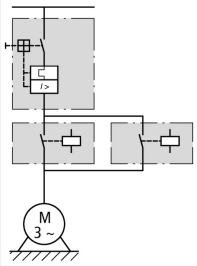
Reversing starter, 3p, 0.75kW/400V/AC3, 150kA

Part no. MSC-R-2,5-M7(230V50HZ)
Article no. 283178
Catalog No. XTSR2P5B007BFNL

Powering Business Worldwide

Delivery programme

Basic function			Omkeerstarters (complete apparatuur)
Basic device			MSC
			IE3
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	P	kW	0.75
Rated operational current	I_e	A	1.9
Rated short-circuit current 380 - 415 V	I_q	kA	150
Setting range			
Setting range of overload releases	I_r	A	1.6 - 2.5
Non-delayed	I_{rm}	A	35
Coordination			Type of coordination “1” Type of coordination “2”
Contact sequence			
Actuating voltage			230 V 50 Hz
			AC voltage

Motor-protective circuit-breakers PKZM0-2,5

Contactor DILM7-01(...)

Reversing starter worong set
Mechanical connection element and electrical contact module and reversing connector PKZM0-XRM12

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.

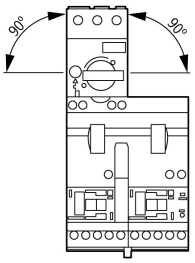
When using the auxiliary contacts DILA-XHIT… (→ 101042) the plug-in electrical connector can be removed without the removal of the front mounting auxiliary contact.

For further information	**Page**
Technical data PKZM0	→ PKZM0
Accessories PKZ	→ 072896

Technical data DILM	→ DILM
Further actuating voltages	→ 276537
DILM accessories	→ 281199

Technical data

General

Standards			UL 508 (on request) CSA C 22.2 No. 14 (on request)
Mounting position			

Main conducting paths

Rated impulse withstand voltage	U_{imp}	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	A	2.5

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 contactors 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 U_c			
Dual-voltage coil 50 Hz	Sealing	W	1.2

Data for design verification according to IEC/EN 61439

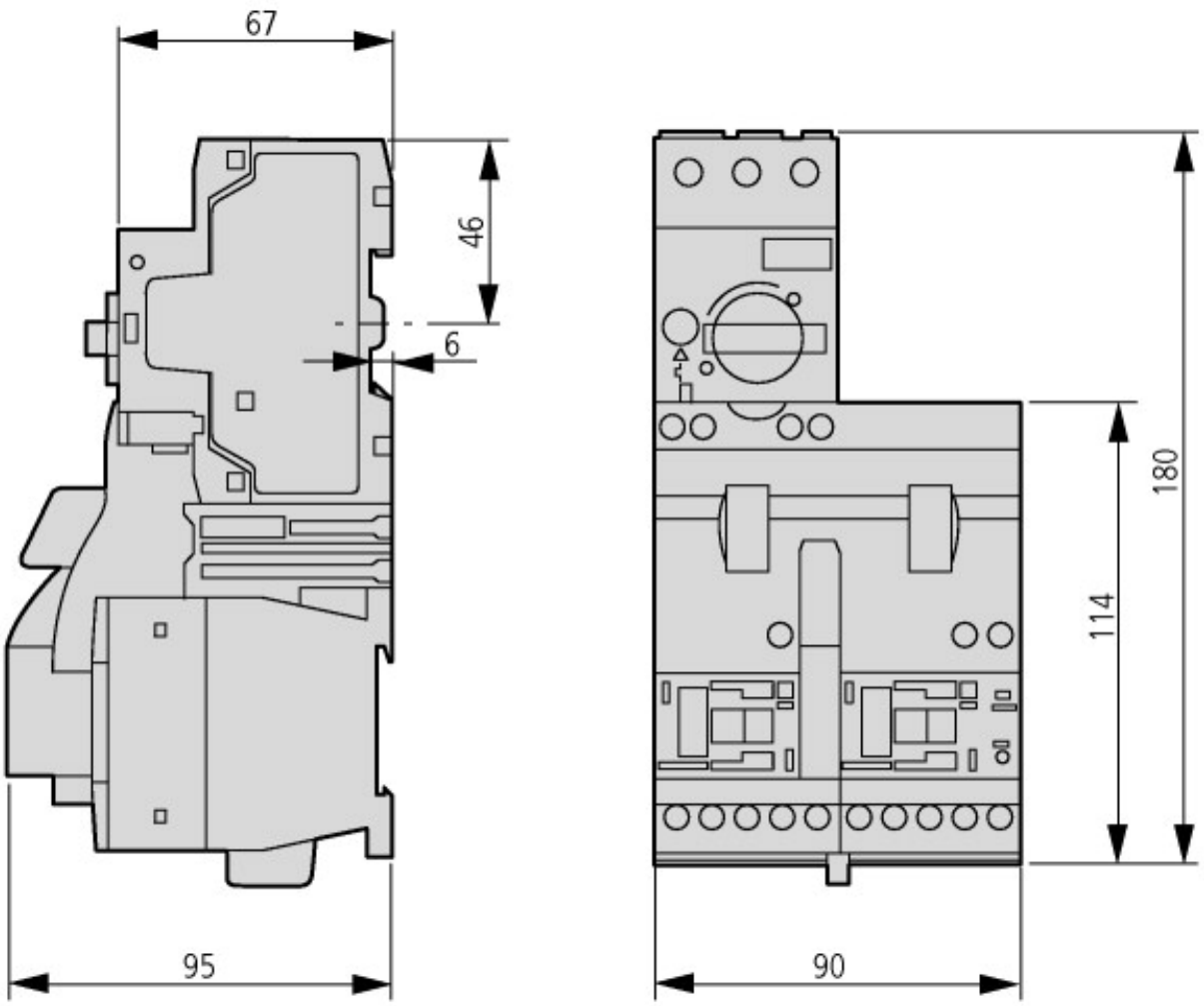
Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	2.5
Heat dissipation per pole, current-dependent	P_{vid}	W	1.9
Equipment heat dissipation, current-dependent	P_{vid}	W	5.7
Static heat dissipation, non-current-dependent	P_{vs}	W	1.4
Heat dissipation capacity	P_{diss}	W	0
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.

10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Motor starter combination (EC001037)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecl@ss8-27-37-09-05 [AJZ718009])			
Function			Reversing starter
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, 400 V		kW	0.75
Rated operation current Ie		A	1.9
Conditioned rated short-circuit current Iq		kA	100
Setting range overload protector		A	1.6 - 2.5
With short-circuit release			Yes
Type of coordination			1.2
Connection type main current circuit			Screw connection
Degree of protection (IP)			IP20
Suited for bus connection			No

Dimensions



MSC-R-…-M7[…12]…

Additional product information (links)

IL03402006Z (AWA1210-2248) Reversing starter to 12 A	
IL03402006Z (AWA1210-2248) Reversing starter to 12 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402006Z2010_10.pdf
Motor starters and "Special Purpose Ratings" for the North American market	http://www.moeller.net/binary/ver_techpapers/ver953en.pdf
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf