



MOTOR PROTECTION, START.PKZM0






Powering Business Worldwide™

Part no. PKZM0-4
Article no. 072737

Catalog No. XTPR004BC1NL

Delivery programme

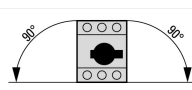
Product range			PKZM0 motor protective circuit-breakers up to 32 A
Basic function			Motor protection
Connection technique			Screw terminals
Max. motor rating			
AC-3			
220 V 230 V 240 V	P	kW	0.75
380 V 400 V 415 V	P	kW	1.5
440 V	P	kW	1.5
500 V	P	kW	2.2
660 V 690 V	P	kW	3
Setting range			
Overload releases	I_r	A	2.5 - 4
			
Short-circuit releases			
			
max.	I_{rm}	A	56
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 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	32 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	0.1
Lifespan, electrical (AC-3 at 400 V)	Operations	x 10^6	0.1
Maximum operating frequency		Ops./ h	
Max. operating frequency		Ops./ h	40
Short-circuit rating			
AC			→ Engineering
DC			
Short-circuit rating		kA	60
Short-circuit rating			60 (up to PKZM0-16) 40 (PKZM0-20 to PKZM0-32)
Motor switching capacity		kA_{rms}	
AC-3 (up to 690 V)		A	32
DC-5 (up to 250 V)		A	25 (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)

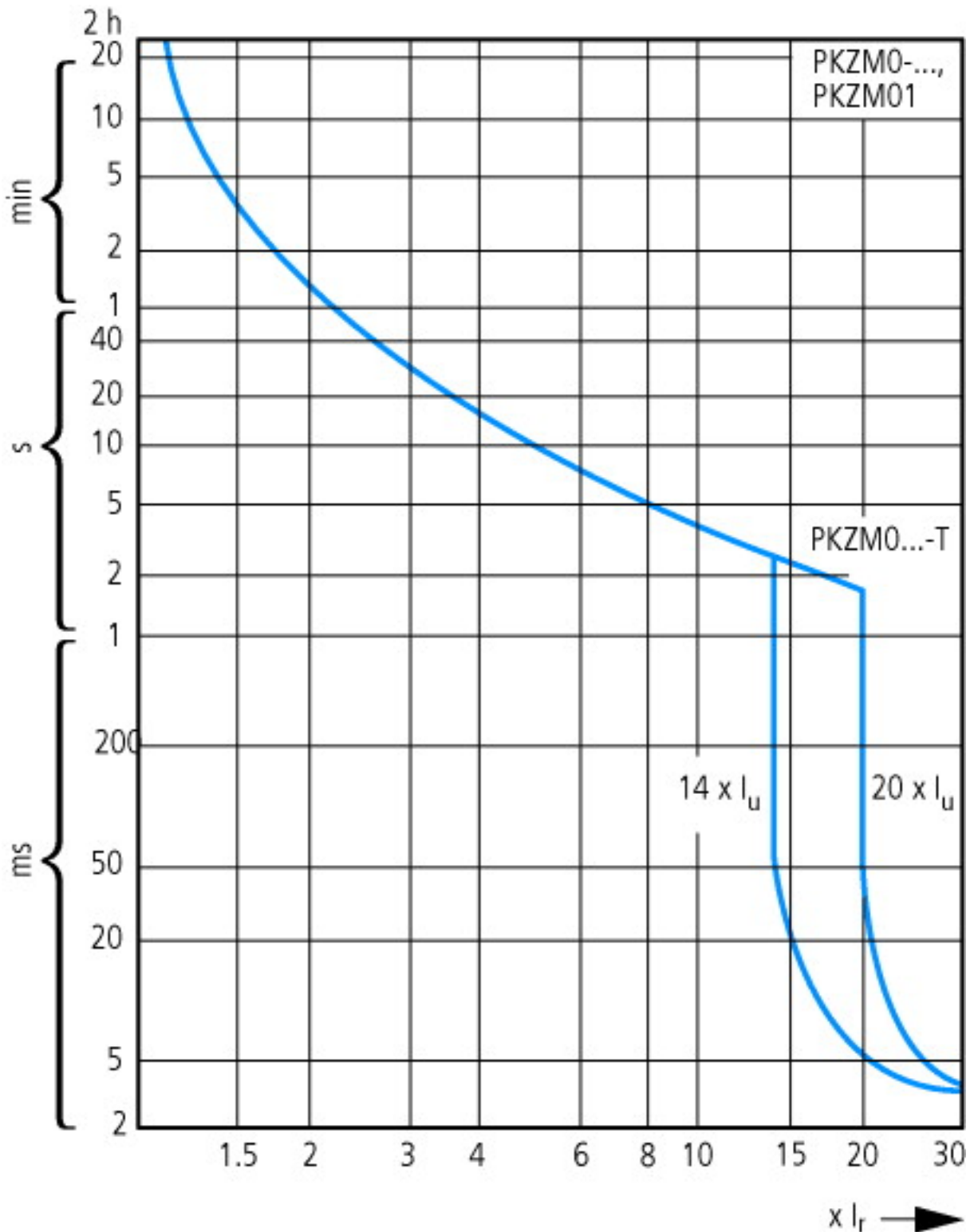
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker motor protection (ecl@ss8-27-37-04-01 [AGZ529012])

