



PKZM4 motor-protective circuit-breaker



Powering Business Worldwide™

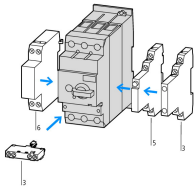
Part no. PKZM4-16
Article no. 222350

Catalog No. XTPR016DC1NL

Delivery programme

Product range				PKZM4 motor protective circuit-breakers up to 65 A
Basic function				Motor protection
Connection technique				Screw terminals
Contact sequence				
Max. motor rating				
AC-3				
220 V 230 V 240 V				
220 V 230 V	P	kW	4	
380 V 400 V 415 V				
380 V 400 V	P	kW	7.5	
440 V	P	kW	9	
500 V	P	kW	9	
660 V 690 V	P	kW	12.5	
Setting range				
Overload releases	I_r	A	10 - 16	
Short-circuit releases				
max.	I_{rm}	A	224	

Notes



Accessories

- 3 Standard auxiliary contact → 072896
- 5 Trip-indicating auxiliary contact → 072898
- 6 Shunt release, undervoltage release → 073187
- Phase failure sensitivity 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 → 266165

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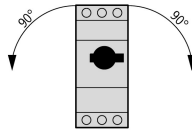
PTB 10 ATEX 3012, see

manual

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			UL 508 (on request) CSA C 22.2 No. 14 (on request)
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	-20 - +55
Enclosed		°C	-20 - +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	15
Altitude		m	2000
Terminal capacities		mm ²	
Solid		mm ²	1 x (1 - 50) 2 x (1 - 35)
Flexible with ferrule		mm ²	1 x (1 - 35) 2 x (1 - 35)
Solid or stranded		AWG	14 - 2
Specified tightening torque for terminal screws			
Main cable		Nm	3.3
Control circuit cables		Nm	1

Main conducting paths

Rated impulse withstand voltage	U _{imp}	V AC	6000
Overtoltage category/pollution degree			III/3
Rated operational voltage	U _e	V AC	690

Rated uninterrupted current = rated operational current	$I_u = I_e$	A	65 open 63 enclosed
Rated uninterrupted current = rated operational current	$I_u = I_e$	A	16
Rated frequency	f	Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	6
Lifespan, mechanical	Operations	$\times 10^6$	0.03
Lifespan, electrical	Operations		30000
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops./h	40
Motor switching capacity		kA _{rms}	
AC-3		V	Max. 400, for higher voltages, please enquire
DC - 5		V	250/60 kA
DC-5 (up to 250 V)		A	63 (3 contacts in series)

