

Residual current circuit breaker (RCCB), 40A, 2p, 100mA, type S/A



Part no. PFIM-40/2/01-S/A-MW
109770
EL Number 1654939
(Norway)

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| Product name | Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB |
| Part no. | PFIM-40/2/01-S/A-MW |
| EAN | 4015081089543 |
| Product Length/Depth | 80 millimetre |
| Product height | 76 millimetre |
| Product width | 35 millimetre |
| Product weight | 0.188 kilogram |
| Compliances | RoHS conform |
| Certifications | IEC/EN 61008 |
| Product Tradename | xPole - PFIM Type AC, A, U, R |
| Product Type | RCCB |
| Product Sub Type | None |
| Globally Marketable | Yes |
| Application | Residual current circuit breaker for residential and commercial applications xPole - Switchgear for residential and commercial applications |
| Number of poles | Two-pole |
| Tripping time | Selective switch off |
| Amperage Rating | 40 A |
| Rated short-circuit strength | 10 kA |
| Fault current rating | 100 mA |
| Sensitivity type | Pulse-current sensitive |
| Impulse withstand current | Surge-proof, 3 kA |
| Type | PFIM Residual current circuit breakers Type S/A |
| Voltage rating | 230 V AC |
| Rated operational voltage (Ue) - max | 230 V |
| Rated insulation voltage (Ui) | 440 V |
| Rated impulse withstand voltage (Uimp) | 4 kV |
| Rated fault current - min | 0.1 A |
| Rated fault current - max | 0.1 A |
| Frequency rating | 50 Hz |
| Short-circuit rating | 63 A (max. admissible back-up fuse) |
| Leakage current type | A |
| Rated residual making and breaking capacity | 500 A |
| Admissible back-up fuse overload - max | 25 A gG/gL |
| Rated short-time withstand current (Icw) | 10 kA |
| Surge current capacity | 5 kA |
| Test circuit range | 196 V AC - 264 V AC |
| Pollution degree | 2 |
| Lifespan, electrical | 4000 operations |
| Frame | 45 mm |
| Width in number of modular spacings | 2 |
| Built-in width (number of units) | 35 mm (2 SU) |
| Built-in depth | 70.5 mm |

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| Mounting Method | | DIN rail Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 |
| Degree of protection | | IP20 IP20, IP40 with suitable enclosure |
| Terminals (top and bottom) | | Open mouthed/lift terminals |
| Terminal capacity (solid wire) | | 1.5 mm ² - 35 mm ² |
| Connectable conductor cross section (solid-core) - min | | 1.5 mm ² |
| Connectable conductor cross section (solid-core) - max | | 35 mm ² |
| Terminal capacity (stranded cable) | | 16 mm ² (2x) |
| Connectable conductor cross section (multi-wired) - min | | 1.5 mm ² |
| Connectable conductor cross section (multi-wired) - max | | 16 mm ² |
| Terminal protection | | Finger and hand touch safe, DGUV VS3, EN 50274 |
| Busbar material thickness | | 0.8 mm - 2 mm |
| Lifespan, mechanical | | 20000 operations |
| Permitted storage and transport temperature - min | | -35 °C |
| Permitted storage and transport temperature - max | | 60 °C |
| Climatic proofing | | 25-55 °C / 90-95% relative humidity according to IEC 60068-2 |
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| Rated operational current for specified heat dissipation (In) | | 40 A |
| Heat dissipation per pole, current-dependent | | 0 W |
| Equipment heat dissipation, current-dependent | | 5.4 W |
| Static heat dissipation, non-current-dependent | | 0 W |
| Heat dissipation capacity | | 0 W |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 60 °C |
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| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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. |
| 10.9.2 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. |
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| Accessories required | | Z-HK 248432 |
| Features | | Additional equipment possible Residual current circuit breaker Selective protection |
| Fitted with: | | Interlocking device |
| Special features | | Maximum operating temperature is 60 °C: Starting at 40 °C, the max. permissible continuous current decreases by 2.5% for every 1 °C |

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| Used with | | Tripping signal contact for subsequent installation Z-NHK 248434 KLV-TC-2 276240 (Compact enclosure) Z-FW/LP 248296 (Remote control and automatic switching device) Z-RC/AK-2MU 285385 (sealing cover set) |
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Technical data ETIM 8.0

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| 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@ss10.0.1-27-14-22-01 [AAB906014]) | | |
| Number of poles | | 2 |
| Rated voltage | V | 230 |
| Rated current | A | 40 |
| Rated fault current | A | 0.1 |
| Rated insulation voltage U_i | V | 440 |
| Rated impulse withstand voltage U_{imp} | kV | 4 |
| Mounting method | | DIN rail |
| Leakage current type | | A |
| Selective protection | | Yes |
| Short-time delayed tripping | | No |
| Short-circuit breaking capacity (I_{cw}) | kA | 10 |
| Surge current capacity | kA | 5 |
| Voltage type | | AC |
| With interlocking device | | Yes |
| Frequency | | 50 Hz |
| Additional equipment possible | | Yes |
| Degree of protection (IP) | | IP20 |
| Width in number of modular spacings | | 2 |
| Built-in depth | mm | 70.5 |
| Ambient temperature during operating | °C | -25 - 60 |
| Pollution degree | | 2 |
| Connectable conductor cross section multi-wired | mm ² | 1.5 - 16 |
| Connectable conductor cross section solid-core | mm ² | 1.5 - 35 |
| Explosion-proof | | No |