

## Arc Fault Circuit Interrupter, 2 poles, C13A, 30mA, type A

Powering Business Worldwide\*

Part no. AFDD-13/2/C/003-A Article no. 187186

Similar to illustration

**Delivery program** 

| Number of poles  Fripping characteristic  Application  Bated current  In A 13  Bated switching capacity according to IEC/EN 60898-1  Bated switching capacity according to IEC/EN 60099  Bated short-circuit strength  Icn KA 10  Bated fault current  IAN A 10  Bated fault current  IAN A 0.03  Fripping  Busbar type  Product range  Sensitivity  AC current sensitive  | Delivery program                                     |                 |    |  |
|--|--|-----------------|----|--|
| Tripping characteristic  Application  Capplication  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 fault current  Rated fault current  Rated fault current  Rated short-circuit strength  Rated short-circuit strength  Rated short-circuit strength  Rated fault current  Rated short-circuit strength  Rated short-c | Basic function                                       |                 |    | Arc fault circuit interrupter                          |
| Application  Application  Rated current  In A 13  Rated switching capacity according to IEC/EN 60898-1  Rated switching capacity according to IEC/EN 61009  Rated short-circuit strength  Icn kA 10  Rated short-circuit strength  Idn kA 10  Rated fault current  Idn kA 10  Rated short-circuit strength  A 0.03  Type A  Fripping  Busbar type  Product range  Sensitivity  Switchgear for residential and commercial applications  A 10  Courrent sensitive  Switchgear for residential and commercial applications  A 10  Courrent sensitive  | Number of poles                                      |                 |    | 2 pole   |
| 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 IAN Rated fault current ITYPE Rated Fripping Rated Sensitivity RA  | Tripping characteristic                              |                 |    | С  |
| 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  I <sub>CR</sub> Rated fault current  I <sub>DR</sub> Rated switching capacity according to IEC/EN 60898-1  IDR Rated switching capacity according to IEC/EN 60898-1  IRR Rated switching capacity according to IEC/EN 61009  IRR Rated switching capacity according to IEC/EN 60898-1  IRR Rated switching capacity according to IEC/EN 61009  III A                                  | Application  |                 |    | Switchgear for residential and commercial applications |
| Rated switching capacity according to IEC/EN 61009  Rated short-circuit strength  Icn  Idn  Rated fault current  Idn  A  Double A  Independent of the company of the company of the current of the curren | Rated current  | In              | Α  | 13   |
| Rated short-circuit strength Rated fault current  I <sub>AN</sub> A 0.03 Type Type A  Inipping A non-delayed  ZV-SS  Product range Sensitivity  AC current sensitive   | Rated switching capacity according to IEC/EN 60898-1 |                 | kA | 10   |
| Rated fault current  IAN A D.03 Type A Type A non-delayed Busbar type Product range Sensitivity  AC current sensitive  | Rated switching capacity according to IEC/EN 61009   |                 | kA | 10   |
| Type A  Tripping  A non-delayed  ZV-SS  Product range  Sensitivity  AC current sensitive   | Rated short-circuit strength                         | I <sub>cn</sub> | kA | 10   |
| Tripping A non-delayed  Busbar type ZV-SS  Product range AFDD  Sensitivity AC current sensitive  | Rated fault current                                  | $I_{\Delta N}$  | Α  | 0.03   |
| Busbar type ZV-SS Product range AFDD Sensitivity AC current sensitive  | Туре   |                 |    | Type A   |
| Product range AFDD Sensitivity AC current sensitive  | Tripping   |                 | Α  | non-delayed  |
| Sensitivity AC current sensitive   | Busbar type  |                 |    | ZV-SS  |
| ·  | Product range  |                 |    | AFDD   |
| mpulse withstand current Partly surge-proof 250 A  | Sensitivity  |                 |    | AC current sensitive                                   |
|  | Impulse withstand current                            |                 |    | Partly surge-proof 250 A                               |

