




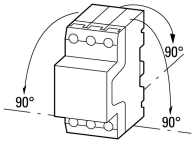
Motor-protective circuit-breaker, 0.09 kW, 0.25 - 0.4 A, Feed-side screw terminals/output-side push-in terminals, For use with motor starter combinations type MSC...

Part no. PKZM0-0,4-SPI32
Catalog No. 199191
Alternate Catalog No. XTPRSPI32P40BC1NL
EL-Nummer (Norway) 4312245

Delivery program

Product range				PKZM0 motor protective circuit-breakers up to 32 A
Basic function				Motor protection
For use with				motor starter combinations type MSC...
				
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		0.06
380 V 400 V 415 V	P	kW		0.09
440 V	P	kW		0.12
500 V	P	kW		0.12
660 V 690 V	P	kW		0.18
Rated uninterrupted current	I_u	A		0.4
Setting range				
Overload releases	I_r	A		0.25 - 0.4
				
short-circuit release				
				
max.	I_{rm}	A		6.2
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 (1 - 6) 2 x (1 - 6)
flexible		mm ²	1 x (1 - 6) 2 x (1 - 6)
flexible with ferrules		mm ²	1 x (1 - 6) 2 x (1 - 4)
flexible with ultrasonic welded busbar end		mm ²	1 x (1 - 10) 2 x (1 - 6)
flexible with uninsulated wire end ferrule		mm ²	1 x (1 - 10) 2 x (1 - 6)
Solid or stranded		AWG	18 - 8
Stripping length		mm	12
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	0.4
Rated frequency	f	Hz	50/60
Current heat loss (3 pole at operating temperature)		W	5.22
Impedance per pole		mΩ	10500
Lifespan, mechanical	Operations	$\times 10^6$	0.1
Lifespan, electrical (AC-3 at 400 V)			
Lifespan, electrical	Operations	$\times 10^6$	0.1
Max. operating frequency		Ops/h	40
Motor switching capacity			
AC-3 (up to 690V)		A	0.4

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		$\times I_u$	0.6 - 1
short-circuit release			Basic device, fixed: $15.5 \times I_u$
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. Angegebene Werte nach NEC Table 430-150
230 V 240 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angegebene Werte nach NEC Table 430-150
460 V 480 V		HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angegebene Werte nach NEC Table 430-150

575 V 600 V	HP	Hinweis: Motorleistung in diesem Bereich nach Bemessungsstrom berechnen. Angegebene Werte 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	0.4 - 0.4	
Adjustment range undelayed short-circuit release	A	6.2 - 6.2	
With thermal protection		No	
Phase failure sensitive		Yes	
Switch off technique		Thermomagnetic	
Rated operating voltage	V	690 - 690	
Rated permanent current Iu	A	0.4	
Rated operation power at AC-3, 230 V	kW	0.06	
Rated operation power at AC-3, 400 V	kW	0.09	
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	101.6	
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	