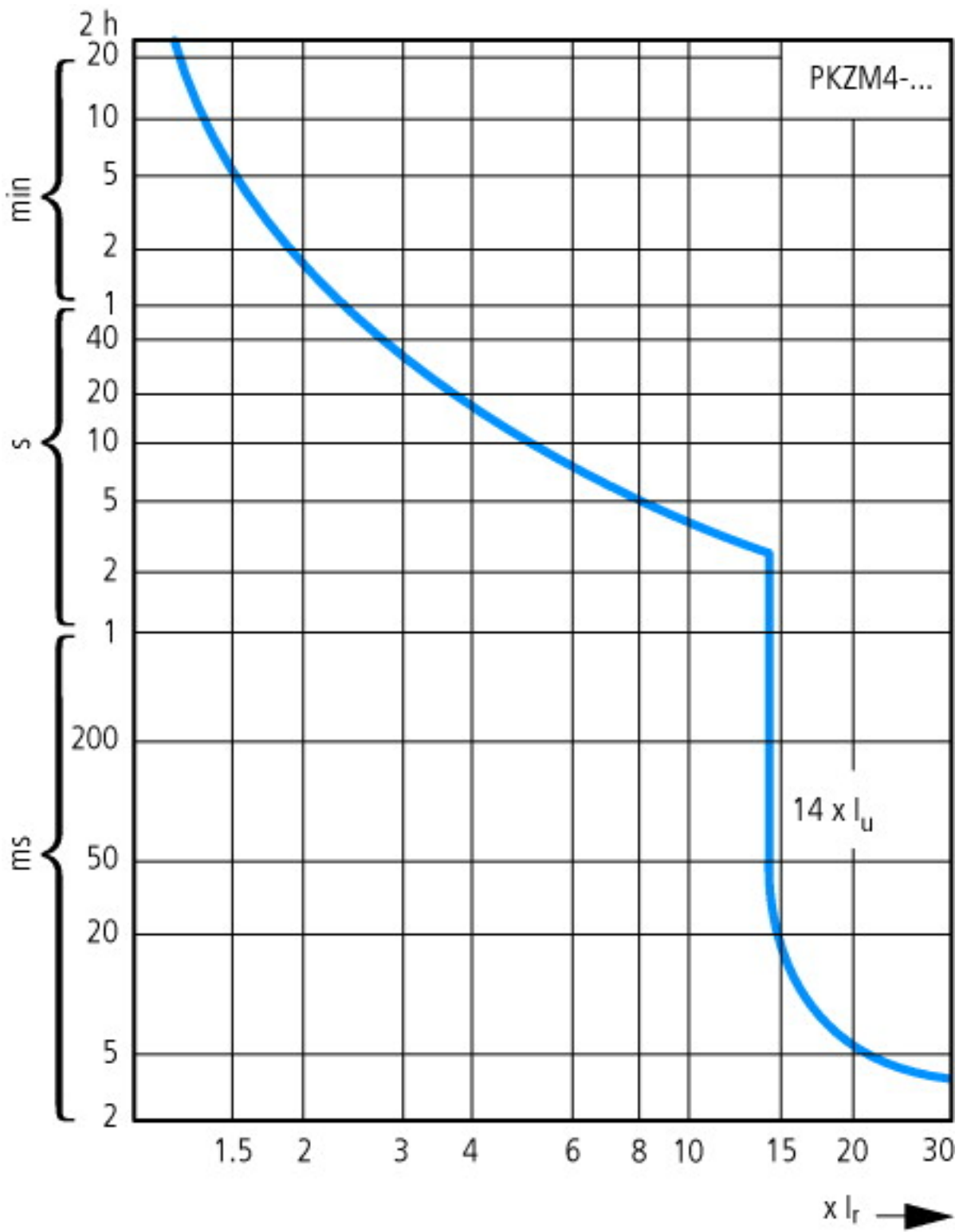
Trip blocks

Temperature compensation		°C	-5 - +40 (to IEC/EN 60947, VDE 0660) -25 - +55 (operating range)
Temperature compensation residual error for T > 40°			$\pm 0.25\%/K$
Setting range of overload releases			0.6 - 1 x I _u
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