## **Technical data**

**Electrical** 

| Types conform to                      |                 |           | IEC/EN 62606<br>IEC/EN 61009 |
|---------------------------------------|-----------------|-----------|------------------------------|
| Current test marks                    |                 |           | As per inscription           |
| Limit values of the operating voltage |                 |           |                              |
| Test circuit                          |                 | V AC      | 170 - 264                    |
| Sensitivity                           |                 |           | AC current sensitive         |
| Rated short-circuit strength          | I <sub>cn</sub> | kA        | 10                           |
| lifespan                              |                 |           |                              |
| Electrical                            |                 |           | 1\$ <u>≥</u> 4000            |
| Mechanical                            |                 | Operation | 20000                        |
| Mechanical                            |                 |           |                              |

| Device height mm 80  Built-in width mm 54 (3TE)  Mounting  Degree of Protection IP20 switches IP 40 enclosed  Terminals top and bottom  Terminal protection Thickness of busbar material mm 0.8 - 2  Admissible ambient temperature range Climatic proofing cording to IEC/EN 61009  To some a cording to IEC/EN 61009   | Mechanical                                     |    |  |
|--|--|----|--|
| Built-in width  mm 54 (3TE)  Mounting  Degree of Protection  Degree of Protection  Tristable slide catch enables removal from existing combination.  IP20 switches IP 40 enclosed  Terminals top and bottom  Twin-purpose terminals  Bushar tag shroud as per VBG4, ÖVE-EN 6  Thickness of bushar material  mm 0.8 - 2  Admissible ambient temperature range  °C -25 - +40  Permissible storage and transport temperatures  °C -35 - +60  according to IEC/EN 61009  | Standard front dimension                       | mm | 45   |
| Mounting Degree of Protection  | Device height                                  | mm | 80   |
| Degree of Protection  IP20 switches IP 40 enclosed  Terminals top and bottom  Terminal protection  Terminal protection  Thickness of busbar material  Thickness of busbar tag shroud as per VBG4, ÖVE-EN 6  Thickness of busba | Built-in width                                 | mm | 54 (3TE)   |
| IP 40 enclosed  Terminals top and bottom  Terminal protection  Thickness of busbar material  Admissible ambient temperature range  Climatic proofing  IP 40 enclosed  Twin-purpose terminals  Busbar tag shroud as per VBG4, ÖVE-EN 6  Busbar tag shroud as per VBG4, ÖVE-EN 6  CC  -25 - +40  -25 - +60  according to IEC/EN 61009  | Mounting                                       |    | Tristable slide catch enables removal from existing combination. |
| 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  according to IEC/EN 61009   | Degree of Protection                           |    |  |
| 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   | Terminals top and bottom                       |    | Twin-purpose terminals   |
| Admissible ambient temperature range  °C -25 - +40  Permissible storage and transport temperatures  °C -35 - +60  Climatic proofing  according to IEC/EN 61009   | Terminal protection                            |    | Busbar tag shroud as per VBG4, ÖVE-EN 6                          |
| Permissible storage and transport temperatures  °C -35 - +60  Climatic proofing according to IEC/EN 61009  | Thickness of busbar material                   | mm | 0.8 - 2  |
| Climatic proofing according to IEC/EN 61009  | Admissible ambient temperature range           | °C | -25 - +40  |
|  | Permissible storage and transport temperatures | °C | -35 - +60  |
| Contact position indicator red / green   | 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 | In | Α | 13 |

| Equipment heat dissipation, current-dependent  | $P_{vid}$ | W | 4  |
|--|-----------|---|--|
| 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])

| 1   |    |                        |
|---|----|------------------------|
| Number of poles                                   |    | 2                      |
| Nominal rated voltage                             | V  | 230                    |
| Nominal rated current                             | Α  | 13                     |
| 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             | А  | 0                      |
| Rated voltage auxiliary device                    | V  | 230                    |
| Control voltage type auxiliary equipment          |    | AC                     |
| Degree of protection (IP)                         |    | IP20                   |
|   |    |                        |