DATASHEET - AT0-20-1-IA/V

Part no. Catalog No.

No.



Position switch, 2N/O, wide, IP65_x, adjustable roller lever





AT0-20-1-IA/V 076411 Alternate Catalog AT0-20-1-IA-V

Delivery program

Degree of Protection	IP65
Contacts	
N/O = Normally open	2 N/O
Contact sequence	$ \begin{array}{c} & & & \\ & $
Contact travel = Contact closed = Contact open	13-14 23-24 0° 8° 54°
Housing	Wide version

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		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
Rated operational current	۱ _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	l _e	А	4
DC-13			
24 V	le	А	10
110 V	le	А	1
220 V	le	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			
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 torque of rotary drives		Nm	0.2
Max. operating speed with DIN cam		m/s	1.5
Notes			for angle of actuation α = 30°, L = 125 mm

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	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) / 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 51 mm 0 Length of sensor mm Rated operation current le at AC-15, 24 V А 10 Rated operation current le at AC-15, 125 V А 0

Aread operation current le at DC-13, 25 V I I Bated operation current le at DC-13, 25 V I Source consumption Switching function I Source consumption Switching function I Source consumption Output electronic I Source consumption Number of stafty auxiliary contacts I Source consumption Number of contacts as normally open contact I I Nyne of contacts as normally open contact I I Nyne of contacts as normally open contact I I Nyne of contacts as normally open contact I I Nyne of contacts as normally open contact I I I Nyne of contacts as normally open contact I I I I Nyne of contacts as normally open contact I <t< th=""><th></th><th></th><th></th></t<>			
And operation current le at DC 13, 125 V Image: A image:	Rated operation current le at AC-15, 230 V	А	6
Atted operation current le at DC-13,230 V A 0 Switching function Switching function latching Switching function latching No Switching function latching No No Output electronic No No Forced opening No No Number of contacts as normally closed contact No No Number of contacts as change-over contact 0 No Nymber of contacts as change-over contact No No State of contacts as change-over contact No No State of contacts as change-over contact No No State of contacts as change-over contact No No Construction type housing No No State of control element No No Control element No No Nype of interface Ver No State of control element No No State of control element No No Nype of interface Ver A A State of control element No No No State of contact, connection <td>Rated operation current le at DC-13, 24 V</td> <td>А</td> <td>10</td>	Rated operation current le at DC-13, 24 V	А	10
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Switching function latchingImage: space s	Rated operation current le at DC-13, 230 V	А	0.5
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Forced opening Nomer of safety auxiliary contacts Nomer of safety auxiliary contacts Number of contacts as normally closed contact 0 Number of contacts as normally closed contact 0 Number of contacts as normally open contact 0 Number of contacts as normally open contact 0 Number of contacts as normally open contact Nome Type of interface Nome Type of interface for safety communication Nome Construction type housing Nome Material housing Outer Alignment of the control element Outer Number of contacts and power for gas Nome Suitable for safety functions Mome Suitable for safety functions Mome Suitable for safety functions Nome Explosion safety functions Nome Explosion safety functions (P) Nome Anbient temperature during operating Nome Degree of protection (IP) Explosion safety functions	Switching function latching		No
Number of safety auxiliary contacts 0 Number of contacts as normally closed contact 0 State of safety number of contact 0 Construction type housing None Contary leven 0 Roter of control element 0 Night effective connection 0 Number of safety functions 0 Suitable for safety functions 0 Suitable for safety functions 0 Explosion safety category for dist None Anbient emperature during operating 0 Degree of protecton (IP) 0 </td <td>Output electronic</td> <td></td> <td>No</td>	Output electronic		No
Number of contacts as normally closed contact0Number of contacts as normally open contact2Number of contacts as normally open contact0Number of contacts as change-over contact0Type of interfaceNoneConstruction type housingNoneConstruction type housingColoidCoating housingOtherCoating housingOtherAlignment of the control elementOtherType of electric connectionOtherWith status indicationOtherSuitable for safety functionsNoneSuitable for safety functionsNone<	Forced opening		No
