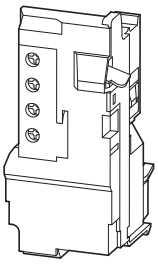
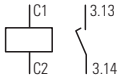


NZM...-XAHIV:

Cannot be used in conjunction with remote operator NZM...-XR....
NZM3: Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms.
NZM4: Early make of auxiliary contact on switching on (manual operation): approx. 90 ms.

①	Reverse power relay contact from mesh network relay
-S11	Remote off
q	Standard auxiliary contacts
-Q1	Shunt releases

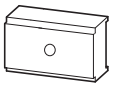
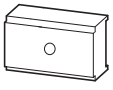
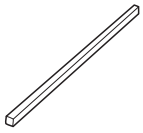
NZM1, NZM2/3, NZM4

	For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
Shunt releases						
With early-make auxiliary contact Not in combination with remote operator.						
 	NZM1(-4), N(S)1(-4)	12 V AC/DC	**NZM1-XAHIV12AC/DC** 259772		1 off	When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...
With clamp terminal on left switch side.		24 V AC/DC	**NZM1-XAHIV24AC/DC** 259774			
		48 V AC/DC	**NZM1-XAHIV48AC/DC** 259776			
		60 V AC/DC	**NZM1-XAHIV60AC/DC** 259778			
		110 V-130 V AC/DC	**NZM1-XAHIV110-130AC/DC** 259780			
		208 V-250 V AC/DC	**NZM1-XAHIV208-250AC/DC** 259782			
		380 V-440 V AC/DC	**NZM1-XAHIV380-440AC/DC** 259784			
 	NZM1(-4), N(S)1(-4)	12 V AC/DC	**NZM1-XAHIVL12AC/DC** 259790		1 off	
With 3 m connection cable instead of screw connection		24 V AC/DC	**NZM1-XAHIVL24AC/DC** 259792			
		110 V-130 V AC/DC	**NZM1-XAHIVL110-130AC/DC** 259798			
		208 V-250 V AC/DC	**NZM1-XAHIVL208-250AC/DC** 259800			
		380 V-440 V AC/DC	**NZM1-XAHIVL380-440AC/DC** 259802			
 	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)	12 V AC/DC	**NZM2/3-XAHIV12AC/DC** 259808		1 off	
		24 V AC/DC	**NZM2/3-XAHIV24AC/DC** 259810			
		48 V AC/DC	**NZM2/3-XAHIV48AC/DC** 259812			
		60 V AC/DC	**NZM2/3-XAHIV60AC/DC** 259814			
		110 V-130 V AC/DC	**NZM2/3-XAHIV110-130AC/DC** 259816			
		208 V-250 V AC/DC	**NZM2/3-XAHIV208-250AC/DC** 259818			
		380 V-440 V AC/DC	**NZM2/3-XAHIV380-440AC/DC** 259820			
 	NZM4(-4), N(S)4(-4)	12 V AC/DC	**NZM4-XAHIV12AC/DC** 266470		1 off	When the shunt release is live, contact with the switch's main contacts on switching on is reliably prevented. Early make of auxiliary contact on switching on (manual operation): approx. 90 ms. Cannot be used in conjunction with remote operator NZM...-XR.... Undervoltage release cannot be installed simultaneously with early-make auxiliary contact NZM...-XHIV... or undervoltage release NZM...-XU...
		24 V AC/DC	**NZM4-XAHIV24AC/DC** 266471			
		48 V AC/DC	**NZM4-XAHIV48AC/DC** 266472			
		60 V AC/DC	**NZM4-XAHIV60AC/DC** 266473			
		110 V-130 V AC/DC	**NZM4-XAHIV110-130AC/DC** 266474			
		208 V-250 V AC/DC	**NZM4-XAHIV208-250AC/DC** 266475			
		380 V-440 V AC/DC	**NZM4-XAHIV380-440AC/DC** 266476			

Information relevant for export to North America

Product Standards	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01
NA Certification	UL Listed, CSA certified

NZM1, NZM2, NZM3, NZM4

Product view		For use with	Standard **Part no.** Article no. when ordered separately	**Price** See price list	Std. pack	**Notes**
Door coupling rotary handles						
Complete including rotary drive and coupling parts An additional extension shaft is necessary with the NZM... - XT(V)D(V)(R)(-60) part numbers. Degree of protection IP66/UL/CSA type 4X, 12 Standard, black/grey						
 		Lockable in 0 position on handle with up to 3 padlocks. With door interlock.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XTVD** 260166	1 off	Door interlock • Not defeated in the locked OFF and ON positions • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVD(V) • External warning plate/ designation label can be clipped on
			NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XTVD** 260168		
			NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XTVD** 260170		
			NZM4(-4), N(S)4(-4)	**NZM4-XTVD** 266614		
 		Lockable on handle and switch with up to 3 padlocks. Can be locked in 0 position, with adequate modification also in I position. With door interlock. Lockable on switch in 0 position.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XTVDV** 260172		
			NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XTVDV** 260174		
			NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XTVDV** 260176		
			NZM4(-4), N(S)4(-4)	**NZM4-XTVDV** 266616		
Red-yellow for emergency witching off  		Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XTVDVR** 260178	1 off	Door interlock • Not defeated in the locked OFF position. • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVDVR • External warning plate/ designation label can be clipped on
			NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XTVDVR** 260180		
			NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XTVDVR** 260182		
			NZM4(-4), N(S)4(-4)	**NZM4-XTVDVR** 266618		
Extension shaft 	–	400 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XV4** 261232	1 off	Length 290 mm, can be cut to required length.
			NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM3/4-XV4** 261234		
		600 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XV6** 260191		Length 425 mm, can be cut to required length.
			NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM3/4-XV6** 260193		
Notes		Circuit-breaker can also be installed in a horizontal position 90° left/right, with the handle still in the same position.				

For maximum shaft length 60 mm **Part no.** Article no. when ordered separately	**Price** See price list	Std. pack	**Notes**	Extremely narrow fittings **Part no.** Article no. when ordered separately	**Price** See price list	Std. pack	**Note**	**Information relevant for export to North America**
NZM1-XTVD-60 271504		1 off	Door interlock • Can not be defeated in the locked OFF and ON positions • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVD(V)-60 • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.	**NZM1-XTVD-0** 279392		1 off	Door interlock • Can not be defeated in the locked OFF and ON positions • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVD(V)-0 • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.	Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. UL Listed, NA Certification CSA certified Degree of Protection IEC: IP66, UL/CSA Type 4X, 12
NZM2-XTVD-60 271505				**NZM2-XTVD-0** 279393				
NZM3-XTVD-60 271506				**NZM3-XTVD-0** 279394				
NZM4-XTVD-60 271507				**NZM4-XTVD-0** 279395				
NZM1-XTVDV-60 271508				**NZM1-XTVDV-0** 279396				
NZM2-XTVDV-60 271509				**NZM2-XTVDV-0** 279397				
NZM3-XTVDV-60 271510				**NZM3-XTVDV-0** 279398				
NZM4-XTVDV-60 271511				**NZM4-XTVDV-0** 279399				
NZM1-XTVDVR-60 271512		1 off	Door interlock • Can not be defeated in the locked OFF position. • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVDVR-60 • For maximum shaft length 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.	**NZM1-XTVDVR-0** 279400		1 off	Door interlock • Can not be defeated in the locked OFF position. • Can be modified such that it can be defeated from the outside using a screwdriver, when it is in the unlocked ON position. • Door can be opened in OFF NZM…-XTVDVR-0 • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/designation label can be clipped on.	
NZM2-XTVDVR-60 271513				**NZM2-XTVDVR-0** 279401				
NZM3-XTVDVR-60 271514				**NZM3-XTVDVR-0** 279402				
NZM4-XTVDVR-60 271515				**NZM4-XTVDVR-0** 279403				
–			–	–			–	UL/CSA certification not required
–				–				
–				–				
–				–				

1

NZM1, NZM2, NZM3, NZM4

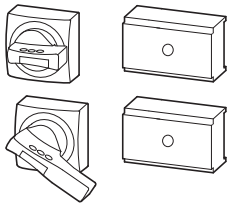
HPL17120EN

Product view	For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes

Door coupling rotary handles

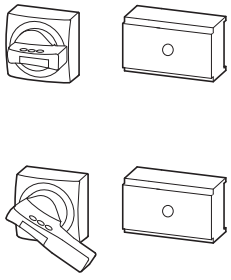
Complete including rotary drive and coupling parts
Extension shaft additionally required.
Degree of protection IP66/UL/CSA type 4X, 12
Difference to normal IEC handles:
Door opening only possible with active rotation beyond the 0 position.

Standard, black/grey



Lockable in 0 position on handle. With door interlock.

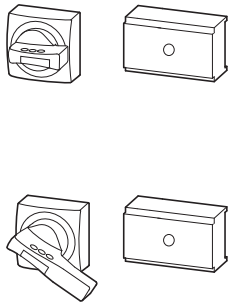
NZM1, N1	**NZM1-XTVD-NA**	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.
	271445		
NZM2, N2	**NZM2-XTVD-NA**		
	271446		
NZM3, N3	**NZM3-XTVD-NA**		
	271447		
NZM4, N4	**NZM4-XTVD-NA**		
	271448		



Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.

NZM1, N(S)1	**NZM1-XTVDV-NA**	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.
	100683		
NZM2, N(S)2	**NZM2-XTVDV-NA**		
	100684		
NZM3, N(S)3	**NZM3-XTVDV-NA**		
	100685		
NZM4, N(S)4	**NZM4-XTVDV-NA**		
	100686		

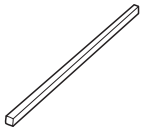
Red-yellow for emergency switching off



Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. With door interlock. Lockable on switch in 0 position.

NZM1, N(S)1	**NZM1-XTVDVR-NA**	1 off	Door interlock • Can not be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/designation label can be clipped on.
	271449		
NZM2, N(S)2	**NZM2-XTVDVR-NA**		
	271450		
NZM3, N(S)3	**NZM3-XTVDVR-NA**		
	271451		
NZM4, N(S)4	**NZM4-XTVDVR-NA**		
	271452		

Extension shaft



400 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1/2-XV4**	1 off	Length 290 mm, can be cut to required length.
	NZM2(-4), PN2(-4), N(S)2(-4)	261232		
	NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3/4-XV4**		
	NZM4(-4), N(S)4(-4)	261234		
600 mm max. mounting depth	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1/2-XV6**		Length 290 mm, can be cut to required length.
	NZM2(-4), PN2(-4), N(S)2(-4)	260191		
	NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3/4-XV6**		
	NZM4(-4), N(S)4(-4)	260193		

Notes Circuit-breaker can also be installed in a lying position 90° left/right, with the handle still in the same position.

NZM1, NZM2, NZM3, NZM4

60 mm **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**	Extremely narrow fittings **Part no.** Article no.	**Price** See price list	Std. pack	**Notes**	**Information relevant for export to North America**
–			–	–			–	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E140305 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certified Degree of Protection: IEC: IP66, UL/CSA Type 4X, 12
–				–				
–				–				
–				–				
NZM1-XTVDV-60-NA 100667		1 off	Door interlock • Cannot be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on. NZM…-XTVDV-60-NA • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on.	**NZM1-XTVDV-0-NA** 100675		1 off	Door interlock • Cannot be defeated in the locked OFF position. • Door opening possible with active rotation beyond the 0 position. Can be defeated from the outside using a screwdriver. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on. NZM…-XTVDV-0-NA • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on.	
NZM2-XTVDV-60-NA 100668				**NZM2-XTVDV-0-NA** 100676				
NZM3-XTVDV-60-NA 100669				**NZM3-XTVDV-0-NA** 100677				
NZM4-XTVDV-60-NA 100670				**NZM4-XTVDV-0-NA** 100678				
NZM1-XTVDVR-60-NA 100671		1 off	Door interlock • Cannot be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on. NZM…-XTVDVR-60-NA • For a maximum shaft length of 60 mm • Without shaft support • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on.	**NZM1-XTVDVR-0-NA** 100679		1 off	Door interlock • Cannot be defeated in the locked OFF position. • Door opening with active rotation beyond the 0 position. • Cannot be combined with mechanical interlock • External warning plate/ designation label can be clipped on. NZM…-XTVDVR-0-NA • For extremely narrow fittings • With special short extension shaft • Cannot be combined with additional handle NZM...-XDZ • External warning plate/ designation label can be clipped on.	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E140305 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certified Degree of Protection: IEC: IP66, UL/CSA Type 4X, 12
NZM2-XTVDVR-60-NA 100672				**NZM2-XTVDVR-0-NA** 100680				
NZM3-XTVDVR-60-NA 100673				**NZM3-XTVDVR-0-NA** 100681				
NZM4-XTVDVR-60-NA 100674				**NZM4-XTVDVR-0-NA** 100682				
–			–	–			–	UL/CSA certification not required
–				–				
–				–				
–				–				

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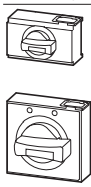
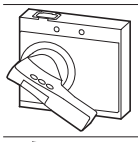
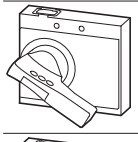
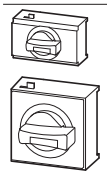
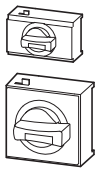
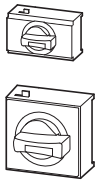
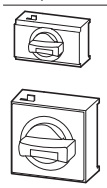
NZM...-XDV

		For use with	Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevant for export to North America	
Rotary handle on circuit-breaker Complete with rotary drive								
Standard, black-grey								
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDV** 260125		1 off	NZM1, 2, 3: Can also be combined with insulating surround. MODAN handle position detection by wire release can be retrofitted	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified
		NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDV** 260127					
		NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XDV** 260129					
		NZM4(-4), N(S)4(-4)	**NZM4-XDV** 266608					
	Lockable in 0 position on handle with upto 3 padlocks.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDVG** 285247		1 off	Can also be combined with insulating surround		
		NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDVG** 285248					
Red-yellow for emergency switching off								
	Lockable in 0 position on switch with upto 3 padlocks.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDVR** 260135		1 off	NZM1, 2, 3: Can also be combined with insulating surround. MODAN handle position detection by wire release can be retrofitted	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified
		NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDVR** 260137					
		NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XDVR** 260140					
		NZM4(-4), N(S)4(-4)	**NZM4-XDVR** 266610					
	Lockable in 0 position on handlewith upto 3 padlocks.	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDVGR** 285249		1 off	Can also be combined with insulating surround		
		NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDVGR** 285280					
Notes	Circuit-breaker can also be installed in a lying position 900 1e/!|right, with the handle still in the same position							

NZM...-XDTV

	For use with	Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevant for export to North America	
Rotary handles on switch with door interlock Complete with rotary drive and insulating surround							
Standard, black-grey							
 Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. Also available with door interlock e.g. for MCC service distribution	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDTV** 260131	1 off	In the ON position, can be defeatedfrom the outside using a 1 mm pin .Can not be defeated inthe locked OFF and ON positions Door can be opened in OFF .Can onlybe switched ON when the door is closed	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified	
	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDTV** 260133					
Red-yellow for emergency switching off							
 Lockable in 0 position on handle with up to 3 padlocks. Also availablewith door interlock e.g. for MCC service distribution	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XDTVR** 260142	1 off				
	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XDTVR** 260144					
Rotary handles on switch with door interlock for UL/CSA approved NA switches Differenceto normal IEC handles: Door opening only possible with active rotation beyond the 0 position. Complete with rotary drive and insulating surround							
Standard, black-grey							
 Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. Also available with door interlock e.g. for MCC service distribution	NZM1, N(S)1	**NZM1-XDTV-NA** 271453	1 off	Door interlock In the ON position, can be defeatedfrom the outside using a 1 mm pin .Can not be defeated inthe locked OFF and ON positions Door opening only possible with active rotation beyondthe 0 position. .Can onlybe switched ON when the door is closed .Cannot be combined with mechanical interlock	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification	UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking E140305 DIHS 022086 1437-01 UL Listed, CSA certified	
	NZM2, N(S)2	**NZM2-XDTV-NA** 271454					
Red-yellow for emergency switching off							
 Lockable in 0 position on handle with up to 3 padlocks. Also availablewith door interlock e.g. for MCC service distribution	NZM1, N(S)1	**NZM1-XDTVR-NA** 271455	1 off				
	NZM2, N(S)2	**NZM2-XDTVR-NA** 271456					

Notes Circuit-breaker can also be installed in a lying position 900 le|1|right, with the handle still in the same position

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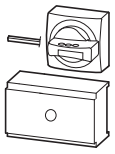
NZM...-XHB..., NZM...-XS...

	Model	For use with	Part no. Article no.for separate order	Price See price list	Std. pack	Information relevant for export to North America

Main switch assembly kit
Equipment supplied:
- Door coupling rotary handle
- Extension shaft NZM...-XV4
- External warning plate/designation label in German/English
- Black and yellowflash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → Page 17/84
Other external warning plates/designation labels can be clipped on.
Degree of protection IP66/UL/CSA type 4X, 12

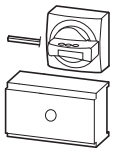
With black door coupling rotary handle



Lockable in 0 position on handle with up to 3 padlocks, can also be modified for the I position. With door interlock

Model	For use with	Part no.	Price	Std. pack	Information relevant for export to North America
–	PN1(-4), N(S)1(-4)	**NZM1-XHB** 266626		1 off	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E140305 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certi-Pied Degree of Protection: IEC:IP66, UL/CSA Type 4X,12
–	PN2(-4), N(S)2(-4)	**NZM2-XHB** 266627			
–	PN3(-4), N(S)3(-4)	**NZM3-XHB** 266628			
–	N(S)4(-4)	**NZM4-XHB** 271779			

W ith red door coupling rotary handle
for use of switch as emergency switching off device to IEC/EN 60204-1

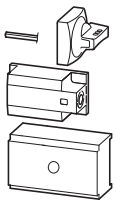


Lockable in 0 position on handle with up to 3 padlocks. Lockable door as additional feature, locking facility on circuit-breaker in 0 position.

Model	For use with	Part no.	Price	Std. pack	Information relevant for export to North America
	PN1(-4), N(S)1(-4)	**NZM1-XHBR** 266632			
	PN2(-4), N(S)2(-4)	**NZM2-XHBR** 266633			
	PN3(-4), N(S)3(-4)	**NZM3-XHBR** 266634			
	N(S)4(-4)	**NZM4-XHBR** 271842			

For side wall installation
Actuation of the switch on the control panel side wall
Switch mounting on mounting plate

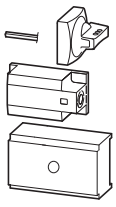
Standard, black/grey



Lockable in 0 position on handle with up to 3 padlocks, with adequate modification also in I position.

Model	For use with	Part no.	Price	Std. pack	Information relevant for export to North America
For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XS-L** 266641		1 off	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E140305 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certi-Pied Degree of Protection: IEC:IP66, UL/CSA Type 4X,12
	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XS-L** 266642			
	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XS-L** 266643			
	NZM4(-4) N(S)4(-4)	**NZM4-XS-L** 289806			
For operation on the right	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XS-R** 266644			
	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XS-R** 266645			
	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XS-R** 266646			
	NZM4(-4) N(S)4(-4)	**NZM4-XS-R** 289807			

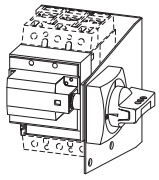
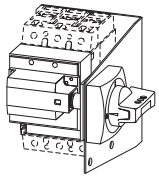
Red-yellow for emergency switching off



Lockable in 0 position on handle with up to 3 padlocks.

Model	For use with	Part no.	Price	Std. pack	Information relevant for export to North America
For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSR-L** 266653		1 off	Product Standards: UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking UL File No.: E140305 UL CCN: DIHS CSA File No.: 022086 CSA Class No.: 1437-01 NA Certification: UL Listed, CSA certi-Pied Degree of Protection: IEC:IP66, UL/CSA Type 4X,12
	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSR-L** 266654			
	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XSR-L** 266655			
	NZM4(-4) N(S)4(-4)	**NZM4-XSR-L** 289808			
For operation on the right	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSR-R** 266656			
	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSR-R** 266657			
	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XSR-R** 266658			
	NZM4(-4) N(S)4(-4)	**NZM4-XSR-R** 289809			

NZM...XS(R)M...

	Model	For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Information relevant for export to North America
Main switch assembly kit for side wall installation with mounting bracket. For direct mounting of circuit-breaker and handle in the side wall of the control cabinet Equipment supplied: .Door coupling rotary handle .Mounting bracket .Special short extension shaft .External warning plate/designation label in German/English .Black and yellowflash For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered } Page 17/84 Other external warning plates/designation labels can be clipped on. Degree of protection IP66/UL/CSAtype 4X, 12						
Standard, black/grey						
 Lockable in 0 position with adequate modification also in I position. Minimum clearance between control panel side walls and circuit-breaker is defined by mounting bracket. Extension cannot be used		For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSM-L** 266663	1 off	Product Standards UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Degree of Protection IEC:IP66, UL/CSA Type 4X,12
		For operation on the left	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSM-L** 266664		
		For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSM-R** 266665		
		For operation on the left	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSM-R** 266666		
Red-yellow for emergency switching off						
 Lockable in 0 position on handle. Minimum clearance between control panel side walls and circuit-breaker is defined by mounting bracket. Extension cannot be used		For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSRM-L** 266671	1 off	Product Standards UL489; CSA-C22.2 N o. 5-09; IEC60947, CE marking UL File No. E140305 UL CCN DIHS CSA File No. 022086 CSA Class No. 1437-01 NA Certification UL Listed, CSA certified Degree of Protection IEC:IP66, UL/CSA Type 4X,12
		For operation on the left	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSRM-L** 266672		
		For operation on the left	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XSRM-R** 266673		
		For operation on the left	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XSRM-R** 266674		
Additional plate For fitting to the mounting bracket when using neutral conductor or PE conductor terminals K25. K50. K95 or K150.						
	–	–	PN1(-4), N(S)1(-4) NZM2(-4), N(S)2(-4)	**NZM1/2-XZB** 266676	1 off	UL/CSA certification not required

Notes Additional terminal arrangement for side wall operator with mounting bracket
→Engineering, Page 17/153

1 NZM...XS(R)M...

	Model	For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Information relevant for export to North America

Main switch assembly kit with additional rotary handle

Main switch assembly kit with additional rotary handle for switching with opened control panel door

Equipment supplied:

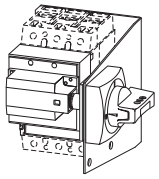
- Door coupling rotary handle
- Additional rotary handle on switch with "Deliberate Action" operation
- Extension shaft NZM...-XV6for mounting depth 600 mm, NZM1/2-XV4with NZM1 for mounting depth 400 mm
- External warning plate/designation label in German/English
- Black and yellowflash

For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered→Page 17/84

Other external warning plates/designation labels can be clipped on.

Degree of protection IP66/UL/CSAtype 4X, 12

With black door coupling rotary handle



on handle with up to 3 padlocks,canalso be modified for the I position. Lockable door as additional feature, locking facility on circuit-breaker in 0 position.

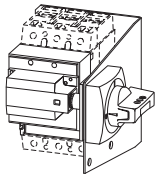
IEC	NZM1(-4) PN1(-4), N1(-4)	**NZM1-XHB-DA** 125956	1 off
UL/CSA	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XHB-DA-NA** 125958	
IEC	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XHB-DA** 116895	
UL/CSA	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XHB-DA-NA** 116897	
IEC	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XHB-DA** 118988	
UL/CSA	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XHB-DA-NA** 119000	
IEC	NZM4(-4) PN4(-4), N(S)4(-4)	**NZM4-XHB-DA** 119002	
UL/CSA	NZM4(-4) PN4(-4), N(S)4(-4)	**NZM4-XHB-DA-NA** 119004	

Product Standards

UL File No.	UL489;
UL CCN	CSA-C22.2
CSA File No.	N o. 5-09;
CSA Class No.	IEC60947,
NA Certification	CE marking
Degree of Protection	E140305 DIHS 022086 1437-01 UL Listed, CSA certified IEC:IP66, UL/CSA Type 4X,12

W ith red door coupling rotary handle

For use of switch as emergency switching off device



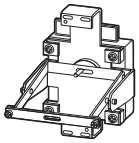
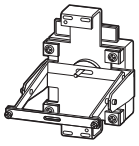
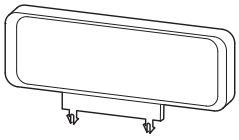
Lockable in 0 position on handle with up to 3 padlocks. With door interlock and lockable on switch in 0 position.

IEC	NZM1(-4) PN1(-4), N1(-4)	**NZM1-XHB-DAR** 125957	1 off
UL/CSA	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XHB-DAR-NA** 125959	
IEC	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XHB-DAR** 116896	
UL/CSA	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XHB-DAR-NA** 116898	
IEC	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XHB-DAR** 118989	
UL/CSA	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XHB-DAR-NA** 119001	
IEC	NZM4(-4) PN4(-4), N(S)4(-4)	**NZM4-XHB-DAR** 119003	
UL/CSA	NZM4(-4) PN4(-4), N(S)4(-4)	**NZM4-XHB-DAR-NA** 119005	

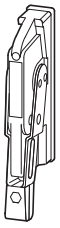
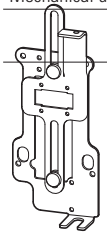
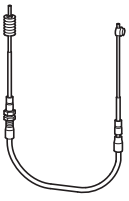
Product Standards

UL File No.	UL489;
UL CCN	CSA-C22.2
CSA File No.	N o. 5-09;
CSA Class No.	IEC60947,
NA Certification	CE marking
Degree of Protection	E140305 DIHS 022086 1437-01 UL Listed, CSA certified IEC:IP66, UL/CSA Type 4X,12

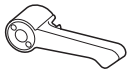
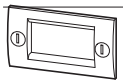
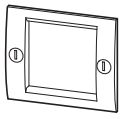
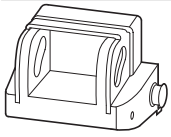
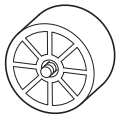
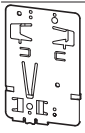
NZM...-XRAV..., ZFS..., BPF-...

		For use with	Part no. Article no.	Price See price list	Std. pack	Notes
Rear-mounted drives						
For direct rear connection ofthe switchtothe side of the control panel or control panel door. Switch actuation on rearthrough side wall or control panel door. For switch with toggle lever.For enhanced protection against direct contact on the incomer side, IP2X protection against contact with a finger can be ordered → Page 17/84. Degree of protection IP66, UL/CSA type 4X, 12						
Standard, blacK/grey						
	Lockable in 0 position on handle with up to 3 padlocks.	NZM1, N1, NS1, PN1	**NZM1-XRAV** 107245		1 off	
		NZM2, N2, NS2, PN2	**NZM2-XRAV** 107247			
Red-yellow for emergency switching off						
	Lockable in 0 position on handle with up to 3 padlocks.	NZM1, N1, NS1, PN1	**NZM1-XRAVR** 107249		1 off	
		NZM2, N2, NS2, PN2	**NZM2-XRAVR** 107261			
External warning plate/designation label						
						
"Main switch–open in 0 position"	German/English	N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**ZFS61/62-NZM7** 272525		10 off	A bilingual external warning plate/ designation label in German/English is already included in the main switch assembly kit.
	German		**ZFS61-NZM7** 051089			
	English		**ZFS62-NZM7** 065957			
	French		**ZFS63-NZM7** 065958			
	Chinese/English		**ZFS82-NZM** 104910		1 off	External warning plates are available in the following languages: 64 Bulgarian, 65 Danish, 66 Finnish, 67 Dutch, 681talian, 69 Greek, 70 Norwegian, 71 Polish, 72 Portuguese, 73 Romanian, 74 Russian, 75 Swedish, 76 Serbo-Croatian, 77 Spanish, 78 Czech, 79 Turkish, 80 Hungarian, 81 Afrikaans, 82 Chinese/English, 83 Chinese. To obtain the order number, insert the language code number into the part number required. **Ordering example** External warning plate in Finnish: ZFS66-NZM7
	Chinese		**ZFS83-NZM** 105945			
	Further languages		**ZFS*-NZM7** 999978			
Symbol	Circuit-breaker symbol		**ZFS-LS-NZM** 104829			
	Switch-disconnector symbol		**ZFS-LTS-NZM** 104828			
	Disconnector symbol		**ZFS-TS-NZM** 115365			
Blank	Blank (for engraving or printing)		**ZFS60-NZM7** 065896		10 off	
Lightning symbol						
Including terminal marking for main switch						
▲ Small		N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**BPF-NZM7** 217294		10 off	Included as standard in main switch assembly kit Marking of the input side of the switch is possible
▲ Large		N(S)3(-4) NZM4(-4), N(S)4(-4)	**BPF-NZM10** 231363			
Information relevant for export to North America			Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Degree of Protection		UL489; CSA-C22.2 No. 5-09; E140305 DIHS 022086 1437-01 UL Listed, CSA certified IEC: IP66, UL/CSA Type 4X, IEC60947, CE marking12	

1 NZM...-XSH...-NA

		For use with	Part no. Article no.	Price See price list	Std. pack	Notes	Information relevant for export to North America
Side-mounted handle For mounting outside the control panel door. Actuation of a switch with toggle lever using a Bowden cable and mechanical components mounted on the front of the switch. For switch with toggle lever. **Caution! Intended exclusively for use outside the scope of validity of the IEC/EN 60947 area.** Handle, metal, black/red							
	Degree of protection UL/CSA Type 12	NZM2…-NA, NS2…-NA NZM3…-NA, NS3…-NA	**NZM-XSHGVR12-NA** 107269			Lockable in 0-position on handle with up to 3 padlocks, for 1 door of an American style control panel(door plus wide bar beside the door. For each handle 1 additional mechanical unit and 1 Bowden cable is required.	ProductStandards UL File No. UL489; CSA-C22.2 UL CCN N o. 5-09 CSA File No. E140305 CSA Class No. DIHS NA Certification 236770 1437-01 Danraa of Prntartinn UL Listed, CSA certified IEC: IP66, UL/CSA Type 12
	Degree of protection UL/CSA Type 4X		**NZM-XSHGVR4X-NA** 107268				ProductStandards UL File No. UL489; CSA-C22.2 UL CCN N o. 5-09 CSA File No. E140305 CSA Class No. DIHS NA Certification 236770 1437-01 Degree of Protection UL Listed, CSA certified IEC: IP66, UL/CSA Type 4X
Mechanical unit							
		NZM2…-NA, NS2…-NA	**NZM2-XSHM-NA** 107266		1 off	For mounting on the front of a switch with toggle lever, including fixing sundries	UL/CSA certification not required
		NZM3…-NA, NS3…-NA	**NZM3-XSHM-NA** 107267				
Bowden cables							
	Nominal length 36" =91.4 cm	NZM2…-NA, NS2…-NA NZM3…-NA, NS3…-NA	**NZM-XSHBZ36-NA** 107263		1 off		ProductStandards UL File No. UL489; CSA-C22.2 UL CCN N o. 5-09 CSA File No. E140305 CSA Class No. DIHS NA Certification 236770 1437-01 UL Listed, CSA certified
	Nominal length 48" =121.9 cm		**NZM-XSHBZ48-NA** 107264				
	Nominal length 60" =152.4 cm		**NZM-XSHBZ60-NA** 107265				ProductStandards UL File No. UL489; CSA-C22.2 UL CCN N o. 5-09 CSA File No. E140306 CSA Class No. DIHS NA Certification 236771 1437-02 UL Listed, CSA certified

NZM...-XDZ, NZM...-XBR, NZM...-X...

	For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
Additional handle Enables switching when control panel door is open					
	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XDZ** 266621		1 off	Push-fits on to the extension shaft. 100 mm free extension shaft required. Cannot be combined with door coupling rotary handles NZM...-XT...-60 or NZM...-XT...0.
	NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM3/4-XDZ** 266622			
Insulating surround For toggle levers, rotary handles with rotary drive and remote operators Degree of protection IP40					
	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XBR** 260195		1 off	For rectangular cut-out on doors and enclosures with material thicknesses of 1.5—5 mm. External warning plate/designation label can be clipped on. NZM4-XBR can not be combined with rotary handle with rotary mechanism.
	NZM2(-4) PN2(-4), N(S)2(-4)	**NZM2-XBR** 260197			
	NZM3(-4) PN3(-4), N(S)3(-4)	**NZM3-XBR** 284645			
	NZM4(-4) N(S)4(-4)	**NZM4-XBR** 284646			
Toggle lever locking device Lockable in Off position with up to three padlocks (haspthickness4—8 mm)					
	NZM1(-4) PN1(-4), N(S)1(-4)	**NZM1-XKAV** 260199		1 off	Cannot be combined with insulating surround
	NZM2(-4), PN2(-4), N(S)2(-4) NZM3(-4), PN3(-4), N(S)3(-4)	**NZM2/3-XKAV** 260201			
Spacers Enables fast and attractively priced offsetting of varying construction sizeswith/without rotary handle or remote operatortothe samefrontdepth					
 	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XAB** 260203		1 off	Grid depth 17.5 mm, M4 thread One set contains 4 spacers Maximum componentfitting: NZM1: 4 off perfixing screw, NZM2: 2 off perfixing screw, 2(NZM1) or 4(NZM2) fixing screws contained per switch
	NZM3(-4) PN3(-4), N(S)3(-4) NZM4(-4) N(S)4(-4)	**NZM3-XAB** 260211			Grid depth 17.5 mm, M5 thread One set contains 4 spacers NZM3, NZM4: 1 off perfixing screw 4 fixing screws per switch included
Clips Allows switches to be clipped orto DIN rails					
	NZM1(-4) PN1(-4) N(S)1(-4)	**NZM1-XC35** 260213		1 off	For 35 mm top-hat rails
	NZM2(-4) PN2(-4) N(S)2(-4)	**NZM2-XC75** 260215			For 75 mm top-hat rails Not in combination with remote operator

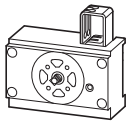
Information relevant for export to North America	Product Standards	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
	UL File No.	E140305
	UL CCN	DIHS
	CSA File No.	022086
	CSA Class No.	1437-01
	NA Certification	UL Listed, CSA certified

1

NZM...XMV(R)(L), NZM-XBZ...

	For use with	Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevant for export to North America

Mechanical interlock for (door coupling) rotary handles

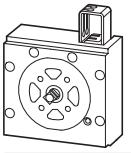


NZM1(-4)
PN1(-4), N(S)1(-4)
NZM1-XMV
281581

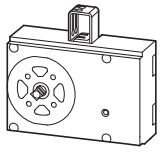
1 off

Allows interlocking of 2, 3 or 4 switches, including different construction sized switches, with Bowden cables.
For every switch an interlocking module NZM...-XMV and a rotary handle on switch NZM...-XDV or a door coupling rotary handle NZM...-XTVD and Bowden cables are required.
Possible combinations and interlock variants, →Engineering
Cannot be combined with UL/CSA door coupling rotary handles NZM...-XTV...-NA, paralleling mechanisms, side wall operators, remote operators or insulating surrounds. Selection and combinations of required Bowden cables →Engineering

Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No. E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified



NZM2(-4)
PN2(-4), N(S)2(-4)
NZM2-XMV
281582



NZM3(-4)
PN3(-4), N(S)3(-4)
NZM3-XMV
281583

NZM4(-4)
N(S)4(-4)
NZM4-XMV
281584

Bowden cables

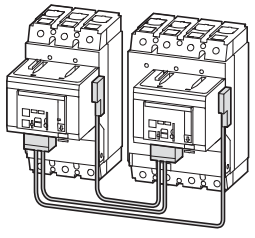
For mechanical interlock for (door coupling) rotary handles

Length	For use with	Part no.	Price	Std. pack	Notes
225 mm	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4) NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM-XBZ225** 281585		1 off	Selection and combinations of Bowden cables →Engineering
600 mm		**NZM-XBZ600** 281586			
1000 mm		**NZM-XBZ1000** 281587			

Product Standards UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No. E140305
UL CCN DIHS
CSA File No. 022086
CSA Class No. 1437-01
NA Certification UL Listed, CSA certified

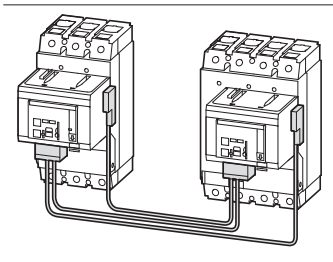
Mechanical interlock for remote operator

For 2 switches of the same or different construction size with opposed operation.
Adjacent mounting.



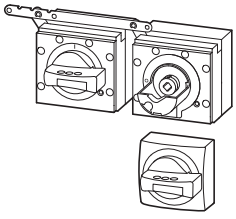
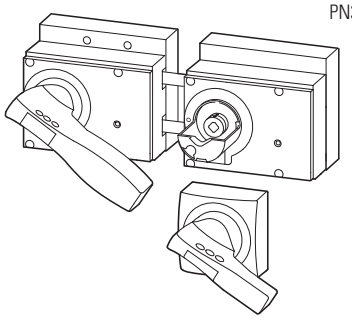
For use with	Part no.	Price	Std. pack	Notes
NZM2(-4), N(S)2(-4) +NZM2(-4), N(S)2(-4)	**NZM2-XMVR** 104543		1 off	Contains parts for both switch sides.Extension shaft additionally required. Maximum switch spacing →Engineering Can not be combined with rotary handles, door coupling rotary handles, early-make auxiliary contacts, and direct-switching remote operator NZM2-XRD
NZM2(-4), N(S)2(-4) +NZM3(-4), N(S)3(-4)	**NZM2/3-XMVR** 104544			
NZM3(-4), N(S)3(-4) +NZM3(-4), N(S)3(-4)	**NZM3-XMVR** 104545			
NZM3(-4), N(S)3(-4) +NZM4(-4), N(S)4(-4)	**NZM3/4-XMVR** 104546			
NZM4(-4), N(S)4(-4) +NZM4(-4), N(S)4(-4)	**NZM4-XMVR** 104547			

For 2 switches of the same or different construction size with opposed operation.
Extra long Bowden cable for mounting one above the other or in adjacent enclosures.



For use with	Part no.	Price	Std. pack	Notes
NZM2(-4), N(S)2(-4) +NZM2(-4), N(S)2(-4)	**NZM2-XMVRL** 104548		1 off	Contains parts for both switch sides. Extension shaft additionally required. Maximum switch spacing →Engineering Can not be combined with rotary handles, door coupling rotary handles, early-make auxiliary contacts, and direct-switching remote operator NZM2-XRD
NZM2(-4), N(S)2(-4) +NZM3(-4), N(S)3(-4)	**NZM2/3-XMVRL** 104549			
NZM3(-4), N(S)3(-4) +NZM3(-4), N(S)3(-4)	**NZM3-XMVRL** 104550			
NZM3(-4), N(S)3(-4) +NZM4(-4), N(S)4(-4)	**NZM3/4-XMVRL** 104551			
NZM4(-4), N(S)4(-4) +NZM4(-4), N(S)4(-4)	**NZM4-XMVRL** 104552			

PN...XPA. NZM...-XV...

	For use with	Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevant forexportto North America
Paralleling mechanism Simultaneous actuation of 2 PN switch-disconnectors of the same type mounted side-by-side. Not UL/CSA approved switch-disconnectors of the same						
	PN1(-4) + PN1(-4)	**PN1-XPA** 283471		1 off	**PN1, PN2** • 1 x rotary handle on switch (-XD) supplied. • 1 x door coupling rotary handle (-XTVD) supplied.	
	PN2(-4) + PN2(-4)	**PN2-XPA** 283472				
	PN3(-4) + PN3(-4)	**PN3-XPA** 283473			**PN3** • 1 x rotary handle on switch (not lockable) supplied. • 1 x door coupling rotary handle (not lockable) supplied. • Not suitable for use as a main switch	

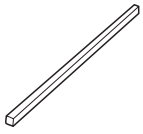
Notes

Extension shaft(-XV4(6)) additionally required for the door coupling rotary handle.
Cannot be combined with mechanical interlock, insulating surrounds, side wall operators or remote operators

For use as emergency switching off device
Forthis the door coupling rotary handle requires an exchange thumb-grip in red/yellow according to the following order number
- for PN1 and PN2: NZM2-XDGVR →100747
- for PN3: NZM4-XDGVR →100774

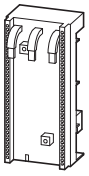
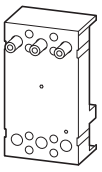
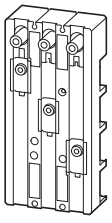
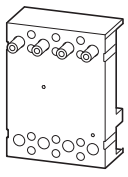
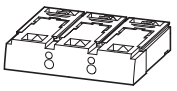
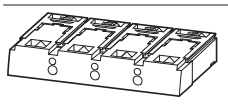
Note: The locking function of these handles must not be used

Extension shaft

		For use with	Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevant forexportto North America
	400 mm max. built-in depth	NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XV4** 261232		1 off	Length 290 mm, can be cut to required length	UI/CSA certification not required
	600 mm max. built-in depth	NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM3/4-XV4** 261234				
		NZM1(-4), PN1(-4), N(S)1(-4) NZM2(-4), PN2(-4), N(S)2(-4)	**NZM1/2-XV6** 260191			Length 425 mm can be cut to required length	
		NZM3(-4), PN3(-4), N(S)3(-4) NZM4(-4), N(S)4(-4)	**NZM3/4-XV6** 260193				

Notes Circuit-breaker can also be installed in a lying position 900 left/right, with the handle still in the same position

NZM...-XAD...

	Number of poles		Rated operational current I_e A	Adapter with mm	For use with	**Part no. suffix** Article no. for ordering with basic device	**Price** See price list
Component adapters for circuit-breakers and switch-disconnectors							
For mounting on flat copper bars 12-30x5-10 mm, double T and triple T profile Rated operating voltage Ua: 690 V • Temperature resistant to 120 0C • Self-extinguishing to UL 94 • Track resistance CTI 200							
	3 pole		160	90	NZM1, PN1, NIS11	–	
			250	106	NZM2, PN2, NIS12	–	
			630	140	NZM3, PN3, NIS13	–	
	3 pole		250	140	NZM2-4, PN2-4, N 2-4	–	
			630	185	N Z-4 NZM3-4 PN3-4, N 3-4	–	
Connection block for component adapters							
For NZM2, NZM3 circuit-breakers							
	3 pole	Above	250	–	NZM2, PN2, N(S)2	**+NZM2-XKR4O** 281664	
		Below			NZM2 PN2, N(S)2	**+NZM2-XKR4U** 281665	
		Above	630		NZM3, PN3, N(S)3	**+NZM3-XKR13O** 281667	
	3 pole	Below		–	NZM3-4, PN3-4, N (S)3-4	**+NZM3-XKR13U** 115796	
		Above	250		NZM2-4, PN2-4, N(S)2-4	**+NZM2-4-XKR4O** 118905	
		Below		–	NZM3, PN3, N(S)3	**+NZM2-4-XKR4U** 118906	
		Above	630		NZM3-4, PN3-4, N(S)3-4	**+NZM3-4-XKR13O** 118908	
		Below		–	NZM2-4, PN2-4, N (S)2-4	**+NZM3-4-XKR13U** 118909	

NZM-XAD

Part no. Article no. for separate order	Price See price list	Std. pack	Notes	Information relevantforexportto North America	
NZM1-XAD160 104554		1off	For switch and standard connection with boxterminal. Connection to the system at top using supplied connectioncable. In conjunction with IP2X protection against contact with afinger. Enhanced contact protection on the switch secondary side. Clips onto busbar with combination foot. Combination foot for adjustment to 5 and 10 mm rail thickness , terminal capacity 6 x 9 x 0.8. Rated short-circuit switching capacity 35 kA at 480 V. Mounted by latching onto de-energized busbar.	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Conditions of Acceptability Suitable for Max. Voltage Rating Degree of Protection	UL508A; CSA-C22.2 No. 14; IEC 60439-1; CE marking E300273 NMTR, NMTR7 236217 3211-37 UL Listed, CSA certified Refer to approbation report Feeder circuits 600 V AC Feeder circuits
NZM2-XAD250 104555			Connection to the system possible at top or bottom via connection on rear(+)NZM2-XKR4... Mounting using clamp and screwfixing. Rated short-circuit switching capacity 65 kA at 480 V, 50 kA at 600 V. Mounted by latching onto de-energized busbar.		
NZM3-XAD630 107206			Connection to the system possible at top or bottom via connection on rear(+)NZM3-XKR13... For mounting use claw terminal. Rated short-circuit switching capacity 65 kA at 480 V, 50 kA at 600 V. Mounted by latching onto de-energized busbar.		
NZM2-4-XAD250 138388			Connection to the system possible at top via connection on rear with (+}NZM2-4-XKR4... Mounting using clamp and screwfixing.		
NZM3-4-XAD630 138389			Connection to the system possible at top via connection on rear with (+}NZM3-4-XKR13... Mounting using clamp and screwfixing.		
NZM2-XKR4 281666		1off	Part no. and part no. suffix include parts for one switch side at top or bottom (for NZM3 top only. Required with component adapter and switch withconnection on rear	Product Standards UL File No. UL CCN CSA File No. CSA Class No. NA Certification Specially designed for NA Suitable for Current Limiting CB Max. Voltage Rating Degree of Protection	UL 489; CSA-C22.2 N o.5-09;IEC 60947-2; CE marking E31593 DIVA 022086 1432-01 UL Listed, CSA certified Yes Feeder circuits, branch circuits Yes 480Y/277 V IEC: IP20; UL/CSA Type:
–					
NZM3-XKR13 281668					
–					
NZM2-4-XKR4 118907					
–					
NZM3-4-XKR13 119020					
–					

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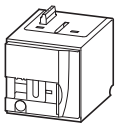
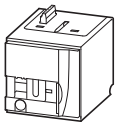
NZM...-XR

	For use with	Rated control voltage U_s V	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
Remote operators						
For remote switching of circuit-breakers and switch-disconnectc ON and OFF switching and resetting by means of two-wire or three-wire control.			Local switching by hand possible. Lockable in the 0 position of the remote operator with up to 3 padlocks(hasp thickness: 4–8 mm)			
Closing delay 110–170 ms, opening delay 110–170 ms						
	NZM2(-4) N (S)2(-4)	110-130 V 50/60 Hz	**NZM2-XRD110-130AC** 115390		1off	Sliding switch for "Auto" or "Manual" Max. number auxiliary contacts: –Standard auxiliary contacts: 2 –Trip-indicating auxiliary contact: 1 Cannot be combined with switch-disconnector PN... Cannot be combined with mechanical interlock 1)Not UL/CSA approved
		208-240 V 50/60 Hz	**NZM2-XRD208-240AC** 115391			
		380-440 V 50/60 Hz	**NZM2-XRD380-440AC** 115392			
		24-30 V DC	**NZM2-XRD24-30DC** 115393			
		110-130 V DC	**NZM2-XRD110-130DC** 115394			
		220-250 V DC	**NZM2-XRD220-250DC** 115395			
Closing delay 60-100 ms, opening delay 300-3000 ms Can be synchronized						
	NZM2(-4) N(S)2(-4)	110-130 V 50/60 Hz	**NZM2-XR110-130AC** 259830		1off	Cannot be combined with switch-disconnector PN... Dual auxiliary switch M 22-CK11 (20/02) can not be combined with remote operator NZM3-XR...
		208-240 V 50/60 Hz	**NZM2-XR208-240AC** 259832			
		380-440 V 50/60 Hz	**NZM2-XR380-440AC** 259834			
		24-30 V DC	**NZM2-XR24-30DC** 259836			
		48-60 V DC	**NZM2-XR48-60DC** 259838			
		110-130 V DC	**NZM2-XR110-130DC** 259840			
		220-250 V DC	**NZM2-XR220-250DC** 259842			
	NZM3(-4) N(S)3(-4)	110-130 V 50/60 Hz	**NZM3-XR110-130AC** 259848			
		208-240 V 50/60 Hz	**NZM3-XR208-240AC** 259850			
		380-440 V 50/60 Hz	**NZM3-XR380-440AC** 259852			
		24-30 V DC	**NZM3-XR24-30DC** 259854			
		48-60 V DC	**NZM3-XR48-60DC** 259856			
		110-130 V DC	**NZM3-XR110-130DC** 259858			
		220-250 V DC	**NZM3-XR220-250DC** 259860			
	NZM4(-4) N(S)4(-4)	110-130 V 50/60 Hz	**NZM4-XR110-130AC** 266684			
		208-240 V 50/60 Hz	**NZM4-XR208-240AC** 266685			
		380-440 V 50/60 Hz	**NZM4-XR380-440AC** 266686			
		24-30 V DC	**NZM4-XR24-30DC** 266691			
		48-60 V DC	**NZM4-XR48-60DC** 266692			
		110-130 V DC	**NZM4-XR110-130DC** 266693			
		220-250 V DC	**NZM4-XR220-250DC** 266694			

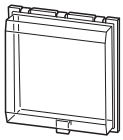
Notes

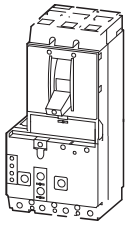
Two-andthree-wire control, circuit diagram→ Engineering, Page 17/153

Information relevant for export to North America

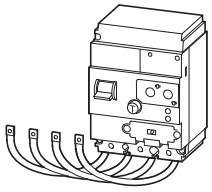
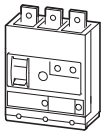
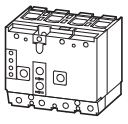
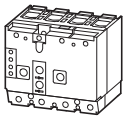
Product Standards	UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.	E140305
UL CCN	DIHS
CSA File No.	022086
CSA Class No.	1437-01

NZM2, NZM3, NZM4, NZM...FI

	For use with	Part no. Article no. when ordered separately	Price See price list	Std. pack	Notes
Cover for 4th pole					
Additional shroud for mounting the NZM2-XR... and NZM3-XR... on a 4 pole switch	NZM2-4 N2-4	**NZM2-XAVPR** 266677		1off	–
	NZM3-4 N3-4	**NZM3-XAVPR** 266678		1off	
Sealing device for "Auto" position					
Manual operation possible nnlv aftar ramnvinn seal	NZM2(-4) N(S)2(-4)	**NZM2-XRDPL** 137305		1off	Suitable for remote operator NZM2-XRD
Protective cover for door cutout					
	NZM2-XR NZM3-XR NZM4-XR	**RTR-NZM10** 034825		1off	Electrical remote switching and manual tripping (push to trip) are still possible.

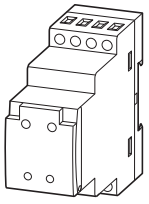
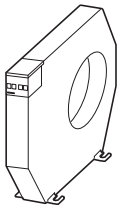
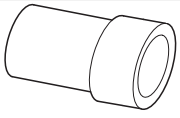
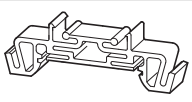
Number of poles	Rated current = Rated uninterrupted current	Setting range Overload releases	Setting range Short-circuit releases	High switching capacity 150 kA; 415 V 50/60 Hz Part no. Article no.		Price See price list	Std. pack
	I_u A	I_r A	I_i A	B = box terminals S = screw terminals			
							
Circuit-breakers with earth-fault release, 3 pole For apparatus with power electronics, such as power inverters and frequency inverters							
							
AC/DC sensitive according to core-balance principle in range of 0—100 kHz residual-current frequency Not UL/CSA approved. Suitable for use in three-phase systems. Rated operating voltage: 400 V (50/60 Hy Rated fault current log=0.03 A Internal power supply U。 =50—400 V Turnkey combination of current-limiting circuit-breaker and residual-current device. Adjusting buttons can be sealed.							
	3 pole	125	100-125	750-1250	**NZMH2-A125-FIA30** 129710	S	1off
		160	125-160	960-1600	**NZMH2-A160-FIA30** 112627	S	
		200	160-200	1200-2000	**NZMH2-A200-FIA30** 112628	S	
		250	200-250	1500-2500	**NZMH2-A250-FIA30** 112629	S	
		125	100-125	750-1250	**NZMH2-A125-FIA30-BT** 129711	B	
		160	125-160	960-1600	**NZMH2-A160-FIA30-BT** 116304	B	
		200	160-200	1200-2000	**NZMH2-A200-FIA30-BT** 116305	B	
		250	200-250	1500-2500	**NZMH2-A250-FIA30-BT** 116306	B	

1 NZM...XFI...

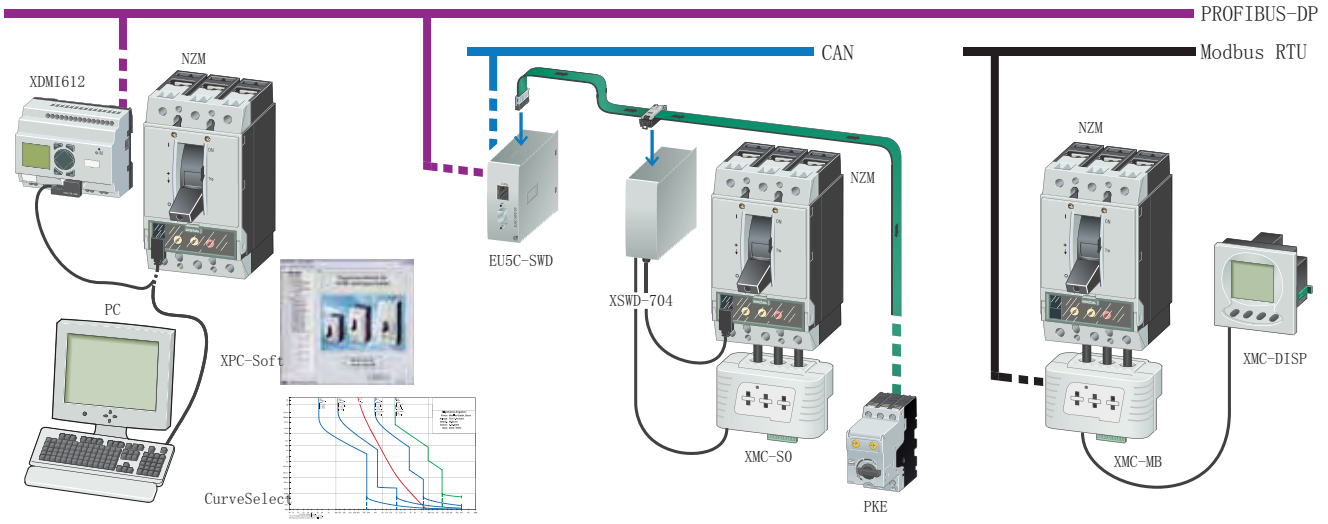
	For use with	Number of conductors	**Part no.** Article no.	**Price** See price list	Std. pack	Notes
Earth-fault release						
To IEC/EN 60947-2						
Not UL/CSA approved						
Suitable for use in three- and single-phase systems						
Pulse-current sensitive according to core-balance principle						
For 3 and 4 pole NZM1}-4) circuit-breakers and N1}-4) switch-disconnectors, dependant on mains power U。 二:200 ...415 V 50/60 Hz						
Mounting on right side up to I_n=160 A at I_{cu}=50 kA						
 Rated fault current $I_{\triangle n}$=0.03A	NZM1 N(S)1	3 pole	**NZM1-XF130R** 104603		1off	AtI$_{\triangle n}$=0.03 A: delaytime t_v always fixed at 10 ms. Alarm indication>30% I$_{\triangle n}$ by yellow LED. Trip indication by up to 2 auxiliary contacts (HIAFI) can be retrofitted: N/0=M22-K01, NC=M22-K10 are reset with the reset toggle lever. If the trip-indicating auxiliary contact in the fault current block is used,the NC contacts operates as a N/0 contact and the NC contact operates as N/0 contacts. Double contact not permissible. Not in combination with insulated enclosure or main switch assembly kit for side wall installation with mounting bracket. NZM1-XFL..R can not be used in combination with lower cover NZM1-XKSA. NZM1-XFI...U not in combination with shunt or undervoltage release, early-make auxiliary contacts. Rated ultimate short-circuit breaking capacity is determined by the fitted NZM1 or NS1, or, lif a switch-disconnector N1 is used, by the fitted back-up fuse →Technical data. Adjusting buttons can be sealed.
	NZM1-4 N1-4	4 pole	**NZM1-4-XF130R** 104606			
Rated fault current $I_{\triangle n}$=0.3A	NZM1 N(S)1	3 pole	**NZM1-XF1300R** 104604			
	NZM1-4 N1-4	4 pole	**NZM1-4-XF1300R** 104607			
Rated fault current $I_{\triangle n=}$0.03-0.1-0.3-0.5-1-3 A Delay time $t_{v=}$10-60-150-300-450 ms	NZM1 N(S)1	3 pole	**NZM1-XFIR** 104605			
	NZM1-4 N1-4	4 pole	**NZM1-4-XFIR** 104608			
Mounting below up to 100 A						
 Rated fault current $I_{\triangle n}$=0.03A	NZM1 N(S)1	3 pole	**NZM1-XF130U** 104609		1off	
	NZM1-4 N1-4	4 pole	**NZM1-4-XF130U** 104612			
Rated fault current $I_{\triangle n}$=0.3A	NZM1 N(S)1	3 pole	**NZM1-XF1300U** 104610			
	NZM1-4 N1-4	4 pole	**NZM1-4-XF1300U** 104613			
Rated fault current $I_{\triangle n=}$0.03-0.1-0.3-0.5-1-3 A Delay time $t_{v=}$10-60-150-300-450 ms	NZM1 N(S)1	3 pole	**NZM1-XFIU** 104611			
	NZM1-4 N1-4	4 pole	**NZM1-4-XFIU** 104614			
Mounting below up to 250 A						
Pulse-current sensitive according to core-balance orinciole						
For 4 pole circuit-breaker NZM2-4 and switch-disconnector N2-4 inrlananrlant of mains vnltana U_e=280...690V50/60Hz						
 Rated fault current $I_{\triangle n}$=0.03A	NZM2-4 N2-4	4 pole	**+NZM2-4-XF130** 292343		1off	Auxiliary contacts (1 N/0,1 NC built-in)are reset with the reset button. Not in combination with plug-in units, insulated enclosure or main switch assembly kit for side wall installation with mounting bracket. Rated ultimate short-circuit breaking capacity is determined byfitted NZM2 and, when using a switch-disconnector N2, by the back-up fuse used→Technical data. Adjusting buttons can be sealed.
Rated fault current $I_{\triangle n=}$0.03-0.1-0.3-0.5-1-3 A Delay time $t_{v=}$10-60-150-300-450 ms	NZM2-4 N2-4	4 pole	**+NZM2-4-XFI** 292344			
Core-balance principle with AC/DC current sensitivity (in range 0...100 kHz)						
For 4 pole circuit-breaker NZM2-4 and switch-disconnector N2-4 Internal voltage supply U_e=50 ...400 V						
 Rated fault current $I_{\triangle n}$=0.03A	NZM2-4 N2-4	4 pole	**+NZM2-4-XFIA** 292346		1off	Observeresponsethreshold dependence on frequency! See "Frequency response" characteristic curve. Adjusting buttons can be sealed.
Rated fault current $I_{\triangle n=}$0.03-0.1-0.3-0.5-1-3 A Delay time $t_{v=}$10-60-150-300-450 ms	NZM2-4 N2-4	4 pole	**+NZM2-4-XFIA30** 292345			

NZM3, NZM4, PFR-...

