

Safety position switch, LS(M)-..., Actuating rod, Complete unit, 1 N/0, 1 NC, Snap-action contact - Yes, Yellow, Metal, Cage Clamp, -25 - +70 $^{\circ}$ C

Part no. LSM-11S/RR

266141

EL Number

4356136

(Norway)	
General specifications	
Product name	Eaton Moeller® series LSM Safety position switch
Part no.	LSM-11S/RR
EAN	4015082661410
Product Length/Depth	33.5 millimetre
Product height	140 millimetre
Product width	31 millimetre
Product weight	0.196 kilogram
Certifications	CSA-C22.2 No. 14 CE IEC/EN 60947 IEC/EN 60947-5 UL File No.: E29184 CSA File No.: 012528 UL UL 508 UL Category Control No.: NKCR CSA CSA Class No.: 3211-03
Product Tradename	LSM
Product Type	Safety position switch
Product Sub Type	None
Catalog Notes	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	Metal
Features	Snap-action contact 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	Actuating rod
Rated impulse withstand voltage (Uimp)	4000 V AC
Repetition accuracy	0.15 mm (Contacts/switching capacity)
Suitable for	Safety functions
Туре	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, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Terminal capacities	
Terminal capacity (flexible with ferrule)	1 x (0.5 - 1.5) mm ²
Terminal capacity (solid)	1 x (0.5 - 2.5) mm ²
Electrical rating	
Rated conditional short-circuit current (Iq)	1 kA
Rated insulation voltage (Ui)	400 V
Rated operational current (le) at AC-15, 220 V, 230 V, 240 V	6 A
Rated operational current (le) at AC-15, 24 V	6 A
Rated operational current (le) 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	Actuating rod
Operating speed	L = 130 mm
oporating appear	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 Pdiss	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) (ect@ss13-77-77-76-01 [AKF640018])

