Reversing starter, 380 V 400 V 415 V: 4 kW, Ir= 6.3 - 10 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage, Push in terminals



Part no.	MSC-R-10-M9(230V50HZ)-PI
Catalog No.	199591
Alternate Catalog	XTSRPI010B009BFNL
No.	

### **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	Р	kW	4	
Rated operational current				
AC-3				
380 V 400 V 415 V	I <sub>e</sub>	А	8.5	
Rated short-circuit current 380 - 415 V	Iq	kA	150	
Setting range				
Setting range of overload releases	I <sub>r</sub>	A	6.3 - 10	
Coordination			Type of coordination "1"	
Actuating voltage			230 V 50 Hz, 240 V 60 Hz	
			AC voltage	
Motor-protective circuit-breakers PKZM0-10				
Contactor DILM9-01()				
DOL starter wiring set Mechanical connection element and electrical electric contact module PKZM0-XRM12-PI				
Notes				

#### 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.

DILM accessories $\rightarrow 2270337$	For further information Technical data PKZM0 Accessories PKZ Technical data DILM Further actuating voltages DILM accessories	Page → PKZM0 → 072896 → DILM → 276537 → 281199
		201100

## **Technical data**

General			
Standards			IEC/EN 60947-4-1, VDE 0668
Altitude		m	Max. 2000
Ambient temperature			-25 - +55
Main conducting paths			
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000

Overvoltage category/pollution degree			111/3
Rated operational voltage	U <sub>e</sub>	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	le	А	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
DILM contactors			
Power consumption of the coil in a cold state and 1.0 x $\ensuremath{U}_S$			
Dual-voltage coil 50 Hz	Sealing	W	12

# 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)

Low-voltage industrial components (EG000017) / Motor starter/Motor starter combinat	tion (EC001037)	
Electric engineering, automation, process control engineering / Low-voltage switch te [AJZ718013])	echnology / Load brea	akout, motor breakout / Motor starter combination (ecl@ss10.0.1-27-37-09-05
Type of motor starter		Reversing starter
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	230 - 230
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		AC
Rated operation power at AC-3, 230 V, 3-phase	kW	2.2
Rated operation power at AC-3, 400 V	kW	4
Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current le	А	8.5
Rated operation current at AC-3, 400 V	А	9
Overload release current setting	А	6.3 - 10
Rated conditional short-circuit current, type 1, 480 Y/277 V	А	0
Rated conditional short-circuit current, type 1, 600 Y/347 V	А	0
Rated conditional short-circuit current, type 2, 230 V	А	0
Rated conditional short-circuit current, type 2, 400 V	А	150
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
Nidth	mm	90
leight	mm	197
Depth	mm	95