DATASHEET - AFDD-16/2/C/003-A



Arc Fault Detection Device, 2 poles, C16A, 30mA, type A

Powering Business Worldwide*

Part no. AFDD-16/2/C/003-A Catalog No. 187210

Similar to illustration

Delivery program

| Number of poles Tripping characteristic C Application Rated current Rated switching capacity according to IEC/EN 60998-1 Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Rated fault current Rated fault current Type Rated fault current sensitive Pulse-current sensitive | Denvery program | | | |
|--|--|-----------------|----|--|
| Tripping characteristic Application Rated current Rated switching capacity according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Rated fault current Ion Rated fault current Type Tripping Busbar type Product range Sensitivity C Switchgear for residential and commercial applications Absolute commercial applications Abolute commercial applications Switchgear for residential and commercial applications 10 Switchgear for residential | Basic function | | | Arc fault detection device |
| Application Rated current Rated switching capacity according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Rated fault current I D D D D D D D D D D D D D D D D D D | Number of poles | | | 2 pole |
| Rated current Rated current Rated switching capacity according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Rated short-circuit strength Rated fault current IDN RATED RA | Tripping characteristic | | | C |
| Rated switching capacity according to IEC/EN 60898-1 Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Rated fault current IDN Rated fault current IDN ITYPE Tripping Busbar type Product range Sensitivity Rated switching capacity according to IEC/EN 60898-1 RA ID ID ID ID ID ID ID ID ID I | Application | | | Switchgear for residential and commercial applications |
| Rated switching capacity according to IEC/EN 61009 Rated short-circuit strength Icn Rated fault current IAN A 0.03 Type Type A Tripping Busbar type Product range Sensitivity ION ION ION ION ION ION ION IO | Rated current | In | Α | 16 |
| Rated short-circuit strength Rated fault current I _{AN} I _{AN} I _{YPP} Trype A Tripping Busbar type Product range Sensitivity I _{Cn} I _{AN} I _O | Rated switching capacity according to IEC/EN 60898-1 | | kA | 10 |
| Rated fault current IAN A 0.03 Type A Tripping Substartype Product range Sensitivity A D D D D D D D D D D D D D D D D D D | Rated switching capacity according to IEC/EN 61009 | | kA | 10 |
| Type A Tripping S non-delayed ZV-SS Product range Sensitivity Type A Type A AFDD Pulse-current sensitive | Rated short-circuit strength | I _{cn} | kA | 10 |
| Tripping S non-delayed Busbar type ZV-SS Product range AFDD Sensitivity Pulse-current sensitive | Rated fault current | $I_{\Delta N}$ | Α | 0.03 |
| Busbar type ZV-SS Product range AFDD Sensitivity Pulse-current sensitive | Туре | | | Type A |
| Product range AFDD Sensitivity Pulse-current sensitive | Tripping | | S | non-delayed |
| Sensitivity Pulse-current sensitive | Busbar type | | | ZV-SS |
| | Product range | | | AFDD |
| Impulse withstand current Partly surge-proof 250 A | 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 |
| 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 | | Operation | n ≩ 4000 |
| Mechanical | | Operation | n ≩ 20000 |
| Rated short-circuit strength | I _{cn} | kA | 10 |
| 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 |

Design verification as per IEC/EN 61439

Contact position indicator

| Technical data for design verification | | |
|--|--|--|

red / green

| Rated operational current for specified heat dissipation | In | Α | 16 |
|---|------------------|----|--|
| Equipment heat dissipation, current-dependent | P_{vid} | W | 5 |
| 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 6.0

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@ss8.1-27-14-22-13 [ADI479004])

| (66) 656.1 27 11 22 16 [7.817.666 1]/ | | |
|---|----|------------------------|
| Number of poles | | 2 |
| Nominal rated voltage | V | 230 |
| Nominal rated current | Α | 16 |
| Rated fault current | Α | 0.03 |
| Leakage current type | | A |
| Current limiting class | | 3 |
| Rated short-circuit breaking capacity EN 60898 | 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 | Α | 0 |
| Rated voltage auxiliary device | V | 230 |
| Control voltage type auxiliary equipment | | AC |
| | | |

Degree of protection (IP)

IP20