



MOTOR PROTECTION, START.PKZM0





Powering Business Worldwide™

Part no. PKZM0-10
Article no. 072739

Catalog No. XTPR010BC1NL

Delivery programme

Product range				PKZM0 motor protective circuit-breakers up to 32 A
Basic function				Motor protection
Connection technique				Screw terminals
Max. motor rating				
AC-3				
220 V 230 V 240 V	P	kW		2.2
380 V 400 V 415 V	P	kW		4
440 V	P	kW		4
500 V	P	kW		4
660 V 690 V	P	kW		7.5
Setting range				
Overload releases	I_r	A		6.3 - 10
				
Short-circuit releases				
				
max.	I_{rm}	A		140

Notes

Phase failure sensitivity to IEC/EN 60947-4-1, VDE 0660 part 102.
can be snapped-on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height

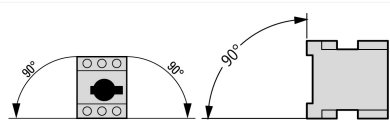


PTB 10 ATEX 3013, observe Manual MN03402003Z-DE/EN

Approvals

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	165628
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Specially designed for North America	No
Suitable for	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	g	-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
Flexible with ferrule to DIN 46228
Solid or stranded
Specified tightening torque for terminal screws
Main cable
Control circuit cables

	mm ²	1 x (1 - 6) 2 x (1 - 6)
	mm ²	1 x (1 - 6) 2 x (1 - 6)
	AWG	18 - 10
	Nm	1.7
	Nm	1

Main conducting paths

Rated impulse withstand voltage
Overvoltage category/pollution degree
Rated operational voltage
Rated uninterrupted current = rated operational current
Rated frequency
Rated frequency
Current heat loss (3 pole at operating temperature)
Lifespan, mechanical
Lifespan, electrical (AC-3 at 400 V)
Maximum operating frequency
Max. operating frequency
Short-circuit rating
AC
DC
Short-circuit rating
Short-circuit rating
Motor switching capacity
AC-3 (up to 690 V)
DC-5 (up to 250 V)

U _{imp}	V AC	6000
		III/3
U _e	V AC	690
I _u = I _e	A	32 or current setting of the overcurrent release
f	Hz	40 - 60
	Hz	40 - 60
	W	6
Operations	x 10 ⁶	0.1
Operations	x 10 ⁶	0.1
	Ops./h	
	Ops./h	40
		→ Engineering
	kA	60
		60 (up to PKZM0-16) 40 (PKZM0-20 to PKZM0-32)
	kA _{rms}	
	A	32
	A	25 (3 contacts in series)

Trip blocks

Temperature compensation
to IEC/EN 60947, VDE 0660
Operating range
Temperature compensation residual error for T > 40 °C
Setting range of overload releases
Short-circuit release fixed
Fixed short-circuit release
Short-circuit release tolerance
Phase-failure sensitivity

