

Part no.

Article no.

Catalog No.

## Position switch, 1N/0+1N/C, wide, IP65\_x

ATR-11-1-IA 034868 ATR-11-1-IA



# **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 <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**

Nated insulation voltage   Output voltage category/pollution degree   Output voltage category/pollution degree   Output voltage category/pollution degree   Output voltage category/pollution degree   Output voltage   Output vo	Contacts/Switching Capacity			
Decivoidage category/pollution degree   III/3   III/	Rated impulse withstand voltage	$U_{\text{imp}}$	V AC	6000
AC-15  24 V	Rated insulation voltage	Ui	V	500
AC-15 24 V	Overvoltage category/pollution degree			III/3
24 V       Ie       A       10         220 V 230 V 240 V       Ie       A       6         380 V 400 V 415 V       Ie       A       4         DC-13       V       V       V         24 V       Ie       A       10         110 V       Ie       A       1         220 V       Ie       A       0.5         Supply frequency       Hz       max. 400         Short-circuit rating to IEC/EN 60947-5-1       A gG/gL       6         max. fuse       A gG/gL       6	Rated operational current	I <sub>e</sub>	Α	
220 V 230 V 240 V	AC-15			
380 V 400 V 415 V	24 V	I <sub>e</sub>	Α	10
DC-13 24 V	220 V 230 V 240 V	I <sub>e</sub>	Α	6
24 V       I <sub>e</sub> A       10         110 V       I <sub>e</sub> A       1         220 V       I <sub>e</sub> A       0.5         Supply frequency       Hz       max. 400         Short-circuit rating to IEC/EN 60947-5-1       A gG/gL       6	380 V 400 V 415 V	I <sub>e</sub>	Α	4
110 V       Ie       A       1         220 V       Ie       A       0.5         Supply frequency       Hz       max. 400         Short-circuit rating to IEC/EN 60947-5-1       A gG/gL       6         max. fuse       A gG/gL       6	DC-13			
220 V I <sub>e</sub> A 0.5 Supply frequency Short-circuit rating to IEC/EN 60947-5-1 max. fuse A gG/gL 6	24 V	I <sub>e</sub>	Α	10
Supply frequency  Short-circuit rating to IEC/EN 60947-5-1  max. fuse  A gG/gL  6	110 V	I <sub>e</sub>	Α	1
Short-circuit rating to IEC/EN 60947-5-1  max. fuse A gG/gL 6	220 V	I <sub>e</sub>	Α	0.5
max. fuse A gG/gL 6	Supply frequency		Hz	max. 400
	Short-circuit rating to IEC/EN 60947-5-1			
Repetition accuracy mm 0.02	max. fuse		A gG/gL	6
	Repetition accuracy		mm	0.02

#### **Mechanical variables**

Lifespan, mechanical	Operations	x 10 <sup>6</sup>	20
Notes			(If approached from the side: 6)
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

ı	Mechanical			
	Actuating force at beginning/end of stroke	N	N	1.0/8.0
	Max. operating speed with DIN cam	n	m/s	1/1
	Notes			for angle of actuation $\alpha=0^{\circ}/30^{\circ}$

# 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	$P_{vid}$	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 <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. $\label{eq:constraint}$
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	mm	51
Diameter sensor	mm	0
Height of sensor	mm	51
Length of sensor	mm	0
Rated operation current le at AC-15, 24 V	Α	0
Rated operation current le at AC-15, 125 V	Α	0
Rated operation current le at AC-15, 230 V	Α	0
Rated operation current le at DC-13, 24 V	Α	0
Rated operation current le at DC-13, 125 V	Α	0
Rated operation current le at DC-13, 230 V	Α	0
Switching function		Slow-action switch
Output electronic		No
Forced opening		Yes
Number of safety auxiliary contacts		0
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		Plunger
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	°C	-25 - 70
Degree of protection (IP)		IP65

## **Dimensions**