	For use with	Part no. suffix Article no. for ordering with basic device	Price See price list	Std. pack	Notes
Earth-fault release, 3 pole, 4 pole					
Not dependent on mains and control voltages I_g=0.35-0.4-0.5-0.6-0.7-0.8-0.9-1.0 x I_n t_g=0-20-60-100-200-300-500-750-1000 ms Not UL/CSA approved	NZM4 NS4	+NZM4-XT 266721		1 off	Only suitable for use in conjunction with circuit-breakers with electronic releases. Not in combination with motor-protective circuit-breakers NZM...-ME... Indication of the earth-fault in optional DMI communication module.
	NZM4-4	+NZM4-4-XT 266722		1 off	

	Description	Rated current Enerav I_n A	Rated current Motor I_n A	Part no. Article no.	Price See price list	Std. pack	Notes
Residual-current relays Pulsed current sensitive Rated control voltage: U_s=230 V AC (50/60 Hz) Integrated auxiliary contact (1 C/0) Ring-type transformer must also be ordered. Not UL/CSA approved							
	Rated fault current $I_{\triangle N}$=0.03 A	–	–	**PFR-003** 285555		1off	Adjustable fault current: 0.03,0.1,0.3,0.5,1,3,5A Adjustable delay time: 0.02,0.1,0.3,0.5,1,3,5A
	Rated fault current $I_{\triangle N}$=0.3 A	–	–	**PFR-03** 285556			
	Rated fault current $I_{\triangle N}$=0.03-5 A Adjustable fault current and delay time Fault current early warning by flashing, red LED	–	–	**PFR-5** 285557			
		–	–	**PFR-5-110AC** 116963			
Ring-type transformer Rated operating voltage: 690 V (50/60 Hz) Not UL/CSA approved							
	Internal diameter: 20 mm	50	50	**PFR-W-20** 285558		1off	Includes fixing clip for DIN rail mounting
	Internal diameter: 30 mm	150	100	**PFR-W-30** 285559			
	Internal diameter: 35 mm	150	100	**PFR-W-35** 285600			Includes screwfixing Alternative: fixing clip for DIN mounting rail Note on engineering: The current transformer diameter must be selected 1.5 times largerthanthe envelope diameterofthepassedthrough conductor
	Internal diameter: 70 mm	400	200	**PFR-W-70** 285601			
	Internal diameter: 105 mm	600	250	**PFR-W-105** 285602			
	Internal diameter: 140 mm	1200	630	**PFR-W-140** 285603			
	Internal diameter: 210 mm	1800	800	**PFR-W-210** 285604			
Magnetic shielding Not UL/CSA approved							
	PFR-W-35	–	–	**PFR-WMA-35** 286001		1off	Required for load circuits with high inrush currents >4 x I_n, e.g. motors and capacitors.
	PFR-W-70	–	–	**PFR-WMA-70** 286002			
	PFR-W-105	–	–	**PFR-WMA-105** 286003			
	PFR-W-140	–	–	**PFR-WMA-140** 286004			
	PFR-W-210	–	–	**PFR-WMA-210** 286005			
Mounting clip							
	For the DIN rail mounting current transformers PFR-W-35 and larger	–	–	**PFR-WC** 286006		1off	1 set=2 off

1 Description



Overview
Forthecompactcircuit-breakers NZM Eaton supplies the following energy measurement and communication components:
- NZM-XPC-Soft: Diagnostics software
- CurveSelect: Software for viewing characteristic curves
- NZM-XMC-S0: Energy measuring module
- NZM-XMC-MB: Measuring and communication module
- NZM-XSWD-704: Communication interface for SmartWire-Darwin with SO input for energy data
- NZM-XDM1612: Data management interface with field bus connection for PRDFIBUS-DP and bus diagnostics software

XPC-Soft
Circuit-breakers NZM with electronic trip block provide all required diagnostics data directlytothe USB or COM interface of a connected PC through a built-in interface.
On overload or short-circuit, the NZM instantly switches off the system and, if a PC is connected, documents the events complete with date and time.
With the software XPC-Soft, users can viewthe history and analyze possible causes. The software can also output power consumption trend graphs as MS Excel table

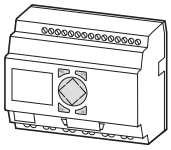
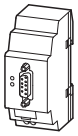
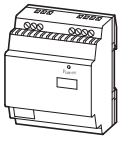
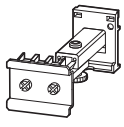
CurveSelect
Thefree characteristic curve program Moeller CurveSelect allows a settings-specific representation of the tripping characteristics of several protective devices with the same time and current scales.
This clearly simplifies an assessment of the interaction of Eaton's circuit-breakers NZM and IZM, motor-protective circuit-breakers PKZ, overload relays ZB, miniature circuit-breakers, and LV h力.c. fuses.
Available for free download from www.moeller.net:
Products&Solutions>Power Distribution>Switching and Protecting Power > CurveSelect: Characteristics program for short-circuit- and overload protection.

Measuring and communication module
For measuring and optimizing energy consumption, Eaton provides module NZM-XMC. This compact device with built-in current converter determines the power and energy values per phase from the measured voltage and current. The module can operate the circuit-breaker through a remote operator. The data is made available on the MODBUS RTU.
With the XMC applications up to 500 A can be operated; the readings have a high accuracy of 0.5 %. Cables, strip or bar can be used. The conductors pass through a tunnel in the device and do not have to be severed. An optional external door display provides real-time local indication of the measured values

Communication interface for SmartWire-Darwin
For remote diagnostics of the circuit-breaker, communication module NZM-XSWD-704 is used. With this module, the switch settings, trip causes, and actual currents can be transmitted to a field bus through SmartWire-Darwin. The circuit-breaker can therefore also be operated through SmartWire-Darwin, like the electronic motor protection PKE and the typical devices such as RMQ and D比.
As a special feature, the XSWD features a built-in power meter, which can be supplied from an external energymeasurementmoduleXMC-S0. This provides everything that is necessary for optimizing energy usage.
With the data from the XSWD-704 all relevant information about energy supply or the respective outgoer on the desiredfield bus are available.This allows visualization and logging of the machines or system components.
For visualization, the free software BreakerVisu can, for example, be used, available for download from www.moeller.net:
www.moeller.net, Products& Solutions>Power Distribution> Switching and Protecting Power Distribution>Moeller BreakerVisu: Visualization for circuit-breakers

Data Management with PRDFI-BUS-DP interface
An alternative to the XSWD-704 is provided by data management interface NZM-XDM1612 with a field bus connection for PRDFIBUS-DP
The advantages of this solution are
.For motor starter applications a ZMR function is available that does not trip the circuit-breaker in the event of an overload butthat deactivatesthe contactorthrough the DMI.
.The built-in display provides a local indication of all parameters of the circuit-breaker.
.The DMI can change the circuit-breakers'tripping parameters. (remote parameterization)
.The DMI's six inputs and six outputs can be used for remote control and for any user functions.
.Through the outputs a "Tripped" signal can be issued locally.
.A central diagnosis across the entire bus to the FDT standard can be implemented through the DMI withthe DPV1 module. Forthis purpose, software NZM-XPC-DTM and, in some cases, FDT-FAVIGATOR are required.

NZM2, NZM3, NZM4

	Description	Part no. Article no.	Price See price list	Std. pack	Notes
Diagnostics and configuration software for NZM and DMI (local)					
	PC software for direct connection to all new NZM circuit-breakers with electronic releases pEC and UL/CSA devices) or for direct connection to the DM I module, including the required connection cable to NZM. • Protection parameter: online display and curve display, export option to curve characteristics program "Moeller CurveSelect". • Warning and release messages: reading of diagnostic memory also in voltage-free state. • Load currents: display and trend indication. • Recording and export options to Excel for load currents and diagnostic messages. • Configuration of the DMI: motor starter, remote operator, assignment of the DMI inputs and outputs and displays.	**NZM-XPC-KIT** 265631		1 off	Only for use in combination with circuit-breakers with electronic releases. Download the manual AWB1230-1459 and demo-software at www.moeller.net. Order connecting cable to DMI separately: EASY-USB-CAB.
Connecting cable PC (USB) to DMI					
	• Fortransmission of DMI configuration between PC with XPC-Soft and DMI • For upgrading DMI firmware	**EASY-USB-CAB** 107926		1 off	Can also be used for programming easy small controllers.
Data management interface (DMI modulel					
	• Access to diagnostics and operational data. • Recording current values, motor starter function, and setting parameters. • Control of the circuit-breakers with electronic trip block. • Comprehensive remote diagnostic options and remote operation via fieldbus in combination with a field Bus connection	**NZM-XDMI612** 260217		1 off	Includes connection cable NZM-XDM ⊢CAB between NZM and DM (length: 2 m). Onlyfor use in combination with circuit-breakers with electronic releases
Fieldbus interface for DMI					
	Connection to the DMI module • Transfer of phase currents, parameter data, status data and diagnostics data. • Transfer of circuit-breaker position (wiring of auxiliary contacts to DMI inputs. • Actuation of the DM I motor starter functions and the NZM remote operator. • Detection of digital inputs and actuation via field Bus. • PRDFIBUS-DPV1-Slave fieldbus interface. Can be operated with class 1 and class 2 masters. Addresses available: 1 to 126	**NZM-XDMI-DPV1** 270333		1 off	Connected to the DMI module and has the same contour appearance.
Switched-mode power supply unit For DMI module					
	• Rated input voltage: 50/60 HZ: 115/230 V AC • Rated output voltage (residual ripple) 24VDC/13%) • Rated output current: 1.25 A	**EASY400-POW** 212319		1 off	
Telescopic adapter For DMI module For equalization of the mounting depth when rear mounted in CI-K... enclosures and cabinets					
	W ith 35 mm top-hat rail IEC/EN 60715, adjustable from 75—115 mm. Screw and snap fitting.	**M22-TA** 226161		1 off	

Information relevant for export to North America	Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
	UL File No.	E29184
	UL CCN	NKCR
	CSA File No.	012528
	CSA Class No.	3211-03
	NA Certification	UL Listed, CSA certified

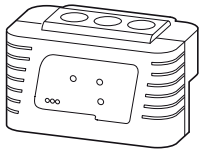
1 NZM, easy

	Description	Part no. Article no.	Price See price list	Std. pack	Notes
FDT frame software for operating field devices					
	PC software for integration of software modules (DTM's) according to the FDT standard V1.2 (e.g. NZM-XPC-DTM). • Operation of a temporary or stationary service station for engineering, remote diagnostics, remote operation and remote parameter definition of networked switchgear and field devices. • Engineering of the network topology of networked field devices. • Overview representation of the topology with online status information. • Access to the device-specific DTM's for configuration, operation, parameterization and diagnostics of the devices.	**FDT-NAVIGATOR** 281623			The connection of the field devices can be implemented via the PROFIBUS DPV1 master or via gateways (e.g.: USB/PRDFIBUS, Ethernet/ PROFIBUS). Communication interfacing for the PC and a communication DTM (driver) is necessary for this purpose.
DTM software module to FTD standard					
	PC software module (Device Type Manager) to FDT/DTM standard V1.2 for integration in the FDT navigator or other FDT-capable framework software packages (primary control system, PLC engineering systems. • Remote diagnostics, remote monitoring, remote parameter definition and remote operation of the new NZM2,3,4 circuit-breakers with electronic trip release via PRDFIBUS-DPV1. • Indication of the circuit-breaker state (on/off/tripped, the phase currents, parameter data, status data and diagnostics data. • Definition of the trip parameters. • Display and setting the DMI motor starter functions and assignment of the DMI inputs and outputs. Control of the motor starter functions	**NZM-XPC-DTM** 281624		1 off	For connection of the circuit-breakerto the PRDFIBUS-DP fieldbus,the accessory device NZM-XDM1612 and the fieldbus interface NZM-XDMI–DPV1 are required.
NZM interface module to SmartWire-Darwin					
	The module implements the data connection between the NZM2/3/4 with electronic release and SmartWire-Darwin. The following data is transmitted: • Digital status data (ON/OFF/Tripped) • Load warnings • Reason for last trip • The actual currents • Switch model • The current settings of the rotary coding switches The switch can also be operated with a remote operator. • Two digital inputs for the switch status • Two transistor outputs for remote switching • Retentive memory for energy data (kWh) Energy data is transmitted through digital input(S) from an external energy measuring module NZN...-XMC-S0.	**NZM-XSWD-704** 135530		1 off	A connection cable to the circuit-breaker and auxiliary contacts NZM is included as standard.
		+NZM-XMC-MB 135524			
		+NZM-XMC-1A0 135525			
		+NZM-XMC-2D0-R 135526			
		+NZM-XMC-4D0-R 135527			
		+NZM-XMC-4D┣4D0 135528			

NZM...-XMC

Energy measuring module

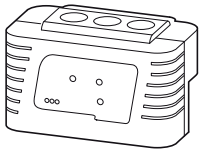
Energy measuring module
For measuring the electrical active energy.
The module has three built-in current transformers and three voltage taps, which contacted with self-tapping screws that penetrate the cable insulation.
Power supply 24 VDC
The module supplies S0 pulses, which can be counted with an external device.
One pulse output for active energy. The pulse rate is fixed.



Number of conductors	Description	For use with	Part no. Article no.	Price See price list	Std. pack	Notes
3 pole	–	NZM2≦300A	**NZM2-XMC-S0** 129839	1 off		When mounting, observe the minimum clearancesto circuit-breaker NZM. The module can befittei on the input or output side.
	–	NZM2≦500A	**NZM3-XMC-S0** 129960	1 off		
4 pole	–	NZM2≦300A	**NZM2-4-XMC-S0** 129963	1 off		
	–	NZM3≦500A	**NZM3-4-XMC-S0** 129964	1 off		

Measuring and communication module

For measuring current, voltage, power and energy.
The module has three built-in current transformers and three voltage taps, which are contacted with self-tapping screws that penetrate the cable insulation.
Power supply 24 VDC
Two S0 pulse outputs
MODBUS interface (slave)
The total energy consumption value is permanently stored in the module.
Display device NZM-XMC-DISP can be connected for local indication of the readings
Can be extended with up to two add-on cards +NZM-XMC.



Number of conductors	Description	For use with	Part no. Article no.	Price See price list	Std. pack	Notes
3 pole	–	NZM2≦300A	**NZM2-XMC-S0** 129839	1 off		When mounting, observe the minimum clearancesto circuit-breaker NZM. The module can befitted on the input or output side.
	–	NZM2≦500A	**NZM3-XMC-S0** 129960	1 off		
4 pole	–	NZM2≦300A	**NZM2-4-XMC-S0** 129963	1 off		
	–	NZM3≦500A	**NZM3-4-XMC-S0** 129964	1 off		

Digital display device

For door-mounting (connection to local display
For all measurement and communication modules with MODBUS interface
Per-phase indication of current, voltage, power and energy values
Includes fixed display configurations

3/4 pole	Front cutout 96 x 96 knockout	NZM...XMC-MB	**NZM-XMC-DISP** 129967	1 off	–	

Power supply

Power supply 230 V AC

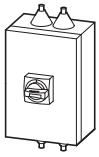
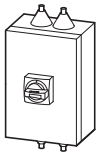
3/4 pole	Can be plugged onto basic device	NZM...XMC-MB	**NZM-XMC-AC** 129968	1 off	–	

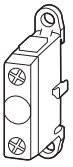
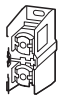
Add-on cards for NZM-XMC modules

Every measurement and communication module can be equipped with up to two expansion cards.

MODBUS interface	–	**+NZM-XMC-MB** 135524	1 off		Order add-on cards together with basic device. The cards are then supplied readily fitted in the basic device.
Analog outputfor 4-20 mA pointer-type instruments	–	**+NZM-XMC-1A0** 135525	1 off		
2 relay outputs (changeover contact)	–	**+NZM-XMC-2D0-R** 135526	1 off		
4 relay outputs (changeover contact)	–	**+NZM-XMC-4D0-R** 135527	1 off		
4 digital inputs and 4 digital outputs	–	**+NZM-XMC-4DI-4D0** 135528	1 off		

NZM-XCI...

		Degree of protection	Max. rated uninterrupted current	For use with	**Part no.** Article no. when ordered separately	**Price** See price list	Std. pack
Insulated enclosures With door coupling rotary handle Complete includes all necessaryfunctional parts Not UL/CSA approved							
Standard, black/grey							
	Lockable in 0 position on handle with up to 3 padlocks. Additionally with cover interlock.	IP65	≦ 63A	PN1, N(S)1	**NZM1-XCIK5-TVD** 271521		1 of
		IP65	≦ 63A	NZM1, PN1, N(S)1	**NZM1-XCI23-TVD** 271522		1 of
		IP64	≦ 125A	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XCI43-TVD** 271523		1 of
		IP64	≦ 160A	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XCI43/2-TVD** 104645		1 of
		IP64	≦ 200A	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XCI43-TVD** 271524		1 of
		IP64	≦ 250A	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XCI45-TVD** 280418		1 of
		IP64	≦ 400A	NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XCI48-TVD** 271525		1 of
Red-yellowfor emergency switching off							
	Lockable on handle and switch with up to 3 padlocks. Lockable in 0 position on handle. Additionally with cover interlock and locking facility on circuit-breaker in 0 position.	IP65	≦ 63A	PN1, N(S)1	**NZM1-XCIK5-TVDVR** 271526		1 of
		IP65	≦ 63A	NZM1, PN1, N(S)1	**NZM1-XCI23-TVDVR** 271527		1 of
		IP64	≦ 125A	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XCI43-TVDVR** 271528		1 of
		IP64	≦ 160A	NZM1(-4), PN1(-4), N(S)1(-4)	**NZM1-XCI43/2-TVDVR** 104646		1 of
		IP64	≦ 200A	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XCI43-TVDVR** 271529		1 of
		IP64	≦ 250A	NZM2(-4), PN2(-4), N(S)2(-4)	**NZM2-XCI45-TVDVR** 279356		1 of
		IP64	≦ 400A	NZM3(-4), PN3(-4), N(S)3(-4)	**NZM3-XCI48-TVDVR** 271530		1 of

	Rated uninterrupted current I_u A	Terminal capacity mm²	**Part no.** Article no. when ordered separately	**Price** See price list	Std. pack
Insulated additional terminals For passing through the neutral and protective conductor 1 pole					
	32	Flexible. 1 x 11.5–61	**K10/1** 093827		10 of
	63	Flexible, 1 x (6–161, stranded, 1 x (16–25)	**K25/1** 096200		10 of
	100	Flexible, 1 x (10–351, stranded,1 x (16–50)	**K50/1** 098573		10 of
	160	Stranded, 1 x (16–95)	**K95/1N/BR** 012336		10 of
	250	Stranded, 1 x (35–1501,2x(16–70)	**K150/1/BR** 014709		10 of
	400	Stranded, 1 x (50–2401, 2 x (25–120)	**K240/1/BR** 017082		10 of
	630	Stranded, 1 x (240–3001, 2 x (50–240)	**K2X240/1/BR** 019455		10 of

NZM-XCI...

Basic enclosure	Terminals for 3-pole switches fitted by user for fourth and fifth conductor (N and PE), on 4 pole switches: for fifth conductor (PE)
CI-K5-160-M	K10/1, K25/1
C123-150	K10/1, K25/1
C143-150	K 10/ I. K25/ I. K50/ I. K95/1N/BR
C143-200	K 10/ I. K25/ I. K50/ I. K95/1N/BR
C143-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR
C145-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR
C148-250	K95/1N/BR, K150/1/BR, K240/1/BR, K2X240/1/BR
CI-K5-160-M	K10/1, K25/1
C123-150	K10/1, K25/1
C143-150	K10/1, K25/1, K50/1, K95/1N/BR
C143-200	K10/1, K25/1, K50/1, K95/1N/BR
C143-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR
C145-200	K10/1, K25/1, K50/1, K95/1N/BR, K150/1/BR, K240/1/BR
C148-250	K95/1N/BR, K150/1/BR, K240/1/BR, K2X240/1/BR

Notes

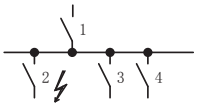
Enclosures for separate mounting with top and bottom cable entry, suitable for installation of
circuit-breakers and switch-disconnectors.
Include fixing straps for wall mounting.
Short-circuit resistance at 415 V 50/60 Hz up to 10 kA.

Cannot be used in combination with remote operator NZM...-XR
plug-in unit NZM...-XSV or withdrawable unit NZM...-XAV.
Order insulated additional terminal for 4th or 5th pole separately

Enclosure C ⊢K5 with hard metric knock-outs
Enclosure CI23 with flanges
C143, CI45 and C148 feature gland plates.

Only for switches with box terminals for direct connection of cables.

1 NZM,FAZ-B(C),PKZ Engineering



Incoming circuit-breaker
Outgoing circuit-breaker

Selectivity 415 V AC

between circuit-breakers enables separate shut-down of faulty system sections.
Selectivity (discrimination) exists between incoming breaker 1 and outgoing breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to be operational.

Incoming circuit-breaker (S1)

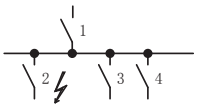
			NZM...1-A...								**NZM...2-A...**									
	I_{cu}[kA]		25(36)(50)(100)								25(36)(50)(150)									
	I_n[A]		20-40	50	63	80	100	125	160		20-40	50	63	80	100	125	160	200	250	300
Outgoing circuit-breaker (S2)	I_n [A]	I_{cu}(415V) [kA]	Selectivity threshold I_s [kA] for selectivity between S2 and S1, overload and short-circuit release set to max. value																	
FAZ-B(C)...	1	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	2	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	3	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	4	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	6	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	10	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	13	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
PKZMO...	16	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	20	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	25	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	32	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	40	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	50	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	63	15	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	0.16	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	0.25	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	0.4	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
PKZ2/ZM-...	0.63	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	1	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	1.6	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	2.5	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	4	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
PKZM4...	6.3	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	10	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	12	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	16	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	20	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	25	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	32	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	0.6	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	1.0	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	1.6	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	2.4	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	4	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	6	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	10	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	16	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	25	30	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	32	30	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	40	30	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	16	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	25	100	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	32	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	40	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	50	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	58	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
	63	50	T	T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T
Notes	T:total selectivity																			

NZM

Incoming circuit-breaker (S1)

NZM…2-VE…			NZM…3-A…				NZM…3-AE…			NZM…3-VE…			NZM…4-AE…					NZM…4-VE…				
50(150)			36(50)(150)				50(150)			50(150)			50(150)					50(150)				
100	160	250	250	320	400	500	250	400	630	250	400	630	630	800	1000	1250	1600	630	800	1000	1250	1600
Prospective short-circuit current (kA). Set the overload and short-circuit release of the incoming circuit-breaker to the max. value.																						
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
8	8	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
7	7	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
6	6	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
6	6	10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
10	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
8	8	T	10	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
4	4	5	5	6	9	T	5	13	T	5	13	T	T	T	T	T	T	T	T	T	T	T
3	3	4	4	4	5	30	4	7	T	4	7	T	T	T	T	T	T	T	T	T	T	T
2	2	3	3	3	4	10	3	5	20	3	5	20	T	T	T	T	T	T	T	T	T	T
2	2	3	3	3	4	8	3	3.5	15	3	3.5	15	T	T	T	T	T	T	T	T	T	T
2	2	2.5	2	3	4	8	2.5	3.5	15	2.5	3.5	15	T	T	T	T	T	T	T	T	T	T
5	5	6	5	10	13	30	6	16	45	6	16	45	45	T	T	T	T	45	T	T	T	T
5	5	3.3	5	6	10	15	3.3	10	25	3.3	10	25	25	42	T	T	T	25	42	T	T	T
4	4	3	4	5	7	12	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
3	3	3	3	5	7	12	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
2.5	2.5	3	2.5	5	7	10	3	8	18	3	8	18	18	30	45	T	T	18	30	45	T	T
2.5	2.5	2.5	2.5	4	6	10	2.5	6.5	15	2.5	6.5	15	15	25	40	T	T	15	25	40	T	T
2	2	2.5	2	4	6	10	2.5	6.5	15	2.5	6.5	15	15	25	40	T	T	15	25	40	T	T

1 NZM



Incoming circuit-breaker
Outgoing circuit-breaker

Selectivity 415 V AC

between circuit-breakers enables separate shut-down of faulty system sections.
Selectivity (discrimination) exists between incoming breaker 1 and outgoing breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit.
System sections 3 and 4 continue to be operational.

Incoming circuit-breaker (S1)

			NZM...1-A...																
	I_{cu}[kA]		25(36)(50)(100)																
	I_n[A]		20-40	50	63	80	100	125	160	20-40	50	63	80	100	125	160	200	250	300
Outgoing circuit-breaker (S2)	I_n [A]	I_{cu}(415V) [kA]	Prospective short-circuit current (kA). Set the overload and short-circuit release of the incoming circuit-breaker to the max. value.																
NZM...1-A...	20-40	25-100	–	–	0.5	0.7	0.8	1.5	1.5	–	–	0.6	0.8	1.5	1.5	1.5	2	3	3
	50	25-100	–	–	–	0.6	0.8	1.5	1.5	–	–	–	0.8	1.5	1.5	1.5	2	3	3
	63	25-100	–	–	–	–	0.8	1.5	1.5	–	–	–	–	1.5	1.5	1.5	2	3	3
	80	25-100	–	–	–	–	–	1.5	1.5	–	–	–	–	–	1.5	1.5	2	3	3
	100	25-100	–	–	–	–	–	–	1.5	–	–	–	–	–	–	1.5	2	3	3
	125	25-100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	3	3
	160	25-100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	3	3
NZM...2-A...	20-40	25-150	–	–	0.5	0.6	0.8	1	1	–	–	0.5	0.6	0.8	1	1.2	1.6	2	2
	50	25-150	–	–	–	0.6	0.8	1	1	–	–	–	0.6	0.8	1	1.2	1.6	2	2
	63	25-150	–	–	–	–	0.8	1	1	–	–	–	–	0.8	1	1.2	1.6	2	2
	80	25-150	–	–	–	–	–	1	1	–	–	–	–	–	1	1.2	1.6	2	2
	100	25-150	–	–	–	–	–	–	1	–	–	–	–	–	–	1.2	1.6	2	2
	125	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.6	2	2
	160	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
	200	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	250	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	300	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...1-M...	40	25-150	–	–	–	–	0.8	1	1	–	–	–	–	–	–	1.2	1.6	2	2
	50	25-150	–	–	–	–	–	–	1	–	–	–	–	–	–	1.2	1.6	2	2
	63	25-150	–	–	–	–	–	–	1	–	–	–	–	–	–	1.2	1.6	2	2
	80	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.6	2	2
	100	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
NZM...2-M...	20-12	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	160	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	200	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...2-VE...	100	25-150	–	–	–	–	–	–	–	–	–	–	–	–	–	1.2	1.6	2	2
	160	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	250	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...2-ME...	90	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	1.2	1.6	2	2
	140	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	220	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...3-AE...	250	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	320	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	400	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	500	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	630	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM…3-VE...	250	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	400	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	630	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...3-ME...	220	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	350	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	450	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...4-AE...	630	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	800	50-150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1000	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1250	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1600	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM…4-VE	630	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	800	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1000	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1250	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1600	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
NZM...4-ME..	550	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	875	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	1400	50-85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Notes T:total selectivity

NZM

1

Incoming circuit-breaker (S1)

NZM...2-VE...			NZM...3-A...				NZM...3-AE...			NZM...3-VE...			NZM...4-AE...					NZM...4-VE...				
50(150)			36(50)(150)				50(150)			50(150)			50(150)					50(150)				
100	160	250	250	320	400	500	250	400	630	250	400	630	630	800	1000	1250	1600	630	800	1000	1250	1600
Prospective short-circuit current (kA). Set the overload and short-circuit release of the incoming circuit-breaker to the max. value.																						
2	5	7.5	3	4	6	7	7.5	20	20	12.5	25	25	T	T	T	T	T	T	T	T	T	T
2	5	7.5	3	4	6	7	7.5	20	20	12.5	25	25	T	T	T	T	T	T	T	T	T	T
2	5	6	3	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	3	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	3	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	3	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	5	6	3	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
1	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	2.5	4	5	6	5	10	10	10	15	15	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	5	6	–	10	10	–	15	15	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	5	6	–	10	10	–	15	15	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	5	6	–	10	10	–	15	15	T	T	T	T	T	T	T	T	T	T
1	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	2	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	4	2.5	4	6	7	6	15	15	11	20	20	T	T	T	T	T	T	T	T	T	T
–	–	2	2.5	4	6	7	6	7	10	7	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	2.5	4	6	7	6	7	10	7	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	6	7	–	7	10	–	10	12	T	T	T	T	T	T	T	T	T	T
–	1.2	2	2.5	4	6	7	6	7	10	7	8	11	T	T	T	T	T	T	T	T	T	T
–	–	2	2.5	4	6	7	6	7	10	7	8	11	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	6	7	–	7	10	–	8	11	T	T	T	T	T	T	T	T	T	T
–	–	2	2.5	4	6	7	6	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	2.5	4	6	7	6	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	6	7	–	7	10	5	10	12	T	T	T	T	T	T	T	T	T	T
–	–	–	–	–	–	–	–	5	7.5	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	5	7.5	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	7.5	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	3.5	4	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	4	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	3.5	4	–	10	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	4	–	–	12	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	–	–	–	–	T/80	T/80	T/80	T/80	–	T/80	T/80	T/80	T/80
–	–	–	–	–	–	–	–	–	–	–	–	–	–	10	15	20	20	–	10	15	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	–	–	–	–	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

1

NZM1, NZM2, NZM3

Protection of PVC insulated cables against thermal overload dueto short-circuits

According to VDE 0100 Part 430 Wiring Regulations, cables and conductors must be protected from overload and short-circuits. In circuit-breakers NZM, overload protection is implemented through the adjustable, current-dependently delayed overload release.

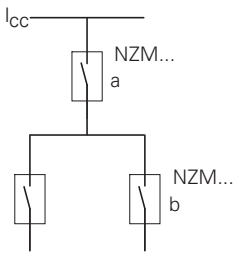
Short-circuit protection is provided by adjustable instantaneous releases, which open the main contacts in less than 25 ms. The short-circuit total opening time restricts the temperature rise of the cable to a minimum.

The tables indicate the minimum conductor cross-section reliably protected by circuit-breakers during a short-circuit.(Operating voltage U_N= 415 V)

	Minimum protected cross-section mm² copper
NZM...1(-4)-...20	6
NZM...1(-4)-...25 – 160	10
NZM...2(-4)-...20 – 300	10
NZM...3(-4)-...250 – 630	16
NZM...4(-4)-...630 – 1600	95

Backup protection

between incoming circuit-breaker NZM(N)(H) and outgoing circuit-breaker NZMB(N)(H)



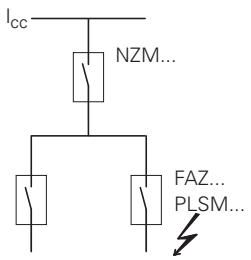
		Incoming circuit-breaker ①										
		NZM1				**NZM2**				**NZM3**		
	I_n	Up to 160 A				Up to 250 A				Up to 500 A	Up to 630 A	
	I_{cu}(415 V)	25 kA	36 kA	50 kA	100 kA	25 kA	36 kA	50 kA	150 kA	36 kA	50 kA	150 kA
Outgoing circuit-breaker ② I_{cu}(415 V)	I_n											
NZMB1 25 kA	Up to 160 A	25	36	50	100	25	36	50	100	36	50	100
NZMC1 36 kA	Up to 160 A	–	36	50	100	–	36	50	100	36	50	100
NZMN1 50 kA	Up to 160 A	–	–	50	100	–	–	50	100	–	50	100
NZMH1 100 kA	Up to 160 A	–	–	–	100	–	–	–	100	–	–	100
NZMB2 25 kA	Up to 300 A	25	36	50	100	25	36	50	150	36	50	150
NZMC2 36 kA	Up to 300 A	–	36	50	100	–	36	50	150	36	50	150
NZMN2 50 kA	Up to 300 A	–	–	50	100	–	–	50	150	–	50	150
NZMH2 150 kA	Up to 300 A	–	–	–	–	–	–	–	150	–	–	150
NZMC3 36 kA	Up to 500 A	–	–	–	–	–	–	–	–	–	50	150
NZMN3 50 kA	Up to 630 A	–	–	–	–	–	–	–	–	–	50	150
NZMH3 150 kA	Up to 630 A	–	–	–	–	–	–	–	–	–	–	150

Where the prospective fault current at the mounting location of circuit-breakers is very high current-limiting circuit-breakers NZMN(H) are normally used. A cost-effective alternative if the fault level is too high for circuit-breakers NZMB(C)(N) is to fit a current-limiting circuit-breaker NZMN(H) upstream of an arrangement of standard circuit-breakers NZMB(C)(N).

The table shows which current-limiting circuit-breakers NZMN(H) provide reliable protection at network locations with high short-circuit ratings in combination with NZMB(C)(N).

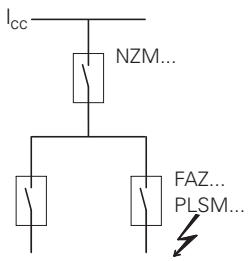
The selectivity limit is determined by the response current of the non-delayed short-circuit release in the upstream incoming circuit-breaker. In many applications this is sufficient.

between incoming circuit-breaker NZM...1-A... and outgoing circuit-breaker FAZ-B(C)/PLSM-B(C)...



Outgoing circuit-breaker	**Incoming circuit-breaker NZMB1-A...**	**NZMC(N)(H)1-A...**
FAZ-B(C)...		
0.5 – 16	25 kA	30 kA
20 – 40	20 kA	20 kA
50, 63	15 kA	15 kA
PLSM-B(C)...(/...)		
0.5 – 16	25 kA	30 kA
20 – 40	20 kA	20 kA
50, 63	15 kA	15 kA

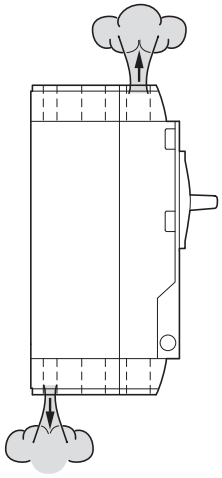
between incoming circuit-breaker NZM...2-A... and outgoing circuit-breaker FAZ-B(C)/PLSM-B(C)...



Outgoing circuit-breaker	**Incoming circuit-breaker NZMB2-A...**	**NZMN(H)2-A...**
FAZ-B(C)...		
0.5 – 10	25 kA	50 kA
13 – 32	25 kA	30 kA
40 – 63	20 kA	20 kA
PLSM-B(C)...(/...)		
0.5 – 10	25 kA	50 kA
13 – 32	25 kA	30 kA
40 – 63	20 kA	20 kA

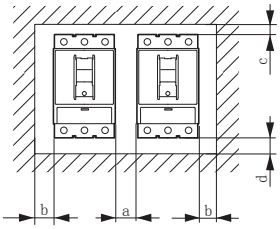
NZM1, NZM2, NZM3, NZM4

Direction of blow-out



	Top, front	Bottom, rear
NZM1	X	–
NZMB(C)2-A... 250	X	–
(P)N2(-4)-...	X	–
NZMN(H)2...	X	X
NZM...2-4..	X	X
NZM3	X	X
NZM4	X	–

Minimum clearances



between two adjacently mounted switches
Minimum clearance a in mm

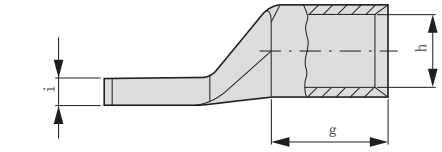
	NZM1	NZM2	NZM3	NZM4
NZM1	0	5	5	15
NZM2	5	5	5	15
NZM3	5	5	5	15
NZM4	15	15	15	15

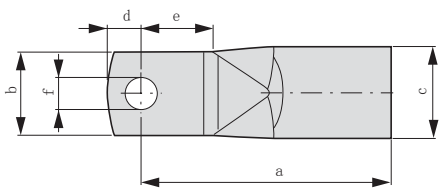
between switches and other parts
Minimum clearances in mm

	b		c		d	
	≦690V	1000 V	≦440V	≦690V	1000 V	≦690V	1000 V
NZM1	0	–	30	60	–	0	–
NZM2[1)]	5	5	20[1)]	35[1)]	35	35	35
NZM3	5	5	30	60	60	60	60
NZM4	15	15	50	100[1)]	200	0	0

1)NZMB(C)2 – A … ≦440 V: C= 20 mm, d = 0 mm
≦690 V: C= 60 mm, d = 0 mm
2)At 690 V IT network: 200 mm

Tube cable lugs, dimensions





For pressing the cable lugs a press tool K22, HK60/22 or EK22 from Klauke with the following press inserts is required:
R22/95 for 95 mm²
R22/120 for 120 mm²
R22/150 for 150 mm²
R22/185 for 185 mm²
R22/240 for 240 mm²

Cable lug	For use with	Nominal cross section mm²	Terminal bolt	Dimensions in mm								
			Ø	a	b	c	d	e	f	g	h	i
KS95-NZM7	NZM2	95	M8	53^{+2}	$23^{\pm0.5}$	$18^{\pm0.2}$	$10^{\pm1}$	19	8.5	25	13.5	4.4
KS120-NZM7	NZM2	120	M8	56^{+2}	$23^{\pm0.5}$	$19.5^{\pm0.2}$	$10^{\pm1}$	19	8.5	26	15	4.4
KS150-NZM7	NZM2	150	M8	61^{+2}	$23^{\pm0.5}$	$21^{\pm0.2}$	$10^{\pm1}$	19	8.5	30	16.5	4.4
NZM2-XKS185	NZM2	185	M8	$65^{\pm1.5}$	$22^{\pm1}$	$24^{\pm0.3}$	$9^{+1}_{-0.5}$	$19^{+2.5}_{-0.5}$	$8.5^{+0.05}_{-0.5}$	$30^{\pm2}$	$19^{\pm0.4}$	7
NZM3-XKS185	NZM3, NZM4	185	M10	65	24.5	24	11.5	18	10.5	30	19	$0.7^{\pm0.8}$
NZM3-XKS240	NZM3, NZM4	240	M10	72	31	26	11.5	19	10.5	35	21	$5.0^{\pm0.8}$

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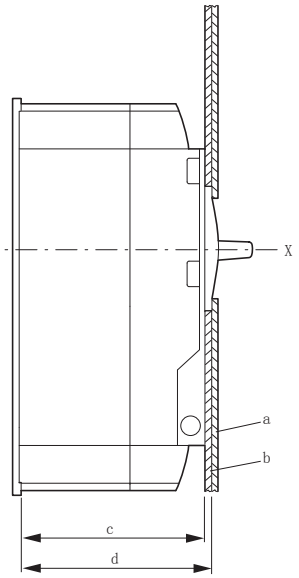
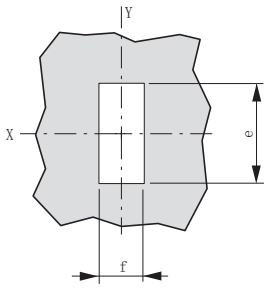
NZM1, NZM2, NZM3, NZ M4
Engineering

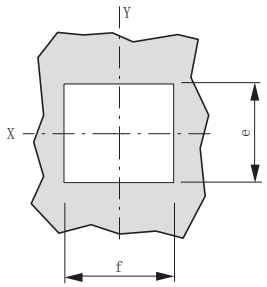
Front cut-outs



Cut-outa
Rocker lever



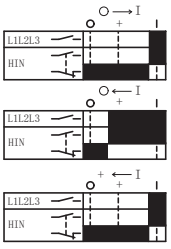
Cut-outb
Rotary handle, remote operator



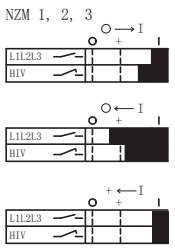
	Distance from mounting plate and door cut-out		Cut-out		Cut-out	
	c	d	e	f	e	f
	mm	mm	mm	mm	mm	mm
NZM1	68	68	68	68	68	68
NZM2	103	103	103	103	103	103
NZM3	120.5	120.5	120.5	120.5	120.5	120.5
NZM4	138	138	138	138	138	138

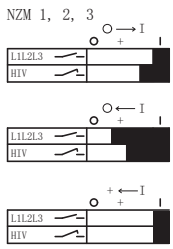
Contact sequence of the auxiliary contacts

Standard auxiliary contacts (HIN)

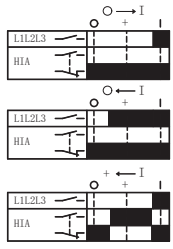


Early-make auxiliary contact(HIV)





Trip-indicating auxiliary contacts(HIA)



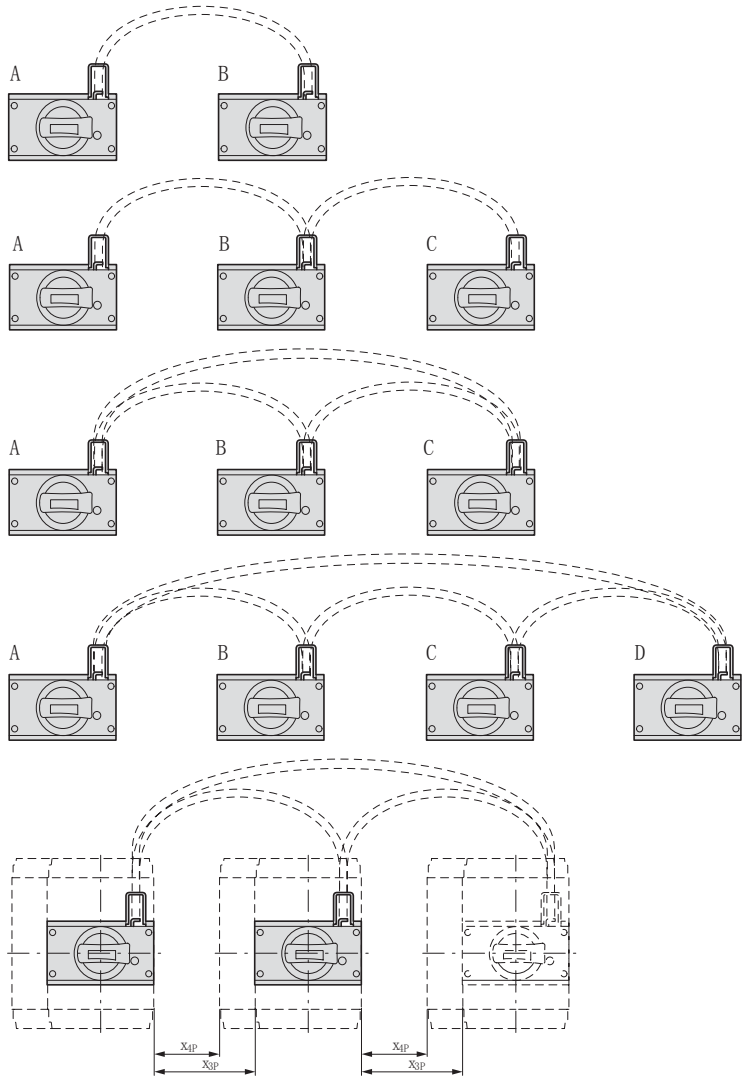
0 →I Switch-on
0 ←I Switch-off
+←I Trip

■ Contact closed
□ Contact opened

Notes If early-make contacts are required in combination with shunt orundervoltage releases, please select the combination type in section "Releases"

NZM, NZM...-XBZ-...

Interlock variations and combination possibilities



A	B
OFF	OFF
ON/TRIP	~~ON~~
~~ON~~	ON/TRIP

A	B	C
OFF	OFF	OFF
~~ON~~	ON/TRIP	~~ON~~
ON/TRIP	~~ON~~	ON/TRIP

A	B	C
ON/TRIP	~~ON~~	~~ON~~
~~ON~~	ON/TRIP	~~ON~~
~~ON~~	~~ON~~	ON/TRIP

A	B	C	D
OFF	OFF	OFF	OFF
ON/TRIP	~~ON~~	ON/TRIP	~~ON~~
~~ON~~	ON/TRIP	~~ON~~	ON/TRIP

X_{3p} = switch spacing, 3 pole
X_{4p} = switch spacing, 4 pole

NZM-						Right switch			
Max. switch spacing		NZM-1		NZM-2		NZM-3		NZM-4	
		X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{3P}
Left switch		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	135	105	120	85	135	90	125	80
NZM2	3/4 pole	135	105	120	85	135	90	125	80
NZM3	3/4 pole	90	75	75	35	85	40	80	45
NZM4	3/4 pole	50	35	40	15	25	–	15	–
NZM-XBZ600									
Max. switch spacing		NZM-1		NZM-2		NZM-3		NZM-4	
		X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{3P}
Left switch		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	510	480	495	460	510	465	475	405
NZM2	3/4 pole	510	480	495	460	510	465	475	405
NZM3	3/4 pole	460	430	450	410	460	415	460	390
NZM4	3/4 pole	400	370	380	340	400	375	390	320
NZM-XBZ1000									
Max. switch spacing		NZM-1		NZM-2		NZM-3		NZM-4	
		X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{4P}	X_{3P}	X_{3P}
Left switch		mm	mm	mm	mm	mm	mm	mm	mm
NZM1	3/4 pole	910	880	895	860	910	865	865	795
NZM2	3/4 pole	910	880	895	860	910	865	865	795
NZM3	3/4 pole	820	790	850	810	860	815	860	790
NZM4	3/4 pole	750	720	730	700	800	775	790	720

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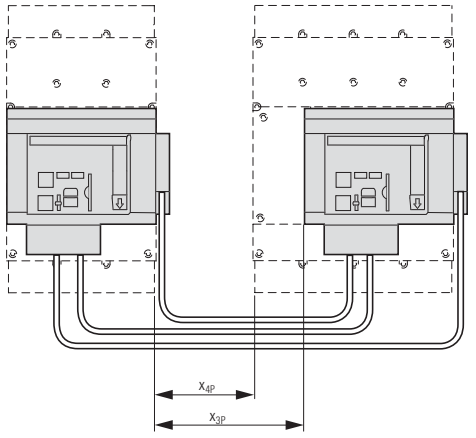
NZM...-XMVR(L)



X_{3p} = max. switch spacing 3 pole
X_{4p} = max. switch spacing 4 pole

Mechanical interlock XMVR
NZM...-XMVR (mounted side-by-side)

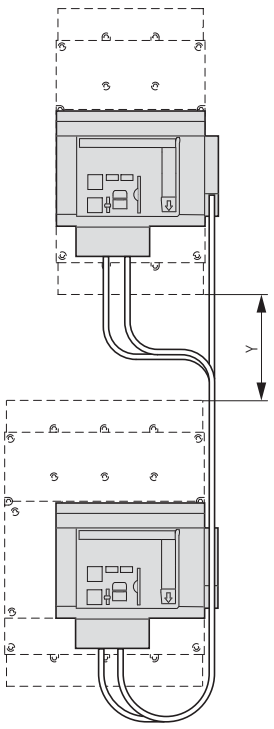
Max. switch spacing

		Right switch					
		NZM2		NZM3		NZM4	
		X^{3p}	X^{4p}	X^{3p}	X^{4p}	X^{3p}	X^{4p}
Left switch		mm	mm	mm	mm	mm	mm
NZM2	3/4 pole	130	95	95	50	–	–
NZM3	3/4 pole	–	–	135	90	155	85
NZM4	3/4 pole	–	–	–	–	120	50

Mechanical interlock XMVRL

NZM...-XMVRL (mounted side-by-side, in adjacent enclosures)

Max. switch spacing		Right switch					
		NZM2		NZM3		NZM4	
		X^{3p}	X^{4p}	X^{3p}	X^{4p}	X^{3p}	X^{4p}
Left switch		mm	mm	mm	mm	mm	mm
NZM2	3/4 pole	350	315	420	385	–	–
NZM3	3/4 pole	–	–	400	365	460	390
NZM4	3/4 pole	–	–	–	–	420	350



Mechanical interlock XMVRL

NZM…-XMVRL (mounted one above the other)

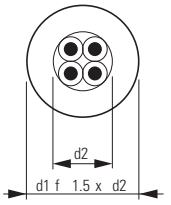
Max. switch spacing		Switch at top		
		NZM2	NZM3	NZM4
		3/4 pole	3/4 pole	3/4 pole
		Y	Y	Y
Switch at bottom		mm	mm	mm
NZM2	3/4 pole	220	225	–
NZM3	3/4 pole	–	220	230
NZM4	3/4 pole	–	–	230

Y = max. switch spacing

Residual-current relay PFR

Ring-type transformer PFR-W...

Maximum rated operational current [A]		Diameter	
Power distribution	Motor/capacitor	Transformer part no. PFR-W-… d1	Maximum conductor circumference (mm) d2
50	50	20	13
150	100	30	20
150	100	35	23
400	200	70	47
600	250	105	70
1200	630	140	93
1800	800	210	140

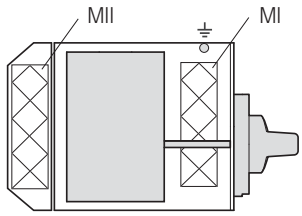


NZM-XS(R)M, NZM...XRD

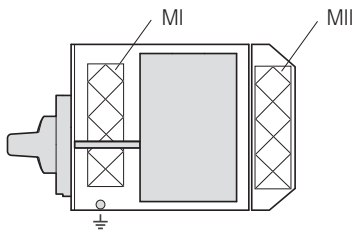
Additional terminal arrangement for side wall operator with mounting bracket.
NZM1-XS(R)M-..., NZM2-XS(R)M-...
Additional terminals K25, K50, K95, K150
Actuation:

3 pole

For operation on the right

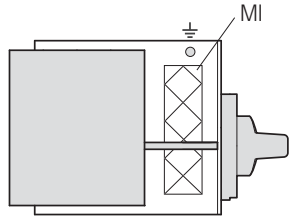


For operation on the left

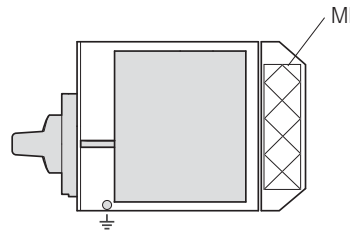


4 pole

For operation on the right



For operation on the left

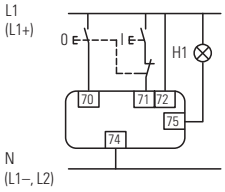


Mounting areas		MI				MII	
Variation options		V1	V2	V3	V4	V1	V2
Maximum number of additional terminals	K25	2 x	–	–	–	–	–
	K50	–	2 x	–	–	–	–
	K95	–	–	1 x	–	1 x	–
	K150	–	–	–	1 x	–	1 x

Example : In mounting area MI, variation option 1 allows the K25 additional terminal to be mounted twice.

2/3-wire control remote operator

Three-wire control



Please note for engineering:

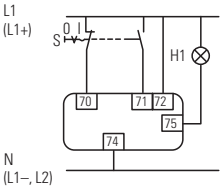
Terminal 70/71:

NZM-XR: Contact loading according to technical data

NZM2-XRD: Full current flows though the contact during make and break!

RMQ series contact elements can be used fo r the remote operators.NZM2(3.4)-XR(D)...

Two-wire control



Terminal 75:

NZM-XR: Operational readiness signal when cover closed and not locked.

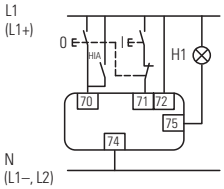
NZM2-XRD: Operational readiness signal when sliding switch set to Auto.

Sliding switch with three positions: Manual/Auto/Locked for reliable differentiation of operating positions.

AC-15: 400 V; 2 A

DC-13: 220 V; 0.2 A

Three-wire control with auto matic reset to the 0 positi on after the switch has tripped



Switching cycle:

NZM2-XRD

NZM2-XR

NZM3-XR

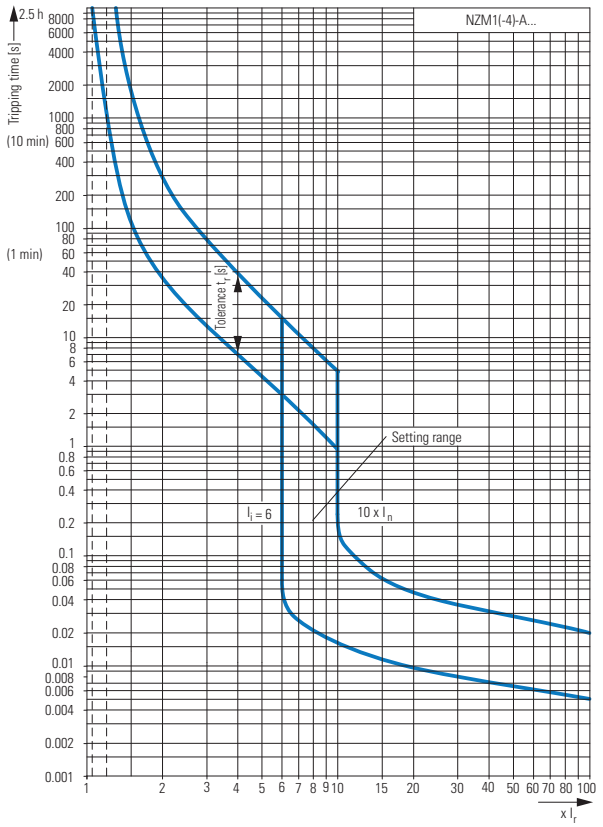
NZM4-XR

The time interval between OFF and ON is 3 seconds.
ON commands received during the time interval are ignored within the first 3 seconds after switch off.

