

DOL starter, 380 V 400 V 415 V: 5.5 kW, Ir= 8 - 12 A, 24 V DC, DC



Powering Business Worldwide™

Part no. **MSC-D-12-M17(24VDC)**
101048
EL Number **4315113**
(Norway)

General specifications

Product name	Eaton Moeller® series MSC-D DOL starter
Part no.	MSC-D-12-M17(24VDC)
EAN	4015081009435
Product Length/Depth	123.4 millimetre
Product height	228 millimetre
Product width	45 millimetre
Product weight	0.975 kilogram
Certifications	UL IEC/EN 60947-4-1 VDE 0660 CSA UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 CSA File No.: 012528 UL Category Control No.: NLRV CSA Class No.: 3211-24 CE UL File No.: E36332
Product Tradename	MSC-D
Product Type	DOL starter
Product Sub Type	None
Catalog Notes	IE3-ready devices are identified by the logo on their packaging.

Features & Functions

Fitted with:	Short-circuit release
Functions	Temperature compensated overload protection

General information

Class	CLASS 10 A
Connection	Screw terminals
Connection to SmartWire-DT	No
Coordination type	2
Degree of protection	IP00 NEMA Other
Model	IEC/UL starter
Mounting method	DIN rail
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	1
Overload release current setting - min	8 A
Overload release current setting - max	12 A
Overtvoltage category	III
Pollution degree	3
Rated impulse withstand voltage (Uimp)	6000 V AC
Suitable for	Also motors with efficiency class IE3
Type	Starter with Bi-Metal release
Voltage type	DC

Climatic environmental conditions

Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	55 °C

Electrical rating

Rated operational current (Ie)	11.3 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	12 A
Rated operational power at AC-3, 220/230 V, 50 Hz	3 kW

Rated operational power at AC-3, 380/400 V, 50 Hz	5.5 kW
Rated operational voltage	230 - 415 V AC
Switching capacity (auxiliary contacts, general use)	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)
Short-circuit rating	
Rated conditional short-circuit current (I _q), type 2, 380 V, 400 V, 415 V	50000 A
Short-circuit release (I _{rm}) - max	186 A
Magnet system	
Power consumption (sealing) at DC	0.86 W
Rated control supply voltage (U _s) at AC, 50 Hz - min	0 V
Rated control supply voltage (U _s) at AC, 50 Hz - max	0 V
Rated control supply voltage (U _s) at AC, 60 Hz - min	0 V
Rated control supply voltage (U _s) at AC, 60 Hz - max	0 V
Rated control supply voltage (U _s) at DC - min	24 V
Rated control supply voltage (U _s) at DC - max	24 V
Design verification	
Equipment heat dissipation, current-dependent P _{vid}	8.1 W
Heat dissipation capacity P _{diss}	0 W
Heat dissipation per pole, current-dependent P _{vid}	2.7 W
Rated operational current for specified heat dissipation (I _n)	12 A
Static heat dissipation, non-current-dependent P _{vs}	0.9 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

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@ss13-27-37-09-05 [AJZ718018])

Type of motor starter	Direct online starter (DOL)	
With short-circuit release	Yes	
Rated control supply voltage AC 50 Hz	V	0 - 0
Rated control supply voltage AC 60 Hz	V	0 - 0
Rated control supply voltage DC	V	24 - 24

Voltage type for actuating		DC
Rated operation power at AC-3, 230 V, 3-phase	kW	3
Rated operation power at AC-3, 400 V	kW	5.5
Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current Ie	A	11.3
Rated operation current at AC-3, 400 V	A	12
Overload release current setting	A	8 - 12
Rated conditional short-circuit current, type 1, 480 Y/277 V	A	0
Rated conditional short-circuit current, type 1, 600 Y/347 V	A	0
Rated conditional short-circuit current, type 2, 230 V	A	50000
Rated conditional short-circuit current, type 2, 400 V	A	50000
Power consumption	W	0.9
Number of auxiliary contacts as normally open contact		1
Number of auxiliary contacts as normally closed contact		0
Ambient temperature, upper operating limit	°C	55
Temperature compensated overload protection		Yes
Release class		CLASS 10 A
Type of electrical connection of main circuit		Screw connection
Type of electrical connection for auxiliary- and control current circuit		Screw connection
Rail mounting possible		No
With transformer		No
Number of command positions		0
Suitable for emergency stop		No
Coordination class according to IEC 60947-4-3		Class 2
Number of indicator lights		0
External reset possible		No
With fuse		No
Degree of protection (IP)		IP00
Degree of protection (NEMA)		Other
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
Width	mm	45
Height	mm	228
Depth	mm	123.4

