

Motor-protective circuit-breaker, 0.25 kW, 0.63 - 1 A, Feed-side screw terminals/output-side push-in terminals

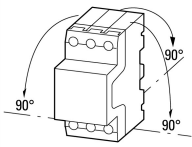
Part no. PKZM0-1-SPI16
Catalog No. 199181
Alternate Catalog No. XTPRSPI161P0BC1NL
EL-Nummer (Norway) 4312271

Delivery program

Product range			PKZM0 motor protective circuit-breakers up to 32 A
Basic function			Motor protection
			
Notes			Also suitable for motors with efficiency class IE3.
Connection technique			Feed-side screw terminals/output-side push-in terminals
Max. motor rating			
AC-3			
220 V 230 V 240 V	P	kW	0.12
380 V 400 V 415 V	P	kW	0.25
440 V	P	kW	0.25
500 V	P	kW	0.37
660 V 690 V	P	kW	0.55
Rated uninterrupted current	I_u	A	1
Setting range			
Overload releases	I_r	A	0.63 - 1
			
short-circuit release			
			
max.	I_{rm}	A	15.5
Phase-failure sensitivity			IEC/EN 60947-4-1, VDE 0660 Part 102

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
Mounting position			
Direction of incoming supply			as required
Degree of protection			
Device			IP20
Terminations			IP00
Protection against direct contact when actuated from front (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 main cable			
Screw terminals			
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	18 - 10
Stripping length		mm	10
Push-in terminals			
Solid		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with ferrules		mm ²	1 x (0,5 - 1,5) 2 x (0,5 - 1,5)
flexible with ultrasonic welded busbar end		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with uninsulated wire end ferrule		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
Solid or stranded		AWG	20 - 14
Stripping length		mm	10
Standard screwdriver			3.0 x 0.5
Specified tightening torque for terminal screws			
Main cable		Nm	1.7

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
Rated frequency	f	Hz	50/60
Current heat loss (3 pole at operating temperature)		W	5.33
Impedance per pole		mΩ	1700
Lifespan, mechanical	Operations	x 10 ⁶	0.1
Lifespan, electrical (AC-3 at 400 V)			
Lifespan, electrical	Operations	x 10 ⁶	0.1
Max. operating frequency		Ops/h	40
Motor switching capacity			
AC-3 (up to 690V)		A	1

Trip blocks

Temperature compensation			
to IEC/EN 60947, VDE 0660		°C	- 5 ... 40
Operating range		°C	- 25 ... 55
Temperature compensation residual error for T > 40 °C			≤ 0.25 %/K
Setting range of overload releases		x I _u	0.6 - 1
short-circuit release			Basic device, fixed: 15.5 x I _u
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			IEC/EN 60947-4-1, VDE 0660 Part 102

Rating data for approved types

Switching capacity			
Maximum motor rating			
Three-phase			
200 V 208 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angabe nach NEC Table 430-150
230 V 240 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angabe nach NEC Table 430-150
460 V 480 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angabe nach NEC Table 430-150
575 V 600 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angabe nach NEC Table 430-150
Short Circuit Current Rating, type E		SCCR	

240 V		kA	65
480 Y / 277 V		kA	65
600 Y / 347 V		kA	50
Accessories required			BK25/3-PKZ0-E
Short Circuit Current Rating, group protection		SCCR	
600 V High Fault			
SCCR (fuse)		kA	50
max. Fuse		A	600
SCCR (CB)		kA	50
max. CB		A	600

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55

Technical data ETIM 8.0

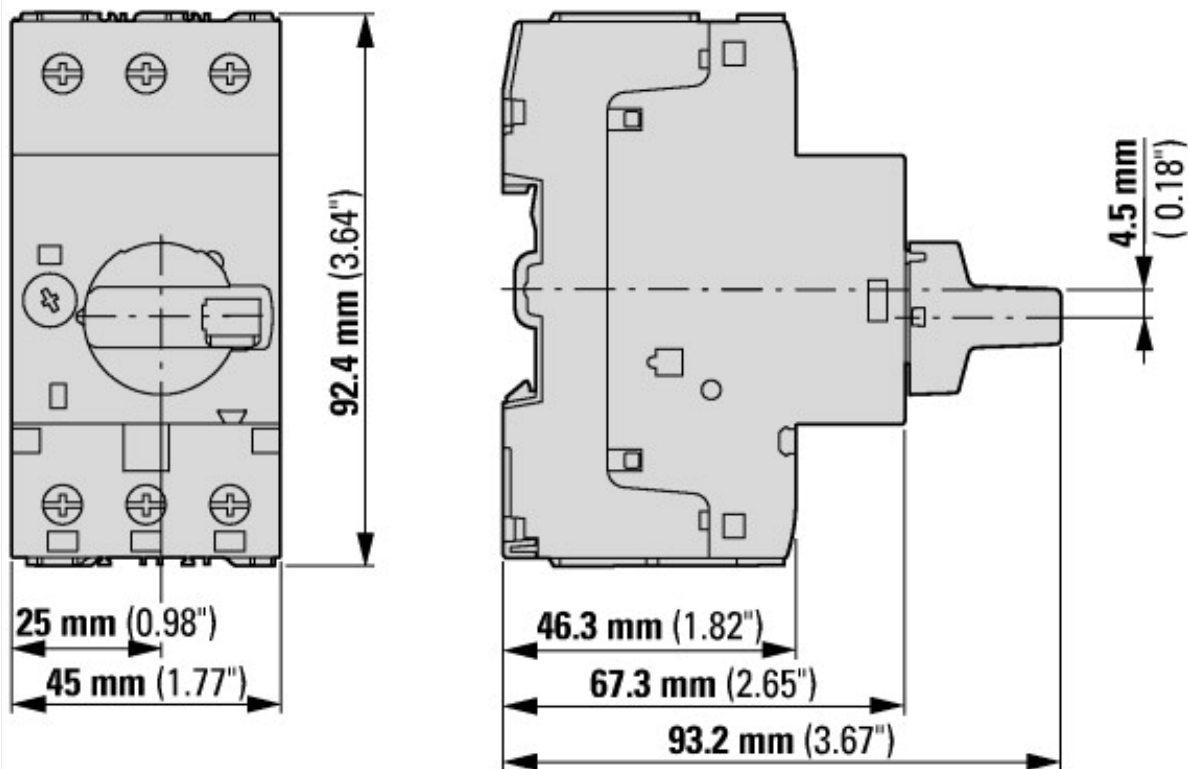
Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss10.0.1-27-37-04-01 [AGZ529016])			
Overload release current setting		A	1 - 1
Adjustment range undelayed short-circuit release		A	15.5 - 15.5
With thermal protection			No
Phase failure sensitive			Yes
Switch off technique			Thermomagnetic
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	1
Rated operation power at AC-3, 230 V		kW	0.12
Rated operation power at AC-3, 400 V		kW	0.25
Type of electrical connection of main circuit			Spring clamp 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	93.5
Width		mm	45
Depth		mm	75.1

