



Arc Fault Detection Device, 2 poles, C10A, 10mA, KV, type A

Part no. AFDD-10/2/C/001-LI/A
Catalog No. 187172

Delivery program

| | | | |
|--|----------------|------|--|
| Basic function | | | Arc fault detection device |
| Number of poles | | | 2 pole |
| Tripping characteristic | | | C |
| Application | | | Switchgear for residential and commercial applications |
| Rated current | I_n | A | 10 |
| Rated switching capacity according to IEC/EN 60898-1 | I_{cn} | kA | 10 |
| Rated switching capacity according to IEC/EN 61009 | | kA | 10 |
| Rated short-circuit strength | I_{cn} | kA | 10 |
| Rated fault current | $I_{\Delta N}$ | A | 0.01 |
| Type | | | Typ LI/A |
| Tripping | | s... | Short time-delayed |
| Busbar type | | | ZV-SS |
| Product range | | | AFDD |
| Sensitivity | | | Pulse-current sensitive |
| Impulse withstand current | | | Partly surge-proof 250 A |

Technical data

Electrical

| | | | |
|--|------------|------|------------------------------|
| Types conform to | | | IEC/EN 62606 IEC/EN 61009 |
| Current test marks | | | As per inscription |
| Rated switching capacity according to IEC/EN 60898-1 | I_{cn} | kA | 10 |
| Limit values of the operating voltage | | | |
| Test circuit | | V AC | 170 - 264 |
| Sensitivity | | | Pulse-current sensitive |
| Rated short-circuit strength | I_{cn} | kA | 10 |
| lifespan | | | |
| Electrical | Operations | | ≥ 4000 |
| Mechanical | Operations | | ≥ 20000 |

Mechanical

| | | | |
|--|--|----|--|
| Standard front dimension | | mm | 45 |
| Device height | | mm | 80 |
| Built-in width | | mm | 54 (3TE) |
| Mounting | | | Tristable slide catch enables removal from existing combination. |
| Degree of Protection | | | IP20 switches IP40 enclosed |
| Terminals top and bottom | | | Twin-purpose terminals |
| Terminal protection | | | Busbar tag shroud as per VBG4, ÖVE-EN 6 |
| Thickness of busbar material | | mm | 0.8 - 2 |
| Admissible ambient temperature range | | °C | -25 - +40 |
| Permissible storage and transport temperatures | | °C | -35 - +60 |
| Climatic proofing | | | according to IEC/EN 61009 |
| Contact position indicator | | | red / green |

Design verification as per IEC/EN 61439

| | | | |
|--|-----------|---|----|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I_n | A | 10 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 6 |

| | | |
|--|----|--|
| Operating ambient temperature min. | °C | -25 |
| Operating ambient temperature max. | °C | 40 |
| 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

| | | |
|---|----|------------------------|
| Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker with auxiliary device (EC002695) | | |
| Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Earth leakage circuit breaker with auxiliary device (ecl@ss10.0.1-27-14-22-13 [ADI479007]) | | |
| Number of poles | | 2 |
| Rated voltage | V | 230 |
| Rated current | A | 10 |
| Rated fault current | A | 0.01 |
| Leakage current type | | A |
| Current limiting class | | 3 |
| Rated short-circuit breaking capacity acc. EN 61009 | kA | 10 |
| Rated short-circuit breaking capacity IEC 60947-2 | kA | 0 |
| Frequency | Hz | 50 |
| Release characteristic | | C |
| Concurrently switching N-neutral | | No |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Width in number of modular spacings | | 3 |
| Built-in depth | mm | 67 |
| Additional equipment attached at delivery | | Fire protection switch |
| Rated switch current auxiliary device | A | 0 |
| Rated voltage auxiliary device | V | 230 |
| Control voltage type auxiliary equipment | | AC |
| Degree of protection (IP) | | IP20 |