



MSC MOTOR STARTERS COMBINATIONS
102973


Overview


Specifications


Resources


How to buy

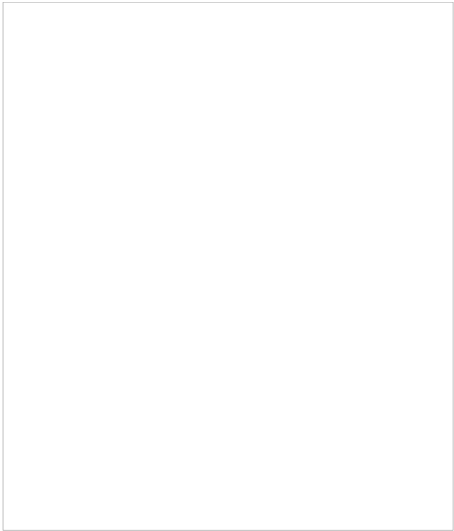


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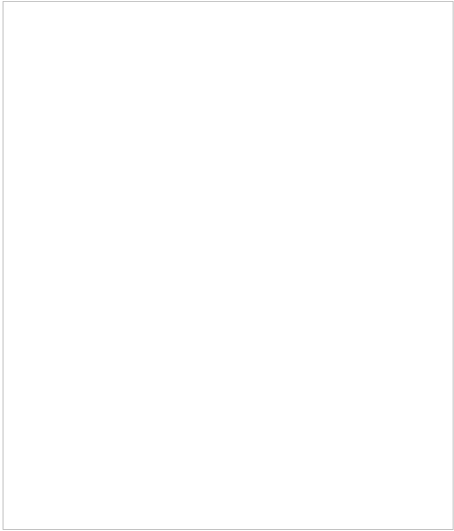


Photo is representative

102973

Eaton Moeller® series MSC-D DOL starter, 380 V 4
A, 24 VDC, DC voltage MSC-D-10-M9(24VDC)/BB



 [Configurator Motor starter combinations](#)

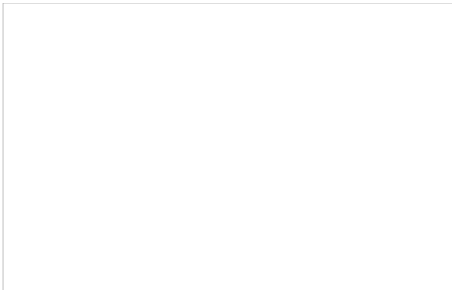


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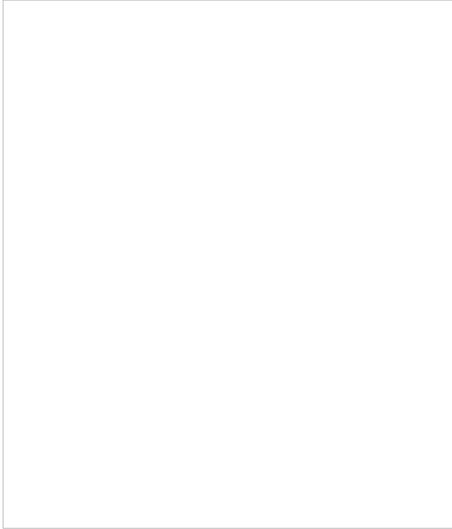


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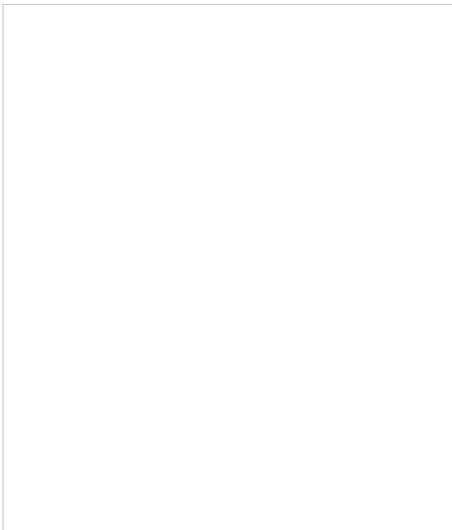


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Designed to work together

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, 4 pole, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, MSC

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GENERAL SPECIFICATIONS

General specifications	>	PRODUCTNAME	Eaton Moeller® series MSC-D DOL starter
		CATALOG NUMBER	102973
Product specifications	>	MODEL CODE	MSC-D-10-M9(24VDC)/BBA
		EAN	4015081028122
		PRODUCT LENGTH/DEPTH	154 mm
		PRODUCT HEIGHT	200 mm
		PRODUCT WIDTH	45 mm
		PRODUCT WEIGHT	0.93 kg

CERTIFICATIONS

UL60947-4-1A
CE
CSA Class No.: 3211-04
CSA-C22.2 No. 14 (on request)
IEC/EN 60947-4-1
UL 508 (on request)
CSA
CSA File No.: 012528
CSA-C22.2 No. 14-10
UL
UL Category Control No.: NKJH
UL File No.: E123500

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	9 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specification must be observed.
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	4 kW
RATED OPERATIONAL VOLTAGE	230 - 415 V AC
RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 480 Y/277 V	0 A
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
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
RATED POWER AT 575 V, 60 HZ, 3-PHASE	0 kW
RATED POWER AT 460 V, 60 HZ, 3-PHASE	0 kW
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
FITTED WITH:	Short-circuit release
NUMBER OF PILOT LIGHTS	0
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
COORDINATION TYPE	1
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
COORDINATION CLASS (IEC 60947-4-3)	Class 1
RATED CONDITIONAL SHORT-CIRCUIT CURRENT, TYPE 1, 600 Y/347 V	0 A
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	2.2 kW
CONNECTION TO SMARTWIRE-DT	No
NUMBER OF COMMAND POSITIONS	0
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.6 W

ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT	Screw connection
POWER CONSUMPTION (SEALING) AT DC	3 W
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	24 V
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
CLASS	CLASS 10 A
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the inf instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	3.1 W
ACTUATING VOLTAGE	24 V DC
VOLTAGE TYPE	DC
SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
OVERLOAD RELEASE CURRENT SETTING - MIN	6.3 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	9.3 W
HEAT DISSIPATION CAPACITY PDISS	0 W
RATED OPERATIONAL CURRENT (IE)	8.5 A
SUITABLE FOR	Also motors with efficiency class IE3
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 V	100 A
POWER CONSUMPTION	2.6 W
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	Meets the product standard's requirements.

HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
OVERLOAD RELEASE CURRENT SETTING - MAX	10 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 device.
FUNCTIONS	Temperature compensated overload protection
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 230 V	0 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	155 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	9 A
MODEL	Direct starter
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
ALTITUDE	Max. 2000 m
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)

Catalogs

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

Wiring diagrams

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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.