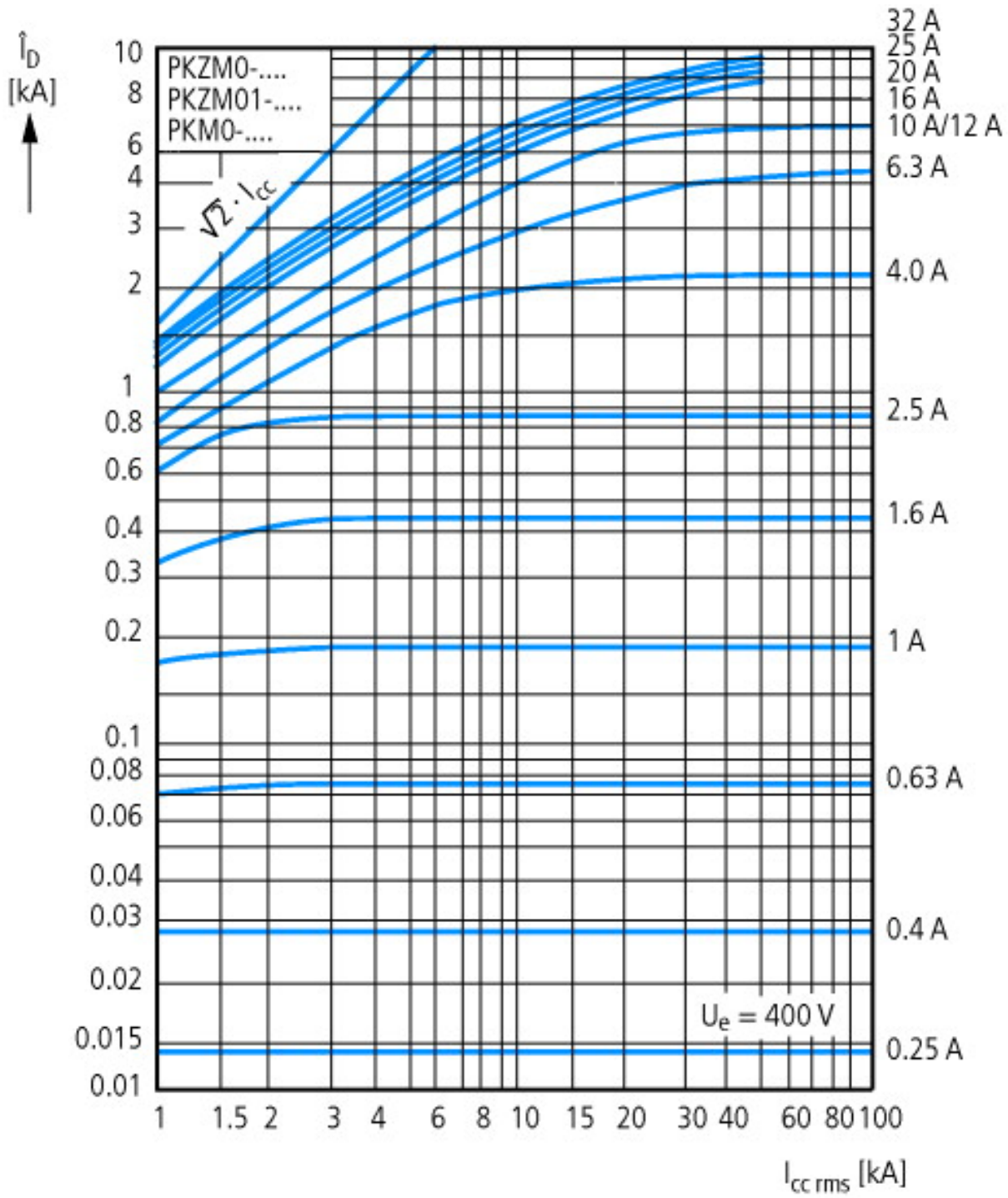
Setting range overload protector		A	2.5 - 4
Adjustment range undelayed short-circuit release		A	56 - 56
Phase failure sensitive			Yes
Switch off technique			Electronic

