

Position switch, Adjustable roller lever, Complete unit, 1 N/O, 1 NC, Snap-action contact - Yes, Screw terminal, Yellow, Insulated material, -25 - +70 °C



Part no. LS-S11S/RLA
106803
EL Number 4315216
(Norway)

General specifications		
Product name		Eaton Moeller® series LS Position switch
Part no.		LS-S11S/RLA
EAN		4015081065707
Product Length/Depth		33.5 millimetre
Product height		120 millimetre
Product width		31 millimetre
Product weight		0.085 kilogram
Certifications		CSA File No.: 012528 CSA CSA-C22.2 No. 14 IEC/EN 60947-5 UL UL File No.: E29184 CE IEC/EN 60947 CSA Class No.: 3211-03 UL 508 UL Category Control No.: NKCR
Product Tradename		LS
Product Type		Position switch
Product Sub Type		None
Catalog Notes		Contacts with safety function, by positive opening to IEC/EN 60947-5-1 The operating head can be rotated 90° to enable adaptation to the specified approach direction
Features & Functions		
Electric connection type		Cable entry metrical
Enclosure color		Yellow Cover
Enclosure material		Polyamide PA66-GF25 Insulated material Plastic
Features		Snap-action contact Positive opening Forced opening
Switch function type		Quick-break switch
General information		
Connection type		Screw terminal
Degree of protection		IP66/IP67 NEMA Other
Lifespan		8,000,000 mechanical Operations
Operating frequency		6000 Operations/h
Overvoltage category		III
Pollution degree		3
Product category		Adjustable roller lever
Rated impulse withstand voltage (Uimp)		4000 V AC
Repetition accuracy		0.15 mm (Contacts/switching capacity)
Suitable for		Safety functions
Type		Position switch Safety position switch
Ambient conditions, mechanical		
Mounting position		As required
Shock resistance		25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms
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 (Iq)			1 kA
Rated insulation voltage (Ui)			400 V
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
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
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			Adjustable roller lever
Operating speed			For angle of actuation $\alpha = 30^\circ$, L = 125 mm Max. 1.5 m/s (with DIN cam, mechanical actuation)
Contacts			
Control circuit reliability			1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA) 1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 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 Pvid			0 W
Heat dissipation capacity Pdis			0 W
Heat dissipation per pole, current-dependent Pvid			0.17 W
Rated operational current for specified heat dissipation (In)			6 A
Static heat dissipation, non-current-dependent Pvs			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) (ecl@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		1
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		Plastic
Coating housing		Other
Type of control element		Adjustable roller lever
Alignment of the control element		Roller cam crossed
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