# DATASHEET - PKZM01-1-G

**Motor-protective circuit-breaker, 660 V 690 V: 0.55 kW, Ir= 0.63 - 1 A, IP20**

**Part no.** **PKZM01-1-G**
**286082**

| | |
|---|---|
| Product name | Eaton Moeller® series PKZM01 Motor-protective circuit-breaker |
| Part no. | PKZM01-1-G |
| EAN | 4015082860820 |
| Product Length/Depth | 158 millimetre |
| Product height | 80 millimetre |
| Product width | 117 millimetre |
| Product weight | 0.551 kilogram |
| Compliances | CE Marked |
| Certifications | CSA Std. C22.2 No. 14<br>IEC 60947-4-1<br>UL 508<br>VDE<br>VDE 0660<br>IEC/EN 60947 |
| Product Tradename | PKZM01 |
| Product Type | Motor-protective circuit-breaker |
| Product Sub Type | None |
| Catalog Notes | IE3-ready devices are identified by the logo on their packaging. |
| | |
| Actuator type | Push button |
| Features | Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102) |
| Fitted with: | Operating membrane |
| Functions | Motor protection<br>Phase failure sensitive |
| Number of poles | Three-pole |
| | |
| Connection | Screw terminals |
| Degree of protection | IP65 |
| Lifespan, electrical | 50,000 operations (at 400V, AC-3) |
| Lifespan, mechanical | 50,000 Operations (Main conducting paths) |
| Mounting position | Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height. |
| Operating frequency | 25 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 |
| | |
| Altitude | Max. 2000 m |
| 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 |
| | |
| Terminal capacity (flexible with ferrule) | 2 x (1 - 6) $mm^2$, ferrule to DIN 46228<br>1 x (1 - 6) $mm^2$, ferrule to DIN 46228 |
| Terminal capacity (solid) | 1 x (1 - 6) $mm^2$<br>2 x (1 - 6) $mm^2$ |
| Terminal capacity (solid/stranded AWG) | 18 - 10 |

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|---|---|
| Stripping length (main cable) | 10 mm |
| Tightening torque | 1.7 Nm, Screw terminals, Main cable |
| | |
| Rated frequency - min | 50 Hz |
| Rated frequency - max | 60 Hz |
| Rated operational current (Ie) | 1 A |
| Rated operational power at AC-3, 220/230 V, 50 Hz | 0.09 kW |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 0.12 kW |
| Rated operational power at AC-3, 440 V, 50 Hz | 0.25 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | 0.37 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | 0.55 kW |
| Rated operational voltage (Ue) - min | 690 V |
| Rated operational voltage (Ue) - max | 690 V |
| Rated uninterrupted current (Iu) | 0.63 A |
| | |
| Rated short-circuit breaking capacity Icu at 400 V AC | 50 kA |
| Short-circuit current | 60 kA DC, up to 250 V DC, Main conducting paths |
| Short-circuit release | 15.5 A, Irm, Setting range max.<br>± 20% tolerance, Trip blocks<br>Basic device fixed 15.5 x Iu, Trip Blocks |
| | |
| Switching capacity | 1 A, AC-3 up to 690 V<br>1 A (3 contacts in series), DC-5 up to 250V |
| | |
| Overload release current setting - min | 0.63 A |
| Overload release current setting - max | 1 A |
| Tripping characteristic | Overload trigger: tripping class 10 A |
| | |
| Equipment heat dissipation, current-dependent Pvid | 5.33 W |
| Heat dissipation capacity Pdiss | 0 W |
| Heat dissipation per pole, current-dependent Pvid | 1.78 W |
| Rated operational current for specified heat dissipation (In) | 1 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 8.0

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@ss10.0.1-27-37-04-01 [AGZ529016])

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|---|---|---|
| Overload release current setting | A | 0.63 - 1 |
| Adjustment range undelayed short-circuit release | A | 15.5 - 15.5 |
| With thermal protection | | No |
| Phase failure sensitive | | Yes |
| Switch off technique | | Thermomagnetic |
| Rated operating voltage | V | 690 - 690 |
| Rated permanent current Iu | A | 0.63 |
| Rated operation power at AC-3, 230 V | kW | 0.09 |
| Rated operation power at AC-3, 400 V | kW | 0.12 |
| Type of electrical connection of main circuit | | Screw connection |
| Type of control element | | Push button |
| Device construction | | Complete device in housing |
| 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 | 50 |
| Degree of protection (IP) | | IP65 |
| Height | mm | 80 |
| Width | mm | 117 |
| Depth | mm | 158 |


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