DATASHEET - PKZM0-0,16-T-PI



Transformer-protective circuit-breaker, 0.1 - 0.16 A, Push in terminals

PKZM0-0,16-T-PI Part no. Catalog No. 199163 Alternate Catalog XTPTPIP16BC1NL Powering Business Worldwide

Delivery program

Product range			PKZM0T transformer-protective circuit-breakers up to 25 A
Basic function			Transformer protection
			IE3 ✓
Notes			Also suitable for motors with efficiency class IE3.
Connection technique			Push in terminals
Contact sequence			
Rated uninterrupted current	I _u	Α	0.16
Setting range			
Overload releases	l _r	А	0.1 - 0.16
short-circuit release			
max.	I _{rm}	Α	2.4
Phase-failure sensitivity			IEC/EN 60947-4-1, VDE 0660 Part 102

Technical data

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		
Storage	°C	- 40 - 80
Open	°C	-25 - +55
Enclosed	°C	- 25 - 40
Mounting position		90°
Direction of incoming supply		as required
Degree of protection		
Device		IP20
Terminations		IP20
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		

Bush in terminals			
Push-in terminals		2	1,,/1 6
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
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	$I_u = I_e$	Α	0.16
Rated frequency	f	Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	5.39
Lifespan, mechanical	Operations	x 10 ⁶	0.1
Lifespan, electrical (AC-3 at 400 V)	·	X 10	
Lifespan, electrical	Operations	.6	0.1
	Operations	x 10 ⁶	
Max. operating frequency		Ops/h	40
Short-circuit rating			
DC			
Short-circuit rating		kA	60
Motor switching capacity			
AC-3 (up to 690V)		Α	0.16
Trip blocks			
Temperature compensation to IEC/EN 60947, VDE 0660		°C	- 5 40
Operating range		°C	- 25 40
Temperature compensation residual error for T > 40 °C		C	= 0.25 %/K
		w.l	0.6 - 1
Setting range of overload releases		x l _u	
short-circuit release			Basic device, fixed: 20 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 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			LSA-PKZ0-E-PI
Short Circuit Current Rating, group protection		SCCR	
600 V High Fault		2001	
SCCR (fuse)		kA	50
max. Fuse		A	600
SCCR (CB)		kA	50
max. CB		A	600
IIIđA. GD		H	UUU

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 7.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])

Asted voltage Asted short-circuit breaking capacity lou at 400 V, 50 Hz Asted short-circuit breaking capacity lou at 400 V, 50 Hz Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adju	protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])		
Rated short-circuit breaking capacity lcu at 400 V, 50 Hz Diverload release current setting A 0.16 - 0.16 Adjustment range short-term delayed short-circuit release A 0 - 0 Adjustment range undelayed short-circuit release A 24 - 2.4 Antegrated earth fault protection Fype of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact North switched-off indicator North switched-off oples Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional No 0 No 0	Rated permanent current lu	Α	0.16
Deveload release current setting Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit rel	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release ADJustment range undelayed short-circuit ADJustment range undelayed short-circuit ADJustment range undelayed short-circuit ADJustment range undelayed short-circuit release ADJustment range undelayed schort-circuit release ADJustment range undelayed schort release ADJustment range under undelayed schort release ADJust	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	150
Adjustment range undelayed short-circuit release A 2.4 - 2.4 Integrated earth fault protection No Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No No No No No No No Motor drive integrated No Motor drive optional	Overload release current setting	Α	0.16 - 0.16
Integrated earth fault protection Fype of electrical connection of main circuit Device construction Spring clamp connection Other Other Suitable for DIN rail (top hat rail) mounting Yes OIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact Outher Number of auxiliary contacts as normally open contact Outher Number of auxiliary contacts as change-over contact Ves With switched-off indicator With switched-off indicator With under voltage release No Number of poles Position of connection for main current circuit Sype of control element Complete device with protection unit Wes Motor drive integrated Motor drive optional	Adjustment range short-term delayed short-circuit release	Α	0 - 0
Type of electrical connection of main circuit Device construction Other Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Number of auxiliary contacts as change-over contact No No No No No Position of connection for main current circuit Type of control element Complete device with protection unit Yes Motor drive integrated No Motor drive optional	Adjustment range undelayed short-circuit release	Α	2.4 - 2.4
Device construction Suitable for DIN rail (top hat rail) mounting Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact Outhor of auxiliary contacts as normally open contact Outhor of auxiliary contacts as change-over contact Outhor of optional Outhor of indicator Ves No Outhor of indicator Outhor	Integrated earth fault protection		No
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Yes Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact O Number of auxiliary contacts as change-over contact Vith switched-off indicator Ves Nith under voltage release No No Number of poles O Sumber of poles O Sumber of connection for main current circuit Complete device with protection unit Ves Motor drive integrated No Motor drive optional No	Type of electrical connection of main circuit		Spring clamp connection
DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Nith switched-off indicator With under voltage release No Number of poles Society of connection for main current circuit Turn button Complete device with protection unit Motor drive integrated No Motor drive optional Yes Yes No No Motor drive optional	Device construction		Other
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Nith switched-off indicator Nith switched-off indicator No Number of poles No Number of poles Seposition of connection for main current circuit Turn button Complete device with protection unit No Motor drive integrated No No No No No No No No No N	Suitable for DIN rail (top hat rail) mounting		Yes
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Noth switched-off indicator Nith under voltage release Noth under of poles Position of connection for main current circuit Turn button Complete device with protection unit Noth of the control element Noth of the control eleme	DIN rail (top hat rail) mounting optional		Yes
Number of auxiliary contacts as change-over contact With switched-off indicator With under voltage release With under of poles Position of connection for main current circuit Type of control element Complete device with protection unit Wotor drive integrated Motor drive optional O Yes O No No No No No No No No No	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator With under voltage release No Number of poles Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional Yes Yes No No No	Number of auxiliary contacts as normally open contact		0
With under voltage release No Number of poles 3 Position of connection for main current circuit Type of control element Complete device with protection unit Wotor drive optional No	Number of auxiliary contacts as change-over contact		0
Number of poles 3 Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional 3 Turn button Yes No No	With switched-off indicator		Yes
Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive optional Other Turn button Yes No No	With under voltage release		No
Type of control element Complete device with protection unit Yes Motor drive optional No	Number of poles		3
Complete device with protection unit Yes Motor drive integrated No Motor drive optional No	Position of connection for main current circuit		Other
Motor drive integrated No	Type of control element		Turn button
Motor drive optional No	Complete device with protection unit		Yes
·	Motor drive integrated		No
Degree of protection (IP)	Motor drive optional		No
	Degree of protection (IP)		IP20

Approvals

- PPT-0-1-0-1	
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 Line Side Adapter, or suitable for group installations

Dimensions

