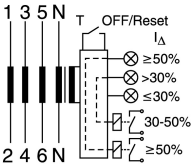
# Residual current circuit-breaker, 100A, 4p, 0mA, AC-Char

| | |
|---|---|
| **Part no.** | **PDIM-100/4** |
| **Article no.** | **111761** |
| **Catalog No.** | **PDIM-100-4** |

Similar to illustration

## Delivery program

| | | | |
|---|---|---|---|
| Basic function | | | Leakage current monitor |
| Number of poles | | | 4 pole |
| Application | | | Switchgear for industrial and advanced commercial applications |
| Rated current | $I_n$ | A | 100 |
| Rated short-circuit strength | $I_{cn}$ | kA | 10 |
| Rated fault current | $I_{\Delta N}$ | A | adjustable: 0.03/0.1/0.3/0.5/1 |
| Tripping | | A | Short time-delayed, adjustable<br>selective switch off, adjustable<br>non-delayed, adjustable |
| Product range | | | PDIM |
| Sensitivity | | | AC and pulsating DC current sensitive |
| Contact sequence | | |  |



## Technical data

### Electrical

| | | | |
|---|---|---|---|
| Types based on | | | DIN/EN 62020 |
| Current test marks | | | As per inscription |
| Rated current | $I_n$ | A | 100 |
| Response value | | | unverzögert |
| Type G | | | 10 ms verzögert |
| Type S | | | 40 ms verzögert - selektiv |
| Rated operating voltage | $U_n$ | V AC | 230/400, 50/60 Hz<br>240/415, 50/60 Hz |
| Sensitivity | | | AC and pulsating DC current sensitive |
| Rated insulation voltage | $U_i$ | V | 440 |
| Rated short-circuit strength | $I_{cn}$ | kA | 10 |
| Max. admissible back-up fuse | | | |
| Short-circuit | gG/gL | A | 100 |
| Overload | gG/gL | A | 63 |
| Switch contacts | | | 10 A / 240 V~ |
| Response behaviour of contacts | | | 1: 30 - 50 % $I_{\Delta n}$<br>2: > 50 % $I_{\Delta n}$ |
| lifespan | | | |
| Electrical | | Operations | 2000 |
| Mechanical | | Operations | 10000 |

### Mechanical

| | | | |
|---|---|---|---|
| Standard front dimension | | mm | 45 |
| Device height | | mm | 80 |
| Built-in width | | mm | 70 (4TE) |
| Mounting | | | Quick attachment with 2 latch positions on top-hat rail IEC/EN 60715 |
| Degree of Protection | | | IP20 switches<br>IP 40 enclosed |
| Terminals top and bottom | | | Twin-purpose terminals |
| Terminal protection | | | Protection against electric shock to A3, ÖVE-EN 6 |

| | | | |
|---|---|---|---|
| Terminal capacity (1, 2, 3, 4, 5, 6, N, N) | | | |
| Solid | | $mm^2$ | 1.5 - 35 |
| Stranded | | $mm^2$ | 2 x 16 |
| Terminal cross-section of switching contacts | | $mm^2$ | 0.25 - 1.5 |
| Thickness of busbar material | | mm | 0.8 - 2 |
| Admissible ambient temperature range | | °C | -25 to +40 |
| Permissible storage and transport temperatures | | °C | -35 - +60 |
| Climatic proofing | | | according to IEC/EN 61008 |
| Operating ambient temperature min. | | °C | -25 |

## Design verification as per IEC/EN 61439

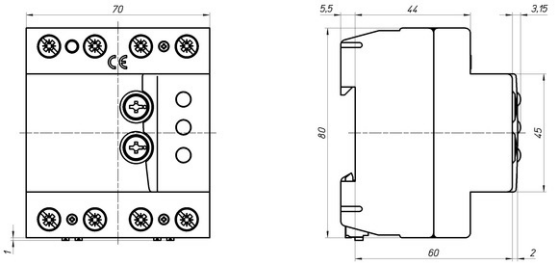
| | | | |
|---|---|---|---|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | $I_n$ | A | 100 |
| Heat dissipation per pole, current-dependent | $P_{vid}$ | W | 0 |
| Equipment heat dissipation, current-dependent | $P_{vid}$ | W | 18.8 |
| Static 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 6.0

| | | | |
|---|---|---|---|
| Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003) | | | |
| Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecl@ss8.1-27-14-22-01 [AAB906011]) | | | |
| Number of poles | | | 4 |
| Nominal rated voltage | | V | 415 |
| Nominal rated current | | A | 100 |

| | | | |
|---|---|---|---|
| Rated fault current | | A | 0 |
| Mounting method | | | DIN rail |
| Leakage current type | | | AC |
| Selective protection | | | Yes |
| Short-circuit breaking capacity (Icw) | | kA | 10 |
| Surge current capacity | | kA | 0.25 |
| Frequency | | | 60 Hz |
| Additional equipment possible | | | Yes |
| Degree of protection (IP) | | | IP20 |
| Construction size (in accordance with DIN 43880) | | | 1 |
| Width in number of modular spacings | | | 4 |
| Built-in depth | | mm | 60 |
| Short-time delayed tripping | | | Yes |

## Dimensions




## Additional product information (links)

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|---|---|
| Product overview (Web) | http://www.eaton.eu/Europe/Electrical/ProductsServices/CircuitProtection/DigitalCircuitBreakers/index.htm |