Rated operating voltage	V	690 - 690
Rated permanent current I_u	A	4
Rated operation power at AC-3, 230 V	kW	0.75
Rated operation power at AC-3, 400 V	kW	1.5
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	150
Degree of protection (IP)		IP20

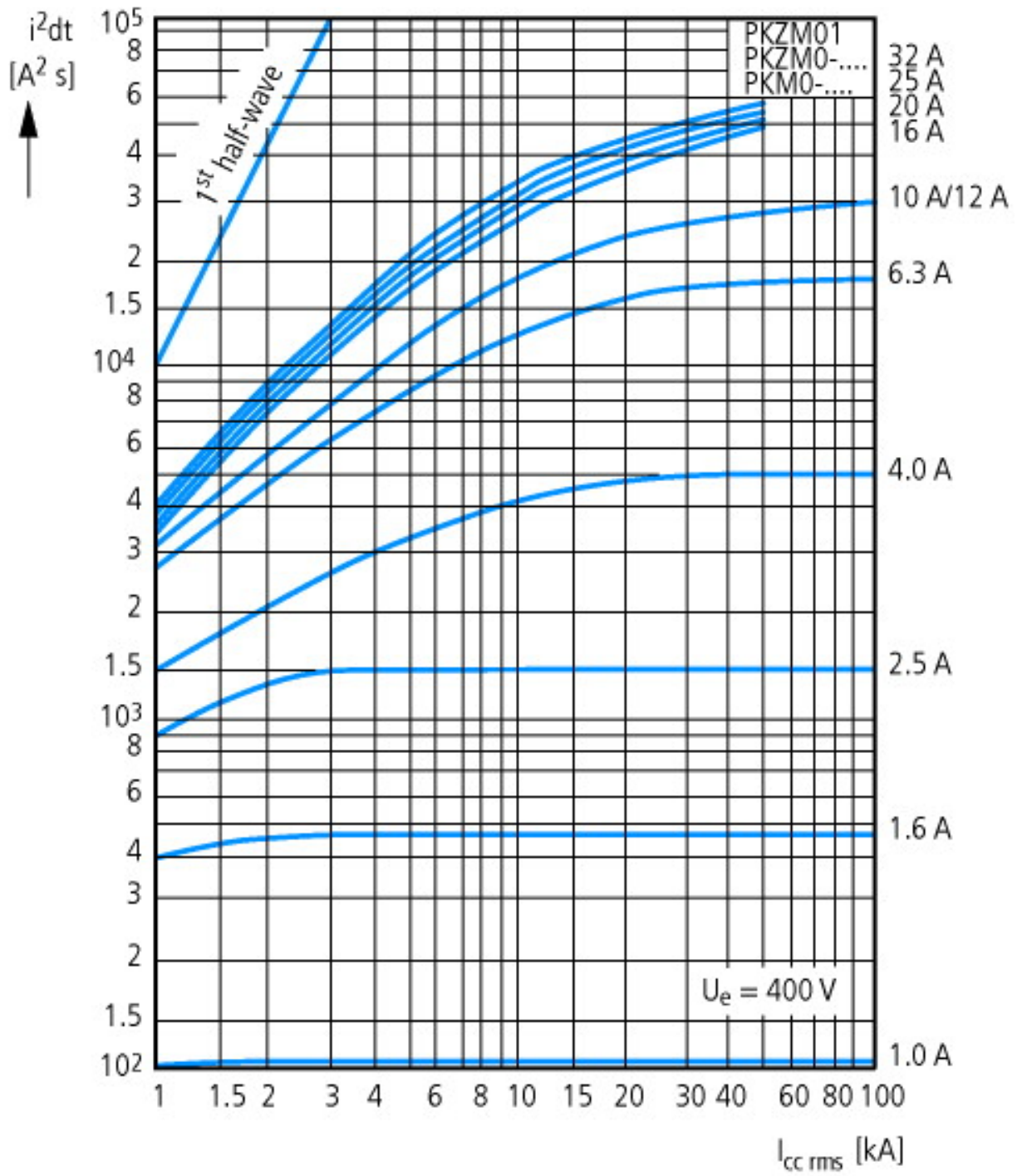
Characteristics

Characteristic curves



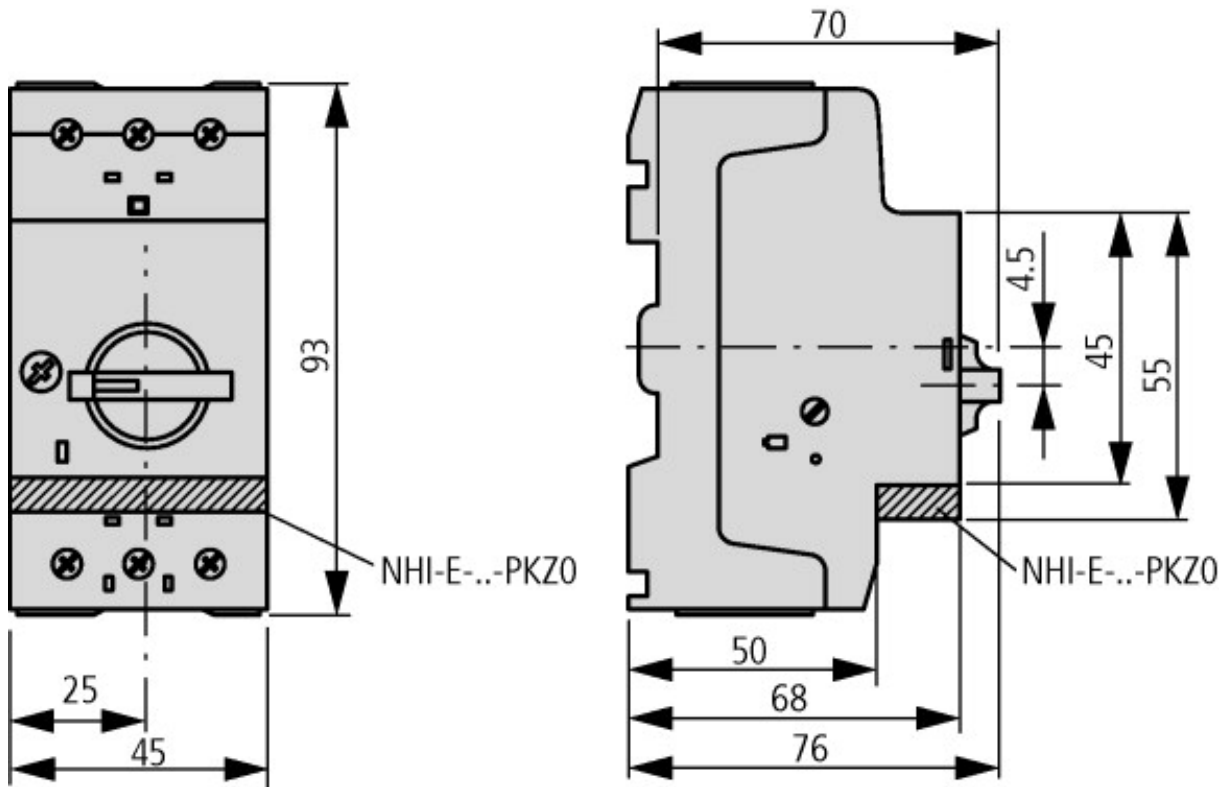


