### DATASHEET - PBSM-634/1-S-MW



Residual-current circuit breaker trip block for PLS. 63A, 4 p, 1000mA, type



Part no. Catalog No.

S

PBSM-634/1-S-MW 262607

#### Similar to illustration

| Delivery program             |                 |    |  |
|------------------------------|-----------------|----|--|
| Basic function               |                 |    | Add-on residual current protection unit                |
| Number of poles              |                 |    | 4 pole   |
| Application                  |                 |    | Switchgear for residential and commercial applications |
| Rated current                | In              | А  | 63   |
| Rated short-circuit strength | I <sub>cn</sub> | kA | same as connected PLS up to max. 10                    |
| Rated fault current          | $I_{\Delta N}$  | А  | 1  |
| Туре                         |                 |    | Type S   |
| Tripping                     |                 | s  | selective switch off                                   |
| Product range                |                 |    | PBSM   |
| Sensitivity                  |                 |    | AC current sensitive                                   |
| Impulse withstand current    |                 |    | surge-proof 5 kA                                       |

# Technical data

| Electrical                                     |                  |    |   |
|--|------------------|----|---|
| Rated frequency                                | f                | Hz | 50  |
| Sensitivity                                    |                  |    | AC current sensitive                                      |
| Rated current                                  | In               | Α  | 63  |
| Rated impulse withstand voltage                | U <sub>imp</sub> | kV | 4   |
| lifespan                                       |                  |    |   |
| Electrical                                     | Operations       |    | ≧ 4000  |
| Mechanical                                     | Operations       |    | ≧ 20000   |
| Mechanical                                     |                  |    |   |
| Standard front dimension                       |                  | mm | 45  |
| Device height                                  |                  | mm | 90  |
| Built-in width                                 |                  | mm | 125 (4TE)   |
| Mounting                                       |                  |    | fix mounted onto PLS                                      |
| Degree of Protection                           |                  |    | IP40, IP54 (with moisture-proof enclosure)                |
| Terminals top and bottom                       |                  |    | Lift terminals  |
| Terminal protection                            |                  |    | BGV A3, ÖVE-EN 6  |
| 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 |
|  |                  |    |   |

## Design verification as per IEC/EN 61439

| Technical data for design verification                   |                   |    |   |
|--|-------------------|----|---|
| Rated operational current for specified heat dissipation | I <sub>n</sub>    | А  | 63  |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub>  | W  | 0   |
| Equipment heat dissipation, current-dependent            | P <sub>vid</sub>  | W  | 25  |
| 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 | 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 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                                   | А   | 63        |
| Rated fault current                             | mA  | 1000      |
| Rated insulation voltage Ui                     | V   | 440       |
| Rated impulse withstand voltage Uimp            | kV  | 4         |
| Mounting method                                 |     | DIN rail  |
| Leakage current type                            |     | AC        |
| Selective protection                            |     | Yes       |
| Short-time delayed tripping                     |     | No        |
| Short-circuit breaking capacity (Icw)           | kA  | 0         |
| Surge current capacity                          | kA  | 6         |
| Frequency                                       |     | 50 Hz     |
| Additional equipment possible                   |     | Yes       |
| With interlocking device                        |     | Yes       |
| Degree of protection (IP)                       |     | IP20      |
| Width in number of modular spacings             |     | 7.14      |
| Built-in depth                                  | mm  | 70        |
| Ambient temperature during operating            | °C  | -25 - 40  |
| Pollution degree                                |     | 2         |
| Connectable conductor cross section multi-wired | mm² | 0.75 - 16 |
| Connectable conductor cross section solid-core  | mm² | 0.75 - 16 |
|   |     |           |