DATASHEET - MSC-R-0,63-M7(230V50HZ)



Reversing starter, 380 V 400 V 415 V: 0.12, 0.18 kW, Ir= 0.4 - 0.63 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage



Powering Business Worldwide

MSC-R-0,63-M7(230V50HZ) Part no.

283173 Catalog No.

Alternate Catalog

XTSRP63B007BFNL

No.

4365052 **EL-Nummer**

(Norway)

Delivery program

Basic function			Reversing starters (complete devices)
Basic device			MSC
			IE3 ✓
Notes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.
Connection to SmartWire-DT			no
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	P	kW	0.12 0.18
Rated operational current			
AC-3			
380 V 400 V 415 V	I _e	Α	0.41 0.6
Rated short-circuit current 380 - 415 V	I_q	kA	150
Setting range			
Setting range of overload releases	I _r	A	0.4 - 0.63
Coordination			Type of coordination "1" Type of coordination "2"
Contact sequence			M 32-
Actuating voltage			230 V 50 Hz, 240 V 60 Hz
			AC voltage
Motor-protective circuit-breakers PKZM0-0,63			

PKZM0-0,63

Contactor DILM7-01(...)

DOL starter wiring set

Mechanical connection element and electrical electric contact module 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
Technical data PKZM0
Accessories PKZ
Technical data DILM
Further actuating voltages
DILM accessories

Page → PKZM0 → 072896 → DILM → 276537 → 281199

Technical data

Mounting position Mounting position Altitude In Max. 2000 Antitude Antitude In Max. 2000 Antitude Antitude In Max. 2000 In 25 - 45 Mounting paths Rated impulse withstand voltage Vimp VAC Mono Vervoltage category/pollution degree Rated operational voltage Overvoltage category/pollution degree Rated operational current Open. 3-pole: 50 - 60 Hz 380 V 400 V In A 380 V 400 V Additional technical data Motor protective circuit breaker PKZM0, PKE Power consumption of the coil in a cold state and 1.0 x Us Pollul contactors Power consumption of the coil in a cold state and 1.0 x Us Bull-voltage coil 50 Hz Sealing data for approved types	General			
Alkitude	Standards			
Main conducting paths Rated inpulse withstand voltage Overvoltage category/pollution degree Alter dipulse withstand voltage Overvoltage category/pollution degree Alter dipulse withstand voltage Overvoltage category/pollution degree Alter dipulse withstand voltage Overvoltage category/pollution degree Illy3 Rated operational current Open, 3-pole: 50 – 60 Hz 380 v 400 V Ig A O 63 Additional technical data Motor protective circuit breaker PKZMO, PKE Power consumption of the coil in a cold state and 1.0 x Ug DILM contactors Power consumption of the coil in a cold state and 1.0 x Ug Dual-voltage coil 50 Hz Audilary contacts Pilot Duty AC operated OC operated OC operated AC CO perated AC CO perated AC CO each contact cont	Mounting position			
Main conducting paths Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage Que Que Que Que Que Que Que Que Que Q	Altitude		m	Max. 2000
Rated impulse withstand voltage Overvoltage category/pollution degree Rated operational voltage Rated operational current Open, 3-pole: 50 – 60 Hz 3 80 V 400 V Rated operational technical data Motor protective circuit breaker PKZM0, PKE Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Auxiliary contacts Pilot Dury AC Operated AC Operated AC Operated AC Operated AC AC Operated AC A	Ambient temperature			-25 - +55
Overvoltage category/pollution degree Rated operational voltage Rated operational voltage Rated operational current Open, 3-pole: 50 – 60 Hz 380 V 400 V Rated Technical data Motor protective circuit breaker PKZM0, PKE Motor protective circuit breaker PKZM0, PKE PKZM0 motor-protective circuit-breakers, see motor-protective circuit-breakers, see contactor product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays product group DILBT timing relay, ETR, see contactors, electronic timing relays pr	Main conducting paths			
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Rated operational current Open, 3-pole: 50 – 60 Hz 380 V 400 V Additional technical data Motor protective circuit breaker PKZM0, PKE Motor protective circuit breaker PKZM0, PKE Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated AC AC AC AC AC AC AC AC DC DC	Overvoltage category/pollution degree			III/3
Open, 3-pole: 50 – 60 Hz 380 V 400 V Additional technical data Motor protective circuit breaker PKZM0, PKE Motor protective circuit breaker PKZM0, PKE Motor protective circuit breaker PKZM0, PKE Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Auxiliary contacts Pilot Duty AC operated DC operated AC AC AC AC AC AC AC AC AC A	Rated operational voltage	U _e	V	230 - 415
Additional technical data Motor protective circuit breaker PKZM0, PKE Motor protective circuit breakers, see motor-protective circuit-breakers, PKZM0 motor-protective circuit-breakers, PKZM0 product group DILM contactors Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Sealing data for approved types Auxiliary contacts Pilot Duty AC operated DC operated General Use AC AC AC AC AC AC BC	Rated operational current			
Additional technical data Motor protective circuit breaker PKZM0, PKE Motor protective circuit breakers, see motor-protective circuit-breakers, PKZM0 product group DILM contactors Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Sealing Motor protective circuit breakers, see motor-protective circuit-breakers, PKZM0 product group DILM contactors, see contactor gro	Open, 3-pole: 50 – 60 Hz			
Motor protective circuit breaker PKZM0, PKE PKZM0 product group DILM contactors, see contactor product group DILM contactors, see contactor,	380 V 400 V	I _e	Α	0.63
PKZM0 product group DILM contactors Power consumption of the coil in a cold state and 1.0 x Us Dual-voltage coil 50 Hz Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated AC AC AC AC AC DC DC PKZM0 product group DILM contactors, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relays product group DILET timing relay, ETR, see contactors, electronic timing relay product group DILET timing relay, ETR, see contactors, electronic timing relay product group DILET timing relay, ETR, see contactors, electronic timing relay product group DILET timing relay,	Additional technical data			
Power consumption of the coil in a cold state and 1.0 x U _S Dual-voltage coil 50 Hz Sealing W 1.2 Rating data for approved types Auxiliary contacts Pilot Duty AC operated DC operated AC AC AC AC AC AC AC AC AC A	Motor protective circuit breaker PKZM0, PKE			PKZM0 product group DILM contactors, see contactor product group
Dual-voltage coil 50 Hz Sealing W 1.2 Rating data for approved types Auxiliary contacts Image: Contact of the contac	DILM contactors			
Rating data for approved types Auxiliary contacts	Power consumption of the coil in a cold state and 1.0 x $\ensuremath{\text{U}_{\text{S}}}$			
Auxiliary contacts Image: Contact of the policy of the	Dual-voltage coil 50 Hz	Sealing	W	1.2
Pilot Duty A600 DC operated A600 DC operated P300 General Use V AC V AC A DC V DC V DC V	Rating data for approved types			
AC operated A600 DC operated P300 General Use V AC V 600 AC A 15 DC V 250	Auxiliary contacts			
DC operated P300 General Use V 600 AC A 15 DC V 250	Pilot Duty			
General Use V 600 AC A 15 DC V 250	AC operated			A600
AC V 600 AC A 15 DC V 250	DC operated			P300
AC	General Use			
DC V 250	AC		V	600
	AC		Α	15
DC A 1	DC		V	250
	DC		Α	1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0.63
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
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
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 7.0

