Position switch, Rounded plunger, Basic device, expandable, 1 N/0, 1 NC, Screw terminal, Black, Insulated material, -25 - +70  $^{\circ}$ C



Part no. LS-S11-SW 106807

neral specifications	
Product name	Eaton Moeller® series LS Position switch
Part no.	LS-S11-SW
EAN	4015081065745
Product Length/Depth	33.5 millimetre
Product height	76.5 millimetre
Product width	31 millimetre
Product weight	0.052 kilogram
Certifications	IEC/EN 60947-5 UL Category Control No.: NKCR CE CSA UL File No.: E29184 IEC/EN 60947 CSA File No.: 012528 CSA Class No.: 3211-03 UL CSA-C22.2 No. 14 UL 508
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
eatures & Functions	
Electric connection type	Cable entry metrical
Enclosure color	Black (Cover)
Enclosure material	Plastic Insulated material
Features Society for the transfer of the second sec	Expandable Positive opening Forced opening
Switch function type	Quick-break switch
eneral 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	Rounded plunger
Rated impulse withstand voltage (Uimp)	4000 V AC
Repetition accuracy	0.15 mm (Contacts/switching capacity)
Suitable for	Safety functions
Туре	Position switch Safety position switch
mbient 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
limatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	70 °C

Terminal conscision	Damp heat, constant, to IEC 60068-2-78
Terminal capacities	(0.7.47)
Terminal capacity (flexible with ferrule)	1 x (0.5 - 1.5) mm <sup>2</sup>
Terminal capacity (solid)	1 x (0.5 - 2.5) mm <sup>2</sup>
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 (le) at DC-13, 110 V	0.6 A
Rated operational current (le) 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	Plunger
Operating speed	Max. 1/0.5 m/s (with DIN cam, mechanical actuation) For angle of actuation $\alpha=0^{\circ}/30^{\circ}$
Contacts	
Control circuit reliability	1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC, 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 (cormally closed contacts)	1
Number of contacts (normally crosed contacts)	1
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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.

10.10 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) (ac)@s13-27-27-26-01 [AKEA0018])

