

PKE12 basic device

Part no. **PKE12**

Article no. **121721**

Powering Business Worldwide

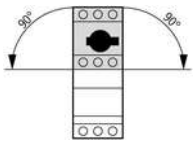
Delivery programme

Product range			PKE motor protective circuit-breakers with electronic wide-range overload protection up to 32 A
Basic function			Motor protection Motor protection for heavy starting duty
Single unit/Complete unit			Basic device with standard knob
Setting range of useable overload releases	I_r	CSA	0.3 - 12
Function			Without overload releases
Connection to SmartWire-DT			No

Approvals

Product Standards	UL508; CSA-C22.2 No.14-10;IEC60947-4-1; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	12528
CSA Class No.	3211-05
NA Certification	UL listed, CSA certified
Specially designed for NA	No

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
Busbar tag shroud to EN 50274			finger- and back-of-hand-proof
Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27		g	25
Altitude		m	Max. 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	14 - 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	12

Rated frequency	f	Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	3,5 (with PKE-XTU(A)-12) 0,5 (with PKE-XTU(A)-4) 0,4 (with PKE-XTU(A)-1,2)
Lifespan, mechanical	Operations	x 10^6	0.05
Lifespan, electrical (AC-3 at 400 V)			
Lifespan, electrical	Operations	x 10^6	0.05
Maximum operating frequency		Ops./ h	
Max. operating frequency		Ops/ h	60
Other technical data (sheet catalogue)			Switching capacity
Motor switching capacity		kA_{rms}	
AC-3 (up to 690 V)		A	12

