



Motor-protect.circuit-breaker PKZM01-16



Powering Business Worldwide™

Part no. PKZM01-16
Article no. 283390
Catalog No. XTPB016BC1

Delivery programme

Product range			PKZM01 motor protective circuit-breakers up to 16 A with pushbutton actuation
Basic function			Motor protection
Contact sequence			
Max. motor rating			
AC-3			
220 V 230 V 240 V	P	kW	4
380 V 400 V 415 V	P	kW	7.5
440 V	P	kW	9
Setting range			
Overload releases 	I_r	A	10 - 16
Short-circuit releases 			
max.	I_{rm}	A	224
Connection technique			Screw terminals
Notes			
Accessories 3 Standard auxiliary contact 5 Trip-indicating auxiliary contact 6 Shunt release, undervoltage release Single-phasing sensitivity according to IEC/EN 60947-4-1, VDE 0660 Part 102. Can be snap-fitted to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height		Page → 072896 → 072898 → 073187	

Approvals

Product Standards
 UL File No.
 UL Category Control No.
 CSA File No.
 CSA Class No.
 North America Certification
 Specially designed for North America
 Suitable for

UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
 E36332
 NLRV
 165628
 3211-05
 UL listed, CSA certified
 No
 Branch circuit: Manual type E if used with terminal, or suitable for group installations

General

Standards			IEC/EN 60947, VDE 0660
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature		°C	
Storage	θ	°C	-40 - +80
Open		°C	-25 - 55
Enclosed		°C	-25 - 40
Mounting position			
Direction of incoming supply			as required

Degree of protection			
Device			IP20
Terminations			IP00
Protection against direct contact			Finger and back-of-hand proof
Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27		g	25
Altitude		m	2000
Terminal capacity screw terminals		mm ²	
Solid		mm ²	1 x (1 - 6) 2 x (1 - 6)
Flexible with ferrule to DIN 46228		mm ²	1 x (1 - 6) 2 x (1 - 6)
Solid or stranded		AWG	18 - 10
Specified tightening torque for terminal screws			
Main cable		Nm	1.7
Control circuit cables		Nm	1

Main conducting paths

Rated impulse withstand voltage	U_{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current = rated operational current	$I_u = I_e$	A	16 or current setting of the overcurrent release
Rated frequency	f	Hz	40 - 60
Rated frequency		Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	6
Lifespan, mechanical	Operations	x 10 ⁶	0.05
Lifespan, electrical (AC-3 at 400 V)	Operations	x 10 ⁶	0.05
Maximum operating frequency		Ops/ h	
Max. operating frequency		Ops/ h	25
Short-circuit rating			
AC			
			→ Engineering
DC			
Short-circuit rating		kA	60
Short-circuit rating			60
Motor switching capacity		kA _{rms}	
AC-3 (up to 690 V)		A	16
DC-5 (up to 250 V)		A	16 (3 contacts in series)

Trip blocks

Temperature compensation			
to IEC/EN 60947, VDE 0660		°C	- 5 ... 40
Operating range		°C	- 25 ... 55
Temperature compensation residual error for T > 40 °C			\leq 0.25 %/K
Setting range of overload releases		x I_u	0.6 - 1
Short-circuit release fixed		x I_u	14
Fixed short-circuit release			Basic device 14 x I_u
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			IEC/EN 60947-1-1, VDE 0660 Part 102