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])

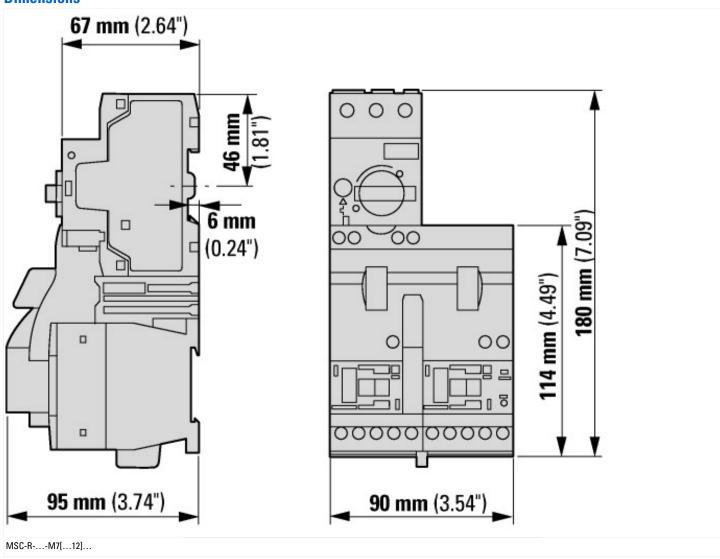
[A02710013])		
Kind of motor starter		Reversing starter
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	230 - 230
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		AC
Rated operation power at AC-3, 230 V, 3-phase	kW	0.09
Rated operation power at AC-3, 400 V	kW	0.18
Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current le	Α	0.6
Rated operation current at AC-3, 400 V	Α	0.63
Overload release current setting	Α	0.4 - 0.63
Rated conditional short-circuit current, type 1, 480 Y/277 V	Α	0
Rated conditional short-circuit current, type 1, 600 Y/347 V	Α	0
Rated conditional short-circuit current, type 2, 230 V	Α	50000
Rated conditional short-circuit current, type 2, 400 V	Α	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	60
Temperature compensated overload protection		Yes
Release class		CLASS 10
Type of electrical connection of main circuit		Screw connection
Type of electrical connection for auxiliary- and control current circuit		Screw 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 2
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	180
Depth	mm	95

Approvals

Product Standards	UL60947-4-1A; CSA-C22.2 No. 14-10; IEC60947-4-1; CE marking
UL File No.	E123500
UL Category Control No.	NKJH
CSA File No.	12528
CSA Class No.	3211-24
North America Certification	UL listed, CSA certified
Specially designed for North America	No

Dimensions



Assets (links)

Declaration of CE Conformity

00002885

Instruction Leaflets

IL03402006Z2018_04

Additional product information (links)

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/IL03402006Z2018_04.pdf	
Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf	
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf	