

## Position switch, 1N/O+1N/C, wide, IP65\_x, roller lever

Powering Business Worldwide

Part no. AT0-11-S-IA/R Article no. 028951 Catalog No. AT0-11-S-IA-R

### 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
Mounting position			As required
Degree of Protection			IP65
Terminal capacities		$\mathrm{mm}^2$	
Solid		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)
Contacts/switching capacity			
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			III/3
Rated operational current	I <sub>e</sub>	Α	
AC-15			
24 V	I <sub>e</sub>	Α	10

6

4

10

1

0.5

max. 400

Α

Α

Α

Α

Α

Hz

le

Ιe

Ιe

Ιe

Ιe

# Supply frequency Short-circuit rating to IEC/EN 60947-5-1

220 V 230 V 240 V

380 V 400 V 415 V

DC-13 24 V

110 V

220 V

max. fuse	А	gG/gL	6
Repetition accuracy	m	nm	0.02

#### **Mechanical variables**

Lifespan, mechanical	Operations	x 10 <sup>6</sup>	20
Contact temperature of roller head		°C	≦ <sub>100</sub>
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Snap-action contact		g	2
Operating frequency	Operations/h		≦ <sub>6000</sub>

## Actuation

Mechanical		
Actuating force at beginning/end of stroke	N	8.0/20.0
Actuating torque of rotary drives	Nm	0.2
Max. operating speed with DIN cam	m/s	1.5
Notes		for angle of actuation $\alpha=30^\circ,L=125$ mm

# **Design verification as per IEC/EN 61439**

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	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 <sub>diss</sub>	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 switch gear must be observed. $\label{eq:continuous}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

# **Technical data ETIM 6.0**

Sensors (EG000026) / End switch (EC000030)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss8.1-27-27-06-01 [AGZ382012])

Width sensor	mn	m	51
Diameter sensor	mn	m	0
Height of sensor	mn	m	51
Length of sensor	mn	m	0
Rated operation current le  at AC-15, 24 V	Α		10
Rated operation current le  at AC-15, 125 V	Α		0
Rated operation current le at AC-15, 230 V	А		6
Rated operation current le  at DC-13, 24 V	А		10
Rated operation current le  at DC-13, 125 V	Α		1
Rated operation current le  at DC-13, 230 V	А		0.5
Switching function			Quick-break switch
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

Housing according to norm			•
Construction type housing			Cuboid
Material housing			Plastic
Coating housing			-
Type of control element			Rotary lever
Alignment of the control element			-
Type of electric connection			-
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	0	C.	-25 - 70
Degree of protection (IP)			IP65