Number of contacts as normally open contact Image: Participa of contacts as change-over contacts Image: Participa of contacts Image:	Number of safety auxiliary contacts		0
Number of contacts as change-over contact Image: Contact as change-over contact </td <td>Number of contacts as normally closed contact</td> <td></td> <td>0</td>	Number of contacts as normally closed contact		0
Type of interface None Type of interface for safety communication None Construction type housing Cuboid Material housing Plastic Coating housing Other Coating housing Other Type of control element Other Alignment of the control element Other Type of electric connection Other Suitable for safety functions None Explosion safety category for gas None Explosion safety category for dust None Anheint temperature during operating Other Bugger of protection (IP) States	Number of contacts as normally open contact		2
Type of interface for safety communication Image: Construction type housing None Construction type housing Cuboid Cuboid Material housing Plastic Other Coating housing Other Other Type of control element Adjustable rotary lever Other Alignment of the control element Other Other Suitable for safety functions Image: Construction type for gas None Explosion safety category for dust None None Anbient temperature during operating Image: Construction (IP) None	Number of contacts as change-over contact		0
Construction type housing Cubid Material housing Plastic Coating housing Other Type of control element Adjustable rotary lever Alignment of the control element Other Nyre of electric connection Other With status indication Other Suitable for safety functions Other Explosion safety category for gas No Explosion safety category for dust No Ambient temperature during operating Co Burger of protection (IP) Plost	Type of interface		None
Material housing Plastic Coating housing Other Type of control element Adjustable rotary lever Alignment of the control element Other Type of electric connection Steeler With status indication Steeler Suitable for safety functions Steeler Explosion safety category for gas Steeler Explosion safety category for dust None Ambient temperature during operating Steeler Barbert of (IP) Barbert of (IP)	Type of interface for safety communication		None
Coating housing Other Type of control element Adjustable rotary lever Alignment of the control element Other Type of electric connection Other With status indication Other Suitable for safety functions Image: Set of the safety functions Explosion safety category for dust Mone Ambient temperature during operating Image: Set of the safety category for (P)	Construction type housing		Cuboid
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Alignment of the control element Image: Control for the control element Other Type of electric connection Image: Control for the control element Other With status indication Image: Control for the control element No Suitable for safety functions Image: Control for the control element No Explosion safety category for gas Image: Control for the control element No Ambient temperature during operating Image: Control for the control element So Begree of protection (IP) Image: Control element Image: Control element	Coating housing		Other
Type of electric connection Image: Book of the connection Other With status indication Image: Book of the connection No Suitable for safety functions Image: Book of the connection No Explosion safety category for gas Image: Book of the connection None Ambient temperature during operating Image: Book of the connection Sole of the connection Begree of protection (IP) Image: Book of the connection Image: Book of the connection	Type of control element		Adjustable rotary lever
Annotation Annotation With status indication Mo Suitable for safety functions Mo Explosion safety category for gas Mo Explosion safety category for dust Mo Ambient temperature during operating Mo Degree of protection (IP) Mo	Alignment of the control element		Other
Suitable for safety functions No Explosion safety category for gas No Explosion safety category for dust No Ambient temperature during operating P Degree of protection (IP) Image: Safety category for dust	Type of electric connection		Other
Explosion safety category for gas Mone Explosion safety category for dust Mone Ambient temperature during operating Mone Degree of protection (IP) Mone	With status indication		No
Explosion safety category for dust None Ambient temperature during operating °C 25 - 70 Degree of protection (IP) IP65	Suitable for safety functions		No
Ambient temperature during operating °C 25 - 70 Degree of protection (IP) IP65	Explosion safety category for gas		None
Degree of protection (IP)	Explosion safety category for dust		None
	Ambient temperature during operating	°C	25 - 70
	Degree of protection (IP)		IP65
	Degree of protection (NEMA)		Other