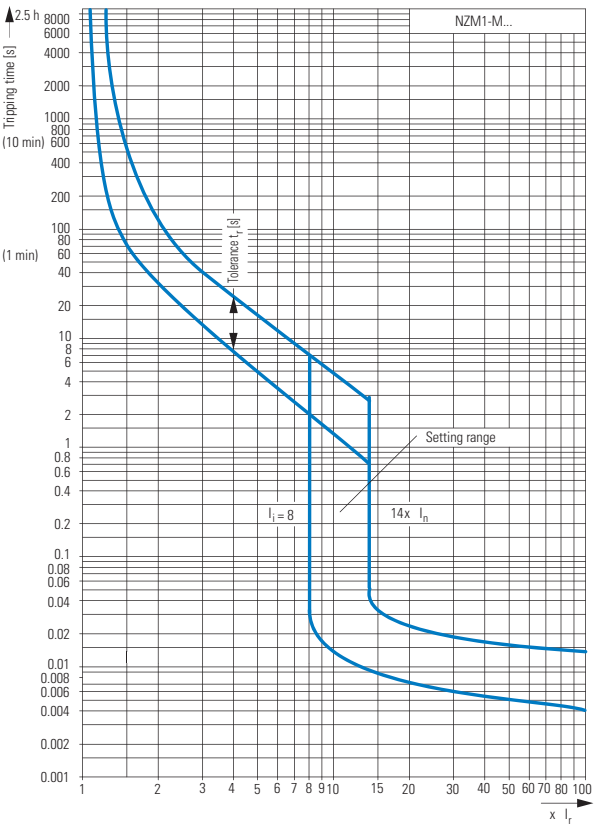
1

NZM1, NZM2

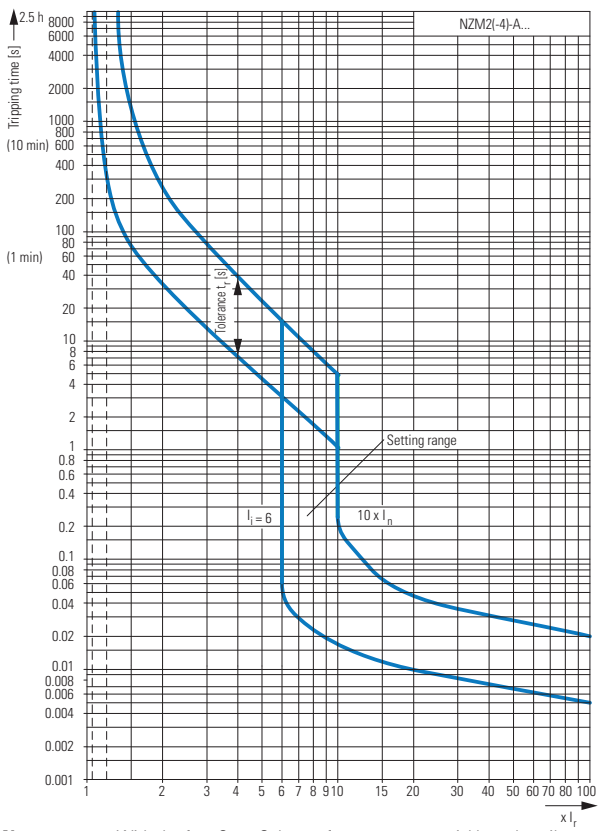
System and line protection with NZM1



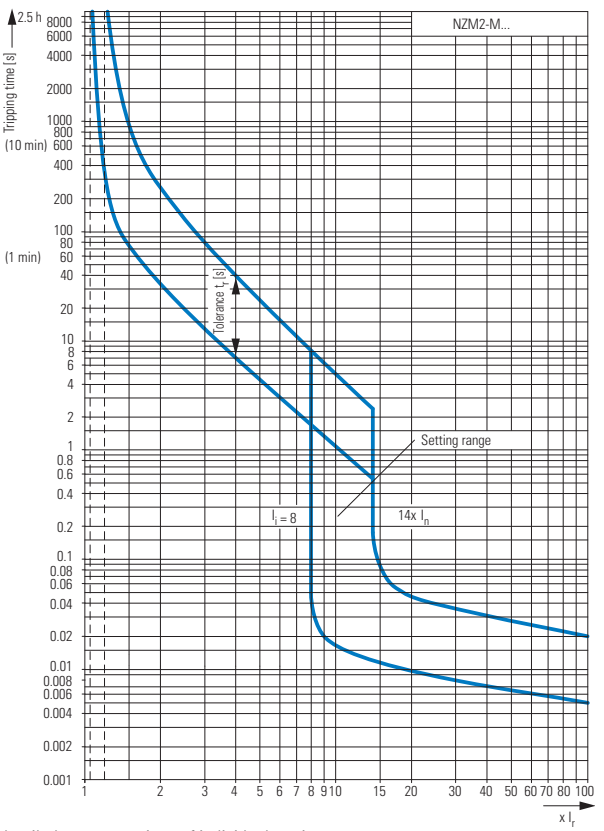
Motor protection with NZM1



System and line protection with NZM2



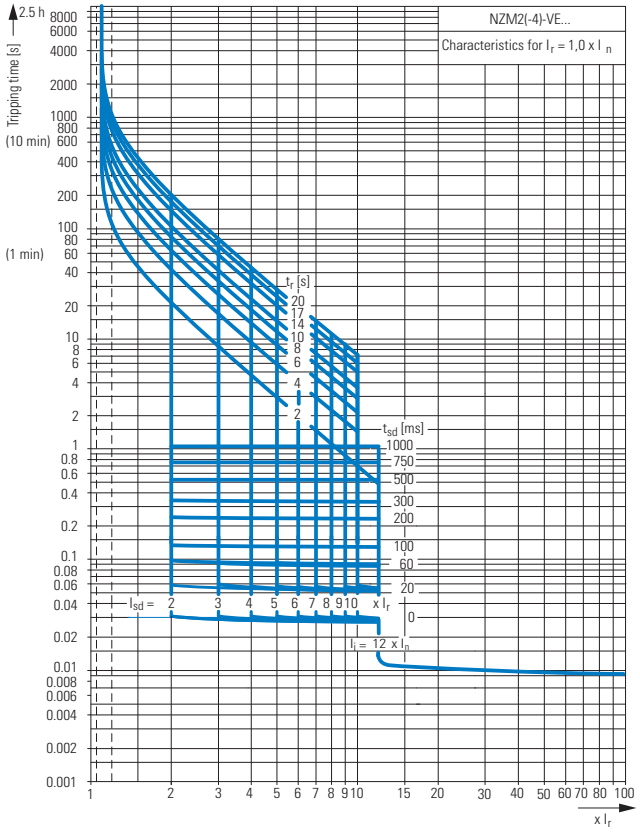
Motor protection with NZM2



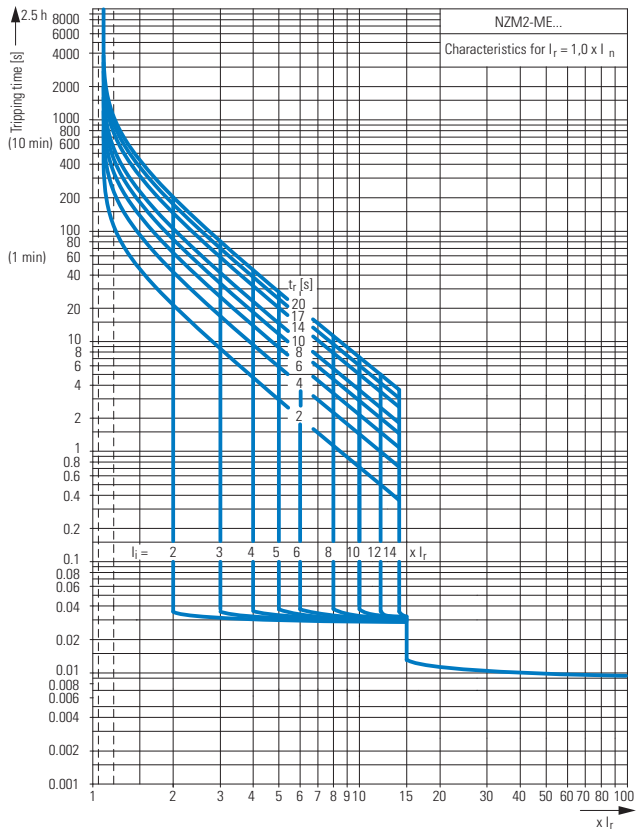
Notes With the free CurveSelect software you can quickly and easily create detailed representations of individual settings:
www.moeller.net, Products & Solutions>Power Distribution>Switching and Protecting Power Distribution>CurveSelect: Characteristics program.

NZM2, NZM3

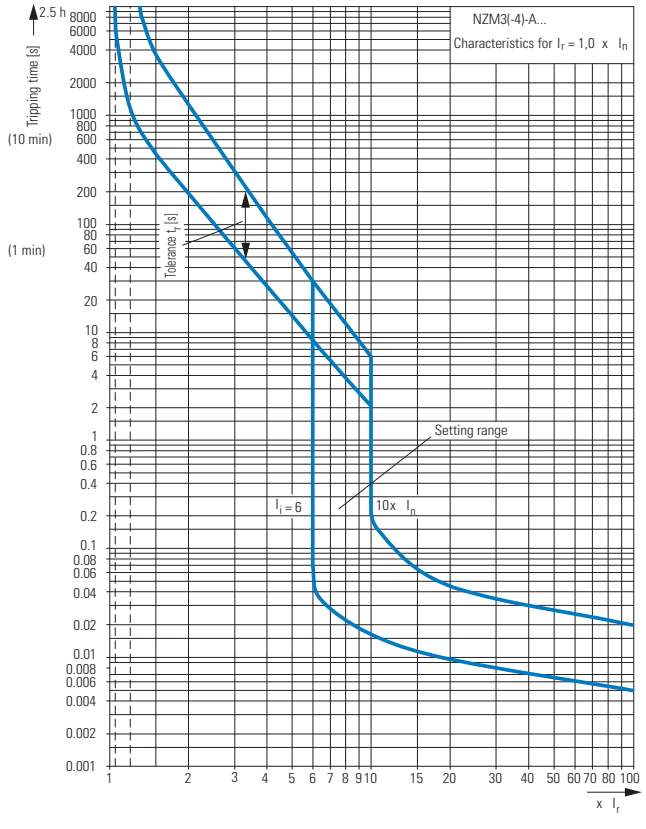
Systems, cable, selectivity and generator protection with NZM2

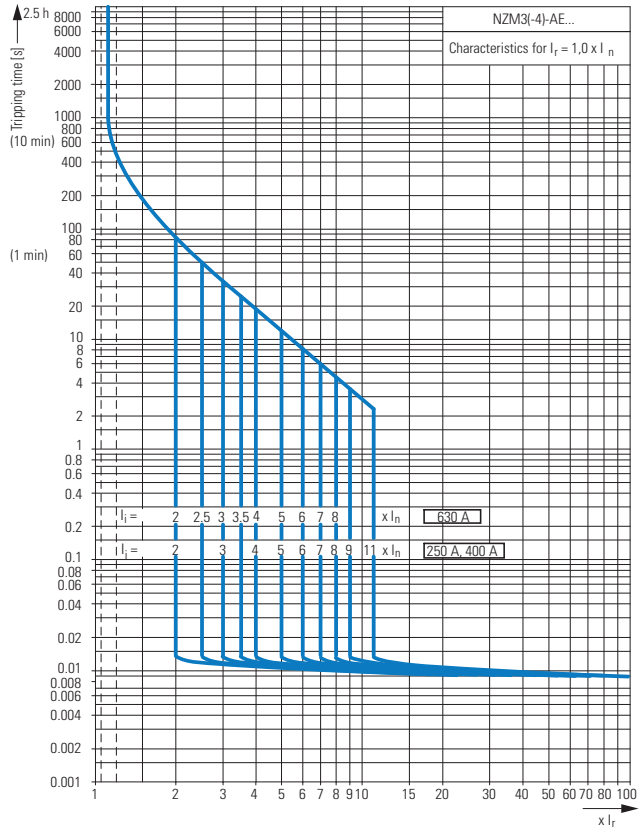


Motor protection with NZM2



System and line protection with NZM3



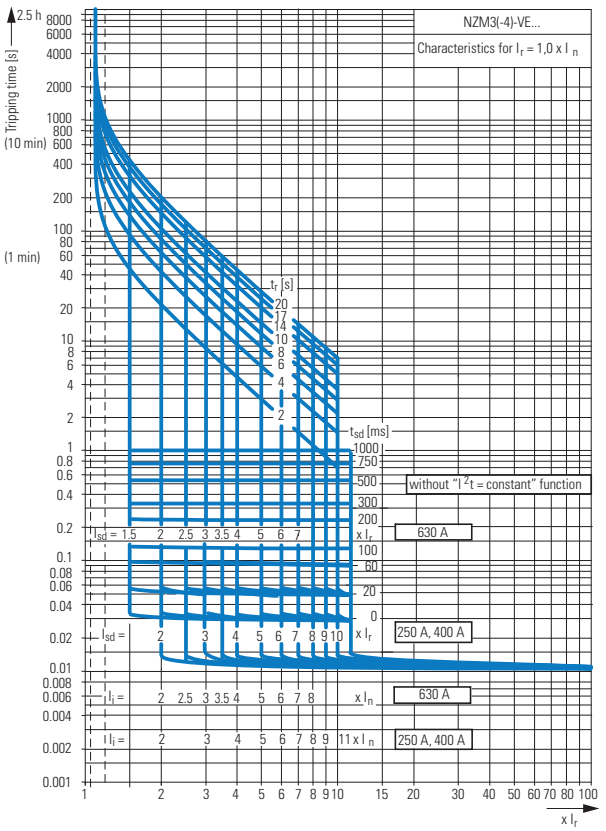


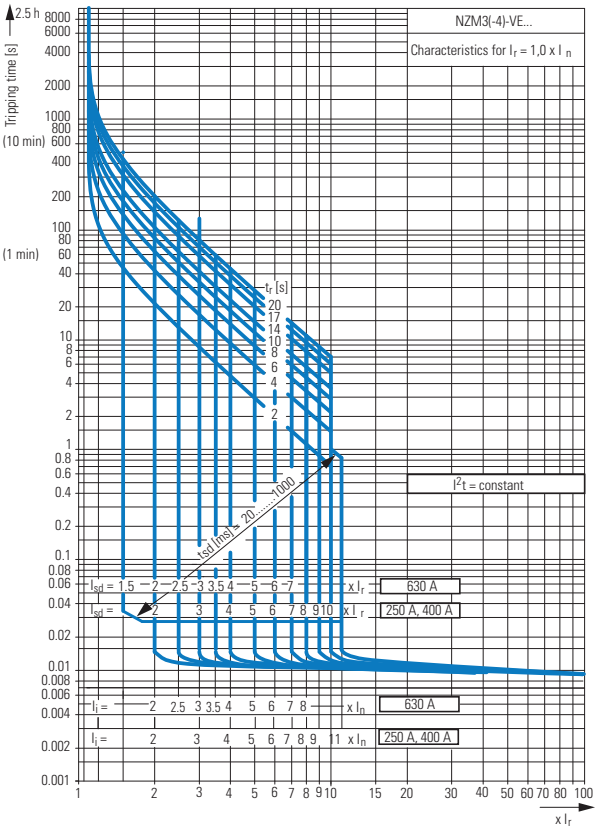
Notes With the free CurveSelect software you can quickly and easily create detailed representations of individual settings:
www.moeller.net, Products & Solutions>Power Distribution>Switching and Protecting Power Distribution>CurveSelect: Characteristics program

1

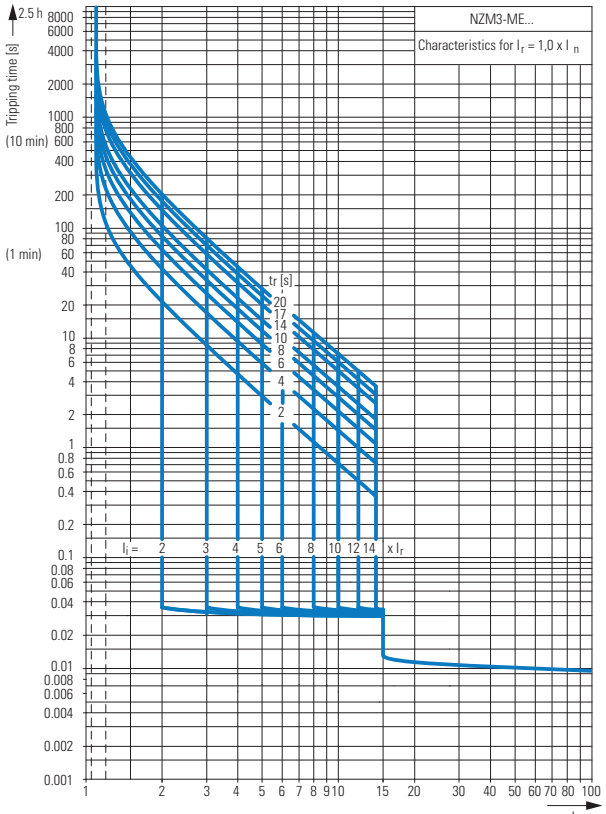
NZM3, NZM4

Systems, cable, selectivity and generator protection with NZM3





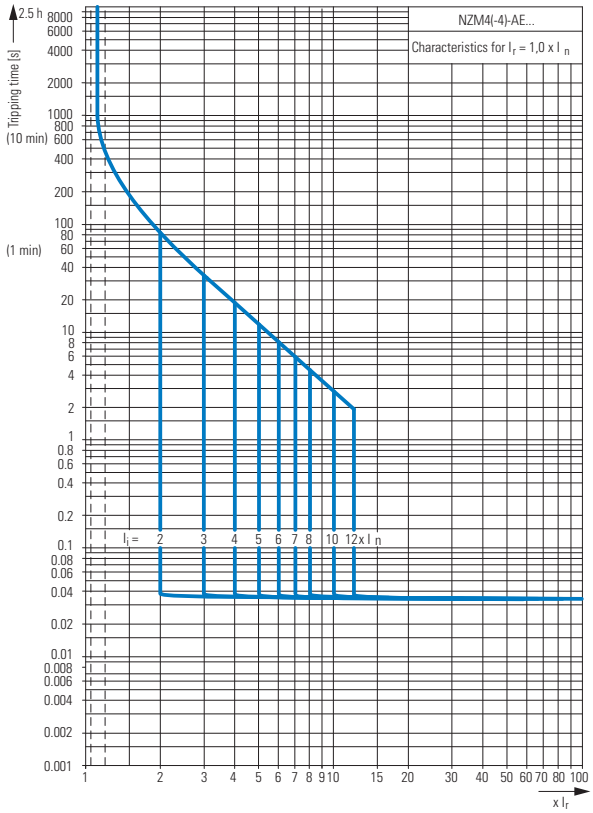
Motor protection with NZM3



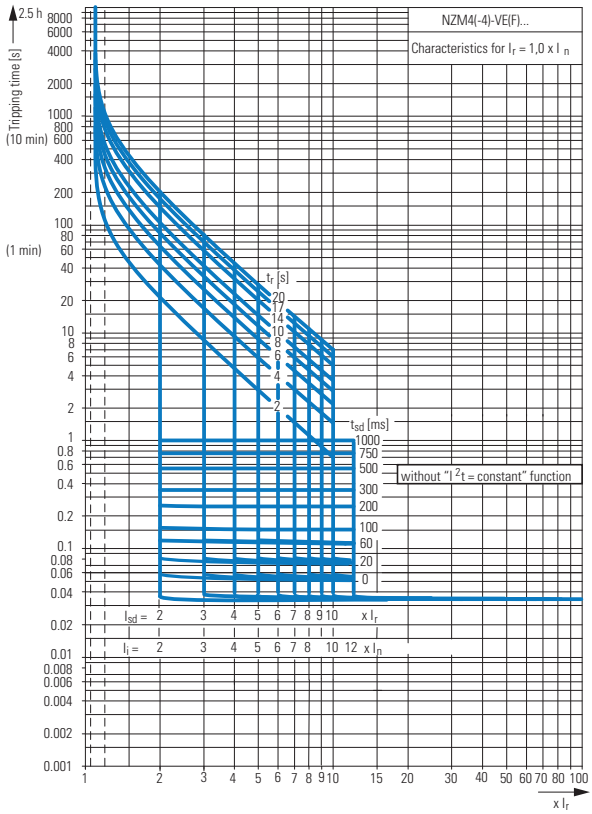
Notes With the free CurveSelect software you can quickly and easily create detailed representations of individual settings:
www.moeller.net, Products & Solutions>Power Distribution>Switching and Protecting Power Distribution>CurveSelect: Characteristics program

NZM4

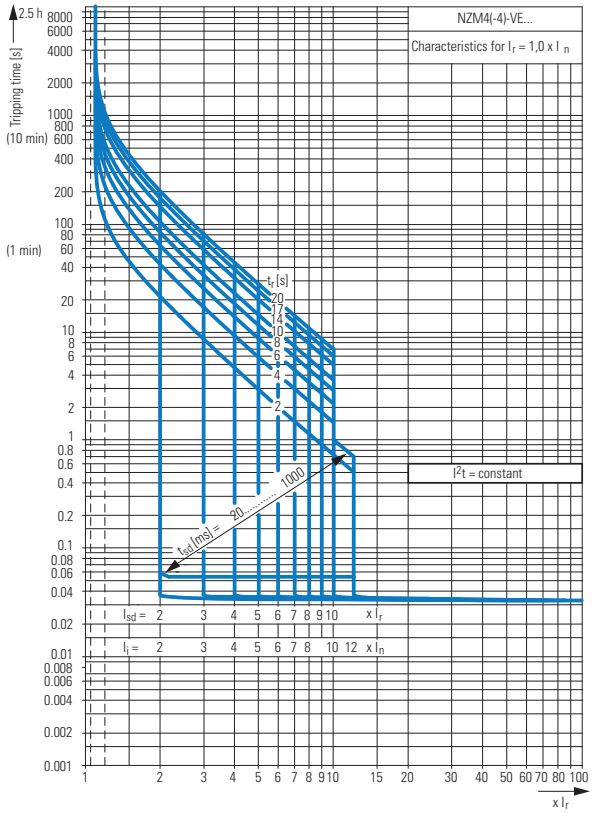
System and line protection with NZM4



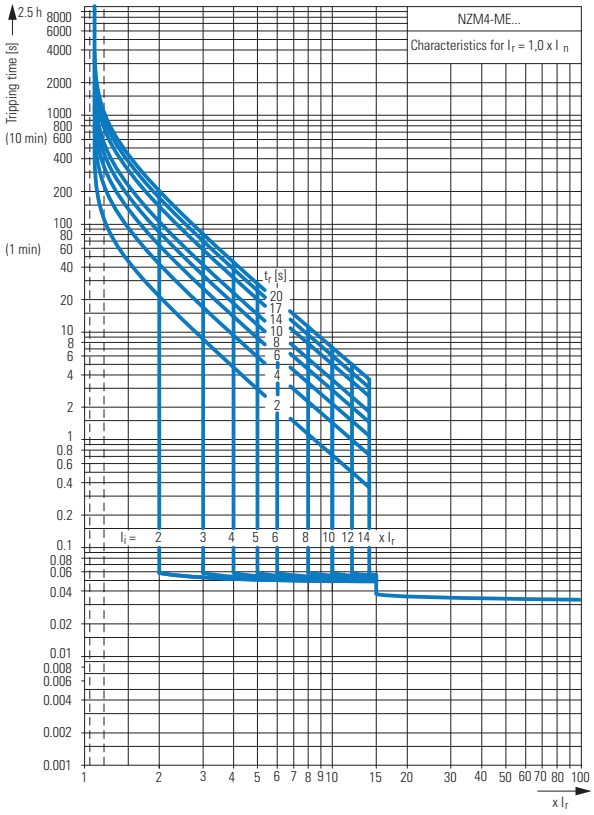
Systems, cable, selectivity and generator protection with NZM4



Systems, cable, selectivity and generator protection with NZM4



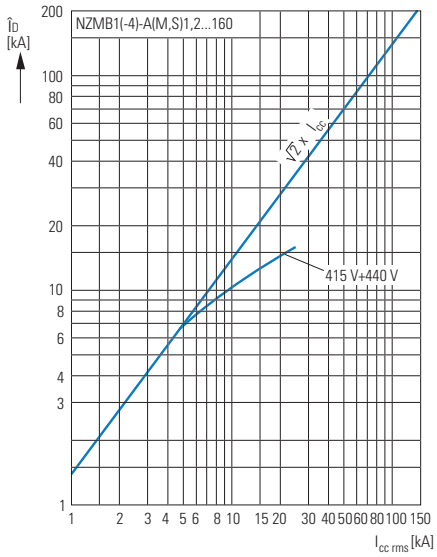
Motor protection with NZM4

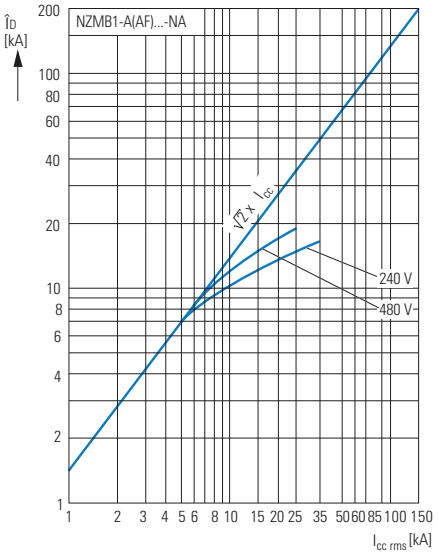


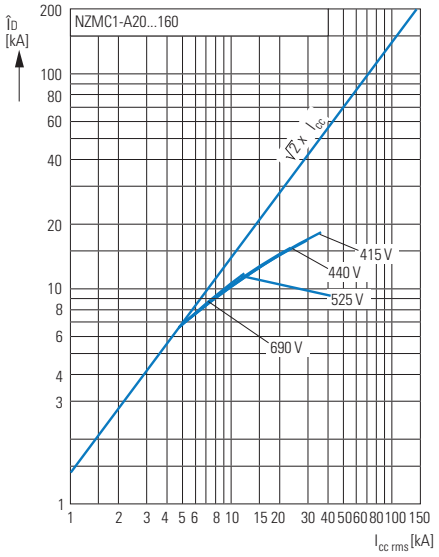
1

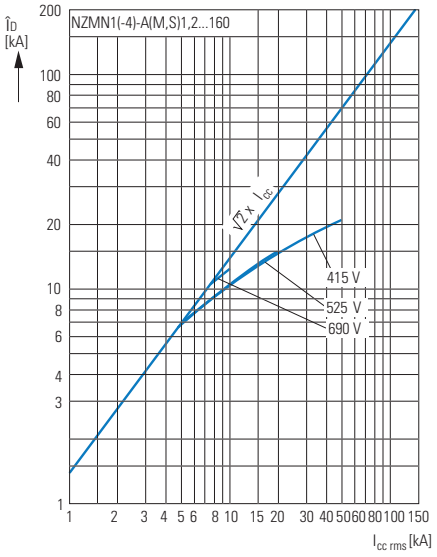
NZM1

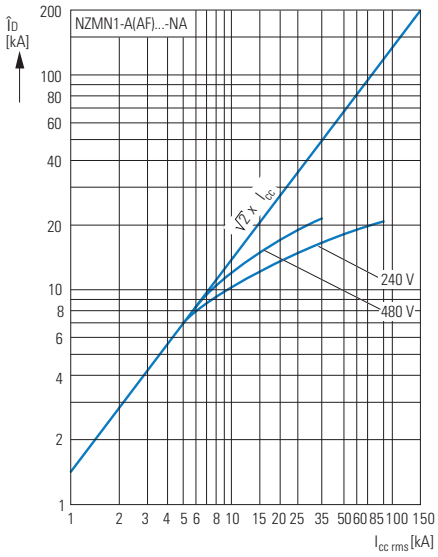
Let-through current $\hat{i}_D$

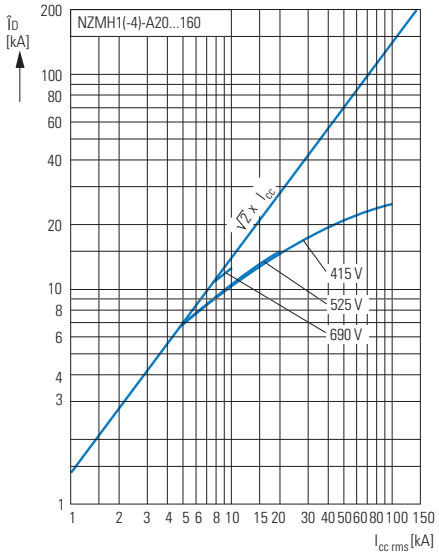






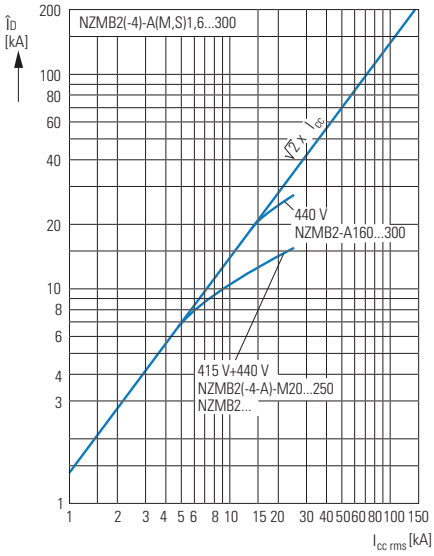


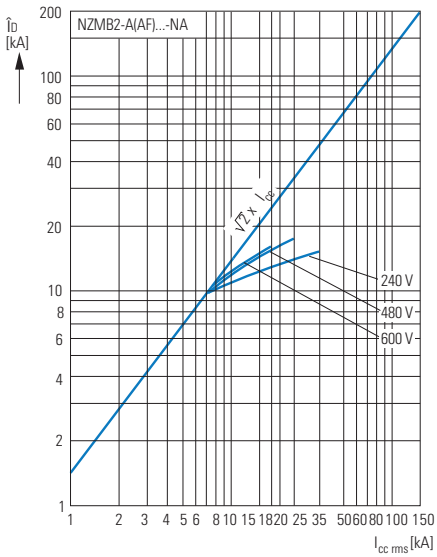


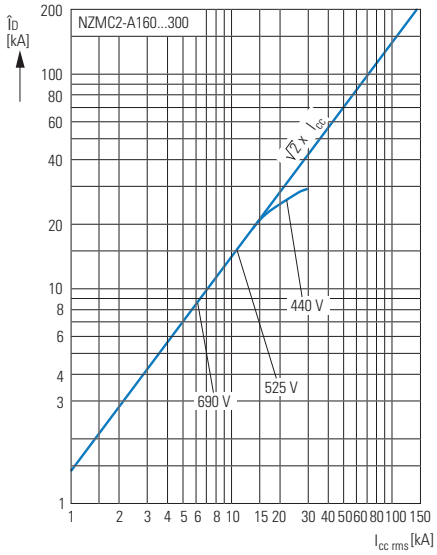


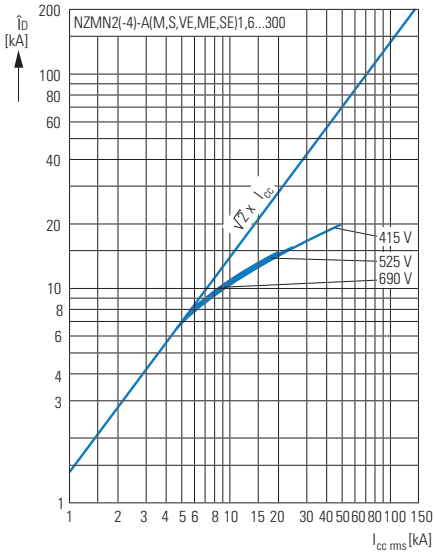
NZM2

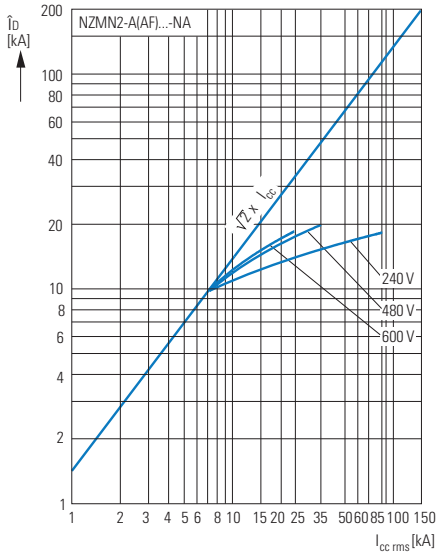
Let-through current $\hat{i}_D$

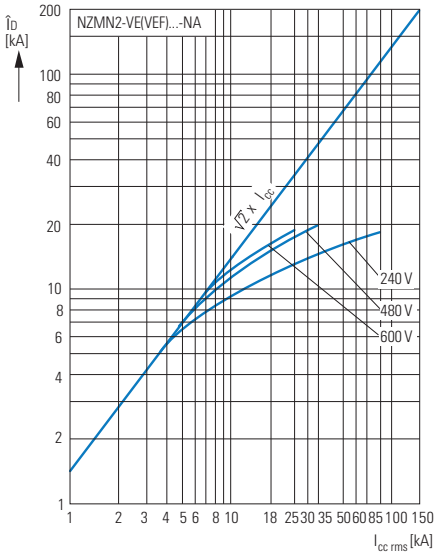


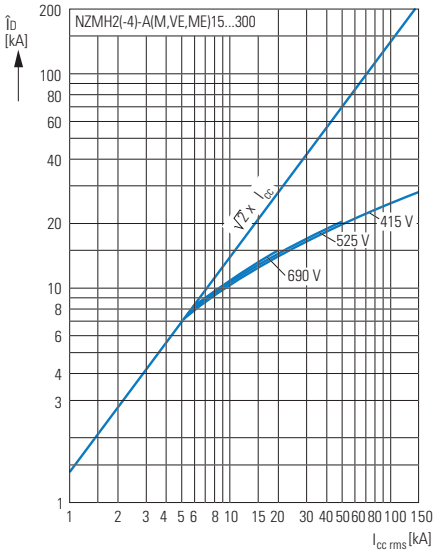


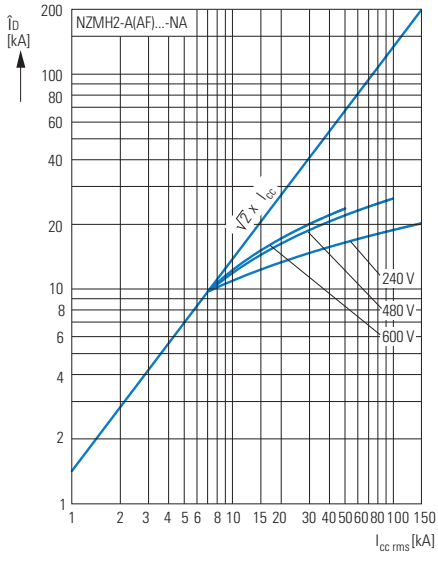


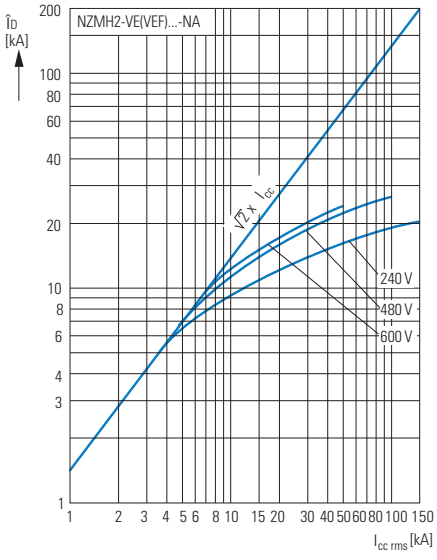






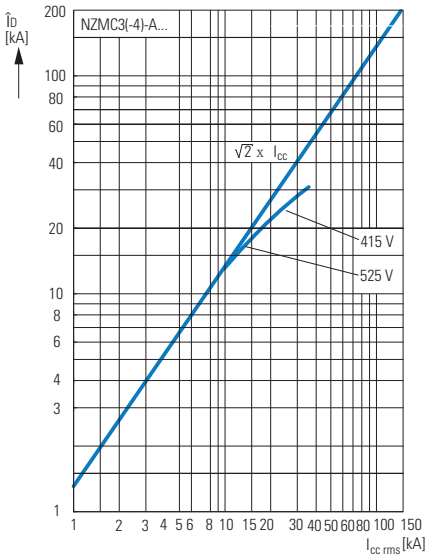


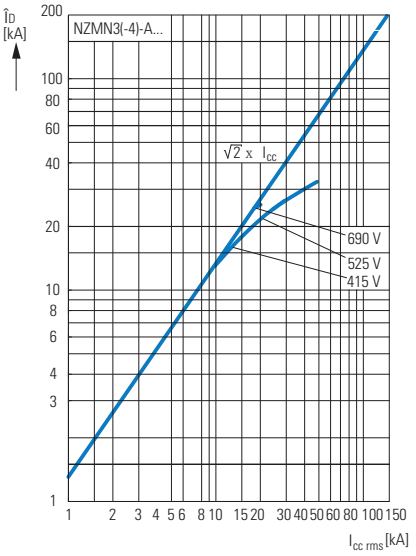


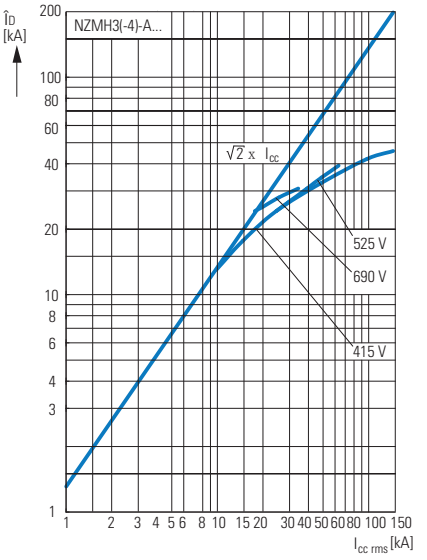


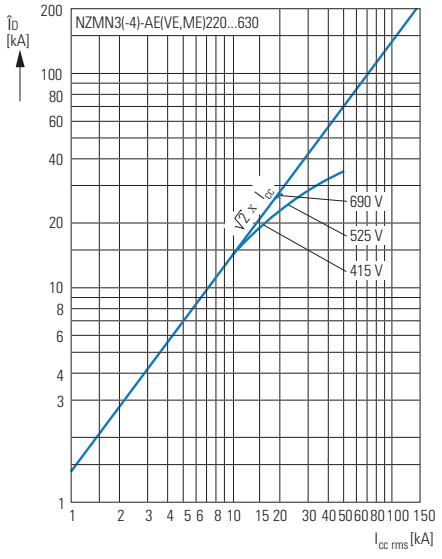
1 NZM3

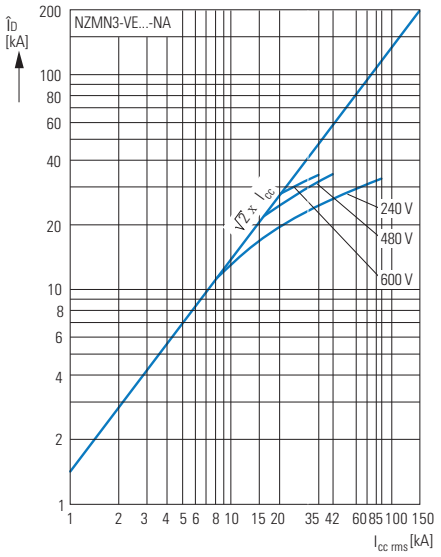
Let-through current $\hat{I}_D$

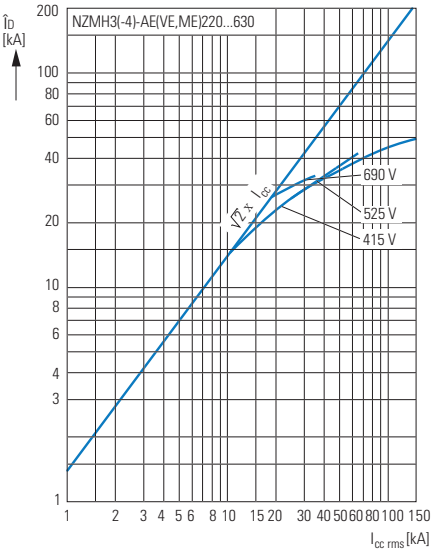


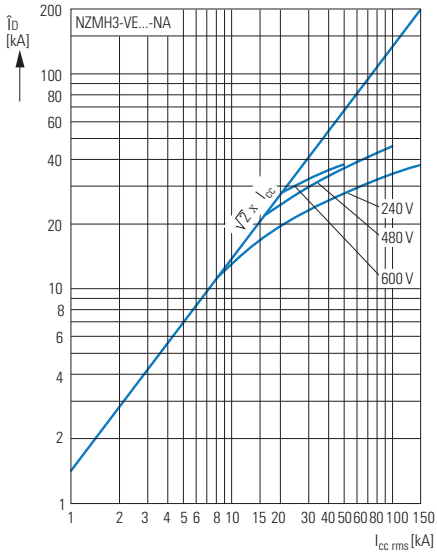






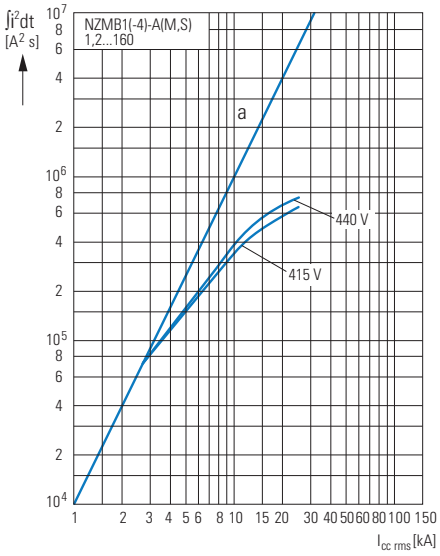


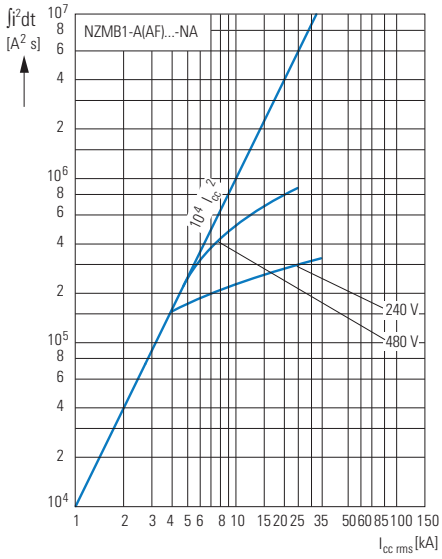


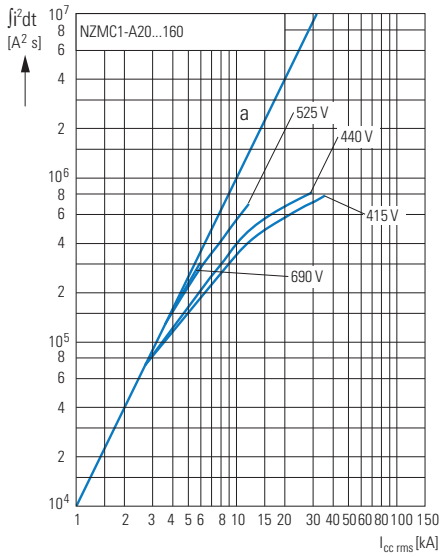


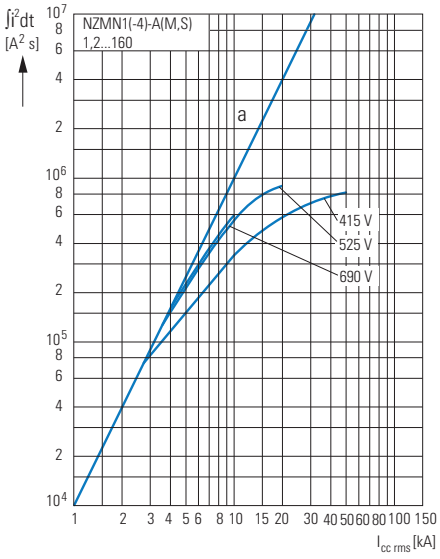
NZM1

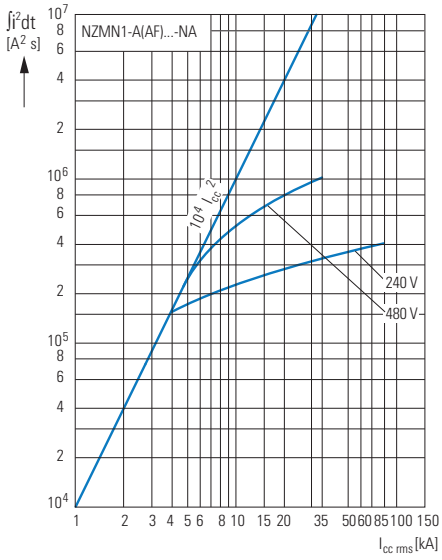
Let-through energy I^2t

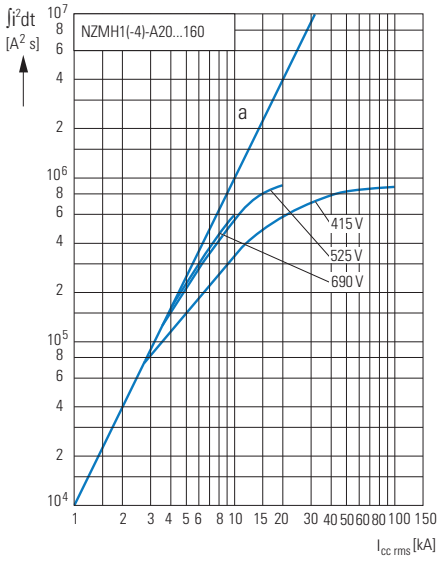












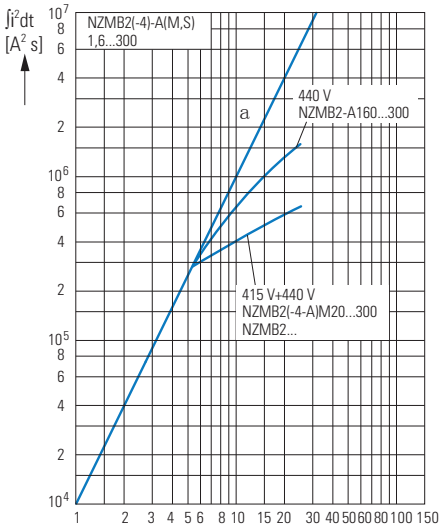
① 1 half-cycle

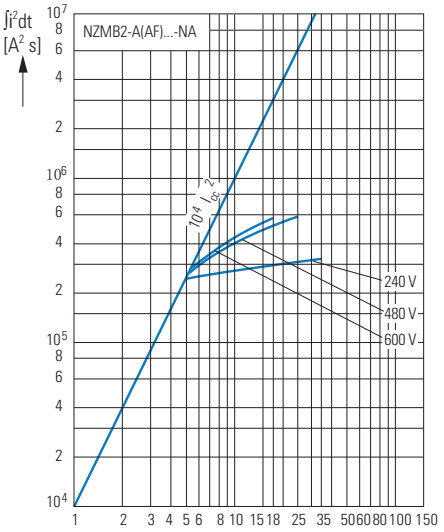
① 1 half-cycle

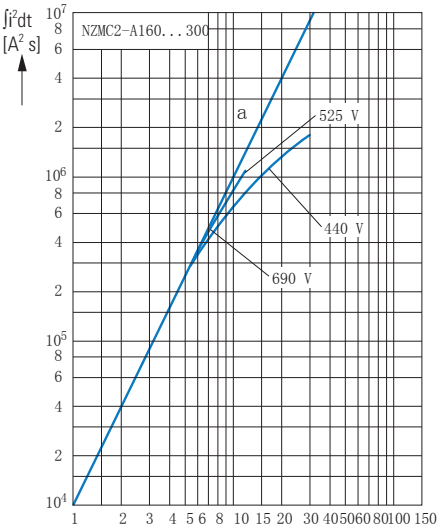
1

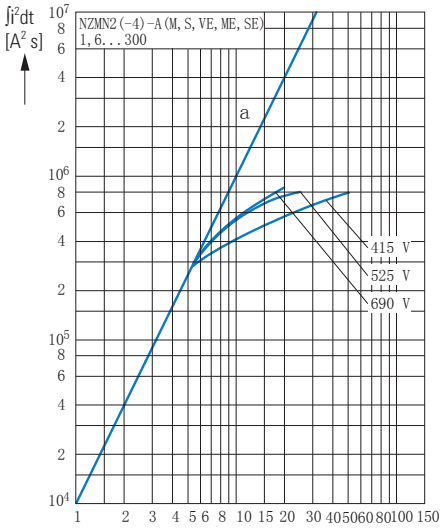
NZM2

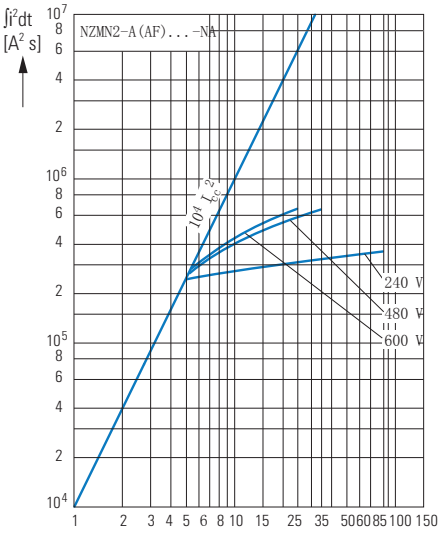
Let-through energy I^2t

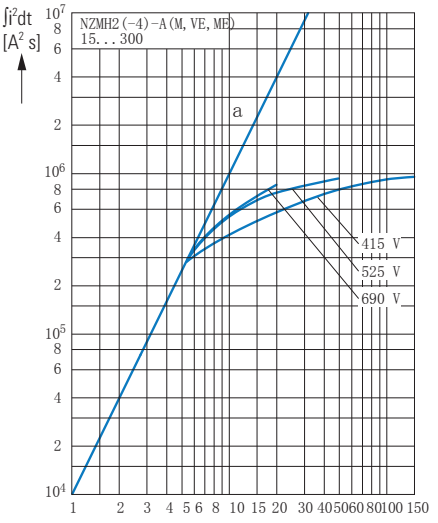


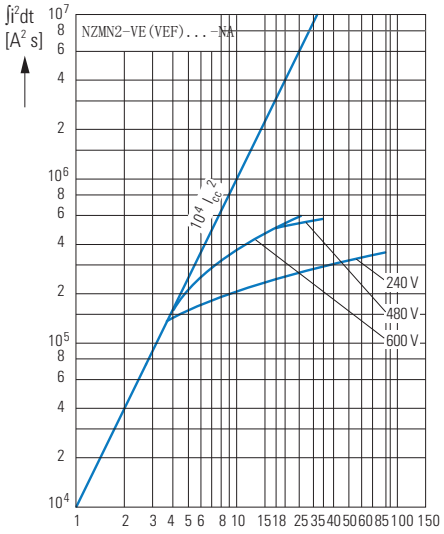


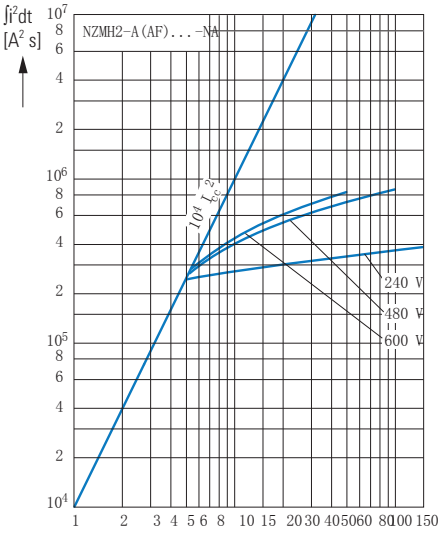


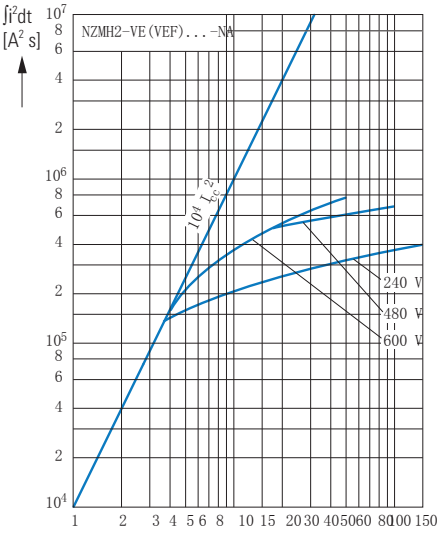










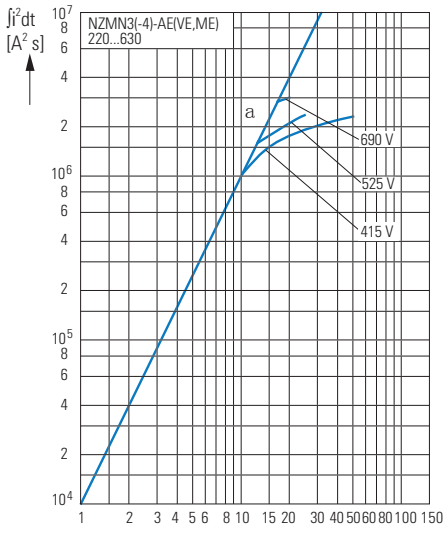


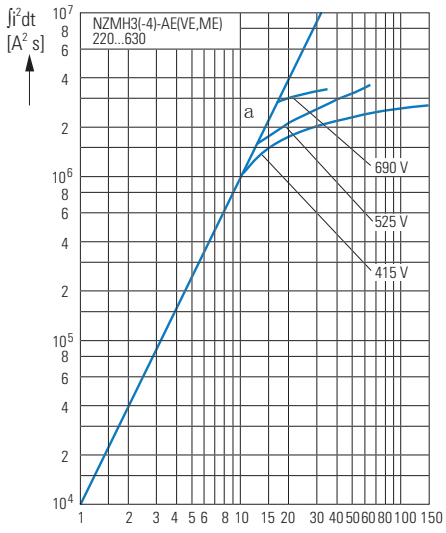
①1 half-cycle

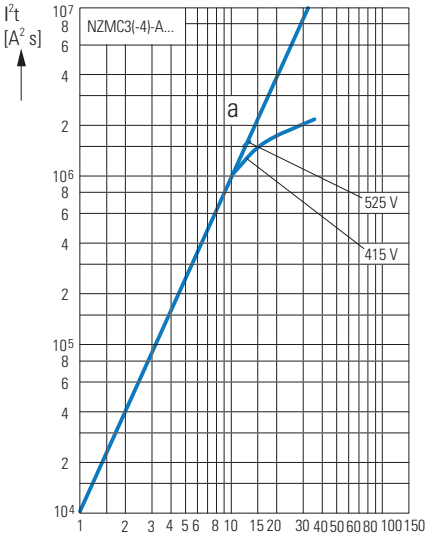
①1 half-cycle

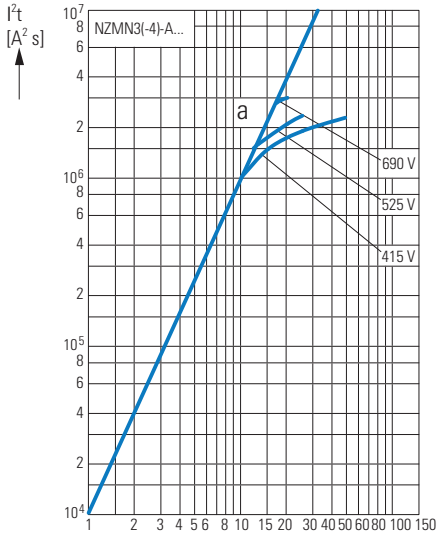
NZM3

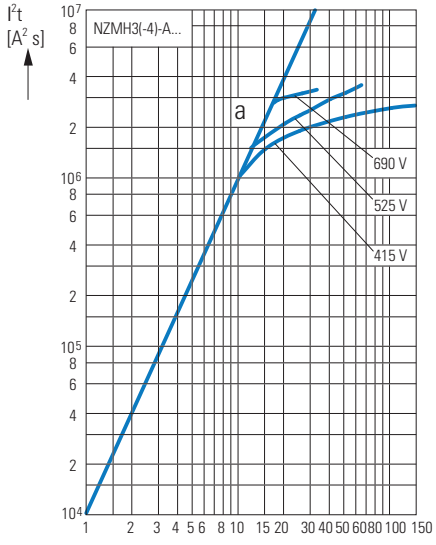
Let-through energy I^2t

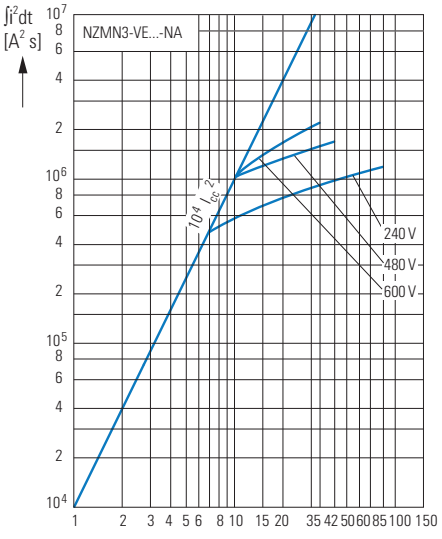


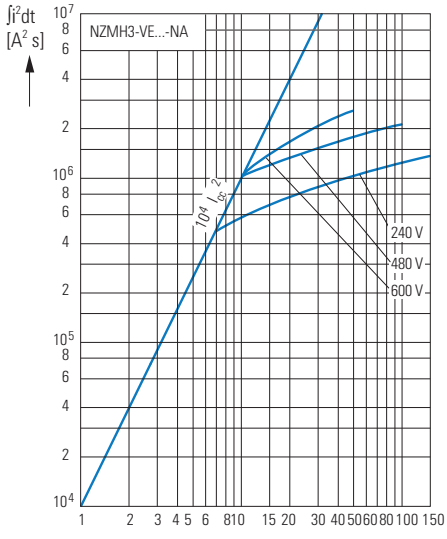










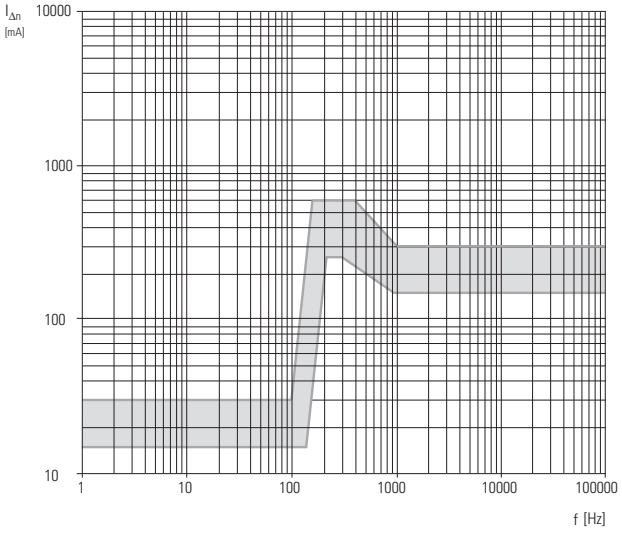


1

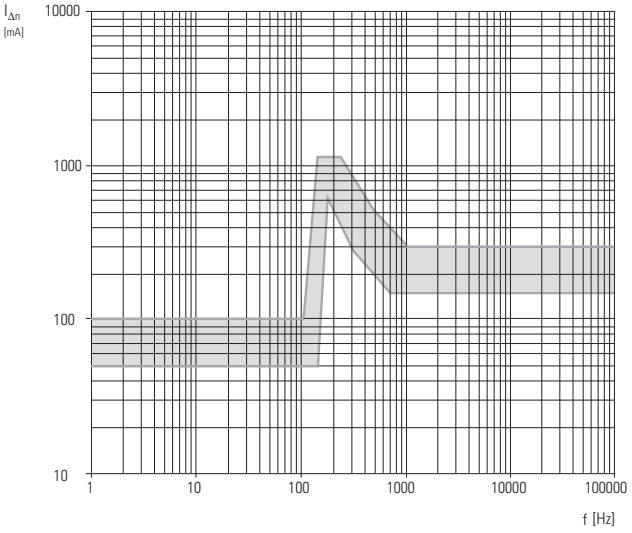
NZM2...XFIA

Frequency response

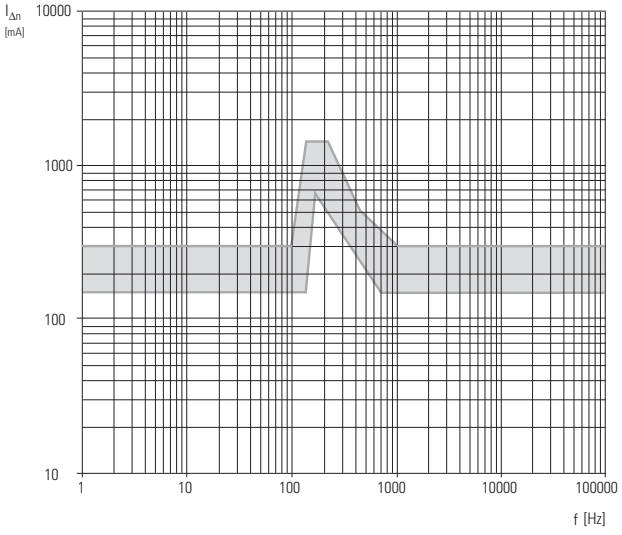
+NZM2-4-XFIA30
30 mA



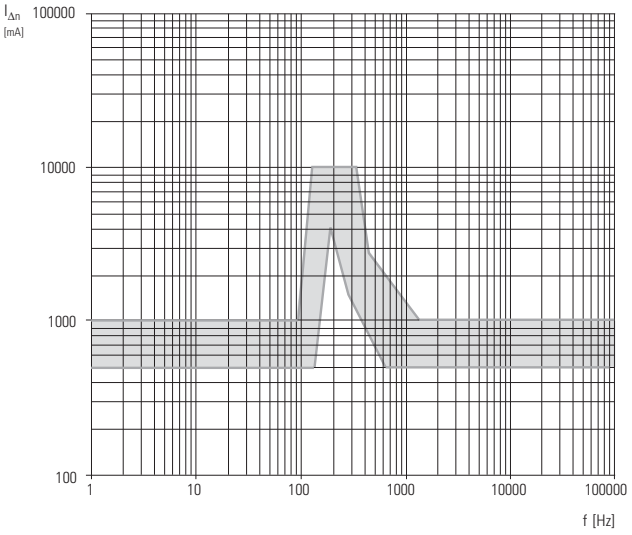
+NZM2-4-XFIA
100 mA



+NZM2-4-XFIA
300 mA

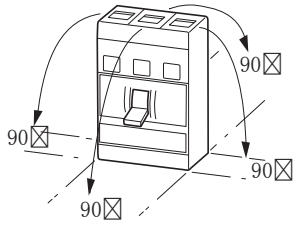


1000 mA



NZM, PN, N, NS

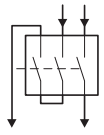
Technical data

General											
Standards			IEC/EN 60947 and VDE 0660								
Contact protection			Finger and back-of-hand proofto DIN EN 50274/VDE 0660 Part 514								
Climatic proofing			Damp heat, constant,to IEC 60068-2-78								
			Damp heat, cyclic,to IEC 60068-2-30								
Ambient temperature											
Storage		°C	-25...+70								
Operation		°C	-25...+70								
Mechanical shock resistance QEC/EN 60068-2-27)		g	20 (half-sinusoidal shock 20 ms)								
Safe isolation according to EN 61140											
Between auxiliary contacts and main contacts		VAC	500								
Between the auxiliary contacts		VAC	300								
Built-in position			Vertical and 900 in all directions								
											
