# **DATASHEET - PFIM-63/2/01-A-MW**



## Residual current circuit breaker (RCCB), 63A, 2p, 100mA, type A

Powering Business Worldwide

PFIM-63/2/01-A-MW Part no. Catalog No. 235432

**EL-Nummer** (Norway)

0001609318

Similar to illustration

| Delivery program             |                 |    |  |
|------------------------------|-----------------|----|--|
| Basic function               |                 |    | Residual current circuit-breakers  |
| Number of poles              |                 |    | 2 pole   |
| Application                  |                 |    | Residual current circuit-breaker for residential and commercial applications |
| Rated current                | I <sub>n</sub>  | Α  | 63   |
| Rated short-circuit strength | I <sub>cn</sub> | kA | 10   |
| Rated fault current          | $I_{\Delta N}$  | Α  | 0.1  |
| Туре                         |                 |    | Type A   |
| Tripping                     |                 | s  | non-delayed  |
| Product range                |                 |    | PFIM   |
| Sensitivity                  |                 |    | Pulse-current sensitive  |
| Impulse withstand current    |                 |    | Partly surge-proof 250 A   |

# **Technical data**

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| Standards  |                    |      | IEC/EN 61008            |
|--|--------------------|------|-------------------------|
| Rated operational voltage  | U <sub>e</sub>     | V    |                         |
|  | U <sub>e</sub>     | V AC |                         |
| Rated operating voltage  | U <sub>e</sub>     | V AC | 230                     |
| Rated frequency  | f                  | Hz   | 50                      |
| Limit values of the operating voltage  |                    |      |                         |
| Test circuit   |                    | V AC | 196 - 264               |
| Sensitivity  |                    |      | Pulse-current sensitive |
| Rated insulation voltage   | Ui                 | V    | 440                     |
| Rated impulse withstand voltage  | U <sub>imp</sub>   | kV   | 4                       |
| Rated short-circuit strength   | I <sub>cn</sub>    | kA   | 10                      |
| Rated making and breaking capacity / Rated residual making and breaking capacity | $I_m/I_{\Delta m}$ | Α    | 630                     |
| lifespan   |                    |      |                         |
| Electrical   | Operations         |      | ≧ 4000                  |
| Mechanical   | Operations         |      | ≧ 20000                 |
| References   |                    |      |                         |

### References

| Auxiliary switch for subsequent installation        | Z-HK 248432        |
|---|--------------------|
| Tripping signal contact for subsequent installation | Z-NHK 248434       |
| Remote control and automatic switching device       | Z-FW/LP 248296     |
| Compact enclosure                                   | KLV-TC-2 276240    |
| Sealing cover set                                   | Z-RC/AK-2MU 285385 |
|   |                    |

| Mechanical               |    |   |
|--------------------------|----|---|
| Standard front dimension | mm | 45  |
| Device height            | mm | 80  |
| Built-in width           | mm | 35 (2TE)  |
| Mounting                 |    | Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 |
| Degree of Protection     |    | IP40, IP54 (with moisture-proof enclosure)                        |
| Terminals top and bottom |    | Open mouthed/lift terminals                                       |
| Terminal protection      |    | DGUV VS3, EN 50274  |
| Terminal cross-section   |    |   |

| Solid  | $mm^2$ | 1.5 - 35  |
|--|--------|---|
| Stranded                                       | $mm^2$ | 2 x 16  |
| Thickness of busbar material                   | mm     | 0.8 - 2   |
| Permissible storage and transport temperatures | °C     | -35 - +60   |
| Climatic proofing                              |        | 25-55°C/90-95% relative humidity according to IEC 60068-2 |
| Thickness of busbar material                   | mm     |   |
| Material thickness                             | mm     | 0.8 - 2   |

# Design verification as per IEC/EN 61439

| boolgii vormoution do por 120, 211 or 100   |                   |    |  |
|---|-------------------|----|--|
| Technical data for design verification  |                   |    |  |
| Rated operational current for specified heat dissipation  | In                | Α  | 63   |
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 7.2  |
| Static heat dissipation, non-current-dependent  | $P_{vs}$          | W  | 0  |
| Heat dissipation capacity   | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.  |                   | °C | -25  |
| Operating ambient temperature max.  |                   | °C | 40   |
|   |                   |    | Starting at 40 °C, the max. permissible continuous current decreases by 3% for every 1 °C  |
| 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 switch<br>gear must be observed. $\label{eq:constraint}$       |
| 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 7.0**

| Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003) |
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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])

| (ecl@ss10.0.1-27-14-22-01 [AAB906014]) |    |     |
|--|----|-----|
| Number of poles                        |    | 2   |
| Rated voltage                          | V  | 230 |
| Rated current                          | Α  | 63  |
| Rated fault current                    | mA | 100 |

| Rated insulation voltage Ui                     | V | /   | 440      |
|---|---|-----|----------|
| Rated impulse withstand voltage Uimp            | k | κV  | 4        |
| Mounting method                                 |   |     | DIN rail |
| Leakage current type                            |   |     | A        |
| Selective protection                            |   |     | No       |
| Short-time delayed tripping                     |   |     | No       |
| Short-circuit breaking capacity (Icw)           | k | κA  | 10       |
| Surge current capacity                          | k | κA  | 0.25     |
| Frequency                                       |   |     | 50 Hz    |
| Additional equipment possible                   |   |     | Yes      |
| With interlocking device                        |   |     | Yes      |
| Degree of protection (IP)                       |   |     | IP20     |
| Width in number of modular spacings             |   |     | 2        |
| Built-in depth                                  | n | nm  | 70.5     |
| Ambient temperature during operating            | 0 | ,C  | -25 - 40 |
| Pollution degree                                |   |     | 2        |
| Connectable conductor cross section multi-wired | n | nm² | 1.5 - 16 |
| Connectable conductor cross section solid-core  | n | nm² | 1.5 - 35 |
|   |   |     |          |