Specifications

Eaton 121740



Catalog Number: 121740

Eaton Moeller® series MSC-DE DOL starter, 380 V 400 V 415 V: 3 kW, Iq= 100 kA, Ir= 3 - 12 A, 24 V DC, DC voltage

General specifications

Product Name
Eaton Moeller® series MSC-DE DOL starter

Catalog Number
121740

EAN
4015081195503

Product Length/Depth
102 mm

Product Height
198 mm

Product Width
45 mm

Product Weight
0.78 kg

Certifications
IEC/EN 60947-4-1
VDE 0660

Powering Business Worldwide

Features & Functions

Fitted with:

Short-circuit release

Functions

Temperature compensated overload protection

General

Class

Adjustable

Connection

Screw terminals

Connection to SmartWire-DT

No

Coordination type

1

Current flow times - min

700 (Class 10) AC-4 cycle operation, Main conducting paths
For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods.
1000 (Class 20) AC-4 cycle operation, Main conducting paths
Note: Going below the minimum current flow time can cause overheating of the load (motor).
500 (Class 5) AC-4 cycle operation, Main conducting paths
900 (Class 15) AC-4 cycle operation, Main conducting paths

Cut-out periods - min

≤ 500 ms, main conducting paths, AC-4 cycle operation

Degree of protection

IP20
NEMA Other

Model

IEC 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

3 A

Overload release current setting - max

12 A

Overvoltage category

III

Pollution degree

3

Rated impulse withstand voltage (Uimp)

6000 V AC

Suitable for

Also motors with efficiency class IE3

Type

Starter with electronic trip unit

Voltage type

DC

Climatic environmental conditions

Altitude

Max. 2000 m

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

55 °C

Electrical rating

Rated operational current (Ie)

6.6 A

Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V

7 A

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

1.5 kW

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

3 kW

Rated operational voltage

230 - 415 V AC

Short-circuit rating

Short-circuit current rating (basic rating)

200 A, max. Fuse, SCCR (UL/CSA)

150 A, max. CB, SCCR (UL/CSA)

10 kA, SCCR (UL/CSA)

Short-circuit current rating (high fault at 480 V)

100 A, max. CB, SCCR (UL/CSA)

100 kA, Fuse, SCCR (UL/CSA)

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

65 kA, CB, SCCR (UL/CSA)

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

100 kA, Fuse, SCCR (UL/CSA)

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

Short-circuit release (Irm) - max

186 A

Magnet system

Power consumption (sealing) at DC

2.6 W

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

0 V

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

0 V

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

0 V

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

0 V

Rated control supply voltage (Us) at DC - min

24 V

Rated control supply voltage (Us) at DC - max

24 V

Design verification

Equipment heat dissipation, current-dependent Pvid

1.3 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0.4 W

Rated operational current for specified heat dissipation (In)

7 A

Static heat dissipation, non-current-dependent Pvs

2.6 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

Resources

Brochures

eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf

eaton-msfs-motor-starter-feeder-system-brochure-br034005en-en-us.pdf

Catalogs

Product Range Catalog Switching and protecting motors

eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf

Declarations of conformity

DA-DC-00004244.pdf

DA-DC-00004969.pdf

Drawings

eaton-manual-motor-starters-starter-msc-d-dol-starter-dimensions-002.eps

eaton-manual-motor-starters-starter-msc-d-dol-starter-3d-drawing.eps

eaton-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps

eaton-general-ie-ready-dilm-contactor-standards.eps

eCAD model

ETN.121740.edz

Installation instructions

IL034038ZU

Installation videos

WIN-WIN with push-in technology

mCAD model

DA-CD-msc_de_bg1

DA-CS-msc_de_bg1

Sales notes

eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf

Wiring diagrams

eaton-manual-motor-starters-device-msc-d-dol-starter-wiring-diagram.eps

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.

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