

# Specifications



Photo is representative



## Eaton 283146

Eaton Moeller® series MSC-D DOL starter, 380 V 400 V 415 V: 3 kW, Ir= 6.3 - 10 A, 230 V 50 Hz, 240 V 60 Hz.

### General specifications

<b>PRODUCT NAME</b>	Eaton Moeller® series MSC-D DOL starter
<b>CATALOG NUMBER</b>	283146
<b>MODEL CODE</b>	MSC-D-10-M7(230V50HZ)
<b>EAN</b>	4015082831462
<b>PRODUCT LENGTH/DEPTH</b>	95 mm
<b>PRODUCT HEIGHT</b>	180 mm
<b>PRODUCT WIDTH</b>	45 mm
<b>PRODUCT WEIGHT</b>	0.58 kg
<b>CERTIFICATIONS</b>	VDE 0660 CSA Class No.: 3211-24 UL UL File No.: E36332 IEC/EN 60947-4-1 UL Category Control No.: NLRV UL 60947-4-1 CSA-C22.2 No. 60947-4-1- 14 CE CSA File No.: 012528 CSA
<b>GLOBAL CATALOG</b>	283146

## Product specifications

<b>TYPE</b>	Starter with Bi-Metal release
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF</b>	Does not apply, since the

## Resources

<b>BROCHURES</b>	<a href="#">eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf</a>
	<a href="#">eaton-msfs-motor-starter-feeder-system-brochure-br034005en-en-us.pdf</a>
<b>CATALOGS</b>	<a href="#">eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf</a>
	<a href="#">Product Range Catalog</a> <a href="#">Switching and protecting motors</a>
<b>DECLARATIONS OF CONFORMITY</b>	<a href="#">eaton-dol-starter-declaration-of-conformity-eu250673en.pdf</a>
<b>DRAWINGS</b>	<a href="#">eaton-manual-motor-starters-motorstarter-msc-d-dol-starter-dimensions.eps</a> <a href="#">eaton-general-ie-ready-dilm-contactor-standards.eps</a> <a href="#">eaton-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps</a>
<b>ECAD MODEL</b>	<a href="#">ETN.283146.edz</a>
<b>INSTALLATION INSTRUCTIONS</b>	<a href="#">IL034014ZU</a> <a href="#">IL034038ZU</a>
<b>INSTALLATION VIDEOS</b>	<a href="#">WIN-WIN with push-in technology</a>
<b>MCAD MODEL</b>	<a href="#">DA-CS-msc_d_bg1</a> <a href="#">DA-CD-msc_d_bg1</a>
<b>SALES NOTES</b>	<a href="#">eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf</a>
<b>WIRING DIAGRAMS</b>	<a href="#">eaton-manual-motor-starters-device-msc-d-dol-starter-wiring-diagram.eps</a>

<b>PROTECTION OF ASSEMBLIES</b>	entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>FITTED WITH:</b>	Short-circuit release
<b>POLLUTION DEGREE</b>	3
<b>CLASS</b>	CLASS 10 A
<b>CONNECTION TO SMARTWIRE-DT</b>	No
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	6000 V AC
<b>MODEL</b>	IEC/UL starter
<b>ALTITUDE</b>	Max. 2000 m
<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	Screw connection
<b>VOLTAGE TYPE</b>	AC
<b>MOUNTING METHOD</b>	DIN rail
<b>OVERVOLTAGE CATEGORY</b>	III
<b>FUNCTIONS</b>	Temperature compensated overload protection
<b>OVERLOAD RELEASE CURRENT SETTING - MIN</b>	6.3 A
<b>RATED CONDITIONAL</b>	0 A

**SHORT-CIRCUIT CURRENT****(IQ), TYPE 2, 230 V****RATED CONDITIONAL****SHORT-CIRCUIT CURRENT****(IQ), TYPE 2, 380 V, 400 V,****415 V**

150 A

**RATED CONDITIONAL****SHORT-CIRCUIT****CURRENT, TYPE 1, 480**

0 A

**Y/277 V****RATED CONDITIONAL****SHORT-CIRCUIT****CURRENT, TYPE 1, 600**

0 A

**Y/347 V****RATED CONTROL SUPPLY****VOLTAGE (US) AT AC, 50**

230 V

**Hz - MAX****RATED CONTROL SUPPLY****VOLTAGE (US) AT AC, 50**

230 V

**Hz - MIN****RATED CONTROL SUPPLY****VOLTAGE (US) AT AC, 60**

0 V

**Hz - MAX****RATED CONTROL SUPPLY****VOLTAGE (US) AT AC, 60**

0 V

**Hz - MIN****RATED CONTROL SUPPLY****VOLTAGE (US) AT DC -**

0 V

**MAX****RATED CONTROL SUPPLY****VOLTAGE (US) AT DC -**

0 V

**MIN****RATED OPERATIONAL****CURRENT (IE) AT AC-3,**

7 A

**380 V, 400 V, 415 V****POWER CONSUMPTION,  
SEALING, 50 Hz**1.4 W, Dual-frequency coil  
in a cold state and 1.0 x  
Us, at 50 Hz**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)**A600, AC operated  
(UL/CSA)  
P300, DC operated  
(UL/CSA)**RATED OPERATIONAL  
CURRENT (IE)**

6.6 A

**RATED OPERATIONAL****CURRENT FOR SPECIFIED**

10 A

**HEAT DISSIPATION (IN)**

<b>RATED OPERATIONAL VOLTAGE</b>	230 - 415 V AC
<b>SUITABLE FOR</b>	Also motors with efficiency class IE3
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	55 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>COORDINATION TYPE</b>	1
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	8.1 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	2.7 W
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	1
<b>NUMBER OF COMMAND POSITIONS</b>	0
<b>NUMBER OF PILOT LIGHTS</b>	0
<b>OVERLOAD RELEASE CURRENT SETTING - MAX</b>	10 A
<b>RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ</b>	1.5 kW
<b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>	3 kW
<b>RATED POWER AT 460 V, 60 HZ, 3-PHASE</b>	0 kW
<b>RATED POWER AT 575 V, 60 HZ, 3-PHASE</b>	0 kW
<b>SHORT-CIRCUIT RELEASE (IRM) - MAX</b>	155 A
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	1.4 W
<b>COORDINATION CLASS (IEC 60947-4-3)</b>	Class 1
<b>DEGREE OF PROTECTION</b>	IP20

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NEMA Other

**ELECTRICAL  
CONNECTION TYPE FOR  
AUXILIARY- AND  
CONTROL-CURRENT  
CIRCUIT**

Screw connection

**ACTUATING VOLTAGE**

230 V 50 Hz  
240 V 60 Hz

**POWER CONSUMPTION**

1.4 W

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**PROJECT NAME:**

**PROJECT NUMBER:**

**PREPARED BY:**

**DATE:**

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