



## PKZM4 motor-protective circuit-breaker

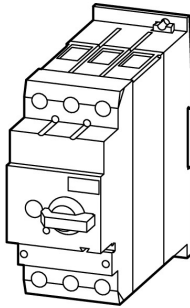
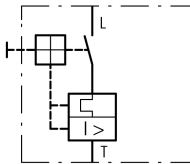
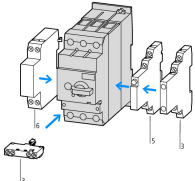



Powering Business Worldwide™

**Part no.** PKZM4-40

**Article no.** 222354

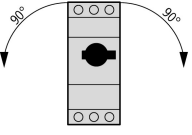
### Delivery programme

				
Product range				PKZM4 motor protective circuit-breakers up to 65 A
Basic function				Motor protection
Connection technique				Screw terminals
Contact sequence				
220 - 240 V				
AC-3				
220 V 230 V 240 V	P	kW		11
380 V 400 V 415 V	P	kW		20
440 V	P	kW		22
500 V	P	kW		24
660 V 690 V	P	kW		30
Rated uninterrupted current	$I_u$	A		40
<b>Setting range</b>				
Overload releases	$I_r$	A		32 - 40
Short-circuit releases				
max.	$I_{rm}$	A		560
<b>Notes</b>				
				
<b>Accessories</b>		<b>Page</b>		
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		
				
manual				PTB 10 ATEX 3012, see

### Approbationen

UL approval	Yes
CSA approval	Yes
Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332


## 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		°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 <sup>2</sup>	
Solid		mm <sup>2</sup>	1 x (1 - 50) 2 x (1 - 35)
Flexible with ferrule		mm <sup>2</sup>	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 frequency	f	Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	6
Lifespan, mechanical	Operations	x $10^6$	0.03
Lifespan, electrical	Operations		30000
Maximum operating frequency		Ops./ h	
Max. operating frequency		Ops./ h	40
Motor switching capacity		kA <sub>rms</sub>	
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

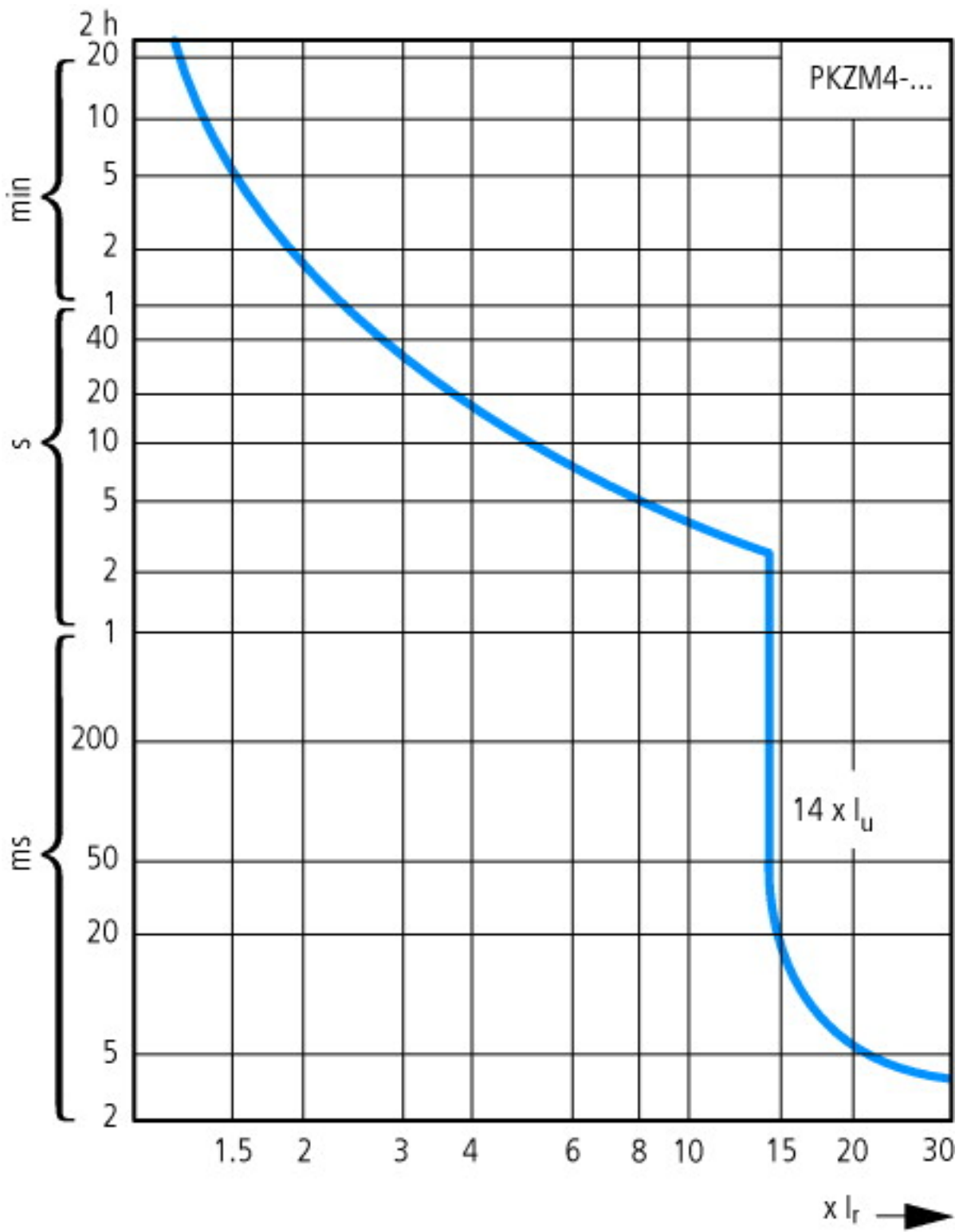
Temperature compensation		°C	-5 - 40 (to IEC/EN 60947, VDE 0660) -25 - 55 (operating range)
Temperature compensation residual error for T > 40°			 0.25%/K