			With residual-current release XFI: - NZM1, N1, NZM2, N2: vertical and 90° in all directions With plug-in adapter elements - NZM1, N1, NZM2, N2: vertical, 90° right/left With withdrawable unit: - NZM3, N3: vertical, 90° left - NZM4, N4: vertical With remote operator: - NZM2, N(S)2, NZM3, N(S)3, NZM4, N(S)4: vertical and 90° in all directions								
Direction of incoming supply			Any								
Degree of protection											
Device			In the area of the HMI devices: IP20 (basic degree of protection)								
Enclosure			With insulating surround: IP40 With door coupling rotary handle: IP66								
Terminal type			Tunnel terminal: IP10 Phase isolator and cable terminal: IP00								
			Rated uninterrupted current								
			max. 160 A			**max. 300 A**			**max. 630 A**		**max. 1600 A**	
			NZMB1	**NZMC1**	**NZMN1 NZMH1**	**NZMB2**	**NZMC2**	**NZMN2 NZMH2**	**NZMC3**	**NZMN3 NZMH3**	**NZMN4**	**NZMH4**
Circuit-breaker												
Rated impulse withstand voltage U_{imp}												
Main contacts		V	6000	6000	6000	8000	8000	8000	8000	8000	8000	8000
Auxiliary contacts		V	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Rated operating voltage	U_e	V AC	440	690	690	440	690	690	690	690	690	690
		V DC[1]	–	–	500	–	–	750	750	–	–	–
Overvoltage category/degree of pollution			III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V	690	690	690	690	690	1000	1000	1000	1000	1000
For use in IT electrical power networks		V	440	690	690	440	690	690	690	690	525	690[2]

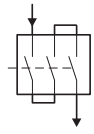
Notes

1) Details apply for 3 pole system protection circuit-breaker with thermomagnetic release NZMN(H)1(2)(3)-A... up to 500 A.
For rated operating voltage switching on 3 contacts the following applies
DC correction factor for instantaneous release
response value NZM1: 1.25, NZM2: 1.35, NZM3: 1.45
Setting for I_i at DC=setting I_i AC/correction factor DC

Switching of one pole via two series contacts



Switching of one pole via three series contacts



2)

2)>800 A=525

NZM...1, NZM...2, NZM...3, NZM...4

					Max. rated uninterrupted current 160 A			
					NZMB1	NZMC1	NZMN1	NZMH1
Switching capacity								
Rated short-circuit making capacity								
	240 V	I_{cm}	kA		63	121	187	220
	400/415 V	I_{cm}	kA		53	76	105	220
	440 V	I_{cm}	kA		53	63	74	74
	525 V	I_{cm}	kA		–	24	40	40
	690 V	I_{cm}	kA		–	14	17	17
Rated short-circuit breaking capacity Icy								
Icy according to IEC/EN 60947	240 V 50/60 Hz	I_{cu}	kA		30	55	85	100
Operating sequence O-t-CO	**400/415 V 50/60 Hz**	I_{cu}	kA		25	36	50	100
	440 V 50/60 H	I_{cu}	kA		25	30	35	70
	525 V 50/60 Hz	I_{cu}	kA		–	12	20	20
	690 V 50/60 Hz	I_{cu}	kA		–	8	10	10
	500 V DC[3]	I_{cu}	kA		–	–	15	30
	750 V DC[3]	I_{cu}	kA		–	–	–	–
Ins according to IEC/EN 60947	240 V 50/60 Hz	I_{cs}	kA		30	55	85	100
Operating sequence O-t-CO-t-CO	**400/415 V 50/60 Hz**	I_{cs}	kA		25	36	50	50
	440 V 50/60 Hz	I_{cs}	kA		18.5	22.5	35	35
	525 V 50/60 Hz	I_{cs}	kA		–	6	10	10
	690 V 50/60 Hz	I_{cs}	kA		–	4	7.5	7.5
Maximum LV h.b.c. fuses[6]		A gG/gL		NZM.1-...20...100: 20C NZM.1-...125,160: 315				
Rated short-time withstand current								
t=0.3 s		I_{cw}	kA		–	–	–	–
t=1s		I_{cw}	kA		–	–	–	–
Utilization category according to IEC/EN 60947-2					A	A	A	A
Rated making and breaking capacity								
Rated operational current	AC-1 **400/415 V 50/60 Hz**	I_e	A		**160**	**160**	**160**	**160**
	690 V 50/60 Hz	I_e	A		160	160	160	160
	AC-3 **400/415 V 50/60 Hz**	I_e	A		**160**	**160**	**160**	**160**
	690 V 50/60 Hz	I_e	A		160	160	160	160
	DC-1[3] 500 V DC	I_e	A		–	–	125	125
	750 V DC	I_e	A		–	–	–	–
	DC-3[3] 500 V DC	I_e	A		–	–	125	125
	750 V DC	I_e	A		–	–	–	–
Lifespan, mechanical		Operations			20000	20000	20000	20000
of which max. 50%trip by shunt/undervoltage release								
Lifespan, electrical								
	AC-1 **400/415 V 50/60 Hz**	Operations			**7500**	**7500**	**10000**	**10000**
	690 V 50/60 Hz	Operations			–	5000	7500	7500
	AC-3 **400/415 V 50/60 Hz**	Operations			**–**	**–**	**7500**	**7500**
	690 V 50/60 Hz	Operations			–	–	5000	5000
	DC-1[3] 500 V DC	Operations			–	–	10000	10000
	750 V DC	Operations			–	–	–	–
	DC-3[3] 500 V DC	Operations			–	–	5000	5000
	750 V DC	Operations			–	–	–	–
Max. operating frequency				Ops/h	120	120	120	120
Heat dissipation per pole at I_{uc}				W	16.7	16.7	16.7	16.7
Total opening delay on short-circuit				mS	< 10	< 10	< 10	< 10
Technical data that diverge from products for the IEC market								
Switching capacity of NA switch (UL489, CSA 22.2 No. 5-09)								
Short-circuit current rating (SCCR)								
	240 V 60 Hz			kA	35	–	85	–
	480 V 60 Hz			kA	25[1]	–	35[1]	–
	600 V 60 Hz			kA	–	–	–	–

Notes

1) Switching capacity of NA switches with NZM...1-...(C)NA: 480 Y/277 V
2) For rated operational current AC-3 with NZM4: 400 V: max. 650 kW; 690 V: max. 600 kW
3) DC data apply only for NZM...A... with thermomagnetic release
4) For switching capacity NZM2...NA: 600 V/347 V
5) For thermal losses per pole the specification refers to the maximum rated operational current of the construction size
6) Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit-breaker
7)For higher switching capacity please inquire

NZM...1, NZM...2, NZM...3, NZM...4

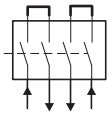
Max. rated uninterrupted current 300 A				Max. rated uninterrupted current 630 A			Max. rated uninterrupted current 1600 A	
NZMB2	**NZMC2**	**NZMN2**	**NZMH2**	**NZMC3**	**NZMN3**	**NZMH3**	**NZMN4**	**NZMH4**
63	121	187	330	121	187	330	105	275
53	76	105	330	76	105	330	105	187
53	63	74	286	63	74	286	74	187
–	24	53	105	24	53	143	53	143
–	9	40	40	14	40	74	40	105
30	55	85	150	55	85	150	50	125
25	36	50	150	36	50	150	50	85
25	30	35	130	30	35	130	35	85[7)]
–	12	25	50	12	25	65	25	65
–	8	20	20	8	20	35	20	50
–	–	30	60	–	30	70	–	–
–	–	30	60	–	30	70	–	–
30	55	85	150	55	85	150	37	63
25	36	50	150	36	50	150	37	43
18.5	22.5	35	130	22.5	35	130	26	43
–	6	25	37.5	9	13	33	19	49
–	4	5	5	4	5	9	15	37
355	355	355	355	NZMC3...500: 630	NZMH3-...250,	NZMH3-...250,	NZMN4-…630…1250: 2 x 630	
					400: 400	400: 400	NZMN4-…1600: 2 x 800	
					NZMH3...500: 630	NZMH3...500: 630		
					NZMH3...630: 630	NZMH3...630: 630		
–	–	1.9	1.9	3.3	3.3	3.3	19.2	19.2
–	–	1.9	1.9	3.3	3.3	3.3	19.2	19.2
A	A	A	A	A	A	A	B	B
300	300	300	300	500	630	630	1600	1600
250	250	250	250	500	630	630	1600	1600
300	300	300	300	450	450	450	1600[2)]	1600[2)]
250	250	250	250	450	450	450	1600[2)]	1600[2)]
–	–	250	250	–	500	500	–	–
–	–	250	250	–	500	500	–	–
–	–	250	250	–	500	500	–	–
–	–	250	250	–	500	500	–	–
20000	20000	20000	20000	15000	15000	15000	10000	10000
7500	7500	10000	10000	5000	5000	5000	3000	3000
–	7500	7500	7500	3000	3000	3000	2000	2000
–	–	6500	6500	2000	2000	2000	2000	2000
–	5000	5000	5000	2000	2000	2000	1000	1000
–	–	7500	7500	–	5000	5000	–	–
–	–	7500	7500	–	5000	5000	–	–
–	–	3000	3000	–	2000	2000	–	–
–	–	3000	3000	–	2000	2000	–	–
120	120	120	120	60	60	60	60	60
19	19	19	19	31	31	31	97	97
< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 25 ≤ 415 V; < 35 > 415 V	< 25 ≤ 415 V; < 35 > 415 V
35	–	85	150	–	85	150	85	125
25	–	35	100	–	42	100	42	85
18[4)]	–	25[4)]	50[4)]	–	35	50	35	50

1

NZMH...S1, N...-4...S1-DC

Circuit-breakers for 7000 V AC			NZMH2...S1 max. 300 A	NZMH3...S1 max. 630 A	NZMH4...S1 max.1600 A
Rated operating voltage	U_e	V AC	1000	1000	1000
Rated uninterrupted current	I_u	A	300/50 °C	630/50 °C	1600/50 °C
Rated operational current					
AC-1			300	630	1600
Rated short-circuit making capacity					
1000 V 50/60 Hz	I_{cm}	kA	17	17	40
Rated short-circuit breaking capacity I_{cn}					
I_{cu} according to IEC/EN 60947	I_{cu}	kA	10	15	20
Operating sequence O-t-CO					
I_{cs} according to IEC/EN 60947	I_{cs}	kA	3	10	15
Operating sequence O-t-CO-t-CO					
Utility category			A	A	A/B
Maximum operating frequency		Ops/h	120	60	60
Durability					
Mechanical(of which max. 50% trip by shunt/ undervoltage release)		Operations	20000	15000	10000
Electrical, AC-1 1000 V		Operations	3000	1000	500
Rated insulation voltage	U_i	V AC	1000	1000	1000
For use in IT electrical power networks			–	–	–
			N2-4...S1-DC max. 200 A	**N3-4...S1-DC max. 500 A**	**N4-4...S1-DC max. 1400 A**
Rated operating voltage	U_e	V DC	1000	1000	1000
Rated uninterrupted current withterminaljumpers	I_u	A	200/65 °C	500/65 °C	1400/65 °C
Rated operational current	I_e		200 (DC 22-B)	500 (DC 22-B)	1400 (DC 21-B)
Rated short-time withstand current t =0.1 s	I_{cw}	kA	3	6	25
Rated conditional short-circuit current	I_q	kA	15	15	–
With back-up fuse		A9R	200	500	–
Maximum operating frequency		Ops/h	120	60	60
Durability					
Mechanical (of which max. 50%trip by shunt/ undervoltage release)		Operations	20000	15000	10000
Electrical, 1000 V DC		Operations	2500 (DC 22-B)	1000 (DC 22-B)	500 (DC 21-B)
Rated insulation voltage	U_i	V DC	1250	1250	1250
For use in IT electrical power networks		V DC	1000	1000	1000

Notes NZM...S1 and N...S1⎓DC can not be combined with withdrawable units and/or connection on rear.
Can not be combined with early-make auxiliary contacts NZM⎓~.XHIV or boxterminal NZM2-4-XKC at U;>1000 V DC
Terminal type N...S1-DC:
for 2 pole switches series connection of two poles each is required. See jumper kit NZM...-4-XKV2P



PN..., N...

			PN1/N1 max. 160 A	PN2/N2 max. 250 A	PN3/N3 max. 630 A	N4 max. 1600 A
Switch-disconnectors						
Rated impulse withstand voltage Uimp						
Main contacts		V	6000	8000	8000	8000
Auxiliary contacts		V	6000	6000	6000	6000
Rated operating voltage AC	U_e	V AC	690	690	690	690
(40-60 Hz)						
Max. rated uninterrupted current						
IEC/EN 60947-3	I_u	A	160	250	630	1600
Overvoltage category/degree of pollution			III/3	III/3	III/3	III/3
Rated insulation voltage	U_i	V AC	690	690	1000	1000
For use in IT electrical power networks		V	690	690	690	525
Switching capacity						
Rated short-circuit making capacity	I_{cm}	kA	2.8	5.5	25	53
Rated short-time withstand current						
t=0.3 s	I_{cw}	kA	2	3.5[1)]	12	25
t=1s	I_{cw}	kA	2	3.5[1)]	12	25
Rated conditional short-circuit current Iq						
With back-upfuse		A gG/gL	PN1(N1)-63…125: 125 PN1(N1)-160: 160	PN2(N2)-160…250: 250	PN3(N3)-400…630: 630	N4-630…1600: 2 x 800
400/415 V		kA	100	100	100	100
690 V		kA	80	80	80	80
With downstream fuse		A gG/gL	PN1(N1)-63…125: 125 PN1(N1)-160: 160	PN2(N2)-160…250: 250	PN3(N3)-400…630: 630	N4-630…1600: 2 x 800
400/415 V		kA	100	100	100	100
690 V		kA	10	80	80	80
Rated making and breaking capacity						
Rated operational current						
AC-22/23A						
415 V	I_e	A	160	250	630	1600
690 V	I_e	A	160	250	630	1600
Lifespan, mechanical	Operations		20000	20000	15000	10000
Maximum operating frequency		Ops/h	120	120	60	60
Lifespan, electrical according to						
IEC/EN 60947-4-1 Annex B						
AC-1						
400/415 V	Operations		10000	10000[4)]	5000	3000
690 V	Operations		7500	7500[4)]	3000	2000
AC-3						
400/415 V	Operations		7500	7500[5)]	3000	2000
690 V	Operations		5000	5000[3)5)]	2000	1000
Heat dissipation per pole at I}z}		W	12.7	16	40	97

Notes

1)The rated short-time withstand currentfor PN2/N2 in conjunction with residual-current release NZM2-4-XFL..
I_{cw}=1.5 kA

2) For thermal losses per pole the specification refers to the maximum rated operational current of the construction size.

3) For the electrical life at AC-3 for PN2/N2 the following applies: 690 V: max. 160 kW

4) For 4 pole switch-disconnectors the following applies: 400/415 V 7500 switching operations; 690 V 5000 switching operations

5) For 4 pole switch-disconnectors the following applies: 400/415 V 6000 switching operations; 690 V 4000 switching operations

NS...-...NA

					NS1-...-NA max. 125A	NS2-..: NA max. 250A	NS3-...-NA max. 600A	NS4-..: NA max.1200A
Molded Case Switch								
Rated peak withstand current			U_{imp}					
Main contacts				V	6000	8000	8000	8000
Auxiliary contacts				V	6000	6000	6000	6000
Rated operating voltage			U_e	VAC	690	690	690	690
Max. rated uninterrupted current								
IEC/EN 60947-2 Annex L			I_n	A	125	250	600	1200
UL489/CSA 22.2 No. 5.1				A	125	250	600	1200
Overvoltage category/pollution degree					III/3	III/3	III/3	III/3
Rated insulation voltage			U_{imp}	V	690	1000	1000	1000
Switching capacity according to UL 489, CSA 22.2 No. 5.1								
		240 V 60 Hz		KA	85	150	150	85
		480 V 60 Hz		KA	35	100	100	65
		600 V 60 Hz		KA	–	50	50	42
Switching capacity divergent from products for North America.								
Rated short-circuit making capacity		240 V 50/60 Hz	I_{cm}	KA	187	330	330	187
		400/415 V 50/60 Hz	I_{cm}	KA	105	330	330	154
		440 V 50/60 Hz	I_{cm}	KA	74	286	286	143
		525 V 50/60 Hz	I_{cm}	KA	53	105	143	84
		690 V 50/60 Hz	I_{cm}	KA	17	53	74	74
Rated short-circuit breaking capacity	I_{cu} to	240 V 50/60 Hz	I_{cu}	KA	85	150	150	85
$L_{cc}=L_{uc}$	IEC/EN 60947	400/415 V 50/60 Hz	I_{cu}	KA	50	150	150	70
To IEC/EN 60947-2 Annex L	test cycle	440 V 50/60 Hz	I_{cu}	KA	35	130	130	65
	O-t-CO	525 V 50/60 Hz	I_{cu}	KA	20	50	85	40
		690 V 50/60 Hz	I_{cu}	KA	10	20	35	35
	I_{cs}Saccording	400/415 V 50/60 Hz	I_{cs}	KA	85	150	150	43
	to	240 V 50/60 Hz	I_{cs}	KA	50	150	150	35
	IEC/EN 60947	440 V 50/60 Hz	I_{cs}	KA	35	130	130	33
	test cycle	525 V 50/60 Hz	I_{cs}	KA	10	37.5	33	20
	O-t-CO-t-CO	690 V 50/60 Hz	I_{cs}	KA	7.5	5	9	18
Lifespan, mechanical			Operations		20000	20000	15000	10000
(of which max. 50%trip by shunt/undervoltage release)								
Maximum operating frequency			ops./h		120	120	60	60
Lifespan, electrical	AC-1	400/415 V 50/60	Operations		10000	10000	5000	3000
		690 V 50/60 Hz	Operations		7500	7500	3000	2000
	AC-3	400/415 V 50/60	Operations		7500	6500	2000	2000
		690V 50/60 Hz	Operations		5000	5000	2000	1000
Heat dissipation per pole at I_u [1)]			w		8.7	19	40	97
Total downtime on short-circuit			ms		< 10	< 10	< 10	<25 ≦ 415V <35 > 415V

Notes 1)Figures apply to the maximum rated operational current of the construction size

NZM1, NZM2, NZM3...-NA

Circuit-breaker		Volts AC	Threshold current			Intermediate current			High interrupting capacity		
Part no.	60Hz amps (A)	60Hz (V)	rms sym (kA)	Maximum Peak (kA)	I^2dt (kA^2s)	rms sym (kA)	Maximum Peak (kA)	I^2dt (kA^2s)	rms sym (kA)	Maximum Peak (kA)	I^2dt (kA^2s)
NZM B1	125 A	240	8.125	7.4	0.18	22	13.53	0.33	35	16.78	0.35
A.../AF...NA		480	8.125	9.22	0.38	18	15.16	0.67	25	26.55	0.78
NZM N1-	125 A	240	8.125	7.4	0.18	50	18.53	0.38	85	19.16	0.36
A.../AF...NA		480	8.125	9.22	0.38	22	18.55	0.97	35	20.58	1.02
NZMB2-	250 A	240	16.25	13.00	0.4	22	14.5	0.6	35	15.5	0.4
A.../AF...NA		480	15	14	0.6	22	13.5	0.45	25	16.5	0.6
		600	10	12	0.5	14	14.5	0.75	18	15.5	0.75
NZMN2-	250 A	240	16.25	13	0.4	50	17	0.45	85	19.5	0.45
A.../AF...NA		480	16.25	13.5	0.6	22	14.5	0.6	35	20	0.65
		600	15	14.5	0.7	22	16.5	0.8	25	17	0.75
NZMN2-	250 A	240	16.25	12	0.45	50	18	0.4	85	19.5	0.4
VE(F)-NA		480	16.25	14.5	0.5	22	18	0.65	35	20	0.6
		600	15	14.5	0.6	22	17	0.75	25	18	0.65
NZMH2-	125 A	240	8.125	9	0.3	100	19	0.35	200	21.5	0.35
A.../AF...NA		480	8.125	9	0.35	55	23	0.7	150	29	0.85
		600	8.125	10	0.4	42	22.5	0.7	55	26	0.8
NZMH2-	250 A	240	16.25	13	0.4	100	20.5	0.4	150	20	0.4
A... /AF...NA		480	16.25	13.5	0.5	65	24	0.9	100	27	0.8
		600	16.25	13	0.6	30	20	0.7	50	25	0.9
NZMH2-	250 A	240	16.25	11.5	0.4	100	18.5	0.3	150	21	0.4
VE.../VEF...NA		480	16.25	14.5	0.5	65	24	0.6	100	27	0.7
		600	16.25	14.5	0.5	30	20	0.6	50	25	0.8
NZMN3-	250 A	39	24.5	1	-	-	-	85	33.5	1.1	240
VE...NA		25	27	1.8	-	-	-	42	35	1.8	480
		20	25	1.8	-	-	-	35	34	2.6	600
NZMH3-	600 A	240	39	45	4.5	100	35	2	150	40	2.5
VE...NA		480	39	35	2.5	65	39	3	100	47	3
		600	30	31	2.4	42	37	3	50	42	2.8

	Part no.	Weight kg
Circuit-breakers		
	NZM...1-...	1.046
	NZM...1-4...	1.325
	NZM...2-...	2.345
	NZM...2-4...	3.5
	NZM...3-...	6.34
	NZM...3-4...	8.4
	NZM...4-...	21
	NZM...4-4...	27
Plug-in adapter elements		
	+NZM2-XSV	4.7
	+NZM2-4-XSV	5 .9
Withdrawable units		
	+NZM3-XAV	21
	+NZM3-4-XAV	27
	+NZM4-XAV	52
	+NZM4-4-XAV	65

Part no.	Weight kg
Switch-disconnectors	
PN1-.. , N1-...	0.926
PN1-4-..., N1-4-...	1.325
PN2-..., N2-...	2.15
PN2-4-..., N2-4-...	2.65
PN3-...,N3-...	5.7
PN3-4-..., N3-4...	7.1
N4-...	17
N4-4-	22

1

NZM...A(F), NZM...M(S)

Device part no	Release type	Response time of the overload release at temperatures deviating from the reference temperatures Temperature compensation coefficient 20 °C	30 °C	40 °C	50 °C	60 °C	65 °C	70 °C
Thermomagnetic release (TM)								
System protection		System protection (reference temperature 40 °C)						
NZM…1(-4)-A(F)15…80(-NA)	TM	1.14	1.07	1	0.93	0.86	0.83	0.79
NZM…1(-4)-A(F)90…125(-NA)	TM	1.14	1.07	1	0.93	0.86	0.83	0.79
NZM…1(-4)-A160	TM	1.08	1.04	1	0.96	0.92	0.90	0.88
NZM…1-A20…125-SVE	TM with SVE	1.14	1.07	1	0.93	0.86	0.83	0.79
NZM…2(-4)-A(F)15…200(-NA)	TM	1.04	1.02	1	0.98	0.96	0.95	0.94
NZM…2(-4)-A(F)250(-NA)	TM	1.04	1.02	1	0.98	0.96	0.95	0.94
NZM…2(-4)-A20…200-SVE	TM with SVE	1.04	1.02	1	0.98	0.96	0.95	0.94
NZM…2(-4)-A250-SVE	TM with SVE	1.04	1.02	1	0.98	0.96	0.95	0.94
NZM…3(-4)A-250…500	TM	1.12	1.06	1	0.94	0.88	0.85	0.82
NZM…3(-4)A-250…500	TM with XAV	1.06	1	0.94	0.88	0.82	0.79	0.76
Short-circuit/motor protection		Motor protection(reference temperature 20 0C)						
NZM…1-M(S)40…80(-CNA)	TM	1	0.98	0.95	0.93	0.90	0.89	0.88
NZM…1-M(S)100(-CNA)	TM	1	0.98	0.95	0.93	0.90	0.89	0.88
NZM…1-M(S)40…100-SVE	TM with SVE	1	0.98	0.95	0.93	0.90	0.89	0.88
NZM…2-M(S)20…200(-CNA)	TM	1	0.98	0.96	0.94	0.92	0.91	0.90
NZM…2-M(S)20…200-SVE	TM with SVE	1	0.98	0.96	0.94	0.92	0.91	0.90
NZM…3-S250…500	TM with/without XAV	1	1	1	1	1	1	1

Notes

If temperatures deviate from the reference temperature, a slight change of the overload protection properties occurs. To determine the response time from the tripping characteristics, the temperature compensation coefficients listed in the table must be considered.

Example:

An NZM1-A100 is calibrated for a reference temperature of 40 °C.

What happens when it is operated at an ambient temperature of 60 °C?

At 60 0C, the temperature compensation coefficient of 0.86 results in a reduced operating current of I_r=100 A x 0.86 = 86 A. In other words at an ambient temperature of 60 0C the NZM1-A100 trips as if it were set to 86 A.

Device part no	Release type	Response time of the overload release at temperatures deviating from the reference temperatures Temperature compensation coefficient 20 °C	30 °C	40 °C	50 °C	60 °C	65 °C	70 °C
Thermomagnetic release (TM)								
System protection								
NZM…1(-4)-A(F)15…80(-NA)	TM	1	1	1	1	1	1	1
NZM…1(-4)-A(F)90…125(-NA)	TM	1	1	1	1	0.86	0.83	0.8
NZM…1(-4)-A160	TM	1	1	1	0.95	0.9	0.85	0.8
NZM…1-A20…125-SVE	TM with SVE	1	1	1	1	1	1	1
NZM…2(-4)-A(F)15…200(-NA)	TM	1	0.92	0.87	0.81	–	–	–
NZM…2(-4)-A(F)250(-NA)	TM	1	1	1	1	1	1	1
NZM…2(-4)-A20…200-SVE	TM with SVE	1	1	1	1	0.9	0.85	0.8
NZM…2(-4)-A250-SVE	TM with SVE	1	1	1	1	1	1	1
NZM…3(-4)A-250…500	TM	1	0.97	0.92	0.87	0.81	–	–
NZM…3(-4)A-250…500	TM with XAV	1	1	1	0.94	0.88	0.85	0.82
Short-circuit/motor protection		1	1	0.94	0.88	0.82	0.79	0.76
NZM…1-M(S)40…80(-CNA)	TM	Motor protection (reference temperature 20 °C)						
NZM…1-M(S)100(-CNA)	TM	1	1	1	1	1	1	1
NZM…1-M(S)40…100-SVE	TM with SVE	1	1	1	1	0.86	0.83	0.8
NZM…2-M(S)20…200(-CNA)	TM	1	0.92	0.87	0.81	–	–	–
NZM…2-M(S)20…200-SVE	TM with SVE	1	1	1	1	1	1	1
NZM…3-S250…500		1	1	1	1	1	1	1
NZM…3-S250…500	TM with/without XAV	1	1	1	0.94	0.88	0.85	0.82
NZM…3-S250…500	TM	1	1	1	0.94	0.88	0.85	0.82
NZM…3-S250…400	TM with/without XAV	1	1	1	1	1	1	1
		1	1	1	1	1	0.97	0.94

Notes

In determining the maximum permissible current loads at different ambient temperatures, the derating coefficients listed inthetable must be considered.

Example:

An NZM2-A250 should be operated at an ambient airtemperature of 65 °C.

How high is the permissible rated operational current I_e?

At 65 0C the derating coefficient is 0.85, i.e.I_e=250Ax0.85=212.5 A.

At an ambient temperature of 65°C the NZM2-A250 can therefore be operated at up to I_e=212.5 A.

NZM1, NZM2, NZM3, NZM4

Device part no	Release type	Reduction of the rated operational current (derating) under particular ambient conditions(according to IEC 947) berating coefficient 20 °C	30 °C	40 °C	50 °C	60 °C	65 °C	70 °C
Electronic release (E)								
System protection								
NZM...31-41-AEIF1250...500(-NA)	E	1	1	1	1	1	1	1
NZM...31-41-AEIF1550...630(-NA)	E	1	1	1	1	0.9	0.85	0.8
NZM...31-41-AE250...400+XAV	E with XAV	1	1	1	1	1	1	1
NZM...31-41-AE630+XAV	E with XAV	0.96	0.92	0.87	0.83	0.78	0.75	0.73
NZM...41-41-AEIF1600...1250(-NA)	E	1	1	1	1	1	1	1
NZM...41-41-AE1600	E	1	1	1	1	0.87	0.85	0.82
NZM...41-41-AE630...1250+XAV	E with XAV	1	1	1	1	1	1	1
NZM...41-41-AE1600+XAV	E with XAV	1	0.98	0.93	0.89	0.85	0.83	0.8
Selectivity and generator protection								
NZM...21-41-VEIF1100...175(-NA) (-S1)	E	1	1	1	1	1	1	1
NZM...21-41-VEIF1200...250(-NA) (-S1)	E	1	1	1	1	0.9	0.85	0.8
NZM...21-41-VE100...160+XSV	E with XAVE	1	1	1	1	1	1	1
NZM...21-41-VE250+XSV	E with XAV	1	1	1	0.94	0.88	0.84	0.81
NZM...31-41-VEIF1250...500(-NA)	E	1	1	1	1	1	1	1
NZM...31-41-VEIF1550...630(-NA)	E	1	1	1	1	0.9	0.85	0.8
NZM...31-41-VE250...400+XAV	E with XAV	1	1	1	1	1	1	1
NZM...31-41-VE630+XAV	E with XAV	0.96	0.92	0.87	0.83	0.78	0.75	0.73
NZM...41-41-VEIF1600...1250(–NA) (-S1)	E	1	1	1	1	1	1	1
NZM...41-41-VE1600 (-S1)	E	1	1	1	1	0.87	0.85	0.82
NZM...41-41-VE630...1250+XAV	E with XAV	1	1	1	1	1	1	1
NZM...41-41-VE1600+XAV	E with XAV	1	0.98	0.93	0.89	0.85	0.83	0.8
Motor protection								
NZM...2-ME(SE)90...140(-CNA)	E	1	1	1	1	1	1	1
NZM...2-ME(SE)220(-CNA)	E	1	1	1	1	0.9	0.85	0.8
NZM...2-ME90...140+XSV	E with XAV	1	1	1	1	1	1	1
NZM...2-ME220+XSV	E with XAV	1	1	1	0.94	0.88	0.84	0.81
NZM...3-ME(SE)220...350(-CNA) (-S1)	E	1	1	1	1	1	1	1
NZM...3-ME(SE)450(-CNA) (-S1)	E	1	1	1	1	1	1	1
NZM...3-M E220...350+XAV	E with XAV	1	1	1	1	1	1	1
NZM...3-ME450+XAV	E with XAV	0.96	0.92	0.87	0.83	0.78	0.75	0.73
NZM...4-ME550...875 (-S1)	E	1	1	1	1	1	1	1
NZM...4-ME1400 (-S1)	E	1	1	1	1	1	1	1
NZM...4-M E550...875+XAV	E with XAV	1	1	1	1	1	1	1
NZM...4-ME1400+XAV	E with XAV	1	0.98	0.93	0.89	0.85	0.83	0.8
Switch-disconnectors/Molded Case Switch								
N (-4)-63, PN1(-4)-63, NS1-63-NA		1	1	1	1	1	1	1
N 1(-4)-100...125, PN1(-4)-100...125, NS1-100...125-NA		1	1	1	1	0.86	0.83	0.8
N (-4)–160, PN1(-4)–160		1	1	1	0.95	0.9	0.85	0.8
N2(-4)–160...200, PN2(-4)-160...200, NS2-160...200-NA		1	1	1	1	1	1	1
N21-4)-250, PN2(-4)-200, NS2-250-NA		1	1	1	1	0.9	0.85	0.8
N2(-4)–160...200+XSV		1	1	1	1	1	1	1
N2(-4)-250, NS2-250-NA		1	0.97	0.92	0.87	0.81	1	1
N3(-4)-400. PN3(-4)-400. NS3-400-NA		1	1	1	1	1	1	1
N3(-4)-630, PN3(-4)-630, NS3-600-NA		1	1	1	0.94	0.89	0.86	0.84
N3(-4)-400+XAV		1	1	1	1	1	1	1
N3(-4)-630+XAV		0.96	0.92	0.87	0.83	0.78	0.75	0.73
N4(-4)-630...1250, NS4-800...1200-NA		1	1	1	1	1	1	1
N4(-4)–1600		1	1	1	1	0.87	0.85	0.82
N4(-4)-630...1250+XAV		1	1	1	1	1	1	1
N4(-4)–1600+XAV		1	0.98	0.93	0.89	0.85	0.83	0.8
Multi-function component adapters								
NZM...3-630...+NZM3-XAD630	with XAD	1	0.96	0.92	0.88	0.84	0.82	0.8

Notes

In determining the maximum permissible current loads at different ambient temperatures, the derating coefficients listed in the table must be considered.

Example:

An NZM2-A250 should be operated at an ambient air temperature of 65 °C.

How high is the permissible rated operational current I_e?

At 65 °C the derating coefficient is 0.85, this means I_e=250Ax0.85=212.5 A.

The NZM2-A250 may be operated at an ambient temperature of 65 °C with a maximum I_e=212.5 A.

NZM1, NZM2, NZM3, NZM4

NZM up to 500 A with thermomagnetic release(3 and 4 pole)

	Fixed mounted											
	NZM1-											
	A...(-NA)											
Ln[A]	P	B	P	B	P	B	P	B	P	B	P	B
	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]
1.2	–	–	–	–	–	–	1.8	413000	–	–	–	–
1.6	–	–	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	0.8	66000	–	–	–	–
2.4	–	–	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	1.8	66000	–	–	–	–
5	–	–	–	–	–	–	0.7	9180	–	–	–	–
8	–	–	–	–	–	–	1.8	9180	–	–	–	–
12	–	–	–	–	–	–	0.7	1670	–	–	–	–
15	–	–	–	–	5.5	8180	–	–	–	–	–	–
18	–	–	–	–	–	–	1.6	1670	–	–	–	–
20	9.8	8180	–	–	9.8	8180	–	–	–	–	–	–
25	8.8	4680	–	–	8.8	4680	–	–	–	–	–	–
26	–	–	–	–	–	–	2.0	1050	–	–	–	–
30	–	–	–	–	8.2	3030	–	–	–	–	–	–
32	9.3	3030	–	–	–	–	–	–	–	–	–	–
33	–	–	–	–	–	–	3.4	1050	–	–	–	–
35	–	–	–	–	8.2	2220	–	–	–	–	–	–
40	10.7	2220	13.5	2810	10.7	2220	2.7	562	–	–	–	–
45	–	–	–	–	10.7	1760	–	–	–	–	–	–
50	13.2	1760	14.1	1880	13.2	1760	4.2	562	–	–	–	–
60	–	–	–	–	12.9	1190	–	–	–	–	–	–
63	14.2	1190	14.9	1250	–	–	6.7	562	6.7	562	6	380
70	–	–	–	–	12.5	850	–	–	–	–	–	–
80	16.3	850	20.8	1085	16.3	850	10.8	562	–	–	–	–
90	–	–	–	–	17.7	730	–	–	–	–	–	–
100	21.9	730	23.9	795	21.9	730	16.9	562	16.9	562	11.4	380
110	–	–	–	–	20.7	570	–	–	–	–	–	–
125	26.7	570	–	–	26.7	570	–	–	26.3	562	17.8	380
150	–	–	–	–	–	–	–	–	–	–	–	–
160	36.1	470	–	–	–	–	–	–	–	–	29.2	380
175	–	–	–	–	–	–	–	–	–	–	–	–
200	–	–	–	–	–	–	–	–	–	–	–	–
225	–	–	–	–	–	–	–	–	–	–	–	–
250	–	–	–	–	–	–	–	–	–	–	–	–
300	–	–	–	–	–	–	–	–	–	–	–	–
400												
500												

NZM2/3/4 with electronic release			**N2/3/4, PN2/3**				**Additional plug-in units**		
	Fixed mounted		**Fixed mounted**		**N2-4-..: S1-DC**			**NZM1-...**	
	NZM2-...		**N2-...**		IN+L1+L2+L31		Ln[A]	P	B
			PN2-...					[W]	[µohms]
Ln[A]	P	B	P	B	P	B	125	14	300
	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]			
200	–	–	–	–	44	275		**NZM2-...**	
250	52	275	48	256	–	–	Ln[A]	P	B
								[W]	[µohms]
	NZM3-...		**NZM3-...**		**NZM3-...**		250	19	100
Ln[A]	P	B	P	B	P	B			
	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	**Additional withdrawahle units**		
450	–	–	–	–	122	150		**NZM3-...**	
630	119	100	107	90	–	–	Ln[A]	P	B
								[W]	[µohms]
	NZM4-...		**NZM4-...**		**NZM4-...**		630	83	70
Ln[A]	P	B	P	B	P	B		**NZM4-...**	
	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	Ln[A]	P	B
1250	–	–	–	–	231	37		[W]	[µohms]
1400	–	–	–	–	290	37	1600	77	10
1400	52	275	284	37	–	–			

NZM1, NZM2, NZM3, NZM4

Fixed mountec													
NZM2-													
A...(-NA)													
P	B	P	B	P	B	P	B	P	B	P	B	P	B
[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]	[W]	[µohms]
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	5.8	750000	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	7.8	450000	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	0.3	4600	–	–	–	–	–	–
–	–	–	–	–	–	0.9	4600	–	–	–	–	–	–
–	–	–	–	–	–	0.5	1200	–	–	–	–	–	–
–	–	–	–	2.9	4250	–	–	–	–	–	–	–	–
–	–	–	–	–	–	1.2	1200	–	–	–	–	–	–
5.1	4250	5.1	4250	5.1	4250	–	–	–	–	–	–	–	–
8	4250	8	4250	5.9	3140	–	–	–	–	–	–	–	–
–	–	–	–	–	–	1.6	780	–	–	–	–	–	–
–	–	–	–	8.5	3140	–	–	–	–	–	–	–	–
9.6	3140	9.6	3140	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	2.5	780	–	–	–	–	–	–
–	–	–	–	10.3	2800	–	–	–	–	–	–	–	–
13.4	2800	13.4	2800	13.4	2800	1.5	317	–	–	–	–	–	–
–	–	–	–	13.8	2270	–	–	–	–	–	–	–	–
17	2270	17	2270	17	2270	2.4	317	–	–	–	–	–	–
–	–	–	–	18.4	1700	–	–	–	–	–	–	–	–
20.2	1700	20.2	1700	–	–	3.8	317	–	–	–	–	–	–
–	–	–	–	15.7	1070	–	–	–	–	–	–	–	–
20.5	1070	20.5	1070	20.5	1070	6.1	317	–	–	–	–	–	–
–	–	–	–	20.8	855	–	–	–	–	–	–	–	–
25.7	855	25.7	855	25.7	855	9.5	317	–	–	–	–	–	–
–	–	–	–	21.4	589	–	–	–	–	–	–	–	–
27.6	589	27.6	589	27.6	589	14.9	317	–	–	–	–	–	–
–	–	–	–	33.6	500	–	–	–	–	–	–	–	–
38.4	500	38.4	500	–	–	24.3	317	24.3	317	19.7	256		
–	–	–	–	36.8	400	–	–	–	–	–	–		
48	400	48	400	48	400	38	317	38	317	30.7	256		
–	–	–	–	47.1	310	–	–	–	–	–	–		
58.1	310	–	–	58.1	310	59.4	317	59.4	317	48	256	68	364
83.7	310	–	–	83.7	310	85.6	317	–	–	–	–	79	256
												72	151
												93	124

Notes: The values stated in the table apply for 3 and 4 pole fixed mounted devices with an equal load distribution.
On 4 pole devices the current in the neutral conductor is equal to zero
The total resistive load is the measured value for a 3 pole or a 4 pole switch(independent of I} and the type of release.

Thetotal resistive load for a switch orwithdrawable plug results from the resistive value for fixed mounting+resistive value for plug-in orwithdrawable.
The heat dissipation can be calculated with the formula: $P=3xRxI^2$

NZM..., PN..., NS..., N...

					NZM1, PN1, N1 NS1 160A	I_n 1) A	NZM2, PN2, N2 NS2 300 A	I_n 1) A	NZM3, PN3, N3, NS3 630 A	I_n 1) A
Terminal capacities										
Standard equipment					Boxterminal	–	Screwterminal	–	Screwterminal	–
Accessories					Screwterminals		Boxterminal		Boxterminal	
					Tunnel terminals		Tunnel terminals		Tunnel terminals	
					Rearterminal bolts		Rearterminal bolts		Rearterminal bolts	
Copper conductors and cables										
Box terminal	Solid			mm²	1 x (10-16) ,2x(6-16)	160	1 x (10-16) ,2x(4-16)	300	2x16	500
	Stranded			mm²	1 x (25-70)[3] ,2x(6-25)		1 x (25-185)[3] ,2x(25-70)		1 x (35-240 ,2x(25-120)	
Tunnel terminal	Solid			mm²	1x16	160	1x16	300	–	–
	Stranded	1-hole		mm²	1 x (25-95)		1 x (25-185)		1 x (25-185)[2]	350
		Double-hole		mm²	–	–	–	–	1 x (50-240)	630
									2 x (50-240)	2x185
		4-hole		mm²	–	–	–	–	–	–
Screwterminals and connection on rear										
Directly on switch	Solid			mm²	1 x (10-16) ,2x(6-16)	160	1 x (10-16) ,2x(4-16)	300	1 x16,2x16	630 ,2x185
	Stranded			mm²	1 x (25-70)[3] ,2x25		1 x (25-185) ,2x(25-70)		1 x (25-240) ,2x (25-240)	
Module plate	1-hole	min.		mm²	–	–	–	–	–	–
		max		mm²	–	–	–	–	–	–
Module plate	2-hole	min.		mm²	–	–	–	–	–	–
		max		mm²	–	–	–	–	–	–
Connection width extension				mm²					2x300	630 ,2x185
Aluminium conductors and cables										
Tunnel terminal	Solid			mm²	1 x 16	160	1 x 16	250	1 x 16	350
	Stranded	1-hole		mm²	1 x (25-95)		1 x (25-185)		1 x (25-185)[3]	
		Double-hole		mm²	–	–	–	–	1 x (50-240) ,2x (50-240)	630
		4-hole		mm²	–	–	–	–	–	–
Screwterminals and connection on rear										
Directly on switch	Solid			mm²	1 x (10-16) ,2x(10-16)	160	1 x (10-16) ,2x(10-16)	250	1 x16 ,2x(10-16)	400
	Stranded			mm²	1 x (25-35) ,2x(25-35)		1 x (25-50) ,2x(25-50)		1 x (25-120) ,2x(25-120)	
Module plate	1-hole	min.		mm²	–	–	–	–	–	–
		max.		mm²	–	–	–	–	–	–
Module plate	2-hole			mm²	–	–	–	–	–	–
Connection width extension				mm²						
Copper strip (number of segments x width x segment thickness)										
Box terminal		min.		mm	2x9x0.8	160	2x9x0.8	300	6x16x0.8	630
		max.		mm	9x9x0.8		10x16x0.8		10x24x1.0	
							2x8x15.5x0.8		+5x24x1.0	
									(2x)8x24x1.0	–
Singleflat cableterminal		min.		mm	–	–	–	–	–	–
		max.		mm	–	–	–	–	–	–
Module plate	1-hole			mm	–	–	–	–	–	
Screwterminals and connection on rear										
Copper strip, perforated		min.		mm	–	–	2x16x0.8	300	6x16x0.8	630
Copper strip, perforated		max.		mm	–	–	10x24x0.8		10x32x1.0	
							–		+5x32x1.0	
Connection width extension				mm²	–	–	–	–	(2x)10x50x1.0	
Copper bar(width x thickness)										
Screwterminals and connection on rear										
Screw terminals										
Directly on switch		min.			M6	–	M8	–	M10	–
		max.		mm	12x5	160	16x5	300	20x5	630
				mm	16x5		24x8		30 x 10, +30 x 5	
Module plate	1-hole	min.		mm	–	–	–	–	–	–
		max.		mm	–	–	–	–	–	–
Module plate	2-hole			mm	–	–	–	–	–	–
Connection width extension		min.		mm	–	–	–	–	–	630
		max.		mm	–	–	–	–	2x(10x50)	10x40

Notes 1)The rated currents I_n have been determined according to IEC/EN 60947 (switchgear standard) and generally relate to the max. defined cross-sections.They are given for general reference here. The engineering standards which apply in each case must be observed

2)To 240 mm² can be connected depending on the make of cable.

3)To95 mm² can be connected depending on the make of cable.

NS..., NZM...-NA

NZM4, N4, NS4	Ln[1]		NZM...1...NA,	NZM...2...NA,	NZM...3...NA,	NZM...4...NA,
7 600 A	A		NS1...NA	NS2...NA	NS3...NA	NS4...NA
Screwterminal	–	–	Box terminal	Screwterminal	Screw terminal	Screw terminal
Tunnel terminals		–	Screwterminals	Boxterminal	Box terminal	Tunnel terminals
Rearterminal bolts			Tunnel terminals	Tunnel terminals	Tunnel terminals	Rearterminalbolts
Strip terminal			Rearterminalbolts	Rearterminal bolts	Rearterminalbolts	Strip terminal
–	–	AWG	1 x (12–6)	1 x (12–6)	–	–
–	–	AWG/kcmil	1x(4-2/0)	1x(4-350)	1 x (2–500)	–
–	–	AWG	1x6	1x6	1x6	–
–	–	AWG/kcmil	1x(4-3/0)	1x(4-350)	1x(4-350)	–
–	–	AWG/kcmil	–	–	1x(0-500) ,2x(0-500)	–
4 x (50-240)	1400	AWG/kcmil	–	–	–	4x(0-500)
–	–	AWG	1 x (12–6)	1 x (12–6)	–	–
			2x(9–6)			
1 x (120–185)	1250	AWG/kcmil	1x(4–2/0)	1x(4–2/0)	1x(4–350)	1 x (250–350)
4x(50–185)					2x350	4x(0–350)
1 x (120–300)	1000	kcmil	–	–	–	1 x (250–600)
2 x (95–300)		AWG/kcmil	–	–	–	2 x (3/0–600)
2 x (95–185)	1400	AWG/kcmil	–	–	–	2 x (3/0–350)
4 x (35–185)		AWG/kcmil	–	–	–	4x(2–350)
4 x 300	1600	AWG/kcmil	–		2x 500	4 x 600
6x195–2401	4 x 240				–	6 x (3/0–500)
–	–	AWG	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
4 x (50-240)	1400	AWG/kcmil	–	–	–	–
–	–	AWG	–	–	–	–
–	–	AWG/kcmil	–	–	–	–
1 x (185–240)	Please inquire	kcmil	–	–	–	–
2 x (70–185)	Please inquire	AWG/kcmil	–	–	–	–
4 x 50	–	AWG	–	–	–	–
2 x 240	Please inquire	AWG/kcmil				
6x170–240)						
–	–	mm	2x9x0.8	2x9x0.8	6x16x0.8	
–	–	mm	9x9x0.8	10x16x0.8	10 x 24 x 1.0	
					+5x24x1.0	
					(2x)8x24x1.0	
6x16x0.8	1100	mm	–	–	–	6x16x0.8
(2x)10x32x1.0		mm	–	–	–	(2x) 10x32x 1.0
(2x110x50x1.0	1250	mm	–	–	–	(2x110x50x1.0
	(2x)10x40x1.0					
(2x)10x50x1.0	1600	mm	–	2x16x0.8	6x16x0.8	(2x)10x50x1.0
(2x110x50x1.0		mm	–	10x16x0.8	10x32x1.0	(2x)10x50x1.0
		mm	–	–	+5x32x1.0	
(2x110x80x1.0	1600				(2x)10x50x1.0	(2x)10x80x 1.0
	2x(10x50x1.0)					
M10	–	–	M6	M8	M10	M10
25x5	1600	mm	12x5	16x5	20 x 5	25x5
2x150x10),2 x (80x 10)		mm	16x5	20x5	30 x 10, +30 x 5	2 x (50 x 10)
25x5	1250	mm	–	–	–	25x5
2x150x10)	2 x (40 x 10)	mm	–	–	–	2 x (50 x 10)
2x150x10)	1600	mm	–	–	–	2 x (50 x 10)
60 x 10	1600	mm	–	–	–	60 x 10
2 x (80 x 10)	2 x (50 x 10)	mm	–	–	2x110x50)	2 x (80 x 10)

N...S1-DC

Reduction of the rated operational current (derating) under particular ambient conditions

Basic devices		Jumper kits	Contact protection	Mounting position	Temperature compensation coefficient 20 °C	20 °C	20 °C	20 °C	20 °C	20 °C	20 °C	20 °C
Switch-disconnectors												
N2-4-160-S1–DC		+NZM2-4-XKV2P	IP2X	v	1	1	1	1	1	1	1	1
				h	1	1	1	1	1	1	1	1
N2-4-200-S1–DC		+NZM2-4-XKV2P	IP2X	v	1	1	1	1	1	1	1	0.95
				h	1	1	1	1	1	1	0.95	0.92
N3-4-320(400)-S1–DC		+NZM3-4-XKV2P	IP2X	v	1	1	1	1	1	1	1	1
				h	1	1	1	1	1	1	1	1
N 3-4-500-S 1–DC		+NZM3-4-XKVI2P	IP00	v	1	1	1	1	1	1	1	1
				h	1	1	1	1	1	1	1	1
N2-4-160-S1–DC		+NZM3-4-XKVI2P-K	IP00	v	1	1	1	1	1	1	1	0.97
				h	1	1	1	1	1	1	0.97	0.95
		+NZM3-4-XKVI2P	IP00	v	1	1	1	1	0.97	0.95	0.92	0.89
				h	1	1	1	0.97	0.95	0.92	0.89	0.87
		+NZM3-4-XKV2P-K	IP1X	v	1	1	1	1	1	0.98	0.95	0.92
				h	1	1	1	1	0.97	0.94	0.91	0.89
		+NZM3-4-XKV2P-K	IP2X	v	1	1	1	0.95	0.92	0.89	0.86	0.83
				h	1	1	0.98	0.93	0.9	0.87	0.84	0.81
N4-4-800110001-S1-DC		+NZM4-4-XKV2P	IP2X	v	1	1	1	1	1	1	1	1
				h	1	1	1	1	1	1	1	1
N 4-4-1250-S 1–DC		+NZM4-4-XKV2P	IP2X	v	1	1	1	1	1	1	1	0.97
				h	1	1	1	1	1	1	0.97	0.95
N 4-4-1400-S 1–DC		+NZM4-4-XKV2P	IP2X	v	1	1	1	0.94	0.92	0.9	–	–
				h	1	1	0.97	0.91	–	–	–	–
		+NZM3-4-XKV2P-1400	IP00	v	1	1	1	1	1[1)]	1[1)]	1[1)]	0.97
				h	1	1	1	1	1[1)]	1[1)]	1[1)]	0.97

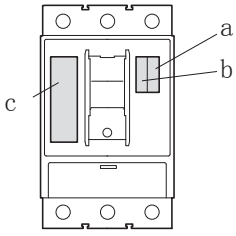
Notes

Mounting position:
v=vertical, h=horizontal
Incomer and outgoer at bottom or top, freely selectable
[1)]Incomer at from bottom only.