Technical data ETIM 5.0

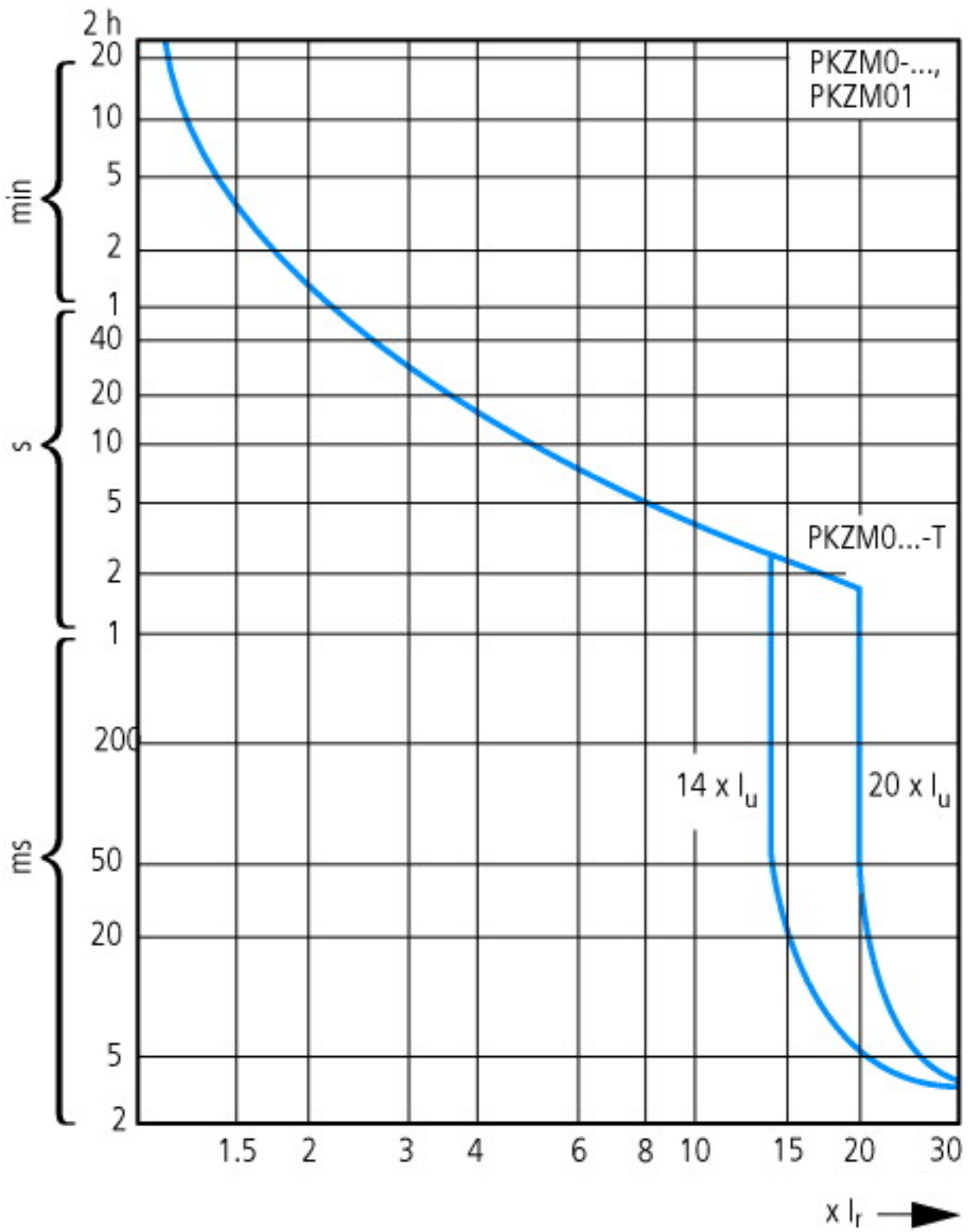
Low-voltage industrial components (EG000017) / Motor protective circuit-breaker (EC000074)
 Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker motor protection
 (ecl@ss8-27-37-04-01 [AGZ529012])

