



Safety position switch, LS(M)-..., Rounded plunger, Basic device, expandable, 1 N/O, 1 NC, EN 50047 Form B, Snap-action contact - Yes, Yellow, Metal, Cage Clamp, -25 - +70 °C

Part no. LSM-11S
266140
EL Number 4356135
(Norway)

General specifications		
Product name		Eaton Moeller® series LSM Safety position switch
Part no.		LSM-11S
EAN		4015082661403
Product Length/Depth		33.5 millimetre
Product height		76.5 millimetre
Product width		31 millimetre
Product weight		0.147 kilogram
Compliances		CE Marked
Certifications		CSA File No.: 012528 CSA Class No.: 3211-03 CE IEC/EN 60947-5 UL Category Control No.: NKCR CSA CSA Std. C22.2 No. 14 UL UL File No.: E29184 EN 60947-5 IEC 60947-5 CSA-C22.2 No. 14 UL 508 IEC/EN 60947
Product Tradename		LSM
Product Type		Safety position switch
Product Sub Type		None
Features & Functions		
Design		EN 50047 Form B
Electric connection type		Cable entry metrical
Enclosure color		Yellow Cover
Enclosure material		Metal
Features		Snap-action contact Expandable Positive opening Forced opening
Switch function type		Quick-break switch
General information		
Connection type		Cage Clamp
Degree of protection		NEMA Other IP66/IP67
Lifespan		8,000,000 mechanical Operations
Operating frequency		6000 Operations/h
Overvoltage category		III
Pollution degree		3
Product category		Rounded plunger
Rated impulse withstand voltage (Uimp)		4000 V AC
Repetition accuracy		0.15 mm (Contacts/switching capacity)
Suitable for		Safety functions
Type		Safety position switch
Ambient conditions, mechanical		
Mounting position		As required
Shock resistance		25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms
Temperature resistance		100 °C, Contact temperature of roller head

Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		70 °C
Climatic proofing		Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Terminal capacities		
Terminal capacity (flexible with ferrule)		1 x (0.5 - 1.5) mm²
Terminal capacity (solid)		1 x (0.5 - 2.5) mm²
Electrical rating		
Rated conditional short-circuit current (I _q)		1 kA
Rated insulation voltage (U _i)		400 V
Rated operational current (I _e) at AC-15, 220 V, 230 V, 240 V		6 A
Rated operational current (I _e) at AC-15, 24 V		6 A
Rated operational current (I _e) at AC-15, 380 V, 400 V, 415 V		4 A
Rated operational current (I _e) at DC-13, 110 V		0.6 A
Rated operational current (I _e) at DC-13, 125 V		0.8 A
Rated operational current (I _e) at DC-13, 220 V, 230 V		0.3 A
Rated operational current (I _e) at DC-13, 24 V		3 A
Short-circuit protection rating		Max. 6 A gG/gL, Fuse, Contacts
Supply frequency		Max. 400 Hz, Contacts
Actuator		
Actuating force at beginning/end of stroke		1.0 N/8.0 N
Actuating torque of rotary drives		0.2 N-m
Actuator type		Plunger
Operating speed		For angle of actuation $\alpha = 0^\circ/30^\circ$ Max. 1/0.5 m/s (with DIN cam, mechanical actuation)
Contacts		
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)
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		1
Safety		
Explosion safety category for gas		None
Explosion safety category for dust		None
Design verification		
Equipment heat dissipation, current-dependent P _{vid}		0 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent P _{vid}		0.17 W
Rated operational current for specified heat dissipation (I _n)		6 A
Static heat dissipation, non-current-dependent P _{vs}		0 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.
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.

Technical data ETIM 9.0

Sensors (EG000026) / End switch (EC000030)			
Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Safety-related mechanical switch (sensor technology) / Safety position switch (Type 1) (ecI@ss13-27-27-26-01 [AKE640018])			
Width sensor	mm	31	
Diameter sensor	mm	0	
Height of sensor	mm	61	
Length of sensor	mm	33.5	
Rated operation current I _e at AC-15, 24 V	A	6	
Rated operation current I _e at AC-15, 125 V	A	6	
Rated operation current I _e at AC-15, 230 V	A	6	
Rated operation current I _e at DC-13, 24 V	A	3	
Rated operation current I _e at DC-13, 125 V	A	0.8	
Rated operation current I _e at DC-13, 230 V	A	0.3	
Switching function		Quick-break switch	
Switching function latching		No	
Output electronic		No	
Forced opening		Yes	
Number of safety auxiliary contacts		0	
Number of contacts as normally closed contact		1	
Number of contacts as normally open contact		1	
Number of contacts as change-over contact		0	
Type of interface		None	
Type of interface for safety communication		None	
Construction type housing		Cuboid	
Housing material		Metal	
Coating housing		Other	
Type of control element		Plunger	
Alignment of the control element		Roller cam straight	
Type of electric connection		Cable entry metrical	
With status indication		No	
Suitable for safety functions		Yes	
Explosion safety category for gas		None	
Explosion safety category for dust		None	
Ambient temperature during operating	°C	-25 - 70	
Degree of protection (IP)		IP66/IP67	
Degree of protection (NEMA)		Other	