Reversing starter, 380 V 400 V 415 V: 4 kW, Ir= 6.3 - 10 A, 24 V DC, DC voltage, Push in terminals



MSC-R-10-M9(24VDC)-PI Part no.

Catalog No. 199602

Alternate Catalog XTSRPI010B009BTDNL

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1121	IVELV	11111	пташ

Basic function			Reversing starters (complete devices)
Basic device			MSC
Notes			Also suitable for motors with efficiency class IE3.
Connection technique			Push in terminals
Connection to SmartWire-DT			no
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	P	kW	4
Rated operational current			
AC-3			
380 V 400 V 415 V	I _e	Α	8.5
Rated short-circuit current 380 - 415 V	Iq	kA	150
Setting range			
Setting range of overload releases	I _r	A	6.3 - 10
Coordination			Type of coordination "1"
Actuating voltage			24 V DC
			DC voltage
Motor-protective circuit-breakers PK7M0-10			

Motor-protective circuit-breakers PKZM0-10

Contactor DILM9-01(...)

DOL starter wiring set

Mechanical connection element and electrical electric contact module PKZM0-XRM12-PI

The reversing starter (complete unit) consists of a PKZM0 motor-protective circuit-breaker and two DILM contactors.

With the adapter-less top-hat rail mounting of starters up to 12 A, only the motor-protective circuit-breaker on the top-hat rail requires an adapter. The contactors are provided with mechanical support via a mechanical connection element.

Control wire guide with max. 6 conductors up to 2.5mm external diameter or 4 conductors up to 3.5mm external diameter.

From 16 A, the motor-protective circuit-breakers and contactors are mounted on the top-hat rail adapter plate.

The connection of the main circuit between PKZ and contactor is established with electrical contact modules.

Complete units with mechanical interlock, starters up to 12 A also feature electrical interlock.

When using the auxiliary contacts DILA-XHIT... (-> 101042) the plug-in electrical connector can be removed without the removal of the front mounting auxiliary contact.

For further information Page → PKZM0 Technical data PKZM0 Accessories PKZ → 072896 Technical data DILM → DILM Further actuating voltages → 276537 DILM accessories

Technical data

General		
Standards		IEC/EN 60947-4-1, VDE 0669
Altitude	m	Max. 2000
Ambient temperature		-25 - +55
The state of the s		

Main conducting paths Rated impulse withstand voltage V AC 6000

Overvoltage category/pollution degree			III/3
Rated operational voltage	U _e	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	I _e	Α	10

Additional technical data

Motor protective circuit breaker PKZM0, PKE	PKZM0 motor-protective circuit-breakers, see motor-protective circuit-breakers/
	PKZM0 product group
	DILM contactors, see contactor product group
	DILET timing relay, ETR, see contactors, electronic timing relays product group
Downey concumption	

Power consumption

DC operated	Sealing	W	3	
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Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.	٥	,C	-25
Operating ambient temperature max.	٥	,C	55

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC001037)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecl@ss10.0.1-27-37-09-05 [AJZ718013])