Setting range of overload releases			0.6 - 1 x I <sub>u</sub>
Fixed short-circuit release			Basic device 14 x I <sub>u</sub>
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			IEC/EN 60947-1-1, VDE 0660 Part 102

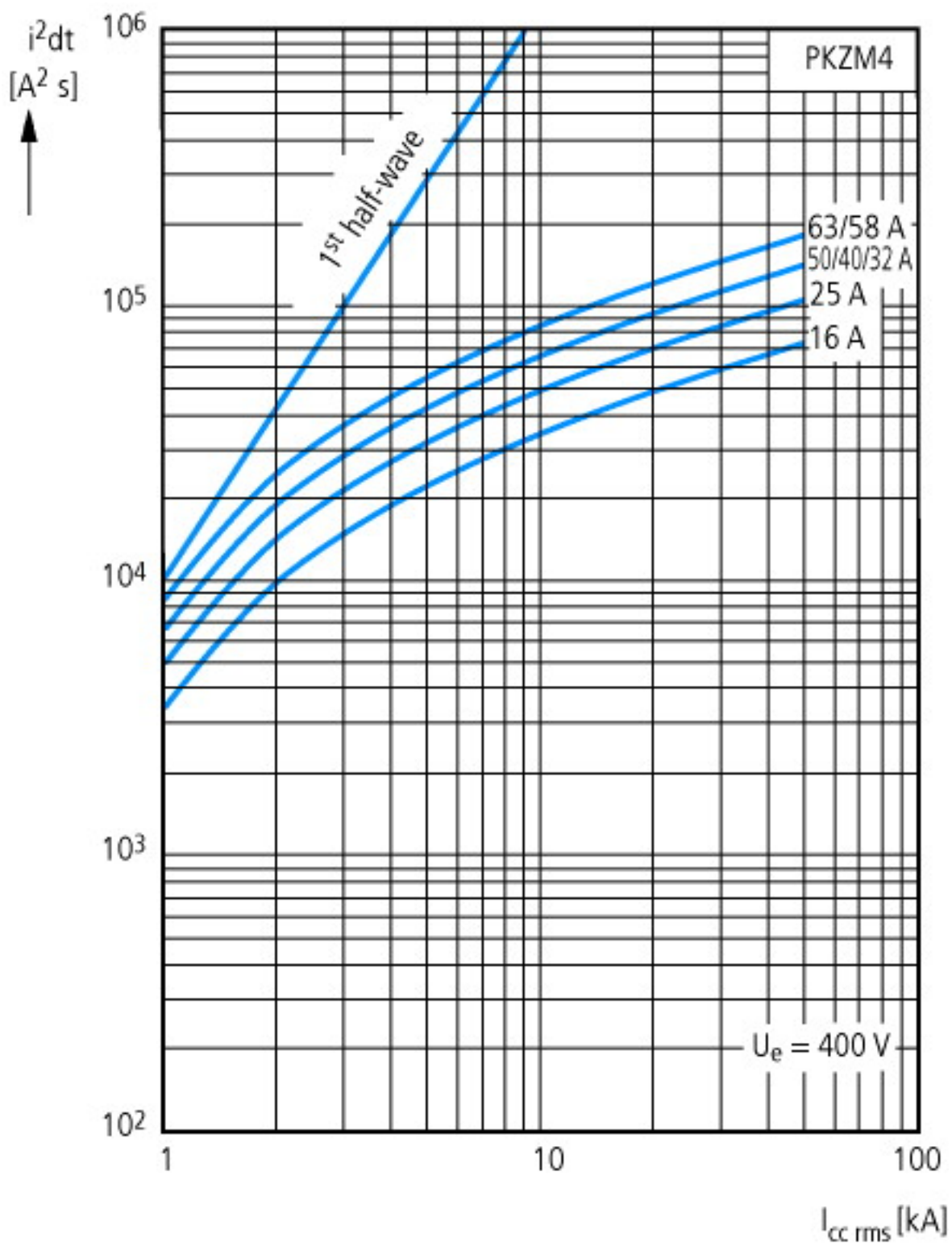
### Technical data ETIM 4.0

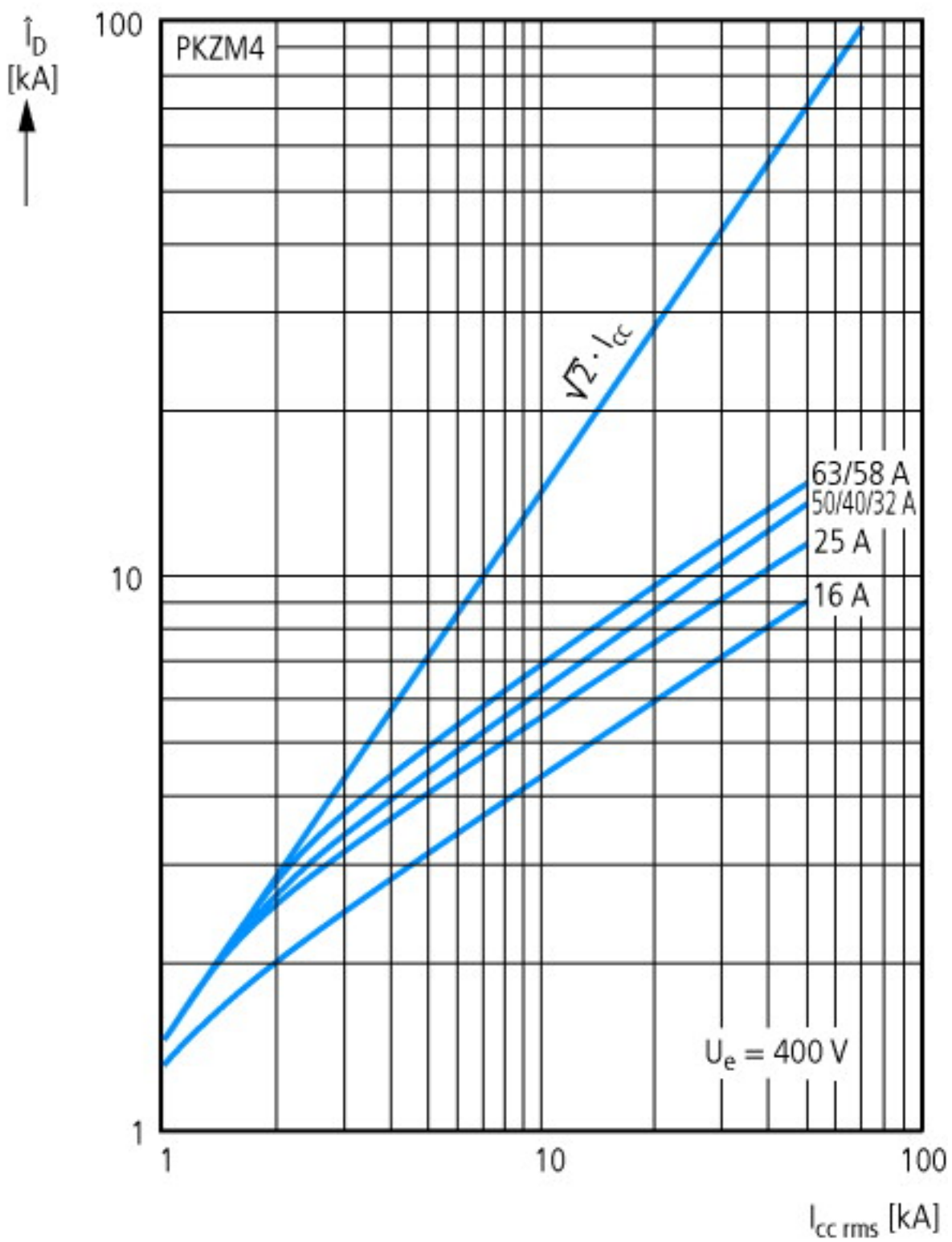
Rated operation power at AC-3, 400 V		kWh	20
With integrated auxiliary switch			No
Rated permanent current I <sub>u</sub>		A	40
With integrated under voltage release			No
Number of poles			3
Degree of protection (IP)			IP20
Connection type main current circuit			Screw connection

