

**Motor-protective circuit-breaker, Complete device with standard knob,
Electronic, 0.3 - 1.2 A, 1.2 A, With overload release, Screw terminals**



Part no. PKE12/XTU-1,2
121731
EL Number 4356001
(Norway)

| General specifications | |
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| Product name | Eaton Moeller® series PKE System-protective circuit-breaker |
| Part no. | PKE12/XTU-1,2 |
| EAN | 4015081195411 |
| Product Length/Depth | 101 millimetre |
| Product height | 102.5 millimetre |
| Product width | 45 millimetre |
| Product weight | 0.42 kilogram |
| Compliances | Contact Manufacturer |
| Certifications | CE CSA-C22.2 No. 60947-4-1-14 CSA UL UL Category Control No.: NLRV UL File No.: E36332 VDE 0660 IEC/EN 60947-4-1 CSA File No.: 165628 CSA Class No.: 3211-05 IEC/EN 60947 UL 60947-4-1 |
| Product Tradename | PKE |
| Product Type | System-protective circuit-breaker |
| Product Sub Type | None |
| Catalog Notes | IE3-ready devices are identified by the logo on their packaging. |
| Features & Functions | |
| Actuator type | Turn button |
| Features | Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102) |
| Fitted with: | Standard knob |
| Functions | Motor protection for heavy starting duty Motor protection Phase failure sensitive Overload release |
| Number of poles | Three-pole |
| General information | |
| Current flow times - min | 900 (Class 15) AC-4 cycle operation, Main conducting paths 500 (Class 5) AC-4 cycle operation, Main conducting paths 700 (Class 10) AC-4 cycle operation, Main conducting paths 1000 (Class 20) AC-4 cycle operation, Main conducting paths For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. Note: Going below the minimum current flow time can cause overheating of the load (motor). |
| Cut-out periods - min | ≤ 500 ms, main conducting paths, AC-4 cycle operation |
| Degree of protection | Terminals: IP00 IP20 |
| Lifespan, electrical | 50,000 operations (at 400V, AC-3) |
| Lifespan, mechanical | 50,000 Operations (Main conducting paths) |
| Operating frequency | 60 Operations/h |
| Overload release current setting - min | 0.3 A |
| Overload release current setting - max | 1.2 A |
| 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) |

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| Rated impulse withstand voltage (Uimp) | 6000 V AC |
| Suitable for | Also motors with efficiency class IE3 |
| Temperature compensation | -5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range |
| Ambient conditions, mechanical | |
| Shock resistance | 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| 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, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| Terminal capacities | |
| Terminal capacity (flexible with ferrule) | 2 x (1 - 6) mm ² , ferrule to DIN 46228 1 x (1 - 6) mm ² , ferrule to DIN 46228 |
| Terminal capacity (solid) | 1 x (1 - 6) mm ² 2 x (1 - 6) mm ² |
| Terminal capacity (solid/stranded AWG) | 14 - 10 |
| Stripping length (main cable) | 10 mm |
| Tightening torque | 1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable |
| Electrical rating | |
| Rated frequency - min | 50 Hz |
| Rated frequency - max | 60 Hz |
| Rated operational current (Ie) | 1.2 A |
| Rated operational power at AC-3, 220/230 V, 50 Hz | 0.12 kW |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 0.25 kW |
| Rated operational power at AC-3, 440 V, 50 Hz | 0.37 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | 0.37 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | 0.75 kW |
| Rated operational voltage (Ue) - min | 690 V |
| Rated operational voltage (Ue) - max | 690 V |
| Rated uninterrupted current (Iu) | 1.2 A |
| Short-circuit rating | |
| Short-circuit current rating (group protection) | 100 A, Class J, 600 V High Fault, max. Fuse, SCCR (UL/CSA) 100 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) |
| Short-circuit release | Basic device fixed 15.5 x Iu, Trip Blocks ± 20% tolerance, Trip blocks Trip block fixed 15.5 x Iu Delayed approx. 60 ms, Trip blocks |
| Switching capacity | |
| Switching capacity | 1.2 A, AC-3 up to 690 V |
| Motor rating | |
| Assigned motor power at 460/480 V, 60 Hz, 3-phase | 0.5 HP |
| Assigned motor power at 575/600 V, 60 Hz, 3-phase | 0.5 HP |
| Communication | |
| Connection | Screw terminals |
| Design verification | |
| Equipment heat dissipation, current-dependent Pvid | 0.3 W |
| Heat dissipation capacity Pdis | 0 W |
| Heat dissipation per pole, current-dependent Pvid | 0.1 W |
| Rated operational current for specified heat dissipation (In) | 1.2 A |
| Static heat dissipation, non-current-dependent Pvs | 0 W |

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| 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

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| 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 | 0.3 - 1.2 |
| Adjustment range undelayed short-circuit release | A | 18.6 - 18.6 |
| With thermal overload protection | | No |
| Phase failure sensitive | | Yes |
| Switch off technique | | Electronic |
| Rated operating voltage | V | 690 - 690 |
| Rated permanent current I _u | A | 1.2 |
| Rated operation power at AC-3, 230 V | kW | 0.12 |
| Rated operation power at AC-3, 400 V | kW | 0.25 |
| Power loss | W | |
| 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 I _{cu} at 400 V, AC | kA | 100 |
| Degree of protection (IP) | | IP20 |
| Height | mm | 102.5 |
| Width | mm | 45 |
| Depth | mm | 101 |