

Specifications



Photo is representative



Eaton 188280

Eaton Moeller® series MSC-DM DOL starter,
380 V 400 V 415 V: 0.09 kW, $I_r = 0.25 - 0.4$ A,
230 V 50 Hz, 240 V 60 Hz, Alternating voltage

General specifications

PRODUCT NAME	Eaton Moeller® series MSC-DM DOL starter
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CATALOG NUMBER	188280
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MODEL CODE	MSC-DM-0,4- M7(230V50HZ)
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EAN	4015081861651
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PRODUCT LENGTH/DEPTH	76 mm
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PRODUCT HEIGHT	170 mm
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PRODUCT WIDTH	45 mm
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PRODUCT WEIGHT	0.546 kg
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CERTIFICATIONS	UL60947-4-1A CSA-C22.2 No. 14-10 CSA UL Category Control No.: NKJH UL CE CSA Class No.: 3211-04 IEC/EN 60947-4-1 CSA File No.: 012528 VDE 0660 UL File No.: E123500
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Features & Functions

FITTED WITH:	Short-circuit release
FUNCTIONS	Temperature compensated overload protection

Climatic environmental conditions

ALTITUDE	Max. 2000 m
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	55 °C

General

CLASS	CLASS 10 A
CONNECTION	Screw terminals
CONNECTION TO SMARTWIRE-DT	No
COORDINATION TYPE	2
DEGREE OF PROTECTION	IP20 NEMA Other
MODEL	IEC/UL 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	0.25 A
OVERLOAD RELEASE CURRENT SETTING - MAX	0.4 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

Electrical rating

RATED OPERATIONAL CURRENT (IE)	0.31 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	0.4 A
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	0.06 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	0.09 kW
RATED OPERATIONAL	230 - 415 V AC

Short-circuit rating

**RATED CONDITIONAL
SHORT-CIRCUIT CURRENT
(IQ), TYPE 2, 380 V, 400 V,
415 V** 50000 A

**SHORT-CIRCUIT RELEASE
(IRM) - MAX** 6.2 A

VOLTAGE

**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)** P300, DC operated
(UL/CSA)
A600, AC operated
(UL/CSA)

Magnet system

**POWER CONSUMPTION,
SEALING, 50 HZ** 1.4 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

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 Is the panel builder's responsibility.

Resources

BROCHURES

[eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf](#)

[eaton-msfs-motor-starter-feeder-system-brochure-br034005en-en-us.pdf](#)

CATALOGUES

[eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf](#)

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

DECLARATIONS OF CONFORMITY

[eaton-dol-starter-declaration-of-conformity-uk251157en.pdf](#)

[eaton-dol-starter-declaration-of-conformity-eu250674en.pdf](#)

DRAWINGS

[eaton-manual-motor-starters-msc-d-dol-starter-dimensions-002.eps](#)

[eaton-manual-motor-starters-msc-d-dol-starter-3d-drawing-002.eps](#)

[eaton-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps](#)

[eaton-general-ie-ready-dilm-contactor-standards.eps](#)

ECAD MODEL

[ETN.188280.edz](#)

INSTALLATION INSTRUCTIONS

[IL034030ZU](#)

INSTALLATION VIDEOS

[WIN-WIN with push-in technology](#)

MCAD MODEL

[DA-CS-msc_dm](#)

[DA-CD-msc_dm](#)

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](#)

INSULATING MATERIAL

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.

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:

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