

DOL starter, 3p, 0.55kW/400V/AC3, 150kA

Part no. MSC-D-1,6-M7(24VDC)
Article no. 283159
Catalog No. XTSC1P6B007BTDNL



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.
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	P	kW	0.37 0.55
Rated operational current			
AC-3			
400 V	l _e	Α	1.1 1.5
Rated short-circuit current 380 - 415 V	I_q	kA	150
Setting range			
Setting range of overload releases	I _r	Α	1 - 1.6
Short-circuit releases			
Non-delayed	I _{rm}	A	24.8
Coordination			Type of coordination "1" Type of coordination "2"
Contact sequence			M 3~

Actuating voltage 24 V DC
DC voltage

Motor-protective circuit-breakers PKZM0-1,6

PKZM0-1,6

Contactor DILM7-10(...)

DOL starter wiring set

Mechanical connection element and electrical electric contact module PKZM0-XDM12

Notes

The DOL starter (complete device) consists of a PKZM0 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 PKZ and contactor is established with electrical contact modules.

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.

Notes

BK25/3-PKZ0-E extension terminal and if necessary B3.../...-PKZ0 three-phase commoning link can be added to motor-starter combinations to make Type F starters in accordance with UL508.

Technical data

General	
Standards	IEC/EN 60947-4-1, VDE 0660
Mounting position	

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	Ie	Α	1.6

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
Danies agreement as	

Power consumption

DC operated	Sealing	W	3	
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Design verification as per IEC/EN 61439

Technical data for design verification Rated operational current for specified heat dissipation In A 1.6 Heat dissipation per pole, current-dependent Pvid W 1.9 Equipment heat dissipation, current-dependent Pvid W 5.7 Static heat dissipation, non-current-dependent Pvs W 2.6 Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. c C -25	
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 2.6 Heat dissipation capacity P _{diss} W 0	
Equipment heat dissipation, current-dependent P_{vid} W 5.7 Static heat dissipation, non-current-dependent P_{vs} W 2.6 Heat dissipation capacity P_{diss} W 0	
Static heat dissipation, non-current-dependent P _{vs} W 2.6 Heat dissipation capacity P _{diss} W 0	
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 of provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear mobserved.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear mobserved.
10.13 Mechanical function	The device meets the requirements, provided the information in the instructi 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])

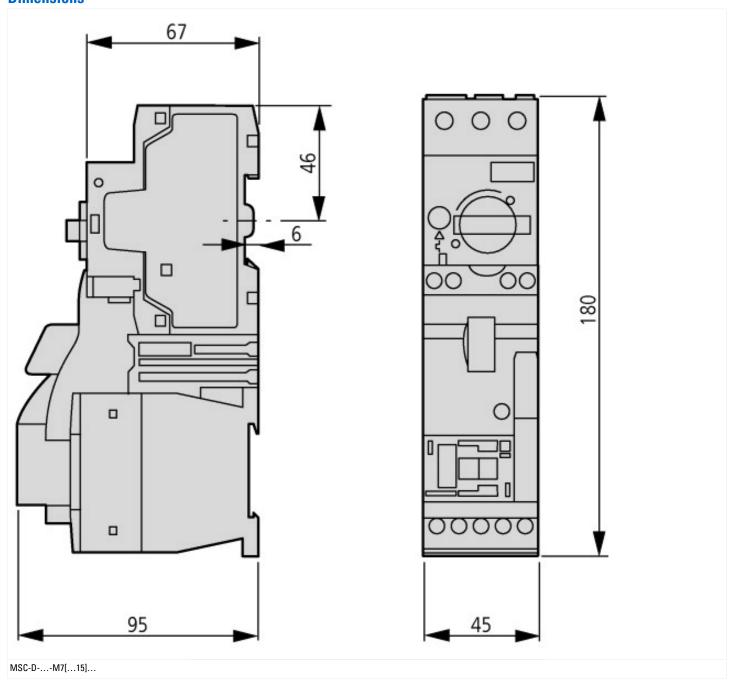
Kind of motor starter		Direct starter
With short-circuit release		Yes
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	24 - 24
Voltage type for actuating		DC
Rated operation power at AC-3, 230 V, 3-phase	kW	0.25
Rated operation power at AC-3, 400 V	kW	0.55
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	1.5
Rated operation current at AC-3, 400 V	Α	1.6
Overload release current setting	Α	1 - 1.6
Rated conditional short-circuit current, type 1, 480 Y/277 V	Α	0
Rated conditional short-circuit current, type 1, 600 Y/347 V	А	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		1
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
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	No

Approvals

Product Standards	UL508; CSA-C22.2 No. 14; IEC60847-4-1; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	165628
CSA Class No.	3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No

Dimensions



Additional product information (links)

IL034014ZU (IL03402005Z) Direct-on-line starter up to 15 A		
IL034014ZU (IL03402005Z) Direct-on-line starter up to 15 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL034014ZU2013_11.pdf	
Motor starters and "Special Purpose Ratings" for the North American market	http://www.moeller.net/binary/ver_techpapers/ver953en.pdf	
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf	
Moeller_Online Selections Aids	http://www.moeller.net/en/support/slider/index.jsp	