

Position switch, 1N/O+1N/C, wide, IP65\_x, actuating rod

Part no.AT0-11-S-IA/H

Catalog No.026578

Alternate Catalog No.AT0-11-S-IA/H



Delivery program

|   |    |  |
|---|----|--|
| Basic function  |    | Position switches<br>Safety position switches              |
| Part group reference  |    | AT0  |
| Product range   |    | Actuating rod  |
| Degree of Protection  |    | IP65   |
| Features  |    | Complete unit  |
| Ambient temperature   | °C | -25 - +70  |
| Snap-action contact   |    | Yes  |
| Approval  |    | <div>totally insulated</div>                               |
| 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  |    |  |
| Positive opening (ZW)   |    | yes  |
| Colour  |    |  |
| Enclosure covers  |    | Grey   |
| Enclosure covers  |    |  |
| Housing   |    | Insulated material   |
| Connection type   |    | Screw terminal   |
| <b>Notes</b> The operating head can be rotated at 90° intervals to adapt to the specified approach direction.<br>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)<br>2 x (0.75 - 1.5)   |
| Flexible with ferrule |  | mm <sup>2</sup> | 1 x (0.5 - 1.5)<br>2 x (0.5 - 1.5)   |
| Repetition accuracy   |  | mm              | 0.02   |

### 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        |

### Mechanical variables

|  |              |                   |        |
|--|--------------|-------------------|--------|
| Lifespan, mechanical                                       | Operations   | x 10 <sup>6</sup> | 20     |
| 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   | 8.0/20.0   |
| Actuating torque of rotary drives          |  | Nm  | 0.2        |
| Max. operating speed with DIN cam          |  | m/s | 1.5        |
| <b>Notes</b>                               |  |     | L = 130 mm |

## 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  | 0.13                                       |
| 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 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)<br>(ecI@ss10.0.1-27-27-06-01 [AGZ382015]) |    |                    |
| Width sensor  | mm | 51                 |
| Diameter sensor   | mm | 0                  |
| Height of sensor  | mm | 51                 |
| 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  | 0.5                |
| Switching function  |    | Quick-break switch |
| Switching function latching   |    | No                 |
| Output electronic   |    | No                 |
| Forced opening  |    | No                 |
| Number of safety auxiliary contacts   |    | 0                  |
| 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   |    | Actuating rod      |
| 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 |  | °C | 25 - 70 |
| Degree of protection (IP)            |  |    | IP65    |
| Degree of protection (NEMA)          |  |    | Other   |

## Assets (links)

### Declaration of CE Conformity

00002834

### Instruction Leaflets

IL05208013Z2018\_06