DATASHEET - LS-11/LS

Position switch, Roller lever, Complete unit, 1 N/O, 1 NC, Cage Clamp, Yellow, Insulated material, -25 - +70 °C, Short



Part no.	LS-11/LS
	290173
EL Number	4315231
(Norway)	

Part nu. Image: Part nu. Image: Part nu. FAN Mode Ling/Minime Mode SIGE/2007/35 Poduct huig/Minime Mode Mode Mode Mode Mode Mode Mode Mode		
AN Product logit Product logit	Product name	Eaton Moeller® series LS Position switch
Product Lengt/Depth Field 9 millimetre Product Weight 00 Millimetre Product Weight 00 Millimetre Compliances EM Minde Compliances EM Minde Cartilications State (22 No. 14 Missopress) Product Tredentame State (22 No. 14 Missopress)		LS-11/LS
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Product weight Deal klagam Compliances E Marked Certifications E Marked E Marked E Marked Marked E Marked Product Trademame E Marked Product Trademame P Marked Carbon Archite	Product height	91 millimetre
Constrained CE Marked Certifications CE Marked Certifications CE SA Stat C22 No. 14 Certifications CE SA Certifications Product Tadename CE SA Certifications Product Tadename CE SA Certifications Product Tadename CE SA Certifications Product Tage CE SA Certifications Certification spectrometers CE SA Certifications spectrometers Certification spectrometers CE SA Certification spectrometers Certification spectrometers Ce Sa Cerification spectrometers	Product width	31 millimetre
Eartifications Expertises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Science Experises Solid Sci 222 No. 14 In Separation Network Science Experises Solid Sci 222 No. 14 In Separation Network Science Experises Solid Science Science Product Tadomame Experises Pasition solid Science Product Tadomame Experises Pasition solid Science Product Tadomame Experises Pasition solid Science Eatility Connection Nype Experises Pasition Science Eatility Connection Nype Experises Pasition Science Solid Ent Intervers Pasition Science Pasition Science Solid Ent Intervers Pasition Science Pasition Science Solid Ent Intervers Pasition Science Pasition Science Derosting Science	Product weight	0.06 kilogram
Product Tradename Image: Product Tradena	Compliances	CE Marked
Product Type None Catalog Notes None Catalog Notes The operating head can be rotated 90° to enable adaptation to the specified adaptation	Certifications	EN 60947-5 IEC 60947-5 UL 508 CSA-C22.2 No. 14 CE UL IEC/EN 60947 UL File No.: E29184 CSA File No.: 12528 UL Category Control No.: NKCR CSA CSA Class No.: 3211-03
Product Sub Type None Catalog Notes The operating head can be rotated 90° to enable adaptation to the specified approach direction Electric connection type Cable entry metrical Enclosure color Yellow Cover Enclosure material Insulated material Features Positive opening Forced opening Forced opening Forced opening Cable entry metrical Dagree of protection Cable Case Clamp Dagree of protection Case Clamp Devendage category Mone Polition degree Soliton Deparationsh Polition degree Soliton Contact/switching capacity) Suitable for Soliton Contact/switching capacity) Suitable for Soliton Soliton Type Soliton Soliton Suitable for Soliton Soliton Type Soliton Soliton Suitable for Soliton Contact/switching capacity) Suitable for Soliton Contact/switching capacity) Suitable for Soliton Soliton <td>Product Tradename</td> <td>LS</td>	Product Tradename	LS
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Image: Section approach direction Electric connection type Cable entry metrical Enclosure color Image: Section approach direction Enclosure material Image: Section approach direction Features Image: Section approach direction Switch function type Image: Section approach direction approach direction Connection type Positive opening Porteed Open	Product Sub Type	None
Enclosure color Yellow Cover Enclosure material Isulated material Fatures Isulated material Fatures Source opening Switch function type Sour-action switch Connection type Sour-action switch Degree of protection F66//P67 Supprese of protection Source opening Operating frequency Source opening Overolage category Source opening Polution degree Source opening Product category Source opening Rated impulse withstand voltage (Uimp) Source opening Suitable for Source opening Type Source opening Mounting position Source opening Notice in accuracy Source opening Suitable for Source opening Type Source opening/h Mounting position Source opening Suitable for Source opening Type Source opening Mounting position Source opening Suitable for Source opening Type Source opening Mounting position </td <td>Catalog Notes</td> <td></td>	Catalog Notes	
