DATASHEET - PF6-25/4/03-A

Residual current circuit breaker (RCCB), 25A, 4p, 300mA, type A



Part no. PF6-25/4/03-A Catalog No. 112932

Similar to illustration

Delivery program Basic function Residual current circuit-breakers Number of poles 4 pole Application Residual current circuit-breaker for residential and commercial applications Rated current 25 I_n А kA 6 Rated short-circuit strength I_{cn} Rated fault current 0.3 А $\mathsf{I}_{\Delta \mathsf{N}}$ Туре Type A Tripping non-delayed s... Product range PF6 Sensitivity Pulse-current sensitive Impulse withstand current Partly surge-proof 250 A

Technical data

| Electrical | | | |
|--|----------------------------------|---------|-------------------------|
| Types conform to | | | IEC/EN 61008 |
| Standards | | | IEC/EN 61008 |
| Rated operational voltage | U _e | V | |
| | U _e | V AC | |
| Rated operating voltage | U _e | V AC | 230/400 |
| Rated frequency | f | Hz | 50 |
| Limit values of the operating voltage | | | |
| Test circuit | | V AC | 184 - 440 |
| Sensitivity | | | Pulse-current sensitive |
| Rated insulation voltage | Ui | V | 440 |
| Rated impulse withstand voltage | U _{imp} | kV | 4 |
| Rated short-circuit strength | I _{cn} | kA | 6 |
| Max. admissible back-up fuse | | | |
| Short-circuit | gG/gL | Α | 63 |
| Overload | gG/gL | А | 25 |
| Rated making and breaking capacity / Rated residual making and breaking capacity | I _m / I _{∆m} | A | 500 |
| Max. back-up fuse | | A gL/gG | 25 |
| Maximum max. as short-circuit protective device | | A gL | |
| Back-up fuse | | A gL | 63 |
| lifespan | | | |
| Electrical | Operations | | ≧ 4000 |
| Mechanical | Operations | | ≧ 20000 |
| References | | | |
| Auxiliary switch for subsequent installation | | | Z-HK 248432 |
| Tripping signal contact for subsequent installation | | | Z-NHK 248434 |
| Remote control and automatic switching device | | | Z-FW/LP 248296 |
| Compact enclosure | | | KLV-TC-4 276241 |
| Switching interlock | | | IS/SPE-1TE 101911 |
| Sealing cover set | | | Z-RC/AK-4TE 101062 |
| | | | |

Mechanical

| Mechanica | | |
|--|-----------------|---|
| Standard front dimension | mm | 45 |
| Device height | mm | 80 |
| Built-in width | mm | 70 (4TE) |
| Mounting | | Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 |
| Degree of Protection | | IP20, IP40 with suitable enclosure |
| Terminals top and bottom | | Open mouthed/lift terminals |
| Terminal protection | | finger and hand touch safe, DGUV VS3, EN 50274 |
| Terminal cross-section | | |
| Solid | mm ² | 1.5 - 35 |
| Stranded | mm ² | 2 x 16 |
| Thickness of busbar material | mm | 0.8 - 2 |
| Permissible storage and transport temperatures | °C | -35 - +60 |
| Climatic proofing | | 25-55°C/90-95% relative humidity according to IEC 60068-2 |
| Thickness of busbar material | mm | |
| Material thickness | mm | 0.8 - 2 |
| | | |

Design verification as per IEC/EN 61439

| Design verification as per IEC/EN 61439 | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | А | 25 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 2.8 |
| 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 | 55 |
| | | | Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C |
| 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 | | | | | |
|--|-----|----------|--|--|--|
| Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003) | | | | | |
| Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecl@ss10.0.1-27-14-22-01 [AAB906014]) | | | | | |
| Number of poles | | 4 | | | |
| Rated voltage | V | 400 | | | |
| Rated current | А | 25 | | | |
| Rated fault current | А | 0.3 | | | |
| Rated insulation voltage Ui | V | 440 | | | |
| Rated impulse withstand voltage Uimp | kV | 4 | | | |
| Mounting method | | DIN rail | | | |
| Leakage current type | | A | | | |
| Selective protection | | No | | | |
| Short-time delayed tripping | | No | | | |
| Short-circuit breaking capacity (Icw) | kA | 6 | | | |
| Surge current capacity | kA | 0.25 | | | |
| Voltage type | | AC | | | |
| With interlocking device | | Yes | | | |
| Frequency | | 50 Hz | | | |
| Additional equipment possible | | Yes | | | |
| Degree of protection (IP) | | IP20 | | | |
| Width in number of modular spacings | | 4 | | | |
| Built-in depth | mm | 69.5 | | | |
| Ambient temperature during operating | °C | -25 - 55 | | | |
| Pollution degree | | 2 | | | |
| Connectable conductor cross section multi-wired | mm² | 1.5 - 16 | | | |
| Connectable conductor cross section solid-core | mm² | 1.5 - 35 | | | |
| Explosion-proof | | No | | | |