Setting range overload protector		A	10 - 16
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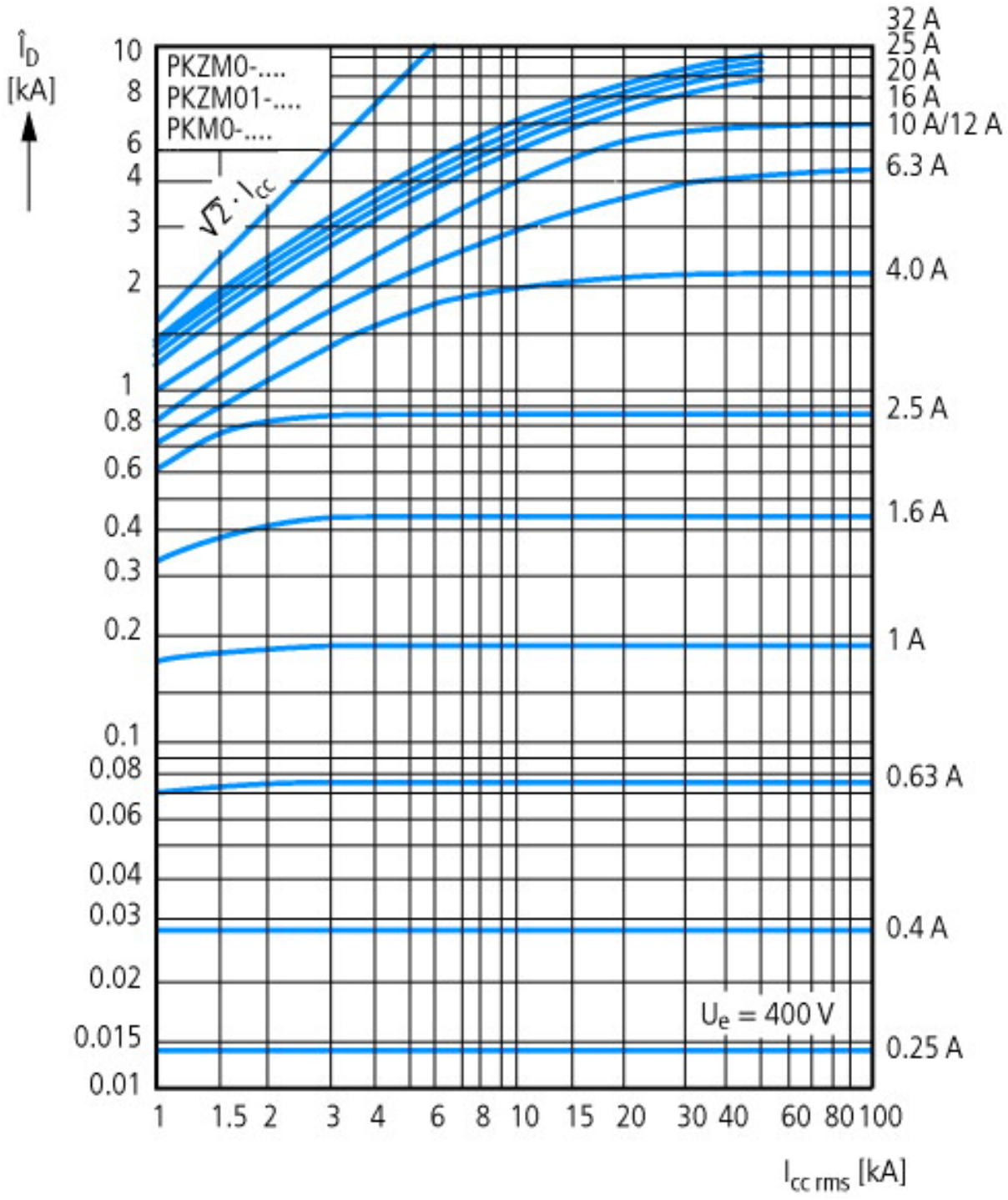
Adjustment range undelayed short-circuit release		A	224 - 224
Phase failure sensitive			Yes
Switch off technique			Electronic
Rated operating voltage		V	690 - 690
Rated permanent current I _u		A	16
Rated operation power at AC-3, 230 V		kW	4
Rated operation power at AC-3, 400 V		kW	7.5
Connection type main current circuit			Screw connection
Device construction			Built-in device fixed built-in technique
With integrated auxiliary switch			No
With integrated under voltage release			No
Number of poles			3
Rated short-circuit breaking capacity I _{cu} at 400 V, AC		kA	50
Degree of protection (IP)			IP20

