# DATASHEET - PKM0-6,3

**Short-circuit protective breaker, Iu 6.3 A, Irm 97.7 A, Screw terminals, Also suitable for motors with efficiency class IE3.**

Powering Business Worldwide™

**Part no.** **PKM0-6,3**
**072728**

## General specifications

| | |
|---|---|
| Product name | Eaton Moeller® series PKM0 Short-circuit protective breaker |
| Part no. | PKM0-6,3 |
| EAN | 4015080727286 |
| Product Length/Depth | 76 millimetre |
| Product height | 93 millimetre |
| Product width | 45 millimetre |
| Product weight | 0.289 kilogram |
| Certifications | IEC/EN 60947<br>VDE 0660 |
| Product Tradename | PKM0 |
| Product Type | Short-circuit protective breaker |
| Product Sub Type | None |
| Catalog Notes | An appropriate overload relay must be fitted to protect motors against overload.<br>IE3-ready devices are identified by the logo on their packaging.<br>Refer to catalog CA034001DE for the allocation of short circuit protection and contactor |

## Features & Functions

| | |
|---|---|
| Actuator type | Turn button |
| Number of poles | Three-pole |

## General information

| | |
|---|---|
| Connection | Screw terminals |
| Degree of protection | Terminals: IP00<br>IP20 |
| Lifespan, electrical | 100,000 operations |
| Lifespan, mechanical | 100,000 Operations |
| Mounting position | Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height. |
| Operating frequency | 40 Operations/h |
| Overvoltage category | III |
| Pollution degree | 3 |
| Product category | Motor protective circuit breaker |
| Protection | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| Rated impulse withstand voltage (Uimp) | 6000 V AC |
| Shock resistance | 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| Suitable for | Also motors with efficiency class IE3 |
| Temperature compensation | -5 - 40 °C to IEC/EN 60947, VDE 0660<br>-25 - 55 °C, Operating range<br>≤ 0.25 %/K, residual error for T > 40° |
| Type | Short-circuit protective device only |

## Climatic environmental conditions

| | |
|---|---|
| Altitude | Max. 2000 m |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 55 °C |
| Ambient operating temperature (enclosed) - min | 25 °C |
| Ambient operating temperature (enclosed) - max | 40 °C |
| Ambient storage temperature - min | 40 °C |
| Ambient storage temperature - max | 80 °C |
| Climatic proofing | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |

## Terminal capacities

| | |
|---|---|
| Terminal capacity (flexible with ferrule) | 1 x (1 - 6) mm², ferrule to DIN 46228<br>2 x (1 - 6) mm², ferrule to DIN 46228 |
| Terminal capacity (solid) | 2 x (1 - 6) mm²<br>1 x (1 - 6) mm² |
| Terminal capacity (solid/stranded AWG) | 18 - 10 |
| Stripping length (main cable) | 10 mm |
| Tightening torque | 1.7 Nm, Screw terminals, Main cable<br>1 Nm, Screw terminals, Control circuit cables |

## Electrical rating

| | |
|---|---|
| Rated frequency - min | 50 Hz |
| Rated frequency - max | 60 Hz |
| Rated operational current (Ie) | 6.3 A |
| Rated operational power at AC-3, 220/230 V, 50 Hz | 1.1 kW |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 2.2 kW |
| Rated operational power at AC-3, 440 V, 50 Hz | 3 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | 3 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | 4 kW |
| Rated operational voltage (Ue) - min | 690 V |
| Rated operational voltage (Ue) - max | 690 V |
| Rated uninterrupted current (Iu) | 6.3 A |

## Short-circuit rating

| | |
|---|---|
| Rated short-circuit breaking capacity Icu at 400 V AC | 150 kA |
| Short-circuit release | 97.7 A, Irm, Setting range max.<br>Basic device fixed 15.5 x Iu, Trip Blocks<br>± 20% tolerance, Trip blocks |

## Switching capacity

| | |
|---|---|
| Switching capacity | 6.3 A, AC-3 up to 690 V<br>6.3 A (3 contacts in series), DC-5 up to 250V |

## Trip blocks

| | |
|---|---|
| Overload release current setting - min | 0 A |
| Overload release current setting - max | 0 A |

## Design verification

| | |
|---|---|
| Equipment heat dissipation, current-dependent Pvid | 5.68 W |
| Heat dissipation capacity Pdiss | 0 W |
| Heat dissipation per pole, current-dependent Pvid | 1.89 W |
| Rated operational current for specified heat dissipation (In) | 6.3 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) / Motor protection circuit-breaker (EC000074) | | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss13-27-37-04-01 [AGZ529021]) | | | |
| Overload release current setting | | A | 0 - 0 |
| Adjustment range undelayed short-circuit release | | A | 98 - 98 |
| With thermal overload protection | | | No |
| Phase failure sensitive | | | No |
| Switch off technique | | | Magnetic |
| Rated operating voltage | | V | 690 - 690 |
| Rated permanent current Iu | | A | 6.3 |
| Rated operation power at AC-3, 230 V | | kW | 1.1 |
| Rated operation power at AC-3, 400 V | | kW | 2.2 |
| Power loss | | W | 5.68 |
| Type of electrical connection of main circuit | | | Screw connection |
| Type of control element | | | Turn button |
| Device construction | | | Built-in device fixed built-in technique |
| With integrated auxiliary switch | | | No |
| With integrated under voltage release | | | No |
| Number of poles | | | 3 |
| Rated short-circuit breaking capacity Icu at 400 V, AC | | kA | 150 |
| Degree of protection (IP) | | | IP20 |
| Height | | mm | 93 |
| Width | | mm | 45 |
| Depth | | mm | 76 |