# Function element, SmartWire-DT, PKE / XTPE

**Part no.** PKE-SWD-SP
**Article no.** 150614
**Catalog No.** PKE-SWD-SP

## Delivery program

| | | | |
|---|---|---|---|
| Product range | | | SmartWire-DT slave |
| Subrange | | | SmartWire-DT PKE (motor protective circuit breaker) |
| Basic function | | | Motor protection<br>Motor protection for heavy starting duty<br>System protection |
| Product range | | | Accessories |
| Accessories | | | SmartWire-DT PKE (motor-protective circuit-breaker) |
| Function | | | For connecting the motor-protective circuit-breaker with PKE-XTU(W)A-... trip blocks(motor protection) to SmartWire-DT |
| Description | | | Fitted on PKE motor-protective circuit-breaker |
| Messages | | | Contactor state PKE<br>Motor current in %<br>Thermal motor image in %<br>Trip indications (Overload, Short-circuit,...)<br>Set value of overload releases<br>Set time lag (CLASS)<br>Part no. of trip block |
| Commands | | | Remote disconnection of motor-protective circuit-breaker |
| For use with | | | PKE12<br>PKE32<br>PKE65 |
| Connection to SmartWire-DT | | | yes |

## Technical data

### General

| | | | |
|---|---|---|---|
| Standards | | | IEC/EN 61131-2 |
| Dimensions (W x H x D) | | mm | 45 x 46.8 x 70.3 |
| Weight | | kg | 0.02 |
| Mounting | | | at PKE12/32/65 |
| Mounting position | | | as PKE12/35/65 |

### Ambient conditions, mechanical

| | | | |
|---|---|---|---|
| Protection type (IEC/EN 60529, EN50178, VBG 4) | | | IP20 |
| Vibrations (IEC/EN 61131-2:2008) | | | |
| Constant amplitude 3,5 mm | | Hz | 5 - 8.4 |
| Constant acceleration 1 g | | Hz | 8.4 - 150 |
| Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms | | Impacts | 9 |
| Drop to IEC/EN 60068-2-31 | Drop height | mm | 50 |
| Free fall, packaged (IEC/EN 60068-2-32) | | m | 0.3 |

### Electromagnetic compatibility (EMC)

| | | | |
|---|---|---|---|
| Overvoltage category | | | II |
| Pollution degree | | | 2 |
| Electrostatic discharge (IEC/EN 61131-2:2008) | | | |
| Air discharge (Level 3) | | kV | 8 |
| Contact discharge (Level 2) | | kV | 4 |
| Electromagnetic fields (IEC/EN 61131-2:2008) | | | |
| 80 - 1000 MHz | | V/m | 10 |
| 1.4 - 2 GHz | | V/m | 3 |
| 2 - 2.7 GHz | | V/m | 1 |
| Radio interference suppression SmartWire-DT | | | |
| Radio interference suppression | | | EN 55011 Class A |
| Burst (IEC/EN 61131-2:2008, Level 3) | | | |
| SmartWire-DT cables | | | |

| | | | |
|---|---|---|---|
| Signal lines | | kV | 1 |
| CAN/DP-bus cable | | | |
| SmartWire-DT cables | | kV | 1 |
| Radiated RFI (IEC/EN 61131-2:2008, Level 3) | | V | 10 |

### Climatic environmental conditions

| | | | |
|---|---|---|---|
| Operating ambient temperature (IEC 60068-2) | | °C | |
| Ambient temperature | | °C | -25 - +60 |
| Condensation | | | Take appropriate measures to prevent condensation |
| Storage | ϑ | °C | -30 - +70 |
| Relative humidity, non-condensing (IEC/EN 60068-2-30) | | % | 5 - 95 |

### SmartWire-DT network

| | | | |
|---|---|---|---|
| Station type | | | SmartWire-DT slave |
| Address allocation | | | automatic |
| Status SmartWire-DT | | LED | Green |
| Connections | | | Plug, 8-pole |
| Connection | | | External device plug SWD4-8SF2-5 |
| Current consumption | | mW | |
| 15-V-SWD supply | | mA | 35 |

## Design verification as per IEC/EN 61439

| | | | |
|---|---|---|---|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | $I_n$ | A | 0 |
| Heat dissipation per pole, current-dependent | $P_{vid}$ | W | 0 |
| Equipment heat dissipation, current-dependent | $P_{vid}$ | W | 0 |
| Static heat dissipation, non-current-dependent | $P_{vs}$ | W | 0.5 |
| Heat dissipation capacity | $P_{diss}$ | W | 0 |
| Operating ambient temperature min. | | °C | -25 |
| Operating ambient temperature max. | | °C | 55 |
| IEC/EN 61439 design verification | | | |
| 10.2 Strength of materials and parts | | | |
| 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties | | | |
| 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. |