M22-K..., XHI(V)

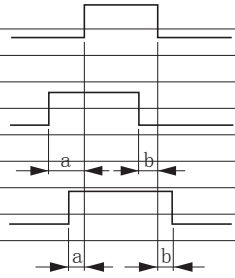
			At AC=50/60 Hz	M22-K...	M22-CK...	XHIV
Auxiliary contacts						
Rated operating voltage						
AC voltage		U_a	V AC	500	230	500
DC voltage		U_a	V DC	220	220	220
Conventional thermal current		$L_{th}=L_e$	A	4	4	4
Rated operational current						
AC-15	115 V	L_e	A	4	4	4
	230 V	L_e	A	4	4	4
	400 V	L_e	A	2	–	2
	500 V	L_e	A	1	–	1
DC-13	24 V	L_e	A	3	3	3
	42 V	L_e	A	1.1	1	1.5
	60 V	L_e	A	1.2	0.8	0.8
	110 V	L_e	A	0.8	0.5	0.5
	220 V	L_e	A	0.3	0.2	0.2
Short-circuit protection						
Max.fuse			A gG/gL	10	10	10
Max. miniature circuit-breaker			A	PKZMO-10/FAZ-B6	FAZ-B6/B 1	FAZ-B6
Early make times compared to main contacts on make and break(switching times on manual operation.			ms	–	–	– NZM1, PN1, N(S)1: approx.20 NZM2, PN2, N(S)2: approx.20 NZM3, PN3, N(S)3: approx.20 NZM4, N(S)4: approx. 90 With NZM4/N}S}4the HIV does not feature early break.
Terminal capacities						
Solid or flexible conductor with ferrule						
			mm^2	1 x (0.75–2.5) 2 x (0.75–2.5)	1 x (0.5–1.5) 2 x (0.5–1.5)	1 x (0.75–2.5) 2 x (0.75–2.5)
			AWG	1x(18–14)	1x(20–18)	1x(18–14)
		L_e	A	2x(18–14)	2x(20–18)	2x(18–14)
UL/CSA						
Rated operational current				10A...600 V AC 1A–250 V DC		2.5 A–240 V AC 1A–250 V DC
Heavy Pilot Duty				A600/P300 via 300 V AC same polarity		C300/R300

Maximum equiment and position of the built-in accessories



	③ -XHIV(2S) or-XA or-XU	② HIA	① HIN
NZM1, N/S}1	1	1	1
NZM2, N/S}2	1	1	2
NZM3, N/S}3	1	1	3
NZM4, N/S}4	1	2	3
PN1	1	–	1
PN2	1	–	2
PN3	1	–	3

Time differences ON-OFF



Main contact

Auxiliary contact, early make (HIV)

Auxiliary contact, normal (HIN)

Notes On combination with remote operator NZM-XR...,the right slotfor standard auxiliary contacts HIN can be equipped onlywith single contacts.

	Time difference a (ms) Manual operation HIV	HIN K10	HIN K01	Motor drive HIV	HIN K10	HIN K01	Time difference b (ms) Manual operation HIV	HIN K10	HIN K01	Motor drive HIV	HIN K10	HIN K01
NZM1	20[2)]	0	2.5	–	–	–	20[2)]	0	2.5	–	–	–
NZM2	20[2)]	3.5	6.5	Not permissible	2.5	4.5	20[2)]	3	4.5	Not permissible	3	4
NZM3	20[2)]	4	8	Not permissible	2	NZM1	20[2)]	3.5	8	Not permissible	3	6.5
NZM4	90[2)]	7	11	Not permissible	Please inquire	Please inquire	0[1)2)]	12	15	Not permissible	Please inquire	Please inquire

Notes 1)With NZM4/N}S}4the HIV does not feature early break.
2) Minimum value, as it is dependent on the switching speed

NZM...-XU, NZM...-XA...

			NZM112/31-XU...	NZM4-XU...
Undervoltage releases				
Rated control voltage				
AC voltage at 50/60 Hz	U_s	V AC	24...600	24...600
DC voltage	U_s	V DC	12...250	12...250
Operating range				
Drop-out voltage		x U_s	0.35–0.7	0.35–0.7
Pick-up voltage		x U_s	0.85–1.1	0.85–1.1
Power consumption				
AC voltage				
AC pick-up rating		VA	1.5	3.6
AC consumption when closed		VA	1.5	3.6
DC voltage				
DC pick-up rating		W	0.8	2.5
DC consumption when closed		W	0.8	2.5
Max. opening delay(response time until the main circuits open)		ms		
Minimum signal duration				
Terminal capacities				
Solid or flexible conductor with ferrule		mm^2	1X(0.75-2.5) 2X(0.75-2.5)	1X(0.75-2.5) 2X(0.75-2.5)
		A WG	1X(18-14) 2X(18-14)	1X(18-14) 2X(18-14)

			UVU-NZM				NZM-XCM
Undervoltage releases, off-delayed				**Capacitor unit for shunt release**			
Rated operating voltage							
AC voltage at 50/60 Hz	U_e	V AC	24, 220–550	Rated operating voltage	U_e	V AC	
DC voltage	U_e	V DC	24	Rated operational current	I_e	mA	
Inrush current (peak value)	I_e	mA	<500	Inrush current}peak value)	I_e	A	
Power consumption		V A	50	Terminal capacity			
Deceleration time	t_{sd}	ms	70–4000	Solid or flexible conductor with		mm^2	1 x (0.5–2.5)
With additional external capacitor 90,000 uF- 35 V		s	To 16	ferrule		AW	1 x (20–14)
With additional external capacitor 30,000 uF- 35 V		s	To 8			G	2x120–16)
Terminal capacities							
Solid or flexible conductor with ferrule		mm^2	1 x (0.5–2.5) 2 x 10.5–1.5)				

			NZM112/31-XA...	NZM4-XA…	NZM2/3-XA...-MNS	NZM4-XA...-MNS
Shunt releases (for power circuit breaker)						
Rated control voltage						
AC voltage	U_s	V AC	12...440	12...440	230	230
DC voltage	U_s	V DC	12...440	12...440	–	–
Frequency range		Hz	0–400	0–400	50/60	50/60
Operating range						
AC voltage		x Us	0.7...1.1	0.7...1.1	0.1...1.1	0.1...1.1
DC voltage		x Us	0.7...1.1	0.7...1.1	–	–
Power consumption						
AC/DC pick-up rating		VA/W	2.5	2.5	–	–
AC/DC consumption when closed		VA/W	2.5	2.5	–	–
Maximum power consumption at 110%认(230 V 50 Hz)		A		–	0.5	1
Max. opening delay		ms		22	20	22
(response time until the main circuits opey						
Max. duty factor		ms	∞	∞	1000ms	1000ms
Minimum signal duration		ms	10–15	10–15	10–15	10–15
Terminal capacity						
Solid or flexible conductor with ferrule		mm^2	1 x (0.75–2.5)	1 x (0.75–2.5)	1 x (0.75–2.5)	1 x (0.75–2.5)
			2 x (0.75–2.5)	2 x (0.75–2.5)	2 x (0.75–2.5)	2 x (0.75–2.5)
		AWG	1x(18-14)	1x(18-14)	1x(18-14)	1x(18-14)
			2x(18-14)	2x(18-14)	2x(18-14)	2x(18-14)

				NZM2-XRD...	NZM2-XR...	NZM3-XR...	NZM4-XR...
Remote operators							
Rated control voltage							
AC voltage		U_s	V AC	100...440	100...440	100...440	100...440
DC voltage		U_s	V DC	24...250	24...250	24...250	24...250
Operating range							
AC voltage				0.85...1.1	0.85...1.1	0.85...1.1	0.85...1.1
DC voltage				0.85...1.1	0.85...1.1	0.85...1.1	0.85...1.1
Rated operational power							
AC voltage	110 V...130VAC		VA	550	350	350	350
	208 V...240 V AC		VA	550	350	350	350
	380 V...440 V AC		VA	650	350	350	350
DC voltage	24 V...30 V D C		W	450	250(max. 17A 30 ms)	250	250
	110 V...130VDC		W	450	250	250	250
	220 V...250 V DC		W	450	250	250	250
Total make time			ms	110-170	60	80	100
Total opening delay			ms	110-170	3000	1000	3000
Minimum signal duration							
With switch on			ms	30	30	30	30
With switch off			ms	500	150	250	500
Lifespan, mechanical		Operations		20000	20000	15000	10000
Maximum operating frequency			Opa/h	120	120	60	20
Terminal capacities							
Solid or flexible conductor with ferrule			mm^2	0.75–2.5	0.75–2.5	0.75–2.5	0.75–2.5
			AWG	18–14	18–14	18–14	18–14

				PFR-003	PFR-03	PFR-5
Electrical						
Standards				IEC/EN 60947-2, IEC 755, IEC 1008, IEC 1009		
Sensitivity				Pulse-current sensitive, type A		
Rated control voltage		U_s	V AC	230 120% (50/60 Hz)		
Motor rating		P_e	W	3	3	3
Rated fault currents		$L_{\Delta n}$	A	0.03	0.03	0.03,0.1,0.3,0.5,3,5
Deceleration time		t_v	s	0.02 (non-delayed)	0.02 (non-delayed)	0.02,0.1,0.3,0.5,3,5
Relay contacts				1 built-in changeover contact	1 built-in changeover contact	1 built-in changeover contact
Rated operating voltage of the relay contacts			VAC/DC	250/100	250/100	250/100
Rated operational current of the relay contacts			A	6	6	6
Fault current early warning			Hz	–	–	0.5=25%–50% $I_{\Delta n}$ 1=50%–75% $I_{\Delta n}$ 2=75%–100% $I_{\Delta n}$
Mechanical						
Standard front dimension			mm	45	45	45
Device height			mm	85	85	85
Built-in width			mm	36	36	36
Mounting				Quick attachment fortop-hat rail DIN 46277, EN 50022		
Terminals top and bottom				Boxterminals		
Terminal protection				Finger and back-of-hand proof BGV A2, VDE 106 Part 100		
Terminal capacities			mm^2	2 x 0.75–2.5 solid, 2 x 0.75–1.5 flexible/with sleeve		
Sealing facility for setting buttons				–	–	Yes

1 NZM...-XFI...

			NZM11-41-XFI30R NZM11-41-XFI300R NZM11-41-XFIR	NZM11-41-XFI30U NZM11-41-XFI300U NZM11-41-XFIU	+NZM2-4-XFI30 +NZM2-4-XFI	+NZM2-4-XFIA30 +NZM2-4-XFIA NZMH2..: XFIA30
Electrical						
Standards			IEC/EN 60947-2			
Sensitivity			Pulse-current sensitive, type A			
Min. operating voltage						
For detecting type A/AC fault currents			80 V (dependent on mains power)	80 V (dependent on mains power)	80 V (dependent on mains power)	80 V (dependent on mains power)
For detecting type B fault currents			–	–	–	–
Suitable for use in			Three-and single-phase systems	Three-and single-phase systems	Three-and single-phase systems	Three-and single-phase systems
Rated operating voltage	U_e	V AC	200...415 (3~)	200...415 (3~)	280..690	50...400 (3~)
Rated frequency	f	Hz	50/60	50/60	50/60	50/60
Number of poles			3/4	3/4	3/4	3/4
Rated operational current range	I_n	A	15...160	15...100	15...250	15...250
Rated fault currents	$I_{\Delta n}$	A				
NZM1}-4}-XFI30R			0.03			
NZM1}-4}-XFI300R			0.3			
NZM1}-4}-XFIR			0.03-0.1-0.3-0.5-1-3			
NZM1}-4}-XFI30U				0.03		
NZM1}-4}-XFI300U				0.3		
NZM1}-4}-XFIU				0.03-0.1-0.3-0.5-1-3		
+NZM2-4-XFI30					0.03	
+NZM2-4-XFI					0.03-0.1-0.3-0.5-1-3	
+NZM2-4-XFIA30						0.03
+NZM2-4-XFIA						0.3-1
NZMH2..: XFIA30						0.03
Detection range of fault current			50/60 Hz	50/60 Hz	50/60 Hz	With AC voltage: 0–100 kHz With pulsed DC voltage: 50 Hz
Rated ultimate short-circuit making and rated breaking capacity	$I_{\Delta m}$	A	=Lcu	=Lcu	=Lcu	=Lcu
Fault current early warning			≧ 0.3 x $I_{\Delta n}$	≧ 0.3 x $I_{\Delta n}$	–	–
Shock resistance (IEC 60068-2-27)			20(ha1f-sinusoidal shock20 ms)			
Lifespan, mechanical	Operations		20000	20000	≧ 20000	≧ 20000
(50%with fault current)						NZMH2: 20000
Mechanical						
Standard front dimension		mm	45	45	96	96
Mounting			On right side	Bottom	Bottom	Bottom
Mounting position			Vertical and 900 in all directions			
Feeder			NZM1 from above	NZM1 from above	Any	Bottom
Degree of protection		^{0}C	IP20 inthe operating component area			
Ambient temperature			-5...+40	-5...+40	-25...+70	-25...+70
Terminal capacities						
Flexible without ferrule		mm^2	Same as NZM1 standardterminal			
Flexible with ferrule		mm^2	Same as NZM1 standardterminal			
Sealability			Yes, setting buttons			

NZM…-XU, NZM…-XA…

			DMI
General			
Dimensions (W x H x D)		mm	107.5 x 90 x 53
Modular spacing(space units)			6 SU (space units) wide
Weight		kg	0.3
Mounting			Top-hat rail IEC/EN 60715, 35 mm
Ambient climatic conditions			
Operating ambienttemperature		^0C	0 to +55
Built-in position			Horizontal/vertical
Condensation			Prevent condensation by means of suitable measures
LCD display (clearly legible)		^0C	0 to +55
Storage/transport		^0C	-40 to +70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 ...95
Air pressure(in operation)		hPa	795...1080
Corrosion resistance			
IEC/EN 60068-2-42	4 days SO_2	cm^3/m^3	10
IEC/EN 60068-2-43	4 days HZ_S	cm^3/m^3	1
Ambient mechanical conditions			
Pollution degree			2
Degree of protection IEC/EN 60529			IP20
Vibrations (IEC/EN 60068-2-6)			
Constant amplitude 0.15 mm		Hz	10...57
Constant acceleration, 2 g		Hz	57...150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11		Shocks	18
Drop IEC/EN 60068-2-3	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1
Power supply			
Rated operating voltage	U_e	V DC	24
Permissible range		V DC	20.4...28.8
Residual ripple		%	≦5
Input current at 24 V DC		mA	210
Voltage dips (IEC/EN 61131-2)		ms	10
Power loss at 24 V DC		W	5

EASY22..., NZM-XDMI

			EASY221-CO	EASY222-DN	NZM-XDMI-DPV1
General					
Standards			EN 55011, EN 55022, EN 61000-4, IEC 60068-2-6, IEC 60068-2-27		
Dimensions (VV x H x D)		mm	35.5x90x58	35.5x90x58	35.5x90x58
			(2 space units)	(2 space units)	(2 space units)
Weight		kg	0.15		
Mounting			Top-hat rail EN 50022, 35 mm or screw fixing using fixing brackets		
			ZB4-101-GFi (accessories)		
Terminal capacity					
Solid		mm^2	0.2x4 (AWG 22–12)		
Flexible with ferrule		mm^2	0.2x2.5 (AWG 22–12)		
Standard screwdriver		mm	3.5 x 0.8	3.5 x 0.8	3.5 x 0.8
Max. tightening torque		Nm	0.6	0.6	0.6
Ambient climatic conditions					
Operating ambienttemperature		^0C	-25 to 55, low temperatures to IEC 60068-2-1,		
			high temperatures to IEC 60068-2-2		
Condensation			Prevent condensation by means of suitable measures		
Storage		^0C	40–70	40–70	40–70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5–95	5–95	5–95
Air pressure (in operation)		hPa	795–1080	795–1080	795–1080
Corrosion resistance					
IEC/EN 60068-2-42	4 day SO_2	cm^3/m^3	10	10	10
IEC/EN 60068-2-43	4 day SO_2	cm^3/m^3	1	1	1
Ambient mechanical conditions					
Pollution degree			2	2	2
Degree of protection (IEC/EN 60529)			IP20	IP20	IP20
Vibrations (IEC/EN 60068-2-6)					
Constant amplitude 0.15 mm		Hz	10–57	10–57	10–57
Constant acceleration, 2 g		Hz	57–150	57–150	57–150
Mechanical shock resistance (IEC/EN 60068-2-27)		Shocks	18	18	18
semi-sinusoidal 15 g/11ms					
Drop (IEC/EN 60 068-2-31)	Drop height	mm	50	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1	1
Mounting position			horizontal x vertical	horizontal x vertical	horizontal x vertical
Electromagnetic compatibility (EMC)					
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)					
Air discharge					
Contact discharge		kV	8	8	8
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		kV	6	6	6
Radio interference suppression (EN 55011)		V/m	10	10	10
			EN 55011 ClassB		EN 55011 ClassA
Burstimpulse (IEC/EN 61000-4-4, Level 3)			EN 55022 ClassB		EN 55022 ClassA
Supply cables					
Signal cables		kV	2	2	2
High-energy pulses}surge)		kV	2	2	2
(IEC/EN 61000-4-5, Level 2)		kV	0.5 (supply cables, symmetrical)		
Immunity to line-conducted interference					
(IEC/EN 61000-4-6)		V	10	10	10

EASY..., NZM-...

Insulation resistance			EASY221-CO	EASY222-DN	NZM-XDMI-DPV1
Clearances and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142		
Insulation resistance					
Power supply					
Rated operating voltage	U_e	V	24 (-15/+20%)	24 (-15/+20%)	24 (-15/+20%)
Permissible range		V DC	20.4-28.8	20.4-28.8	20.4-28.8
Ripple		%	< 5	< 5	< 5
At 24 V D C		mA	typ. 200	typ. 200	typ. 200
Voltage dips (IEC/EN 61131-2)		ms	10	10	10
Heat dissipation at 24 V DC		W	4.8	4.8	4.8
Polarity reversal protection					
Power supply			Yes	Yes	Yes
LED indicators					
Power supply			RUN LED (RUN1: green	Module status LED (MSS: green	Power LED (POW):green
LED display			LED ERROR (ERRI: red	Network status LED (NSF: red/green	PROFIBUS—DP LED (BUST: red
Network					
Terminal type			RJ45	5 pole, pluggable screw terminal	SUB-D 9 pole, socket
Potential isolation			Between busand powersupply (simple, between bus and power supply and NZM-XDM16121safe isolation)	Between busand powersupply (simple, between bus and power supply and NZM-XDM16121safe isolation)	Between bus and power supply (simple, between bus and power supply and NZM-XD M1612
Function			CANopen slave	DeviceNet slave	PROFIBUS—DP slave
Interface			CAN	CAN	RS 485
Bus protocol			CANopen	DeviceNet	PROF日US—DP
Baud rates			Automatic search up to 1 MBit/s	Automatic search up to 500 kBit/s	Automatic search up to 12 MBit/s
Bus terminating resistors			Separate external bus termination required (120 0) NZM-XDM1612	Separate external bus termination required (120 0) NZM-XDM1612	Separate external bus termination required
Bus addresses			1–127 addressed via display	0–63 addressed via display	1–126 via D MI
Services					
Cyclical			All data R1–R16,S1–S8	All data R1–R16,S1–S8	StatusOn/Dff,tripped[detailed) load early warnings, phase currents I}/h/13[A], remote operator acutation, display/ operation NZM-XDM1612 inputs/outputs, motor starter functions
Acyclical			Read/write, real-time, day, summer/winter time, all parameters of the easyfunction relay	Read/write, real-time, day, summer/winter time, all parameters of the easyfunction relay	Display/match protection protection settings, event list, identification, hours of operation, switching operations, time

NZM-XSWD

			NZM-XSWD-704
General			
Standards			IEC/EN 61131-2 EN 50178
Dimensions (W x H x D)		mm	35 x 90 x 101
Weight		kg	0.1
Mounting			Top-hat rail IEC/EN 60715, 35 mm
Built-in position			Vertical
Ambient mechanical conditions			
Degree of protection (IEC/EN 60529)			IP20
VibrationsIIEC/EN 61131-2:2008)			
Constant amplitude 3.5 mm		Hz	5 … 8.4
Constant acceleration, 1 g		Hz	8.4 … 150
Mechanical shock resistance (IEC/EN 60068-2-27)		Shocks	9
semi-sinusoidal 15 g/11 ms			
Drop (IEC/EN 60068-2-31)	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	0.3
Electromagnetic compatibility (EMC)			
Overvoltage category			II
Pollution degree			2
Electrostatic discharge (IEC/EN 61131-2:2008)			
Air discharge (Level 3)		kV	8
Contact discharge (Level 2)		kV	4
Electromagnetic fields (IEC/EN 61131-2:2008)			
80 -1000 M Hz		V/m	10
1.4-2 GHz		V/m	3
2-2.7 GHz		V/m	1
Radio interference suppression (SmartWire-Darwin)			EN 55011 Class A
Burst (IEC/EN 61131-2:2008, Level 3)			
Supply cables		kV	2
Signal cables		kV	1
SmartWire-Darwin cables		kV	1
Surge (IEC/EN 61131-2:2008, Level 1)			–
Radiated RFIIIEC/EN 61131-2:2008,Level3)		V	10
Ambient climatic conditions			
Operating ambient temperature (IEC 60068-2)		^{0}C	–25 … +55
Condensation			Prevent with suitable measures
Storage		^{0}C	–40…70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 … 95
SmartWire-Darwin status			
Station type			SmartWire-Darwin station (slave)
Baud rate setting			Automatic
SmartWire-Darwin status		LED	Green
Connection			8-pin connector Connection plug: External device plug SWD4-8SF2-5
Power consumption (15 V SWD supply			See separate table
Supply and I/0 connection			
Connection type			Push-In
Solid		mm^2	0.2-1.5 (AWG 24-16)
Flexible with ferrule's		mm^2	0.25-1.5
24 V DC supply for output supply			
Rated operating voltage	U_e	V	–
Input voltage residual ripple		%	–
Polarity reversal protection reversal			–

Notes

1)Minimum length 8 mm

NZM-XSWD

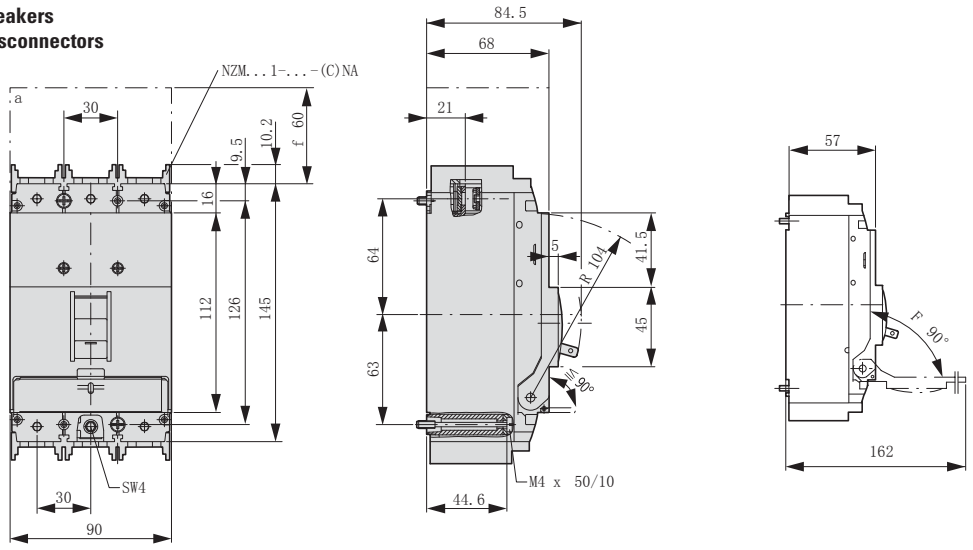
			NZM-XSWD-704
Digital inputs			
Number			2
Input current		mA	Typically 4 at 24 V DC
Voltage level to IEC/EN 61131-2			
Limit value type 1			Low < 5 V DC; High > 15 V DC
Input delay			High →Low typically < 0.2 ms
			Low →High typically < 0.2 ms
Status display inputs		LED	Yellow
Digital semiconductor outputs			
Number			2
Output current		A	0.2 at 24 V DC
Short-circuittripping current		A	–
Lamp load	R_{LL}	W	–
Overload proof			Yes, with diagnostics
Switching capacity			EN 60947-5-1 utilization category DC-13
Relay outputs			
Number			
Contact type			–
Operations			–
Utilization category AC-1, 250 V, 6 A			
Utilization category AC-15, 250 V, 3 A			–
Utilization category DC-13, 24 V, 1 A		V AC	–
Safe disconnection		mA	–
Minimum load current			–
Response/reset time		mS	–
Bounce duration		mS	–
Short-circuit protection			–
Status display outputs		LED	–
Potential isolation			
Inputs for SmartWire-Darwin			Yes
Semiconductor outputs to SmartWire-Darwin			Yes
Semiconductor outputs to inputs			–
Relays to SmartWire-Darwin			–
Relays to inputs			–
Relays to relays			–

NZM-...XMC

General		NZM2-XMC-S0	NZM3-XMC-S0	NZM2/3-XMC-MB
Dimensions	mm	209 × 91 × 132 (3 pole)	209 × 91 × 132 (3 pole)	209 × 91 × 132 (3 pole)
		251 × 91 × 132 (4 pole)	251 × 91 × 132 (4 pole)	251 × 91 × 132 (4 pole)
Weight	9	850 (3 pole)	850 (3 pole)	850 (3 pole)
		975 (4 pole)	975 (4 pole)	975 (4 pole)
Material characteristic		UL94-V0	UL94-V0	UL94-V0
Environmental conditions				
Operating temperature	°C	-15-+65	-15-+65	-15-+65
Storage temperature	°C	-40-+80	-40-+80	-40-+80
Humidity (non-condensed)	%	5-95	5-95	5-95
Maximum operating altitude	m	2000	2000	2000
IP protection class		IP 20	IP 20	IP 20
Supply				
Voltage	V DC	18 – 36	18 – 36	18 – 36
Maximum current	mA	200	200	200
Conductors		Phoenix Contact GMVSTBR	Phoenix Contact GMVSTBR	Phoenix Contact GMVSTBR
		2.5-2-ST-7.62	2.5-2-ST-7.62	2.5-2-ST-7.62
Voltage measurement				
Rated operating voltage	V AC	690	690	690
Maximum surge voltage at8/加ms	kV	8	8	8
Maximum voltage	V AC	800	800	800
Surge impedance (impedance)	kohms	1	1	1
Frequency	Hz	45-65	45-65	45-65
Accuracy		0.4 % measured value	0.4 % measured value	0.4 % measured value
		+0.05 % FS	+0.05 % FS	+0.05 % FS
Overvoltage category according to EN61010		CAT IV (600 V)	CAT IV (600 V)	CAT IV (600 V)
Current measurement				
Rated operational current	A AC	300	500	300 (NZM2)/500 (NZM3)
Maximum current	A AC	350	740	30
Maximum currentimpulse 1s	kA	30	30	30
Frequency	Hz	45-200	45-200	45-200
Category EN61010		CAT IV-600 V	CAT IV-600 V	CAT IV-600 V
Power measurement				
Maximum power (per phase)	kwh	–	–	280
Accuracy		–	–	0.95 % measurement
				+ 0.05 % FS
Accuracy, active power		Class 1 (IEC62053-21)	Class 1 (IEC62053-21)	Class 1 (IEC62053-21)
Accuracy, reactive energy		–	–	Class 2 (IEC62053-23)
Pulse output				
Outputtype		NPN-isolated transistor	NPN-isolated transistor	NPN-isolated transistor
VCE max	V	80	80	80
VCE sat	V	0.4	0.4	0.4
Ic max	mA	50	50	50
Ic recommended	mA	10	10	10
Isolation	kV	3	3	3
Max. switching frequency	H2	2	2	4
Pulse width	ms	120	120	⩾20
Pulse rate power	Pulses/kN	15	7.5	
Digital output				
Type		–	–	
Maximum voltage	V	–	–	350
Maximum current	mA	–	–	120
Isolation	kV	–	–	2.5
Digital input				
Maximum voltage	V	–	–	50
VIHmax	V	–	–	3
MODBUS output-RS485				
Data rate	bit/s	–	–	9600, 19200, 38400, 56000,
				57600
Stop bits		–	–	1, 2
Parity		–	–	None, odd, even
Isolation	kV	–	–	3
Output–display				
DC supply voltage	VDC	–	–	5
Maximum current	mA	–	–	180

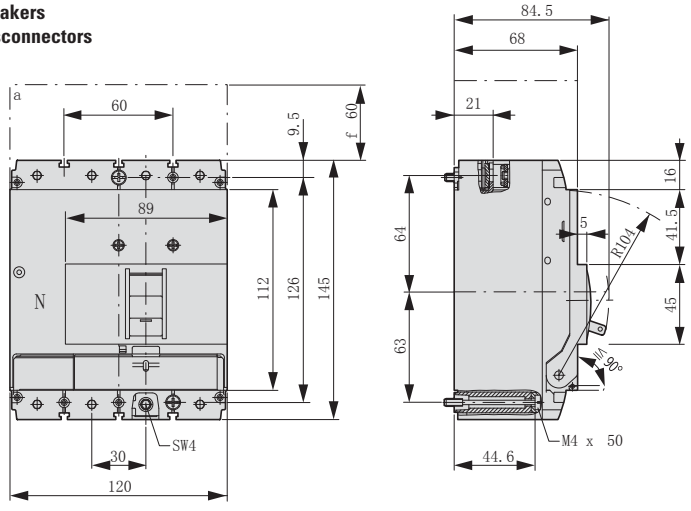
Dimensions

Circuit-breakers
Switch-disconnectors
3 pole
NZMB1
NZMC1
NZMN1
NZMH1
PN1
N1
NS1



①Blow-out area, minimum distance to other parts ≧ 60 mm

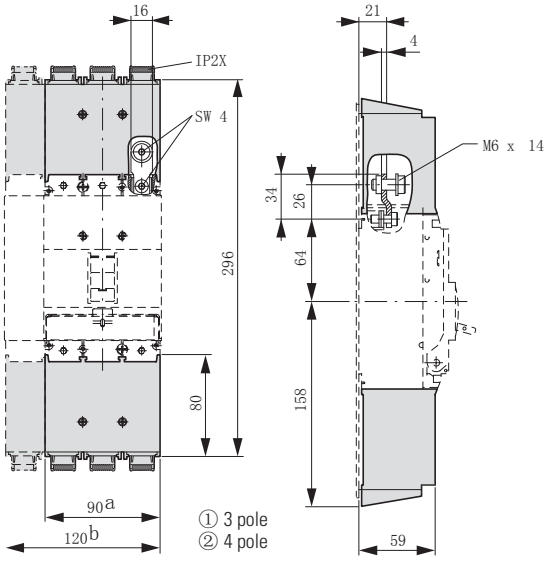
Circuit-breakers
Switch-disconnectors
4 pole
NZMB1-4
NZMC1-4
NZMN1-4
NZMH1-4
PN1-4
N1-4



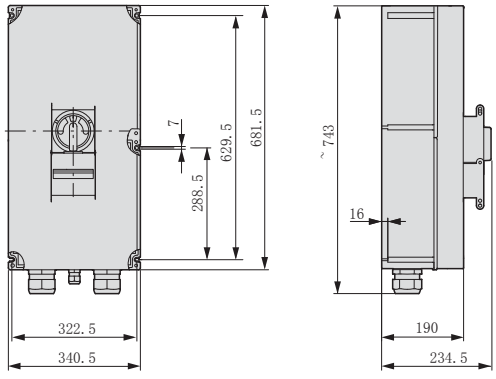
①Blow-out area, minimum distance to other parts ≧ 60 mm

Covers
NZM 11-41-XKSA
Screw terminals
NZM 11-41-XKS
IP2Xprotectionagainst contact with a finger for cover

NZM1(-4)-XIPA

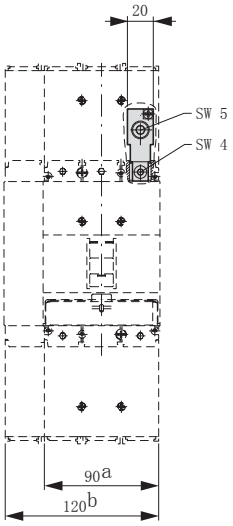


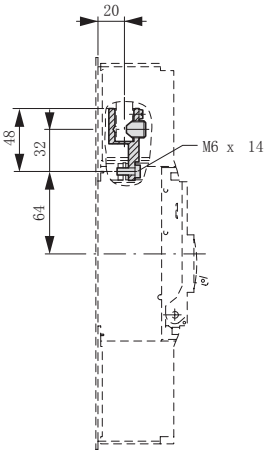
Switch-disconnectors
ATEX22-type
3 pole
PN 1../ATEX22



1 NZM1...-XK..., NZM1...XIPK, NZM-XSTK

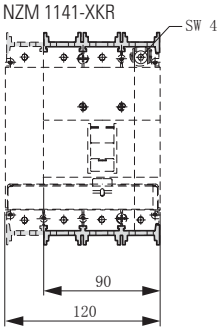
Tunnel terminal
NZM 11-41-XKA

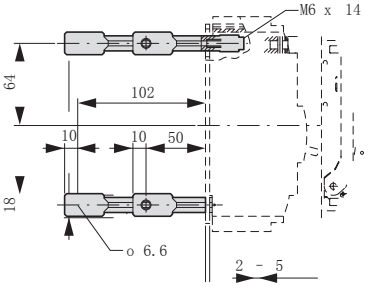


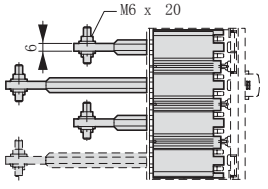


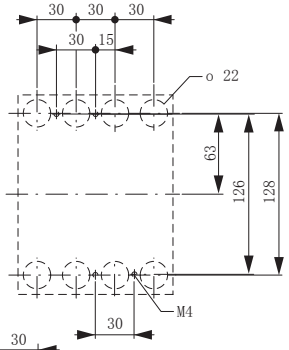
① 3 pole
② 4 pole

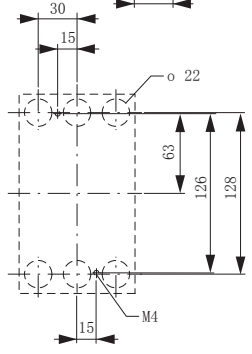
Rear terminal bolts
NZM 1141-XKR



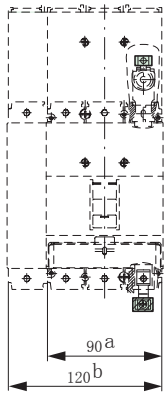


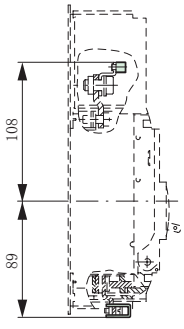






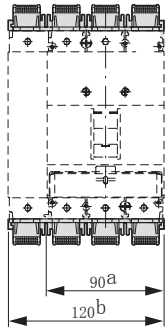
Control cable terminals
NZM1-XIPK, NZM-XSTK

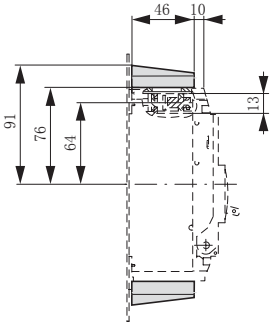




① 3 pole
② 4 pole

IP2X protection against contact with finger
NZM11-41-XIPK

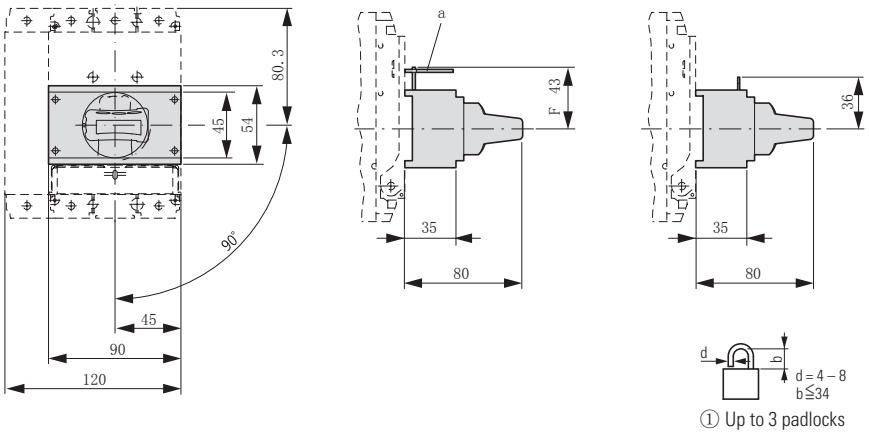




Rotary mechanism
Rotary handle on circuit-breaker

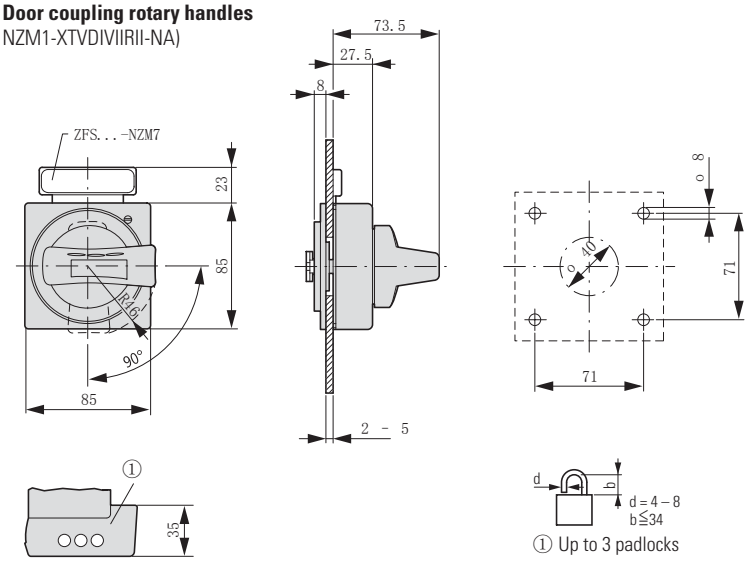
NZM1-XDV
NLM-XDVR

NZM1-XDTV



① Up to 3 padlocks

Door coupling rotary handles
NZM1-XTVDIVIIRII-NA)

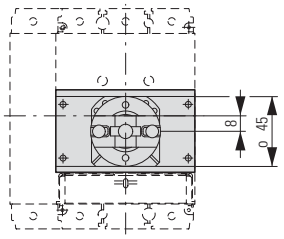


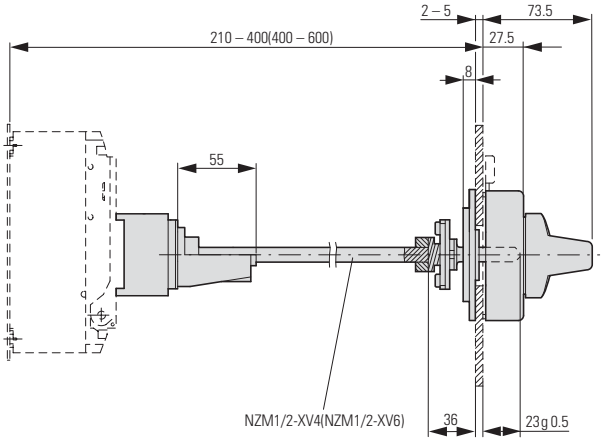
① Up to 3 padlocks

1

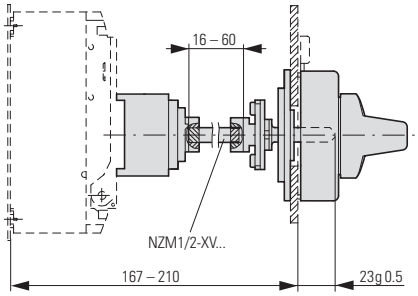
NZM1-XTVD...

Door coupling rotary handle with extension shaft
NZM1-XTVDIVIIRII-NA)
NZM 1/2-XV416)

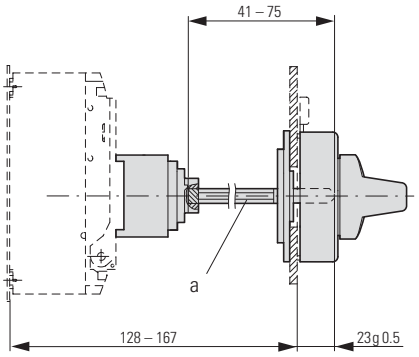




NZM1-XTVDIVIIRI-601-NA)

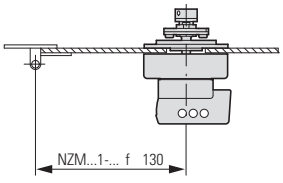


NZM1-XTVDIVIIRI-0(—NA)



① Special tip

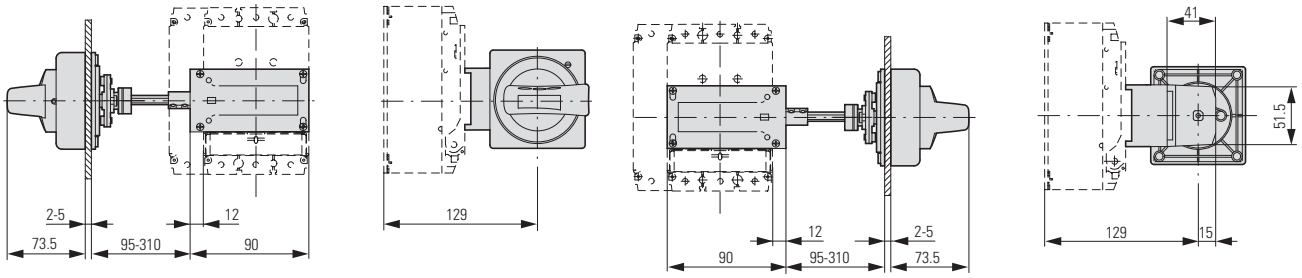
Minimum distance of door coupling rotary handle from door pivot point



NZM1-XS, NZM1...HIV

Main switch assembly kit for side wall installation

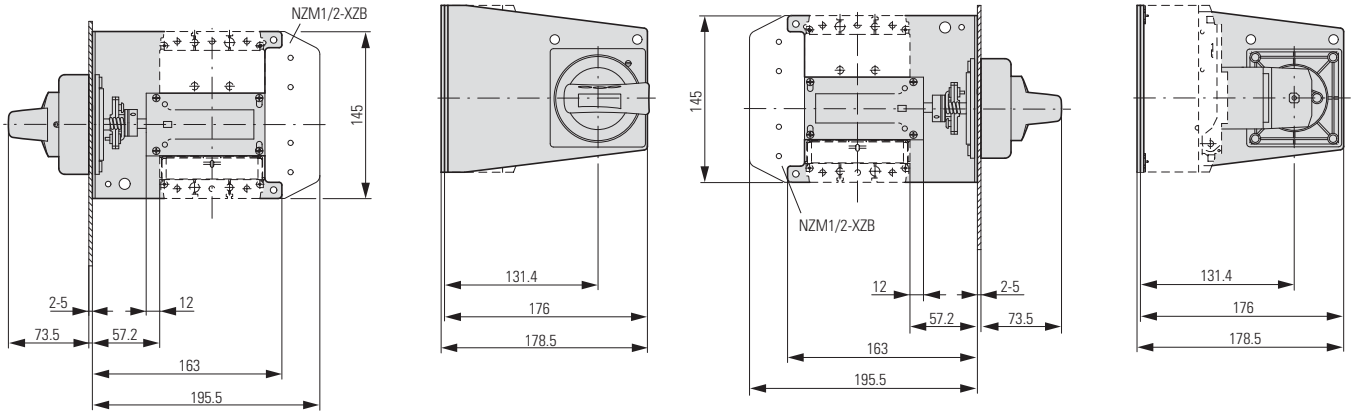
NZM1-XSIRI-L



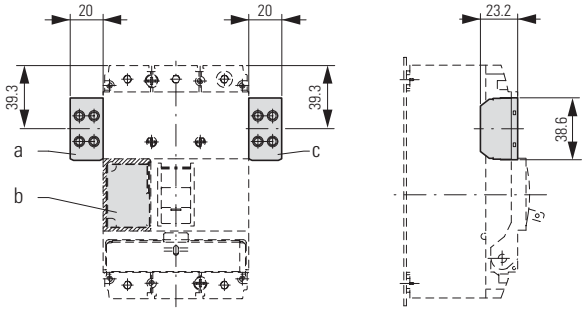
Main switch assembly kit for side wall installation with mounting bracket

NZM1-XSIRIM-L

NZM1-XSIRIM-R



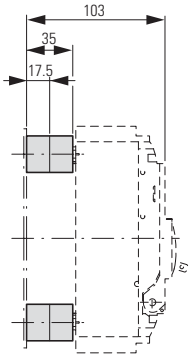
Undervoltage releases
Shunt releases (for power circuit breaker)
Early-make auxiliary contacts



①
NZM1-XA(HIV)
NZM1-XU(HIV)(20)
NZM1-XHIV
②
NZM1-XA(HIV)(L)
NZM1-XU(V)(HIV)(L)(20)
NZM1-XHIV(L)
③
NZM1-XHIVR

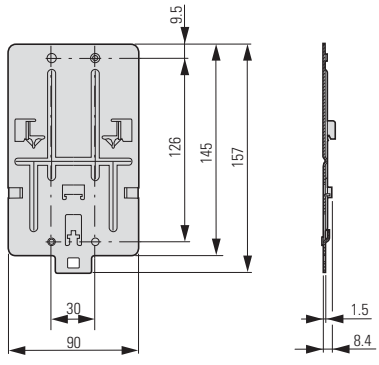
Spacers

NZM1/2-XAB



Clip plate

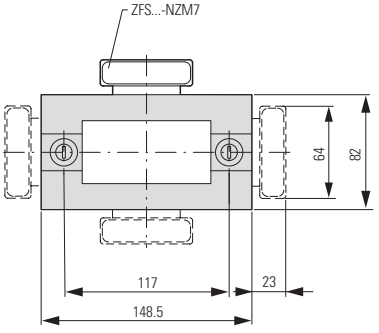
NZM1-XC35

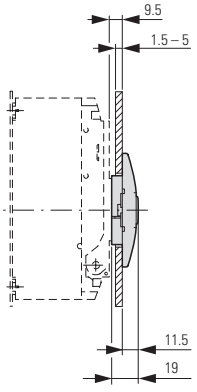


1

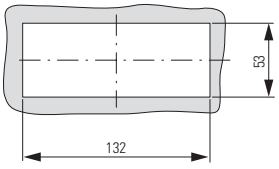
NZM...-X...

Insulating surround
NZM1-XBR

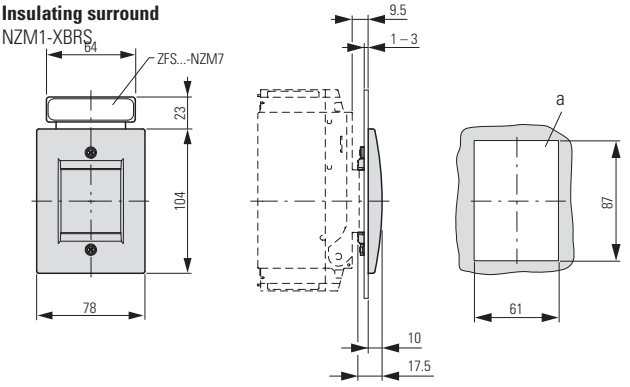




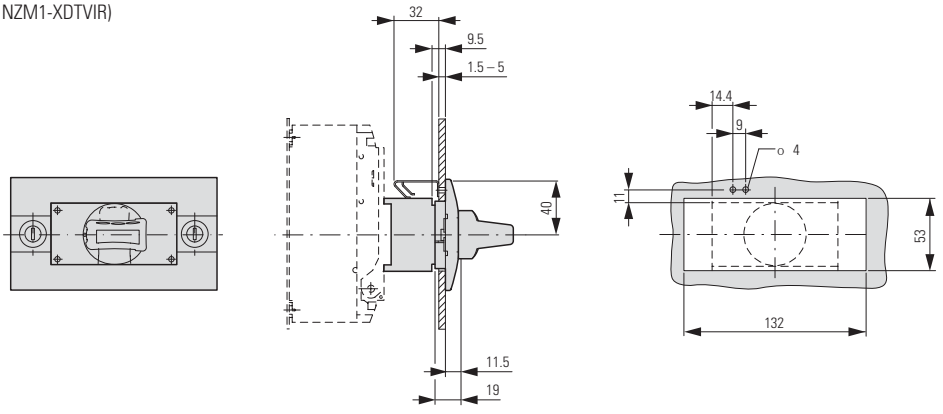
Mounting aperture



Insulating surround
NZM1-XBRS

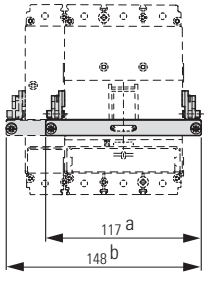


Rotary handle on switch with door interlock
NZM1-XDTVIR)

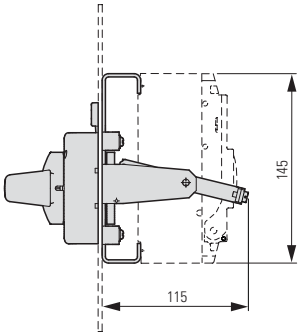


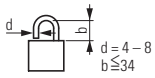
Mounting aperture

Rear-mounted drives
NZM1-XRAV(R)
NZM1-4-XRAVIR)



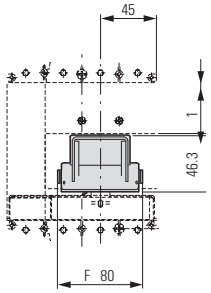
① NZM1-XRAV(R)
② NZM1-4-XRAV(R)

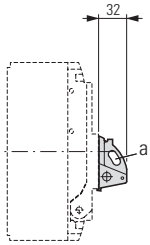




① Up to 3 padlocks

Toggle lever locking device
NZM-XKAV

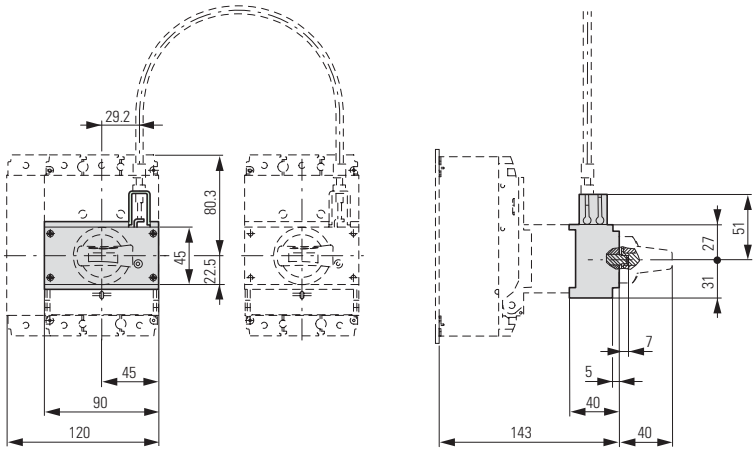




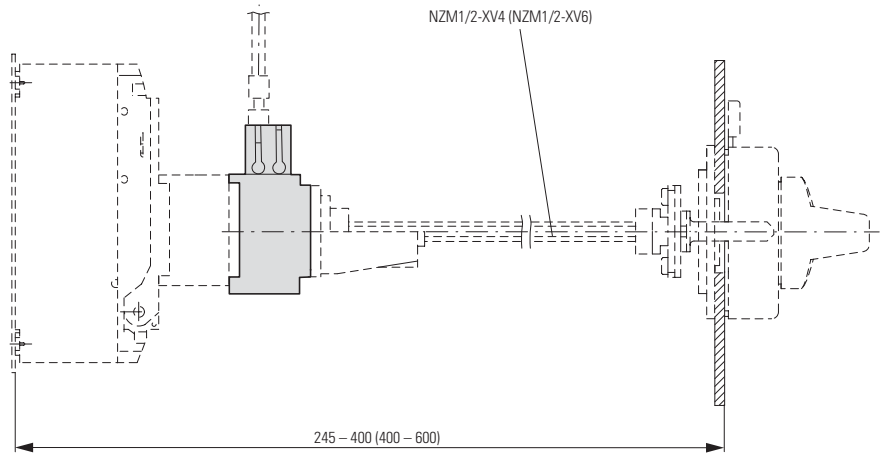
NZM1-XMV, NZM1-XTV...

