



**RCD/MCB combination, 20 A, 300 mA, MCB trip characteristic: B, 1p+N,
RCD trip characteristic: A**

Part no. PFL6-20/1N/B/03-A
Catalog No. 165542

Similar to illustration

Design verification as per IEC/EN 61439

| | | | |
|--|------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I_n | A | 20 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 4.7 |
| 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 | 40 |
| | | | 0 |
| 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

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| Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905) | | | |
| Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ810015]) | | | |
| Number of poles (total) | | | 2 |
| Number of protected poles | | | 1 |
| Rated voltage | | V | 230 |

| | | |
|--|-----------------|-----------|
| Rated insulation voltage U_i | V | 440 |
| Rated impulse withstand voltage U_{imp} | kV | 4 |
| Rated current | A | 20 |
| Rated fault current | A | 0.3 |
| Leakage current type | | A |
| Current limiting class | | 3 |
| Rated short-circuit breaking capacity according to EN 61009 | kA | 6 |
| Rated short-circuit breaking capacity according to IEC 60947-2 | kA | 0 |
| Rated short-circuit breaking capacity I_{cn} according to EN 61009-1 | kA | 6 |
| Disconnection characteristic | | Undelayed |
| Surge current capacity | kA | 0.25 |
| Voltage type | | AC |
| Frequency | | 50 Hz |
| Release characteristic | | B |
| Concurrently switching neutral conductor | | Yes |
| With interlocking device | | No |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Ambient temperature during operating | °C | -25 - 40 |
| Width in number of modular spacings | | 2 |
| Built-in depth | mm | 69.5 |
| Flush-mounted installation | | No |
| Anti- nuisance tripping version | | No |
| Degree of protection (IP) | | IP20 |
| Connectable conductor cross section solid-core | mm ² | 1 - 25 |
| Connectable conductor cross section multi-wired | mm ² | 1 - 25 |