DATASHEET - ATO-11-1-IA



Part no.

(Norway)

No.

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





Delivery program

Image: propertion writches Safety position writches lart group reference AT requery reference Rounded plunger requery reference Rounded plunger requery reference Rounded plunger eatures Safety position swritches for Safety position swritches Safety position swritches for Safety position swritches Safety position swritches Safety position swritches			
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basign bound boun	Features		Basic device, expandable
where interfacts interfacts Note Normally open INC Note Normally closed INC Notes Int C Interfacts Interfacts Interfacts Intenterial	Ambient temperature	°C	-25 - +70
Contacts Inclairy insulated NO = Normally open 1 N/O NC = Normally closed 1 N/O Notes Inc Image:	Design		EN 50047 Form B
N0 = Normally open INC INC Notes INC Image: Im	Approval		totally insulated
Notes Inc Image: Im	Contacts		
Notes Set of intervel iontact sequence Image: Set of intervel iontact ravel Contact closed contact travel Contact closed contact closed Contact c	N/O = Normally open		1 N/O
Item is a line in a line	N/C = Normally closed		1 NC 🕀
Image:	Notes		Θ = safety function, by positive opening to IEC/EN 60947-5-1
Image: Series of the series	Contact sequence		~ \ 7
Colour Grey Enclosure covers Grey Enclosure covers Grey Nousing Insulated material Rousing Insulated material Rousing Grew terminal	Contact travel = Contact closed = Contact open		21-22 0 2.9 4.8 6 mm
Enclosure covers Grey Enclosure covers Image: Comparison of the comparison of t	Positive opening (ZW)		yes
Enclosure covers Image: Comparison of the comparison of	Colour		
Iousing Insulated material connection type Screw terminal	Enclosure covers		Grey
Connection type Screw terminal	Enclosure covers		
	Housing		Insulated material
lotes For degree of protection IP65, use V-M20 (206910) cable glands with connecting thread of max. 9 mm length.	Connection type		Screw terminal

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	le	А	
AC-15			
24 V	le	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			
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
Actuating torque of rotary drives		Nm	0.2
Max. operating speed with DIN cam		m/s	1/0.5
Notes			for angle of actuation α = 0°/30°

Design verification as per IEC/EN 61439

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])

(eci@\$\$10.0.1-27-27-06-01 [AGZ382015])			
Width sensor	n	nm	51
Diameter sensor	n	nm	0
Height of sensor	n	nm	51
Length of sensor	n	nm	0
Rated operation current le at AC-15, 24 V	A	4	10
Rated operation current le at AC-15, 125 V	A	4	0
Rated operation current le at AC-15, 230 V	A	4	6
Rated operation current le at DC-13, 24 V	A	4	10
Rated operation current le at DC-13, 125 V	A	4	1
Rated operation current le at DC-13, 230 V	A	4	0.5
Switching function			Slow-action switch
Switching function latching			No
Output electronic			No
Forced opening			No
Number of safety auxiliary contacts			1
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			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	o	°C	25 - 70
Degree of protection (IP)			IP65
Degree of protection (NEMA)			Other