# DOL starter, 3p, 0.06-0.37kW/400V/AC3, 100kA, protection electronic



Part no. Article no. Catalog No. MSC-DE-1,2-M7(230V50HZ) 121735 XTSE1P2B007BFNL



#### **Delivery programme**

Derivery programme			
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.
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	Р	kW	0.37
Rated operational current			
AC-3			
400 V	Ie	A	1.1
Rated short-circuit current 380 - 400 V	١ <sub>q</sub>	kA	100
Setting range			
Setting range of overload releases	I <sub>r</sub>	А	0.3 - 1.2
「 中			
Short-circuit releases			
Non-delayed	I <sub>rm</sub>	A	168
Coordination			Type of coordination "1"
Contact sequence			
Actuating voltage			230 V 50 Hz

	AC voltage
Motor-protective circuit-breakers PKE12/XTU-1,2	
Contactor DILM7-10()	
<b>DOL starter wiring set</b> Mechanical connection element and electrical electric contact module PKZM0-XDM12	
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 motor current

Motor output/rated motor current Motor rating	Rated motor current AC-3 220 V	380 V	415 V
	230 V	400 V	
	240 V		
	I <sub>q</sub> = 100 kA	I <sub>q</sub> =100 kA	l <sub>q</sub> = 50 kA
Р	1	I	1
kW	А	А	Α
0.06	0.37	-	-
0.09	0.54	0.31	0.31
0.12	0.72	0.41	0.41
0.18	1.04	0.6	0.6
0.25	-	0.8	0.8
0.37	-	1.1	1.1

#### **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	Ue	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	le	А	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
DILM contactors			
Power consumption of the coil in a cold state and 1.0 x $\rm U_{c}$			
Dual-voltage coil 50 Hz	Sealing	W	1.2

## Data for design verification according to IEC/EN 61439

Technical data for design verification			
Heat dissipation capacity	P <sub>diss</sub>	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.

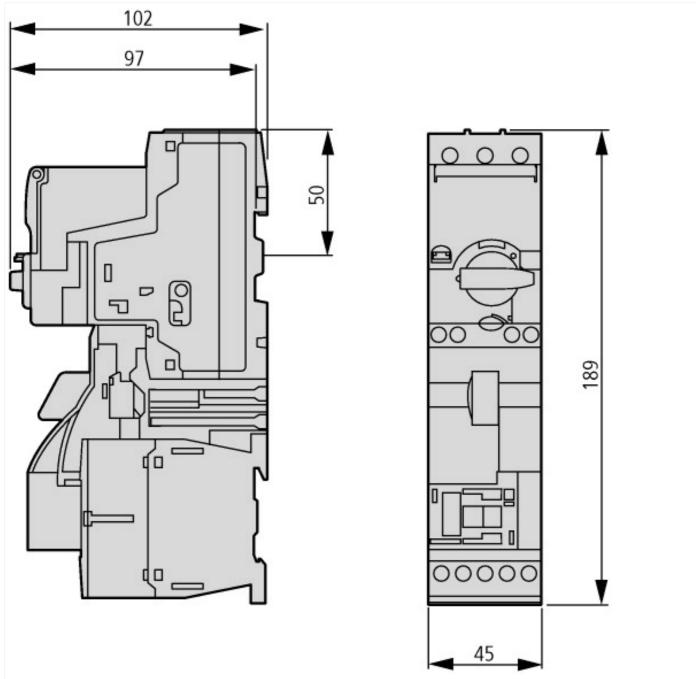
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	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		Direct 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	0.37	
Rated operation current le	А	1.1	
Conditioned rated short-circuit current Iq	kA	100	
Setting range overload protector	А	0.3 - 1.2	
With short-circuit release		Yes	
Type of coordination		2	
Connection type main current circuit		Screw connection	
Degree of protection (IP)		IP20	
Suited for bus connection		Yes	

# **Dimensions**



### Additional product information (links)

#### IL034014ZU (IL03402005Z) Direct-on-line starter up to 15 A

IL034014ZU (IL03402005Z) Direct-on-line starter ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL034014ZU2013\_11.pdf up to 15 A

Moeller\_Online Selections Aids

http://www.moeller.net/en/support/slider/index.jsp