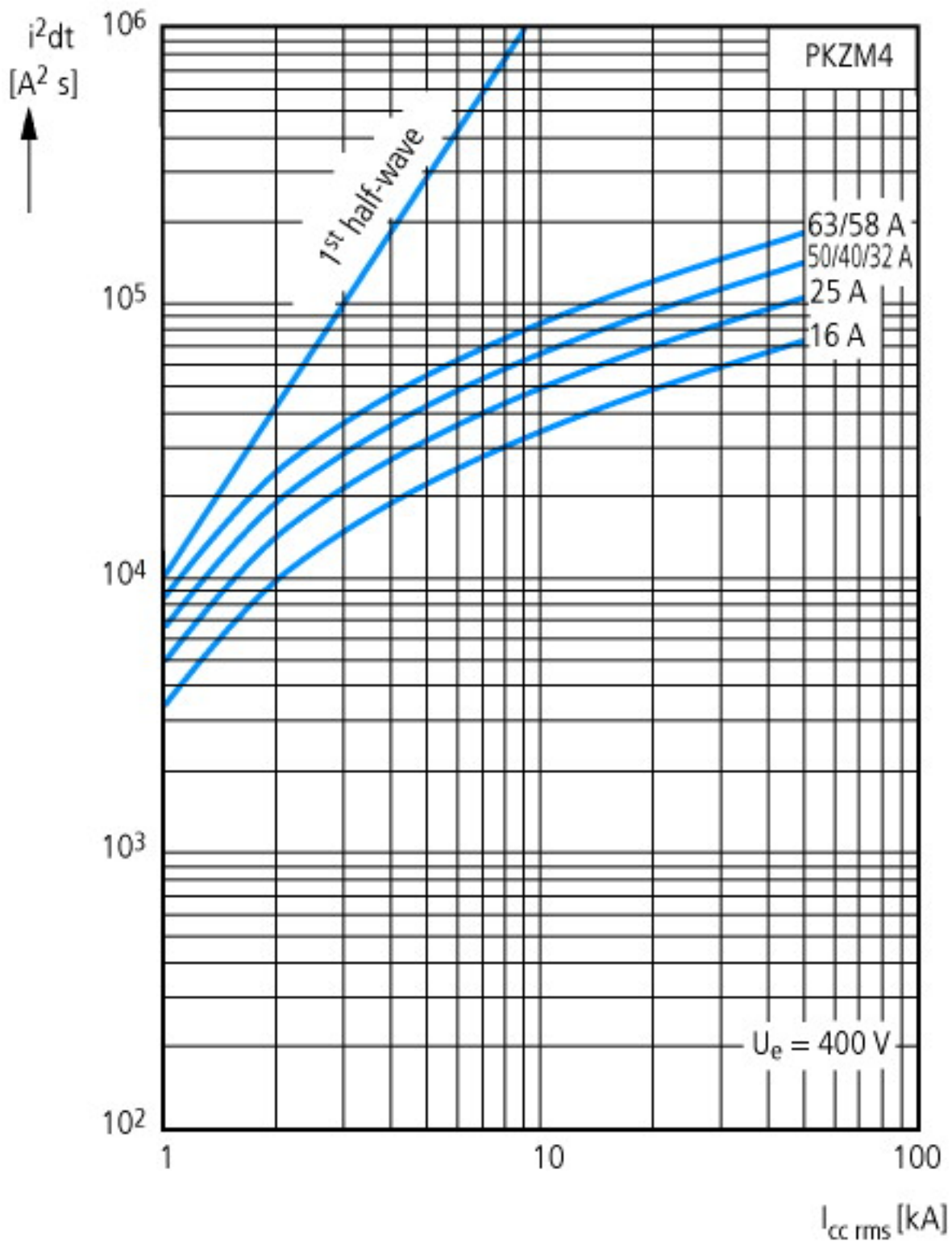
Technical data ETIM 4.0

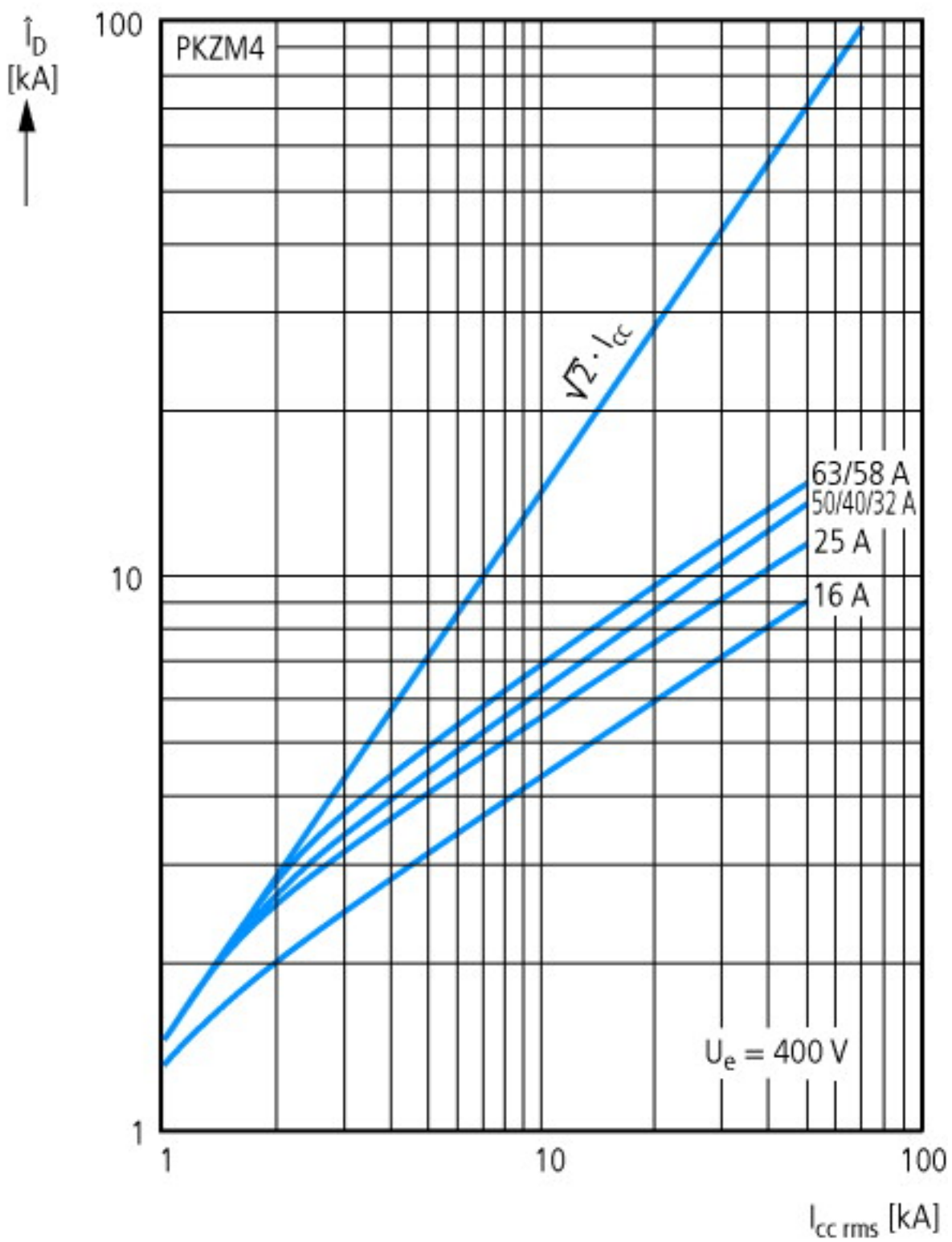
Setting range overload protector		A	10 - 16
Adjustment range undelayed short-circuit release		A	224 - 224
Phase failure sensitive			Yes
Switch off technique			Electronic
Rated permanent current I _u		A	16
Rated operation power at AC-3, 230 V		kW	4
Rated operation power at AC-3, 400 V		kW	7,5
Connection 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	150
Degree of protection (IP)			IP20

