

## Position switch, 1early N/O+1late N/C, wide, IP65\_x, adjustable roller lever



Part no. AT0-11-2-IA/V Article no. 090648 Catalog No. AT0-11-2-IA-V

## 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		$\mathrm{mm}^2$	
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)
Contacts/switching capacity			
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			III/3
Rated operational current	l <sub>e</sub>	Α	
AC-15			
24 V	l <sub>e</sub>	Α	10
220 V 230 V 240 V	l <sub>e</sub>	Α	6
380 V 400 V 415 V	l <sub>e</sub>	Α	4
DC-13			
24 V	I <sub>e</sub>	Α	10
110 V	I <sub>e</sub>	Α	1
220 V	le	Α	0.5
Supply frequency		Hz	max. 400
Short-circuit rating to IEC/EN 60947-5-1			
max. fuse		A gG/gL	6
Repetition accuracy		mm	0.02
Mechanical variables			
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	20
Contact temperature of roller head		°C	≦ <sub>100</sub>
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	25
Snap-action contact		g	2
Operating frequency	Operations/h		≦ <sub>6000</sub>
Actuation			
Mechanical			
Actuating force at beginning/end of stroke		N	8.0/20.0
Actuating torque of rotary drives		Nm	0.2
Max. operating speed with DIN cam		m/s	1.5
Notes			for angle of actuation $\alpha$ = 30°, $L$ = 125 mm

## Design verification as per IEC/EN 61439

Technical data for design verification		
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Rated operational current for specified heat dissipation	I <sub>n</sub>	Α	6
· · · · · · · · · · · · · · · · · · ·		W	0.13
Heat dissipation per pole, current-dependent	P <sub>vid</sub>		
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## **Technical data ETIM 6.0**

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@ss8.1-27-27-06-01 [AG7387012])

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         A         10           Rated operation current le at AC-15, 125 V         A         6           Rated operation current le at AC-15, 230 V         A         10           Rated operation current le at DC-13, 24 V         A         10           Rated operation current le at DC-13, 25 V         A         1           Rated operation current le at DC-13, 25 V         A         1.           Switching function         A         0.5           Switching function         B         A         0.5           Output electronic         No         No         No           Forced opening         Yes         1         1           Number of safety auxiliary contacts         1         1         1           Number of contacts as normally closed contact         1         1         1           Number of contacts as normally open contact         1         1         1	[AGZ382012])		
Height of sensor  Length of sensor  Rated operation current le at AC-15, 24 V  Rated operation current le at AC-15, 125 V  Rated operation current le at AC-15, 230 V  Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 25 V  Rated operation current le at	Width sensor	mm	51
Length of sensor Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 230 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 125 V Rated oper	Diameter sensor	mm	0
Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V A 0 Rated operation current le at AC-15, 230 V A 6 Rated operation current le at DC-13, 24 V A 10 Rated operation current le at DC-13, 125 V A 1 Rated operation current le at DC-13, 125 V A 1 Rated operation current le at DC-13, 125 V A 0.5 Switching function Output electronic Forced opening Number of safety auxiliary contacts Number of contacts as normally closed contact  1 Number of contacts as normally closed contact	Height of sensor	mm	51
Rated operation current le at AC-15, 125 V  Rated operation current le at AC-15, 230 V  Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 125 V  Rated operation current le at DC-13, 125 V  A 1  Rated operation current le at DC-13, 230 V  A 0.5  Switching function  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  A 0  Rated operation current le at DC-13, 125 V  A 1  Number of contacts as normally closed contact  A 0.5  Slow-action switch  No  Yes  1  Number of contacts as normally closed contact	Length of sensor	mm	0
Rated operation current le at AC-15, 230 V  Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 125 V  Rated operation current le at DC-13, 125 V  Rated operation current le at DC-13, 230 V  A  0.5  Switching function  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  A  6  Rated operation current le at DC-13, 24 V  A  1  Number of contacts as normally closed contact  A  6  Rated operation current le at DC-13, 24 V  A  1  Number of contacts as normally closed contact  A  6  Rated operation current le at DC-13, 24 V  A  10  No  Slow-action switch  No  Yes  Number of contacts as normally closed contact  1	Rated operation current le at AC-15, 24 V	Α	10
Rated operation current le at DC-13, 24 V  Rated operation current le at DC-13, 125 V  Rated operation current le at DC-13, 230 V  A 1  Rated operation current le at DC-13, 230 V  A 0.5  Switching function  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact  A 1  Number of contacts as normally closed contact	Rated operation current le at AC-15, 125 V	Α	0
Rated operation current le at DC-13, 125 V  Rated operation current le at DC-13, 230 V  A  0.5  Switching function  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  A  1  1  1  1  1  1  1  1  1  1  1  1	Rated operation current le at AC-15, 230 V	Α	6
Rated operation current le at DC-13, 230 V  Switching function  Output electronic  Forced opening  Number of safety auxiliary contacts  Number of contacts as normally closed contact  A  0.5  Slow-action switch  No  Yes  1  1	Rated operation current le at DC-13, 24 V	Α	10
Switching function  Slow-action switch  Output electronic  No  Forced opening  Yes  Number of safety auxiliary contacts  1  Number of contacts as normally closed contact  1	Rated operation current le at DC-13, 125 V	Α	1
Output electronic No Forced opening Yes Number of safety auxiliary contacts 1 Number of contacts as normally closed contact 1	Rated operation current le at DC-13, 230 V	Α	0.5
Forced opening Yes Number of safety auxiliary contacts 1 Number of contacts as normally closed contact 1	Switching function		Slow-action switch
Number of safety auxiliary contacts  1  Number of contacts as normally closed contact  1	Output electronic		No
Number of contacts as normally closed contact 1	Forced opening		Yes
	Number of safety auxiliary contacts		1
Number of contacts as normally open contact 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
Housing according to norm		-
Construction type housing		Cuboid
Material housing		Plastic
Coating housing		-
Type of control element		Adjustable rotary lever
Alignment of the control element		
Type of electric connection		-
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