## **DATASHEET - LS-11/L**



Position switch, Roller lever, Complete unit, 1 N/O, 1 NC, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, EN 50047 Form E, Long

Part no. LS-11/L

266110

EL Number

4356122

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Part no. LS-11/L  EAN 401508266  Product Length/Depth 33.5 milline  Product width 96 millime  Product weight 0.055 kilog  Certifications UL  UL File No CSA File I CSA CE IEC/EN 60 CSA Class	netre tre tre
Part no.  EAN  401508266  Product Length/Depth  33.5 milline  Product width  Product weight  Certifications  UL  UL File No  CSA  CE  IEC/EN 60  CSA Class UL Categu	inition in the state of the sta
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UL File No CSA File I CSA CE IEC/EN 60 CSA Class UL Categr	
UL 508 IEC/EN 60	s No.: 3211-03 ory Control No.: NKCR 2 No. 14
Product Tradename LS	
Product Type Position s	witch
Product Sub Type None	
Catalog Notes The opera approach	ting head can be rotated 90° to enable adaptation to the specified direction
Features & Functions	
Design EN 50047	Form E
Electric connection type Cable ent	ry metrical
Enclosure color Yellow Co	ver
Enclosure material Plastic Insulated	material
Features Positive of Forced op	
Switch function type Slow-acti	on switch
General information	
Connection type Cage Clar	np
Degree of protection NEMA Ot 1P66/IP67	ner
Lifespan 8,000,000	mechanical Operations
Operating frequency 6000 Oper	ations/h
Overvoltage category III	
Pollution degree 3	
Product category Roller lev	er
Rated impulse withstand voltage (Uimp) 4000 V AC	
Repetition accuracy 0.15 mm (	Contacts/switching capacity)
Suitable for Safety fur	actions
Type Safety po	sition switch
Ambient conditions, mechanical	
Mounting position	ed
Mounting position As require	
	dard-action contact, Mechanical, Half-sinusoidal shock 20 ms
Shock resistance 25 g, Stan	dard-action contact, Mechanical, Half-sinusoidal shock 20 ms
	dard-action contact, Mechanical, Half-sinusoidal shock 20 ms

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 <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 (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			
	1.0 N/8 0 N		
Actuating force at beginning/end of stroke	1.0 N/8.0 N 0.2 N·m		
Actuating torque of rotary drives	u.z n⋅m Roller lever		
Actuator type			
Operating speed	For angle of actuation $\alpha=30^{\circ}/45^{\circ}$ Max. 1 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 DI		
	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  10.2.5 Lifting	Meets the product standard's requirements.  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.  Does not apply, since the entire switchgear needs to be evaluated.		
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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.  Meets the product standard's requirements.		
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.		

10.9.4 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])

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 le at AC-15, 24 V		Α	6	
Rated operation current le at AC-15, 125 V		Α	6	
Rated operation current le at AC-15, 230 V		Α	6	
Rated operation current le at DC-13, 24 V		Α	3	
Rated operation current le at DC-13, 125 V		Α	0.8	
Rated operation current le at DC-13, 230 V		Α	0.3	
Switching function			Slow-action 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			Roller lever	
Alignment of the control element			Other	
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	