# DATASHEET - ATR-11-S-IA/ARK

Part no. Catalog No.

No.



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

ATR-11-S-IA/ARK 034863 Alternate Catalog ATR-11-S-IA-ARK



## **Delivery program**

Basic function		Position switches Safety position switches
Part group reference		ATR
Product range		Roller lever
Degree of Protection		IP65
Features		Complete unit
Ambient temperature	°C	-25 - +70
Snap-action contact		Yes
Contacts		
N/O = Normally open		1 N/O
N/C = Normally closed		1 NC 🛞
Notes		⊖ = safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence		- + + + + + + + + + + + + + + + + + + +
Contact travel = Contact closed = Contact open		$\begin{array}{c} 13.14 \\ 21.22 \\ 13.14 \\ 21.22 \\ 0 \\ 2.6 \\ 4.8 \\ 10.1 \text{ mm} \\ Zw = 7.4 \text{ mm} \end{array} \rightarrow$
Positive opening (ZW)		yes
Colour		
Enclosure covers		Grey
Enclosure covers		
Housing		Insulated material
Connection type		Screw terminal
<b>Notes</b> The operating head can be rotated at 90° intervals to adapt to the specified a For degree of protection IP65, use V-M20 (206910) cable glands with connecting the	approach direction. read of max. 9 mm length	h.

**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 <sup>2</sup>	
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)
Repetition accuracy	mm	0.02

### **Contacts/switching capacity**

Contacts/switching capacity			
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			111/3
Rated operational current	l <sub>e</sub>	Α	
AC-15			
24 V	I <sub>e</sub>	А	10
220 V 230 V 240 V	l <sub>e</sub>	A	6
380 V 400 V 415 V	I <sub>e</sub>	А	4
DC-13			
24 V	le	А	3
110 V	I <sub>e</sub>	А	1
220 V	I <sub>e</sub>	А	0.5
Supply frequency		Hz	max. 400
Short-circuit rating to IEC/EN 60947-5-1			
max. fuse		A gG/gL	6
Mechanical variables			
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	20
Contact temperature of roller head		°C	≦ 100
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Snap-action contact		g	2
Operating frequency	Operations/h		≦ 6000
Actuation			
Mechanical			
Actuating force at beginning/end of stroke		Ν	1.0/8.0
Max. operating speed with DIN cam		m/s	1
Notes			for angle of actuation $\alpha = 30^{\circ}$

# Design verification as per IEC/EN 61439

Rated operational current for specified heat dissipationInA6Heat dissipation per pole, current-dependentPvidWa0.13Equipment heat dissipation, current-dependentPvidWa0Static heat dissipation, non-current-dependentPvsWa0Heat dissipation capacityPdissWa0Operating ambient temperature min.°C25Operating ambient temperature max.°C°C				
Hat dissipation per pole, current-dependent     Pvid     We       Equipment hat dissipation, current-dependent     Pvid     We     0       Static heat dissipation, current-dependent     Pvid     We     0       Heat dissipation, current-dependent     Pvid     We     0       Operating ambient temperature man.     Pvid     C     25       Operating ambient temperature max.     C     70     70       EUCN 61432 design verification     C     70     70       102.2 Corrosion resistance     C     70     70       102.2 Corrosion resistance of insulating materials to normal heat and fire due to intervale dectric effects     Meets the product standard's requirements.     70       102.3.1 Verification of resistance of insulating materials to abnormal heat and fire due to intervale dectric effects     Meets the product standard's requirements.     70       102.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to intervale dectric effects     Meets the product standard's requirements.     70       102.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to intervale dectric effects     Meets the product standard's requirements.     70       102.3.2 Verification of ArsSEMBLIES     <	Technical data for design verification			
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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.	10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.7 Internal electrical circuits and connections Is the panel builder's responsibility.	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.
10.8 Connections for external conductors Is the panel builder's responsibility.	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) / End switch (EC000030)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss10.0.1-27-27-06-01 [AGZ382015])

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	А	0
Rated operation current le at AC-15, 230 V	А	0
Rated operation current le  at DC-13, 24 V	А	0
Rated operation current le  at DC-13, 125 V	Α	0
Rated operation current le  at DC-13, 230 V	А	0
Switching function		Quick-break switch
Switching function latching		No
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
Construction type housing		Cuboid
Material housing		Plastic
Coating housing		Other
Type of control element		Square roller lever
Alignment of the control element		Other
Type of electric connection		Other
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)		Other

# Assets (links)

Declaration of CE Conformity 00002834 Instruction Leaflets IL05208009Z2018\_06