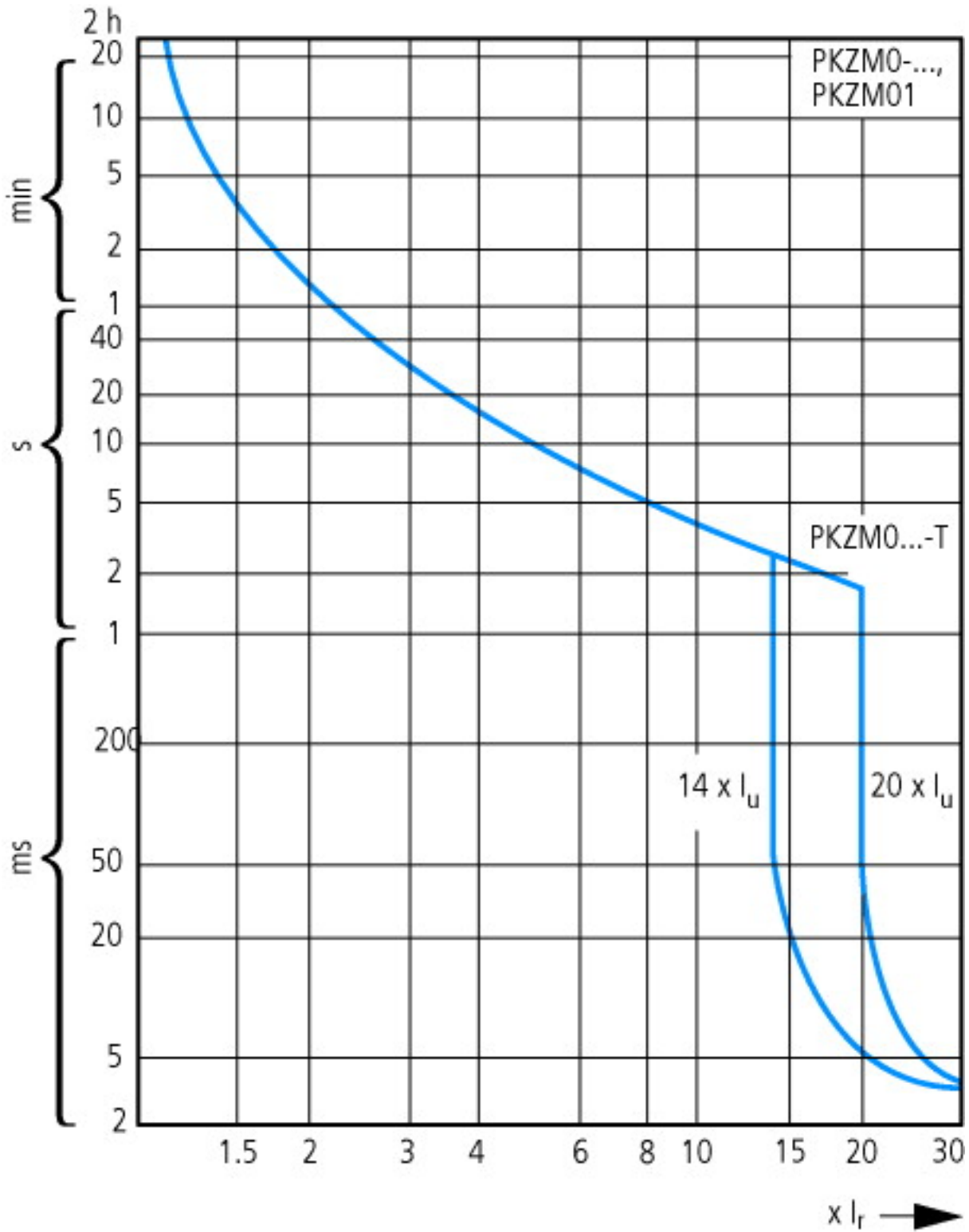
	°C	- 5 ... 40
	°C	- 25 ... 55
		≡ 0.25 %/K
	x I _u	0.6 - 1
	x I _u	14
		Basic device 14 x I _u
		± 20%
		IEC/EN 60947-1-1, VDE 0660 Part 102

