



PKZM4 motor-protective circuit-breaker

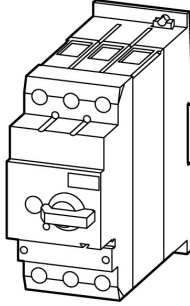
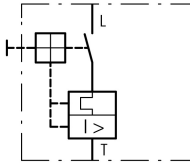
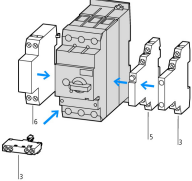



Powering Business Worldwide™

Part no. PKZM4-40

Article no. 222354

Program

				
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
Setting range				
Overload releases	I_r	A		32 - 40
Short-circuit releases				
max.	I_{rm}	A		560
Notes				
				
<p>Accessories</p> <p>3 Standard auxiliary contact → 072896</p> <p>5 Trip-indicating auxiliary contact → 072898</p> <p>6 Shunt release, undervoltage release → 073187</p> <p>Phase failure sensitivity to IEC/EN 60947-4-1, VDE 0660 part 102</p> <p>Can be snap-fitted to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height → 266165</p>				
 <p>PTB 10 ATEX 3012, see manual</p>				

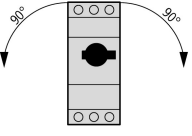
Approbationen

UL approval	Yes
CSA approval	Yes

Product Standards
 UL File No.
 UL CCN
 CSA File No.
 CSA Class No.
 NA Certification
 Specially designed for NA
 Suitable for

UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
 E36332
 NLRV
 12528
 3211-05
 UL listed, CSA certified
 No
 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		°C	-20 - +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
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	65 open 63 enclosed
Rated frequency	f	Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	22
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

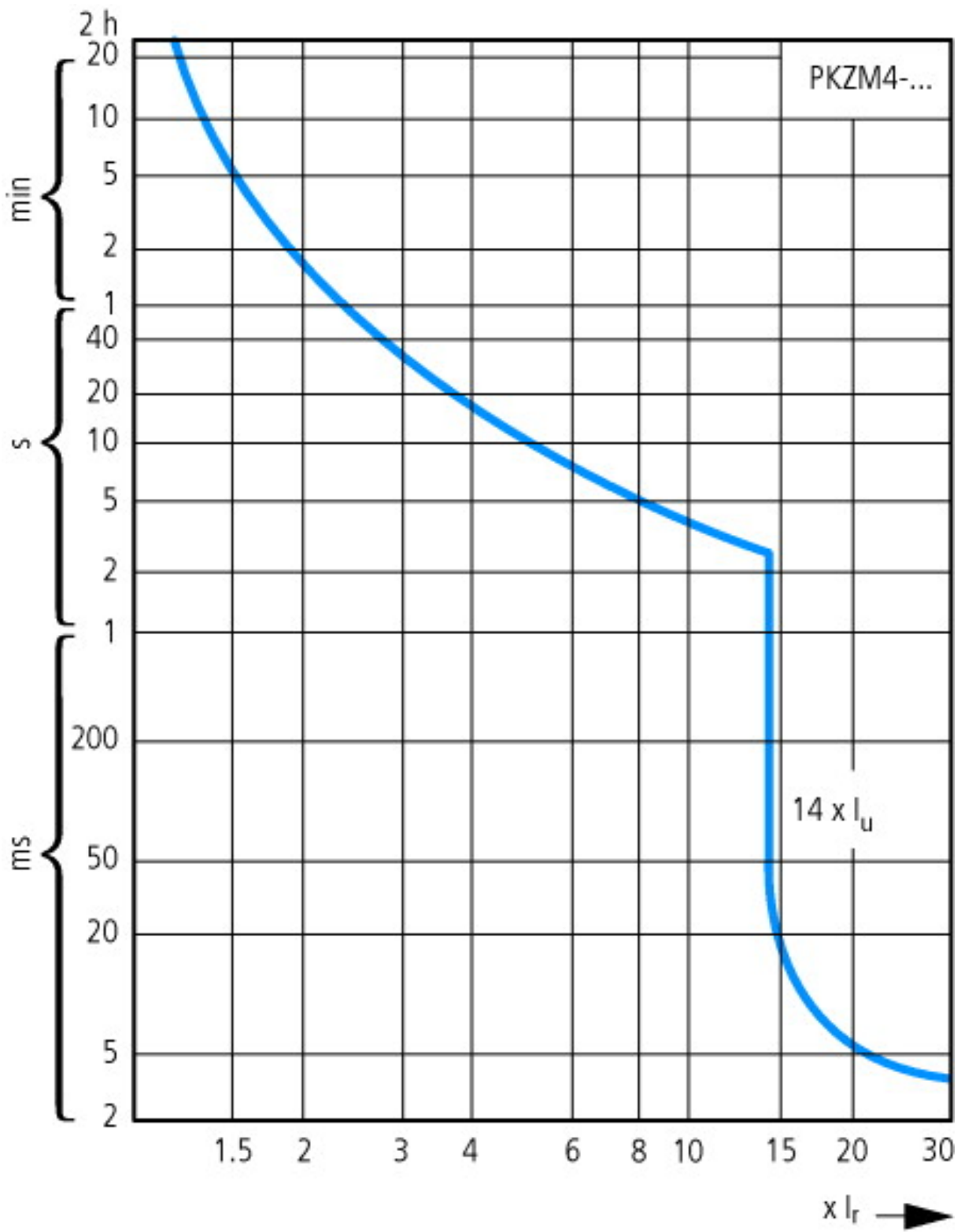
Temperature compensation		°C	-5 - 40 (to IEC/EN 60947, VDE 0660) -25 - 55 (operating range)
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Temperature compensation residual error for T > 40°			\leq 0.25%/K
Setting range of overload releases			0.6 - 1 x I _u
Fixed short-circuit release			Basic device 14 x I _u
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			IEC/EN 60947-4-1, VDE 0660 Part 102

