

Reversing starter, 380 V 400 V 415 V: 5.5 kW, I<sub>r</sub>= 8 - 12 A, 24 V DC, DC voltage, Push in terminals

**Part no.** MSC-R-12-M12(24VDC)-PI  
**Catalog No.** 199603  
**Alternate Catalog No.** XTSRPI012B012BDNL


## Delivery program

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	5.5
Rated operational current			
AC-3			
380 V 400 V 415 V	I <sub>e</sub>	A	11.3
Rated short-circuit current 380 - 415 V	I <sub>q</sub>	kA	50

### Setting range

Setting range of overload releases	I <sub>r</sub>	A	8 - 12
			
Coordination			Type of coordination "1"
Actuating voltage			24 V DC
			DC voltage

### Motor-protective circuit-breakers PKZM0-12

#### Contactor DILM12-01(...)

#### DOL starter wiring set

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

#### Notes

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

Technical data PKZM0  
 Accessories PKZ  
 Technical data DILM  
 Further actuating voltages  
 DILM accessories

#### Page

→ PKZM0  
 → 072896  
 → DILM  
 → 276537  
 → 281199

## Technical data

### General

Standards			IEC/EN 60947-4-1, VDE 0671
Altitude		m	Max. 2000
Ambient temperature			-25 - +55

### Main conducting paths

Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
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Overvoltage category/pollution degree			III/3
Rated operational voltage	U <sub>e</sub>	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	I <sub>e</sub>	A	12

### 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
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### Power consumption

DC operated	Sealing	W	4,5
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## 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 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])			
Type of motor starter			Reversing starter
With short-circuit release			Yes
Rated control supply voltage U <sub>s</sub> at AC 50HZ		V	0 - 0
Rated control supply voltage U <sub>s</sub> at AC 60HZ		V	0 - 0
Rated control supply voltage U <sub>s</sub> at DC		V	24 - 24
Voltage type for actuating			DC
Rated operation power at AC-3, 230 V, 3-phase		kW	3
Rated operation power at AC-3, 400 V		kW	5.5
Rated power, 460 V, 60 Hz, 3-phase		kW	0
Rated power, 575 V, 60 Hz, 3-phase		kW	0
Rated operation current I <sub>e</sub>		A	11.3
Rated operation current at AC-3, 400 V		A	12
Overload release current setting		A	8 - 12
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	0
Rated conditional short-circuit current, type 2, 400 V		A	50000
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as normally closed contact			0
Ambient temperature, upper operating limit		°C	55
Temperature compensated overload protection			Yes
Release class			CLASS 10 A
Type of electrical connection of main circuit			Spring clamp connection
Type of electrical connection for auxiliary- and control current circuit			Spring clamp connection
Rail mounting possible			Yes
With transformer			No
Number of command positions			0
Suitable for emergency stop			No
Coordination class according to IEC 60947-4-3			Class 1
Number of indicator lights			0
External reset possible			No
With fuse			No
Degree of protection (IP)			IP20
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