Specifications

Photo is representative

Eaton 121755

Eaton Moeller® series MSC-DEA DOL starter, 380 V 400 V 415 V: 3 kW, 100 kA, Ir: 3 - 12 A, Connection to SmartWire-DT: yes, 24 V DC, DC

General specifications	
PRODUCT NAME	Eaton Moeller® series MSC-DEA DOL starter
CATALOG NUMBER	121755
EAN	4015081195657
MODEL CODE	MSC-DEA-12-M7(24VDC)
PRODUCT LENGTH/DEPTH	102 mm
PRODUCT HEIGHT	198 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.78 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	In conjunction with PKE-SWD-32 SmartWire DT PKE module Yes
COORDINATION TYPE	1
CURRENT FLOW TIMES - MIN	1000 (Class 20) AC-4 cycle operation, Main conducting paths 700 (Class 10) AC-4 cycle operation, Main conducting paths 900 (Class 15) 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
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)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
OVERLOAD RELEASE CURRENT SETTING - MIN	1 A
OVERLOAD RELEASE CURRENT SETTING - MAX	4 A
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PROTOCOL	Other bus systems

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

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)	6.6 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	7 A
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	1.5 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	3 kW
RATED OPERATIONAL VOLTAGE	230 - 415 V AC

Short-circuit rating

RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 V	100 A
SHORT-CIRCUIT RELEASE (IRM) - MAX	186 A

Magnet system

POWER CONSUMPTION (SEALING) AT DC	2.6 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 VOLTAGE (US) AT DC - MAX	24 V

Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	1.3 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.4 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	7 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.6 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.

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	eaton-dol-starter-declaration-of-conformity-eu250679en.pdf eaton-dol-starter-declaration-of-conformity-uk251162en.pdf
DRAWINGS	eaton-manual-motor-starters-starter-msc-d-dol-starter-dimensions-002.eps eaton-manual-motor-starters-starter-msc-d-dol-starter-3d-drawing.eps eaton-general-ie-ready-dilm-contactor-standards.eps eaton-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps
ECAD MODEL	ETN.121755.edz
INSTALLATION INSTRUCTIONS	IL034038ZU
INSTALLATION VIDEOS	WIN-WIN with push-in technology
MCAD MODEL	DA-CD-msc_de_bg1 DA-CS-msc_de_bg1
SALES NOTES	eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf
WIRING DIAGRAMS	eaton-manual-motor-starters-msc-d-dol-starter-wiring-diagram.eps

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.

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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