Specifications

Eaton 102990

Catalog Number: 102990

Eaton Moeller® series MSC-R Reversing starter, 380 V 400 V 415 V: 4 kW, Ir= 6.3 - 10 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage MSC-R-10-M9(230V50HZ)/BBA



General specifications

Product Name
Eaton Moeller® series MSC-R Reversing starter

Catalog Number
102990

EAN
4015081028290

Product Length/Depth
200 mm

Product Height
153 mm

Product Width
90 mm

Product Weight
1.56 kg

Certifications
UL60947-4-1A
CSA
CSA Class No.: 3211-04
UL
CE
IEC/EN 60947-4-1
UL File No.: E123500
CSA File No.: 012528
UL 508 (on request)
CSA-C22.2 No. 14 (on request)
CSA-C22.2 No. 14-10
UL Category Control No.: NKJH

Powering Business Worldwide

Features & Functions

Fitted with:

Short-circuit release

Functions

Temperature compensated overload protection

General

Class

CLASS 10 A

Connection

Screw terminals

Connection to SmartWire-DT

No

Coordination type

1

Degree of protection

IP20

NEMA Other

Model

IEC/UL starter

Mounting method

Mounting on Busbar 60 mm

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

0

Overload release current setting - min

6.3 A

Overload release current setting - max

10 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 Bi-Metal release

Voltage type

AC

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)

8.5 A

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

9 A

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

2.2 kW

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

4 kW

Rated operational voltage

230 - 415 V AC

Switching capacity (auxiliary contacts, general use)

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

1 A, 250 V DC, (UL/CSA)

Switching capacity (auxiliary contacts, pilot duty)

A600, AC operated (UL/CSA)

P300, DC operated (UL/CSA)

Short-circuit rating

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

100 A

Short-circuit release (Irm) - max

155 A

Magnet system

Power consumption, sealing, 50 Hz

1.2 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

Resources

Equipment heat dissipation, current-dependent Pvid

8.4 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

2.8 W

Rated operational current for specified heat dissipation (In)

9 A

Static heat dissipation, non-current-dependent Pvs

1.4 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

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-00004910.pdf

DA-DC-00004878.pdf

DA-DC-00004972.pdf

DA-DC-00004976.pdf

Drawings

eaton-manual-motor-starters-busbar-msc-r-reversing-starter-dimensions-002.eps

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

eCAD model

ETN.102990.edz

Installation instructions

IL03402006Z

IL03402015Z

Installation videos

WIN-WIN with push-in technology

mCAD model

DA-CS-msc_r_bba_bg1

DA-CD-msc_r_bba_bg1

Sales notes

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

Wiring diagrams

eaton-manual-motor-starters-starter-msc-r-reversing-starter-wiring-diagram.eps

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.

Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

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