Specifications

Photo is representative

Eaton 121740

Eaton Moeller® series MSC-DE DOL starter, 380 V 400 V 415 V: 3 kW, Iq= 100 kA, Ir= 3 - 12 A, 24 V DC, DC voltage

General specifications	
PRODUCT NAME	Eaton Moeller® series MSC-DE DOL starter
CATALOG NUMBER	121740
MODEL CODE	MSC-DE-12-M7(24VDC)
EAN	4015081195503
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
GLOBAL CATALOG	121740

Powering Business Worldwide

Product specifications

TYPE	Starter with electronic trip unit
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.
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	Meets the product

Resources

BROCHURES	eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf eaton-msfs-motor-starter-feeder-system-brochure-br034005en-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-eu250678en.pdf eaton-dol-starter-declaration-of-conformity-uk251161en.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-manual-motor-starters-mounting-msc-d-dol-starter-3d-drawing.eps eaton-general-ie-ready-dilm-contactor-standards.eps
ECAD MODEL	ETN.121740.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-device-msc-d-dol-starter-wiring-diagram.eps

CREEPAGE DISTANCES	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 INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Short-circuit release
POLLUTION DEGREE	3
CLASS	Adjustable
CONNECTION TO SMARTWIRE-DT	No
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
MODEL	IEC starter
ALTITUDE	Max. 2000 m
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
VOLTAGE TYPE	DC
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	100 kA at 380 – 400 V
MOUNTING METHOD	DIN rail
CURRENT FLOW TIMES - MIN	700 (Class 10) AC-4 cycle operation, Main conducting paths For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. 1000 (Class 20) AC-4 cycle operation, Main conducting paths Note: Going below the minimum current flow

	time can cause overheating of the load (motor). 500 (Class 5) AC-4 cycle operation, Main conducting paths 900 (Class 15) AC-4 cycle operation, Main conducting paths
OVERVOLTAGE CATEGORY	III
CONNECTION	Screw terminals
CUT-OUT PERIODS - MIN	≤ 500 ms, main conducting paths, AC-4 cycle operation
FUNCTIONS	Temperature compensated overload protection
OVERLOAD RELEASE CURRENT SETTING - MIN	3 A
POWER CONSUMPTION (SEALING) AT DC	2.6 W
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 230 V	0 A
RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 480 Y/277 V	0 A
RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 600 Y/347 V	0 A
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
RATED OPERATIONAL CURRENT (IE) AT AC-3,	7 A

380 V, 400 V, 415 V	
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	200 A, max. Fuse, SCCR (UL/CSA) 150 A, max. CB, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	100 A, max. CB, SCCR (UL/CSA) 100 kA, Fuse, SCCR (UL/CSA) 125 A, Class J/CC, max. Fuse, SCCR (UL/CSA) 65 kA, CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	100 kA, Fuse, SCCR (UL/CSA) 125 A, Class J/CC, max. Fuse, SCCR (UL/CSA)
RATED OPERATIONAL CURRENT (IE)	6.6 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	7 A
RATED OPERATIONAL VOLTAGE	230 - 415 V AC
SUITABLE FOR	Also motors with efficiency class IE3
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
COORDINATION TYPE	1
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
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF COMMAND POSITIONS	0
NUMBER OF PILOT LIGHTS	0
OVERLOAD RELEASE CURRENT SETTING - MAX	12 A
RATED OPERATIONAL	1.5 kW

POWER AT AC-3, 220/230 V, 50 HZ	
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	3 kW
RATED POWER AT 460 V, 60 HZ, 3-PHASE	0 kW
RATED POWER AT 575 V, 60 HZ, 3-PHASE	0 kW
SHORT-CIRCUIT RELEASE (IRM) - MAX	186 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.6 W
COORDINATION CLASS (IEC 60947-4-3)	Class 1
DEGREE OF PROTECTION	IP20 NEMA Other
ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT	Screw connection
ACTUATING VOLTAGE	24 V DC
POWER CONSUMPTION	3 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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