



**MSC MOTOR STARTERS COMBINATIONS**  
**102968**



Overview

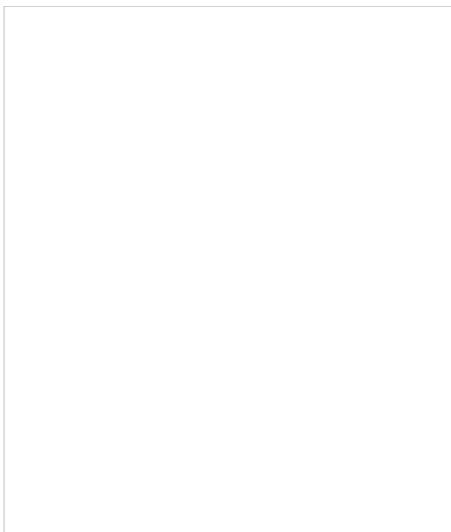


Specifications



Resources

How to



**102968**

Eaton Moeller® series MSC-D DOL starter, 380 V 400 V 500 V 600 V  
Ir= 1 - 1.6 A, 24 V DC, DC voltage

**How to buy**

 Configurator Motor starter combinations

Photo is representative

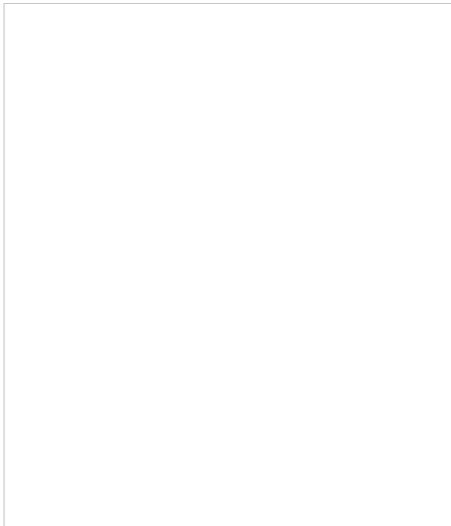


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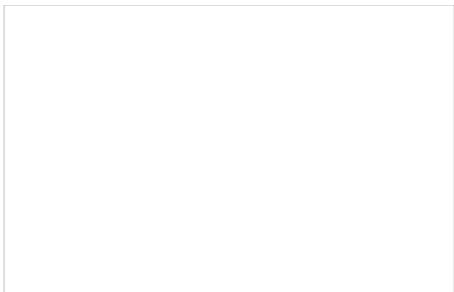


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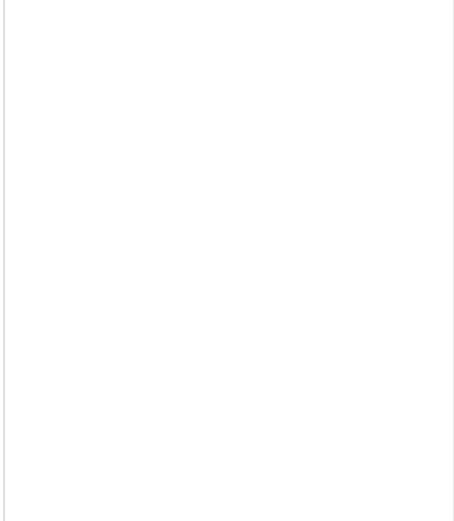


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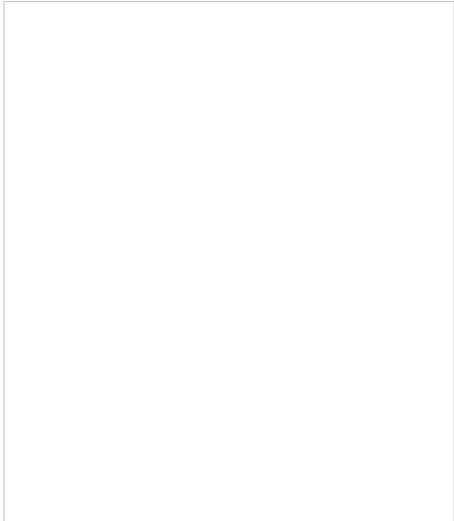


Photo is representative



## Designed to work together

Discover other Eaton products and accessories built to enhance this product.

