# DATASHEET - PHM50

**Fuse switch-disconnector, PHM, 50 A, service distribution board mounting, 1 pole, DIII**

**Part no.** **PHM50**
**1713615**

| | |
|---|---|
| **General specifications** | |
| Product name | Eaton PHM Fuse switch-disconnector |
| Part no. | PHM50 |
| EAN | 8711426208452 |
| Product Length/Depth | 95 millimetre |
| Product height | 93 millimetre |
| Product width | 40 millimetre |
| Product weight | 160.979 gram |
| Certifications | RoHS<br>VDE 0660<br>KEMA<br>IEC/EN 60204<br>IEC/EN 60947<br>CE<br>IEC/EN 60947-3 |
| Product Tradename | PHM |
| Product Type | Fuse switch-disconnector |
| Product Sub Type | None |
| **Features & Functions** | |
| Fitted with: | Connectors |
| Number of poles | Single-pole |
| **General information** | |
| Actuator type | Without actuator |
| Degree of protection | IP20 |
| Degree of protection (front side) | IP20 |
| Mounting method | Service distribution board mounting |
| Mounting position | As required |
| Overvoltage category | III |
| Pollution degree | 3 |
| Product category | Fuse switch-disconnector |
| **Climatic environmental conditions** | |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 50 °C |
| Ambient storage temperature - min | -30 °C |
| Ambient storage temperature - max | 80 °C |
| Operating temperature - min | -25 °C |
| Operating temperature - max | 55 °C |
| **Terminal capacities** | |
| Terminal capacity (flexible) | 1.5 - 10 $mm^2$ |
| Terminal capacity (solid) | 1.5 - 16 $mm^2$ |
| Stripping length (main cable) | 8 mm |
| Tightening torque | 3 Nm, Screw terminals |
| **Electrical rating** | |
| Rated operating voltage (Ue) at AC - max | 400 V |
| Rated operational power at AC-23A, 400 V, 50 Hz | 0 kW |
| Rated short-time withstand current (Icw) | 0 kA |
| Rated uninterrupted current (Iu) | 50 A |
| Uninterrupted current | Rated uninterrupted current Iu is specified for max. cross-section. |
| **Design verification** | |

| | | |
|---|---|---|
| Equipment heat dissipation, current-dependent Pvid | | 0 W |
| Heat dissipation capacity Pdiss | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 5 W |
| Rated operational current for specified heat dissipation (In) | | 0 A |
| Static heat dissipation, non-current-dependent Pvs | | 0 W |
| 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. |

## Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Fuse switch disconnector (EC001040)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnector (ecl@ss13-27-37-14-01 [AKF058018])

| | | |
|---|---|---|
| Version as main switch | | No |
| Version as safety switch | | No |
| Max. rated operation voltage Ue AC | V | 400 |
| Rated permanent current Iu | A | 50 |
| Rated operation power at AC-23, 400 V | kW | 0 |
| Conditioned rated short-circuit current Iq | kA | 0 |
| Rated short-time withstand current Icw | kA | 0 |
| Suitable for fuses | | Other |
| Number of poles | | 1 |
| With error protection | | No |
| Type of electrical connection of main circuit | | Screw connection |
| Cable entry | | Top/bottom |
| Equipped with connectors | | Yes |
| Suitable for floor mounting | | No |
| Suitable for front mounting | | No |
| Suitable for busbar mounting | | No |
| Type of control element | | Without actuator |
| Position control element | | Front side |
| Motor drive optional | | No |
| Motor drive integrated | | No |
| Version as emergency stop installation | | No |
| Degree of protection (IP), front side | | IP20 |

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