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102970

Eaton Moeller® series MSC-D DOL starter, 380 V 400 V 415 V: 1.1, 1.5 kW, Ir= 2.5 - 4 A, 24 V DC, DC voltage

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General specifications

Product Name

Eaton Moeller® series MSC-D DOL starter

Catalog Number

102970

Model Code

MSC-D-4-M7(24VDC)/BBA

EAN

4015081028092

Product Length/Depth

154 mm

Product Height

200 mm

Product Width

45 mm

Product Weight

0.93 kg

Certifications

CE

CSA File No.: 012528

CSA Class No.: 3211-04

CSA-C22.2 No. 14 (on request)

UL

CSA

UL60947-4-1A

UL File No.: E123500

UL Category Control No.: NKJH

UL 508 (on request)

IEC/EN 60947-4-1

Product specifications

Rated operational current for specified heat dissipation (In)

4 A

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Rated operational power at AC-3, 380/400 V, 50 Hz

1.5 kW

Rated operational voltage

230 - 415 V AC

Rated conditional short-circuit current, type 1, 480 Y/277 V

0 A

Rated control supply voltage (Us) at AC, 50 Hz - min

0 V

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Mounting method

Mounting on Busbar 60 mm

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Rated power at 575 V, 60 Hz, 3-phase

0 kW

Rated power at 460 V, 60 Hz, 3-phase

0 kW

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

Rated control supply voltage (Us) at DC - min

24 V

Fitted with:

Short-circuit release

Number of pilot lights

0

Short-circuit current rating (high fault at 600 V)

1 A, Class J/CC, max Fuse, SCCR (UL/CSA)

100 kA, Fuse, SCCR (UL/CSA)

Rated control supply voltage (Us) at AC, 50 Hz - max

0 V

Coordination type

2

10.8 Connections for external conductors

Is the panel builder's responsibility.

Coordination class (IEC 60947-4-3)

Class 2

Rated conditional short-circuit current, type 1, 600 Y/347 V

0 A

Ambient operating temperature - max

55 °C

Rated operational power at AC-3, 220/230 V, 50 Hz

0.75 kW

Connection to SmartWire-DT

No

Number of command positions

0

Static heat dissipation, non-current-dependent Pvs

2.6 W

Electrical connection type of main circuit

Screw connection

Electrical connection type for auxiliary- and control-current circuit

Screw connection

Power consumption (sealing) at DC

3 W

Rated control supply voltage (Us) at DC - max

24 V

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

Class

CLASS 10

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Heat dissipation per pole, current-dependent Pvid

2 W

Actuating voltage

24 VDC

Voltage type

DC

Switching capacity (auxiliary contacts, general use)

15 A, 600 V AC, (UL/CSA)

1 A, 250 VDC, (UL/CSA)

Overload release current setting - min

2.5 A

Equipment heat dissipation, current-dependent Pvid

6 W

Heat dissipation capacity Pdis

0 W

Rated operational current (Ie)

3.6 A

Suitable for

Also motors with efficiency class IE3

Number of auxiliary contacts (normally closed contacts)

0

Rated conditional short-circuit current (Iq), type 2, 380 V, 400 V, 415 V

50000 A

Power consumption

2.6 W

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.

Overload release current setting - max

4 A

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Overvoltage category

III

Degree of protection

IP20

NEMA Other

Pollution degree

3

Rated control supply voltage (Us) at AC, 60 Hz - min

0 V

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Rated impulse withstand voltage (Uimp)

6000 V AC
Connection
Screw terminals
10.10 Temperature rise
The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
Functions
Temperature compensated overload protection
Rated conditional short-circuit current (Iq), type 2, 230 V
50000 A
Type
Starter with Bi-Metal release
10.2.2 Corrosion resistance
Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.
10.2.7 Inscriptions
Meets the product standard's requirements.
Short-circuit release (Irm) - max
62 A
Rated control supply voltage (Us) at AC, 60 Hz - max
0 V
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V
4 A
Model
Direct starter
Number of auxiliary contacts (normally open contacts)
1
Altitude
Max. 2000 m
Switching capacity (auxiliary contacts, pilot duty)
A600, AC operated (UL/CSA)
P300, DC operated (UL/CSA)
Serial Number Verified :
Authenticated: ✓
The product is verified as being authentic; however, this does not guarantee the condition or fit for purpose of the product.

Brochures

- [Save time and space thanks to the new link module PKZM0-XDM32ME](#)
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- [Motor Starters in System xStart - brochure](#)

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Catalogs

- [Product Range Catalog Switching and protecting motors](#)

Declarations of conformity

- [DA-DC-00004878.pdf](#)
- [DA-DC-00004910.pdf](#)

Drawings

- [eaton-manual-motor-starters-adapter-msc-d-dol-starter-dimensions.eps](#)
- [eaton-general-ie-ready-dilm-contactor-standards.eps](#)

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eCAD model

- [DA-CE-ETN.MSC-D-4-M7\(24VDC\)_BBA](#)

Installation instructions

- [IL034014ZU](#)
- [IL03402015Z](#)
- [IL034038ZU](#)

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Installation videos

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mCAD model

- [DA-CD-msc_d_bba_bg1](#)
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Wiring diagrams

- [eaton-manual-motor-starters-device-msc-d-dol-starter-wiring-diagram.eps](#)

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