



Position switch, 1N/O+1N/C, wide, IP65_x, adjustable roller lever

Part no.

Catalog No.

Alternate Catalog No.

AT4/11-1/IA/V

040839

AT4/11-1/IA/V

Delivery program

Basic function			Position switches Safety position switches
Part group reference			AT4
Product range			Adjustable roller lever
Degree of Protection			IP65
Features			Complete unit
Ambient temperature		°C	-25 - +70
Approval			totally insulated
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			
Contact travel = Contact closed = Contact open			13-14 21-22 0°34°44°72° Zw = 50°
Positive opening (ZW)			yes
Colour			
Enclosure covers			Grey
Enclosure covers			
Housing			Insulated material
Connection type			Screw terminal
Notes 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 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	U _i	V	500
Overvoltage category/pollution degree			III/3
Rated operational current	I _e	A	
AC-15			
24 V	I _e	A	10
220 V 230 V 240 V	I _e	A	6
380 V 400 V 415 V	I _e	A	4
DC-13			
24 V	I _e	A	10
110 V	I _e	A	1
220 V	I _e	A	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	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
Max. operating speed with DIN cam		m/s	1.4
Notes			for angle of actuation α = 30°, L = 125 mm

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	6
Heat dissipation per pole, current-dependent	P _{vid}	W	0.1
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 8.0

Sensors (EG000026) / End switch (EC000030)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Safety-related position switch / Safety position switch (Type 1) (ecI@ss10.0.1-27-27-26-01 [AKE640013])			
Width sensor	mm		56
Diameter sensor	mm		0
Height of sensor	mm		83
Length of sensor	mm		0
Rated operation current I _e at AC-15, 24 V	A		10
Rated operation current I _e at AC-15, 125 V	A		0
Rated operation current I _e at AC-15, 230 V	A		6
Rated operation current I _e at DC-13, 24 V	A		10
Rated operation current I _e at DC-13, 125 V	A		1
Rated operation current I _e at DC-13, 230 V	A		0.4
Switching function			Slow-action switch
Switching function latching			No
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
Construction type housing			Cuboid
Material housing			Plastic
Coating housing			Other
Type of control element			Adjustable rotary lever
Alignment of the control element			Roller cam crossed
Type of electric connection			Cable entry metrical
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)			3R, 4X, 13

Approvals

Product Standards			UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			12528
CSA Class No.			3211-03
North America Certification			UL listed, CSA certified
Specially designed for North America			No
Suitable for			Branch circuits
Max. Voltage Rating			600 V AC
Degree of Protection			UL: 1, 4X; CSA: 1, 3R, 4, 4X, 12, 13