DATASHEET - ATR-11-2-IA

Position switch, 1N/O+1N/C, wide, IP65_x



Part no. Catalog No. Alternate Cat No.

Part no.ATR-11-2-IACatalog No.210298Alternate CatalogATR-11-2-IA

Delivery program		
Basic function		Position switches Safety position switches
Part group reference		ATR
Product range		Rounded plunger
Degree of Protection		IP65
Features		Basic device, expandable
Ambient temperature	°C	-25 - +70
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		$-\frac{127}{28}$ $\frac{15}{16}$
Contact travel = Contact closed = Contact open		17-18 25-26 0 2.1 3.4 6 mm Zw = 4.7 mm
Positive opening (ZW)		yes
Colour		
Enclosure covers		Grey
Enclosure covers		
Housing		Insulated material
Connection type		Screw terminal
Notes For degree of protection IP65, use V-M20 (206910) cable glands with connecting thread	of max. 9 mn	n length.

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 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			111/3
Rated operational current	Ι _e	А	
AC-15			
24 V	Ι _e	А	10
220 V 230 V 240 V	le	А	6
380 V 400 V 415 V	Ι _e	А	4
DC-13			
24 V	Ie	А	10
110 V	Ie	А	1
220 V	Ie	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 ⁶	20
Notes			(If approached from the side: 6)
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	1/1
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	A	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
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 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.

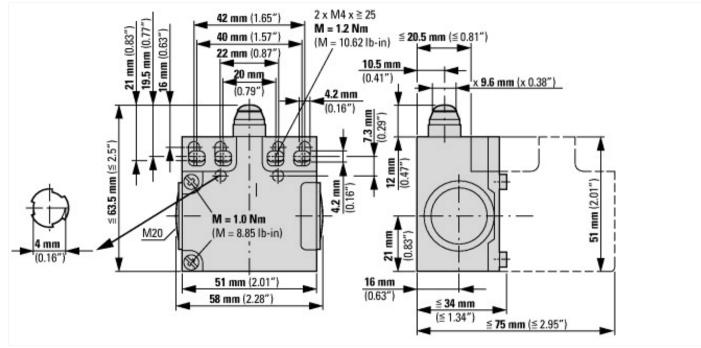
Technical data ETIM 7.0

Sensors	(EG000026) /	Fnd	switch	(FC000030)	
00113013	(L000020)/	Liiu	30010011	(L0000000)	

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 sensor51Diameter sensormm0Height of sensormm51Length of sensormm0Rated operation current le at AC-15, 24 VA0Rated operation current le at AC-15, 25 VA0Rated operation current le at AC-15, 230 VA0Rated operation current le at DC-13, 24 VA0Rated operation current le at DC-13, 24 VA0Rated operation current le at DC-13, 25 VA0Rated operation current le at DC-13, 26 VA0Switching functionM0Switching functionNNOutput electronicNNForced openingVesNNumber of safety auxiliary contactsMNNumber of contacts as normally closed contactMN	
Height of sensormm51Length of sensormm0Rated operation current le at AC-15, 24 VA0Rated operation current le at AC-15, 125 VA0Rated operation current le at AC-15, 230 VA0Rated operation current le at DC-13, 24 VA0Rated operation current le at DC-13, 125 VA0Rated operation current le at DC-13, 230 VA0Rated operation current le at DC-13, 230 VA0Switching functionA0Switching functionA0Switching functionA0Output electronicNoNoForced openingYesNoNumber of safety auxiliary contactsOSovitching	
Length of sensor mm 0 Rated operation current le at AC-15, 24 V A 0 Rated operation current le at AC-15, 125 V A 0 Rated operation current le at AC-15, 230 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 20 V A 0 Switching function A 0 0 Switching function A 0 0 Output electronic A 0 0 Forced opening No No 0 Number of safety auxiliary contacts O Q Q	
Rated operation current le at AC-15, 24 V A 0 Rated operation current le at AC-15, 125 V A 0 Rated operation current le at AC-15, 230 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function A 0 0 Switching function A 0 0 Output electronic No No No Forced opening Yes 0 0 Number of safety auxiliary contacts O O O	
Rated operation current le at AC-15, 125 V A 0 Rated operation current le at AC-15, 230 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function A 0 0 Switching function A 0 0 Output electronic A 0 0 Forced opening No No 0 Number of safety auxiliary contacts O 0 0	
Rated operation current le at AC-15, 230 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function A 0 Switching function latching A 0 Output electronic No No Forced opening Yes 0 Number of safety auxiliary contacts O O	
Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function A 0 Switching function latching Mo No Output electronic Mo Yes Forced opening Yes 0	
Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Switching function A 0 Switching function latching A 0 Output electronic No No Forced opening Yes 0 Number of safety auxiliary contacts O O	
Rated operation current le at DC-13, 230 V A 0 Switching function Slow-action switch Switching function latching No Output electronic Mo Forced opening Yes Number of safety auxiliary contacts O	
Switching functionSlow-action switchSwitching function latchingNoOutput electronicNoForced openingYesNumber of safety auxiliary contactsO	
Switching function latching No Output electronic No Forced opening Yes Number of safety auxiliary contacts O	
Output electronic No Forced opening Yes Number of safety auxiliary contacts O	
Forced opening Yes Number of safety auxiliary contacts 0	
Number of safety auxiliary contacts 0	
Number of contacts as normally closed contact	
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 Plunger	
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) 4X	

Dimensions



Assets (links)

Declaration of CE Conformity 00002834 Instruction Leaflets IL05208009Z2018_06