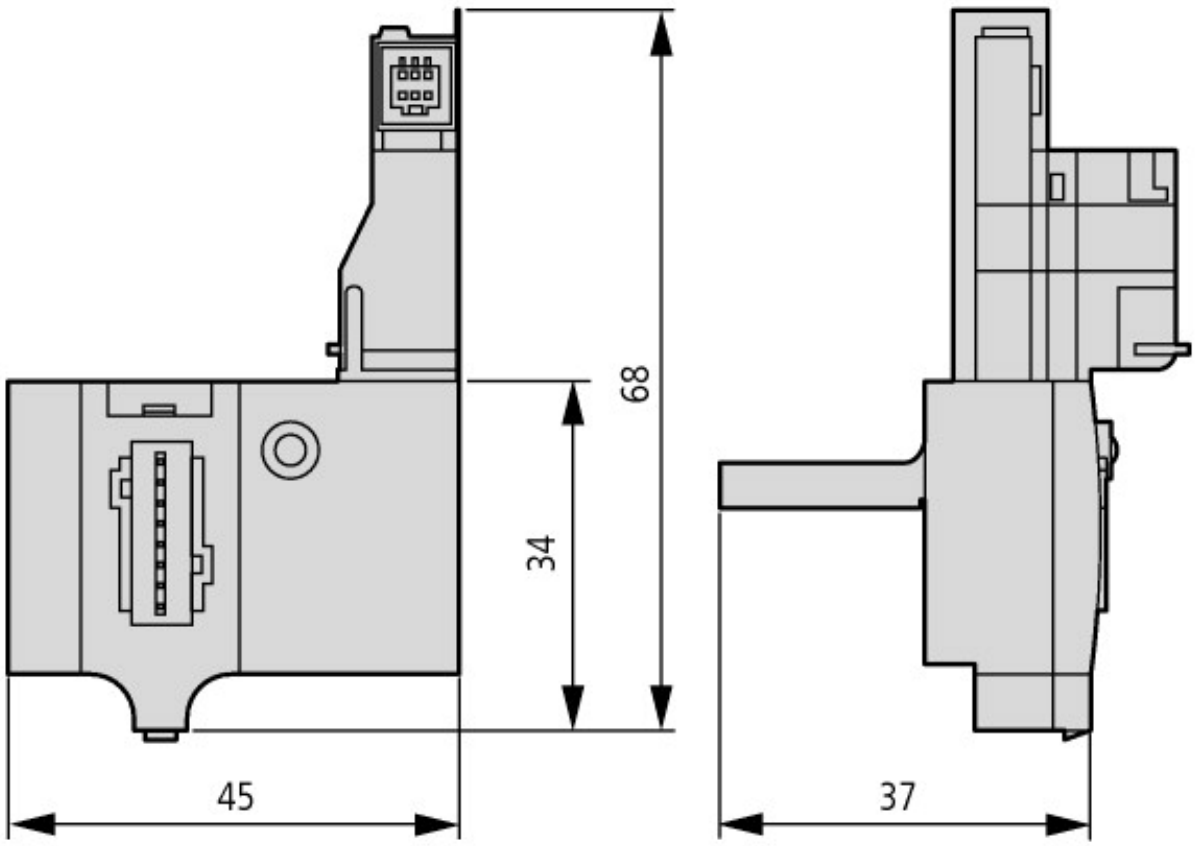
## Technical data ETIM 6.0

| | | | |
|---|---|---|---|
| Low-voltage industrial components (EG000017) / Accessories for low-voltage switch technology (EC002498) | | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Low-voltage switch technology (accessories) / Component for low-voltage switch technology (accessories) (ecl@ss8.1-27-37-92-01 [AKN570010]) | | | |
| Type of accessory | | | Connection technique |

## Approvals

| | | | |
|---|---|---|---|
| Product Standards | | | UL508; CSA-C22.2 No. 14; IEC60847-4-1; CE marking |
| UL File No. | | | E29184 |
| UL Category Control No. | | | NKCR |
| CSA File No. | | | 165628 |
| CSA Class No. | | | 3211-07 |
| North America Certification | | | UL listed, CSA certified |
| Specially designed for North America | | | No |

## Dimensions




SmartWire-DT PKE (motor-protective circuit-breaker)

## Additional product information (links)

| | |
|---|---|
| **IL03407192Z SmartWire-DT, Communication extension for PKE12/32/65** | |
| IL03407192Z SmartWire-DT, Communication extension for PKE12/32/65 | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407192Z2016_07.pdf |
| **MN05006001Z SmartWire-DT, modules** | |
| MN05006001Z SmartWire-DT, Teilnehmer - Deutsch | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_DE.pdf |
| MN05006001Z SmartWire-DT, modules - English | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_EN.pdf |
| MN05006001Z SmartWire-DT, modulo - italiano | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_IT.pdf |
| **MN05006002Z (AWB2723-1617) SmartWire-DT, The system** | |
| MN05006002Z (AWB2723-1617) SmartWire-DT, Das System - Deutsch | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_DE.pdf |
| MN05006002Z (AWB2723-1617) SmartWire-DT, The system - English | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_EN.pdf |
| MN05006002Z (AWB2723-1617) SmartWire-DT, il sistema - italiano | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_IT.pdf |

| **MN05013002Z SmartWire-DT, Gateways** | |
|---|---|
| MN05013002Z SmartWire-DT, Gateways - Deutsch | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05013002Z_DE.pdf |
| MN05013002Z SmartWire-DT, Gateways - English | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05013002Z_EN.pdf |
| MN05013002Z SmartWire-DT, Gateway - italiano | ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05013002Z_IT.pdf |
| Motor starters and "Special Purpose Ratings" for the North American market | http://www.moeller.net/binary/ver_techpapers/ver953en.pdf |
| Busbar Component Adapters for modern Industrial control panels | http://www.moeller.net/binary/ver_techpapers/ver960en.pdf |
| SWD-ASSIST | http://downloadcenter.moeller.net/en/software.a487d8b7-da91-486f-b3ba-a7ca2035db99 |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