



Position switch, 1N/O+1N/C, narrow, IP65\_x, spring-rod actuator

Part no.  
 Article no.  
 Catalog No.

AT4/11-S/I/F  
 066943  
 AT4-11-S-I-F

Delivery program

Basic function		Position switches
Part group reference		AT4
Product range		Spring-rod actuator
Degree of Protection		IP65
Features		Complete unit
Ambient temperature	°C	-25 - +70
Snap-action contact		Yes
Description		Not to be used as a safety position switch
Approval		totally insulated

Contacts

N/O = Normally open		1 N/O
N/C = Normally closed		1 NC
Contact sequence		
Contact travel  = Contact closed  = Contact open		

Colour

Enclosure covers		Grey
Enclosure covers		

Housing		Insulated material
Connection type		Screw terminal
Rod length	mm	160
<b>Notes</b> The operating head can be rotated at 90° intervals to adapt to the specified approach direction. For degree of protection IP65, use V-M20 (206910) cable glands with connecting thread of max. 9 mm 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 <sup>2</sup>	
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	U <sub>i</sub>	V	500
Overvoltage category/pollution degree			III/3
Rated operational current	I <sub>e</sub>	A	
AC-15			
24 V	I <sub>e</sub>	A	10
220 V 230 V 240 V	I <sub>e</sub>	A	6
380 V 400 V 415 V	I <sub>e</sub>	A	4
DC-13			
24 V	I <sub>e</sub>	A	10
110 V	I <sub>e</sub>	A	1
220 V	I <sub>e</sub>	A	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
Rated conditional short-circuit current		kA	1

Mechanical variables

Lifespan, mechanical	Operations	x 10 <sup>6</sup>	8
Contact temperature of roller head		°C	 100
Mechanical shock resistance (half-sinusoidal shock, 20 ms)			
Standard-action contact		g	5
Snap-action contact		g	2
Operating frequency	Operations/h		 6000

Actuation

Mechanical			
Actuating force at beginning/end of stroke		N	8.0/20.0
Actuating torque of rotary drives		Nm	0.3

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	A	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.1
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 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 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 [AGZ382012])		
Width sensor	mm	40
Diameter sensor	mm	0
Height of sensor	mm	83
Length of sensor	mm	0
Rated operation current I <sub>e</sub> at AC-15, 24 V	A	10
Rated operation current I <sub>e</sub> at AC-15, 125 V	A	0
Rated operation current I <sub>e</sub> at AC-15, 230 V	A	6
Rated operation current I <sub>e</sub> at DC-13, 24 V	A	10
Rated operation current I <sub>e</sub> at DC-13, 125 V	A	1
Rated operation current I <sub>e</sub> at DC-13, 230 V	A	0.4
Switching function		Quick-break switch
Output electronic		No
Forced opening		Yes
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
Housing according to norm		-
Construction type housing		Cuboid
Material housing		Plastic

Coating housing			-
Type of control element			Spring-rod
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

## Additional product information (links)

<b>IL05208012Z (AWA1310-0544) Position switch</b>	
IL05208012Z (AWA1310-0544) Position switch	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05208012Z2011_06.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05208012Z2011_06.pdf</a>