Width sensor         mm         31           Diameter sensor         mm         6           Height of sensor         mm         61           Length of sensor         mm         33.5           Rated operation current le at AC-15, 24 V         A         6           Rated operation current le at AC-15, 250 V         A         6           Rated operation current le at DC-13, 24 V         A         3           Rated operation current le at DC-13, 125 V         A         0.8           Rated operation current le at DC-13, 250 V         A         0.8           Rated operation current le at DC-13, 250 V         A         0.8           Switching function         Mo         0.3           Switching function latching         No         No           Output electronic         No         No           Forced opening         Yes         No           Number of contacts as normally closed contact         Yes         1           Number of contacts as normally open contact         Yes         1           Number of contacts as change-over contact         Yes         No           Type of interface for safety communication         Yes         No           Construction type housing         Yes         No	Electric engineering, automation, process control engineering / Sensor technology, safety-related switch (Type 1) (ecl@ss13-27-26-01 [AKE640018])	u sensor te	:cilliology / Salety-leiated mechanical switch (sensor technology) / Safety position
Height of sensor	Width sensor	mm	31
Length of sansor         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, 230 V         A         3           Rated operation current le at DC-13, 24 V         A         3           Rated operation current le at DC-13, 125 V         A         0.3           Rated operation current le at DC-13, 230 V         A         0.3           Switching function latching         Duick-break switch         No           Switching function latching         No         No           Output electronic         No         No           Forced opening         Yes         1           Number of safety auxiliary contacts         Yes         1           Number of contacts as normally closed contact         Yes         1           Number of contacts as schange-over contact         Yes         1           Number of contacts as change-over contact         Yes         None           Type of interface for safety communication         Yes         None           Construction type housing         Yes         Cubid           Construction type housing         Yes         Plastic           Couti	Diameter sensor	mm	0
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, 230 V         A         3           Rated operation current le at DC-13, 24 V         A         3           Rated operation current le at DC-13, 125 V         A         0.3           Rated operation current le at DC-13, 230 V         A         0.3           Switching function         A         0.4           Output electronic         No         No           Forced opening         Yes         Yes           Number of safety auxiliary contacts         1         1           Number of contacts as normally closed contact         1         1           Number of contacts as change-over contact         1         None           Type of interface for safety communication         Yes         None           Construction type housing         Yes         None           Construction type housing         Yes         None           Coating housing         Yes         None           Coating housing         Yes         None           Coating housing         Yes         Plantic           Coating housing         Yes         Plantic	Height of sensor	mm	61
Rated operation current le at AC-15, 125 V         A         6           Rated operation current le at AC-15, 230 V         A         6           Rated operation current le at DC-13, 24 V         A         3           Rated operation current le at DC-13, 125 V         A         0.8           Rated operation current le at DC-13, 230 V         A         0.3           Switching function         Outick-break switch           Switching function latching         No         No           Output electronic         No         Yes           Forced opening         Yes         1           Number of safety auxiliary contacts         1         1           Number of contacts as normally closed contact         1         1           Number of contacts as normally open contact         0         0           Number of contacts as change-over contact         0         0           Type of interface         None         None           Type of interface for safety communication         Cuboid         Cuboid           Construction type housing         Cuboid         Cuboid           Housing material         Plastic         Cuboid           Coating housing         Plunger         Plunger           Alignment of the control element	Length of sensor	mm	33.5
Rated operation current le at AC-15, 230 V         A         6           Rated operation current le at DC-13, 24 V         A         3           Rated operation current le at DC-13, 125 V         A         0.8           Rated operation current le at DC-13, 230 V         A         0.3           Switching function         P         Quick-break switch           Switching function latching         No         No           Output electronic         Yes         No           Forced opening         Yes         1           Number of safety auxiliary contacts         1         1           Number of contacts as normally closed contact         1         1           Number of contacts as normally open contact         1         1           Type of interface         None         None           Type of interface for safety communication         None         None           Construction type housing         Cuboid         None           Housing material         Plastic         Cuboid           Coating housing         Plastic         Other           Type of control element         Plunger         Roller cam straight           Algement of the control element         Roller cam straight         Cable entry metrical	Rated operation current le at AC-15, 24 V	Α	6
Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Switching function latching Output electronic Forced opening Number of safety auxiliary contacts Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as normally open contact Number of contacts as change-over contact 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 Type of electric connection  Type of electric connection  A	Rated operation current le at AC-15, 125 V	Α	6
Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Rowitching function Switching function Switching function latching Output electronic Forced opening Number of safety auxiliary contacts Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as change-over contact 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 Type of electric connection  A	Rated operation current le  at AC-15, 230 V	Α	6
Rated operation current le at DC-13, 230 V  Switching function  Switching function latching  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  Number of contacts as normally open contact  Number of contacts as change-over contact  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  Type of electric connection  A	Rated operation current le  at DC-13, 24 V	Α	3
Switching function  Switching function latching  Output electronic  Forced opening  No  No  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  Number of contacts as normally open contact  Number of contacts as normally open contact  Number of contacts as change-over contact  Type of interface  Type of interface for safety communication  Construction type housing  Housing material  Coating housing  Type of control element  Type of lectric connection  Roller cam straight  Type of electric connection  Cable entry metrical	Rated operation current le at DC-13, 125 V	Α	0.8
Switching function latchingNoOutput electronicNoForced openingYesNumber of safety auxiliary contacts1Number of contacts as normally closed contact1Number of contacts as normally open contact1Number of contacts as change-over contact0Type of interfaceNoneType of interface for safety communicationNoneConstruction type housingCuboidHousing materialPlasticCoating housingOtherType of control elementPlungerAlignment of the control elementRoller cam straightType of electric connectionCable entry metrical	Rated operation current le at DC-13, 230 V	Α	0.3
Output electronicNoForced openingYesNumber of safety auxiliary contacts1Number of contacts as normally closed contact1Number of contacts as normally open contact1Number of contacts as change-over contact0Type of interfaceNoneType of interface for safety communicationNoneConstruction type housingCuboidHousing materialPlasticCoating housingOtherType of control elementPlungerAlignment of the control elementRoller cam straightType of electric connectionCable entry metrical	Switching function		Quick-break switch
Forced opening Number of safety auxiliary contacts Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as normally open contact Number of contacts as change-over contact None Type of interface None  Construction type housing None Construction type housing None Coating housing Other Type of control element Alignment of the control element Type of electric connection Cable entry metrical	Switching function latching		No
Number of safety auxiliary contacts Number of contacts as normally closed contact  Number of contacts as normally open contact  Number of contacts as normally open contact  Number of contacts as change-over contact  Number of contacts as change-over contact  Type of interface  None  Type of interface for safety communication  Construction type housing  Housing material  Coating housing  Type of control element  Alignment of the control element  Type of electric connection  1  1  1  1  1  1  1  1  1  1  1  1  1	Output electronic		No
Number of contacts as normally closed contact  Number of contacts as normally open contact  1  Number of contacts as change-over contact  Type of interface  None  Type of interface for safety communication  Construction type housing  Housing material  Coating housing  Type of control element  Alignment of the control element  Type of electric connection  Cable entry metrical	Forced opening		Yes
Number of contacts as normally open contact  Number of contacts as change-over contact  Type of interface  None  Type of interface for safety communication  Construction type housing  Housing material  Coating housing  Type of control element  Alignment of the control element  Type of electric connection  1  None  Cuboid  Plastic  Other  Plunger  Roller cam straight  Type of electric connection  Cable entry metrical	Number of safety auxiliary contacts		1
Number of contacts as change-over contact  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 Alignment of the control element Type of electric connection  Other  Roller cam straight Cable entry metrical	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 Type of electric connection  None  Cuboid Plastic Other Plunger Roller cam straight Type of electric connection  Cable entry metrical	Number of contacts as normally open contact		1
Type of interface for safety communication  Construction type housing  Cuboid  Housing material  Plastic  Coating housing  Other  Type of control element  Alignment of the control element  Type of electric connection  None  Cuboid  Plastic  Plunger  Roller cam straight  Cable entry metrical	Number of contacts as change-over contact		0
Construction type housing Cuboid Housing material Coating housing Coating housing Type of control element Alignment of the control element Type of electric connection Cuboid Plastic Other Plunger Roller cam straight Cable entry metrical	Type of interface		None
Housing material Plastic  Coating housing Other  Type of control element Plunger  Alignment of the control element Roller cam straight  Type of electric connection Cable entry metrical	Type of interface for safety communication		None
Coating housing  Type of control element  Alignment of the control element  Type of electric connection  Other  Plunger  Roller cam straight  Cable entry metrical	Construction type housing		Cuboid
Type of control element Plunger Alignment of the control element Roller cam straight Type of electric connection Cable entry metrical	Housing material		Plastic
Alignment of the control element  Type of electric connection  Roller cam straight  Cable entry metrical	Coating housing		Other
Type of electric connection  Cable entry metrical	Type of control element		Plunger
	Alignment of the control element		Roller cam straight
With status indication No	Type of electric connection		Cable entry metrical
	With status indication		No
Suitable for safety functions Yes	Suitable for safety functions		Yes
Explosion safety category for gas	Explosion safety category for gas		None
Explosion safety category for dust  None	Explosion safety category for dust		None
Ambient temperature during operating °C -25 - 70	Ambient temperature during operating	°C	-25 - 70
Degree of protection (IP) IP66/IP67	Degree of protection (IP)		IP66/IP67
Degree of protection (NEMA) Other	Degree of protection (NEMA)		Other