Technical data ETIM 5.0

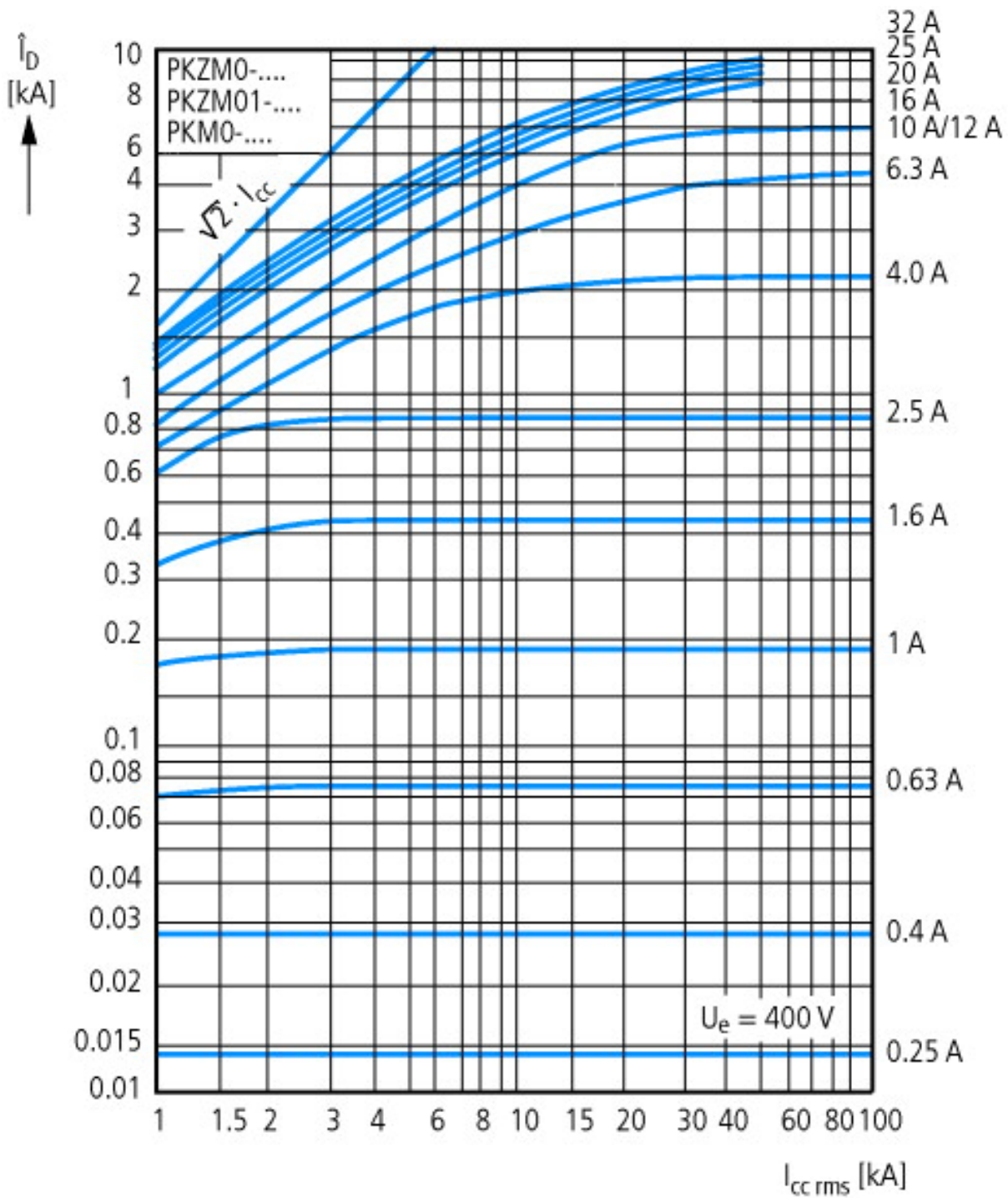
Low-voltage industrial components (EG000017) / Motor protective circuit-breaker (EC000074)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker motor protection		
(ecl@ss8-27-37-04-01 [AGZ529012])		
Setting range overload protector	A	6.3 - 10
Adjustment range undelayed short-circuit release	A	140 - 140
Phase failure sensitive		Yes
Switch off technique		Electronic
Rated operating voltage	V	690 - 690
Rated permanent current I _u	A	10
Rated operation power at AC-3, 230 V	kW	2.2
Rated operation power at AC-3, 400 V	kW	4
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

