



RCD/RCB combination switch, 6A, 100mA, D-LS-Char, 3N pole, FI-Char: A

Part no. mRB6-6/3N/D/01-A
Article no. 120673

Similar to illustration

Delivery program

| | | | |
|--|----------------|----|--|
| Basic function | | | Combined RCD/RCB devices |
| Number of poles | | | 3 pole+N |
| Tripping characteristic | | | D |
| Application | | | Switchgear for residential and commercial applications |
| Rated current | I_n | A | 6 |
| Rated switching capacity acc. to IEC/EN 60947-2 | | kA | 6 |
| Rated switching capacity according to IEC/EN 61009 | | kA | 6 |
| Rated fault current | $I_{\Delta N}$ | A | 0.1 |
| Type | | | Type A |
| Tripping | | A | non-delayed |
| Product range | | | mRB6 |
| Sensitivity | | | Pulse-current sensitive |
| Impulse withstand current | | | Partly surge-proof 250 A |
| Contact sequence | | | |

Technical data

Electrical

| | | | |
|---|-----------------|------|---------------------------|
| Standards | | | IEC/EN 61009 |
| Tripping | | A | non-delayed |
| Rated operating voltage | U_e | V AC | 230/400 |
| Rated frequency | f | Hz | 50 |
| Rated fault currents | $I_{\Delta n}$ | mA | 30, 100, 300 |
| Rated non-tripping current | $I_{\Delta no}$ | | $0.5 \times I_{\Delta n}$ |
| Sensitivity | | | DC and pulsed current |
| Rated switching capacity | I_{cn} | kA | 6 |
| Rated current | I_e | A | 6 - 25 |
| Rated impulse withstand voltage | U_{imp} | kV | 4 (1.2/50 μ s) |
| Characteristic | | | B, C, D |
| Maximum max. as short-circuit protective device | | A gL | 100 |
| Selectivity Class | | | 3 |
| Lifespan | | S | |
| Electrical | | | Operations > 4000 |
| Mechanical | | | Operations > 20000 |

Mechanical

| | | | |
|--------------------------|--|----|--|
| Standard front dimension | | mm | 45 |
| Enclosure height | | mm | 80 |
| Terminal protection | | | Busbar tag shroud to VBG4 |
| Mounting width | | mm | 70 (4 SU) |
| Mounting | | | Tristable slide catch enables removal from existing combination. |
| Degree of protection | | | |
| Switch | | | IP20 |
| Integrated | | | IP40 |

| | | | |
|--------------------------------------|--|-----------------|--|
| Terminals top and bottom | | | Twin-purpose terminals |
| Terminal capacities | | mm ² | |
| Solid | | mm ² | 1 - 25 |
| Thickness of busbar material | | mm | 0.8 ... 2 |
| Admissible ambient temperature range | | °C | -25 ... +40 |
| Climatic proofing | | | according to IEC 68-2 (25 - 55 °C, 90 - 95 % Humidity) |