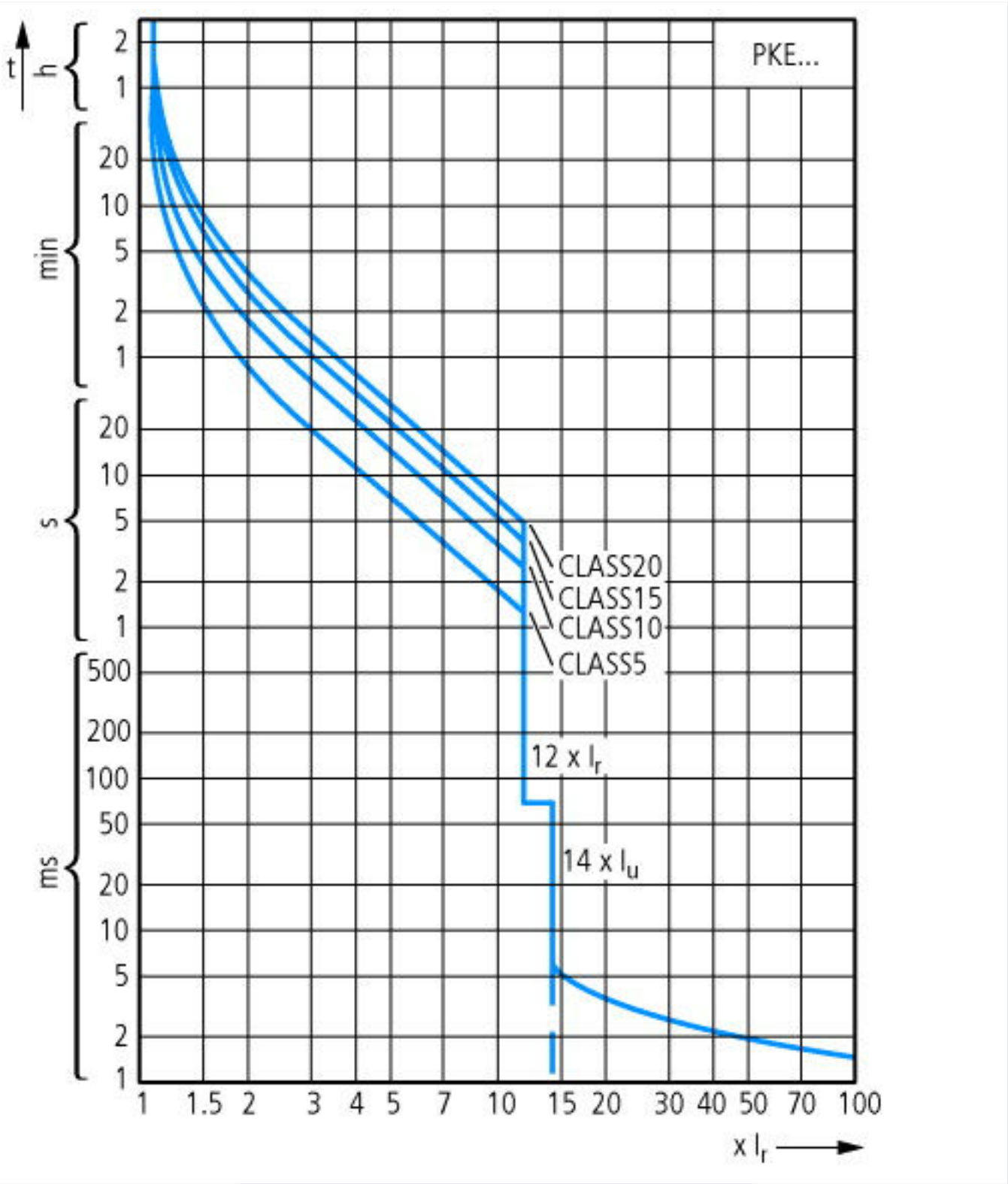
Trip blocks

Temperature compensation		°C	-5 - +40 (to IEC/EN 60947, VDE 0660) -25 - +55 (operating range)
Temperature compensation residual error for T > 40 °C			0.1%/K
Setting range of overload releases			0.25 - 1 x I_u
Fixed short-circuit release			Basic device 14 x I_u
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			yes