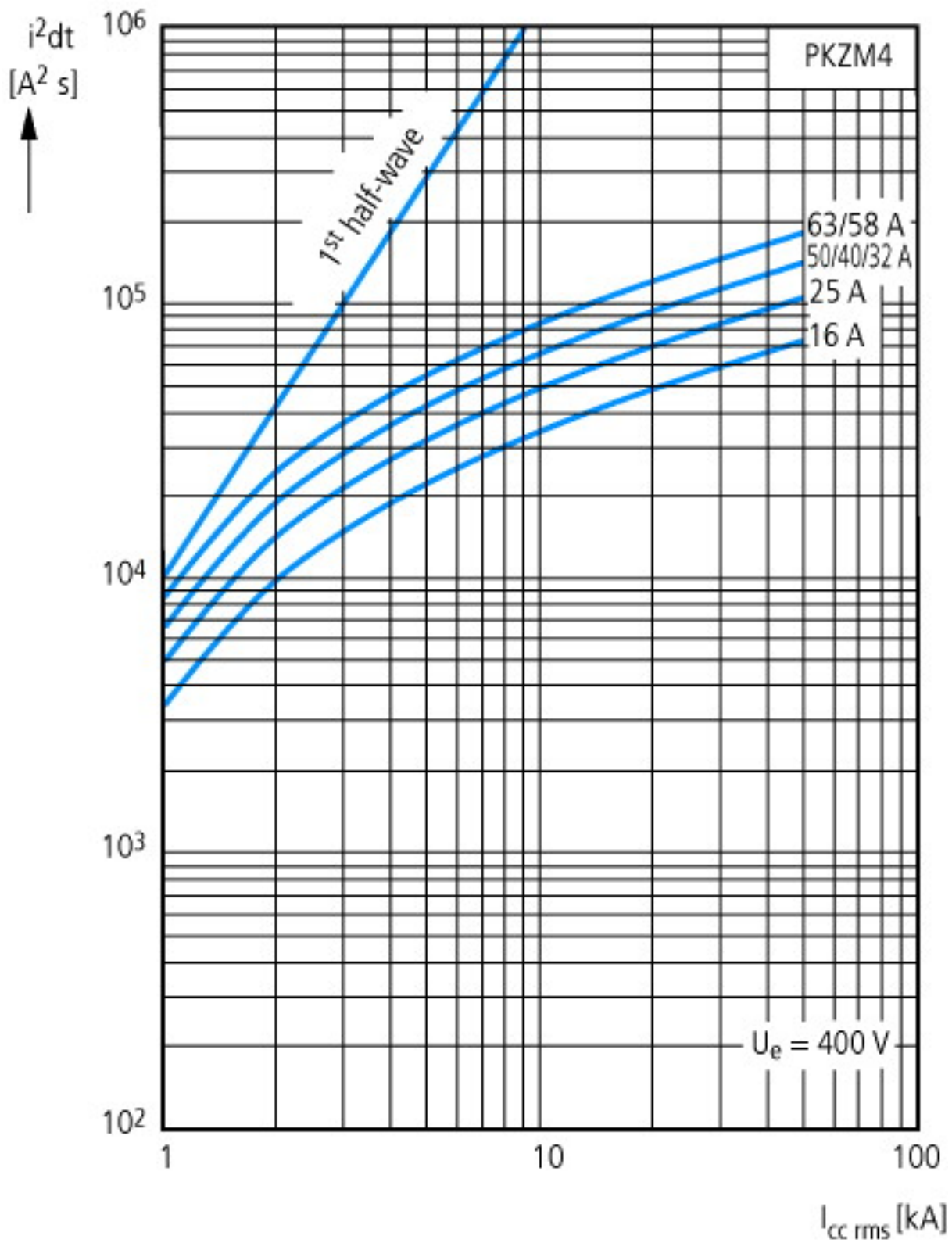
Technical data according to ETIM 4.0

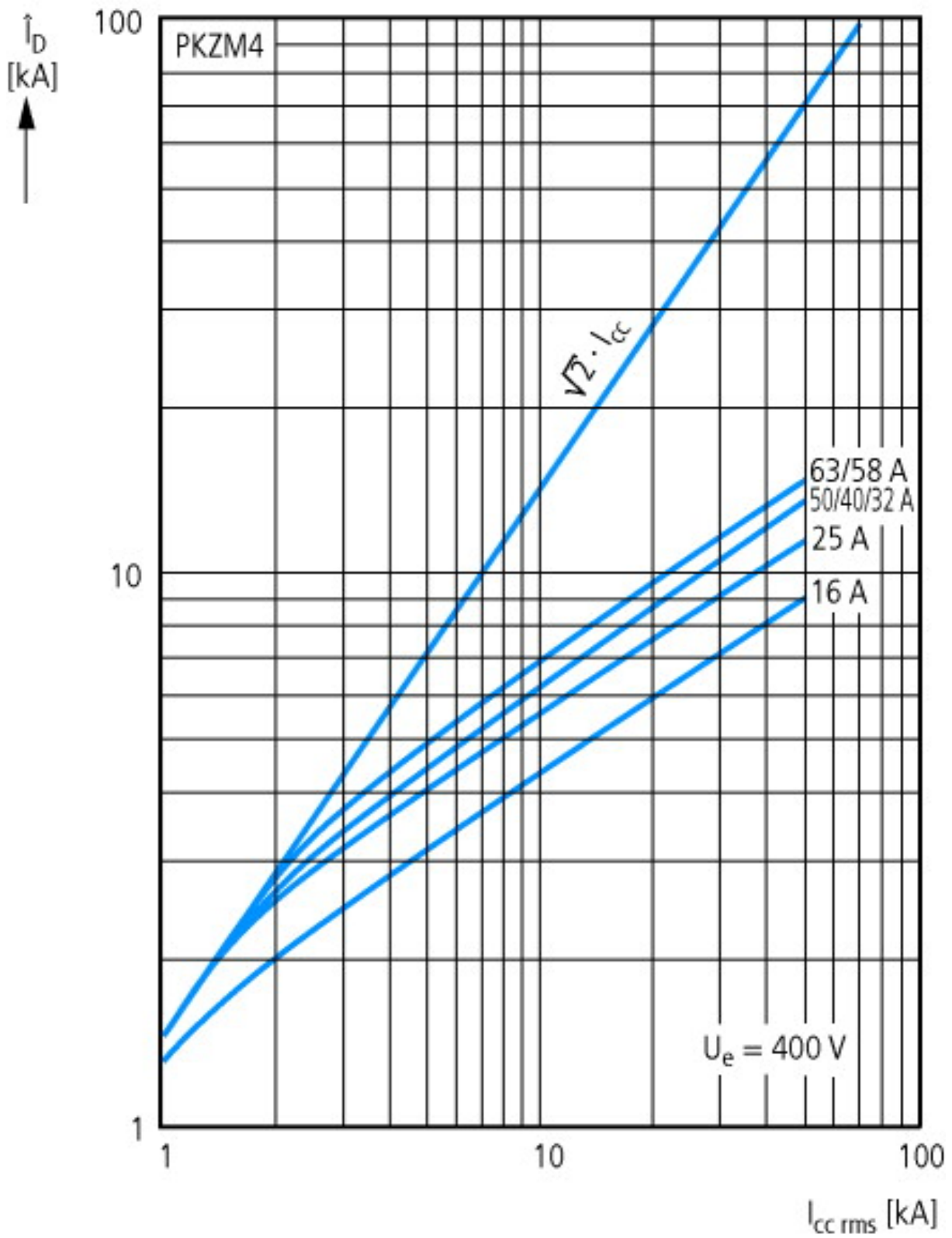
Rated operation power at AC-3, 400 V		kWh	20
With integrated auxiliary switch			No
Rated permanent current I _u		A	40
With integrated under voltage release			No
Number of poles			3
Degree of protection (IP)			IP20
Connection type main current circuit			Screw connection

