Specifications

Eaton 121745



Catalog Number: 121745

Eaton Moeller® series MSC-DE DOL starter, 380 V 400 V 415 V: 5.5 kW, Iq= 100 kA, Ir= 3 - 12 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage, Screw terminals MSC-DE-12-M17(230V50HZ)

General specifications

Product Name
Eaton Moeller® series MSC-DE DOL starter

Catalog Number
121745

EAN
4015081195558

Product Length/Depth
128 mm

Product Height
242 mm

Product Width
45 mm

Product Weight
1 kg

Certifications
IEC/EN 60947-4-1
VDE 0660

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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

2

Current flow times - min

500 (Class 5) AC-4 cycle operation, Main conducting paths
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).
700 (Class 10) AC-4 cycle operation, Main conducting paths
900 (Class 15) 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.

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

AC

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 current (Ie) at AC-3, 500 V

9 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 power at AC-3, 500 V, 50 Hz

5.5 kW

Rated operational voltage

230 - 415 V AC

Short-circuit rating

Rated conditional short-circuit current (Iq), 500 V

50 A

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

100000 A

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

100 kA, Fuse, SCCR (UL/CSA)

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

Short-circuit release (Irm) - max

186 A

Magnet system

Power consumption, sealing, 50 Hz

2.1 W, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz

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

230 V

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

230 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

0 V

Rated control supply voltage (Us) at DC - max

0 V

Design verification

Equipment heat dissipation, current-dependent Pvid

4.2 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

1.4 W

Rated operational current for specified heat dissipation (In)

12 A

Static heat dissipation, non-current-dependent Pvs

2.1 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.

Resources

Brochures

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

eaton-motor-starters-system-xstart-brochure-br03407001en-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-00004996.pdf

DA-DC-00004992.pdf

Drawings

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

eaton-manual-motor-starters-dol-starter-msc-d-3d-drawing-002.eps

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

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

eCAD model

ETN.121745.edz

Installation instructions

IL03402010Z

Installation videos

WIN-WIN with push-in technology

mCAD model

DA-CS-msc_de_bg2

DA-CD-msc_de_bg2

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



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