Design verification as per IEC/EN 61439

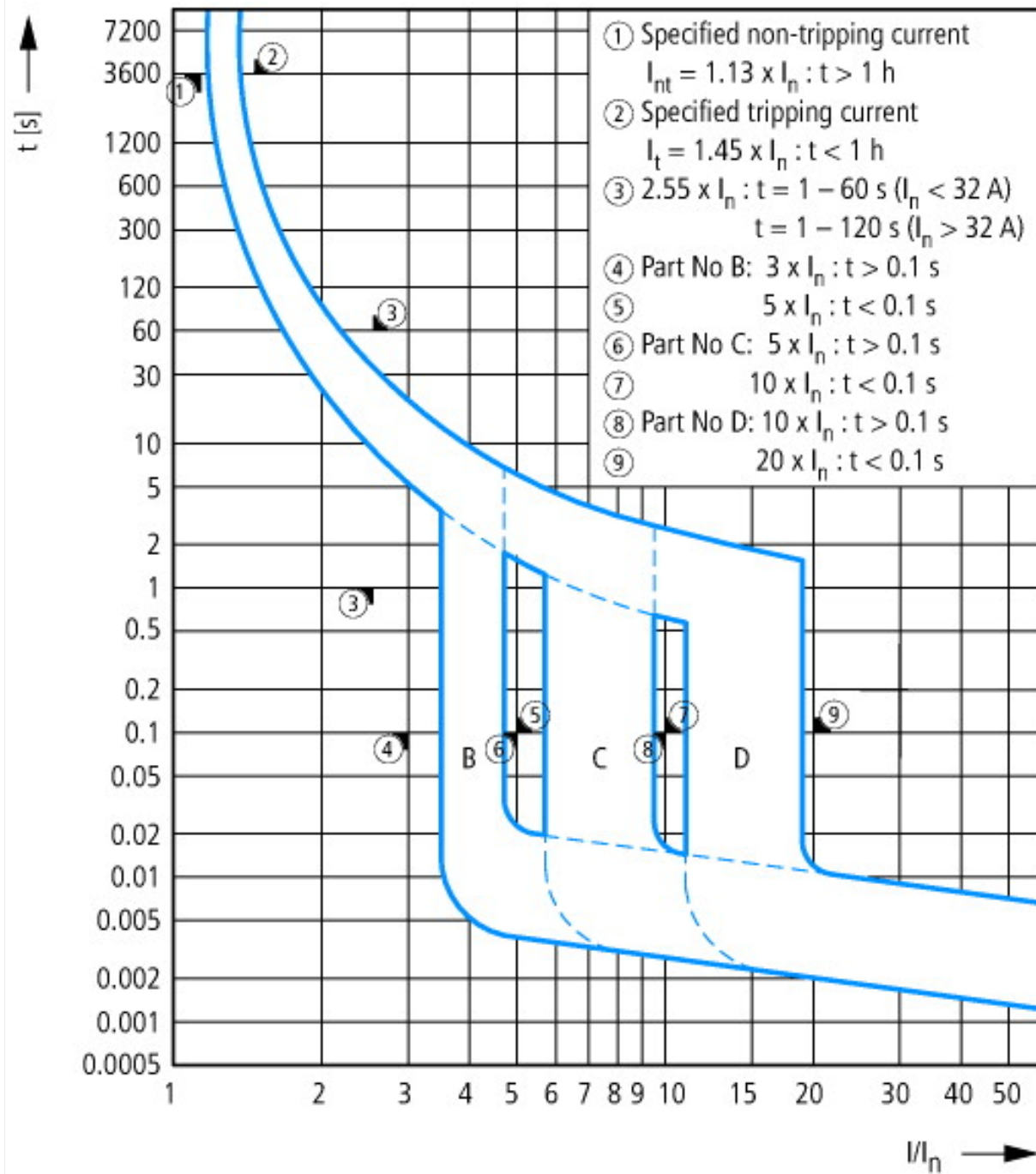
| | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | A | 6 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 4.8 |
| 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) / Earth leakage circuit breaker (EC000905) | | | |
| Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss8.1-27-14-22-07 [AFZ810012]) | | | |
| Number of poles (total) | | | 4 |
| Number of protected poles | | | 1 |
| Nominal rated voltage | | V | 400 |
| Nominal rated current | | A | 6 |
| Rated fault current | | A | 0.1 |
| Leakage current type | | | A |

| | | |
|---|----|-------|
| Current limiting class | | 3 |
| Rated short-circuit breaking capacity EN 60898 | kA | 6 |
| Rated short-circuit breaking capacity IEC 60947-2 | kA | 0 |
| Frequency | | 50 Hz |
| Release characteristic | | D |
| Concurrently switching N-neutral | | Yes |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Width in number of modular spacings | | 4 |
| Built-in depth | mm | 70 |
| Suitable for flush-mounted installation | | No |
| Degree of protection (IP) | | IP20 |
| Surge current capacity | kA | 0.25 |
| Voltage type | | AC |
| Antinuisance tripping version | | No |

Characteristics



Dimensions