Characteristics



Tripping characteristics





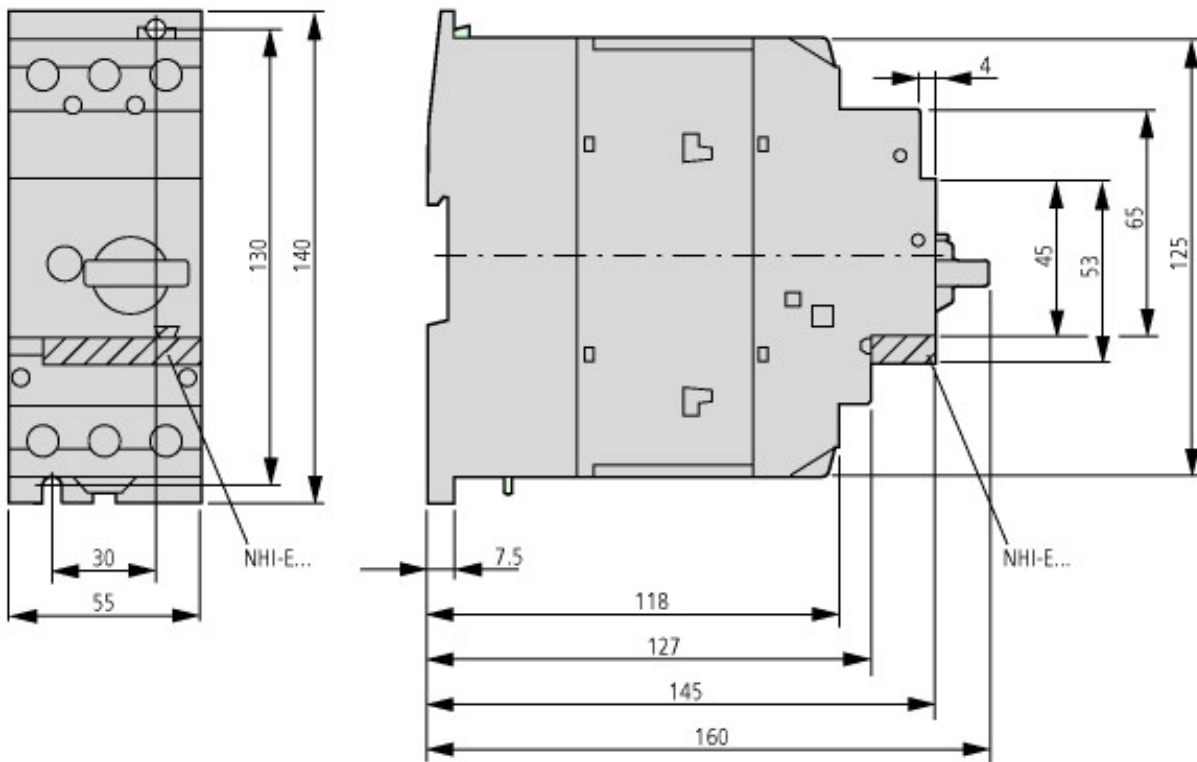
Let-through characteristics

CAD-Data

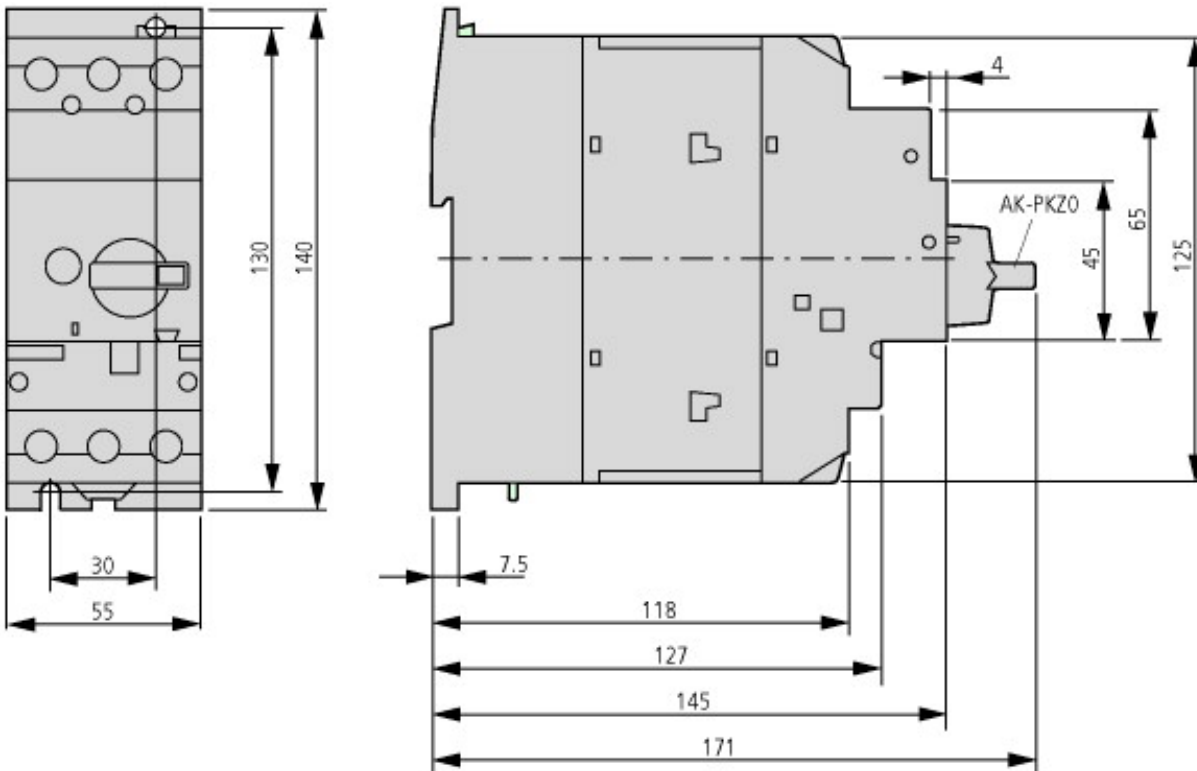
Product standards CAD data:

<http://eaton-moeller.partcommunity.com>

Dimensions



Motor-protective circuit-breakers with lockable cover



PKZM4... +AK-PKZO

Additional product information (links)

IL03407012Z (IL03407012Z) 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 - 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