DATASHEET - LS-11S/RL-M12A

Position switch, Rotary lever, Complete device, 1 N/O, 1 NC, Snap-action contact - Yes, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, with M12 connector, EN 50047 Form A



Part no.

LS-11S/RL-M12A 178142

General specifications	
Product name	Eaton Moeller® series LS Position switch
Part no.	LS-11S/RL-M12A
EAN	4015081734658
Product Length/Depth	33.5 millimetre
Product height	125 millimetre
Product width	31 millimetre
Product weight	0.074 kilogram
Certifications	IEC/EN 60947
Product Tradename	LS
Product Type	Position switch
Product Sub Type	None
Catalog Notes	Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany Contacts with safety function, by positive opening to IEC/EN 60947-5-1
Features & Functions	
Design	EN 50047 Form A
Enclosure color	Yellow Cover
Enclosure material	Insulated material
Features	Positive opening Snap-action contact
General information	
Accessories	M12 connector included.
Connection type	Cage Clamp
Degree of protection	IP66
Lifespan, mechanical	8,000,000 Operations
Operating frequency	6000 Operations/h
Overvoltage category	
Pollution degree	3
Product category	Rotary lever
Rated impulse withstand voltage (Uimp)	2500 V AC
Repetition accuracy	0.15 mm (Contacts/switching capacity)
Туре	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) 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)	250 V

Rated operational current (Ie)	6 A at AC-15, 24 V 3 A at 24 V
	1 A at AC-15, 220 V 230 V 240 V 0.3 A at 220 V
	4 A at AC-15, 115 V
	4 A at AC-15, 380 V 400 V 415 V 0.8 A at 110 V
Short-circuit protection rating	Max. 4 A gG/gL, Fuse, Contacts
Supply frequency	Max. 400 Hz, Contacts
Actuator	
Actuating torque of rotary drives	0.2 N·m
Actuator type	Rotary lever
Operating speed	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 (normally closed contacts)	1
Number of contacts (normally open contacts)	1
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) / Drive head for position switches/hinge switches (EC001483)

Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Mechanical switch (sensor technology) / Drive head for position switches (ecl@ss13-27-27-06-04 [BAA083017])

Type of control element

Rotary lever