



Position switch, 2N/O, wide, IP65_x

Part no. **AT0-20-1-IA**
Article no. **014725**
Catalog No. **AT0-20-1-IA**

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)

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
Repetition accuracy		mm	0.02

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		N	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°

Data for design verification according to IEC/EN 61439

Technical data for design verification			
Rated operational current AC-15 at 220 V, 230 V, 240 V	I _e	A	6
Rated operational current at 24 V	I _e	A	10
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 5.0

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@ss8-27-27-06-01 [AGZ382011])			
Width sensor	mm	51	
Diameter sensor	mm	0	
Height of sensor	mm	51	
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	0.5	
Switching function		Slow-action switch	
Output electronic		No	
Forced opening		No	
Number of safety auxiliary contacts		0	
Number of contacts as normally closed contact		0	
Number of contacts as normally open contact		2	
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		Plunger	
Alignment of the control element		-	
Type of electric connection		-	

With status indication			No
Suited for safety functions			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Ambient temperature during operating		°C	-25 - 70
Degree of protection (IP)			IP65