Vision Short-circuit ralease Ves Po Po Po Po Po Po Po P	[AJZ718013])	•		
Rated control supply voltage Us at AC 50HZ	Type of motor starter			Reversing starter
Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC V 24 - 24 Voltage type for actuating DC Rated operation power at AC-3, 230 V, 3-phase RW 2.2 Rated operation power at AC-3, 400 V RW 4 Rated gower, 469 V, 60 Hz, 3-phase RW 0 Rated gower, 575 V, 60 Hz, 3-phase RW 0 Rated goweration current at AC-3, 400 V A 8.5 Rated operation current at AC-3, 400 V A 9 Overload rolesse current setting A 6.3 - 10 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 2, 400 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150	With short-circuit release			Yes
Rated control supply voltage Us at DC V 24 - 24 Voltage type for actualting DC Rated operation power at AC-3, 230 V, 3-phase KW 2.2 Rated operation power at AC-3, 430 V W 4 Rated power, 450 V, 60 Hz, 3-phase KW 0 Rated operation current lead operation current at AC-3, 400 V A 8.5 Rated operation current setting A 8.5 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 400 V A 150 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally open contact C 55 Refleese class CLASS 10 A Spring clamp connection Type of electrical connection of main circuit Spring clamp connection Spring clamp connection Type of electrical connection for auxiliary- and centred current circuit Spring clamp connection Spring clamp connection Type of electrical connection for auxiliary- and centred current circuit Spring clamp c	Rated control supply voltage Us at AC 50HZ	V	1	0 - 0
Voltage type for actuating DC Rated operation power at AC-3, 200 V, 3-phase WW 2.2 Rated powers at AC-3, 400 V WW 4 Rated powers AG 0V, 60 Hz, 3-phase RW 0 Rated operation current tell A 8.5 Rated operation current at AC-3, 400 V A 9 Overload release current setting A 6.3 - 10 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 1, 500 Y/37 V A 0 Rated conditional short-circuit current, type 2, 230 V A 0 Rated conditional short-circuit current, type 2, 240 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Number of auxiliary contacts as normally closed contact 0 0 Ambient temperature, upper operating limit °C 55 Temperature compensated overload protection Yes CLASS 10 A Type of electrical connection of main circuit Yes CLASS 10A With transformer No No Number of d	Rated control supply voltage Us at AC 60HZ	V	1	0 - 0
Rated operation power at AC-3, 230 V, 3-phase kW 2 Rated operation power at AC-3, 400 V kW 4 Rated operation power at AC-3, 400 V kW 0 Rated power, 575 V, 60 Hz, 3-phase kW 0 Rated operation current te A 8.5 Rated operation current at AC-3, 400 V A 9 Overload release current setting A 6.3 - 10 Rated conditional short-circuic current, type 1,480 Y/277 V A 0 Rated conditional short-circuic current, type 2,300 V A 150 Rated conditional short-circuic current, type 2,400 V A 150 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally closed contact Yes CLASS 10 A Release class CLASS 10 A Spring clamp connection Release class Yes CLASS 10 A Type of electrical connection of main circuit Yes Spring clamp connection Type of electrical connection for main circuit Yes Yes Number of command positions O No No	Rated control supply voltage Us at DC	V	1	24 - 24
Rated operation power at AC-3, 400 V kW 0 Rated power, 460 V, 60 Hz, 3-phase kW 0 Rated operation current te A 8.5 Rated operation current at AC-3, 400 V A 9 Overload release current setting A 6.3-10 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 1, 600 Y/347 V A 0 Rated conditional short-circuit current, type 2, 230 V A 150 Rated conditional short-circuit current, type 2, 400 V A 150 Number of auxiliary contacts as normally closed contact O 0 Number of auxiliary contacts as normally closed contact Yes 150 Release class CLASS 10 A 120 Release class Yes 120 Wrint transformer	Voltage type for actuating			DC
Rated power, 460 V, 60 Hz, 3-phase kW 0 Rated power, 575 V, 60 Hz, 3-phase kW 0 Rated operation current at AC-3, 400 V A 8.5 Overload release current setting A 6.3 - 10 Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 Rated conditional short-circuit current, type 1, 690 Y/347 V A 0 Rated conditional short-circuit current, type 2, 230 V A 150 Rated conditional short-circuit current, type 2, 2400 V A 150 Number of auxiliary contacts as normally open contact C 55 Vambient temperature, upper operating limit °C 55 Temperature compensated overload protection Yes CLASS 10.A Release class CLASS 10.A Spring clamp connection Type of electrical connection of main circuit Yes Spring clamp connection With transformer No No Number of command positions No No Suitable for emergency stop No Class 1 Coordination class a coording to IEC 60947-4-3 No No	Rated operation power at AC-3, 230 V, 3-phase	k¹	W	2.2
Rated power, 575 V, 60 Hz, 3-phase Rated operation current le Rated operation current at AC-3, 400 V Overload release current setting Rated conditional short-circuit current, type 1, 490 Y/277 V Rated conditional short-circuit current, type 1, 490 Y/277 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Release class CLASS 10 A Release class Ves With transformer No No Class 1 No Clas	Rated operation power at AC-3, 400 V	k¹	W	4
Rated operation current le Rated operation current at AC-3, 400 V Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V Rated conditional short-circuit current, type 1, 600 Y/347 V Rated conditional short-circuit current, type 2, 480 Y/277 V Rated conditional short-circuit current, type 2, 530 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 2, 500 C Rated conditional short-circuit current curre	Rated power, 460 V, 60 Hz, 3-phase	k¹	W	0
Rated operation current at AC-3, 400 V Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, ty	Rated power, 575 V, 60 Hz, 3-phase	k¹	W	0
Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V Rated conditional short-circuit current, type 1, 600 Y/347 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current type 2, 400 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit cur	Rated operation current le	А	١	8.5