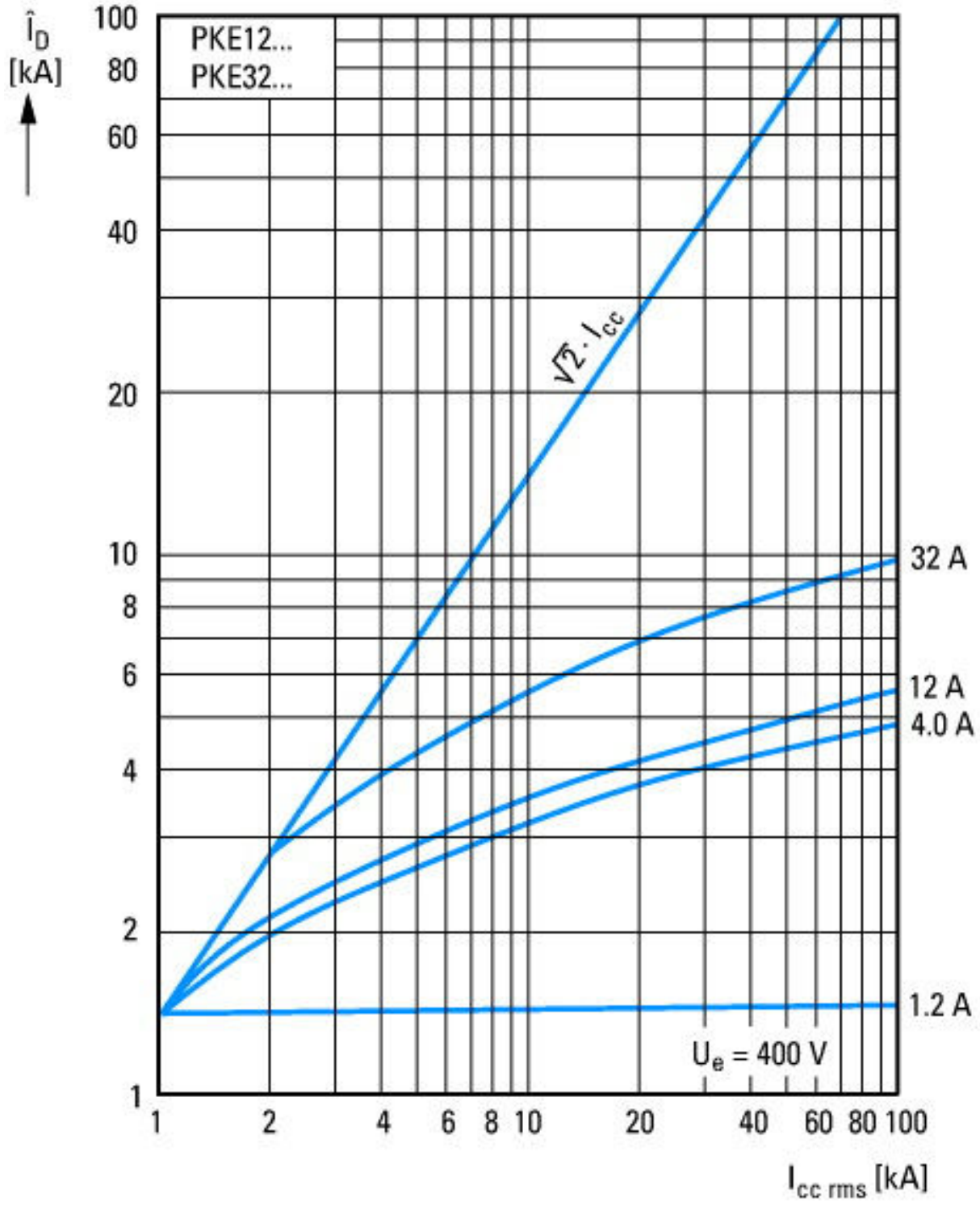
Technical data ETIM 4.0

Rated operation power at AC-3, 400 V		kWh	0
With integrated auxiliary switch			No
Rated permanent current Iu		A	12
With integrated under voltage release			No
Number of poles			3
Degree of protection (IP)			IP20
Connection type main current circuit			Screw connection

