DATASHEET - PKZM4-16



Motor-protective circuit-breaker, Ir= 10 - 16 A, Screw terminals, Terminations: IP00



Part no. PKZM4-16 Catalog No. 222350 Alternate Catalog XTPR016DC1NL No. EL-Nummer 4355157 (Norway)

Delivery program

Product range			PKZM4 motor protective circuit-breakers up to 65 A
Basic function			Motor protection
			IE3 🗸
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.
Connection technique			Screw terminals
Contact sequence			
Max. motor rating			
AC-3			
220 V 230 V 240 V	Р	kW	4
380 V 400 V 415 V	Р	kW	7.5
440 V	Р	kW	9
500 V	Р	kW	9
660 V 690 V	Р	kW	12.5
Rated uninterrupted current	l _u	А	16
Setting range			
Overload releases	١r	A	10 - 16
short-circuit release			
max.	I _{rm}	А	248
Phase-failure sensitivity			IEC/EN 60947-4-1, VDE 0660 Part 102
Explosion protection (according to ATEX 94/9/EC)			PTB 10, ATEX 3012, Ex II(2) G Observe manual MN03402002Z-DE/EN.

Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.

Technical data

General		
Standards		IEC/EN 60947, VDE 0660,UL, CSA
Climatic proofing		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature		
Storage	°C	- 40 - 80
Open	°C	-25 - +55
Enclosed	°C	- 25 - 40

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Solid	Terminal capacity main cable			
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Shipping lengthPartial Shipping lengt	Flexible with ferrule to DIN 46228		mm ²	
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DC Image: Construct rating Image: Constrate rating Image: Construct rating	Max. operating frequency		Ops/h	40
Short-circuit rating KA Ø Notes up 250 V Motor switching capacity in 10 250 V AC-3 (up to 580V) A 16 (a contacts in series) DC-5 (up to 250V) A 16 (a contacts in series) Trip blocks - - - To EC/EN 60947, VDE 0660 - - - - Operating range -	Short-circuit rating			
Notes Notes Pro250 V Motor switching capacity pro 250 V AC-3 (up to 590V) A A DC-5 (up to 250V) A B (3 contacts in series) Trip blocks - - To EC/EN 60947, VDE 0660 M - - Operating range - - - - Temperature compensation residual error for T > 40 °C - <td< td=""><td></td><td></td><td></td><td></td></td<>				
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Trip blocks Temperature compensation Image of 0				
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Three-phase Image: Constraint of the second of the secon	Switching capacity			
200 V 208 V 230 V HP 5	Maximum motor rating			
208 V 230 V HP 5	Three-phase			
			HP	3
			HP	5

480 V الحال الحال <t< th=""><th></th><th></th><th></th></t<>			
600 V Image: Provide the section of the sectin of the section of the section of the sectin of the section of t		HP	10
115 V 120 VHP1230 V 240 VHP2Short Circuit Current Rating, type ESCCR240 VKA5480 Y / 277 VKA5600 Y / 347 VKA5Accessories requiredKA5Short Circuit Current Rating, group protectionMA5K503-PKZ4-E600 V High FaultMASCCR		HP	10
120 V HP P 230 V KA SCCR 240 V KA 5 480 Y / 277 V KA 5 600 Y / 347 V KA 5 Accessories required KA 5 Shot Circuit Current Rating, group protection KA 5 600 V / 347 V KA 5 Accessories required KA 5 Shot Circuit Current Rating, group protection SCR KB 600 V High Fault SCR KB KB	Single-phase		
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480 Y / 277 VKA5600 Y / 347 VKAKA5Accessories requiredKA5Short Circuit Current Rating, group protectionKCRBK50/3-PKZ4-E600 V High FaultKCRKCRKCR	Short Circuit Current Rating, type E	SCCR	
600 Y / 347 V kA 5 Accessories required BK50/3-PKZ4-E Short Circuit Current Rating, group protection SCCR 600 V High Fault Control of the sector	240 V	kA	65
Accessories required BK50/3-PKZ4-E Short Circuit Current Rating, group protection SCCR 600 V High Fault C	480 Y / 277 V	kA	65
Short Circuit Current Rating, group protection 600 V High Fault	600 Y / 347 V	kA	25
600 V High Fault	Accessories required		BK50/3-PKZ4-E
	Short Circuit Current Rating, group protection	SCCR	
	600 V High Fault		
SCCR (fuse) kA 42	SCCR (fuse)	kA	42
max. Fuse A 600	max. Fuse	А	600
SCCR (CB) kA 42	SCCR (CB)	kA	42
max. CB A 600	max. CB	А	600

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	16
Heat dissipation per pole, current-dependent	P _{vid}	W	4.7
Equipment heat dissipation, current-dependent	P _{vid}	W	14.1
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.