Let-through current

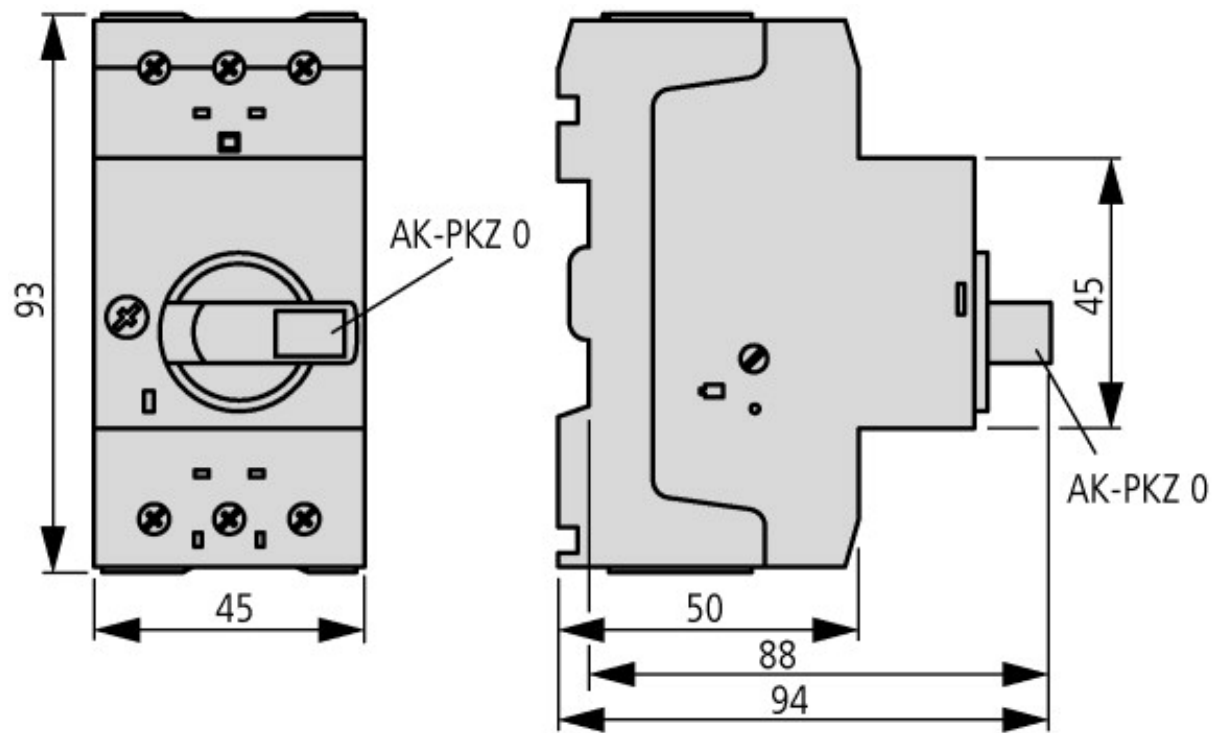


Let-through energy

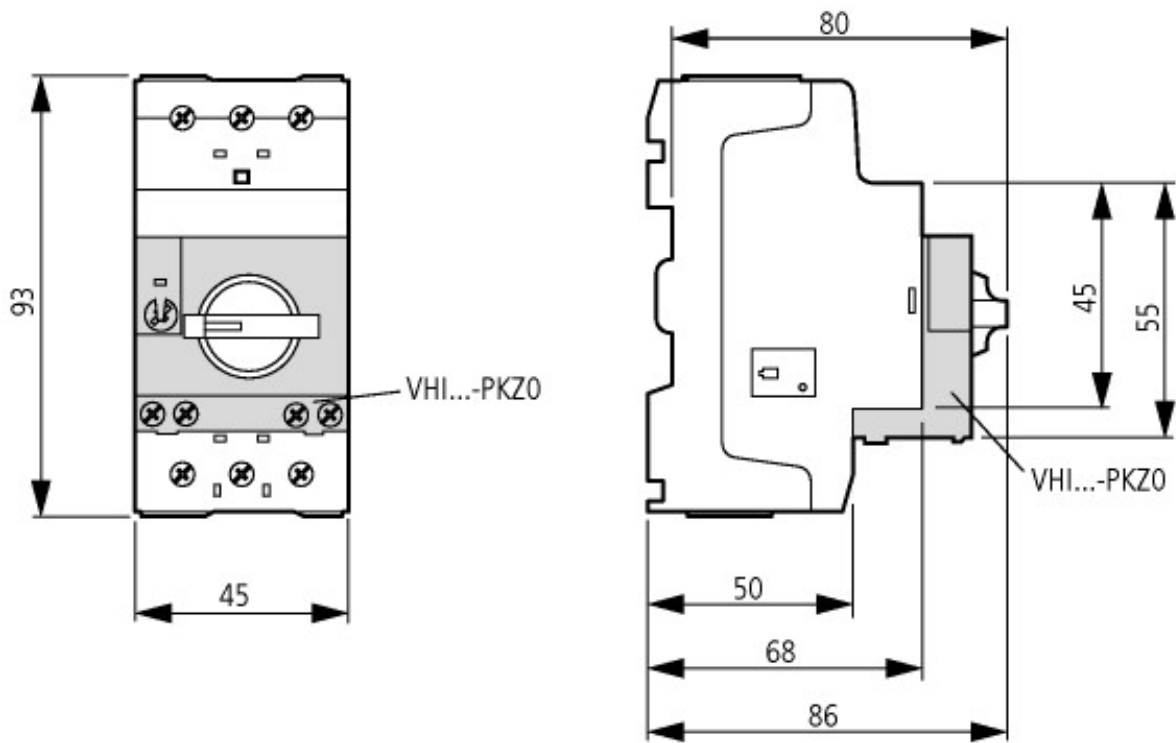
Dimensions



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