

DOL starter, 0.3-1.2A, protection electronic, advanced, SmartWire-DT

Part no. MSC-DEA-1,2-M17(24VDC) Article no. 168804 Catalog No. XTSEA1P2B017CTDNL



1/5



Delivery program

Delivery program			
Basic function			DOL 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			with PKE-SWD-32 for connecting the motor-starter combination
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	Р	kW	0.37
500 V	Р	kW	0.37
Rated operational current			
AC-3			
400 V	l _e	Α	1.1
500 V	l _e	Α	0.9
Rated short-circuit current 380 - 400 V	Iq	kA	100
Rated conditional short-circuit current 500 V	Iq	kA	10
Setting range			
Short-circuit releases			
Non-delayed	I _{rm}	Α	186
Coordination			Type of coordination "1" Type of coordination "2"
Contact sequence			M 3 ~

Actuating voltage	24 V DC
	DC Voltage

Motor-protective circuit-breakers PKE12/XTUA-1,2

Contactor DILM17-01(...)

DOL starter wiring set

Mechanical connection element and electrical electric contact module PKZM0-XDM32

Notes

The DOL starter (complete devices) consists of a PKE motor protective circuit breaker and a DILM contactor.

With the adapter-less top-hat rail mounting of starters up to 15 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 2.5°mm external diameter or 4 conductors up to 3.5°mm external diameter.

From 16 A, the motor-protective circuit-breaker and contactor are mounted on the top-hat rail adapter plate.

The connection of the main circuit between PKE and contactor is established with electrical contact modules.

When using DILA-XHIT... auxiliary contacts with MSC-DE-... DOL starters, the plug-in electrical connectors can be removed without removing the front-mounted auxiliary contact.

Cannot be combined with NHI-E...PKZ0-C.

MSC-DEA... DOL starters are prepared for communications via SmartWire-DT. In order to be used this way, they first need to be expanded with the PKE-SWD-32 communications module.

Motor output/rated mot Motor rating	tor current Rated motor current						
AC-3	220 V	380 V	415 V	440 V	500 V	500 V	660 V
	230 V	400 V				with	690 V
	240 V I _q = 100 kA	I _q =100 kA	I _q = 65 kA	I _q = 65 kA	I _q = 10 kA	CL-PKZ0 I _q = 100 kA	I _q = 3 kA
P	1	1	1	1	1	1	1
kW	Α	Α	Α	Α	Α	Α	Α
0.06	0.37	-	-	-	-	-	-
0.09	0.54	0.31	0.31	-	-	-	-
0.12	0.72	0.41	0.41	0.37	0.33	0.33	-
0.18	1.04	0.6	0.6	0.54	0.48	0.48	0.35
0.25	-	0.8	0.8	0.76	0.7	0.7	0.5
0.37	-	1.1	1.1	1.02	0.9	0.9	0.7
0.55	-	-	-	-	-	-	0.9
0.75	-	-	-	-	-	-	1.1

Technical data

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Standards			IEC/EN 60947-4-1, VDE 0660
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	Α	1.2
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
Power consumption	

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1.2
Heat dissipation per pole, current-dependent	P_{vid}	W	0.4
Equipment heat dissipation, current-dependent	P_{vid}	W	1.2
Static heat dissipation, non-current-dependent	P_{vs}	W	0.86
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55

C/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.
$10.2.3.3\mbox{Verification}$ 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 6.0

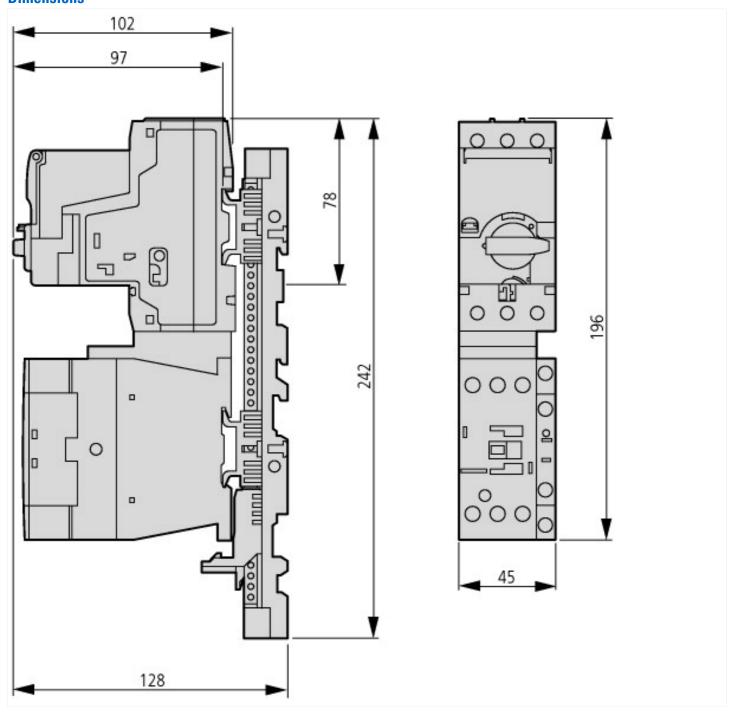
Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC001037)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecl@ss8.1-27-37-09-05 [AJZ718010])

[AJZ718010])			
Kind of motor starter			Direct starter
With short-circuit release			Yes
Rated control supply voltage Us at AC 50HZ	V	1	0 - 0
Rated control supply voltage Us at AC 60HZ	V	1	0 - 0
Rated control supply voltage Us at DC	V	1	24 - 24
Voltage type for actuating			DC
Rated operation power at AC-3, 230 V, 3-phase	k\	W	0.18
Rated operation power at AC-3, 400 V	k\	W	1.1
Rated power, 460 V, 60 Hz, 3-phase	k\	W	0
Rated power, 575 V, 60 Hz, 3-phase	k\	W	0
Rated operation current le	A	١	1.2
Rated operation current at AC-3, 400 V	A	١	1.2
Overload release current setting	A	١	0.3 - 1.2
Rated conditional short-circuit current, type 1, 480 Y/277 V	A	١	0
Rated conditional short-circuit current, type 1, 600 Y/347 V	A	١	0
Rated conditional short-circuit current, type 2, 230 V	A	١	100000
Rated conditional short-circuit current, type 2, 400 V	A	١	100000
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as normally closed contact			1
Ambient temperature, , upper operating limit	°(С	60
Temperature compensated overload protection			Yes
Release class			Adjustable
Type of electrical connection of main circuit			Screw connection
Type of electrical connection for auxiliary- and control current circuit			Screw connection

Yes
163
IP00
No
Yes

Dimensions



Additional product information (links)

IL03402010Z (AWA1210-2265) DOL starter up to 32 A	
IL03402010Z (AWA1210-2265) DOL starter up to 32 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402010Z2012_09.pdf
Moeller_Online Selections Aids	http://www.moeller.net/en/support/slider/index.jsp