Width sensor mm 13 Dameter sensor mm 6 Height of sensor mm 3.5 Rated operation current loat AC-15, 24 V A 6 Rated operation current loat AC-15, 22 V A 6 Rated operation current loat DC-13, 24 V A 6 Rated operation current loat DC-13, 24 V A 6 Rated operation current loat DC-13, 25 V A 8 Rated operation current loat DC-13, 25 V A 8 Rated operation current loat DC-13, 25 V A 8 Rated operation current loat DC-13, 25 V A A Rated operation current loat DC-13, 25 V A A Switching function latching Molecter Scale S	switch (Type 1) (ecl@ss13-27-27-26-01 [AKE640018])	,, ,		
Height of sensor mm 31 Length of sensor mm 33.5 Rated operation current le at AC-15, 24 V A 6 Rated operation current le at AC-15, 125 V A 6 Rated operation current le at AC-15, 125 V A 6 Rated operation current le at DC-13, 24 V A 8 Rated operation current le at DC-13, 125 V A 8 Rated operation current le at DC-13, 125 V A 8 Rated operation current le at DC-13, 125 V A 8 Rated operation current le at DC-13, 125 V A 8 Rated operation current le at DC-13, 125 V A 9 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Switching function Due Dc-13, 125 V 0 0 Will be durition Due Dc-13, 125 V 0 0 Number of contacts as normally open contact Due	Width sensor		mm	31
Length of sensor mm 33.5 Rated operation current le at AC-15, 24 V A 6 Rated operation current le at AC-15, 25 V A 6 Rated operation current le at AC-15, 28 V A 3 Rated operation current le at DC-13, 24 V A 3 Rated operation current le at DC-13, 28 V A 0 Rated operation current le at DC-13, 28 V A 0 Switching function B 0 0 Switching function B No 0 Switching function B No 0 Switching function latching B No 0 Output electronic B No 0 Forced opening B 0 0 Number of contacts as normally closed contact B 0 0 Number of contacts as normally closed contact B 0 0 Number of contacts as change-over contact B 0 0 None of controllegement of penalty penalty of control element B 0 0 <	Diameter sensor		mm	0
Rated operation current le at AC-15, 24 V A 6 Rated operation current le at AC-15, 25 V A 6 Rated operation current le at AC-15, 230 V A 6 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 250 V A 0 Switching function A 0 0 Switching function latching A 0 0 Output electronic B 0 0 Number of safety auxillary contacts B 0 0 Number of contacts as normally closed contact B 0 0 Number of contacts as normally open contact B 0 0 Number of contacts as normally open contact B 0 0 Type of interface B 0 0 Type of interface for safety communication B 0 0 Cotting housing B 0 0 Cotting housing B 0 0 <	Height of sensor		mm	61
Rated operation current le at AC-15, 125 V A 6 Rated operation current le at DC-13, 24 V A 3 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Switching function Build-break switch 0 Switching function Build-break switch No Output electronic Build-break switch Forced opening No No Number of contacts as normally closed contact Build-break switch No Number of contacts as normally open contact Build-break switch No Number of contacts as change-over contact Build-break switch No Number of contacts as change-over contact Build-break switch No Type of interface for safety communication Build-break switch No Construction type housing Build-break switch No Construction type of interface for safety communication Build-break switch No Construction type of interface for safety communication Build-break switch Ro Construction type of interface for safety contact	Length of sensor		mm	33.5
Rated operation current le at AC-15, 230 V A 3 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function B A 0 Switching function latching No No Output electronic B No No Forced opening Yes No Number of contacts as normally closed contact Yes 1 Number of contacts as normally open contact Yes 0 Number of contacts as change-over contact Yes None Type of interface for safety communication Yes None Construction type housing Yes Metal Housing material Yes Actuating rod Coating housing Yes Actuating rod Alignment of the control element Yes Actuating rod Type of control element Yes Actuating rod With status indication Yes Actuating rod	Rated operation current le at AC-15, 24 V		Α	6
Rated operation current le at DC-13, 24V A 3 Rated operation current le at DC-13, 125 V A 0.8 Switching function A 0.3 Switching function latching B 10 0.0 Number of Safety auxiliary contacts B 0 0.0 Number of contacts as normally closed contact B 10 1.0 Number of contacts as normally open contact B 10 1.0 Number of contacts as change-over contact B 10 1.0 Type of interface for safety communication B 10 1.0 Housing material B 10 1.0 Construction type housing B 10 1.0 Status professor B 10 1.0 Statistic for safety function	Rated operation current le at AC-15, 125 V		Α	6
Rated operation current le at DC-13, 125 V A 0.3 Switching function Cuick-break switch Switching function latching Mo No Output electronic Mo No Number of safety auxiliary contacts Mo No Number of contacts as normally closed contact Mo 1 Number of contacts as normally closed contact Mo 1 Number of contacts as normally closed contact Mo No Number of contacts as normally closed contact Mo No Number of contacts as normally closed contact Mo No Number of contacts as change-over contact Mo No Type of interface Mo No Construction type housing Mo No Construction type housing Metal Metal Coting housing Metal Acutaing od Vipus of control element Metal Acutaing od Type of electric connection Metal Acutaing od With status indication Metal Acutaing od Strabely category for dust <td>Rated operation current le at AC-15, 230 V</td> <td></td> <td>Α</td> <td>6</td>	Rated operation current le at AC-15, 230 V		Α	6
Rated operation current le at DC-13, 230 V A 0.3 Switching function Ouick-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 1 Type of interface None Type of interface for safety communication 1 Construction type housing 1 Housing material 1 Coating housing 1 Type of control element 1 Alignment of the control element 1 Alignment of the control element 1 With status indication 1 Suitable for safety functions 1 Explosion safety functions 1 Explosion safety category for dust 1 Ambient temperature during operating 1 Beginned for protection (IP) 1	Rated operation current le at DC-13, 24 V		Α	3
