# DATASHEET - PFIM-63/4/01-S/A-MW



Residual current circuit breaker (RCCB), 63A, 4p, 100mA, type S/A

Powering Business Worldwide

Part no. Catalog No. PFIM-63/4/01-S/A-MW 235471

**EL-Nummer** (Norway)

0001609353

Similar to illustration

| _    |       |         |
|------|-------|---------|
| ומוו | IVATV | program |

| Zonro, program               |                 |    |                                                                              |
|------------------------------|-----------------|----|------------------------------------------------------------------------------|
| Basic function               |                 |    | Residual current circuit-breakers                                            |
| Number of poles              |                 |    | 4 pole                                                                       |
| Application                  |                 |    | Residual current circuit-breaker for residential and commercial applications |
| Rated current                | In              | Α  | 63                                                                           |
| Rated short-circuit strength | I <sub>cn</sub> | kA | 10                                                                           |
| Rated fault current          | $I_{\Delta N}$  | Α  | 0.1                                                                          |
| Туре                         |                 |    | Type S/A                                                                     |
| Tripping                     |                 | s  | selective switch off                                                         |
| Product range                |                 |    | PFIM                                                                         |
| Sensitivity                  |                 |    | Pulse-current sensitive                                                      |
| Impulse withstand current    |                 |    | surge-proof 5 kA                                                             |
|                              |                 |    |                                                                              |

## **Technical data**

### **Electrical**

| 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 | 230/400                 |
| Rated frequency                                                                  | f                  | Hz   | 50                      |
| Limit values of the operating voltage                                            |                    |      |                         |
| Test circuit                                                                     |                    | V AC | 196 - 456               |
| 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                                                                       |                    |      |                         |

| 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-4 276241    |
| Sealing cover set                                   | Z-RC/AK-4MU 101062 |

### Mechanical

| Standard front dimension | mm | 45                                                                |
|--------------------------|----|-------------------------------------------------------------------|
| Device height            | mm | 80                                                                |
| Built-in width           | mm | 70 (4TE)                                                          |
| Mounting                 |    | Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 |
| Degree of Protection     |    | IP20, IP40 with suitable 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

| Design verincation as per illo/liv 01433                                                                               |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| 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  | 10.5                                                                                                                             |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 0                                                                                                                                |
| Heat dissipation capacity                                                                                              | P <sub>diss</sub> | W  | 0                                                                                                                                |
| Operating ambient temperature min.                                                                                     |                   | °C | -25                                                                                                                              |
| Operating ambient temperature max.                                                                                     |                   | °C | 60                                                                                                                               |
|                                                                                                                        |                   |    | Starting at 40 °C, the max. permissible continuous current decreases by 1.8% 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 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 7.0**

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@ss10.0.1-27-14-22-01 [AAB906014]) |    |     |  |
|----------------------------------------|----|-----|--|
| Number of poles                        |    | 4   |  |
| Rated voltage                          | V  | 400 |  |
| Rated current                          | Α  | 63  |  |
| Rated fault current                    | mA | 100 |  |

| Rated insulation voltage Ui                     | V   | 440      |
|-------------------------------------------------|-----|----------|
| Rated impulse withstand voltage Uimp            | kV  | 4        |
| Mounting method                                 |     | DIN rail |
| Leakage current type                            |     | A        |
| Selective protection                            |     | Yes      |
| Short-time delayed tripping                     |     | No       |
| Short-circuit breaking capacity (Icw)           | kA  | 10       |
| Surge current capacity                          | kA  | 5        |
| Frequency                                       |     | 50 Hz    |
| Additional equipment possible                   |     | Yes      |
| With interlocking device                        |     | Yes      |
| Degree of protection (IP)                       |     | IP20     |
| Width in number of modular spacings             |     | 4        |
| Built-in depth                                  | mm  | 70.5     |
| Ambient temperature during operating            | °C  | -25 - 40 |
| Pollution degree                                |     | 2        |
| Connectable conductor cross section multi-wired | mm² | 1.5 - 16 |
| Connectable conductor cross section solid-core  | mm² | 1.5 - 35 |
|                                                 |     |          |