

# Specifications



## Eaton 121761

Eaton Moeller® series MSC-DEA DOL starter,  
380 V 400 V 415 V: 15 kW, 100 kA, Ir: 8 - 32 A,  
Connection to SmartWire-DT: yes, 24 V DC,  
DC Voltage, Screw terminals

### General Specifications

<b>PRODUCT NAME</b>	Eaton Moeller® series MSC-DEA DOL starter
<b>CATALOG NUMBER</b>	121761
<b>PRODUCT LENGTH/DEPTH</b>	128 mm
<b>PRODUCT HEIGHT</b>	242 mm
<b>PRODUCT WIDTH</b>	45 mm
<b>PRODUCT WEIGHT</b>	1.125 kg
<b>CERTIFICATIONS</b>	IEC/EN 60947-4-1 VDE 0660
<b>EAN</b>	4015081195718
<b>MODEL CODE</b>	MSC-DEA-32-M32(24VDC)

## Features & Functions

<b>FITTED WITH:</b>	Short-circuit release
<b>FUNCTIONS</b>	Temperature compensated overload protection

## General

<b>CLASS</b>	Adjustable
<b>CONNECTION</b>	Screw terminals
<b>CONNECTION TO SMARTWIRE-DT</b>	In conjunction with PKE-SWD-32 SmartWire DT PKE module Yes
<b>COORDINATION TYPE</b>	2
<b>CURRENT FLOW TIMES - MIN</b>	900 (Class 15) AC-4 cycle operation, Main conducting paths 700 (Class 10) AC-4 cycle operation, Main conducting paths Note: Going below the minimum current flow time can cause overheating of the load (motor). For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. 500 (Class 5) AC-4 cycle operation, Main conducting paths 1000 (Class 20) AC-4 cycle operation, Main conducting paths
<b>CUT-OUT PERIODS - MIN</b>	≤ 500 ms, main conducting paths, AC-4 cycle operation
<b>DEGREE OF PROTECTION</b>	IP20 NEMA Other
<b>MODEL</b>	IEC starter
<b>MOUNTING METHOD</b>	DIN rail
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	1
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	0
<b>OVERLOAD RELEASE CURRENT SETTING - MIN</b>	8 A
<b>OVERLOAD RELEASE CURRENT SETTING - MAX</b>	32 A
<b>OVERVOLTAGE CATEGORY</b>	III
<b>POLLUTION DEGREE</b>	3
<b>PROTOCOL</b>	Other bus systems

## Climatic environmental conditions

**AMBIENT OPERATING  
TEMPERATURE - MIN** -25 °C

**AMBIENT OPERATING  
TEMPERATURE - MAX** 55 °C

## 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 RELEASE  
(IRM) - MAX** 496 A

**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

## Electrical rating

**RATED OPERATIONAL  
CURRENT (IE)** 29.3 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
380 V, 400 V, 415 V** 32 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
500 V** 28.9 A

**RATED OPERATIONAL  
POWER AT AC-3, 220/230  
V, 50 HZ** 7.5 kW

**RATED OPERATIONAL  
POWER AT AC-3, 380/400  
V, 50 HZ** 15 kW

**RATED OPERATIONAL  
POWER AT AC-3, 500 V, 50  
HZ** 18.5 kW

**RATED OPERATIONAL  
VOLTAGE** 230 - 415 V AC

## Magnet system

**POWER CONSUMPTION  
(SEALING) AT DC** 0.86 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** 24 V

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**VOLTAGE (US) AT DC -  
MAX**

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## Design verification

<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	29.1 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	9.7 W
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	32 A
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	0.86 W
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<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 HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.

## Resources

BROCHURES	<a href="#">eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf</a>
	<a href="#">eaton-msfs-motor-starter-feeder-system-brochure-br034005en-en-us.pdf</a>
CATALOGUES	<a href="#">Product Range Catalog Switching and protecting motors</a>
	<a href="#">eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf</a>
DECLARATIONS OF CONFORMITY	<a href="#">eaton-dol-starter-declaration-of-conformity-eu250679en.pdf</a>
	<a href="#">eaton-dol-starter-declaration-of-conformity-uk251162en.pdf</a>
DRAWINGS	<a href="#">eaton-manual-motor-starters-dol-starter-msc-d-dimensions.eps</a>
	<a href="#">eaton-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps</a>
	<a href="#">eaton-general-ie-ready-dilm-contactor-standards.eps</a>
	<a href="#">eaton-manual-motor-starters-dol-starter-msc-d-3d-drawing-002.eps</a>
ECAD MODEL	<a href="#">ETN.121761.edz</a>
INSTALLATION INSTRUCTIONS	<a href="#">IL03402010Z</a>
INSTALLATION VIDEOS	<a href="#">WIN-WIN with push-in technology</a>
MCAD MODEL	<a href="#">DA-CD-msc_de_bg2</a>
	<a href="#">DA-CS-msc_de_bg2</a>
SALES NOTES	<a href="#">eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf</a>
WIRING DIAGRAMS	<a href="#">eaton-manual-motor-starters-msc-d-dol-starter-wiring-diagram.eps</a>

<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

<b>PROJECT NAME:</b>
<b>PROJECT NUMBER:</b>
<b>PREPARED BY:</b>
<b>DATE:</b>



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