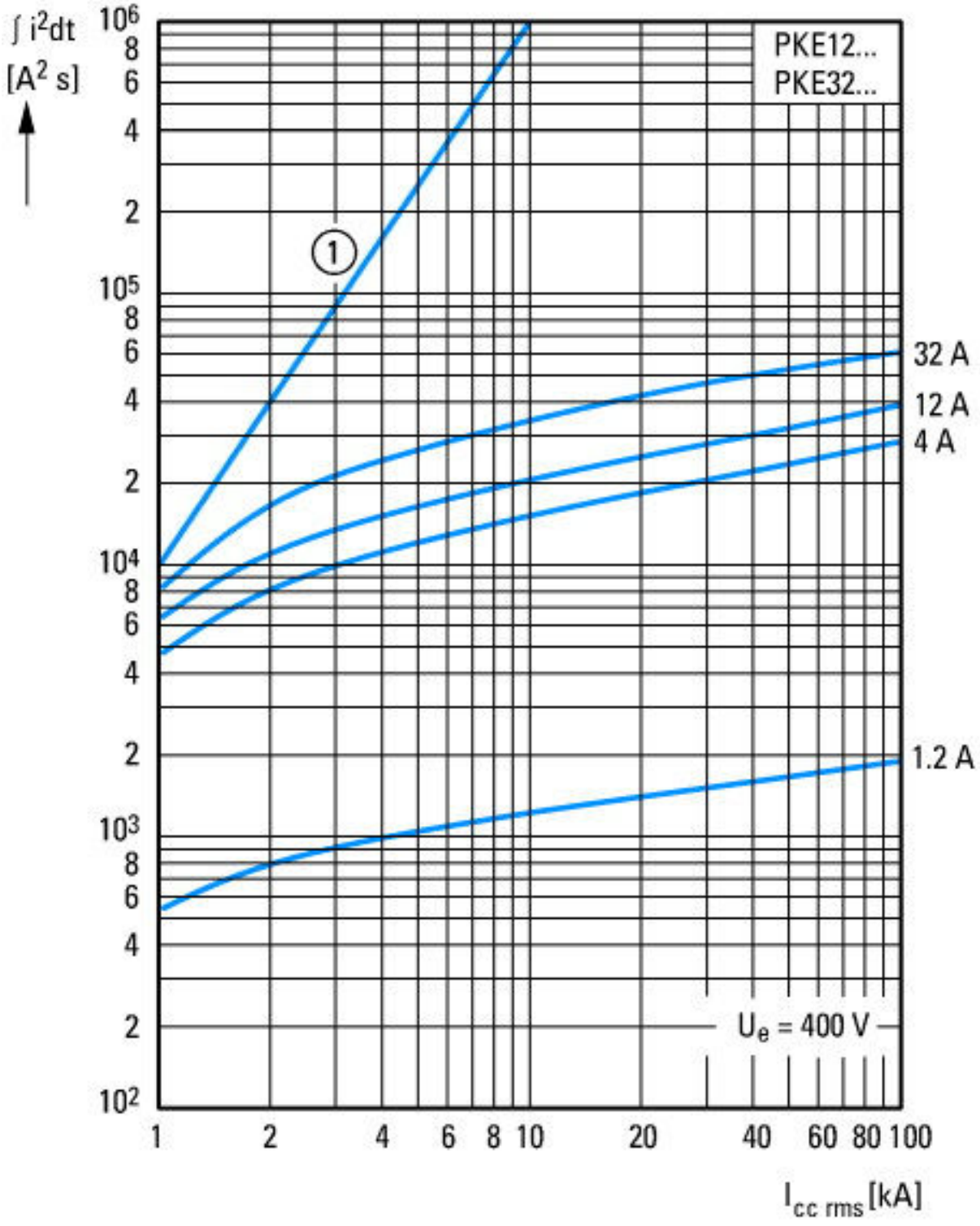
Characteristics



Tripping characteristics

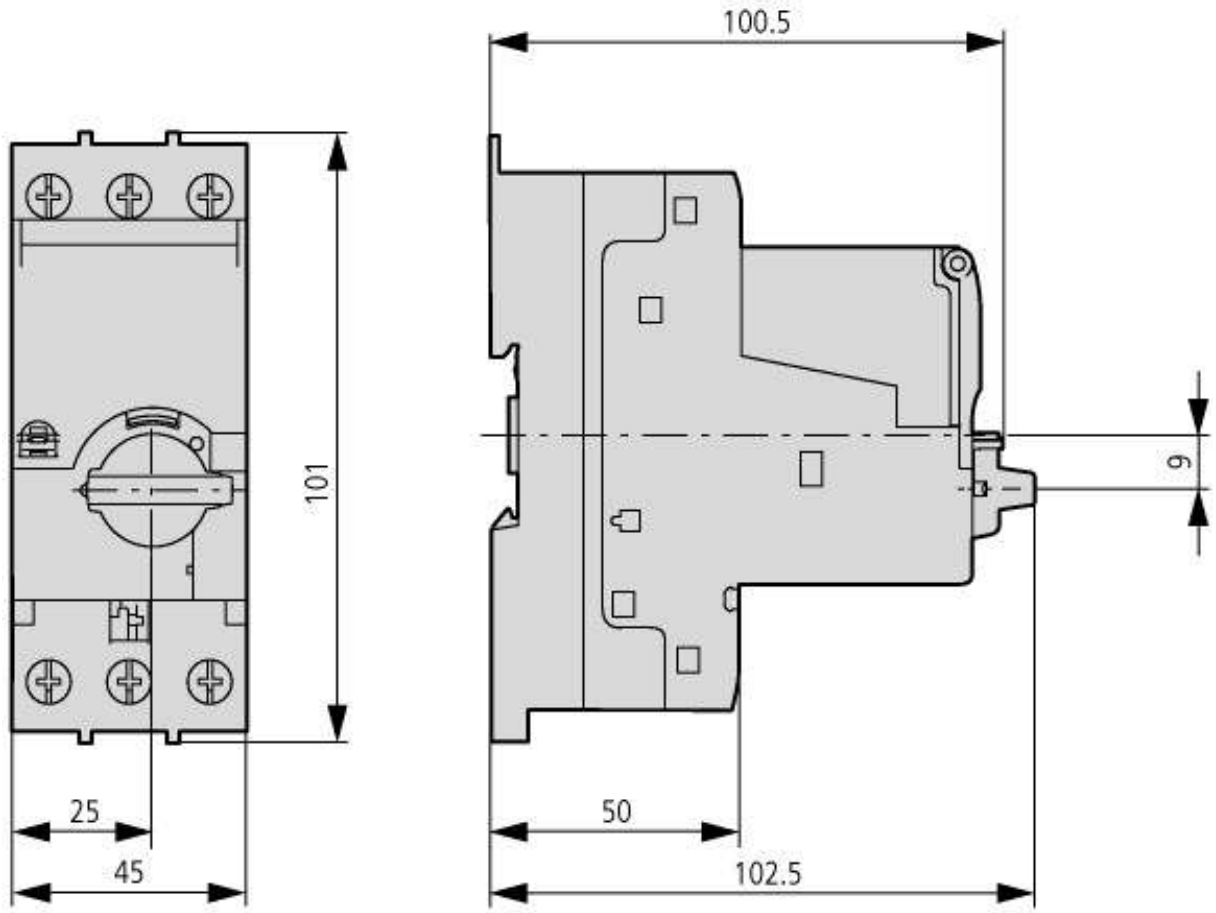


Let-through current



① 1 half-cycle
Let-through energy

Dimensions



Basic device with trip block

Additional product information (links)

IL03402019Z (AWA1210-2490) PKE motor-protective circuit-breaker with wide-range overload protection	
IL03402019Z (AWA1210-2490) PKE motor-protective circuit-breaker with wide-range overload protection	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402019Z2011_09.pdf
IL03402023Z (AWA1210-2705) Trip block for solid-state motor-protective circuit-breaker	
IL03402023Z (AWA1210-2705) Trip block for solid-state motor-protective circuit-breaker	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402023Z2011_08.pdf
MN03402004Z-DE/EN Motor-protective circuit-breaker PKE12 and PKE32; Overload monitoring of Ex e motors	
MN03402004Z-DE/EN Motor-protective circuit-breaker PKE12 and PKE32; Overload monitoring of Ex e motors - Deutsch / English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402004Z_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

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