

Function element, SmartWire-DT, for PKE12/32, manual/auto



Part no. PKE-SWD-32
126895
EL Number 4520200
(Norway)

| General specifications | | |
|------------------------------------|--|---|
| Product name | | Eaton Moeller® series PKE Function element |
| Part no. | | PKE-SWD-32 |
| EAN | | 4015081244751 |
| Product Length/Depth | | 81 millimetre |
| Product height | | 39 millimetre |
| Product width | | 54 millimetre |
| Product weight | | 0.043 kilogram |
| Certifications | | IEC/EN 60947 CSA File No.: 165628 CSA-C22.2 No. 14 IEC/EN 61131-2 CSA UL Category Control No.: NKCR UL CSA Class No.: 3211-07 CE UL508 EN 50178 IEC60847-4-1 UL File No.: E29184 |
| Product Tradename | | PKE |
| Product Type | | Accessory |
| Product Sub Type | | Function element |
| Catalog Notes | | 1 electrical interlock for the surface mounting of reversing starters. 1-0-A switch for manual or automatic operation. Wiring sets DILM 12-XRL and PKZM0-XRM12 cannot be used. |
| Features & Functions | | |
| Electric connection type | | Spring clamp connection |
| Features | | Fieldbus connection over separate bus coupler possible |
| Functions | | Selectable overload relay function (ZMR) for switching off the contactor on overload Activation Overload relay function (ZMR) Motor protection for heavy starting duty Display of Switch position contactor/PKE/1-0-A switch Display of Thermal motor image in % Contactor actuation For connecting PKE motor-starter combination MSC-DEA... with PKE-XTUA... trip blocks with a rated motor output of 15 kW/400 V to SmartWire-DT Motor protection Display of Part no. of trip block Display of Motor current in % Display of Set value of overload releases Display of Trip indications (Overload, Short-circuit,...) Display of Set time lag (CLASS) |
| Operating mode | | Manual operation possible Address allocation via Rotary switch Automatic operation possible |
| General information | | |
| Accessories | | Connecting cable between module and trip block PKE-XTUA-... included with supplied equipment. |
| Cable length | | ≤ 2.8 m, Connection auxiliary contact |
| Current consumption | | 58 mA, SmartWire-DT network, 15-V-SWD supply See the contactor's pick-up current and holding current (max. 0.5 A), 24-V-DC-SWD control voltage Uaux |
| Degree of protection | | IP20 |
| Explosion safety category for dust | | None |
| Explosion safety category for gas | | None |
| Number of inputs (digital) | | 0 |
| Number of outputs (digital) | | 1 |
| Overvoltage category | | II |

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| Pollution degree | | 2 |
| Product category | | Accessories SmartWire-DT slave |
| Protocol | | Other bus systems |
| Type | | SmartWire-DT PKE module (motor-starter combinations) |
| Voltage type | | DC |
| Ambient conditions, mechanical | | |
| Constant acceleration | | 1 g, 8.4 - 150 Hz, according to IEC/EN 61131-2, Vibrations |
| Constant amplitude | | 3,5 mm, 5 - 8.4 Hz, according to IEC/EN 61131-2, Vibrations |
| Drop and topple | | 50 mm Drop height, Drop to IEC/EN 60068-2-31 |
| Height of fall (IEC/EN 60068-2-32) - max | | 0.3 m |
| Mounting position | | As DILM7 to DILM32 |
| Shock resistance | | 15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 Impacts |
| Climatic environmental conditions | | |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 60 °C |
| Ambient storage temperature - min | | -30 °C |
| Ambient storage temperature - max | | 70 °C |
| Environmental conditions | | Condensation: prevent with appropriate measures |
| Relative humidity | | 5 - 95 % (non-condensing, IEC/EN 60068-2-30) |
| Electro magnetic compatibility | | |
| Air discharge | | 8 kV, according to IEC 61131-2, level 3, ESD |
| Burst impulse | | 1 kV, CAN/DP-bus cable, SmartWire-DT cables, according to IEC/EN 61131-2, Level 3 1 kV, SmartWire-DT cable, Signal cable, according to IEC/EN 61131-2, Level 3 |
| Contact discharge | | 4 kV, according to IEC/EN 61131-2, Level 2, ESD |
| Electromagnetic fields | | 10 V/m at 80 - 1000 MHz (according to IEC/EN 61131-2:2008) 3 V/m at 1.4 - 2 GHz (according to IEC/EN 61131-2:2008) 1 V/m at 2.0 - 2.7 GHz (according to IEC/EN 61131-2:2008) |
| Radiated RFI | | 10 V (IEC/EN 61131-2:2008, Level 3) |
| Radio interference class | | Class A (EN 55011) |
| Terminal capacities | | |
| Terminal capacity | | 0.2 - 1.5 mm ² (AWG 24 - 16), solid 0.25 - 1.5 mm ² , flexible with ferrule |
| Electrical rating | | |
| Input current at signal 1 | | 0 mA |
| Output current | | 0.5 A |
| Supply voltage at AC, 50 Hz - min | | 0 V AC |
| Supply voltage at AC, 50 Hz - max | | 0 V AC |
| Supply voltage at DC - min | | 15 V DC |
| Supply voltage at DC - max | | 15 V DC |
| Communication | | |
| Addressing | | Address set automatically |
| Connection | | A2 connections must not be bridged. |
| Connection to SmartWire-DT | | Yes |
| Connection type | | External device plug SWD4-8SF2-5, SmartWire-DT Push in terminals, Auxiliary contact SWD: Plug, 8-pole |
| LED indicator | | Status indication of SmartWire-DT network: Green and orange LED |
| Station | | SmartWire-DT slave, SmartWire-DT network |
| Design verification | | |
| Equipment heat dissipation, current-dependent Pvid | | 0 W |
| Heat dissipation capacity Pdis | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 0 W |
| Rated operational current for specified heat dissipation (In) | | 0 A |
| Static heat dissipation, non-current-dependent Pvs | | 0.9 W |
| 10.2.2 Corrosion resistance | | Meets the product standard's requirements. |