Characteristics

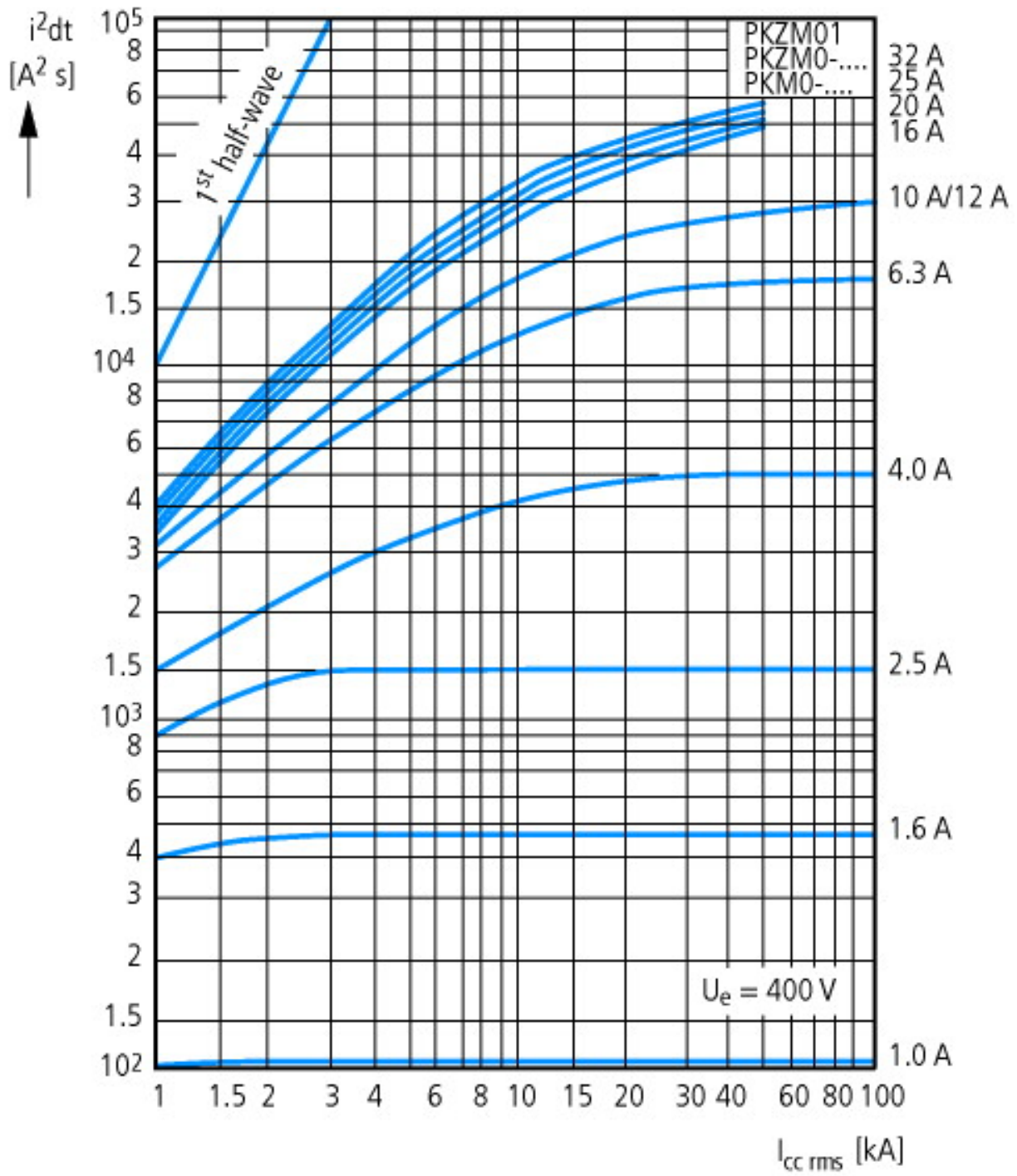
Characteristic curves



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

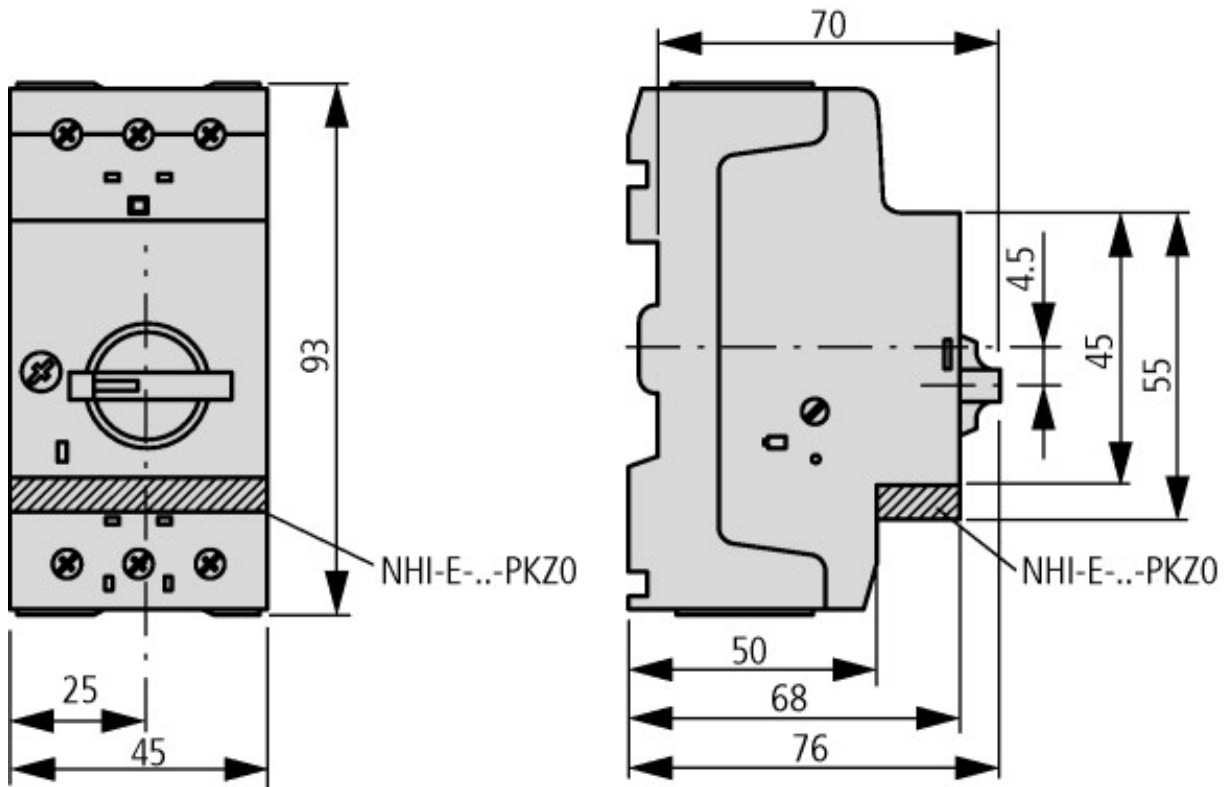


Let-through current

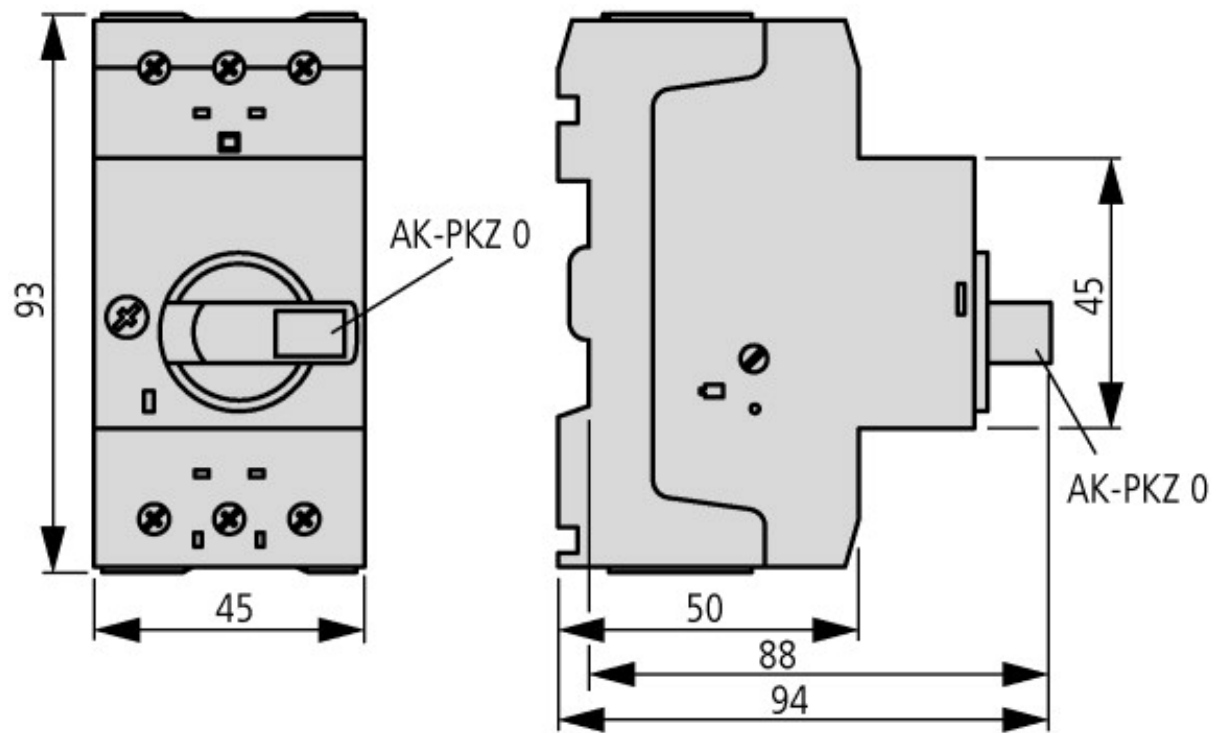


Let-through energy

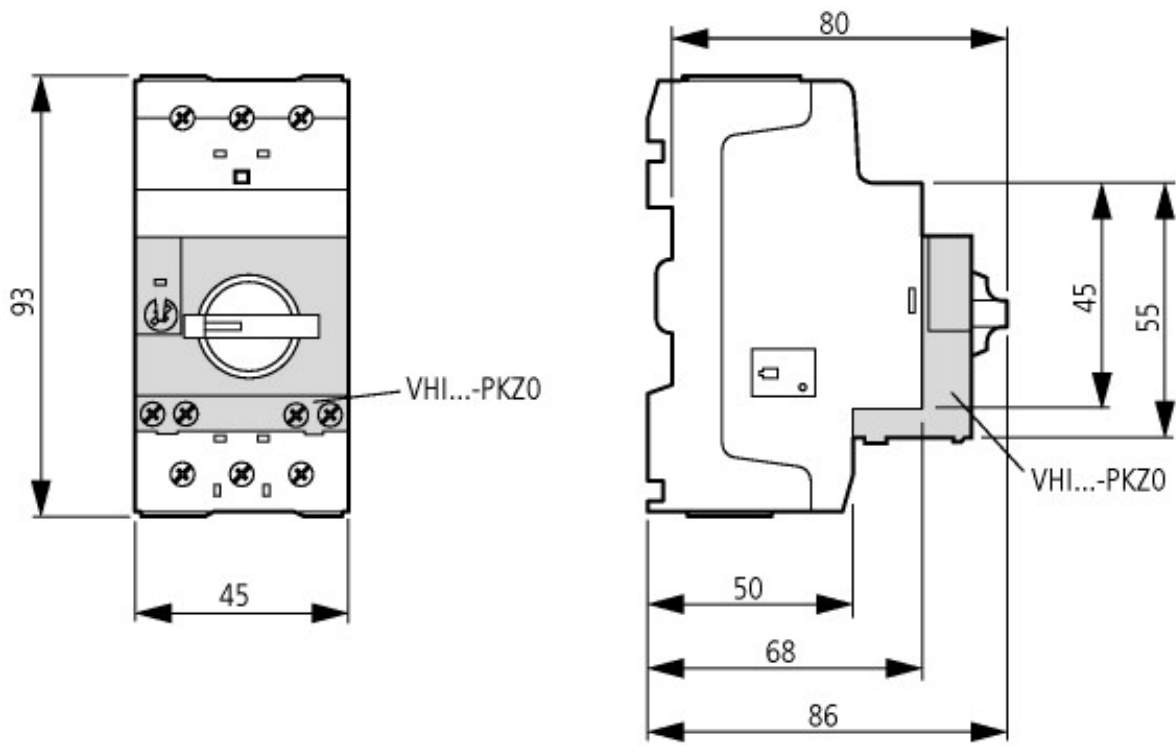
Dimensions



Motor-protective circuit-breaker with standard auxiliary contact
 PKZM0-...(+NHI-E...-PKZ0)
 PKZM0-...-T(+NHI-E...-PKZ0)
 PKM0-...(+NHI-E...-PKZ0)



Motor-protective circuit-breakers with lockable rotary handles
 PKZM0-...+AK-PKZ0



Motor-protective circuit-breakers with early-make auxiliary contacts
 PKZM0-...+VHI-...-PKZ0

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

IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2010_08.pdf

MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors

MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors - Deutsch / English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402003Z_DE_EN.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