Mechanical interlock

NZM1-XMV+NZM1-XDVIR)

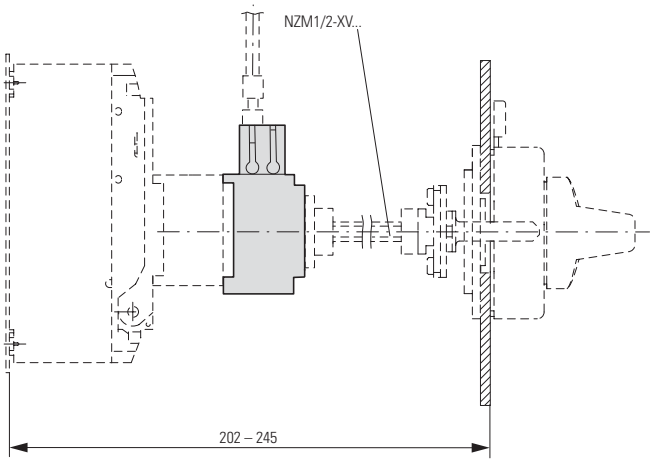


NZM1-XMV+NZM1-XTVDIVIIR)

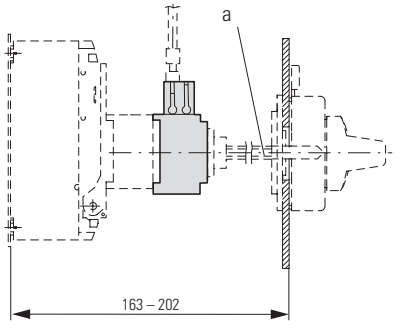


Part no.	x
NZM1/2-XV4	245 – 400
NZM1/2-XV6	400 – 600

NZM1-XMV+NZM1-XTVD(V)(R)-60



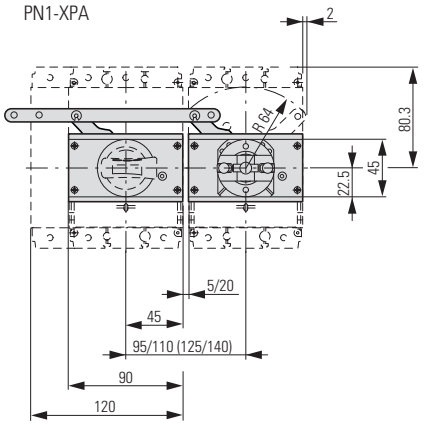
NZM1-XMV+NZM1-XTVD(V)(R)-60

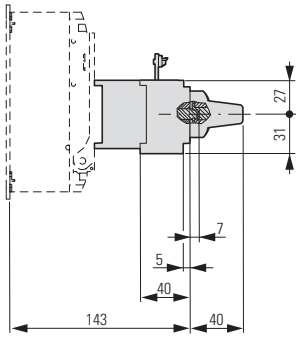


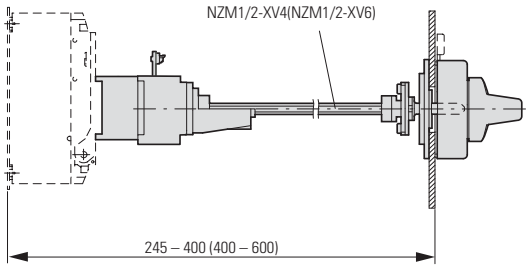
① Special tip

1 PN1-XPA, NZM1-XCI..., NZM1-XAD, NZM1...XSVS

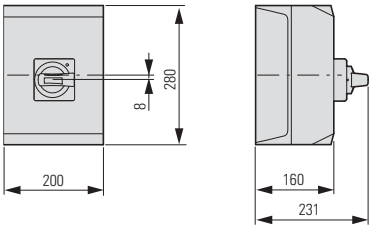
Paralleling mechanism
PN1-XPA



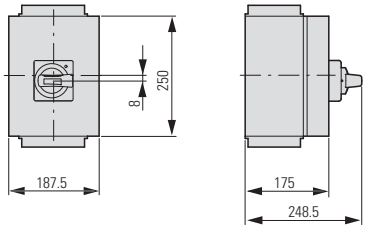




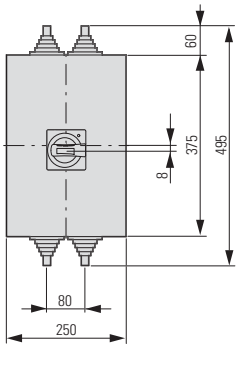
Insulated enclosures
NZM1-XCIKS-T



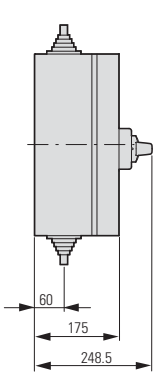
NZM1-XC123-T

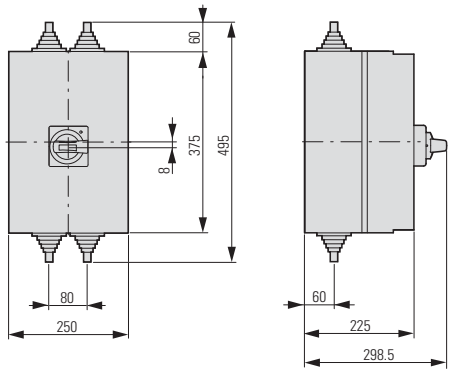


NZM1-XCI43-T

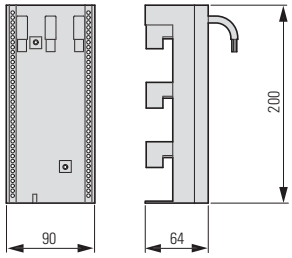


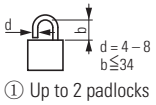
NZM 1-XC 143/2-T





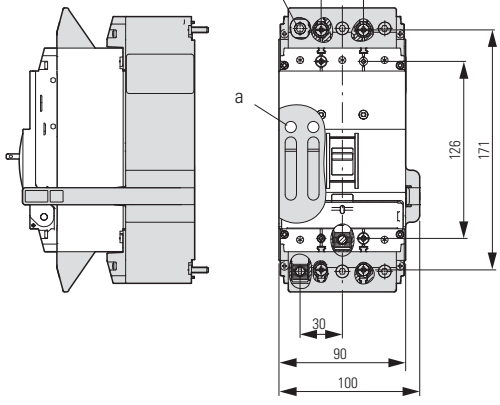
Component adapter
NZM1-XAD160

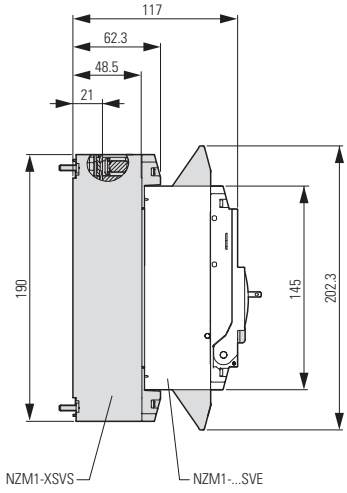




① Up to 2 padlocks

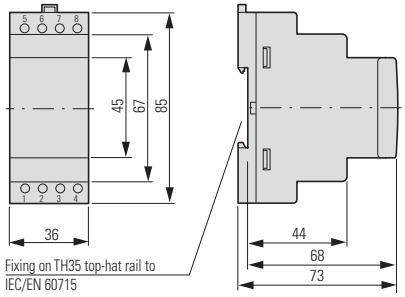
Plug-in units
NZM1-XSVS with
NZM.1⎓~SVE
N1--SVE



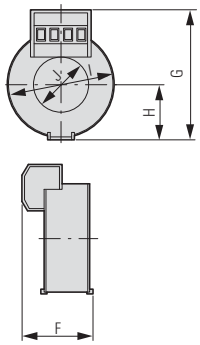


NZM1...-XFI..., PFR-...

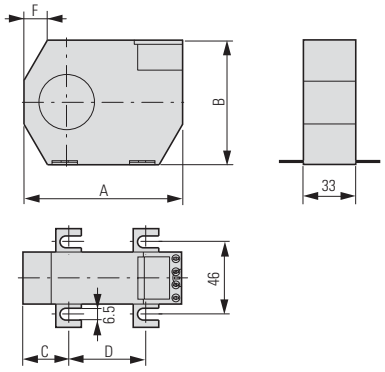
Residual-current relays
PFR-003
PFR-03
PFR-5



Ring-type transformer
PFR-W-20...30



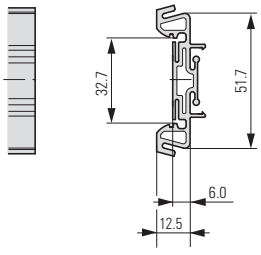
PFR-W-35...210



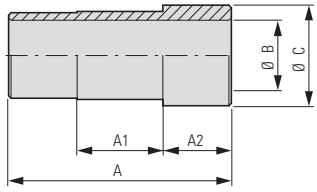
Part no.	F	G	H	I	J
PFR-W-20	32	60	24	46	21
PFR-W-30	32	70	30	59	30

	A	B	C	D	E	F
PFR-W-35	100	79	26	48.5	35	35
PFR-W-70	130	110	32	66	70	52
PFR-W-105	170	146	38	94	105	72
PFR-W-140	220	196	48.5	123	140	97
PFR-W-210	299	284	69	161	210	141

Mounting clip
PFR-WC

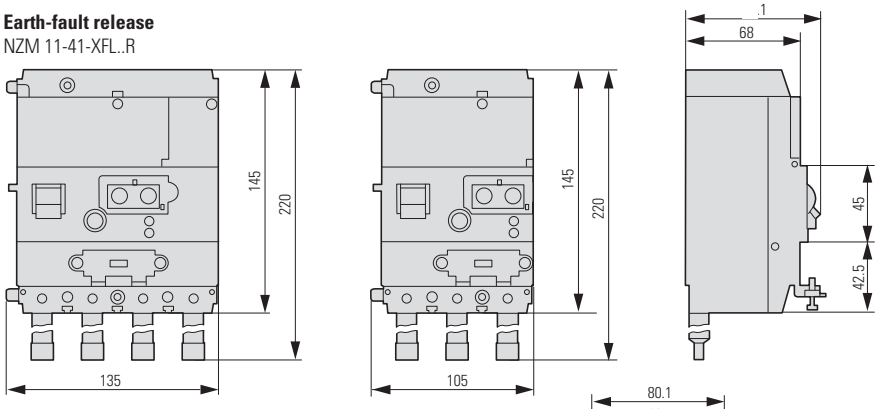


Magnetic shielding
PFR-WMA

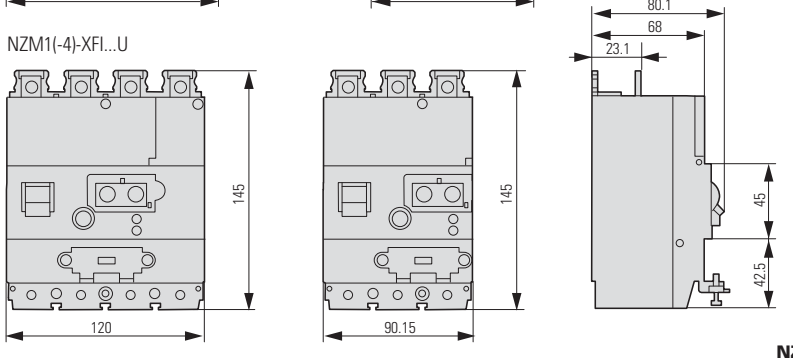


Part no.	A	B	C	A1	A2
PFR-WMA-35	91	28	40	35	28
PFR-WMA-70	105	62	75	35	35
PFR-WMA-105	153	98	110	35	60
PFR-WMA-140	153	133	145	35	60
PFR-WMA-210	153	203	215	35	60

Earth-fault release
NZM 11-41-XFL..R



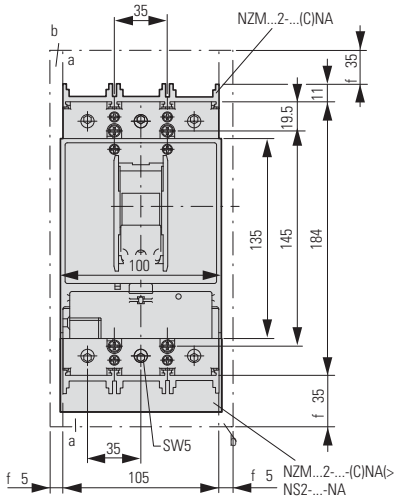
NZM1(-4)-XFI...U

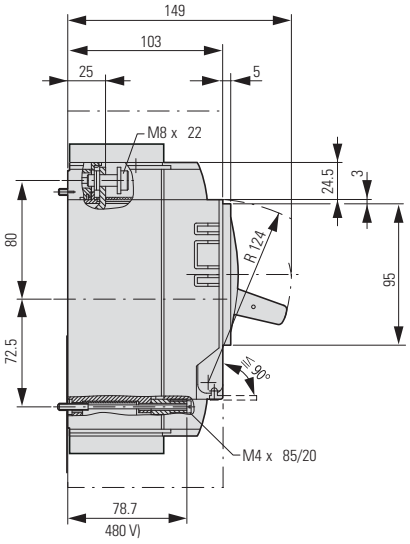


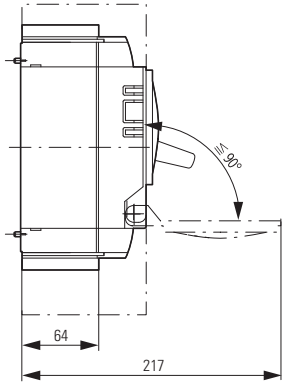
1

NZM2, PN2, N2, NS2

Circuit-breakers
Switch-disconnectors
3 pole
NZMB2
NZMC2
NZMN2
NZMH2
PN2
N2
NS2

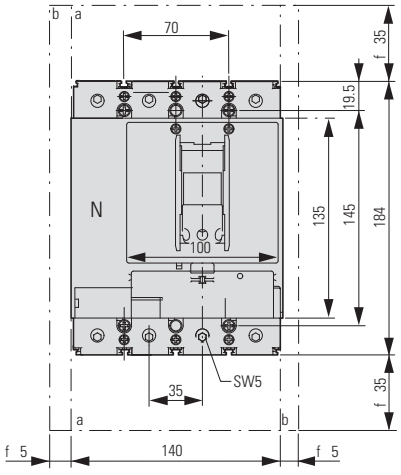


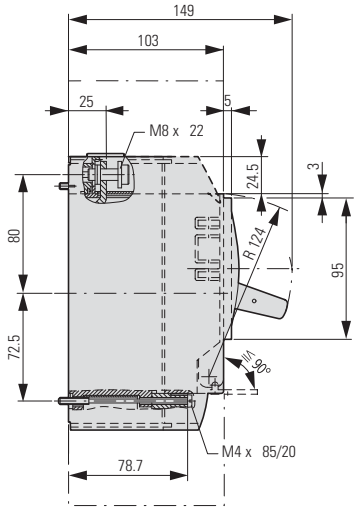




① Blow-out area, minimum distance to other parts 35 mm
② Minimum distance to adjacent parts≦5 mm

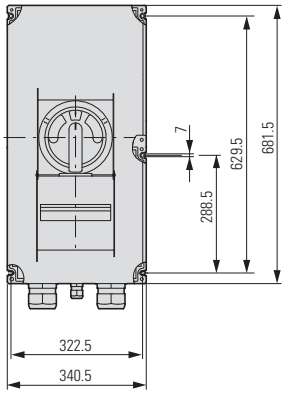
Circuit-breakers
Switch-disconnectors
4 pole
NZMB2-4
NZMC2-4
NZMN2-4
NZMH2-4
PN2-4
N 2-4

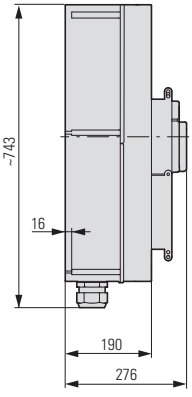




① Blow-out area, minimum distance to other parts 35 mm
② Minimum distance to adjacent parts 5 mm

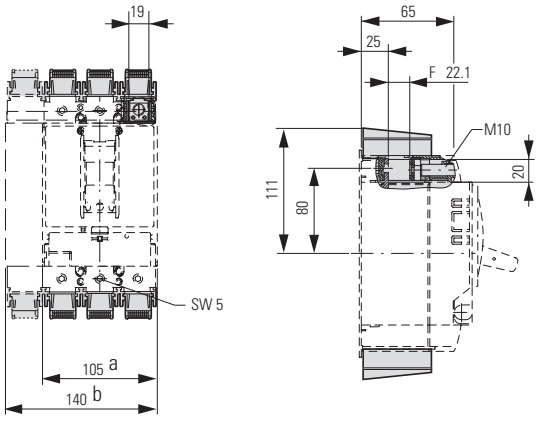
Switch-disconnectors
ATEX22-type
3 pole
PN2.../ATEX22





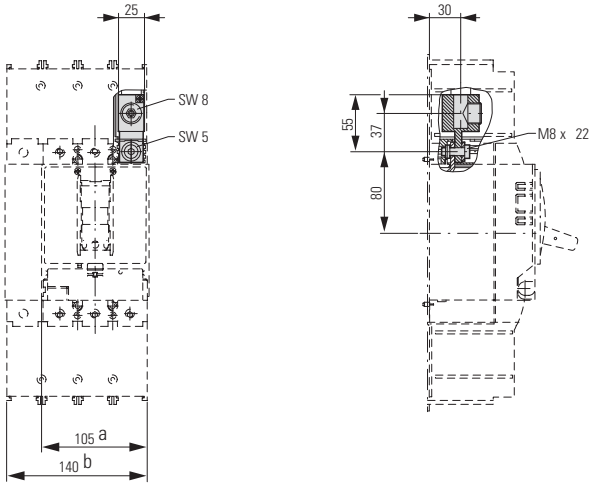
NZM2...-XK..., NZM2...-XIP..., NZM2-XST...

Box terminal
(+INZM21-4)—~XKCIOIIU)
IP2X protection against contact with finger
NZM21-41-XIPK

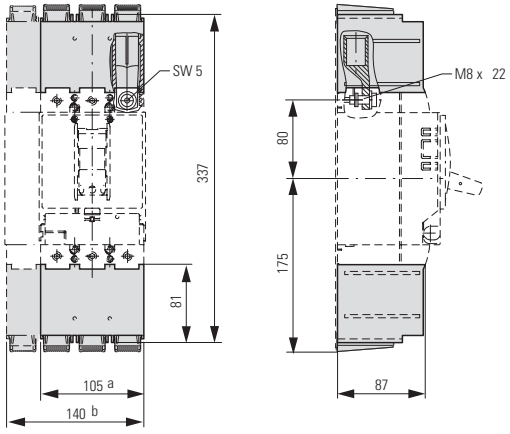


① 3 pole
② 4 pole

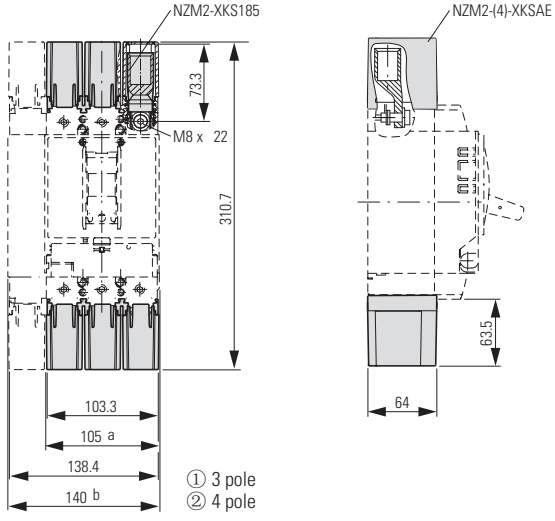
Tunnel terminal
NZM21-41-XKA



Covers
NZM21-41-XKSA
Cable lug
NZM2-XKS185
IP2X protection against contact with a finger for cover
NZM21-41-XI PA

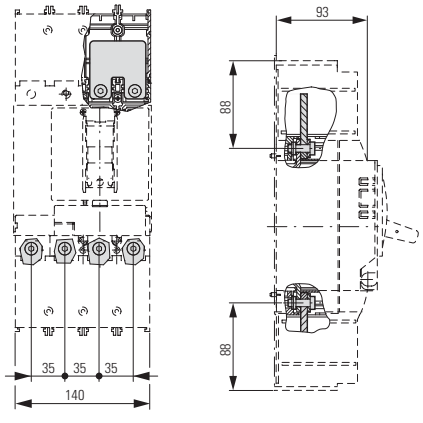


Cable lug cover
NZM2-141-XKSAE

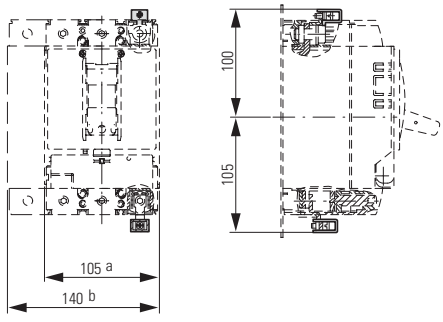


① 3 pole
② 4 pole

Jumper kit
NZM2-4-XKVP



Control cable terminals
NZM2-XSTS
NZM-XSTK

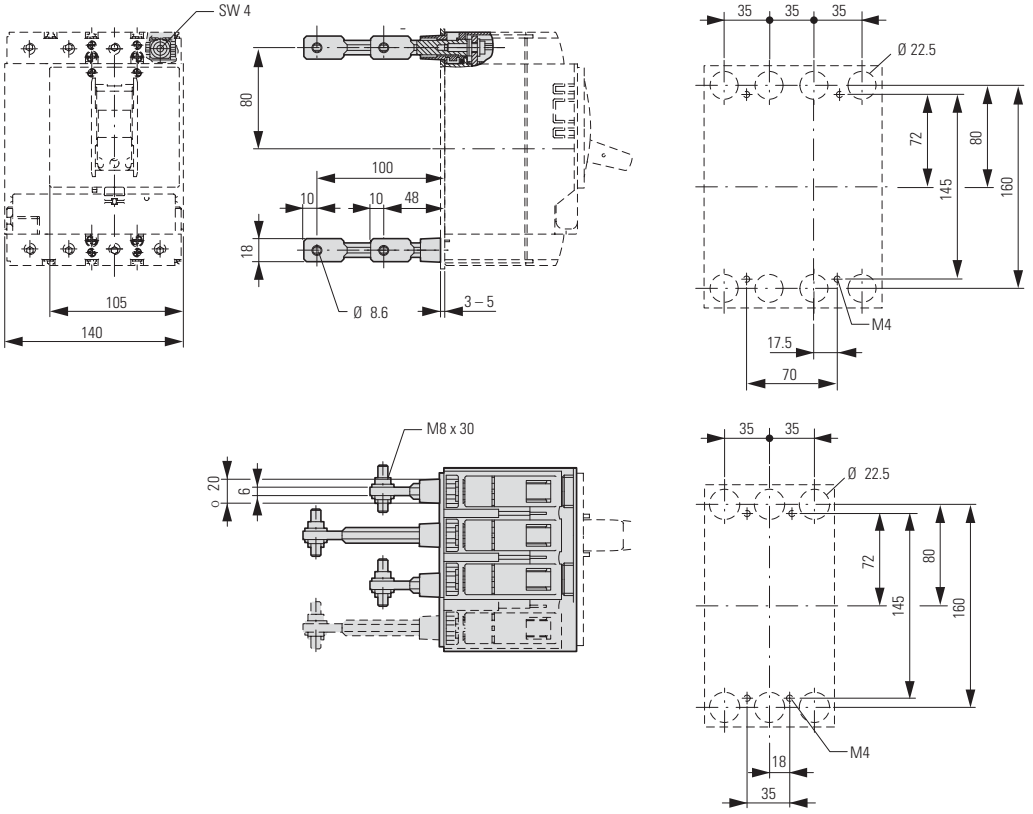


① 3 pole
② 4 pole

1

NZM2...-XKR..., NZM2-XDV..., NZM2-XDTV...

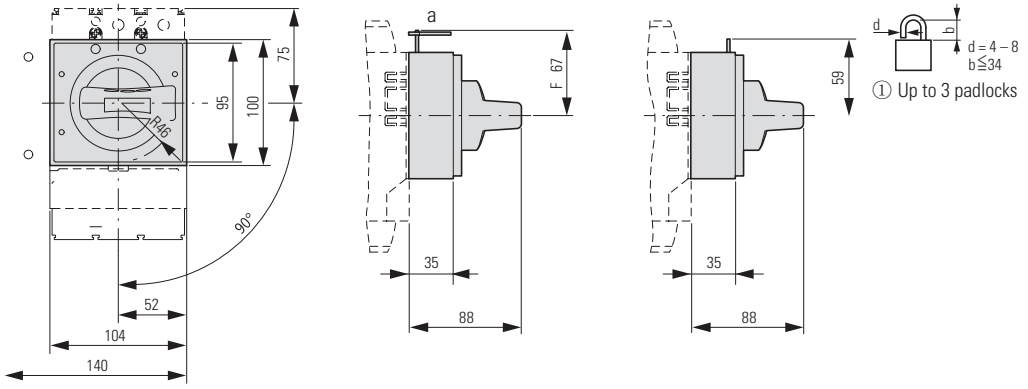
Rear terminal bolts
(+INZM21-41-XKRIOIIU)



Rotary mechanism
Rotary handle on circuit-breaker

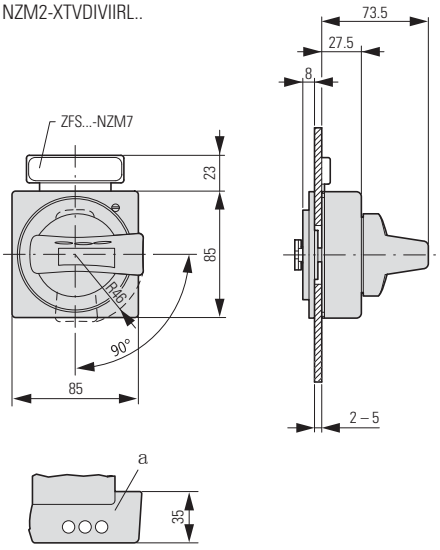
NZM2-XDV
NZM2-XDVR

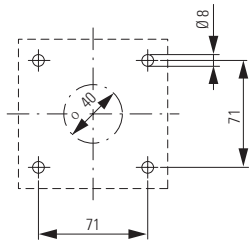
NZM2-XDTV
NZM2-XDTV2

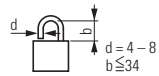


NZM2-XTV..., NZM1/2-XV4(6)

Door coupling rotary handles
NZM2-XTVDIVIIRL..

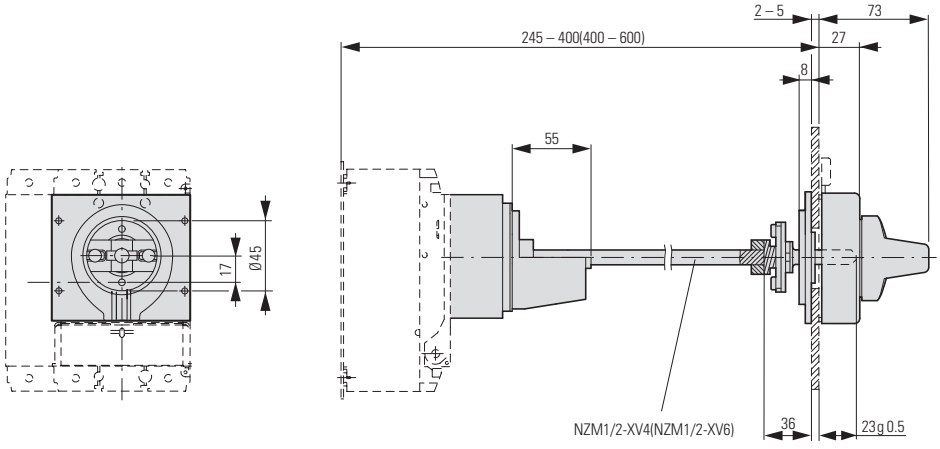




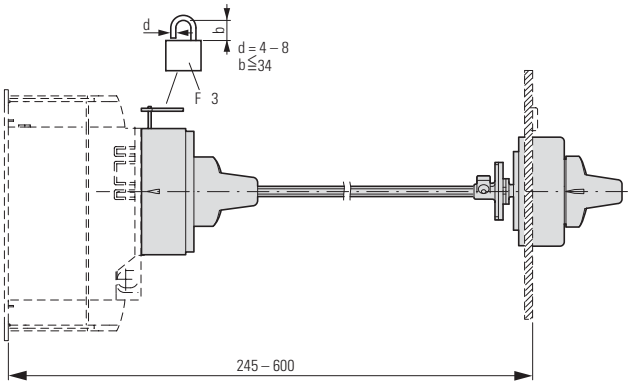


① Up to 3 padlocks

Door coupling rotary handle with extension shaft
NZM2-XTVDIVIIRII-NA)
NZM 1/2-XV416)



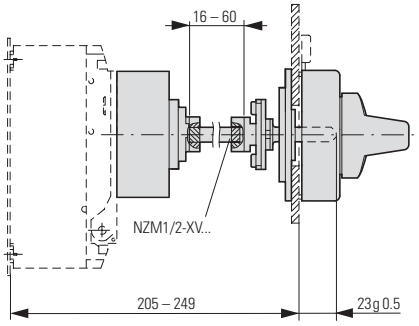
Main switch assembly kit with additional rotary handle
NZM2-XHB-DAIRII-NA)



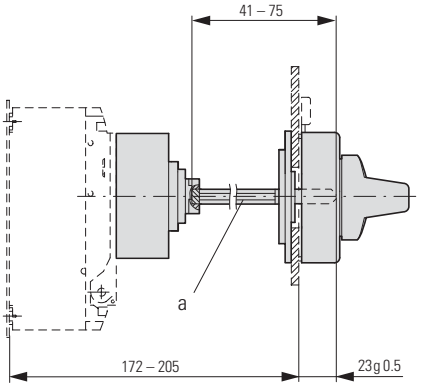
1

NZM2-XTVD..., NZM2-XS...

Door coupling rotary handle with extension shaft
NZM2-XTVDIVIIRI-601-NAI

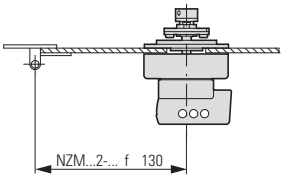


NZM2-XTVDIVIIRI-0(—NAI

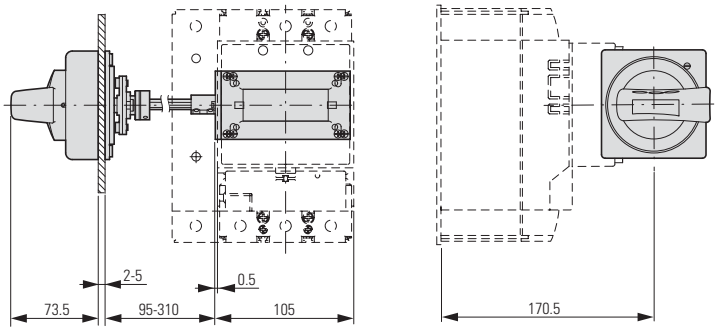


① Special tip

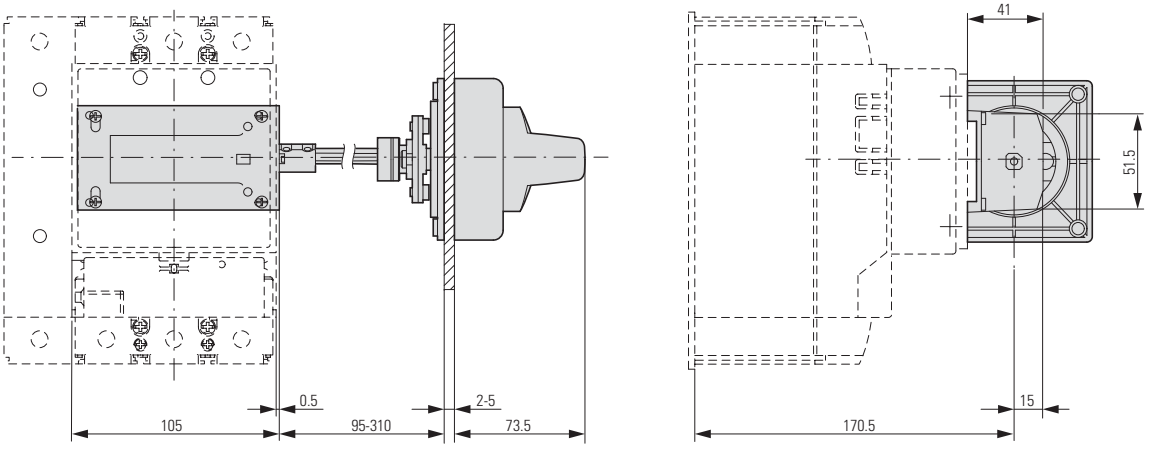
Minimum distance of door coupling rotary handle from door pivot point



Main switch assembly kit for side wall installation
NZM2-XSIRI-L



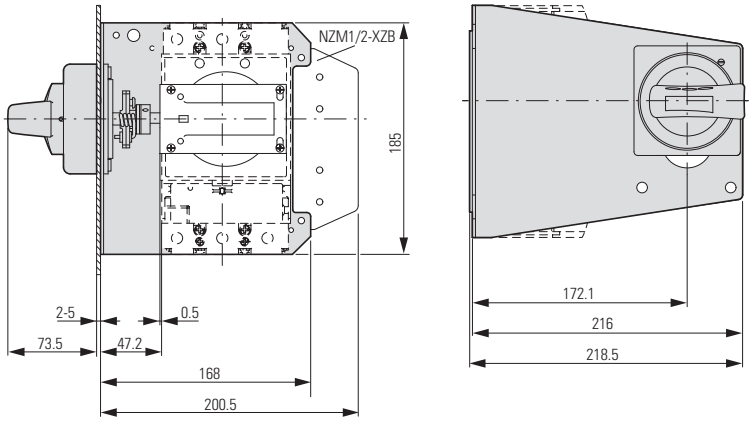
NZM2-XS(R)-R



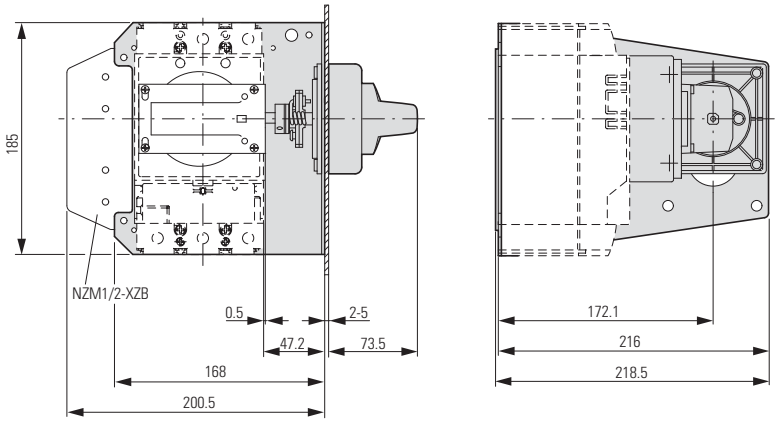
NZM2-XS..., NZM2...-XRAV...

Main switch assembly kit for side wall installation with mounting bracket.

NZM2-XSIRIM-L

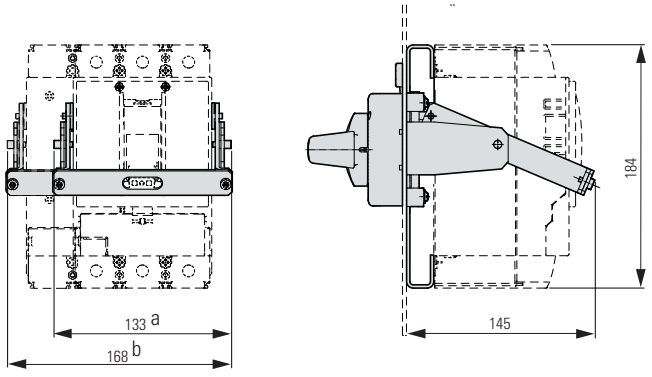


NZM2-XSIRIM-R



Rear-mounted drives

NZM21-41-XRAVIR)

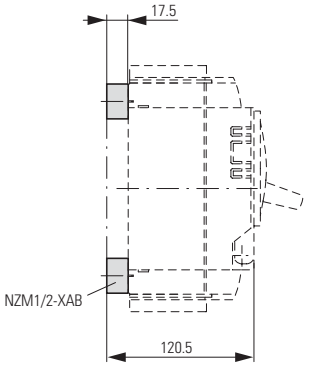


① NZM2-XRAV(R)
② NZM2-4-XRAV(R)

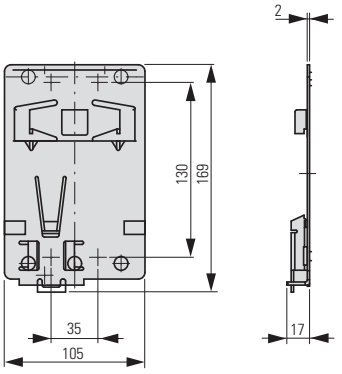
1

NZM...-XAB, NZM2-XBR, NZM2-XDTV...

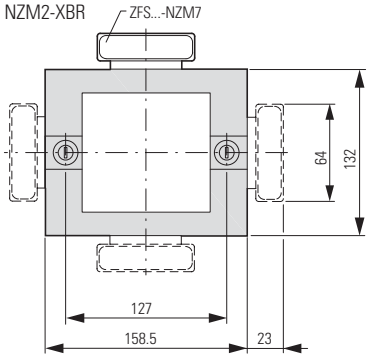
Spacers
NZM1/2-XAB

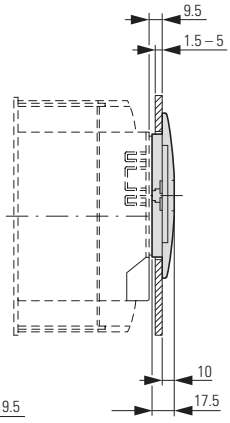


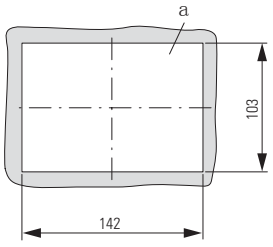
Clip plate
NZM2-XC75



Insulating surround
NZM2-XBR

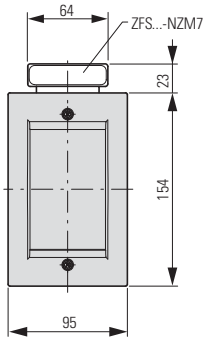


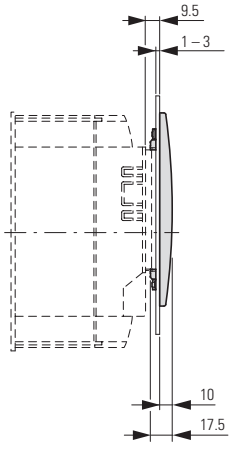


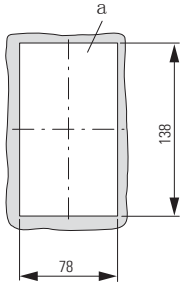


① Mounting aperture

NZM2/3-XBRS

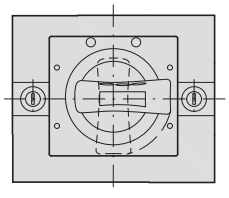


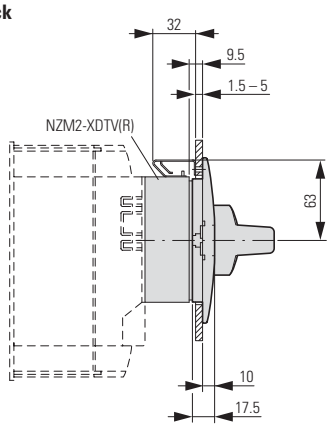


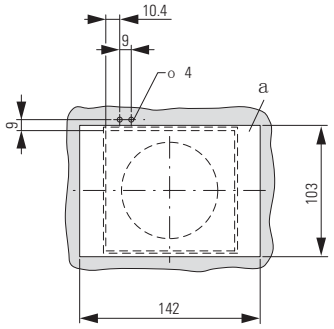


① Mounting aperture

Rotary handle on switch with door interlock
NZM2-XDTVIR)





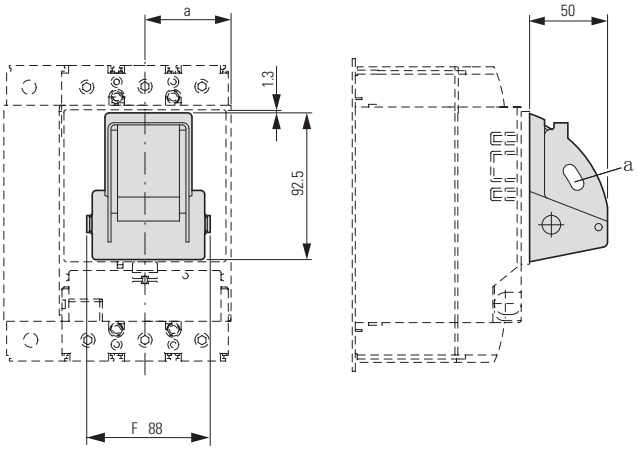


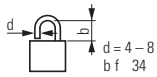
① Mounting aperture

NZM2...-XKAV, NZM2...-XSH

Toggle lever locking device

NZM2/3-XKAV



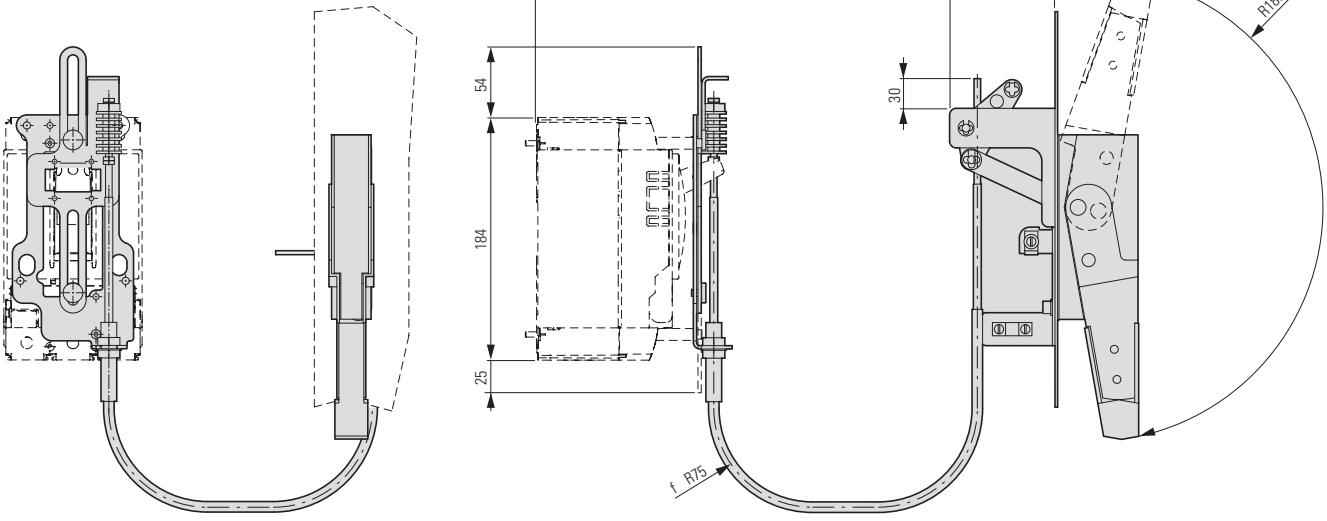


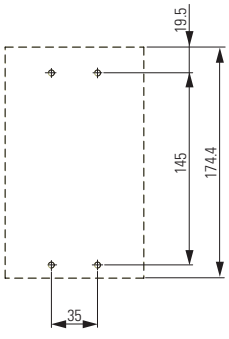
① Up to 3 padlocks

Part no.	a
NZM2, PN2, N2	52.5
NZM3, PN3, N3	70

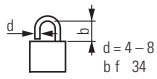
Side-mounted handle

NZM2...-XS H





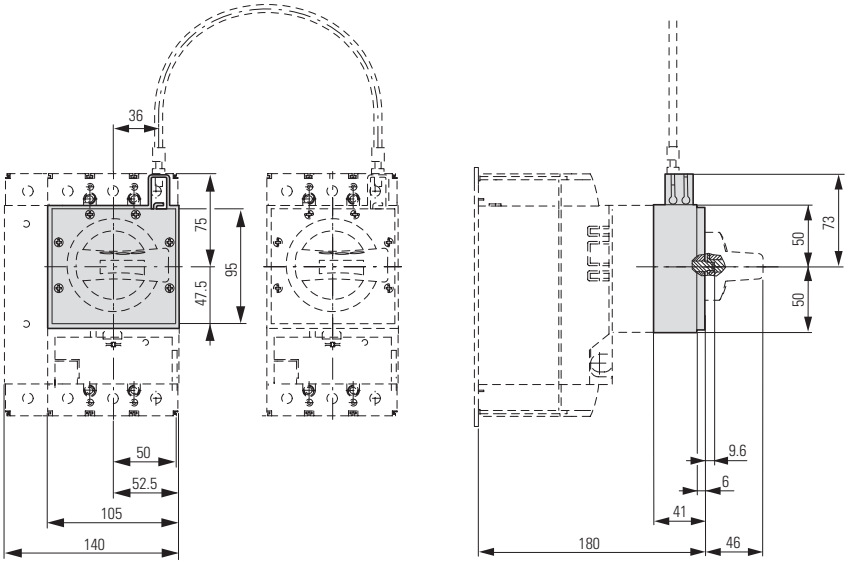
Drilling template



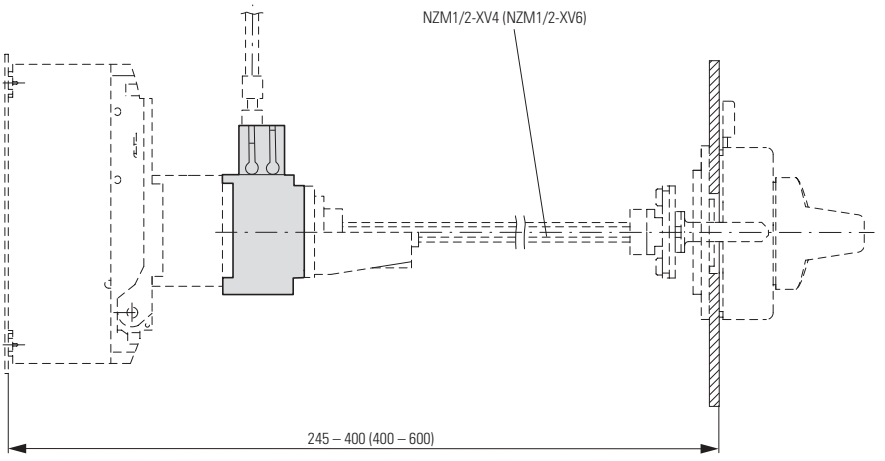
① Up to 3 padlocks

1 NZM2-XMV, NZM2-XTVD..., NZM2-XD

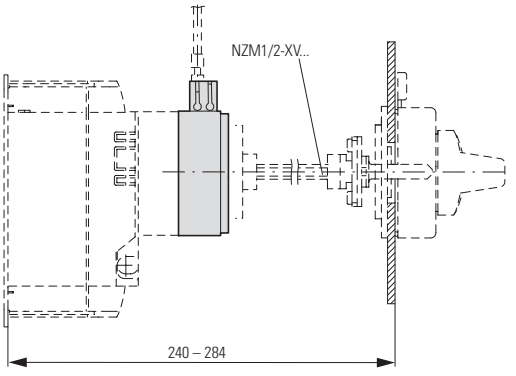
Mechanical interlock
NZM2-XMV+NZM2-XD



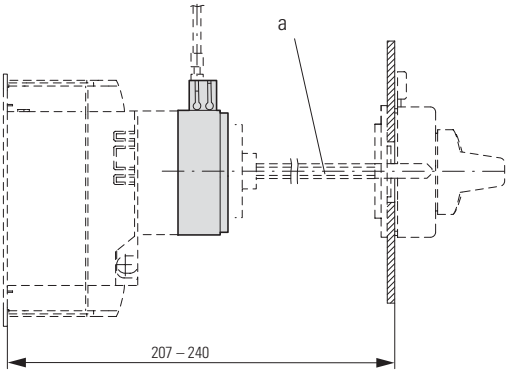
NZM2-XMV+NZM2-XTVDIVIIR)



NZM2-XMV+NZM2-XTVDIVIIRI-60



NZM2-XMV+NZM2-XTIVIDIVIIRI-0

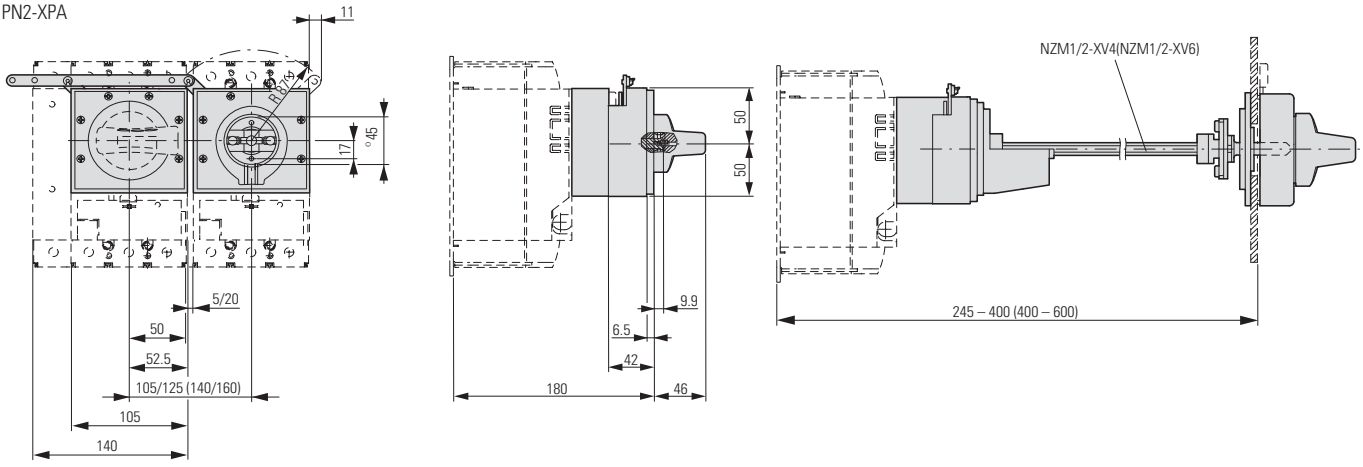


① Special tip

PN2-XPA, NZM2-XR...

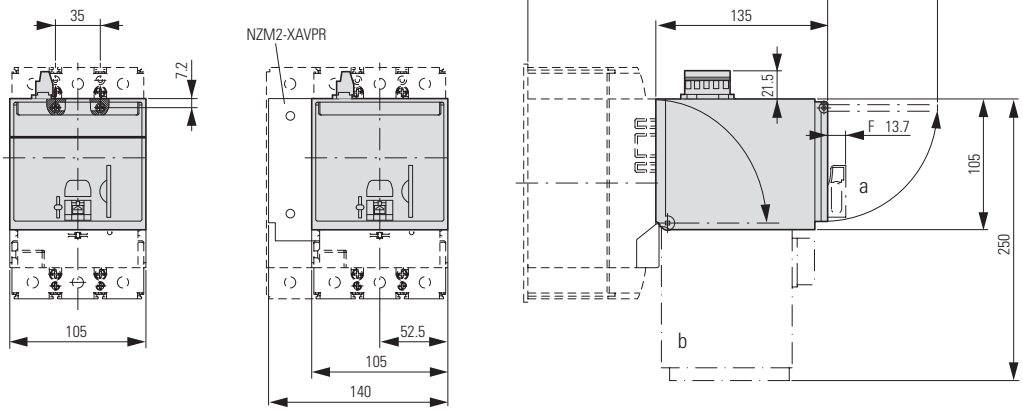
Paralleling mechanism

PN2-XPA

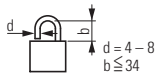


Remote operators

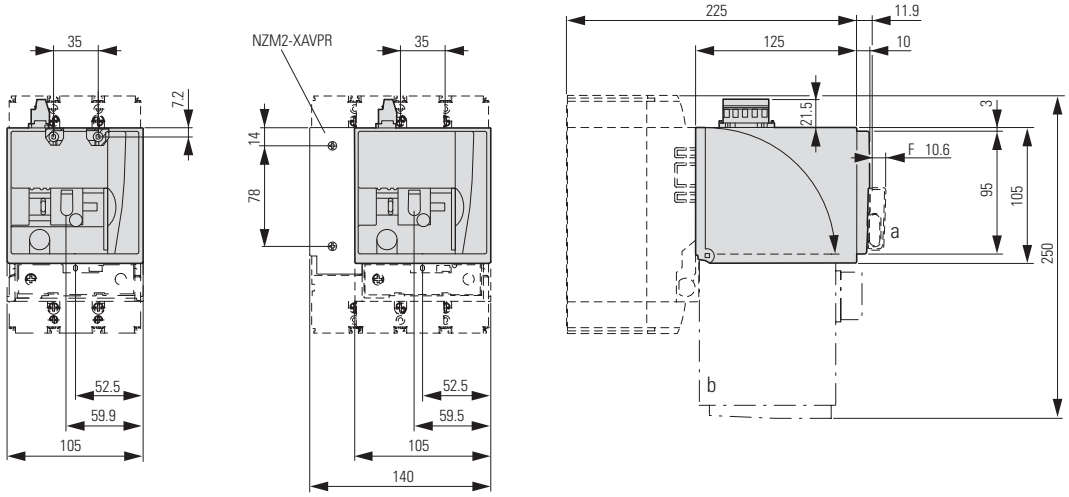
NZM2-XR



① Up to 3 padlocks
② Remote operator folded



NZM2-XRD...



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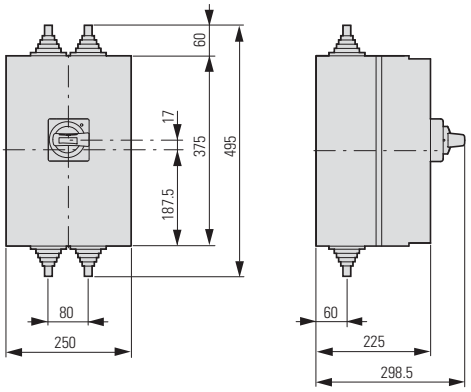
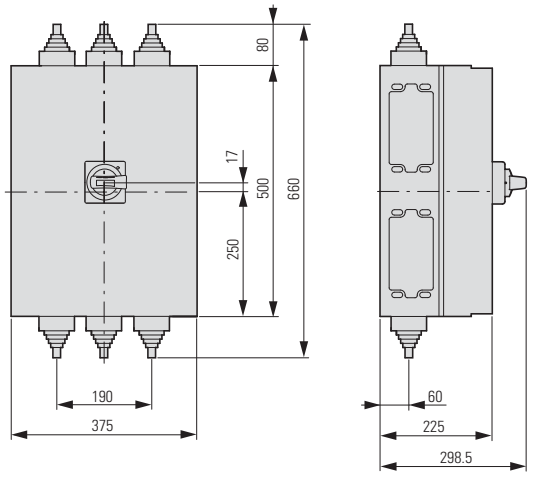
NZM2-XCI..., NZM2-XAD, NZM2...-XSVS

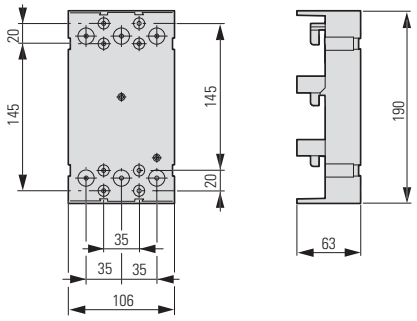
Insulated enclosures
NZM2-XC143-T



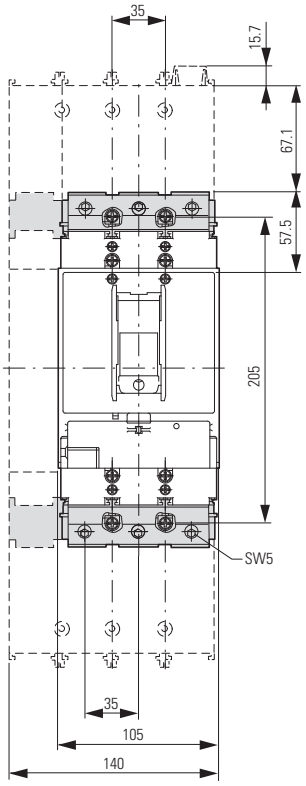
NZM2-XC145-T...