### Characteristics



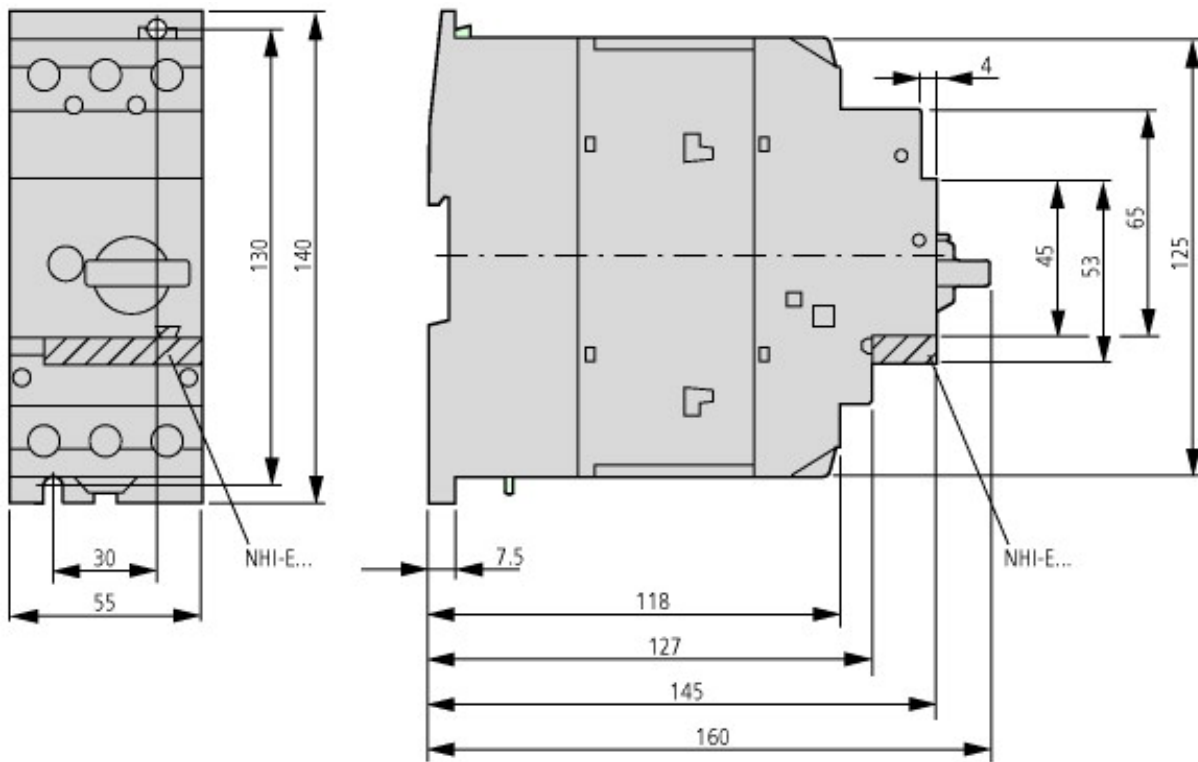
Tripping characteristics



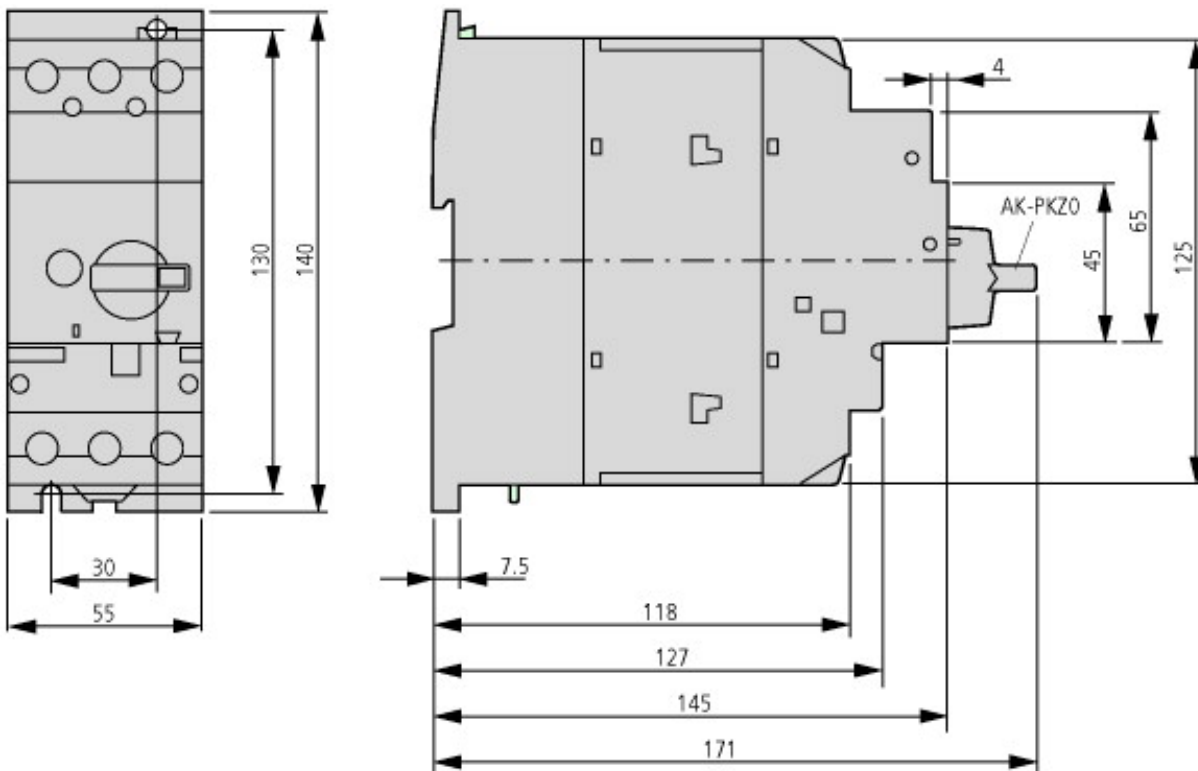


Let-through characteristics

## 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](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](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](http://www.moeller.net/binary/ver_techpapers/ver953en.pdf)

Busbar Component Adapters for modern Industrial control panels

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