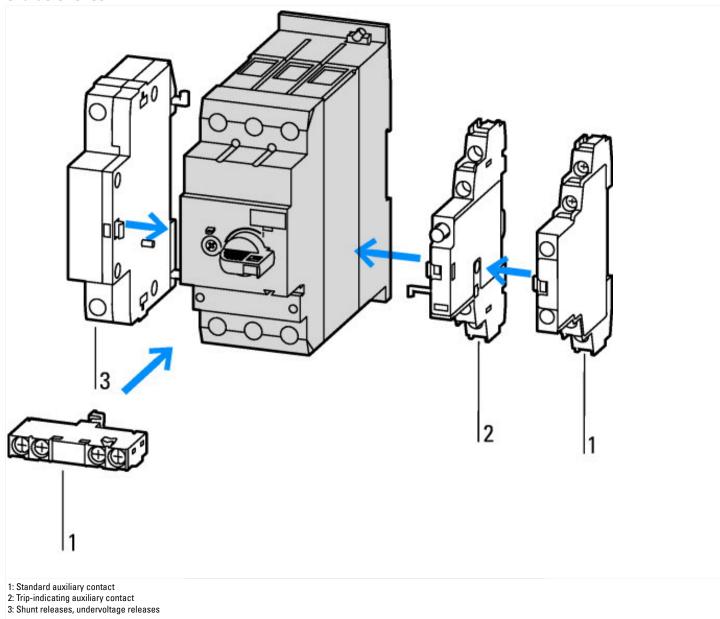
Technical data ETIM 7.0

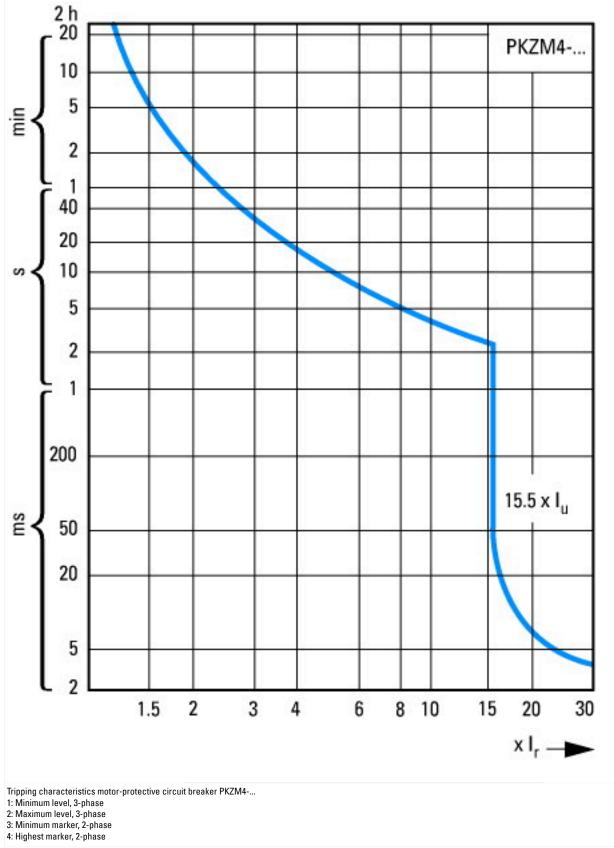
Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (E	EC000074)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss10.0.1-27-37-04-01 [AGZ529016])			
Overload release current setting	А	10 - 16	
Adjustment range undelayed short-circuit release	А	248 - 248	
With thermal protection		Yes	
Phase failure sensitive		Yes	
Switch off technique		Thermomagnetic	
Rated operating voltage	V	690 - 690	
Rated permanent current lu	А	16	
Rated operation power at AC-3, 230 V	kW	4	
Rated operation power at AC-3, 400 V	kW	7.5	
Type of electrical connection of main circuit		Screw connection	
Type of control element		Turn button	
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 Icu at 400 V, AC	kA	150	
Degree of protection (IP)		IP20	
Height	mm	140	
Width	mm	55	
Depth	mm	160	

