DATASHEET - AT0-02-1-IA/V



Position switch, 2 N/C, wide, IP65 $_x$, adjustable roller lever

Part no. ATO-02-1-IA/V Catalog No. 017087 Alternate Catalog ATO-02-1-IA-V No.



Delivery program

| Degree of Protection | IP65 |
|--|--|
| Contacts | |
| N/C = Normally closed | 2 NC → |
| Notes | = safety function, by positive opening to IEC/EN 60947-5-1 |
| Contact sequence | 0 |
| Contact travel = Contact closed = Contact open | 11-12 21-22 0° 27° 54° Zw = 44° |
| Housing | Wide version |

Technical data

| _ | | | | |
|---|----|---|----|--|
| G | er | e | ra | |

| delicial | | | |
|--|----------------|-----------------|--|
| Standards | | | IEC/EN 60947 |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30 |
| 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 | Ui | V | 500 |
| Rated operational current | I _e | Α | |
| AC-15 | | | |
| 24 V | le | 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 | l _e | Α | 1 |
| 220 V | I _e | Α | 0.5 |
| Supply frequency | | Hz | max. 400 |
| Short-circuit rating to IEC/EN 60947-5-1 | | | |
| max. fuse | | A gG/gL | 6 |
| Mechanical variables | | | |
| 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 torque of rotary drives | | Nm | 0.2 |
| Max. operating speed with DIN cam | | m/s | 1.5 |
| Notes | | | for angle of actuation $n = 30^{\circ} I = 125 \text{ mm}$ |

Design verification as per IEC/EN 61439

| boolgii vormoution do por 120/211 or 100 | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | In | Α | 6 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.13 |
| 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 switch gear must be observed. $\label{eq:constraint}$ |
| 10.12 Electromagnetic compatibility | | | Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$ |
| 10.13 Mechanical function | | | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |
| | | | |

Technical data FTIM 7.0

| Technical data Etiivi 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 | 51 | | |
| Diameter sensor | mm | 0 | | |
| Height of sensor | mm | 51 | | |
| Length of sensor | mm | 0 | | |

| Rated operation current le at AC-15, 24 V | Α | 10 |
|---|----|-------------------------|
| Rated operation current le at AC-15, 125 V | Α | 0 |
| Rated operation current le at AC-15, 230 V | Α | 6 |
| Rated operation current le at DC-13, 24 V | Α | 10 |
| Rated operation current le at DC-13, 125 V | Α | 1 |
| Rated operation current le at DC-13, 230 V | Α | 0.5 |
| 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 | | 2 |
| Number of contacts as normally open contact | | 0 |
| 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 | | 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 |
| | | |