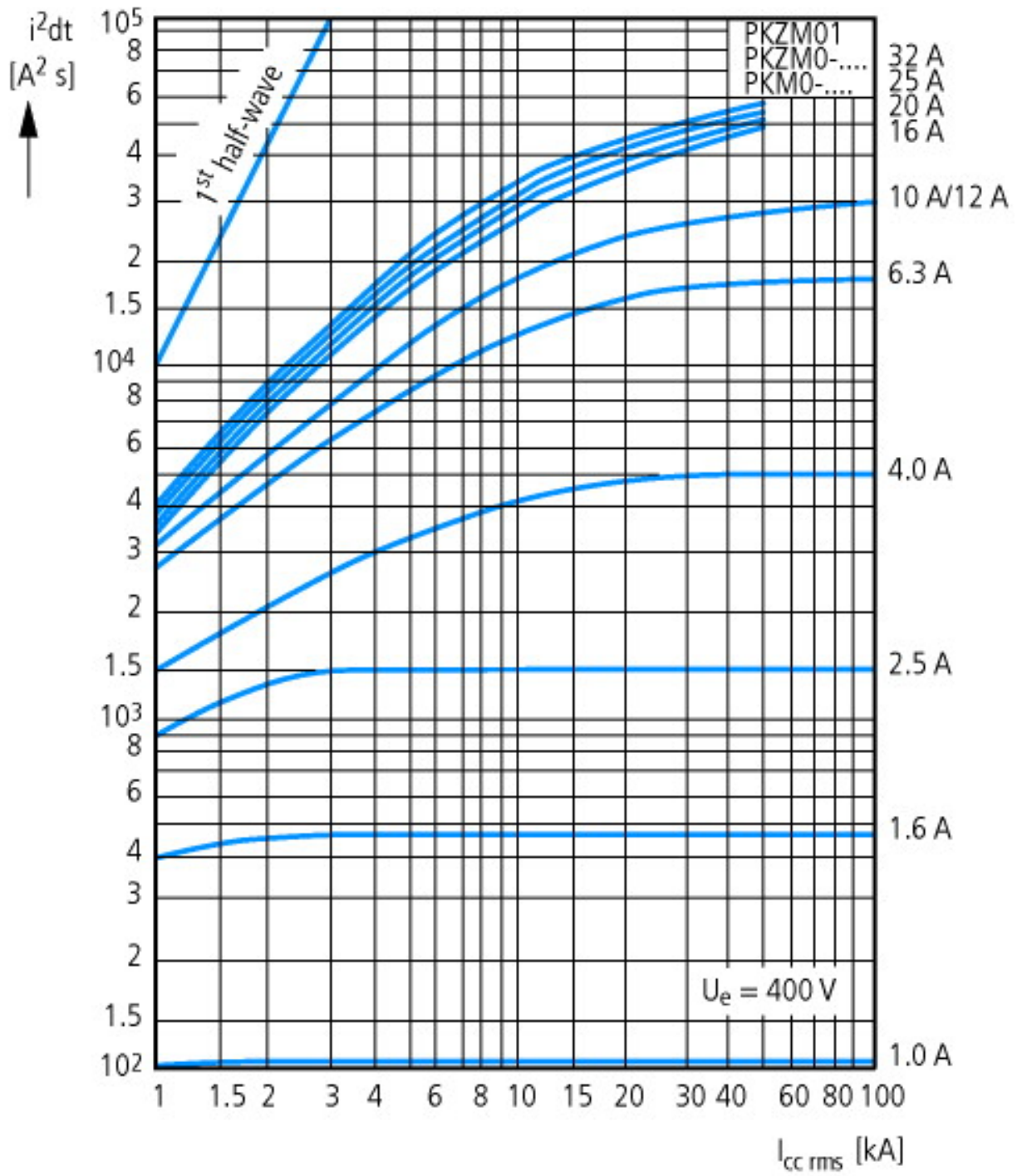
Characteristics

Characteristic curves			
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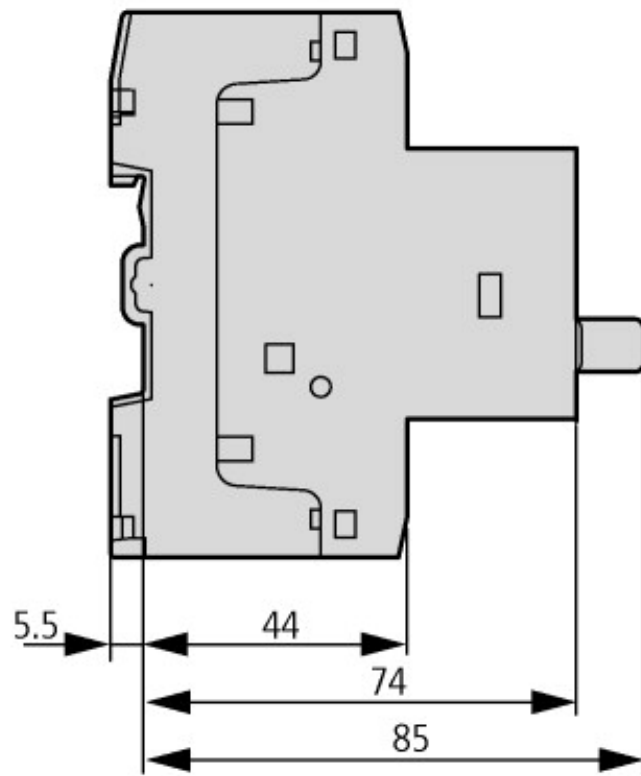
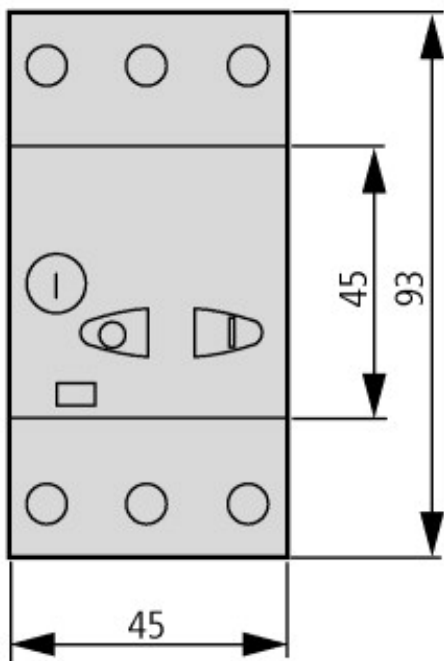
Motor-protective circuit-breaker tripping characteristic (high-capacity) compact starter, PKZM0...T (not for PKM0-...), PKZM01





Let-through characteristics

Dimensions



Additional product information (links)

IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407010Z2010_08.pdf

Motor starters and "Special Purpose Ratings" for the North American market

http://www.moeller.net/binary/ver_techpapers/ver953en.pdf

Busbar Component Adapters for modern Industrial control panels

http://www.moeller.net/binary/ver_techpapers/ver960en.pdf