DATASHEET - LSR-S02-1-I/TKG



Hasp-operated safety switch, LSR, Hasp-operated safety switch, Complete unit, 2 NC, Insulated material, Screw terminal, -25 - +70 °C Powering Business Worldwide

LSR-S02-1-I/TKG Part no.

Catalog No. 106848

Alternate Catalog

LSR-S02-1-I/TKG

No.

EL-Nummer 4356190

(Norway)

Part group reference Product range Degree of Protection Features Ambient temperature Contacts N/C = Normally closed Notes Contact sequence Contact trave ■ = Contact closed = Contact open Contact Trave ■ = Contact closed = Contact open Contact Trave ■ = Contact closed = Contact open Contact Trave ■ = Contact closed = Contact open Contact Trave ■ = Contact closed = C	Delivery program		
Product range Degree of Protection Features Complete unit Ambient temperature Approval Contacts NC = Normally closed Notes Contact sequence Contact trave - Contact closed - Contact open Contact trave - Contact closed - Contact open Hasp-operated safety switch 1P65 Complete unit Complete unit Complete unit Complete unit Contact safety vego Sicherheit geprüft tested safety 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety 2NC - ST - 70 2NC - ST - 70 2NC - ST - 70 Contact safety Sicherheit geprüft tested safety Sicherheit geprüft	Basic function		
Degree of Protection Features Complete unit Ambient temperature "C 25-470 Approval Contacts NCC Normally closed Notes Contact sequence Contact trave □ = Contact closed □ = Contact open Housing I P65 Complete unit Com	Part group reference		LSR
Features Ambient temperature *C -25 + 70 Approval Approval Contacts N/C = Normally closed Notes Notes Contact sequence Contact travel Contact trav	Product range		Hasp-operated safety switch
Approval Contacts N/C = Normally closed Notes Contact sequence Approval Approval	Degree of Protection		IP65
Approval Contacts N/C = Normally closed Notes Contact sequence Contact travel = Contact closed = Contact open Housing LET 17042 Sicherheit geprüft tested Safety 2 NC 2 NC 2 NC 3 = safety function, by positive opening to IEC/EN 60947-5-1 L11	Features		Complete unit
Contacts N/C = Normally closed Notes Contact sequence Contact sequence Contact trave = Contact closed = Contact open Housing Live Sicherheit geprüft tested safety 2 NC ⊕ 2	Ambient temperature	°C	-25 - +70
Notes Notes Contact sequence Contact travel = Contact closed = Contact open Housing Notes 2 NC → 11	Approval		Sicherheit geprüft tested safety
Notes © = safety function, by positive opening to IEC/EN 60947-5-1 Contact sequence Contact travel = Contact closed = Contact open	Contacts		
Contact sequence Contact travel = Contact closed = Contact open Contact travel = Contact closed = Conta	N/C = Normally closed		2 NC →
Contact sequence Contact travel = Contact closed = Contact open Contact travel = Contact closed = Conta	Notes		→ = safety function, by positive opening to IEC/EN 60947-5-1
Housing	Contact sequence		L ₁ 11 L ₂ 1
	Contact travel = Contact closed = Contact open		5° 5° $11 - 12$ 10° 10
Connection type Screw terminal	Housing		
	Connection type		Screw terminal 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	Ui	V	500
Rated operational current	l _e	Α	
AC-15			
24 V	l _e	Α	6
220 V 230 V 240 V	I _e	Α	6
380 V 400 V 415 V	I _e	Α	4
DC-13			
24 V	I _e	Α	3
110 V	I _e	Α	0.8
220 V	I _e	Α	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

chnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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
C/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

recimical data ETIM 7.0		
Sensors (EG000026) / End switch (EC000030)		
Electric engineering, automation, process control engineering / Binary sensor technology, safe (ecl@ss10.0.1-27-27-06-01 [AGZ382015])	ety-related s	ensor technology / Position switch / Position switch (Type 1)
Width sensor	mm	30
Diameter sensor	mm	0
Height of sensor	mm	91
Length of sensor	mm	32
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	0.3
Rated operation current le at DC-13, 230 V	Α	0
Switching function		Slow-action switch
Switching function latching		No
Output electronic		No
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 interface		None
Type of interface for safety communication		None
Construction type housing		Cuboid
Material housing		Plastic
Coating housing		Other
Type of control element		Rotary 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)		IP65
Degree of protection (NEMA)		13

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 26.45 8

Assets (links)

Declaration of CE Conformity

00003115

Additional product information (links)

M20

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IL05208006Z (AWA1310-2363) Hasp-Operated and Hinge-Operated Safty Switches

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 $ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05208006Z2018_09.pdf$

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