Switching function Coulor beak switch Switching function latching Mo Output electronic Mo 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 Construction type housing None Housing material Wetal Coating housing Note Type of control element Actuating rod Alignment of the control element Actuating rod Suitable for safety functions Boller cam crossed Suitable for safety functions Boller cam crossed Suitable for safety functions Boller cam crossed Explosion safety category for gas None Explosion safet	Rated operation current le at DC-13, 125 V		Α	0.8
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 0 Construction type housing 0 Housing material 0 Coating housing 0 Alignment of the control element 0 Alignment of the control element 0 Type of control element 0 With status indication 0 With status indication 0 Suitable for safety functions 0 Explosion safety category for gas 0 Explosion safety category for gas 0 Explosion safety category for dust 0 Amient temperature during operating 0 Pos 25-70	Rated operation current le at DC-13, 230 V		Α	0.3
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 Actuating rod Alignment of the control element Cable entry metrical With status indication No Suitable for safety functions Yes Explosion safety category for gas No Explosion safety category for dust None Ambient temperature during operating C 25 - 70 Degree of protection (IP) F66/F67	Switching function			Quick-break switch
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 Control element Actuating rod Alignment of the control element Actuating rod Type of electric connection Roller cam crossed With status indication No Suitable for safety functions Se Actuating rod Suitable for safety functions No No Explosion safety category for gas No No Explosion safety category for dust None None Ambient temperature during operating "C 25 - 70 Degree of protection (IP) Pole (P6/IP67)	Switching function latching			No
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 Coting housing Other Type of control element Actuating rod Alignment of the control element 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 Bullent temperature during operating "C 25 - 70	Output electronic			No
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 Cuto Guller on Construction Alignment of the control element Cuto Guller cam crossed Type of electric connection Guller cam crossed 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 Bujere of protection (IP) Hose (Jee (Jee (Jee (Jee (Jee (Jee (Jee (J	Forced opening			Yes
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Number of contacts as change-over contact Type of interface Type of interface for safety communication Type of interface for safety communication Construction type housing Housing material Coating housing Type of control element Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for dust Ambient temperature during operating See of protection (IP) Description One One One One One One One O	Number of contacts as normally closed contact			1
Type of interface Type of interface for safety communication Construction type housing Housing material Coating housing Type of control element Alignment of the control element Alignment of the control element With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Suitable for safety of interface None None 1	Number of contacts as normally open contact			1
Type of interface for safety communication Construction type housing Housing material Coating housing Coating housing Type of control element Alignment of the control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) None None None None Pos 70 Po	Number of contacts as change-over contact			0
Construction type housing Housing material Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) Cuboid Metal Cable entry metrical Cable entry metrical No No Suitable for safety functions Yes None None 25 - 70 P66/IP67	Type of interface			None
Housing material Coating housing Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) Metal Metal Metal Other Actuating rod Actuating rod Cable entry metrical No Cable entry metrical No No Suitable for safety functions Yes None None Position safety category for dust None Position Safety Categor	Type of interface for safety communication			None
Coating housingOtherType of control elementActuating rodAlignment of the control elementRoller cam crossedType of electric connectionCable entry metricalWith status indicationNoSuitable for safety functionsYesExplosion safety category for gasNoneExplosion safety category for dustNoneAmbient temperature during operating°C-25 - 70Degree of protection (IP)IP66/IP67	Construction type housing			Cuboid
Type of control element Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) Actuating rod Actuating r	Housing material			Metal
Alignment of the control element Type of electric connection With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) Roller cam crossed Cable entry metrical No Cable entry metrical No	Coating housing			Other
Type of electric connection With status indication Suitable for safety functions Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) Cable entry metrical No Suble entry metrical No Yes None Yes None None 25 - 70 P66/IP67	Type of control element			Actuating rod
With status indication Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) No	Alignment of the control element			Roller cam crossed
Suitable for safety functions Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Pegree of protection (IP) Yes None None 1	Type of electric connection			Cable entry metrical
Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Degree of protection (IP) None *C	With status indication			No
Explosion safety category for dust Ambient temperature during operating C -25 - 70 Degree of protection (IP) P66/IP67	Suitable for safety functions			Yes
Ambient temperature during operating °C -25 - 70 Degree of protection (IP) P66/IP67	Explosion safety category for gas			None
Degree of protection (IP) IP66/IP67	Explosion safety category for dust			None
	Ambient temperature during operating		°C	-25 - 70
Degree of protection (NEMA) Other	Degree of protection (IP)			IP66/IP67
	Degree of protection (NEMA)			Other