## Specifications



## Eaton 167824

Eaton Moeller® series MSC-DEA DOL starter, Ir: 3 - 12 A, Connection to SmartWire-DT: yes, 24 V DC, DC Voltage

General specification	าร
PRODUCT NAME	Eaton Moeller® series MSC-DEA DOL starter
CATALOG NUMBER	167824
MODEL CODE	MSC-DEA-12-M17- SP(24VDC)
EAN	4015081644018
PRODUCT LENGTH/DEPTH	145 mm
PRODUCT HEIGHT	272 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	1.274 kg
CERTIFICATIONS	VDE 0660 CSA Class No.: 3211-08 UL CSA UL Category Control No.: NKJH UL60947-4-1A CSA File No.: 012528 CSA-C22.2 No. 14-10 UL File No.: E123500 CE IEC/EN 60947-4-1
GLOBAL CATALOG	167824



Product specifications	
ТҮРЕ	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	Does not apply, since the

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
DRAWINGS	eaton-manual-motor- starters-msc-d-dol-starter- dimensions.eps  eaton-manual-motor- starters-mounting-msc-d- dol-starter-3d-drawing.eps  eaton-manual-motor- starters-msc-d-dol-starter- 3d-drawing.eps
ECAD MODEL	ETN.167824.edz
INSTALLATION INSTRUCTIONS	<u>IL03402052Z</u>
INSTALLATION VIDEOS	WIN-WIN with push-in technology
MCAD MODEL	DA-CS-msc de sp  DA-CD-msc de sp
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

PROTECTION OF ASSEMBLIES	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.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
FITTED WITH:	Short-circuit release
POLLUTION DEGREE	3
CLASS	Adjustable
CLASS  CONNECTION TO SMARTWIRE-DT	Adjustable  Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module
CONNECTION TO	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE
CONNECTION TO SMARTWIRE-DT  RATED IMPULSE WITHSTAND VOLTAGE	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module
CONNECTION TO SMARTWIRE-DT RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module  6000 V AC
CONNECTION TO SMARTWIRE-DT  RATED IMPULSE WITHSTAND VOLTAGE (UIMP)  MODEL	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module  6000 V AC  UL Type E starter
CONNECTION TO SMARTWIRE-DT  RATED IMPULSE WITHSTAND VOLTAGE (UIMP) MODEL ALTITUDE ELECTRICAL CONNECTION TYPE OF	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module  6000 V AC  UL Type E starter  Max. 2000 m
CONNECTION TO SMARTWIRE-DT  RATED IMPULSE WITHSTAND VOLTAGE (UIMP)  MODEL ALTITUDE  ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module  6000 V AC  UL Type E starter  Max. 2000 m  Screw connection
CONNECTION TO SMARTWIRE-DT  RATED IMPULSE WITHSTAND VOLTAGE (UIMP)  MODEL ALTITUDE ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT  VOLTAGE TYPE	Yes In conjunction with PKE- SWD-32 SmartWire DT PKE module  6000 V AC  UL Type E starter  Max. 2000 m  Screw connection  DC

	overheating of the load (motor). 900 (Class 15) 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 cutout periods. 1000 (Class 20) 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	0.86 W
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 230 V	0 A
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 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	0 V

HZ - MAX

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN  RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX  RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN  RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V  PROTOCOL  SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  18 kA, 240 V, SCCR (UL/CSA) 18 kA, 480 Y/277 V, SCCR (UL/CSA)
VOLTAGE (US) AT DC - MAX  RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN  RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V  PROTOCOL  SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  18 kA, 240 V, SCCR (UL/CSA)  18 kA, 480 Y/277 V, SCCR (UL/CSA)
VOLTAGE (US) AT DC - MIN  RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V  PROTOCOL  SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  12 A  4600, AC operated (UL/CSA) P300, DC operated (UL/CSA)  16.7 A  12 A  12 A  16.7 A  12 A  16.7 A  12 A  18 KA, 240 V, SCCR (UL/CSA) 18 KA, 240 V, SCCR (UL/CSA) 18 KA, 480 Y/277 V, SCCR (UL/CSA)
CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V  PROTOCOL  SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  12 A  15 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)  A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)  16.7 A  12 A  12 A  13 A  15 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL
SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  15 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)  A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)  16.7 A  12 A  12 A  12 A  18 kA, 240 V, SCCR (UL/CSA) 18 kA, 240 V, SCCR (UL/CSA) 18 kA, 480 Y/277 V, SCCR (UL/CSA)
(AUXILIARY CONTACTS, GENERAL USE)  SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  SHORT-CIRCUIT CURRENT RATING (TYPE E)  15 A, 600 V AC, (UL/CSA)  A600, AC operated (UL/CSA)  P300, DC operated (UL/CSA)
(UL/CSA) P300, DC operated (UL/CSA)  RATED OPERATIONAL CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  18 kA, 240 V, SCCR (UL/CSA)  18 kA, 480 Y/277 V, SCCR (UL/CSA)
CURRENT (IE)  RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  18 kA, 240 V, SCCR (UL/CSA) 18 kA, 480 Y/277 V, SCCR (UL/CSA)
CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)  RATED OPERATIONAL VOLTAGE  18 kA, 240 V, SCCR (UL/CSA)  18 kA, 480 Y/277 V, SCCR (UL/CSA)
208 - 600 V AC    SHORT-CIRCUIT CURRENT RATING (TYPE E)   18 kA, 240 V, SCCR (UL/CSA)   18 kA, 480 Y/277 V, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT (UL/CSA)  RATING (TYPE E) 18 kA, 480 Y/277 V, SCCR (UL/CSA)
AMBIENT OPERATING TEMPERATURE - MAX  55 °C
AMBIENT OPERATING TEMPERATURE - MIN
ASSIGNED MOTOR POWER AT 200/208 V, 60 3 HP HZ, 3-PHASE
ASSIGNED MOTOR POWER AT 230/240 V, 60 3 HP HZ, 3-PHASE
ASSIGNED MOTOR POWER AT 460/480 V, 60 7.5 HP HZ, 3-PHASE
EQUIPMENT HEAT
DISSIPATION, CURRENT- 4.2 W DEPENDENT PVID

HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID	1.4 W
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF COMMAND POSITIONS	0
NUMBER OF PILOT LIGHTS	0
OVERLOAD RELEASE CURRENT SETTING - MAX	12 A
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	3 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	7.5 kW
RATED POWER AT 460 V, 60 HZ, 3-PHASE	5.52 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	0.86 W
COORDINATION CLASS (IEC 60947-4-3)	Class 2
DEGREE OF PROTECTION	IP20 NEMA Other
ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT	Screw connection
ACTUATING VOLTAGE	24 V DC
POWER CONSUMPTION	0.9 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	



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