**118561**

Eaton Moeller® series DIL-SWD Function element, contactor, SmartWire-DT, DIL/MSC, manual/auto

**118560**

Eaton Moeller® series DIL-SWD Function element, contactor, SmartWire-DT, DIL/MSC

**101044**

Eaton Moeller® series DILA Auxiliary contact module, Type: high version, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, MSC

**101043**

Eaton Moeller® series DILA Auxiliary contact module, Type: high version, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, MSC

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## GENERAL SPECIFICATIONS

General specifications

>

**PRODUCT NAME**

Eaton Moeller® series MSC-D DOL starter

**CATALOG NUMBER**

102968

Product specifications

>

**MODEL CODE**

MSC-D-1,6-M7(24VDC)/BBA

**EAN**

4015081028078

**PRODUCT LENGTH/DEPTH**

154 mm

**PRODUCT HEIGHT**

200 mm

**PRODUCT WIDTH**

45 mm

**PRODUCT WEIGHT**

0.92 kg

CE

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

CSA File No.: 012528

UL

CSA-C22.2 No. 14-10

UL Category Control No.: NKJH

UL60947-4-1A

CSA Class No.: 3211-04

UL File No.: E123500

IEC/EN 60947-4-1

UL 508 (on request)

CSA

## CERTIFICATIONS

## PRODUCT SPECIFICATIONS

<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	1.6 A
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**10.11 SHORT-CIRCUIT RATING**

Is the panel builder's responsibility. The specification must be observed.

<b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>	0.55 kW
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**RATED OPERATIONAL VOLTAGE**

230 - 415 V AC

<b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 480 Y/277 V</b>	0 A
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<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN</b>	0 V
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**10.4 CLEARANCES AND CREEPAGE DISTANCES**

Meets the product standard's requirements.

**10.12 ELECTROMAGNETIC COMPATIBILITY**

Is the panel builder's responsibility. The specification must be observed.

**Mounting Method**

Mounting on Busbar 60 mm

**10.2.5 LIFTING**

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

**RATED POWER AT 575 V, 60 HZ, 3-PHASE**

0 kW

**RATED POWER AT 460 V, 60 HZ, 3-PHASE**

0 kW

<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
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**RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN** 24 V

**FITTED WITH:**

Short-circuit release

**NUMBER OF PILOT LIGHTS**

0

<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX</b>	0 V
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**COORDINATION TYPE**

2

**10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS**

Is the panel builder's responsibility.

**COORDINATION CLASS (IEC 60947-4-3)**

Class 2

<b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 600 Y/347 V</b>	0 A
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**AMBIENT OPERATING TEMPERATURE - MAX**

55 °C

<b>RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ</b>	0.25 kW
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**CONNECTION TO SMARTWIRE-DT**

No

**NUMBER OF COMMAND POSITIONS**

0

<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	2.6 W
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<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	Screw connection
<b>ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT</b>	Screw connection
<b>POWER CONSUMPTION (SEALING) AT DC</b>	3 W
<b>RATED CONTROL SUPPLY VOLTAGE (US) ATDC - MAX</b>	24 V
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to
<b>CLASS</b>	CLASS 10 A
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the instruction leaflet (IL) is observed.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	1.9 W
<b>ACTUATING VOLTAGE</b>	24 V DC
<b>VOLTAGE TYPE</b>	DC
<b>SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)</b>	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
<b>OVERLOAD RELEASE CURRENT SETTING - MIN</b>	1 A
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	5.7 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>RATED OPERATIONAL CURRENT (IE)</b>	1.5 A
<b>SUITABLE FOR</b>	Also motors with efficiency class IE3
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 V</b>	50000 A
<b>POWER CONSUMPTION</b>	2.6 W
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL</b>	Meets the product standard's requirements

**HEAT/FIRE BY INTERNAL ELECT. EFFECTS**

Meets the product standard's requirements.

**OVERLOAD RELEASE CURRENT SETTING - MAX**

1.6 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  
Eaton will provide heat dissipation data for the devi**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**

24.8 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**

1.6 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)

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## Catalogs

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Declarations of conformity

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Drawings

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eCAD model

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Installation instructions

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Installation videos

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mCAD model

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Wiring diagrams

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102968



Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power—today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy and helping to solve the world's most urgent power management challenges.