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Features Plastic Features Positive opening Switch function type Slow-action switch Connection type Slow-action switch Degree of protection Cage Clamp Lifespan Slow.action switch Operating frequency Slow.action switch Outroltage category III Pollution degree 3 Product category NetWA Other Suitable for Slow VAC Type Safety functions Mounting position Safety functions Mounting position Safety spatiane switch Shok resistance Safety spatiane switch		
Switch function type Sow action switch Connection type Cage Clamp Degree of protection Refs/P87 Disperse of protection Refs/P87 Degree of protection 8,000,000 mechanical Operations Disperse of protection 8,000,000 mechanical Operations Operating frequency 6000 Operations/h Overoltage category II Pollution degree 3 Product category Moon YAC Reted impulse withstand voltage (Uimp) Moon YAC Suitable for Safety functions Type Safety position switch Mounting position Safety position switch Solow resistance Safety position contact, Mechanical, Half-sinusoidal shock 20 ms		Plastic
Connection type Cage Clamp Degree of protection Cage Clamp Lifespan 8000,000 mechanical Operations Operating frequency 6000 Operations/h Overvoltage category III Pollution degree 3 Product category Mollow Particular Switching capacity) Rated impulse withstand voltage (Uimp) Mollow Particular Switching capacity) Suitable for Safety functions Type Safety functions Mounting position Sarequired Shock resistance Safety function contact, Mechanical, Half-sinusoidal shock 20 ms	Features	
Degree of protection P66/P67 Lifespan 8,000,000 mechanical Operations Operating frequency 6000 Operations/h Overvoltage category III Pollution degree 8 Product category 6000 Perations/h Read impulse withstand voltage (Uimp) Repetition accuracy Suitable for 5000 VAC Type Safety functions Mounting position Safety position switch Mounting position Safety position contact, Mechanical, Half-sinusoidal shock 20 ms Shock resistance 6100 Centact, Mechanical, Half-sinusoidal shock 20 ms	Switch function type	Slow-action switch
Degree of protection P66/P67 Lifespan 8,000,000 mechanical Operations Operating frequency 6000 Operations/h Overvoltage category III Pollution degree 8 Product category 6000 Perations/h Read impulse withstand voltage (Uimp) Repetition accuracy Suitable for 5000 VAC Type Safety functions Mounting position Safety position switch Mounting position Safety position contact, Mechanical, Half-sinusoidal shock 20 ms Shock resistance 6100 Centact, Mechanical, Half-sinusoidal shock 20 ms		
Lifespan NEMA Other Lifespan 8,000,00 mechanical Operations Operating frequency 6000 Operations/h Overvoltage category III Pollution degree 3 Product category Roller lever Rated impulse withstand voltage (Uimp) 4000 V AC Suitable for Safety functions Type Safety functions Mounting position Safety position switch Shock resistance Safety function contact, Mechanical, Half-sinusoidal shock 20 ms		
Derating frequency 600 Operations/h Overvoltage category II Pollution degree 3 Product category 600 V AC Rated impulse withstand voltage (Uimp) 600 V AC Repetition accuracy 610 V AC Suitable for 515 mm (Contacts/switching capacity) Type 5164 functions Mounting position 610 V AC Suitable for 5164 functions Nounting position 610 V AC Suitable for 5164 functions Nounting position 610 V AC Suitable for 5164 functions You 700 V AC You 5164 functions You 700 V AC You 5164 functions You 5164 functions You 700 V AC You 5164 functions You 700 V AC You 7	Degree of protection	
Overvoltage category III Pollution degree 3 Product category Roler lever Rated impulse withstand voltage (Uimp) MOV VAC Repetition accuracy Sofery functions Suitable for Safety functions Type Safety functions Mounting position Safety section switch Shock resistance Safety section contact, Mechanical, Half-sinusoidal shock 20 ms	Lifespan	8,000,000 mechanical Operations
Pollution degree 3 Product category Roller lever Rated impulse withstand voltage (Uimp) 4000 V AC Repetition accuracy 0.15 mm (Contacts/switching capacity) Suitable for Safety functions Type Safety position switch Mounting position As required Shock resistance Safety function contact, Mechanical, Half-sinusoidal shock 20 ms	Operating frequency	6000 Operations/h
Product category Roller lever Rated impulse withstand voltage (Uimp) 4000 V AC Repetition accuracy 0.15 mm (Contacts/switching capacity) Suitable for Safety functions Type Safety position switch Mounting position As required Shock resistance Safety function contact, Mechanical, Half-sinusoidal shock 20 ms	Overvoltage category	
Rated impulse withstand voltage (Uimp) Image: Status of the status o	Pollution degree	3
Repetition accuracy Image: Contracts/switching capacity) Suitable for Safety functions Type Safety position switch Mounting position Safety functions Shock resistance Safety function Suitable for Safety position switch	Product category	Roller lever