Approvals

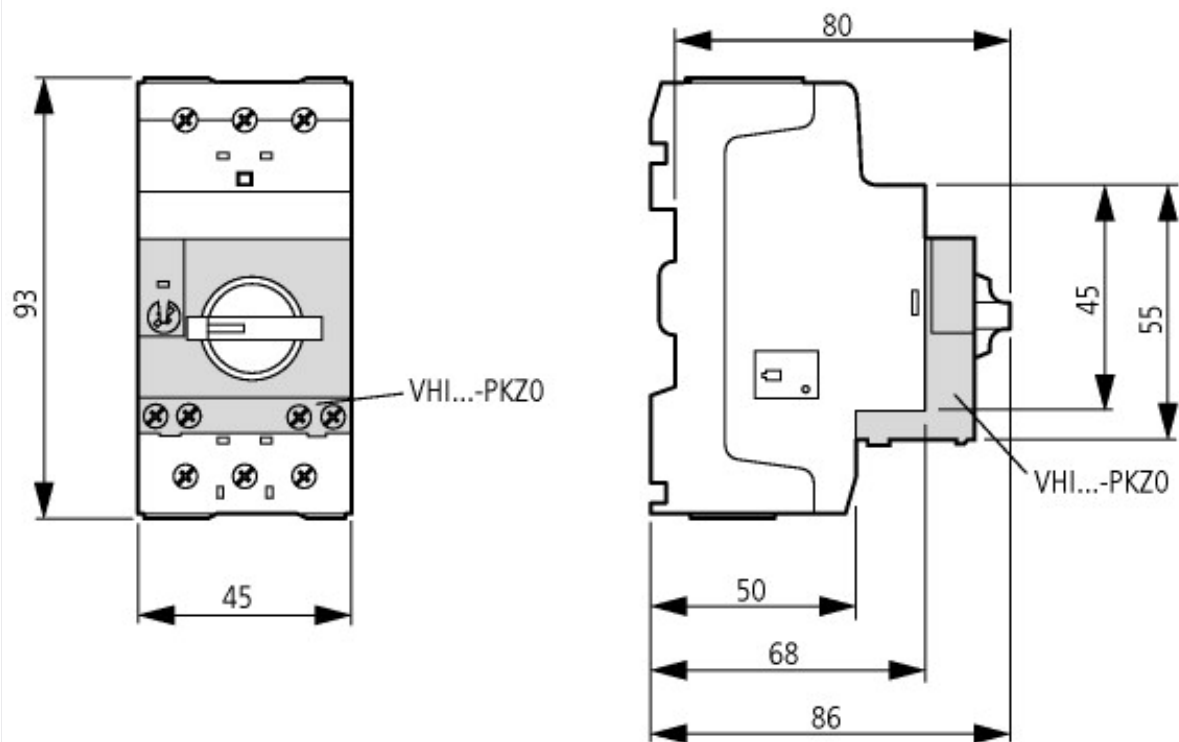
Product Standards			IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
UL File No.			E36332
UL Category Control No.			NLRV
CSA File No.			165628
CSA Class No.			3211-05
North America Certification			UL listed, CSA certified
Specially designed for North America			No
Suitable for			Branch circuit: Manual type E if used with terminal, or suitable for group installations

Dimensions

Motor-protective circuit-breaker with standard auxiliary contact PKZM0-...(+NHI-E-...-PKZ0) PKZM0-...-T(+NHI-E-...-PKZ0)
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Motor-protective circuit-breakers with lockable rotary handles
PKZM0-...+AK-PKZ0



Motor-protective circuit-breakers with early-make auxiliary contacts
PKZM0-...+VHI-...-PKZ0

Additional product information (links)

Schaltvermögen	https://de.ecat.eaton.com/flip-cat/?edition=MOTCONT1_DE#page_3/44
Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf