Trip block, 0.3-1.2A, networkable, motor protection

Part no. PKE-XTUA-1,2
Article no. 121727
Catalog No. XTPEXTA1P2B

Powering Business Worldwide

Delivery programme

Product range			Accessories
Accessories			Trip blocks
Basic function			Motor protection Motor protection for heavy starting duty
			IE3
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.

Setting range

Overload releases			
Setting range of overload releases	I_r	A	0.3 - 1.2
Overload release, min.	I_r	A	0.3
Overload release, max.	I_r	A	1.2
Function			With overload release
Rated uninterrupted current = rated operational current	$I_u = I_e$	A	1.2

Motor rating

AC-3			
220 V 230 V	P	kW	0.18
380 V 400 V	P	kW	0.37
440 V	P	kW	0.37
500 V	P	kW	0.37
660 V 690 V	P	kW	0.75
For use with			PKE12 basic device
Connection to SmartWire-DT			with PKE-SWD-32 or PKE-SWD-SP

Motor output/rated motor current

Motor rating	Rated motor current				
AC-3					
	220 V	380 V	440 V	500 V	660 V
	230 V	400 V			690 V
	240 V	415 V			
P	I	I	I	I	I
kW	A	A	A	A	A
0.06	0.37	-	-	-	-
0.09	0.54	0.31	-	-	-
0.12	0.72	0.41	0.37	0.33	-
0.18	1.04	0.6	0.54	0.48	0.35
0.25	-	0.8	0.76	0.7	0.5
0.37	-	1.1	1.02	0.9	0.7
0.55	-	-	-	-	0.9
0.75	-	-	-	-	1.1

Technical data

General

Standards			IEC/EN 60947, VDE 0660, UL 508, CSA C 22.2 No. 14
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Storage	ϑ	°C	-40 - +80
Open		°C	-20 - +55
Enclosed		°C	-20 - +40

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

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	1.2
Rated frequency	f	Hz	40 - 60
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops/h	60
Motor switching capacity		kA_{rms}	
AC-3 (up to 690 V)		A	1.2

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			±55 (Arbeitsbereich)
Setting range of overload releases			0.25 - 1 x I_u
short-circuit release			Trip block, fixed: 15.5 x I_r delayed approx. 60 ms
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			yes

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	1.2
Heat dissipation per pole, current-dependent	P_{vid}	W	0.1
Equipment heat dissipation, current-dependent	P_{vid}	W	0.3
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.

10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

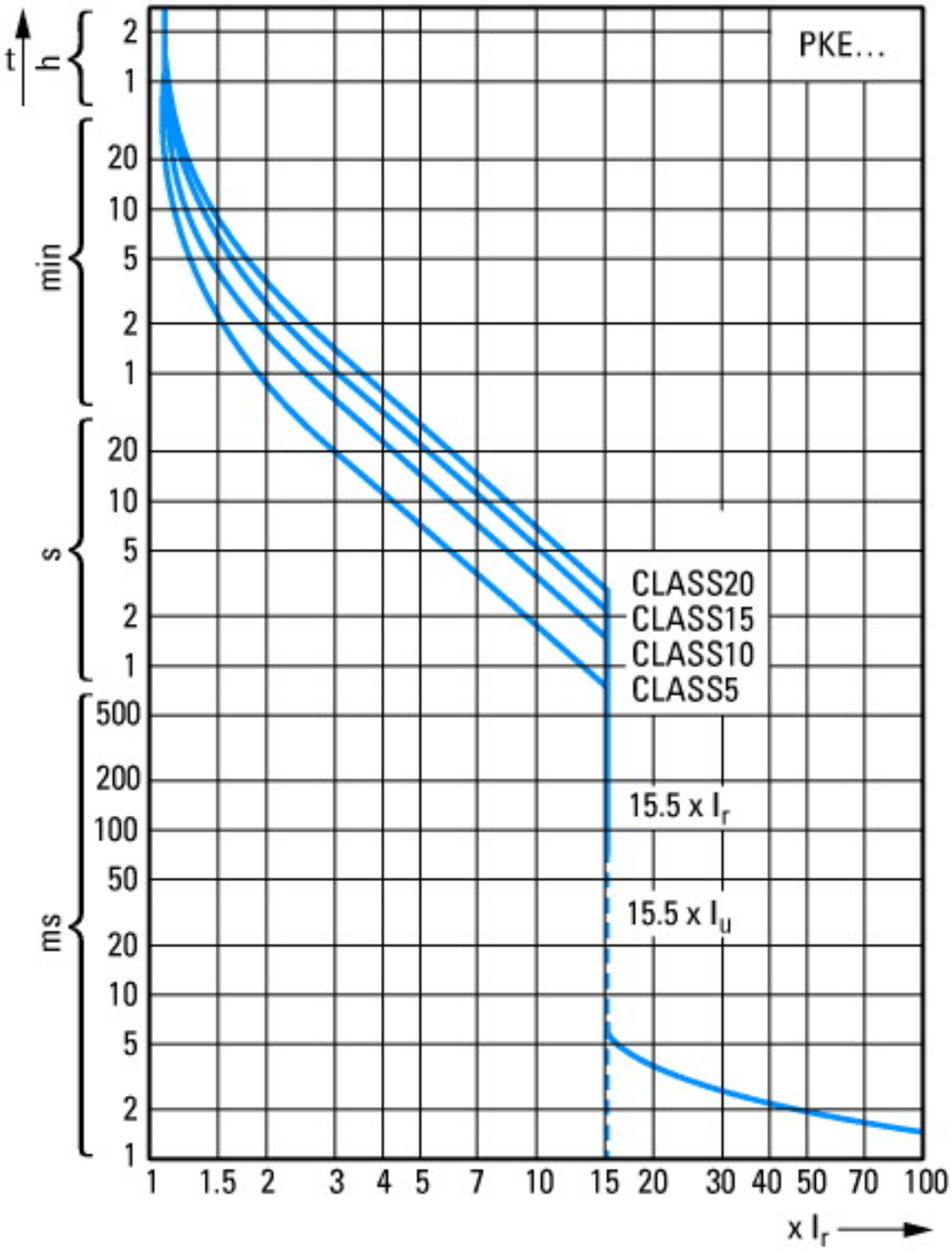
Technical data ETIM 6.0

Low-voltage industrial components (EG000017) / Tripping bloc for power circuit-breaker (EC000617)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Releasing block for circuit breakers (ecl@ss8.1-27-37-04-10 [AKF008010])		
Overload release current setting	A	0.3 - 1.2
Initial value of the undelayed short-circuit release - setting range	A	4.65
End value adjustment range undelayed short-circuit release	A	18.6
Rated permanent current Iu	A	1.2
Number of poles		3
Short-circuit release function		Delayed

Approvals

Product Standards		UL 508; CSA-C22.2 No. 14-10; 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

Characteristics



Tripping characteristics

Additional product information (links)

MN03402004Z PKE12, PKE32 and PKE65 motor-protective circuit-breakers; overload monitoring of Ex e motors	
MN03402004Z PKE12, PKE32 and PKE65 motor-protective circuit-breakers; 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