Suitable for Safety functions Type Safety functions witch Mounting position Safety functions Shock resistance Safety function contact, Mechanical, Half-sinusoidal shock 20 ms	Rated impulse withstand voltage (Uimp)	4000 V AC
Type Safety position switch Mounting position Image: Safety position switch Shock resistance Image: Safety position switch	Repetition accuracy	0.15 mm (Contacts/switching capacity)
Mounting position Mounting position Shock resistance Mounting position	Suitable for	Safety functions
Shock resistance 25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms	Туре	Safety position switch
Shock resistance 25 g, Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms	Mounting position	As required
Ambient operating temperature - min -25 °C	UIIUUR I ESISLAIIUE	
	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 capacity (flexible with ferrule)	1 x (0.5 - 1.5) mm ²
Terminal capacity (solid)	1 x (0.5 - 2.5) mm ²
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 (Ie) at DC-13, 125 V	0.8 A
Rated operational current (le) at DC-13, 220 V, 230 V	0.3 A
Rated operational current (le) at DC-13, 24 V	3 A
Short-circuit protection rating	Max. 6 A gG/gL, Fuse, Contacts
Supply frequency	Max. 400 Hz, Contacts
	101/001
Actuating force at beginning/end of stroke	1.0 N/8.0 N
Actuating torque of rotary drives	0.2 N·m
Actuator type	Roller lever
Operating speed	Max. 1 m/s (with DIN cam, mechanical actuation) For angle of actuation α = 30°/45°
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
	None
Explosion safety category for gas Explosion safety category for dust	None
	Note
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 8.0

Sensors (EG000026) / End switch (EC000030) Electric engineering, automation, process control engineering / Binary sensor tectors, setety-related position switch / Safety position sw	ype 1)
(ccl@ss10.0.1-27-27-26-01 [AKE640013])Width sensormm31Diameter sensormm0Height of sensormm61Length of sensormm33.5Rated operation current le at AC-15, 24 VAA6Rated operation current le at AC-15, 250 VAA6Rated operation current le at AC-15, 230 VAA3.1Rated operation current le at DC-13, 250 VAA0.8Rated operation current le at DC-13, 250 VAA0.8Switching functionMANo	ype 1)
Diameter sensormm0Height of sensormm61Length of sensormm3.5Rated operation current le at AC-15, 24 VA6Rated operation current le at AC-15, 25 VA6Rated operation current le at AC-15, 230 VA6Rated operation current le at DC-13, 24 VA3Rated operation current le at DC-13, 25 VA8Rated operation current le at DC-13, 24 VA9Rated operation current le at DC-13, 25 VA0.8Rated operation current le at DC-13, 230 VA0.3Switching functionSino Action switchSino Action switchSwitching functionSino Action switchSino Action switch	
Height of sensormm61Length of sensormm33.5Rated operation current le at AC-15, 24 VA6Rated operation current le at AC-15, 250 VA6Rated operation current le at AC-15, 230 VA6Rated operation current le at DC-13, 24 VA3Rated operation current le at DC-13, 25 VA0.8Rated operation current le at DC-13, 26 VA0.8Rotching functionA0.3Switching functionSow-action switchSwitching functionNo	
Length of sensormm33.5Rated operation current le at AC-15, 24 VA6Rated operation current le at AC-15, 125 VA6Rated operation current le at AC-15, 230 VA6Rated operation current le at DC-13, 24 VA3Rated operation current le at DC-13, 125 VA0.8Rated operation current le at DC-13, 230 VA0.3Switching functionSwitching functionSolvacation switchSwitching functionMMNo	
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 6 Rated operation current le at DC-13, 24 V A 6 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0.8 Rated operation current le at DC-13, 25 V A 0.8 Switching function A A 0.3 Switching function Sow-action switch No	
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 Switching function latching No	
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 Switching function latching No	
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 Switching function latching No	
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 Solve-action switch Slow-action switch Switching function latching Image: Solve-action switch No	
Rated operation current le at DC-13, 230 V A 0.3 Switching function Slow-action switch Switching function latching No	
Switching function Slow-action switch Switching function latching No	
Switching function latching	
Output electronic No	
Forced opening Yes	
Number of safety auxiliary contacts	
Number of contacts as normally closed contact	
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	
Material housing 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	