DATASHEET - MSC-R-32-M32(24VDC)



Reversing starter, 380 V 400 V 415 V: 15 kW, Ir= 25 - 32 A, 24 V DC, DC voltage



Part no.	MSC-R-32-M32(24VDC)
Catalog No.	283206
Alternate Catalog	XTSR032B032CTDNL
No.	
EL-Nummer	4365077
(Norway)	

Delivery program

onvory program			
asic function			Reversing starters (complete devices)
asic device			MSC
			IE3 🗸
otes			Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging.
onnection to SmartWire-DT			no
lotor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	Р	kW	15
Rated operational current			
AC-3			
380 V 400 V 415 V	l _e	А	29.3
Rated short-circuit current 380 - 415 V	Ιq	kA	50
etting range			
Setting range of overload releases	١r	A	25 - 32
pordination			Type of coordination "1" Type of coordination "2"
ontact sequence			
ctuating voltage			24 V DC DC voltage
lotor-protective circuit-breakers PKZM0-32			
ontactor DILM32-01()			
OL starter wiring set lechanical connection element and electrical electric contact module l			
	PKZM0-XRM32		
otes	PKZM0-XRM32		

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

→ P	KZM0
$\rightarrow 0$	72896
→D	ILM
→2	76537
→2	81199

Technical data

Conserval			
General			(H F29 /
Standards			UL 508 (on request) CSA C 22.2 No. 14 (on request)
Mounting position			
Altitude		m	Max. 2000
Ambient temperature			-25 - +55
Main conducting paths			
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			111/3
Rated operational voltage	Ue	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	l _e	А	32
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
Power consumption			
DC operated	Sealing	W	0.5
Rating data for approved types			
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			
AC		V	600
AC		A	15
DC		V	250
DC		A	1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	32
Heat dissipation per pole, current-dependent	P _{vid}	W	6.5
Equipment heat dissipation, current-dependent	P _{vid}	W	19.5
Static heat dissipation, non-current-dependent	P _{vs}	W	0.9
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])

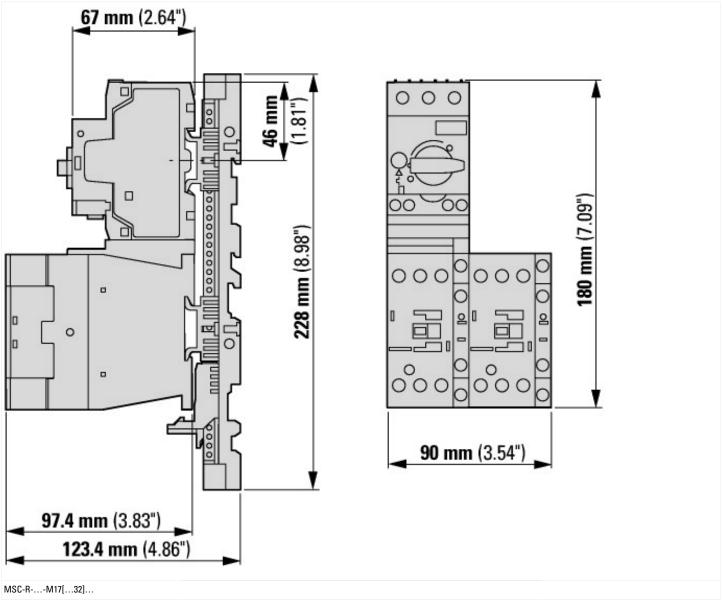
Kind of motor starter		Reversing starter
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	24 - 24
Voltage type for actuating		DC
Rated operation power at AC-3, 230 V, 3-phase	kW	7.5
Rated operation power at AC-3, 400 V	kW	15
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	29.3
Rated operation current at AC-3, 400 V	А	32
Overload release current setting	А	25 - 32
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	50000
Rated conditional short-circuit current, type 2, 400 V	А	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

External reset possibile Ne With fuse No Degree of protection (IP) POO Begree of protection (NEMA) POO Supporting protecol for TCP/P No Supporting protecol for DavieNet No Supporting protecol for DavieNet No Supporting protecol for SUCONET No Supporting protecol for FROFINET CBA	Number of indicator lights		0
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Height mm 228	Supporting protocol for other bus systems		No
	Width	mm	90
Depth mm 123.4	Height	mm	228
	Depth	mm	123.4

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





Assets (links)

Declaration of CE Conformity 00003118 Instruction Leaflets IL03402006Z2018_04

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	
IL03402011Z (AWA1210-2266) Reversing starter	to 32 A	
IL03402011Z (AWA1210-2266) Reversing starter to 32 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402011Z2018_06.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	