DATASHEET - ATR-11-1-IA/ARK



Position switch, 1N/0+1N/C, wide, $IP65_x$, angled roller lever

Powering Business Worldwide

Part no. ATR-11-1-IA/ARK Catalog No. 034864 Alternate Catalog ATR-11-1-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
Contacts		
N/O = Normally open		1 N/O
N/C = Normally closed		1 NC →
Notes		e safety function, by positive opening to IEC/EN 60947-5-1
Contact sequence		0-\frac{13}{14}\frac{1}{22}
Contact travel = Contact closed = Contact open		13-14 21-22 0 4.7 8.0 10.1 mm Zw = 6.8 mm
Positive opening (ZW)		yes
Colour		
Enclosure covers		Grey
Enclosure covers		
Housing		Insulated material
Connection type		Screw terminal
Notes The operating head can be rotated at 90° intervals to adapt to the specified approach direction.		

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For degree of protection IP65, use V-M20 (206910) cable glands with connecting thread of max. 9 mm length.

Technical data General

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
Overvoltage category/pollution degree			III/3
Rated operational current	I _e	Α	
AC-15			
24 V	I _e	Α	10
220 V 230 V 240 V	I _e	Α	6
380 V 400 V 415 V	l _e	Α	4
DC-13			
24 V	I _e	Α	3
110 V	l _e	Α	1
220 V	l _e	Α	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 ⁶	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		N	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

echnical 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
EC/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 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 0 Α Rated operation current le at AC-15, 125 V 0 Α Rated operation current le at AC-15, 230 V Α n Rated operation current le at DC-13, 24 V Α 0 Rated operation current le at DC-13, 125 $\rm V$ Α 0 Α Rated operation current le at DC-13, 230 V 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 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 Plastic Material housing

Other

Other

Other

No

Yes

None

None

25 - 70

IP65 Other

°C

Square roller lever

Assets (links)

Degree of protection (IP)

Degree of protection (NEMA)

Coating housing

Type of control element

With status indication

Suitable for safety functions

Explosion safety category for gas

Explosion safety category for dust

Ambient temperature during operating

Alignment of the control element

Type of electric connection

Declaration of CE Conformity

00002834

Instruction Leaflets

IL05208009Z2018_06