Rated conditional short-circuit current, type 1, 480 Y/277 V A 0 0 Rated conditional short-circuit current, type 2, 230 V A 0 0 Rated conditional short-circuit current, type 2, 230 V A 0 150 Rated conditional short-circuit current, type 2, 400 V A 0 150 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally closed contact 0 0 Ambient temperature, upper operating limit °C 55 Temperature compensated overload protection Free February 10 CLASS 10 A Release class 1 CLASS 10 A Rationunting possible Versame 1 Vers	Rated operation current at AC-3, 400 V	А	١	9
Rated conditional short-circuit current, type 1, 600 Y/347 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current circuit C Rambient temperature, upper operating limit C C C S S C C S S C C R Release class C C C C S S C C C C S S C C C C C S S C C C C C C S S C	Overload release current setting	A	١	6.3 - 10
Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current, type 2, 400 V Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as normally closed contact Rumber of electrical connection of main circuit Rumber of electrical connection of main circuit Rumber of electrical connection for auxiliary- and control current circuit Rumber of command positions Rumber of command positions Rumber of command positions Rumber of indicator lights Rumber of indicat	Rated conditional short-circuit current, type 1, 480 Y/277 V	A	١	0
Rated conditional short-circuit current, type 2, 400 V Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit CC 55 Temperature compensated overload protection Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (IEP) Degree of protection (NEMA)	Rated conditional short-circuit current, type 1, 600 Y/347 V	А	١	0
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Anbient temperature, upper operating limit CC 55 Temperature compensated overload protection Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit	Rated conditional short-circuit current, type 2, 230 V	А	١	0
Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit C 55 Temperature compensated overload protection Release class CLASS 10 A Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (IP) Degree of protection (NEMA) O Other	Rated conditional short-circuit current, type 2, 400 V	A	١	150
Ambient temperature, upper operating limit Temperature compensated overload protection Release class Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (NEMA) Degree of protection (NEMA)	Number of auxiliary contacts as normally open contact			0
Temperature compensated overload protection Release class CLASS 10 A Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (IP) Degree of protection (NEMA) Yes CLASS 10 A Spring clamp connection S	Number of auxiliary contacts as normally closed contact			0
Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible No With fuse Degree of protection (IP) Degree of protection (NEMA) CLASS 10 A Spring clamp connection Spring clamp connection No Condination class according to IEC 60947-4-3 No Coordination class according to IEC 60947-4-3 No Class 1 No Class 1 No Coordination class according to IEC 60947-4-3 No Class 1 No Cl	Ambient temperature, upper operating limit	°(С	55
Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (IP) Degree of protection (NEMA) Spring clamp connection Yes Yes No Class 1 O Class 1 O Liass 1 No No Diployed of protection (IP) Degree of protection (NEMA) Other	Temperature compensated overload protection			Yes
Type of electrical connection for auxiliary- and control current circuit Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible With fuse Degree of protection (IP) Degree of protection (NEMA) Spring clamp connection Yes Yes No Class 1 0 Class 1 0 Lights No No Degree of protection (IP) Degree of protection (NEMA) Other	Release class			CLASS 10 A
Rail mounting possible With transformer No Number of command positions Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible No With fuse Degree of protection (IP) Degree of protection (NEMA) Yes No Code No No Code No No No Other	Type of electrical connection of main circuit			Spring clamp connection
With transformer No Number of command positions O Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights Cuess 1 No External reset possible No With fuse Degree of protection (IP) Degree of protection (NEMA)	Type of electrical connection for auxiliary- and control current circuit			Spring clamp connection
Number of command positions Suitable for emergency stop No Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible No With fuse Degree of protection (IP) Degree of protection (NEMA) O Other	Rail mounting possible			Yes
Suitable for emergency stop Coordination class according to IEC 60947-4-3 Number of indicator lights External reset possible No With fuse Degree of protection (IP) Degree of protection (NEMA) No No Other	With transformer			No
Coordination class according to IEC 60947-4-3 Number of indicator lights Class 1 Number of indicator lights No External reset possible No With fuse No Degree of protection (IP) Degree of protection (NEMA) Class 1 No No Other	Number of command positions			0
Number of indicator lights External reset possible No With fuse No Degree of protection (IP) Degree of protection (NEMA) O O Other	Suitable for emergency stop			No
External reset possible No With fuse No Degree of protection (IP) Degree of protection (NEMA) No Other	Coordination class according to IEC 60947-4-3			Class 1
With fuse No Degree of protection (IP) IP20 Degree of protection (NEMA) Other	Number of indicator lights			0
Degree of protection (IP) Degree of protection (NEMA) Other	External reset possible			No
Degree of protection (NEMA) Other	With fuse			No
	Degree of protection (IP)			IP20
Supporting protocol for TCP/IP No	Degree of protection (NEMA)			Other
	Supporting protocol for TCP/IP			No

Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for Modbus		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Width	mm	90
Height	mm	197
Depth	mm	95