Eaton 176887

Eaton Moeller® series LS Position switch, Rounded plunger, Basic device, expandable, 1 N/O, 1 NC, Cage Clamp, Yellow, Insulated material, -40 - +70 °C, EN 50047 Form B, version A

PRODUCT NAME	Eaton Moeller® series LS Position switch
CATALOG NUMBER	176887
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	34 mm
PRODUCT WIDTH	31 mm
PRODUCT WEIGHT	0.051 kg
CERTIFICATIONS	IEC/EN 60947
CATALOG NOTES	• Contacts with safety function, by positive opening to IEC/EN 60947-5-1 • Contains a silicone seal to increase resistance to ozone, detergents and disinfectants.

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TYPE	• Position switch • Safety position switch
FEATURES	Forced opening Positive opening Expandable
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	Does not apply, since the

DECLARATIONS OF CONFORMITY	DA-DC-00004160.pdf DA-DC-00004133.pdf
	IL053001ZU
	eaton-position-switches-contact-ls-wiring-diagram.eps
	eaton-position-switches-diagram-ls-contact-travel-diagram-009.eps
	eaton-position-switches-plunger-ls-dimensions-004.eps eaton-position-switches-ls-3d-drawing-009.eps

IMPACT	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.
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.
ELECTRIC CONNECTION TYPE	Cable entry metrical
ENCLOSURE MATERIAL FINISHING	Other
OPERATING FREQUENCY	6000 Operations/h
POLLUTION DEGREE	3
ACTUATOR ALIGNMENT	Roller cam straight
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
ENCLOSURE MATERIAL	Insulated material Plastic
ENCLOSURE TYPE	Cuboid
RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V	0.6 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 125 V	0.8 A

RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V	0.3 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	3 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	6 A
SENSOR HEIGHT	61 mm
SENSOR LENGTH	33.5 mm
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
WIDTH SENSOR	31 mm
PRODUCT CATEGORY	Rounded plunger
ACTION	2020122120328-Mechanical Limit Switches.xlsm-Data
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V AC
ENCLOSURE COLOR	Yellow Cover
ACTUATING FORCE AT BEGINNING/END OF STROKE	1.0 N/8.0 N
EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
ACTUATOR TYPE	Plunger
ACTUATING TORQUE OF ROTARY DRIVES	0.2 Nm
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-40 °C
DIAMETER SENSOR	0 mm
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.17 W
NUMBER OF CONTACTS	0

(CHANGE-OVER CONTACTS)	
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF SAFETY AUXILIARY CONTACTS	1
RATED INSULATION VOLTAGE (UI)	400 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 125 V	6 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	6 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 24 V	6 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	4 A
DESIGN	EN 50047 Form B
MOUNTING POSITION	As required
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	1 kA
OVERVOLTAGE CATEGORY	III
CONTROL CIRCUIT RELIABILITY	1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA) 1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA)
CONNECTION TYPE	Cage Clamp
TEMPERATURE RESISTANCE	100 °C, Contact temperature of roller head
DEGREE OF PROTECTION	IP65 NEMA Other
INTERFACE TYPE	None
SWITCH FUNCTION TYPE	Slow-action switch
LIFESPAN	8,000,000 mechanical Operations

REPETITION ACCURACY	0.15 mm (Contacts/switching capacity)
SHOCK RESISTANCE	25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms
SUPPLY FREQUENCY	Max. 400 Hz, Contacts
SUITABLE FOR	Safety functions
OPERATING SPEED	For angle of actuation α = 0°/30° Max. 1/0.5 m/s (with DIN cam, mechanical actuation)
SHORT-CIRCUIT PROTECTION RATING	Max. 6 A gG/gL, Fuse, Contacts
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.5 - 1.5) mm^2
TERMINAL CAPACITY (SOLID)	1 x (0.5 - 2.5) mm^2

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	

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