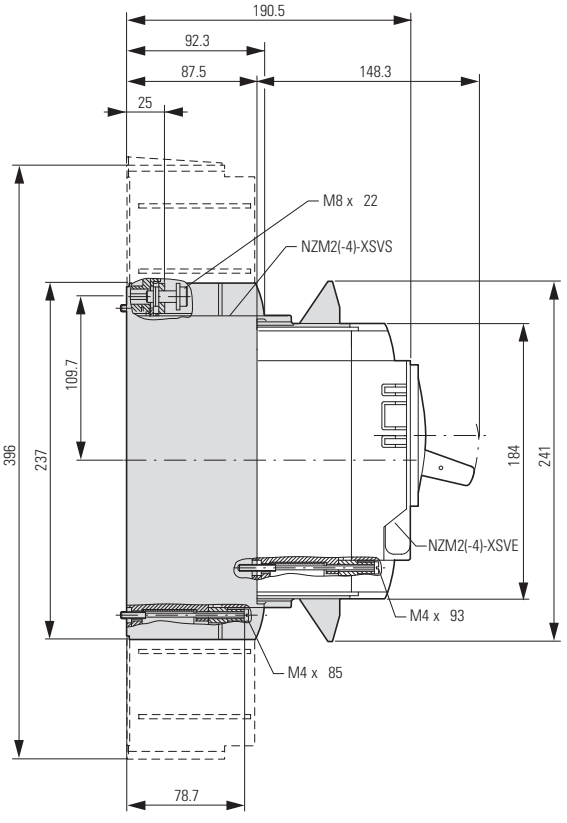


Component adapter
NZM2-XAD250



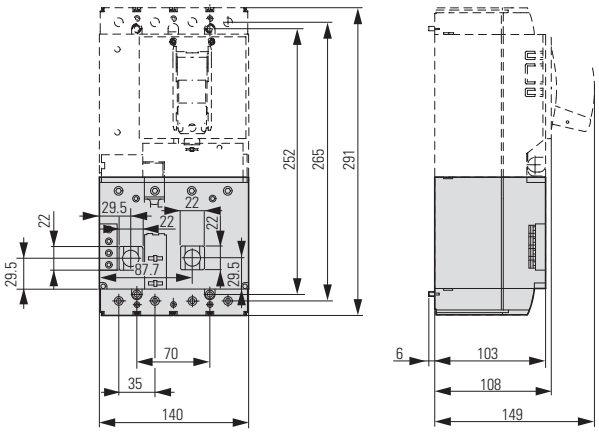
Plug-in units
NZM2-...-SVE
N2-...SVE
NZM21-41-XSVS



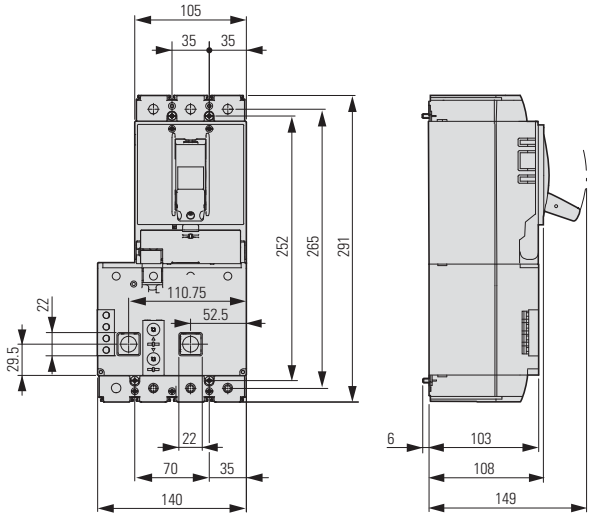


NZM2(-4)-XFI, NZM-XDMI..., UVU-NZM

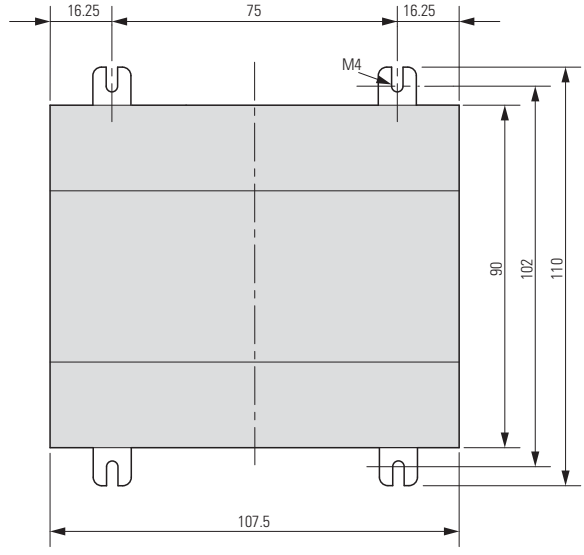
Earth-fault release
NZM21-41-XFL..



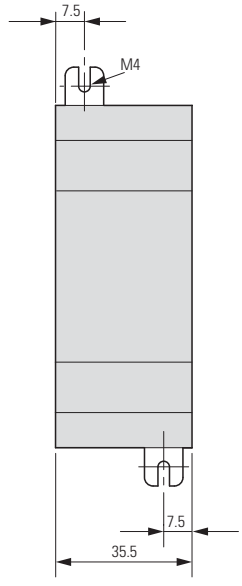
Earth-fault release
NZMH2...-XFIA30



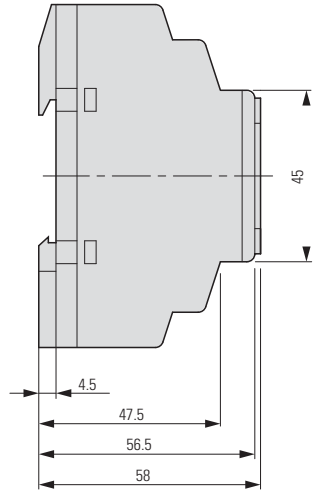
Data management interface (DMI module)
NZM-XDM1612



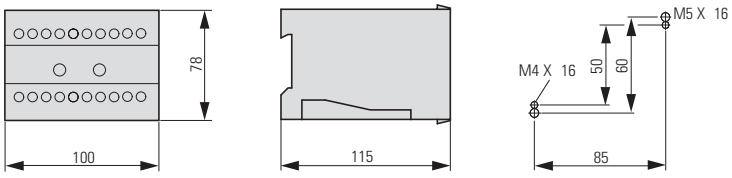
NZM-XDM⊦DPV1
EASY2



NZM-XDMI
EASY2



Undervoltage releases, off-delayed
UVU-NZM
Capacitor unit
NZM-XCM



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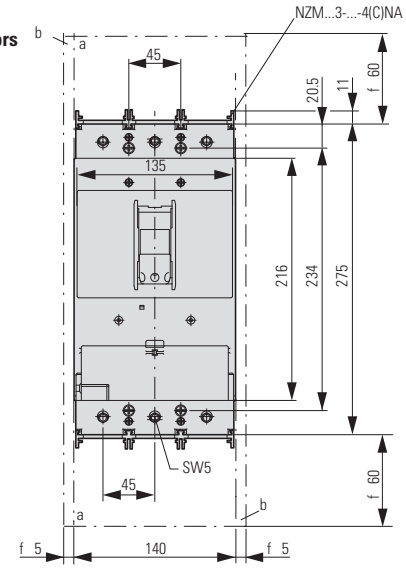
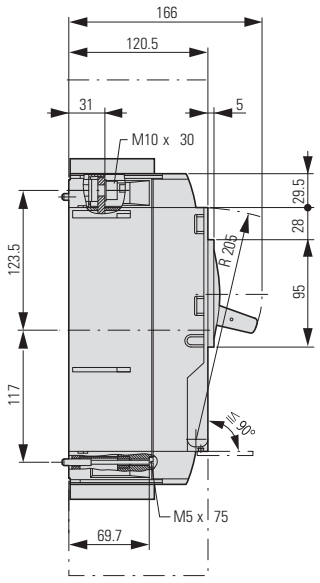
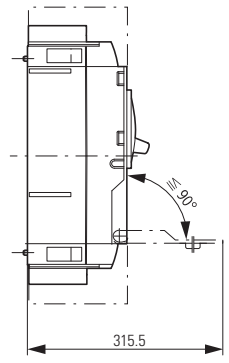
NZM3, PN3, N3, NS3

Circuit-breakers
Switch-disconnectors
3 pole
NZMC3
PN3
N3
NS3

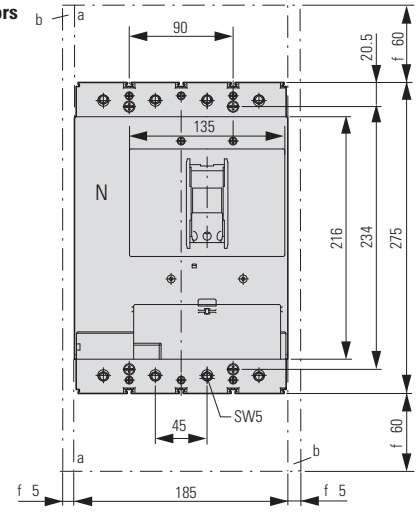


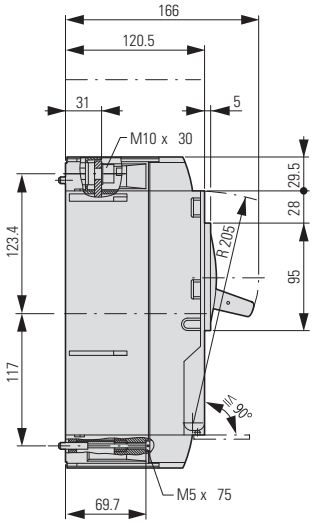




① Blow-out area, minimum clearance to other parts ≧ 60mm
② Minimum clearance to adjacent parts ≧ 5mm

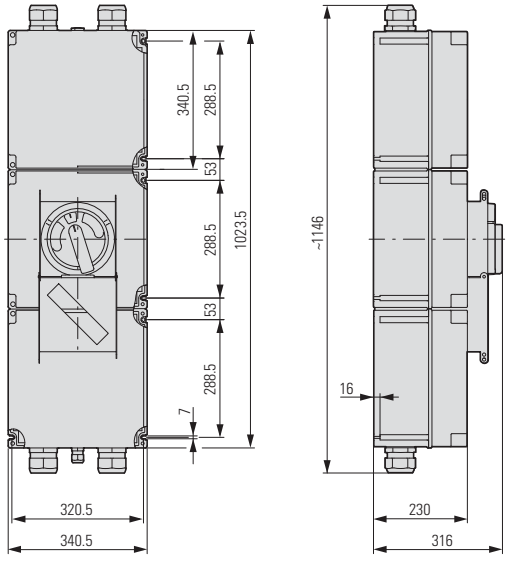
Circuit-breakers
Switch-disconnectors
4 pole
NZMC3-4
NZMN3-4
NZMH3-4
PN3-4
N 3-4





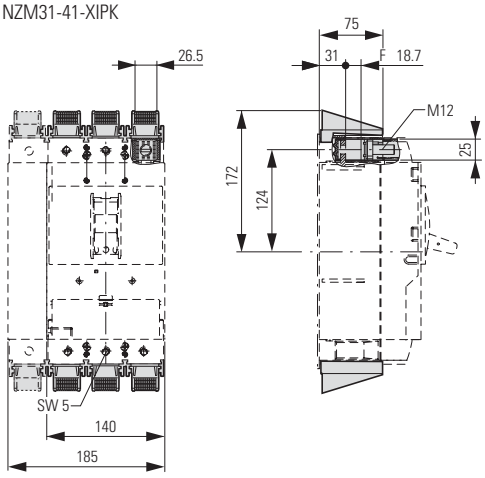
① Blow-out area, minimum clearance to other parts ≧ 60mm
② Minimum clearance to adjacent parts ≧ 5mm

Switch-disconnectors
ATEX22-type
3 pole
PN3.../ATEX22

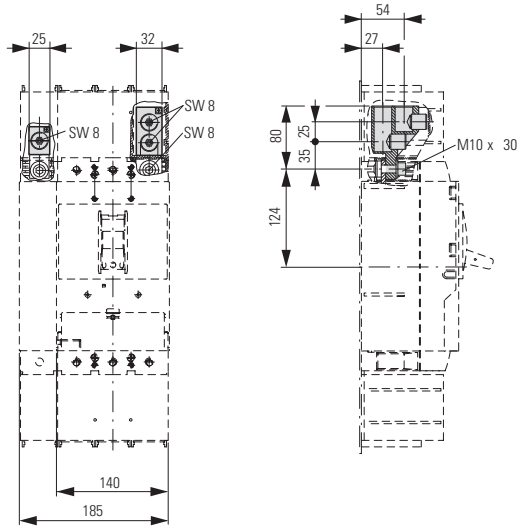


NZM3...-XK, NZM3...-XIP..., NZM3-XST...

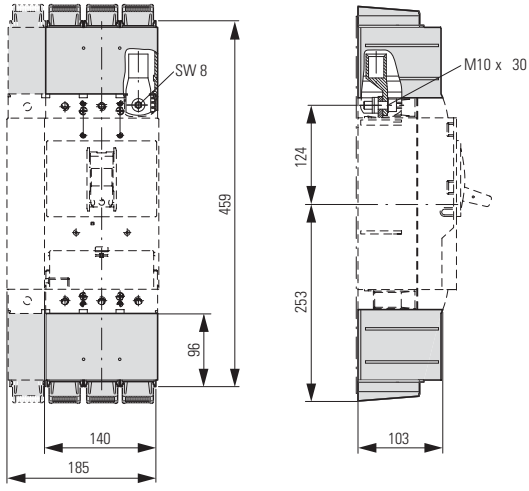
Box terminal
(+INZM31-41-XKCIOIIU)
IP2X protection against contact with finger
NZM31-41-XIPK



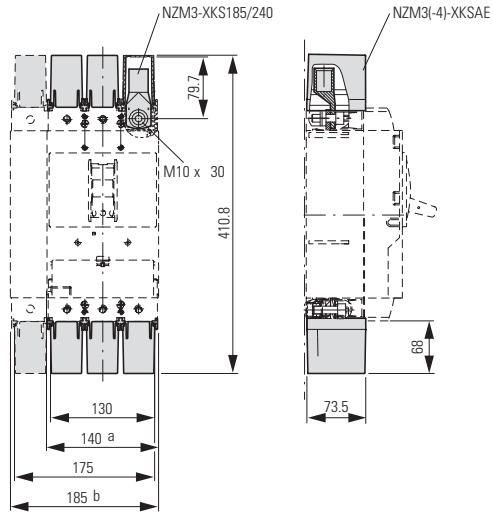
Tunnel terminal
NZM31-41-XKAi (2)



Cover
NZM31-41-XKSA
Cable lug
NZM3-XKS185
IP2X protection against contact with a finger
NZM31-41-XI PA



Cable lug cover
NZM3-141-XKSAE



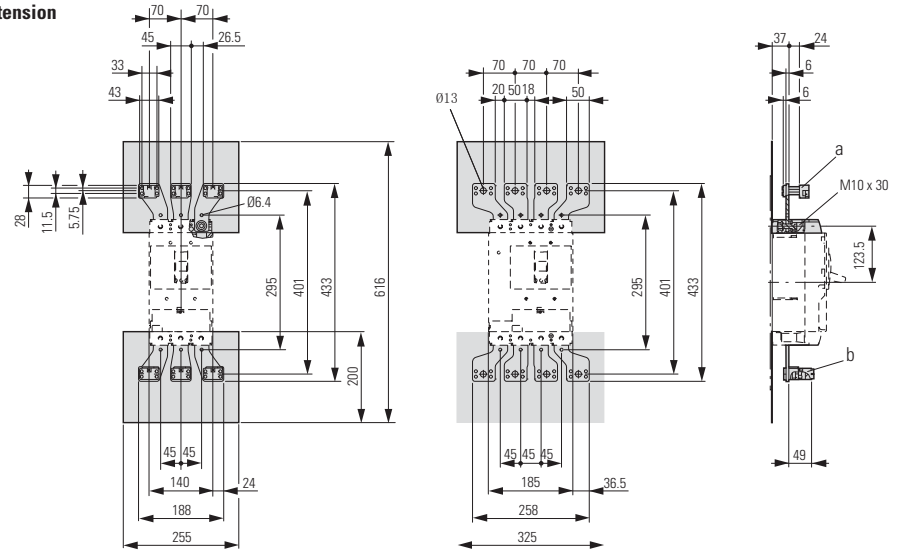
① 3 pole
② 4 pole

1

NZM3...XK...

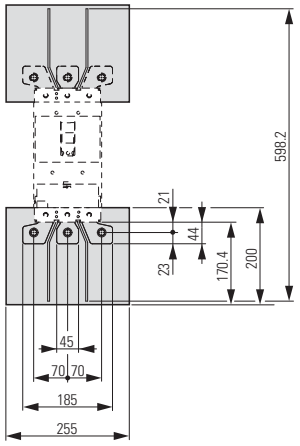
Connection width extension
NZM31-41-XKV70
Terminals
NZM31-41-XK22X21
NZM31-41-XK300

Length with phase isolators approx. 599 mm

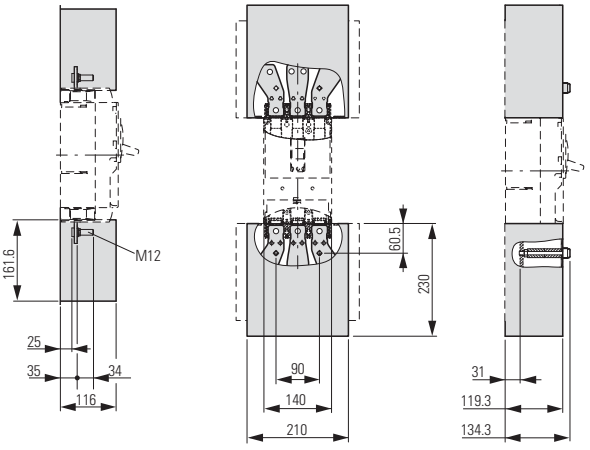


① NZM3(-4)-XK22X21
② NZM3(-4)-XK300

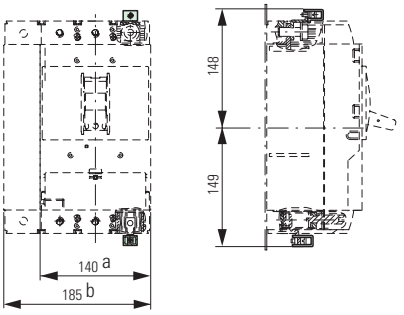
Connection width extension
NZM3-XKV70KB



Connection width extension
NZM3-XKV70-2
Cover, large
NZM3-XKSAV

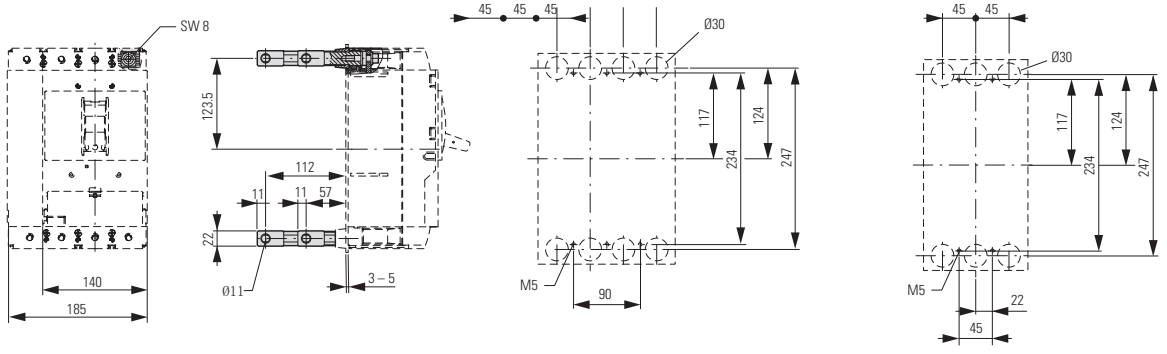


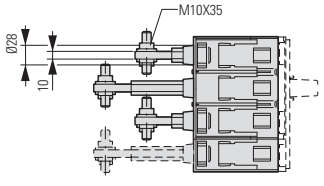
Control cable terminals
NZM3/4-XSTS
NZM-XSTK



① 3 pole
② 4 pole

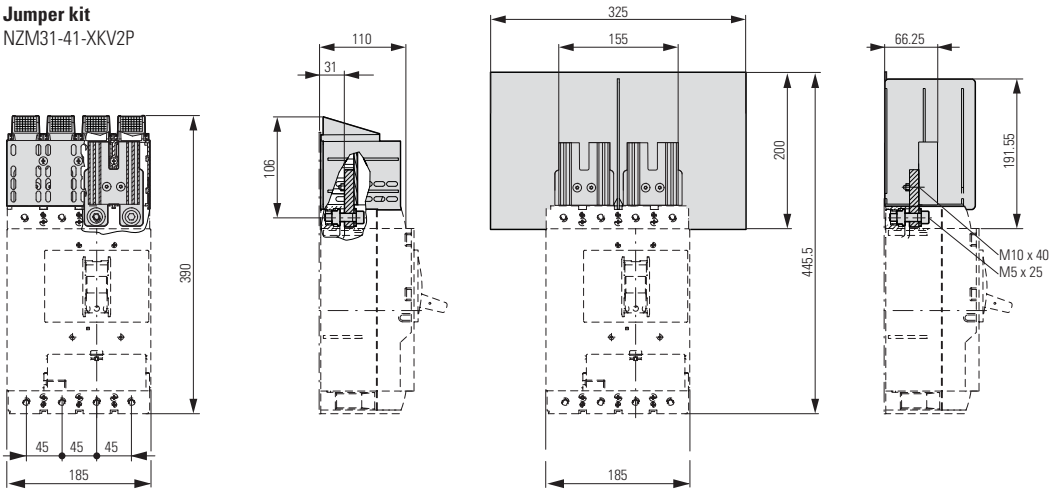
Rear terminal bolts
(+INZM31-41-XKRIOIIU)



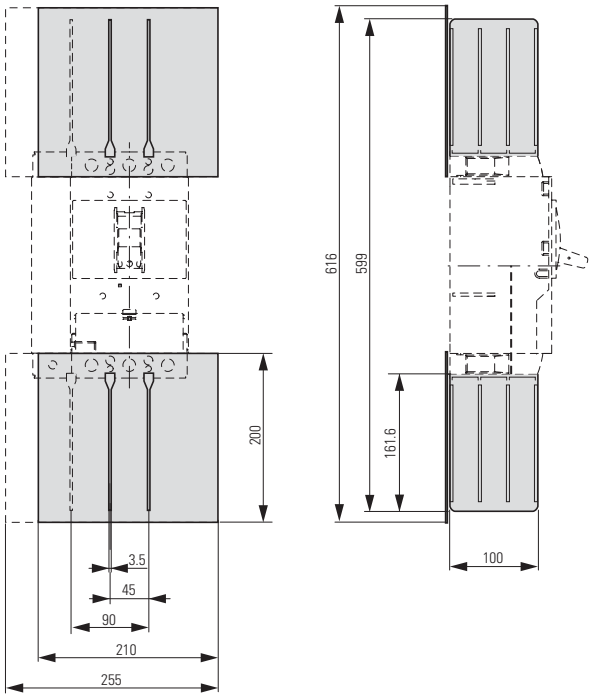


NZM3...-XKP, NZM3-XAB, NZM3-XBR, NZM3-XKV2P

Jumper kit
NZM31-41-XKV2P

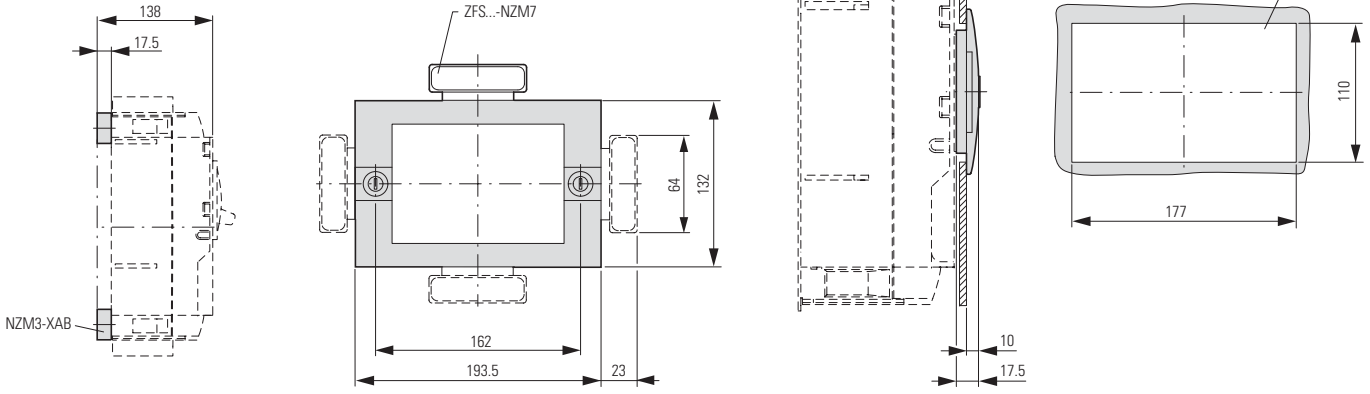


Phase isolators
NZM3-4-XKP



① Mounting aperture

Spacers
NZM3-XAB



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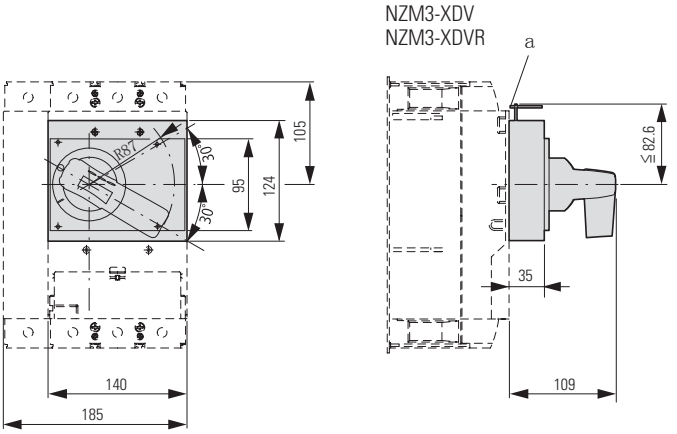
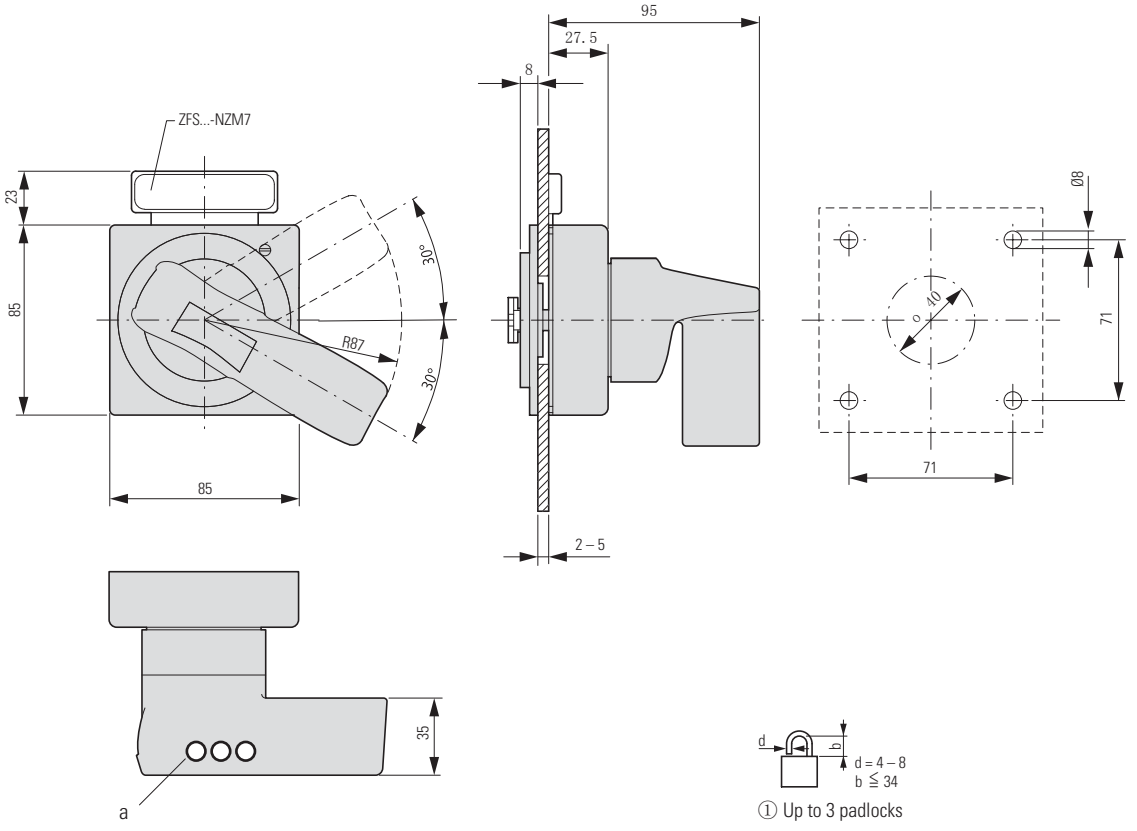
NZM3-XDV..., NZM3-XTVD...

Rotary drive
Rotary handle on circuit-breaker

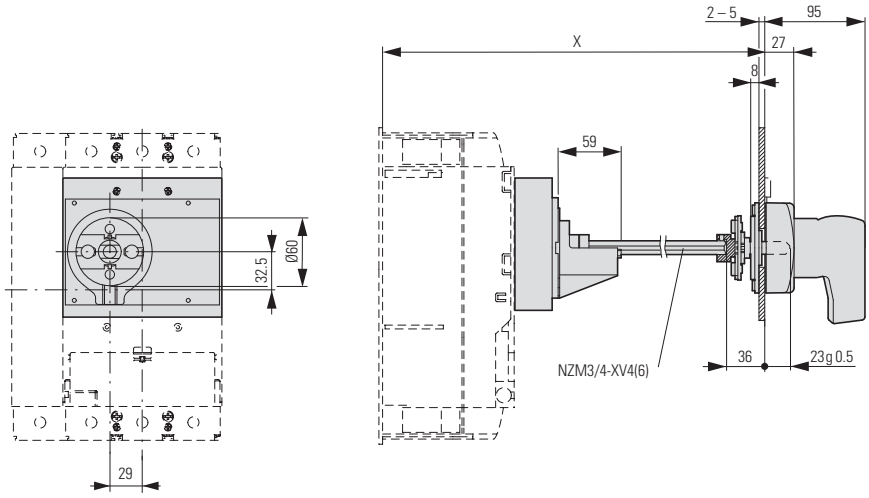


Door coupling rotary handles
NZM3-XTVDIVIIRL..



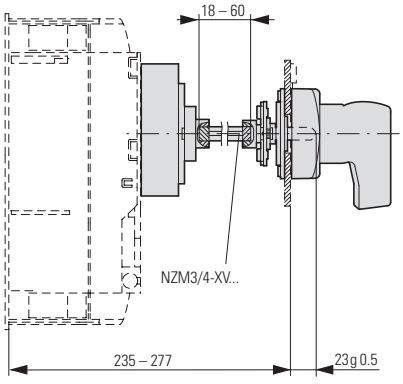
NZM3-XTVD

Door coupling rotary handle with extension shaft
NZM3-XTVDV(R)(-NA)
NZM3/4-XV4(6)

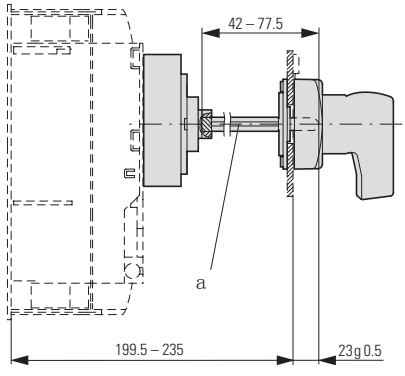


Part no	X
NZM3/4-XV4	270 – 400
NZM3/4-XV6	400 – 600

NZM3-XTVDVIRI-60(–NA)

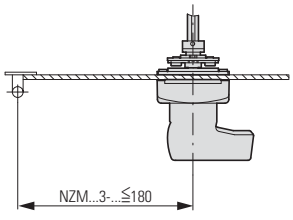


NZM3-XTVDVIRI-0(–NA)



① Special tip

Minimum distance of door coupling rotary handle from door pivot point



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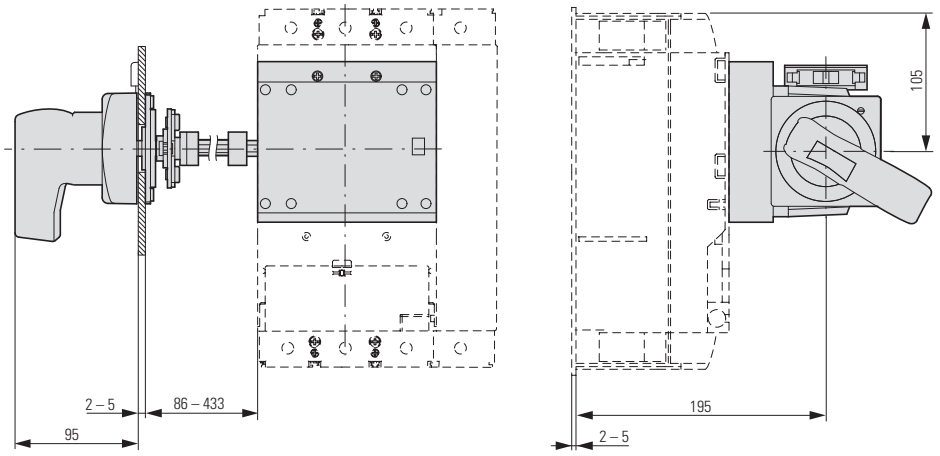
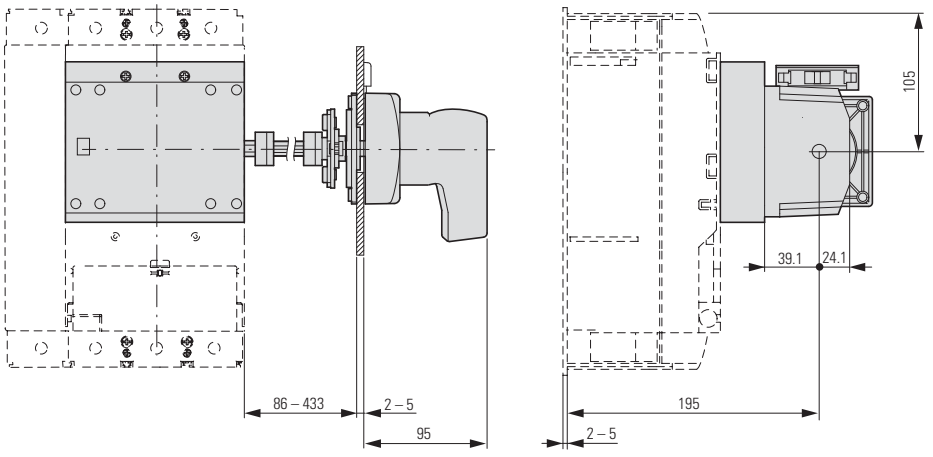
NZM3-XS..., NZM3

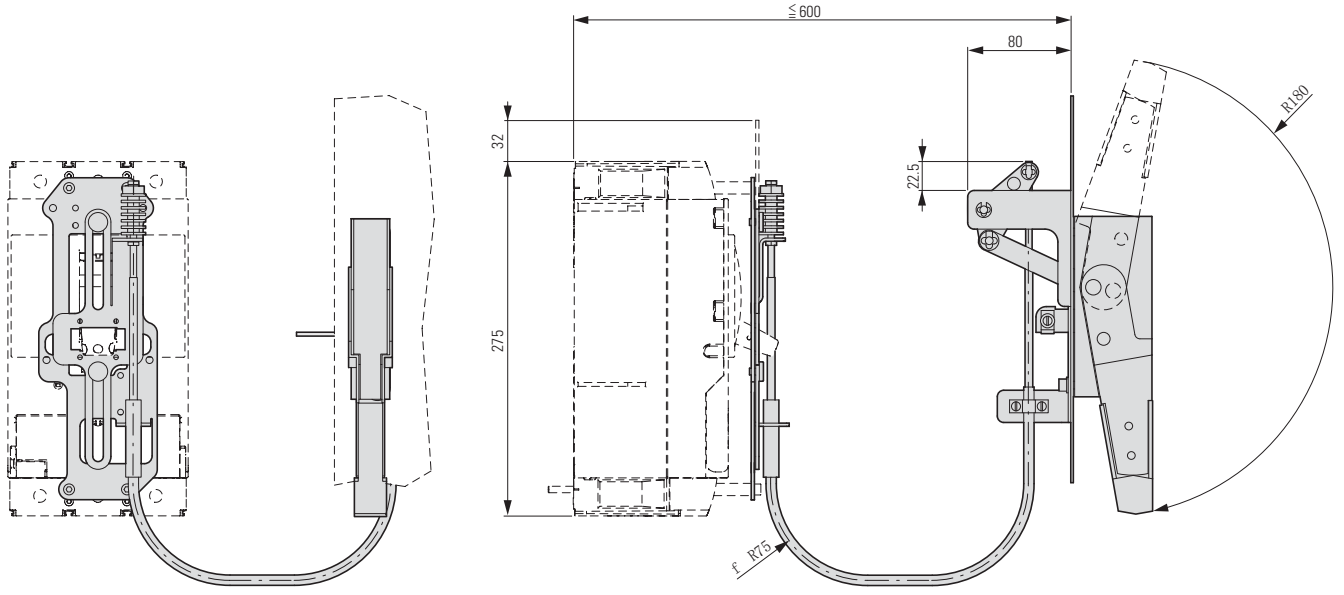
Main switch assembly kit for side wall installation
NZM3-XSIRI-L



NZM3-XS(R)-R



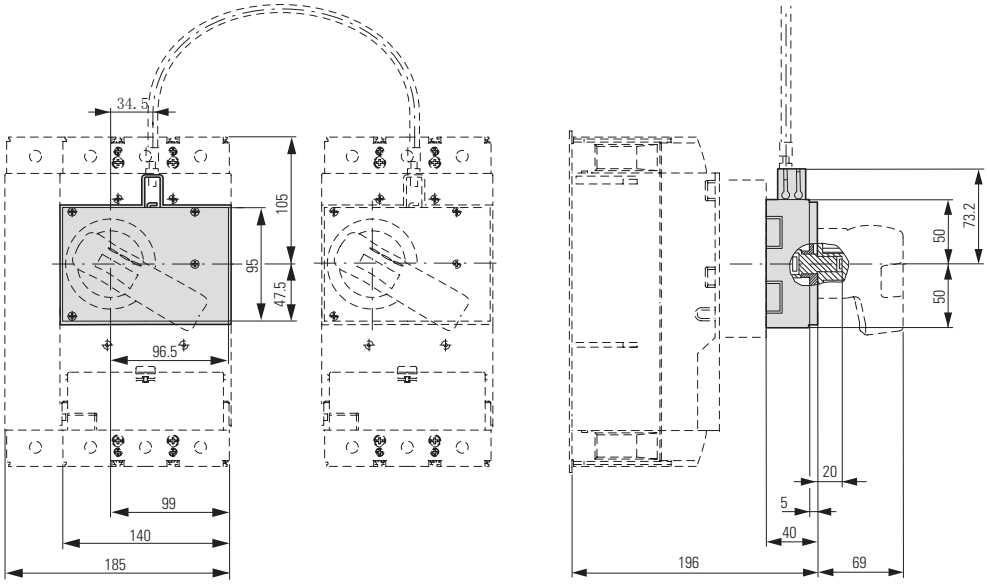
Side-mounted handle
NZM3... XSH



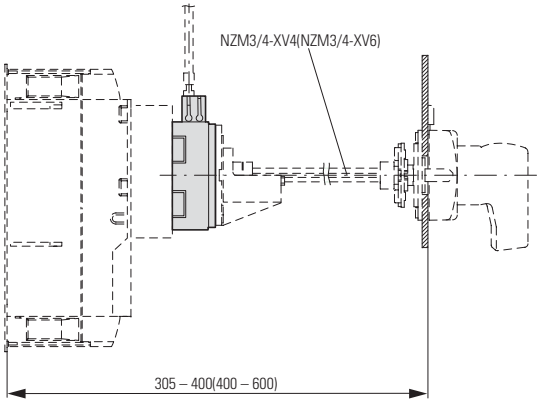
NZM-XMV, NZM3-XTVD..., NZM3-XDV

Mechanical interlock

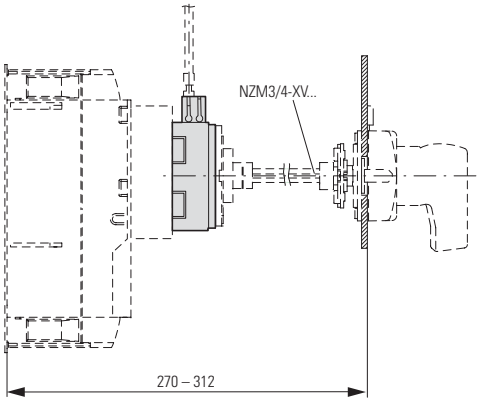
NZM3-XMV+NZM3-XDV(R)



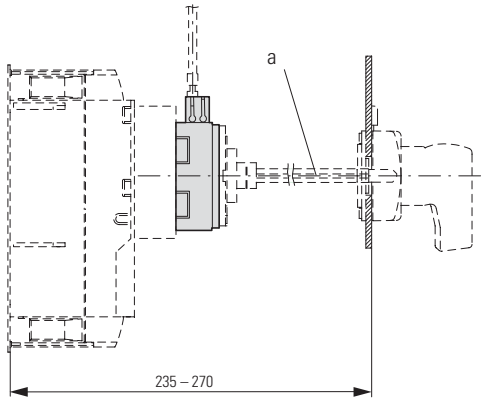
NZM3-XMV+NZM3-XTVDIVIIR)



NZM3-XMV+NZM3-XTVDIVIIRI-60



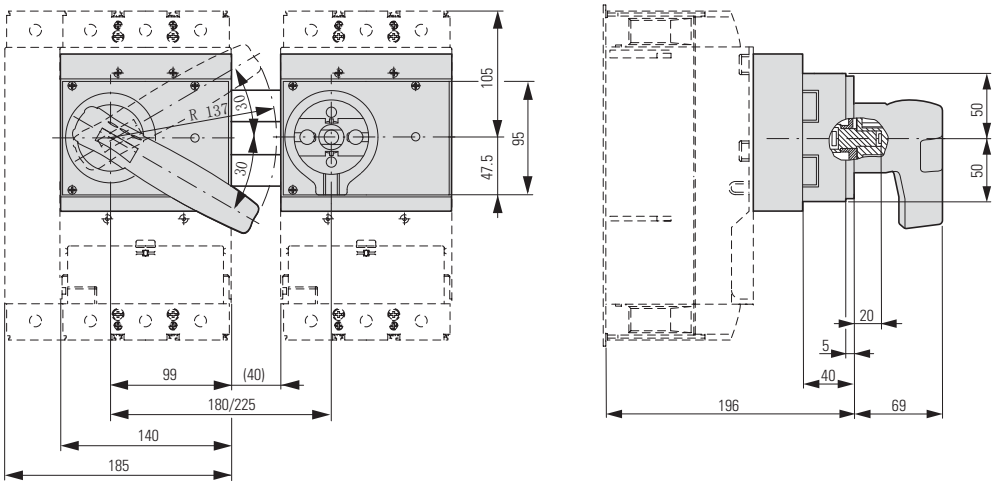
NZM3-XMV+NZM3-XTVDIVIIRI-0



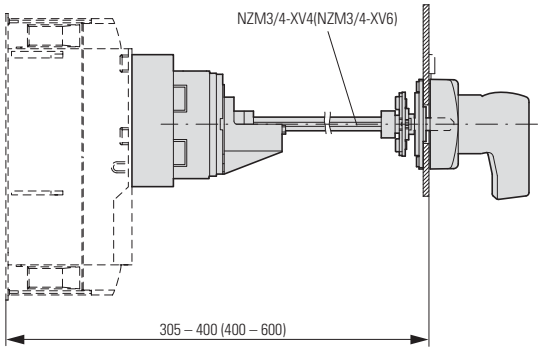
① Special tip

NZM3-XMV, NZM3-XTVD..., NZM3-XDV

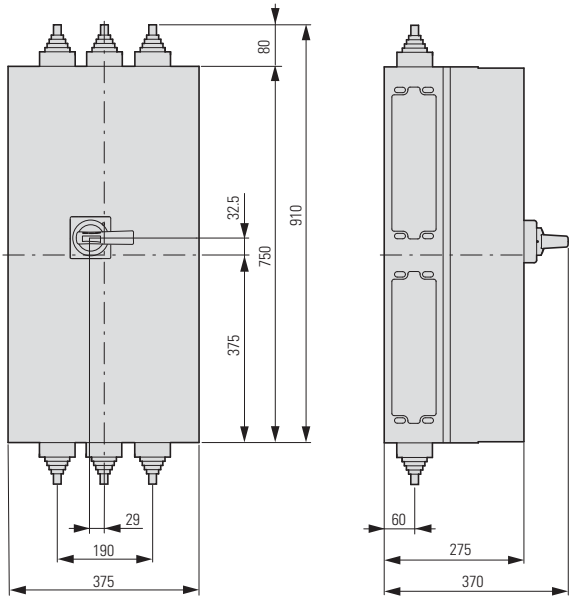
Paralleling mechanism
PN3-XPA



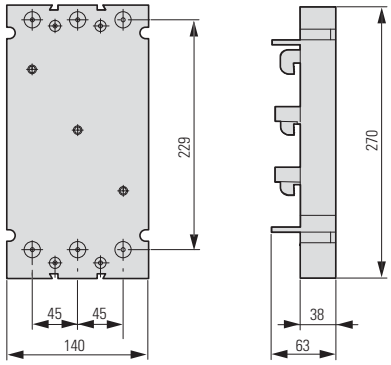
PN3-XPA



Insulated enclosures
NZM3-XC148-TD

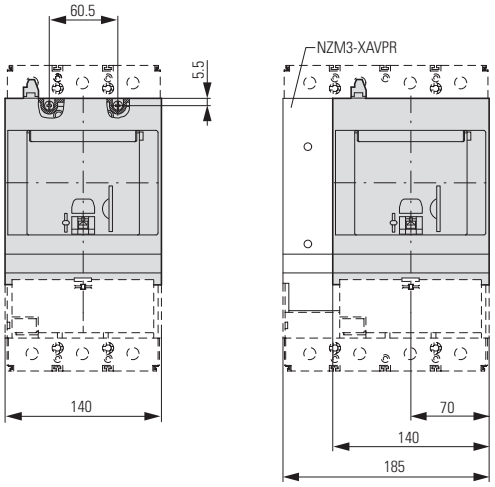


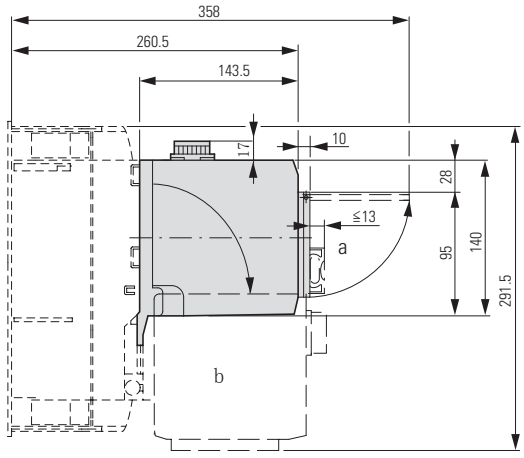
Component adapter
NZM3-XAD550

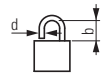


NZM3-X2..., NZM3...XSVS

Remote operators
NZM3-XR

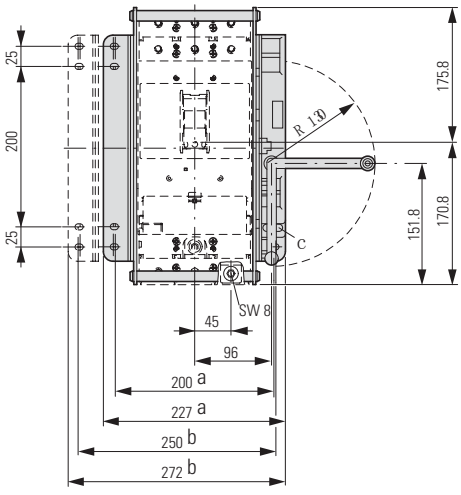


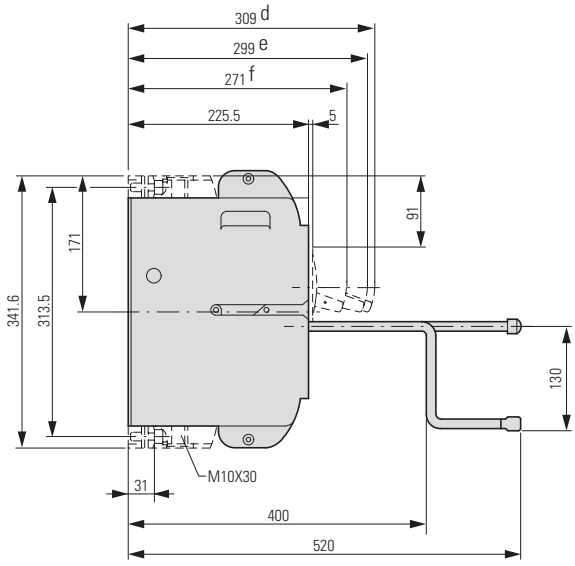




① Up to 3 padlocks
② Remote operator folded

Withdrawable unit with auxiliary plug-in adapter
NZM3-...-SVE
N3...-SVE
NZM3-XSVS





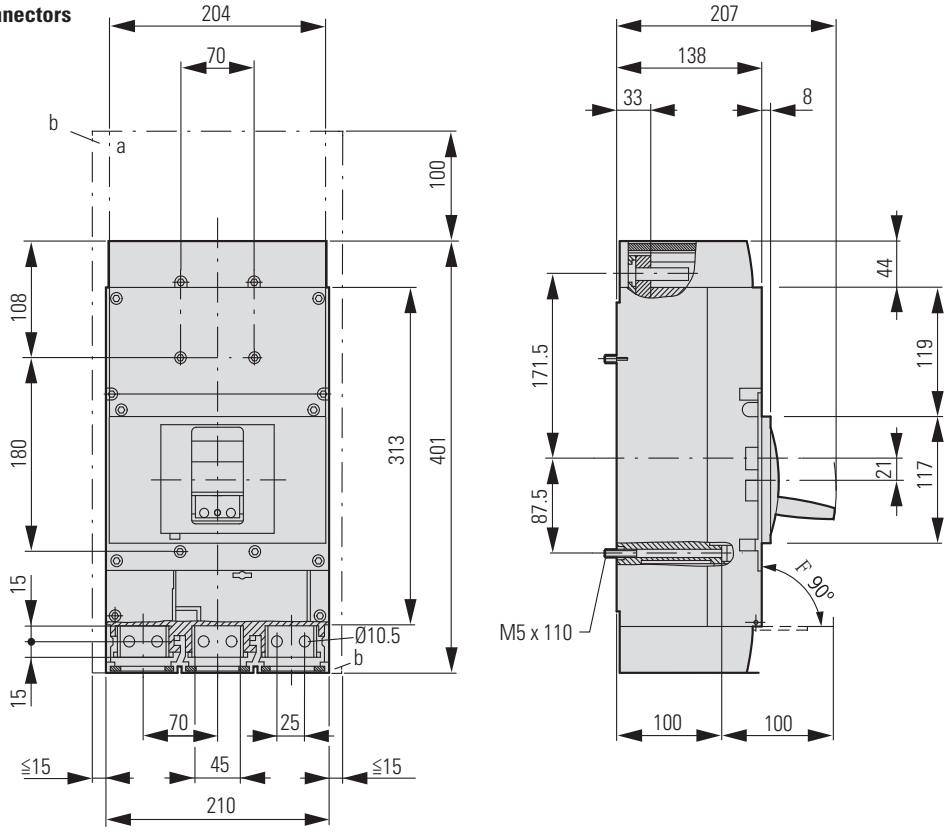
① 3 pole
② 4 pole

③ Up to 3 padlocks

④ Disconnected
⑤ Test
⑥ Connected

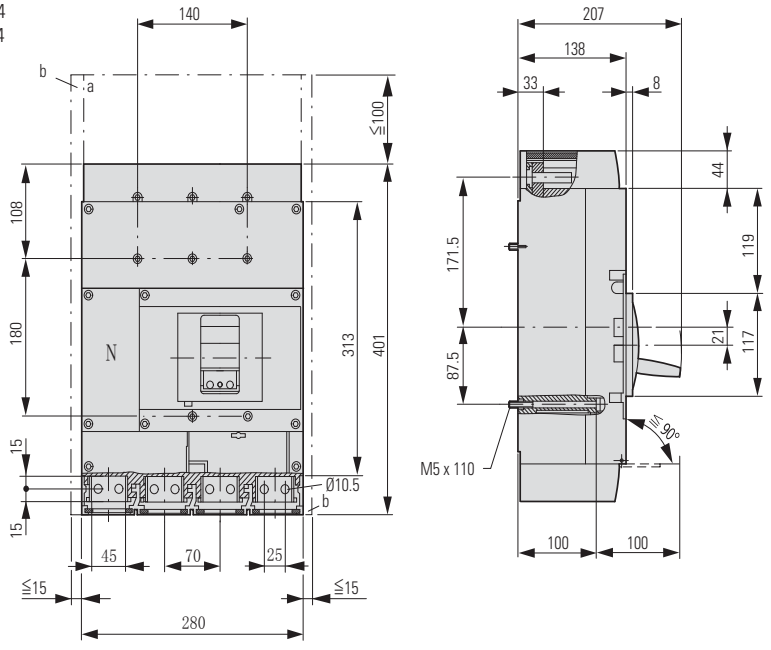
NZM, N4, NS4

Circuit-breakers
Switch-disconnectors
3 pole
NZMN4
NZMH4
N4
NS4



① Blow-out area, minimum clearance to other parts ≧100mm up to 690 V; ≧200 mm up to 1000 V
② Minimum clearance to adjacent parts ≧15mm

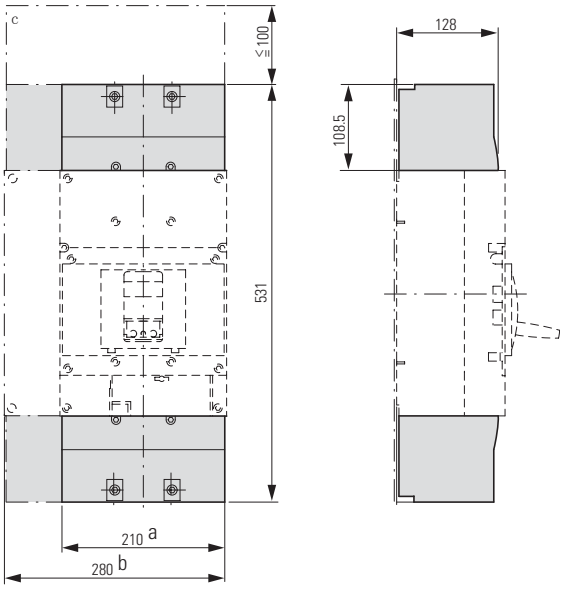
4 pole
NZMN4-4
NZMH4-4
N4-4



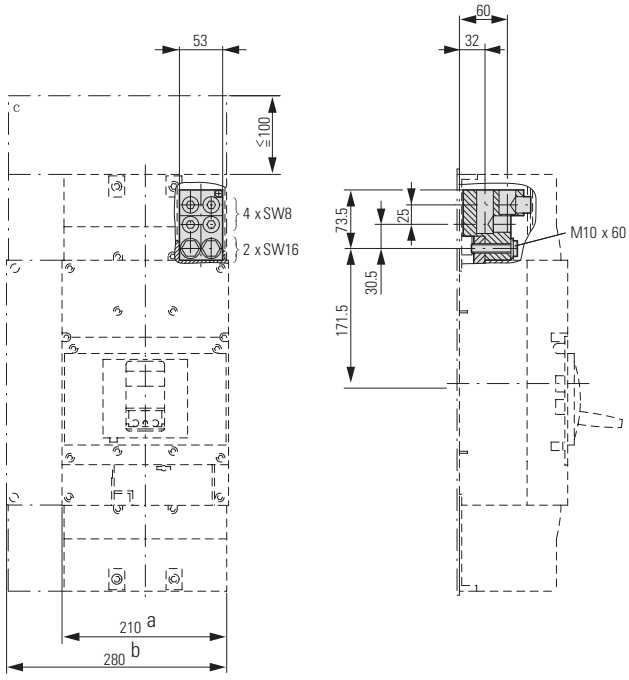
① Blow-out area, minimum clearance to other parts ≧100 mm
② Minimum clearance to adjacent parts ≧15 mm

