



Overview

Specifications

Resources







## **DELIVERY PROGRAM**

Delivery program

Basic function Position switches Safety position switches

Technical data

Design verification as per IEC/EN 61439

Part group reference LSR

Technical data ETIM7.0

Product range Hasp-operated safety switch

Approvals

Degree of Protection IP65

Dimensions

Features Complete unit

Ambient temperature -25 - +70 °C





### **Contacts**

NO = Normally open 1 NO

NC = Normally closed 1 NC

Notes

 $_{\mbox{\tiny $\square$}}$  = safety function, by positive opening to IEC/EN 60947-5-1

Contact sequence



Contact travel $\blacksquare$  = Contact closed $\square$  = 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 -25 - +70 °C

Mounting position As required

Degree of Protection IP65

Terminal capacities

Solid

1 x (0.75 - 2.5)

2 x (0.75 - 1.5) mm<sup>2</sup>

Terminal capacities Flexible with ferrule 1 x (0.5 - 1.5)

2 x (0.5 - 1.5) mm<sup>2</sup>

Repetition accuracy

0.02 mm

# Contacts/switching capacity

Rated impulse with stand voltage  $[U_{mp}]$ 6000 V AC Rated insulation voltage [U] 500 V Rated operational current [ $l_e$ ] AC-15  $24 \, V \, [l_{\rm e}]$ 6 A Rated operational current [ $I_e$ ] 220 V 230 V 240 V [l<sub>e</sub>] 6 A Rated operational current [le] AC-15 380 V 400 V 415 V [l<sub>e</sub>] 4 A Rated operational current [le] DC-13 24 V [l<sub>e</sub>] 3 A Rated operational current [le] DC-13 110 V [l<sub>e</sub>] 0.8 A Rated operational current  $[l_{\rm e}]$ DC-13 220 V [l<sub>e</sub>] 0.3 A Supply frequency max. 400 Hz Short-circuit rating to IEC/EN 60947-5-1 max. fuse 6 A gG/gL Rated conditional short-circuit current 1 kA Mechanical variables Lifespan, mechanical [Operations] 1 x 10<sup>6</sup> Mechanical shock resistance (half-sinusoidal shock, 20 ms) Standard-action contact 25 g 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<sub>n</sub>] 6  $\Delta$ 

Heat dissipation per pole, current-dependent  $[P_{id}] \\ 0.13\,W$ 

Equipment heat dissipation, current-dependent  $[P_{\text{vid}}]$  0 W

Static heat dissipation, non-current-dependent  $[P_{\mbox{\tiny VS}}]$  0 W

Heat dissipation capacity [P<sub>diss</sub>] 0 W

Operating ambient temperature min. -25 °C.

Operating ambient temperature max. +70 °C.

### 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 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures Weets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.2 Verification of resistance of insulating materials to
normal heat
Weets the product standard's requirements.

10.2 Strength of materials and parts
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Weets the product standard's requirements.

10.2 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation Meets the product standard's requirements.

10.2 Strength of materials and parts
10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact Does not apply, since the entire switchgear needs to be 10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage Is the panel builder's responsibility.

10.9 Insulation properties 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) / E	ind switch (EC000030)
	omation, process control engineering / Binary sensor technology, safety-related sensor technology on switch (Type 1) (ecl@ss10.0.1-27-27-06-01 [AGZ382015])
Width sensor 30 mm	
Diameter sensor 0 mm	
Height of sensor 91 mm	
Length of sensor 32 mm	
Rated operation current 6 A	le at AC-15, 24 V
Rated operation current 6 A	le at AC-15, 125 V
Rated operation current l 6 A	le at AC-15, 230 V
Rated operation current I 3 A	le at DC-13, 24 V
Rated operation current l 0.3 A	le at DC-13, 125 V
Rated operation current I 0 A	le at DC-13, 230 V
Switching function Slow-action switch	
Switching function latchi No	ing
Output electronic No	
Forced opening Yes	
Number of safety auxiliar 0	ry contacts

Number of contacts as normally closed contact

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 Ouboid
Material housing Rastic
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 25 - 70 °C
Degree of protection (IP) IP65
Degree of protection (NEVA) 13

## **APPROVALS**