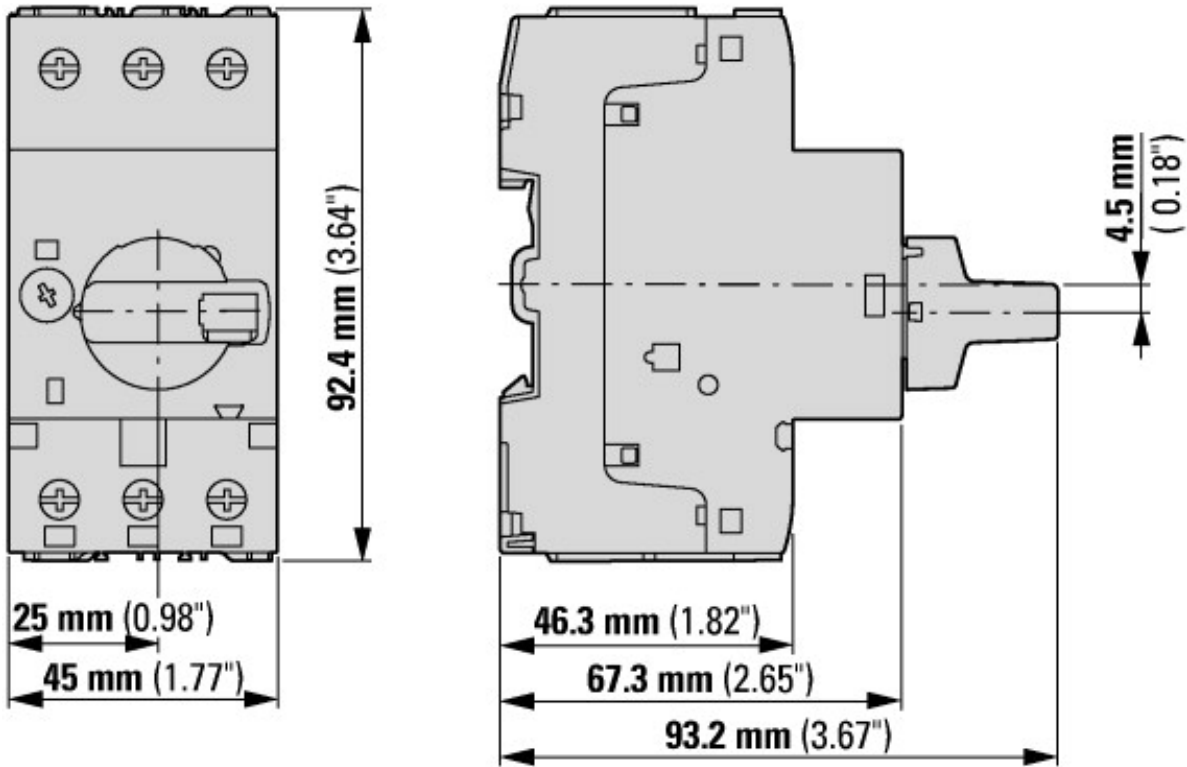
Dimensions

Motor-protective circuit-breaker with standard auxiliary contact

PKZM0-...(+NHI-E-...-PKZ0)

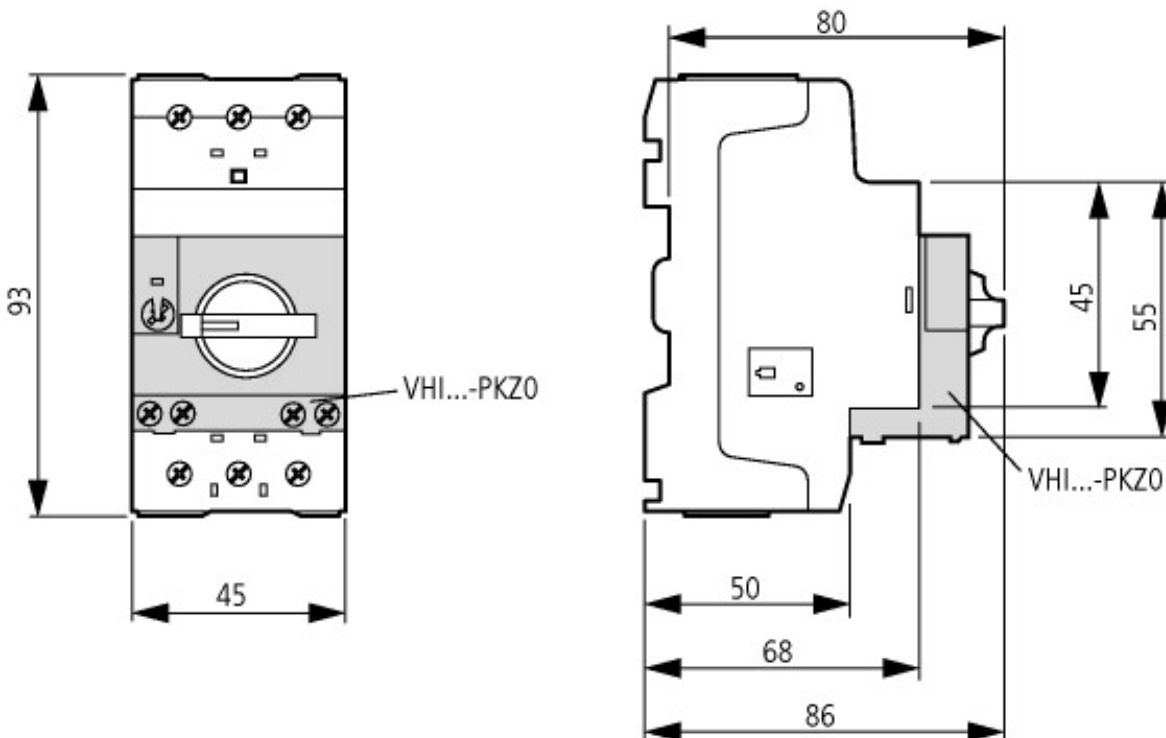
PKZM0-...-T(+NHI-E-...-PKZ0)

PKM0-...(+NHI-E-...-PKZ0)



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

