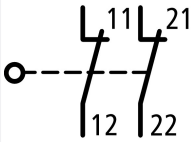
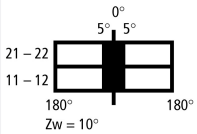
DATASHEET - LSR-S02-1-I/TS

Hinge-operated safety switch, LSR, Safety hinge switch, Complete unit, 2 NC, Insulated material, Screw terminal, -25 - +70 °C

Powering Business Worldwide™

Part no.	**LSR-S02-1-I/TS**
Catalog No.	**106852**
Alternate Catalog No.	**LSR-S02-1-I/TS**
EL-Nummer (Norway)	**4356192**

Delivery program

Basic function			Position switches Safety position switches
Part group reference			LSR
Product range			Safety hinge switch
Degree of Protection			IP65
Features			Complete unit
Ambient temperature		°C	-25 - +70
Approval			DGUV Test ET 17042 Sicherheit geprüft tested safety
Contacts			
N/C = Normally closed			2 NC
Notes			= safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence			
Contact travel■ = Contact closed□ = Contact open			
Housing			Insulated material
Connection type			Screw terminal

Technical data

General

Standards			IEC/EN 60947
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30
Ambient temperature		°C	-25 - +70
Mounting position			As required
Degree of Protection			IP65
Terminal capacities		mm^2	
Solid		mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm^2	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)
Repetition accuracy		mm	0.02

Contacts/switching capacity

Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated insulation voltage	U_i	V	500
Rated operational current	I_e	A	
AC-15			
24 V	I_e	A	6
220 V 230 V 240 V	I_e	A	6
380 V 400 V 415 V	I_e	A	4
DC-13			
24 V	I_e	A	3
110 V	I_e	A	0.8
220 V	I_e	A	0.3
Supply frequency		Hz	max. 400
Short-circuit rating to IEC/EN 60947-5-1			
max. fuse		A gG/gL	6
Rated conditional short-circuit current		kA	1

Mechanical variables

Lifespan, mechanical	Operations	x 10^6	1
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Operating frequency	Operations/h		≦ 1800

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	6
Heat dissipation per pole, current-dependent	P_{vid}	W	0.13
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 7.0

Sensors (EG000026) / Hinge switch (EC002591)

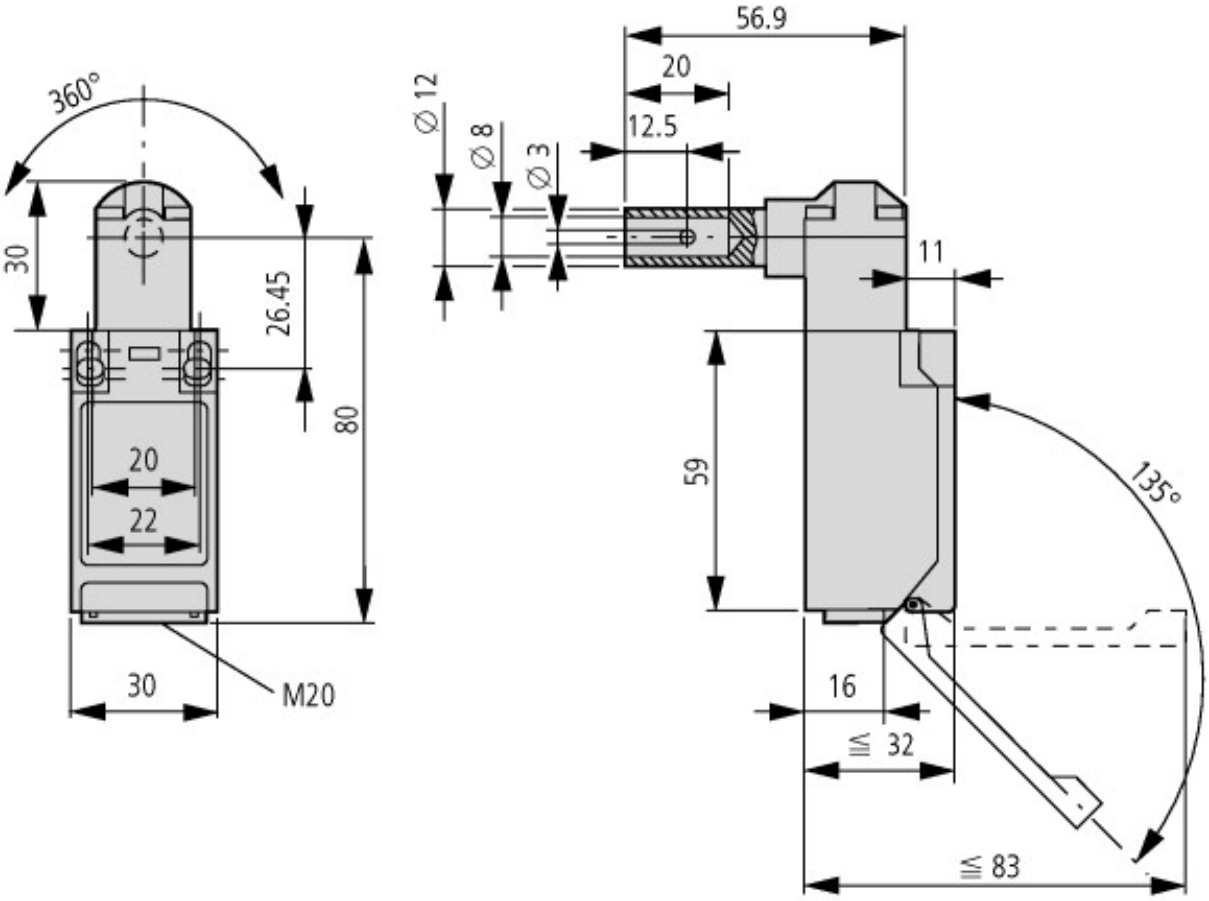
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Hinge switch (ecl@ss10.0.1-27-27-06-09 [ACN833011])

With status indication			No
Suitable for safety functions			Yes
Type of control element			Hollow shaft
Forced opening			Yes
Number of safety auxiliary contacts			0
Number of contacts as normally closed contact			2
Number of contacts as normally open contact			0
Number of contacts as change-over contact			0
Type of switching contact			Slow-action switch
Width sensor		mm	30
Height of sensor		mm	91
Length of sensor		mm	32
Rated operation current Ie at AC-15, 24 V		A	10
Rated operation current Ie at AC-15, 125 V		A	0
Rated operation current Ie at AC-15, 230 V		A	6
Rated operation current Ie at DC-13, 24 V		A	3
Rated operation current Ie at DC-13, 125 V		A	1
Rated operation current Ie at DC-13, 230 V		A	0.5
Construction type housing			Cuboid
Material housing			Plastic
Coating housing			Other
Type of electric connection			Cable entry metrical
Explosion safety category for gas			None
Explosion safety category for dust			None
Type of interface			None
Type of interface for safety communication			None
Degree of protection (IP)			IP65
Degree of protection (NEMA)			Other

Approvals

Product Standards			IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			12528
CSA Class No.			3211-03
North America Certification			UL listed, CSA certified
Degree of Protection			IEC: IP65, UL/CSA Type 3R, 4X (indoor use only), 12, 13

Dimensions



Assets (links)

Declaration of CE Conformity

00003115

Additional product information (links)

IL05208006Z (AWA1310-2363) Hasp-Operated and Hinge-Operated Safty Switches	
IL05208006Z (AWA1310-2363) Hasp-Operated and Hinge-Operated Safty Switches	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05208006Z2018_09.pdf