

Protective Devices

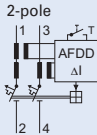
Electric Fire Protective Device, Arc Fault Protection AFDD+, 2-pole

- Electric fire protective device acc. to IEC/EN-62606
- Line-voltage-independent RCBO (combined switch) acc. to IEC/EN 61009
- 2-pole: Both clearances between open contacts are protected
- Variable installation of N either left or right
- Tripped indication: CB, RCD or AFDD
- LED indication for arc faults
- Compatible with standard busbar
- Twin-purpose terminal (lift/open-mouthed) above and below
- Busbar positioning optionally above or below
- Free terminal space despite installed busbar
- Guide for secure terminal connection
- Switching toggle (MCB component) in colour designating the rated current
- Contact position indicator red - green
- Comprehensive range of accessories suitable for subsequent installation
- The test key "T" must be pressed every 6 month. The system operator must be informed of this obligation and his responsibility in a way that can be proven (self-adhesive RCD-label enclosed). The test interval of 6 month is valid for residential and similar applications. Under all other conditions (e.g. damply or dusty environments), it's recommended to test in shorter intervals (e.g. monthly).
- Pressing the test key "T" serves the only purpose of function testing the residual current device (RCD). This test does not make earthing resistance measurement (R_E), or proper checking of the earth conductor condition redundant, which must be performed separately.
- **Type -A:** Protects against special forms of residual pulsating DC which have have not been smoothed
- **Type -Li/A:** As Type -A, but in addition it is short-time delayed. Highly reliable against unwanted tripping

Accessories:

| | | |
|---|------------|----------------|
| Auxiliary switch for subsequent installation | ZP-IHK | 286052 |
| Auxiliary switch | ZP-NHK | 248437 |
| Shunt trip release | ZP-ASA/.. | 248438, 248439 |
| Switching interlock | IS/SPE-1TE | 101911 |
| Busbars: ZV-SS; ZV-L1/N; ZV-L2/L3; ZV-ADP; ZV-AEK | | |

Connection diagram



Technical Data

Electrical

| | |
|---|---|
| Design according to | IEC/EN 62606, IEC/EN 61009 |
| Current test marks as printed onto the device | |
| Tripping | |
| Line-voltage-independent | instantaneous 250A (8/20 μ s) surge-current-proof |
| Rated voltage U_e | 240 V AC; 50 Hz |
| Operational voltage range | 170-264 V |
| Rated tripping current $I_{\Delta n}$ | 10, 30 mA |
| Rated non-tripping current $I_{\Delta no}$ | 0.5 $I_{\Delta n}$ |
| Sensitivity | AC and pulsating DC |
| Selectivity class | 3 |
| Rated breaking capacity | |
| AFDD 10-25A | 10 kA |
| AFDD 32-40A | 6 kA |
| Rated current | 10 - 40 A |
| Rated peak withstand voltage U_{imp} | 4 kV (1.2/50 μ s) |
| Rated fault breaking capacity $I_{\Delta m}$ | |
| EN 61009 | 3 kA |
| IEC 61009 | 10-16 A: 3 kA 20-40 A: 500 A |

Arc fault tripping times after load current

(acc. to IEC/EN62606):

| Load current (A) | Tripping time (s) |
|------------------|-------------------|
| 2.5 | <1 |
| 5 | <0.5 |
| 10 | <0.25 |
| 16 | <0.15 |
| 32 | <0.12 |
| 40 | <0.12 |

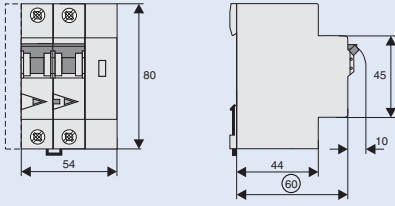
| | |
|--------------------------------------|------------------------------------|
| Characteristic | B, C |
| Maximum back-up fuse (short circuit) | 100 A gL (>10 kA) |
| Endurance electrical comp. | $\geq 4,000$ switching operations |
| mechanical comp. | $\geq 20,000$ switching operations |

Mechanical

| | |
|------------------------------------|---|
| Frame size | 45 mm |
| Device height | 80 mm |
| Device width | 54 mm (3MU) |
| Mounting | 3-position DIN rail clip, permits removal from existing busbar system |
| Upper and lower terminals | open mouthed/lift terminals |
| Terminal protection | finger and hand touch safe, DGUV VS3, EN 50274 |
| Terminal capacity | 1 - 25 mm ² |
| Busbar thickness | 0.8 - 2 mm |
| Degree of protection switch | IP20 |
| Degree of protection, built-in | IP40 |
| Tripping temperature | -25°C to +40°C |
| Storage- and transport temperature | -35°C to +60°C |
| Resistance to climatic conditions | acc. to IEC/EN 61009 |

Protective Devices

Dimensions (mm)



Tripping Characteristic AFDD+, Characteristics B and C