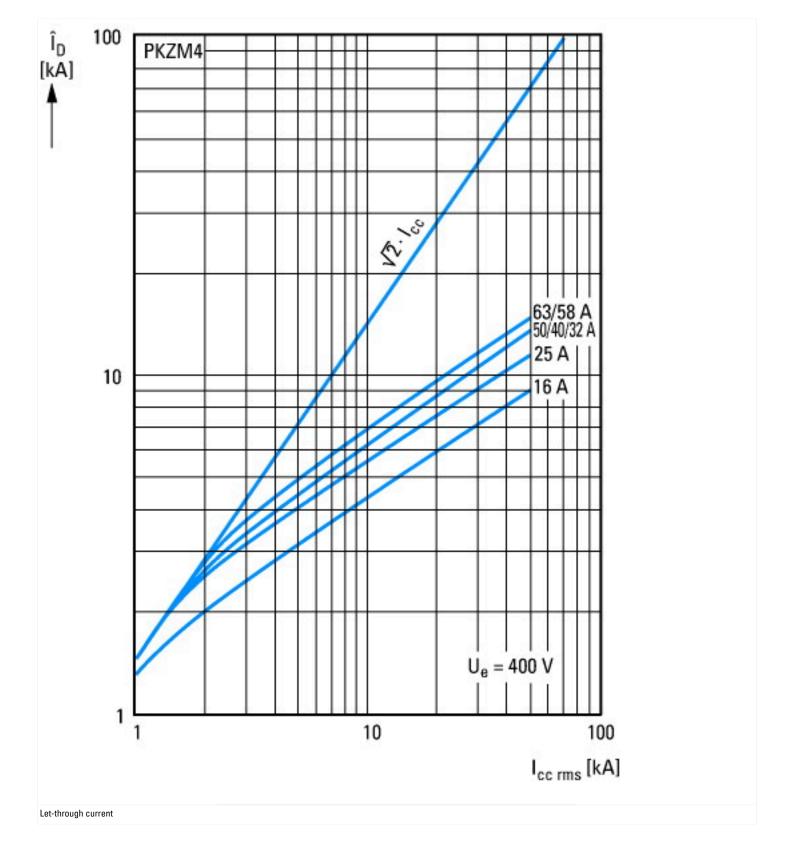
Approvals

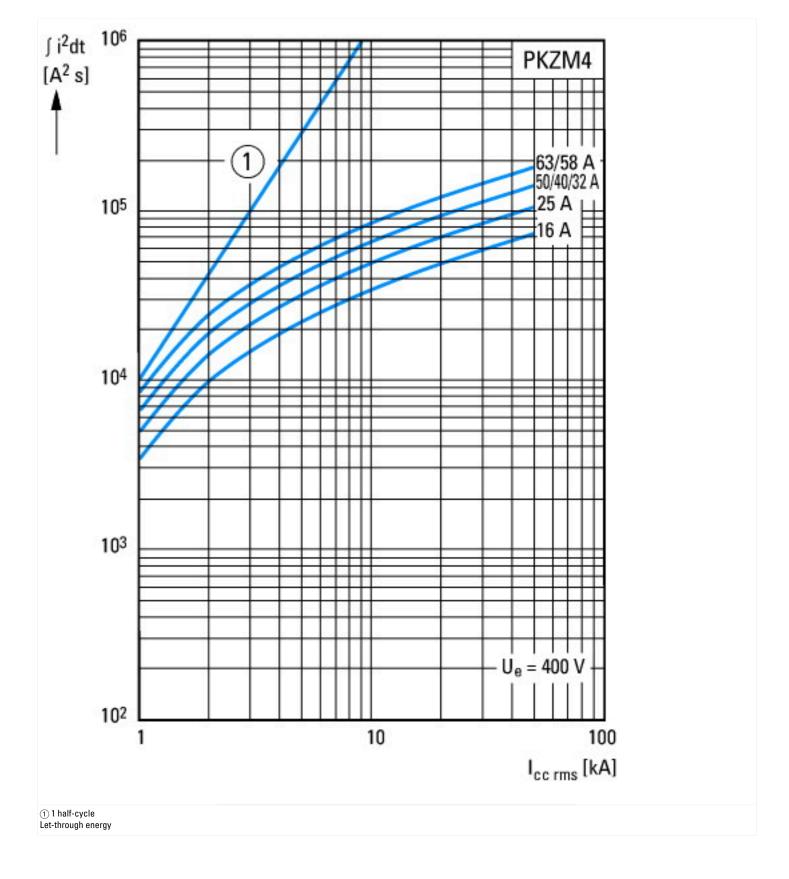
IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
E36332
NLRV
165628
3211-05
UL listed, CSA certified
No
Branch circuit: Manual type E if used with terminal, or suitable for group installations

Characteristics









Dimensions