NZM4...-XK

Covers
NZM41-41-XKSA



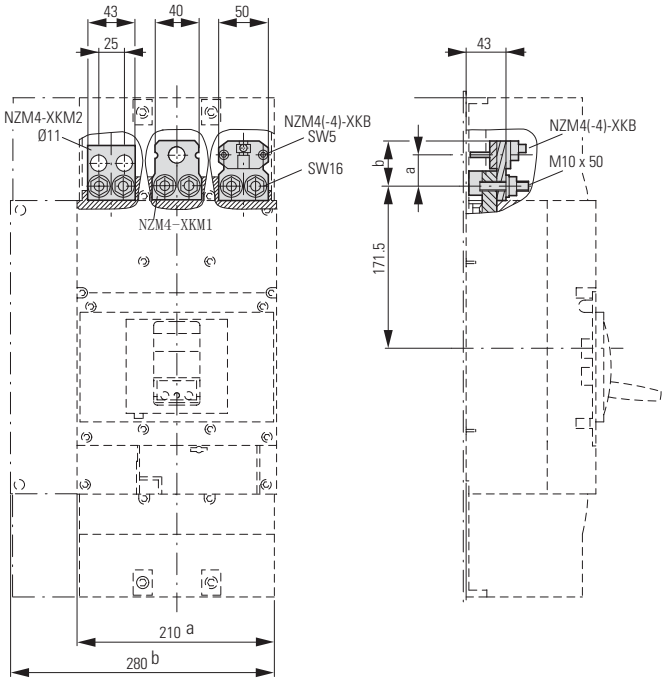
Tunnel terminal
NZM4-4-XKA



① 3 pole
② 4 pole
③ Clearance from conductive parts ≧100 mm up to 690 V; ≧200 mm up to 1000 V

Screw terminals
Module plate
1-hole
NZM41-41-XK M 1
2-hole
NZM41-41-XKM2

Flat cable terminal
NZM41-41-XKB



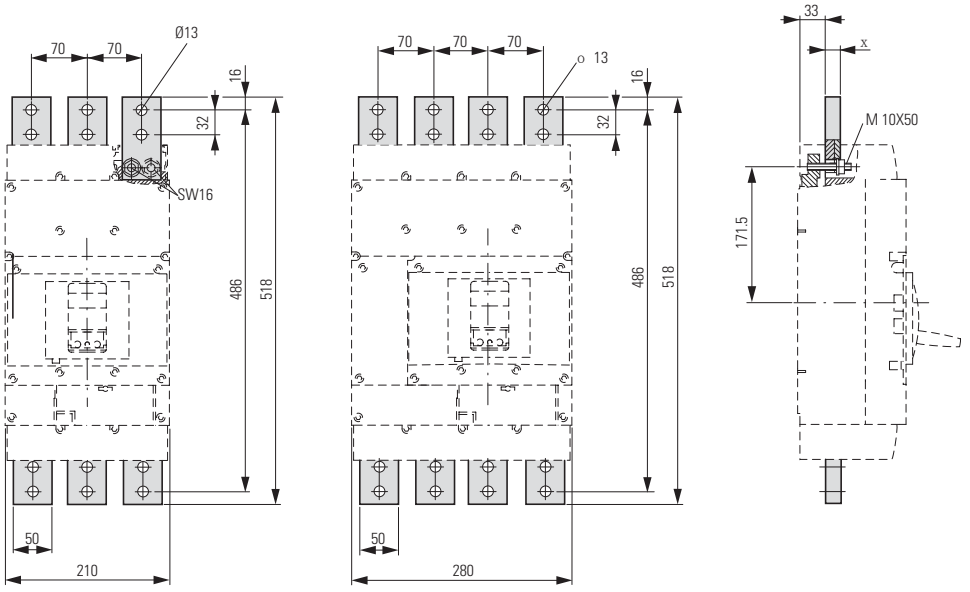
Part no.	a	b
NZM4(-4)-XKM1	36	47
NZM4(-4)-XKM2	32	40
NZM4(-4)-XKB	–	47

① 3 pole
② 4 pole
③ Clearance from conductive parts
≧100 mm up to 690 V;
≧200 mm up to 1000 V

1

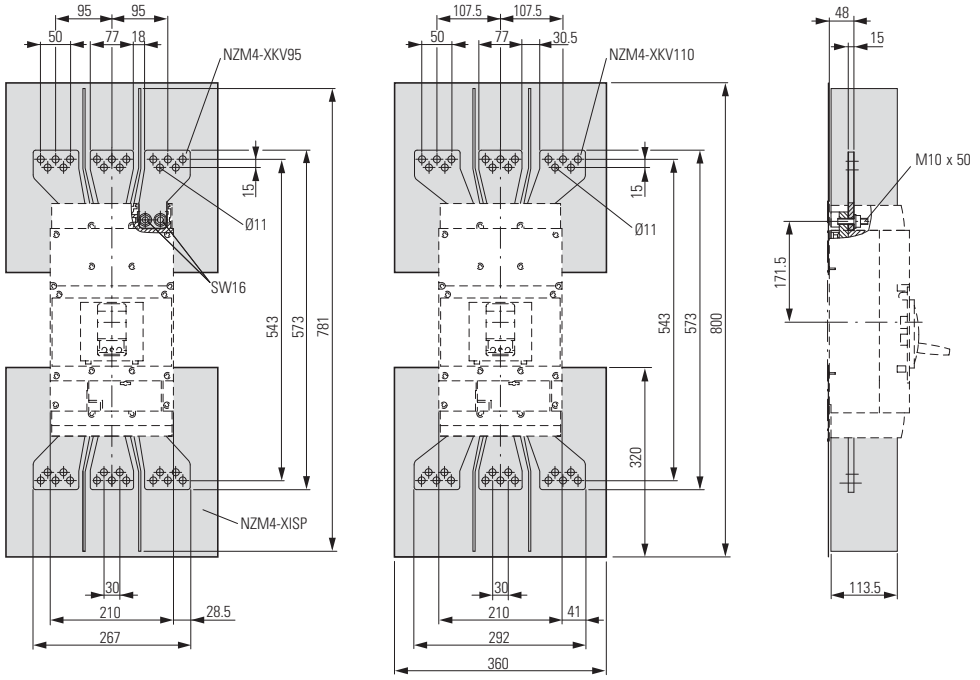
NZM4...-XKM, XKV

Module plate
2 hole, vertical
NZM41-41-XKM2S



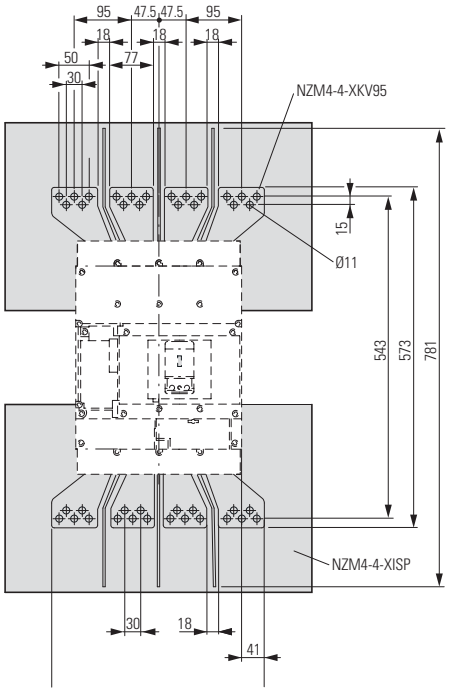
Part no.	X
NZM4(-4)-XKM2S-1250	12
NZM4(-4)-XKM2S-1600	20

Connection width extension
NZM4-XKV95
NZM4-XKV110
Insulation plate
NZM4-XISP
Phase isolators
NZM4-XKP

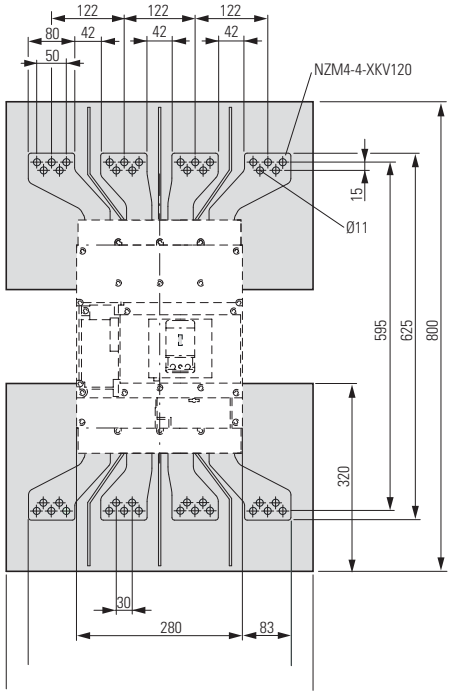


NZM4...-XKV

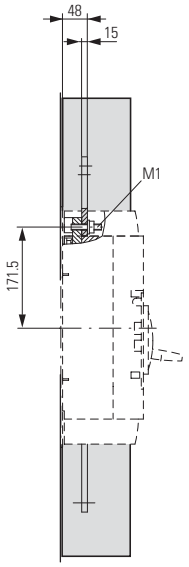
NZM4-4-XKV95



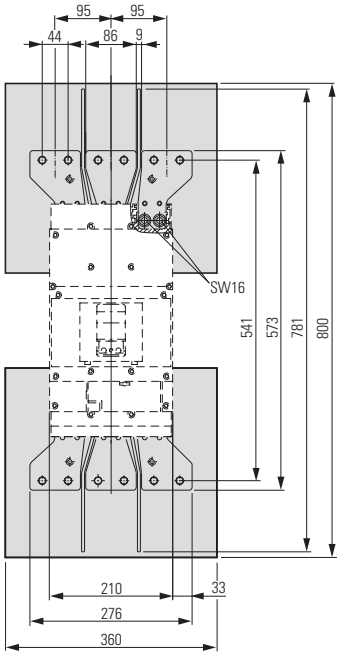
NZM4-4-XKV120

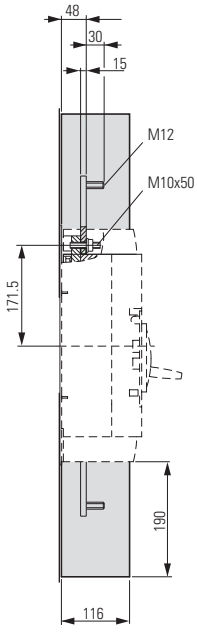


NZM4-4-XISP
NZM4-4-XKP

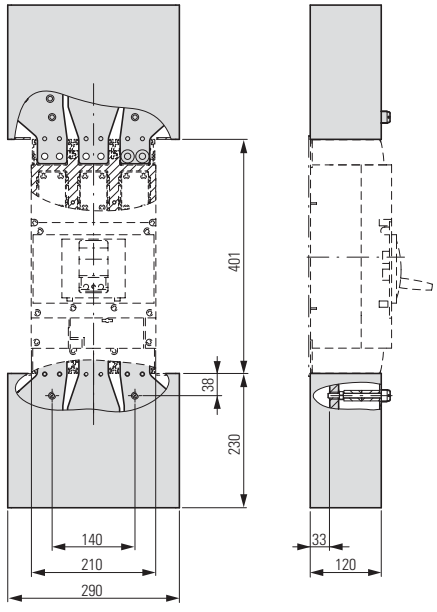


Connection width extension
NZM4-XKV95-2KB





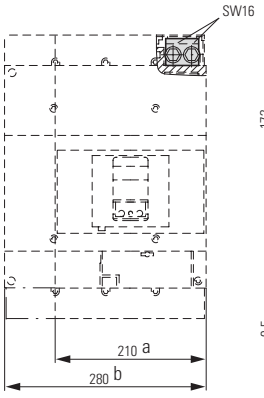
Cover, large
NZM4-XKSAV



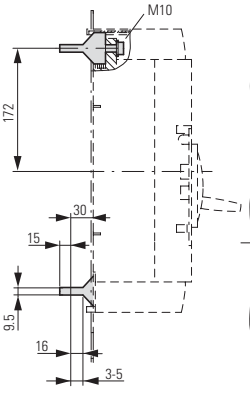
1

NZM4(-4)-XKP, NZM4(-4)-XKR

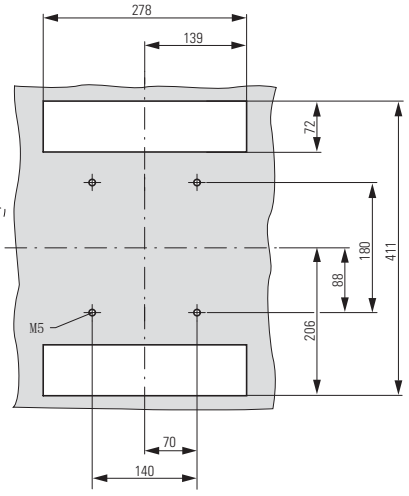
NZM4-4-XKV95



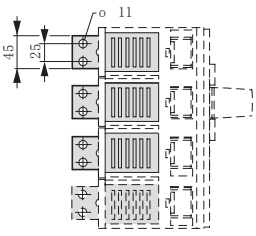
NZM4-4-XKV120

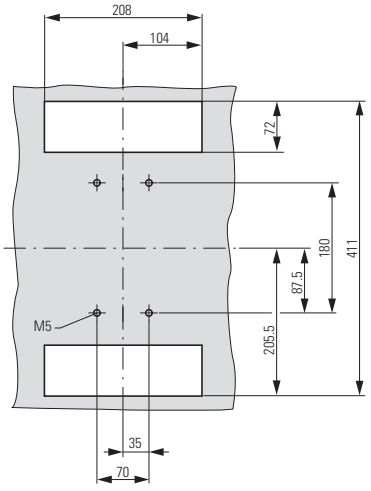


NZM4-4-XISP
NZM4-4-XKP

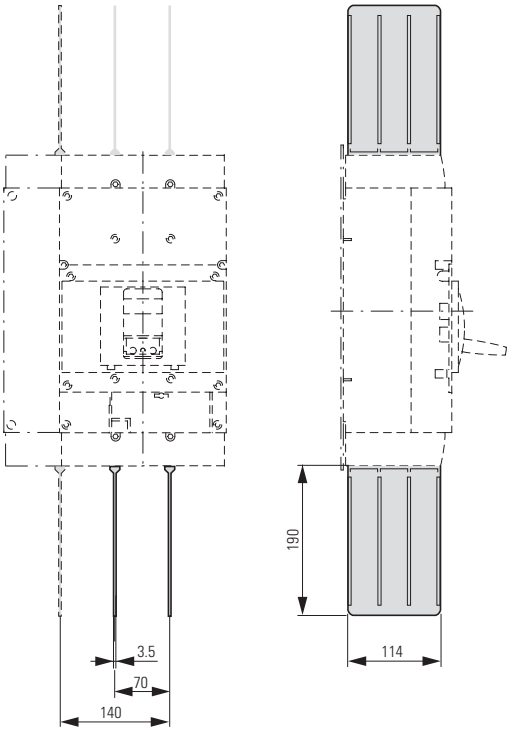


Rear connection possible also rotated by 90°.
① 3 pole
② 4 pole

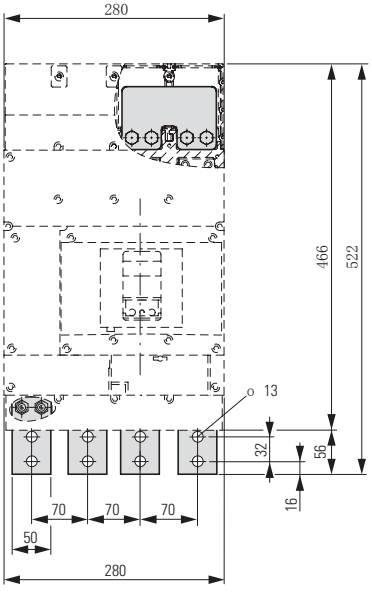


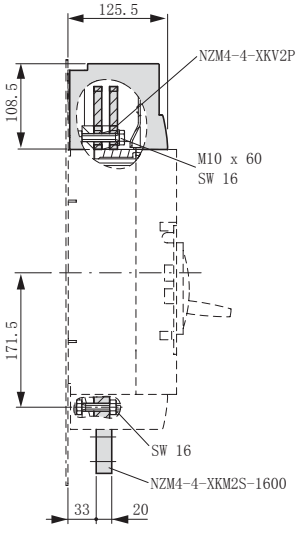


Connection width extension
NZM4-XKV95-2KB



Cover, large
NZM4-XKSAV

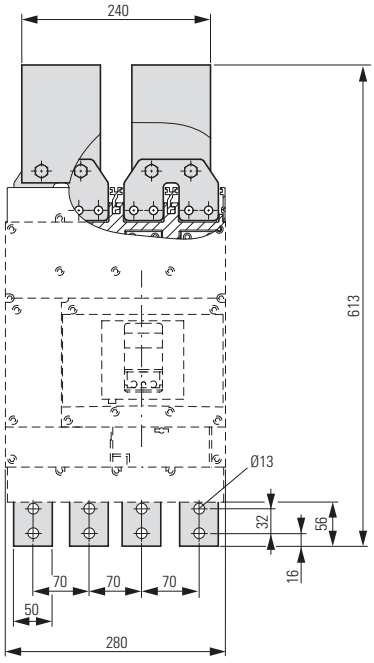


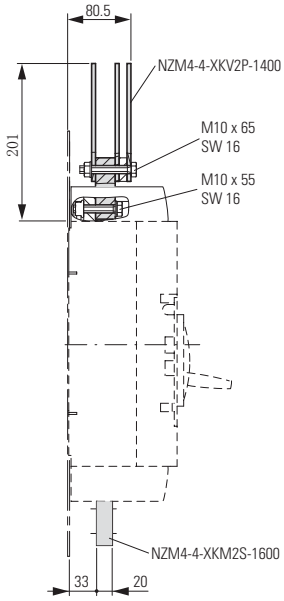


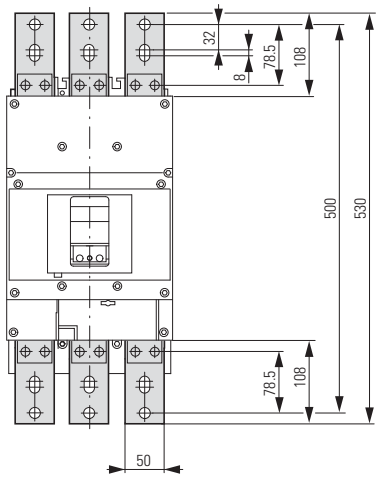
NZM4-XAS..., NZM12

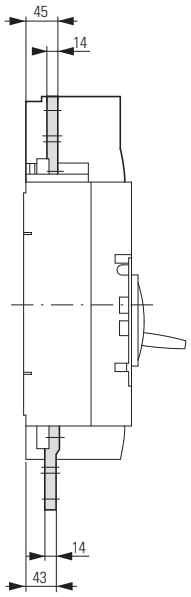
Jumper kit

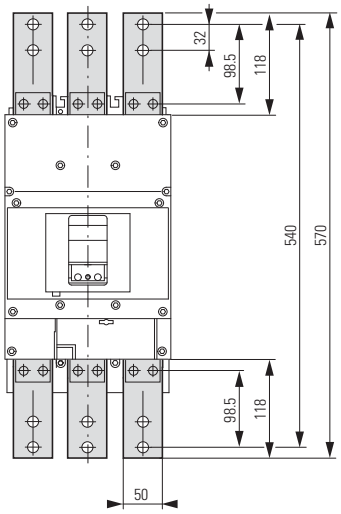
NZM4-4-XKV2P-1400

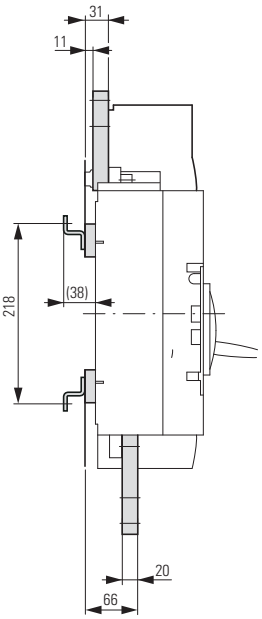




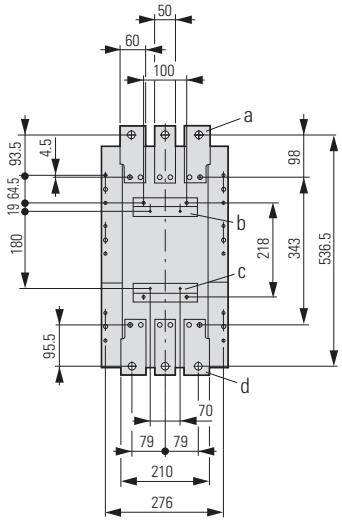








Drilling template NZM12-1000 (1250) conversion to NZM4

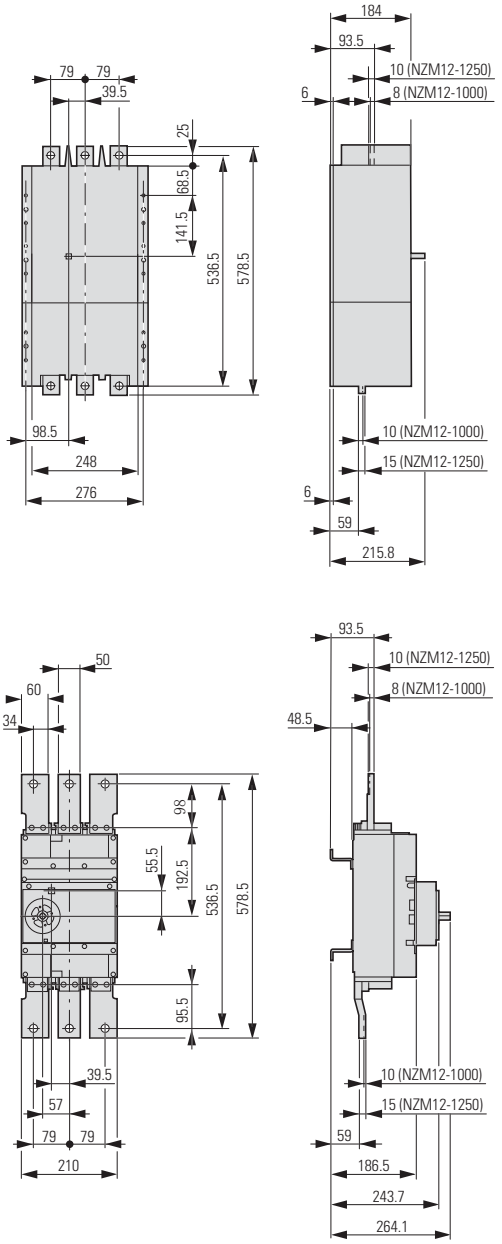


① Module plate NZM4-XAS12-1000(1250)
② Holes for mounting bracket NZM4-XAS12(M5)
③ Mounting bracket NZM4-XAS12
④ Mounting rail NZM12

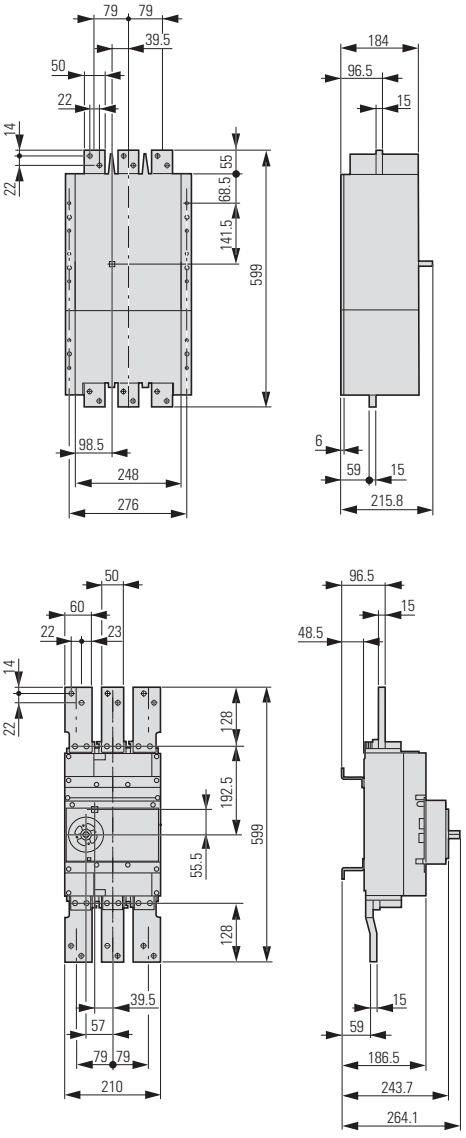
1

NZM12, NZM4-XAS...

Replacement of NZM12-1000(1250) with NZM4 with module plate,
fixed mounting on mounting plate
NZM4-XAS12-1000(1250)

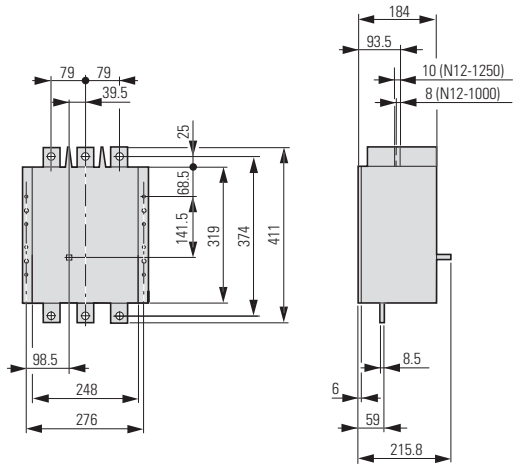


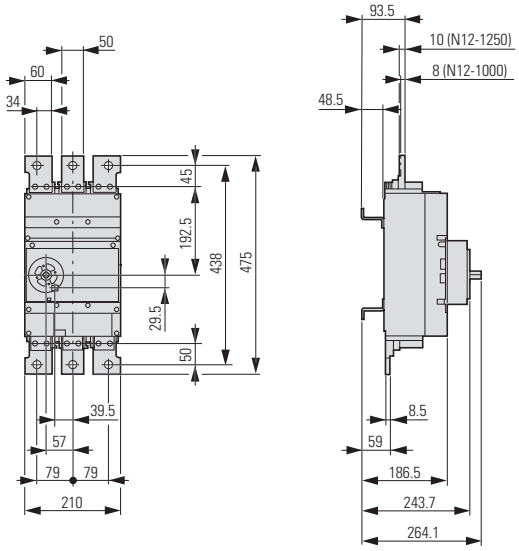
Replacement of NZM12-1600 with NZM4 with module plate,
fixed mounting on mounting plate
NZM4-XAS12-1600



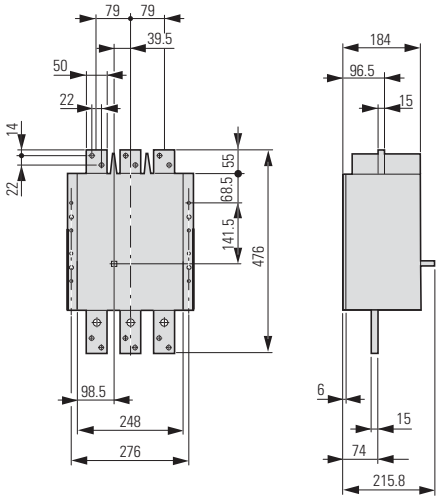
N4-XAS-12

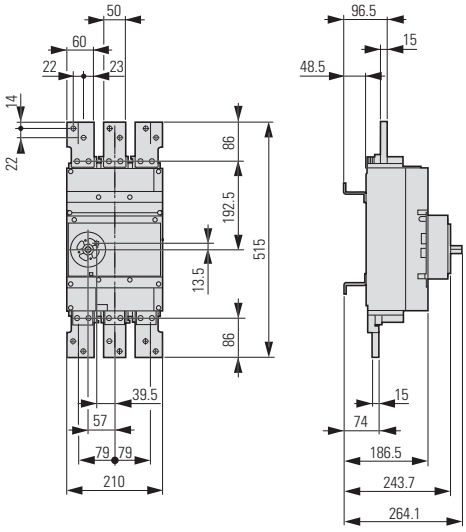
Replacement of N12-1000(1250) with N4 with module plate,
fixed mounting on mounting plate
N4-XAS12-1000(1250)





Replacement of N12-1600 with N4 with module plate,
fixed mounting on mounting plate
N4-XAS12-1600

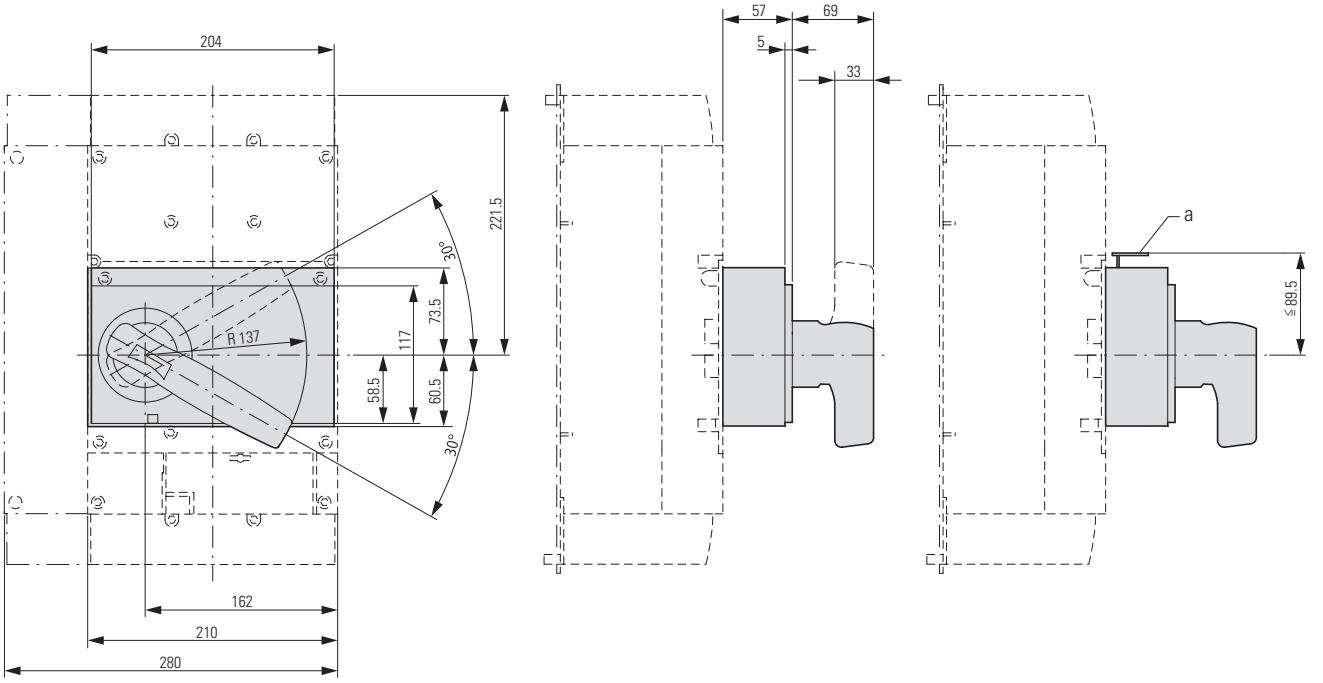


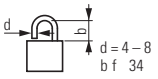


1

NZM4-XDV..., NZM4-XTVD...

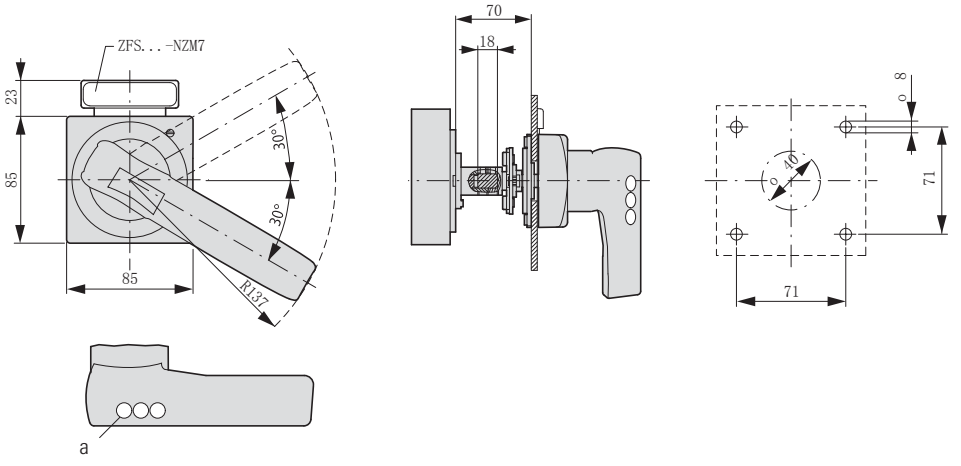
Rotary handle on circuit-breaker
NZM4-XDV(R)

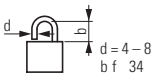




① Up to 3 padlocks

Door coupling rotary handles
NZM4-XTVD(V)(R)...



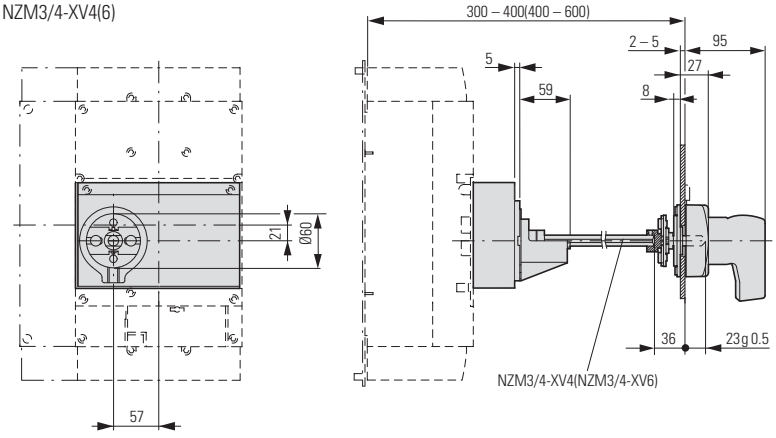


① Up to 3 padlocks

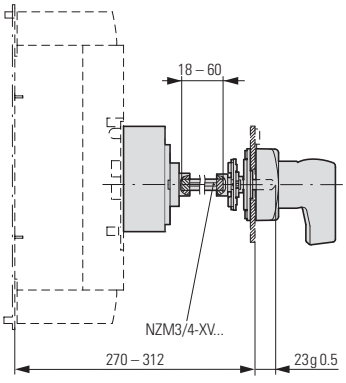
NZM4-XTV..., NZM4...-XV, NZM4-XS...

Door coupling rotary handle with extension shaft

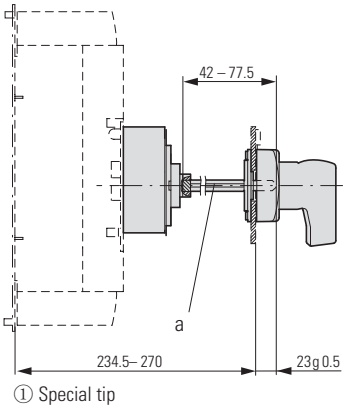
NZM4-XTVD(V)(R)(-NA)
NZM3/4-XV4(6)



NZM4-XTVDIVIIRI-601-NA)

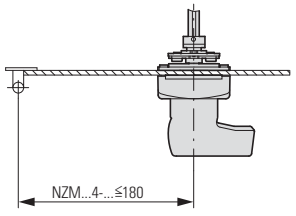


NZM4-XTVDIVIIRI-0I-NA)



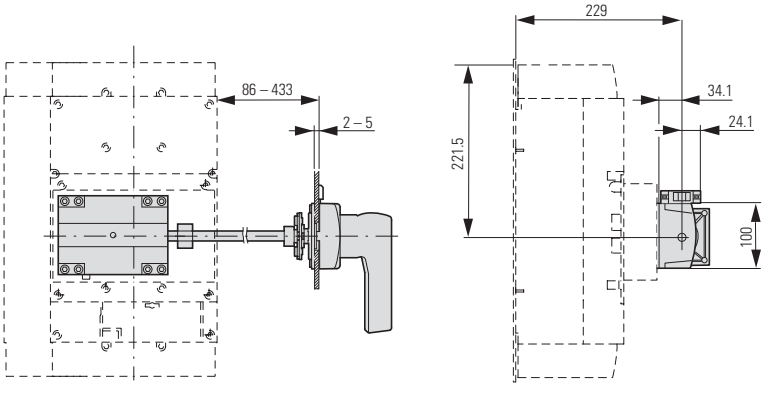
① Special tip

Minimum distance of door coupling rotary handle from door pivot point



Main switch assembly kit for side wall installation

NZM4-XS(R)-L
NZM4-XS(R)-R

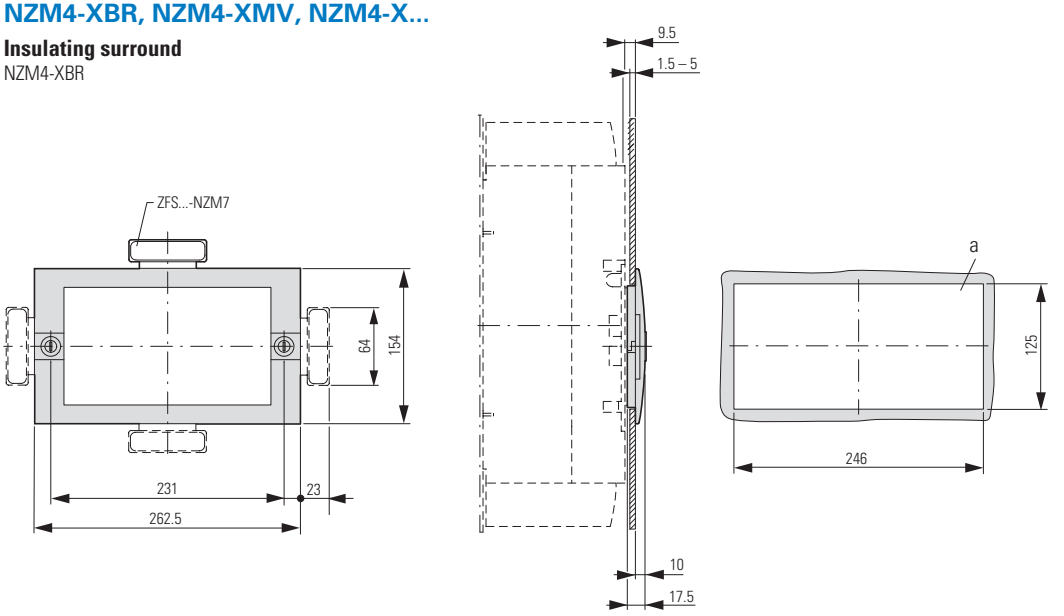


1

NZM4-XBR, NZM4-XMV, NZM4-X...

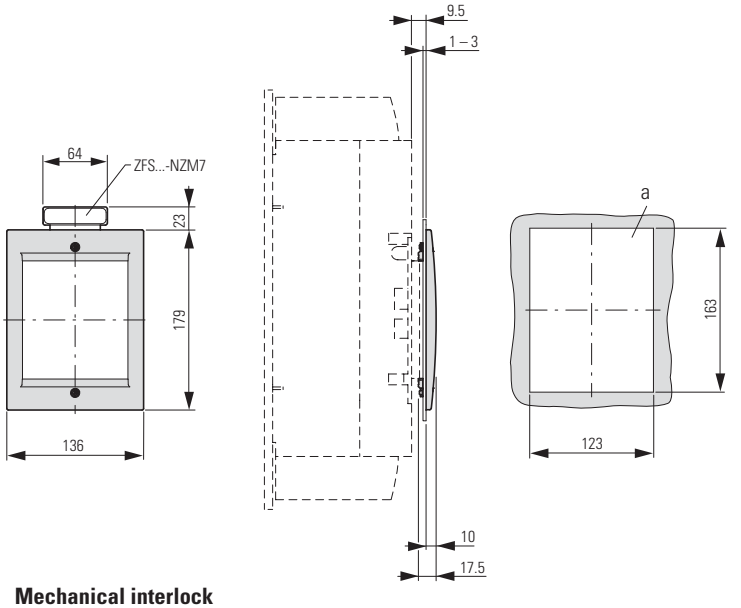
Insulating surround

NZM4-XBR



① Mounting aperture

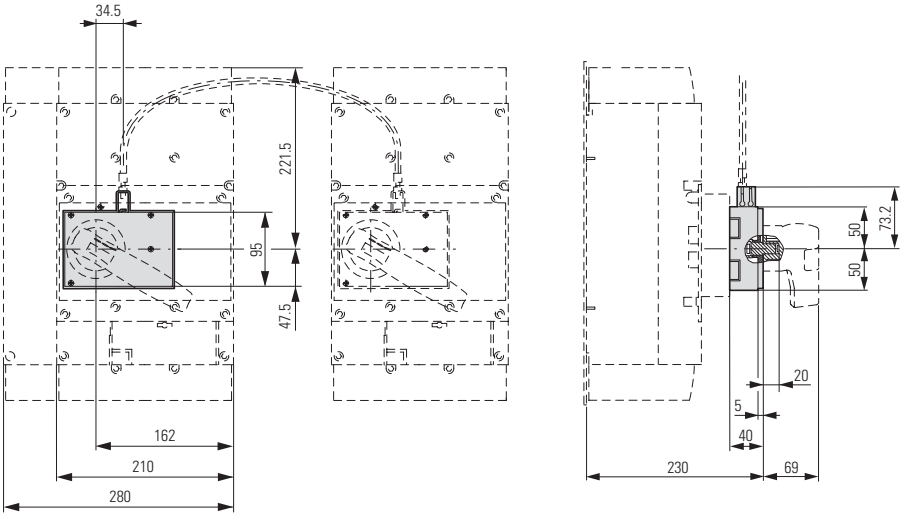
NZM4-XBRS



① Mounting aperture

Mechanical interlock

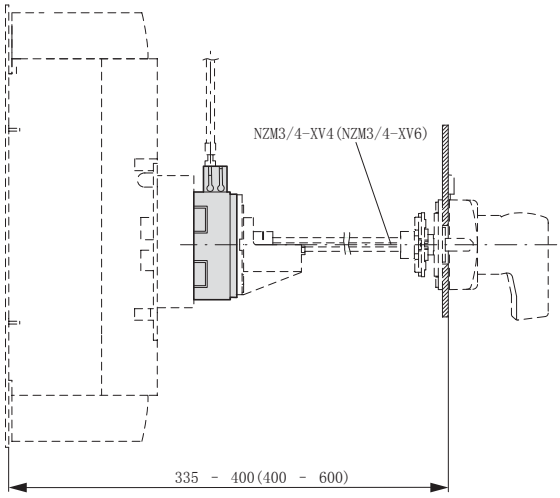
NZM4-XMV + NZM4-XDV(R)



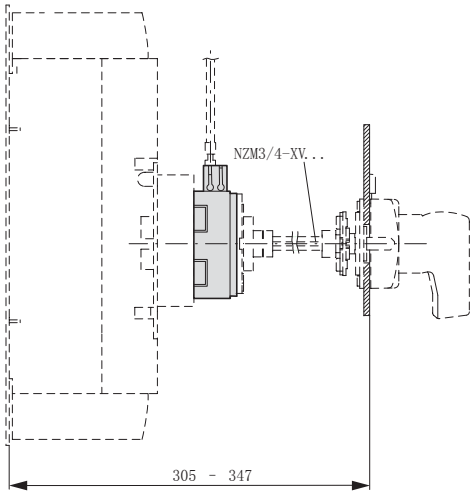
NZM4-XMV + NZM4-XTVD(V)(R)-0

Mechanical interlock

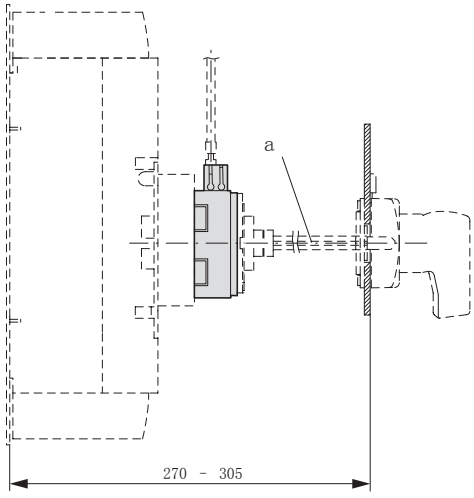
NZM4-XMV+NZM4-XTVDIVIIR)



NZM4-XMV+NZM4-XTVDIVIIRI-60



NZM4-XMV+NZM4-XTVDIVIIRI-0



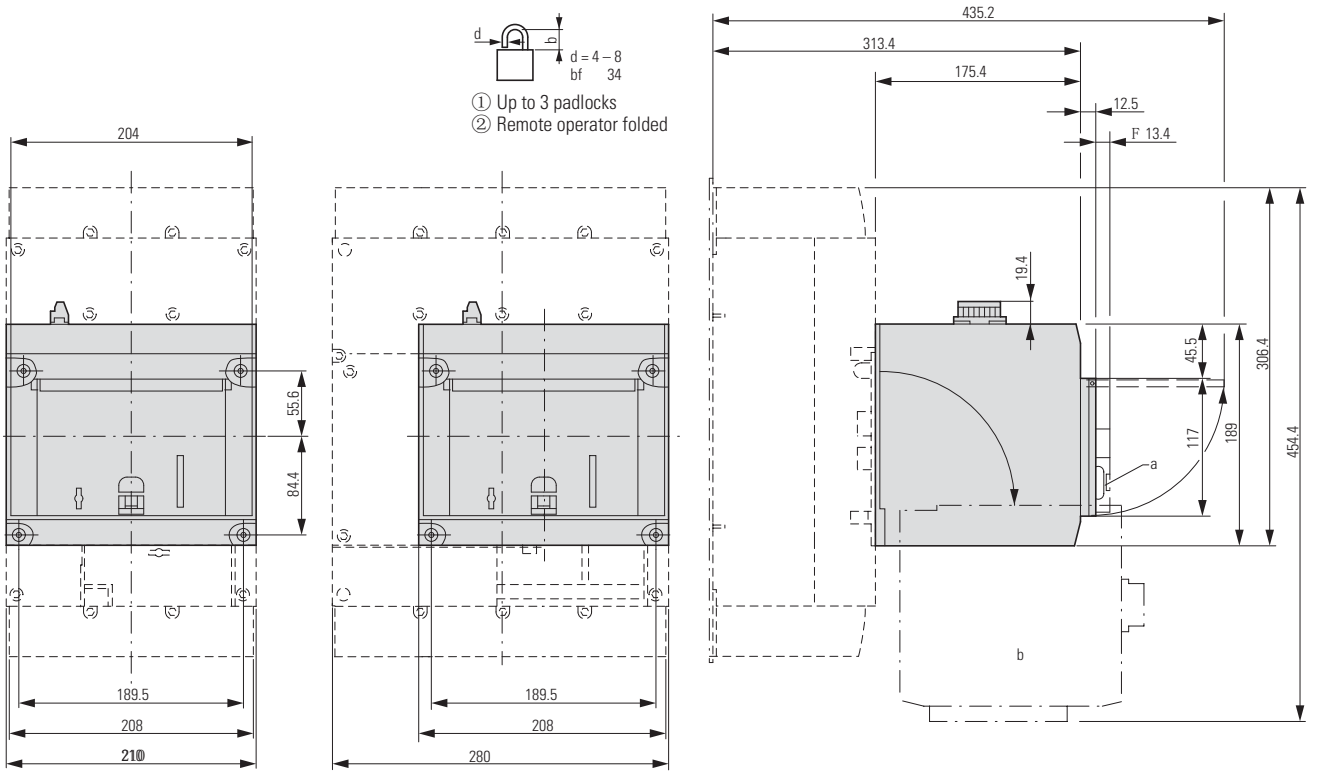
① Special tip

1

NZM4...-XAV

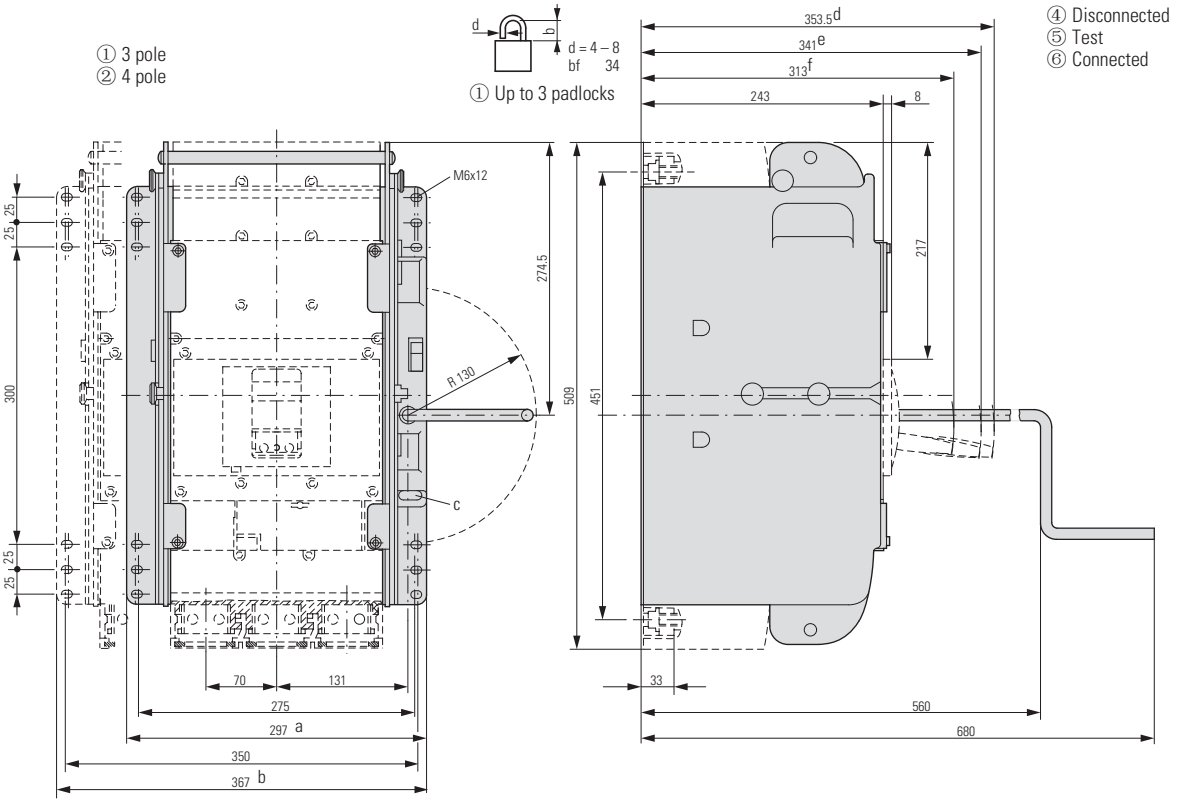
Remote operators

NZM4-XR...



Withdrawable unit

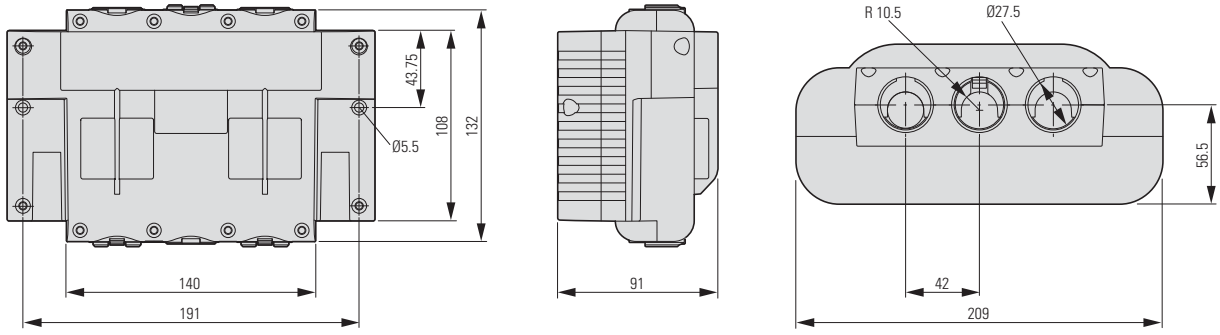
+NZM4-4-XAV



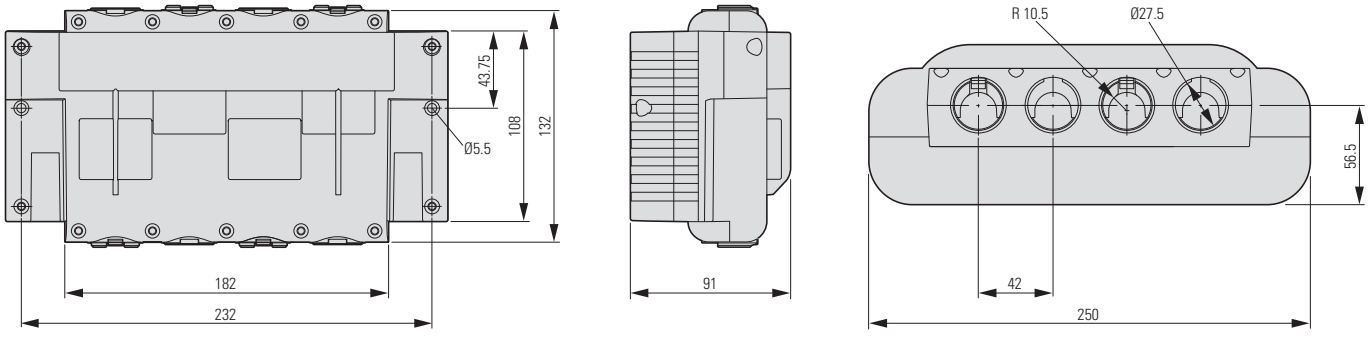
NZM...XMC, NZM-XSWD

Measuring and communication module

NZM2 (3)...XMC-SO(MB)

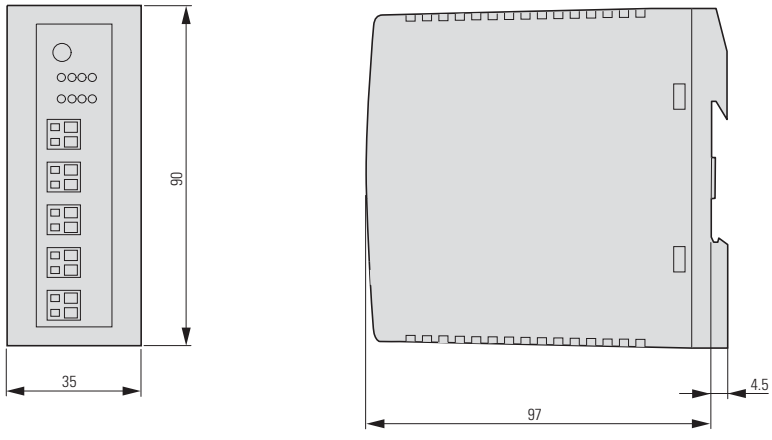


NZM2 (3)(-4)...XMC-SO(MB)



Communication interface for SmartWire-Darwin

NZM-XSWD-704



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