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



Part no. Article no. Catalog No.

MSC-DEA-1,2-M17-SP(24VDC) 167822 XTFCE1P2BCCATD





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Delivery program			
Basic function			Type E DOL starters (complete devices)
Basic device			MSC
Connection to SmartWire-DT			with PKE-SWD-32 for connecting the motor-starter combination
Components for			North America
Maximum motor rating			
AC HP = PS			
460 V 480 V		HP	0.5
575 V 600 V		HP	0.5
Short Circuit Current Rating			
240 V		kA	14
480 Y 277 V		kA	14
600 Y 347 V		kA	14
Setting range			
Setting range of overload releases	I <sub>r</sub>	A	0.3 - 1.2
Short-circuit releases			
Non-delayed	I <sub>rm</sub>	A	186
Contact sequence			
Actuating voltage			24 V DC

		DC Voltage
Motor-protective circuit-breakers PKE12/XTU-1,2		
Contactor DILM17-10()		
DOL starter wiring set Mechanical connection element and electrical electric contact module PKZM0-XD	0M32	
Extension terminal BK25/3-PKZ0-E		
Notes		

The DOL starter type E (complete devices) consists of a PKE motor-protective circuit-breaker with AK-PKZ0, a DILM contactor and an extension terminal BK25/3-PKZ0-E.

Motor-protective circuit-breaker and contactor mounted on top hat rail adapter plate.

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

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

Technical data General			
Standards			IEC/EN 60947-4-1, VDE 0660
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	208 - 600
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	l <sub>e</sub>	Α	1.2
Additional technical data			
Motor protective circuit breaker PKZM0, PKE			PKE motor-protective circuit-breaker, see motor-protective circuit-breaker product group DILM contactors, see contactors product group
Power consumption			
DC operated	Sealing	W	0.5

## Design verification as per IEC/EN 61439

Design verification as per IEC/EN 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	1.2
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.4
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	1.2
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0.86
Heat dissipation capacity	P <sub>diss</sub>	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 6.0**

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

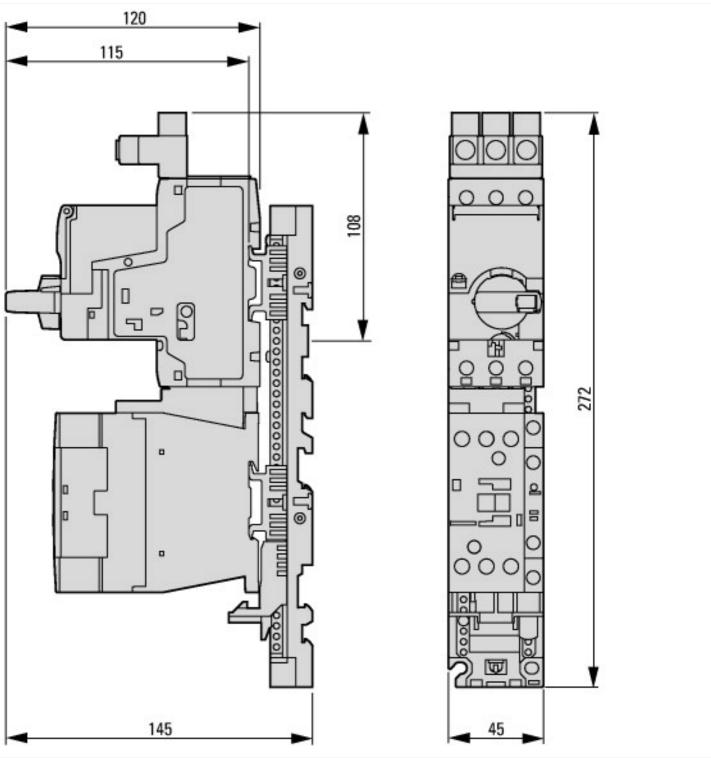
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Electric engineering, automation, process control engineering / Low-voltage swit [AJZ718010])	ch technology /	.oad breal	kout, motor breakout / Motor starter combination (ecl@ss8.1-27-37-09-05
Kind of motor starter			Direct starter
With short-circuit 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	0.18
Rated operation power at AC-3, 400 V		kW	7.5
Rated power, 460 V, 60 Hz, 3-phase		kW	0.37
Rated power, 575 V, 60 Hz, 3-phase		kW	0.37
Rated operation current le		А	16.7
Rated operation current at AC-3, 400 V		А	1.2
Overload release current setting		А	0.3 - 1.2
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	0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as normally closed contact			1
Ambient temperature, , upper operating limit		°C	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
Rail mounting possible			Yes
Degree of protection (IP)			IP20
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	Yes

# **Approvals**

- pp	
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.	165628
CSA Class No.	3211-08
North America Certification	UL listed, CSA certified
Specially designed for North America	Yes

# Dimensions



#### IL03402052Z Motorstarter combination: type E starter/type F starter with PKE

IL03402052Z Motorstarter combination: type E ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL03402052Z2014\_02.pdf starter/type F starter with PKE