DATASHEET - AT4/11-S/I/F

Position switch, 1N/0+1N/C, narrow, $IP65_x$, spring-rod actuator Part no.

AT4/11-S/I/F 066943

AT4/11-S/I/F

No.

Catalog No.

Alternate Catalog

Powering Business Worldwide



Delivery program

| 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/0 = Normally open | | 1 N/O |
| N/C = Normally closed | | 1 NC |
| Contact sequence | | $0 - \frac{13}{14} = \frac{21}{22}$ |
| Contact travel = Contact closed = Contact open | | 13-14 21-22 13-14 21-22 0° 8° 14° 30° |
| Colour | | |
| Enclosure covers | | Grey |
| | | |

| Enclosure covers | | |
|--|-----------------|--------------------|
| Housing | | Insulated material |
| Connection type | | Screw terminal |
| Rod length | mm | 160 |
| Notes The operating head can be rotated at 90° intervals to adapt to the specified ann | roach direction | |

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 | | |

| Contacts/switching capacity | | | |
|--|------------------|---------|----------|
| Rated impulse withstand voltage | U_{imp} | V AC | 6000 |
| Rated insulation voltage | Ui | V | 500 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated operational current | le | Α | |
| AC-15 | | | |
| 24 V | l _e | Α | 10 |
| 220 V 230 V 240 V | l _e | Α | 6 |
| 380 V 400 V 415 V | l _e | Α | 4 |
| DC-13 | | | |
| 24 V | I _e | Α | 10 |
| 110 V | le | Α | 1 |
| 220 V | l _e | Α | 0.5 |
| Supply frequency | | Hz | max. 400 |
| Short-circuit rating to IEC/EN 60947-5-1 | | | |
| max. fuse | | A gG/gL | 6 |
| Rated conditional short-circuit current | | kA | 1 |

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 |

Design verification as per IEC/EN 61439

| Technical data for design verification | | | |
|--|----|---|---|
| Rated operational current for specified heat dissipation | In | Α | 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 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)

| (ecl@ss10.0.1-27-27-06-01 [AGZ382015]) | | | | |
|---|----|--------------------|--|--|
| Width sensor | mm | 40 | | |
| Diameter sensor | mm | 0 | | |
| Height of sensor | mm | 83 | | |
| Length of sensor | mm | 0 | | |
| Rated operation current le at AC-15, 24 V | А | 10 | | |
| Rated operation current le at AC-15, 125 V | А | 0 | | |
| Rated operation current le at AC-15, 230 V | А | 6 | | |
| Rated operation current le at DC-13, 24 V | А | 10 | | |
| Rated operation current le at DC-13, 125 V | А | 1 | | |
| Rated operation current le at DC-13, 230 V | Α | 0.4 | | |
| Switching function | | Quick-break 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 | | |

| | 0 |
|----|------------|
| | None |
| | None |
| | Cuboid |
| | Plastic |
| | Other |
| | Spring-rod |
| | Other |
| | Other |
| | No |
| | Yes |
| | None |
| | None |
| °C | 25 - 70 |
| | IP65 |
| | Other |
| | °C |

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 |