Characteristics



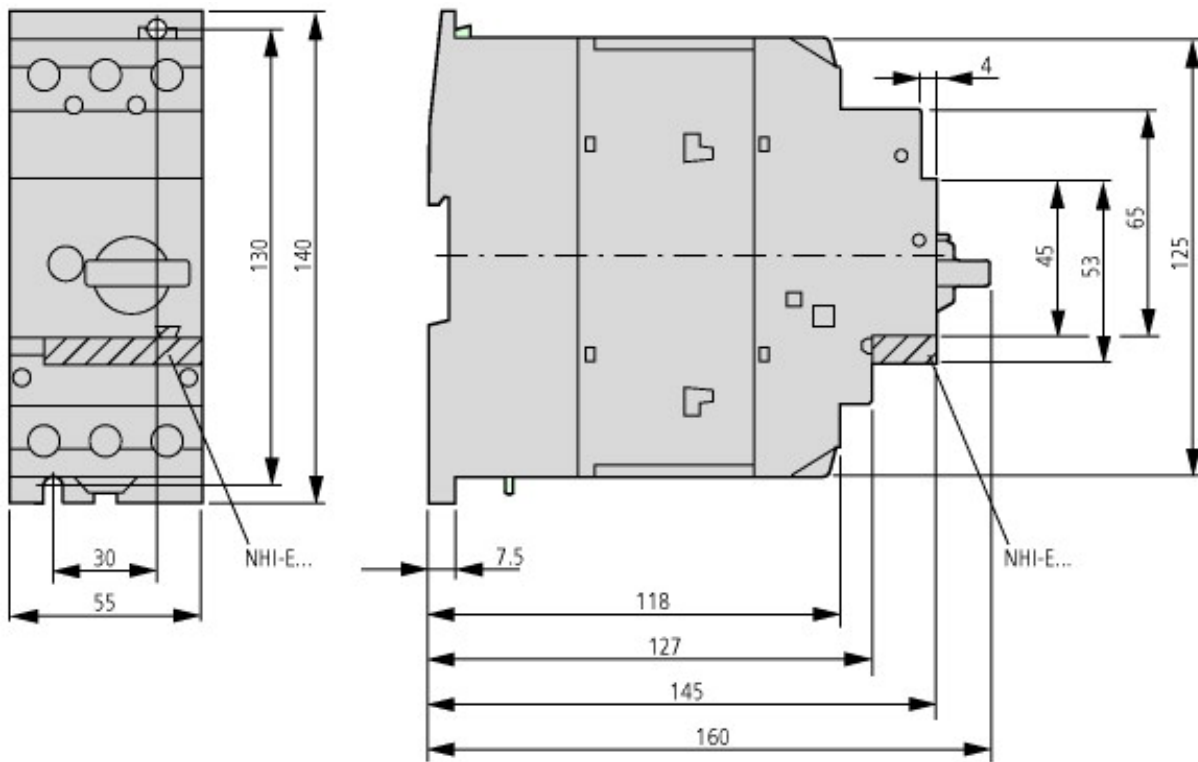
Tripping characteristics



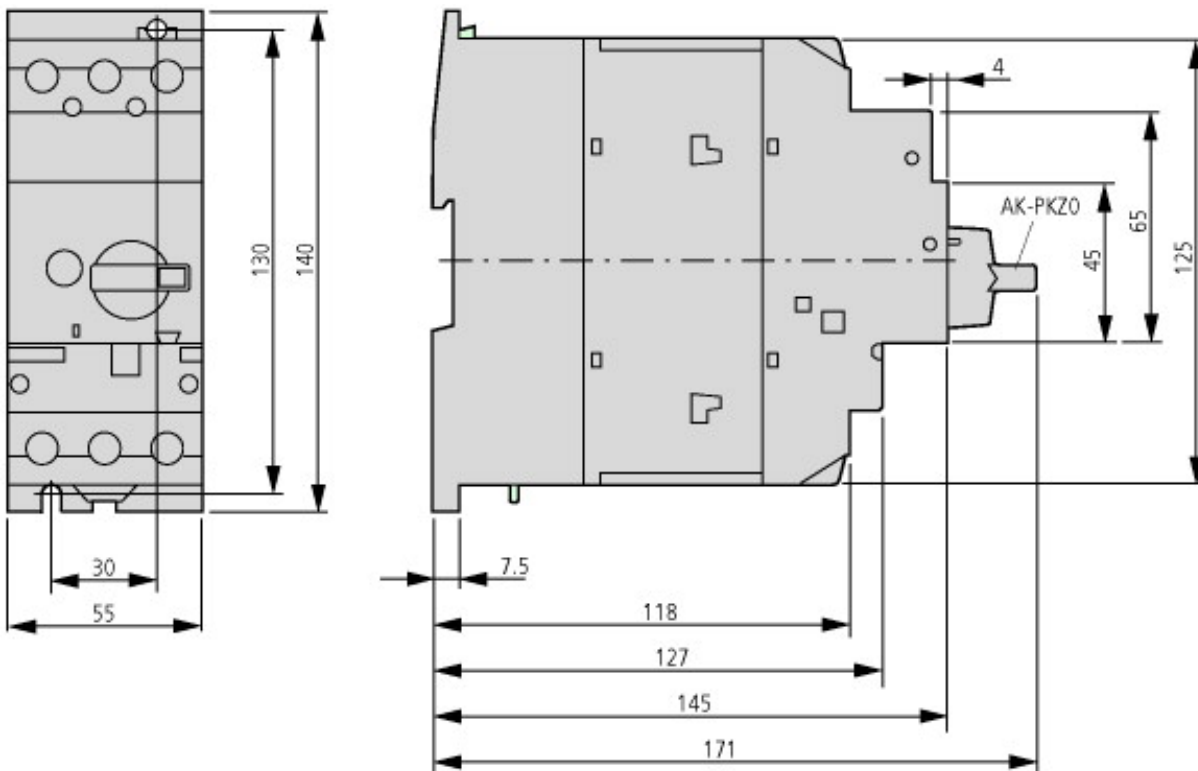


Let-through characteristics

Dimensions



Motor-protective circuit-breakers with lockable cover



PKZM4-... +AK-PKZ0

Additional product information (links)

IL03407012Z (AWA1210-1859) Motor-protective circuit-breaker

IL03407012Z (AWA1210-1859) Motor-protective circuit-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407012Z2010_08.pdf

MN03402002Z-DE/EN (AWB1210-1457) PKZM4 motor-protective circuit-breakers, overload monitoring of Ex e motors

MN03402002Z-DE/EN (AWB1210-1457) PKZM4 motor-protective circuit-breakers, overload monitoring of Ex e motors - Deutsch / English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402002Z_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