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| 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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| Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - digital I/O module (EC001599) | | |
| Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - digital I/O module (eci@ss13-27-24-26-04 [BAA055019]) | | |
| Supply voltage AC 50 Hz | V | 0 - 0 |
| Supply voltage AC 60 Hz | V | 0 - 0 |
| Supply voltage DC | V | 15 - 15 |
| Voltage type (supply voltage) | | DC |
| Number of digital inputs | | 0 |
| Number of digital outputs | | 1 |
| Digital inputs configurable | | No |
| Digital outputs configurable | | No |
| Input current at signal 1 | mA | 0 |
| Permitted voltage at input | V | 15 - 15 |
| Type of voltage (input voltage) | | DC |
| Type of digital output | | Other |
| Output current | A | 0.5 |
| Permitted voltage at output | V | 20.4 - 28.8 |
| Type of output voltage | | DC |
| Short-circuit protection, outputs available | | No |
| Number of HW-interfaces industrial Ethernet | | 0 |
| Number of interfaces PROFINET | | 0 |
| Number of HW-interfaces RS-232 | | 0 |
| Number of HW-interfaces RS-422 | | 0 |
| Number of HW-interfaces RS-485 | | 0 |
| Number of HW-interfaces serial TTY | | 0 |
| Number of HW-interfaces parallel | | 0 |
| Number of HW-interfaces wireless | | 0 |
| Number of HW-interfaces USB | | 0 |
| Number of HW-interfaces other | | 2 |
| With optical interface | | No |
| Supporting protocol for EtherCAT | | No |

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| Supporting protocol for TCP/IP | | No |
| Supporting protocol for PROFIBUS | | No |
| Supporting protocol for CAN | | No |
| Supporting protocol for INTERBUS | | No |
| Supporting protocol for ASI | | No |
| Supporting protocol for KNX | | No |
| Supporting protocol for Modbus | | No |
| Supporting protocol for Data-Highway | | No |
| Supporting protocol for DeviceNet | | No |
| Supporting protocol for SUCONET | | No |
| Supporting protocol for LON | | No |
| Supporting protocol for PROFINET IO | | No |
| Supporting protocol for PROFINET CBA | | No |
| Supporting protocol for SERCOS | | No |
| Supporting protocol for Foundation Fieldbus | | No |
| Supporting protocol for EtherNet/IP | | No |
| Supporting protocol for AS-Interface Safety at Work | | No |
| Supporting protocol for DeviceNet Safety | | No |
| Supporting protocol for INTERBUS-Safety | | No |
| Supporting protocol for PROFIsafe | | No |
| Supporting protocol for SafetyBUS p | | No |
| Supporting protocol for other bus systems | | Yes |
| Radio standard Bluetooth | | No |
| Radio standard WLAN 802.11 | | No |
| Radio standard GPRS | | No |
| Radio standard GSM | | No |
| Radio standard UMTS | | No |
| IO link master | | No |
| System accessory | | Yes |
| Degree of protection (IP) | | IP20 |
| Type of electric connection | | Spring clamp connection |
| Time delay at signal change | ms | 10 - 84 |
| Fieldbus connection over separate bus coupler possible | | Yes |
| Rail mounting possible | | No |
| Wall mounting/direct mounting | | No |
| Front built-in possible | | No |
| Rack-assembly possible | | No |
| Suitable for safety functions | | No |
| SIL according to IEC 61508 | | None |
| Performance level according to EN ISO 13849-1 | | None |
| Appendant operation agent (Ex ia) | | No |
| Appendant operation agent (Ex ib) | | No |
| Explosion safety category for gas | | None |
| Explosion safety category for dust | | None |
| Certified for UL hazardous location class I | | No |
| Certified for UL hazardous location class II | | No |
| Certified for UL hazardous location class III | | No |
| Certified for UL hazardous location division 1 | | No |
| Certified for UL hazardous location division 2 | | No |
| Certified for UL hazardous location group A (acetylene) | | No |
| Certified for UL hazardous location group B (hydrogen) | | No |
| Certified for UL hazardous location group C (ethylene) | | No |
| Certified for UL hazardous location group D (propane) | | No |
| Certified for UL hazardous location group E (metal dusts) | | No |
| Certified for UL hazardous location group F (carbonaceous dusts) | | No |

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| Certified for UL hazardous location group G (non-conductive dusts) | | No |
| Width | mm | 54 |
| Height | mm | 39 |
| Depth | mm | 81 |