



## Function element, MSC-DEA / XTSEA



Powering Business Worldwide™

**Part no.** PKE-SWD-32  
**Article no.** 126895

### Delivery programme

|                                      |  |  |   |
|--------------------------------------|--|--|---|
| Product range                        |  |  | SmartWire-DT slave  |
| Basic function                       |  |  | Motor protection<br>Motor protection for heavy starting duty  |
| Product range                        |  |  | Accessories   |
| Accessories                          |  |  | SmartWire-DT PKE module (motor-starter combinations)  |
| Function                             |  |  | For connecting the motor-starter combination to SmartWire-DT, "expanded" 24 VDC version (MSC-DEA...) up to 15 kW.   |
| Description                          |  |  | Surface-mounting to contactors.<br>One module per contactor and PKE necessary.<br>Additional SWD contactor module required for actuation of reversing starter.<br>1 electrical interlock for the surface mounting of reversing starters.<br>1-0-A switch for manual or automatic operation.<br>Selectable overload relay function (ZMR) for switching off the contactor on overload.<br>Wiring sets DILM 12-XRL and PKZM0-XRM12 cannot be used. |
| Messages                             |  |  | Switch position contactor/PKE/1-0-A switch<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                             |  |  | Contactor actuation<br>Activation Overload relay function (ZMR)   |
| Information about equipment supplied |  |  | Connecting cable between module and trip block PKE-XTUA-... included as standard.   |
| For use with                         |  |  | DILM(C)7... - DILM(C)32<br>MSC-DEA  |
| Connection to SmartWire-DT           |  |  | yes   |
| Connection type                      |  |  | Push in terminals   |
| <b>Notes</b>                         |  |  | <ul style="list-style-type: none"> <li>Take into account the max. current consumption of the contactor coils per SmartWire-Darwin line.</li> <li>A2 connections must not be bridged.</li> <li>Wiring sets DILM 12-XRL and PKZM0-XRM12 cannot be used.</li> <li>Additional SWD contactor module required for actuation of reversing starter.</li> </ul>  |

### Approvals

NA Certification

Request filed for UL and CSA

|                        |  |    |  |
|------------------------|--|----|--|
| <b>Part no.</b>        |  |    | PKE-SWD-32                                 |
| <b>General</b>         |  |    |  |
| Standards              |  |    | IEC/EN 61131-2<br>EN 50178<br>IEC/EN 60947 |
| Dimensions (W x H x D) |  | mm | 45 x 38 x 76                               |
| Weight                 |  | kg | 0.04                                       |
| Mounting               |  |    | on DILM7...DILM32                          |
| Mounting position      |  |    | as DILM7 to DILM32                         |

### 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) |  |     | EN 55011 Class A |
| Burst (IEC/EN 61131-2:2008, Level 3)          |  |     |                  |
| CAN/DP bus cable                              |  | kV  | 1                |
| 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)           |  |    |   |
| Ambient temperature                                   |  | °C | -25 - +60   |
| Condensation  |  |    | Take appropriate measures to prevent condensation |
| Storage   |  | °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                        |
| SmartWire-DT status LED |  | LED | green/orange                     |
| Connections             |  |     | Plug, 8-pole                     |
| Connection              |  |     | External device plug SWD4-8SF2-5 |
| Current consumption     |  | mA  | 58                               |
| Pick-up power           |  |     |                                  |
| for DILM 7-9            |  | W   | 3                                |
| for DILM 12-15          |  | W   | 4.5                              |
| for DILM 17-38          |  | W   | 12                               |
| Pick-up current         |  |     |                                  |
| for DILM 7-9            |  | mA  | 125                              |
| for DILM 12-15          |  | mA  | 188                              |
| for DILM 17-38          |  | mA  | 500                              |
| Holding power           |  |     |                                  |
| for DILM 7-9            |  | W   | 3                                |
| for DILM 12-15          |  | W   | 4.5                              |
| for DILM 17-38          |  | W   | 0.5                              |
| Holding current         |  |     |                                  |
| for DILM 17-38          |  | mA  | 21                               |
| for DILM 12-15          |  | mA  | 188                              |
| for DILM 7-9            |  | mA  | 125                              |

### Mode parameter

|                       |  |  |               |
|-----------------------|--|--|---------------|
| Manual/automatic mode |  |  | yes           |
| Setting               |  |  | Rotary switch |

### Connection auxiliary contact

|                 |  |   |   |
|-----------------|--|---|---|
| Cable length    |  | m |  2.8 |
| Connection type |  |   | Push in terminals   |

### Terminal capacities

|                       |  |                 |                         |
|-----------------------|--|-----------------|-------------------------|
| Solid                 |  | mm <sup>2</sup> | 0.2 - 1.5 (AWG 24 - 16) |
| Flexible with ferrule |  | mm <sup>2</sup> | 0.25 - 1.5              |

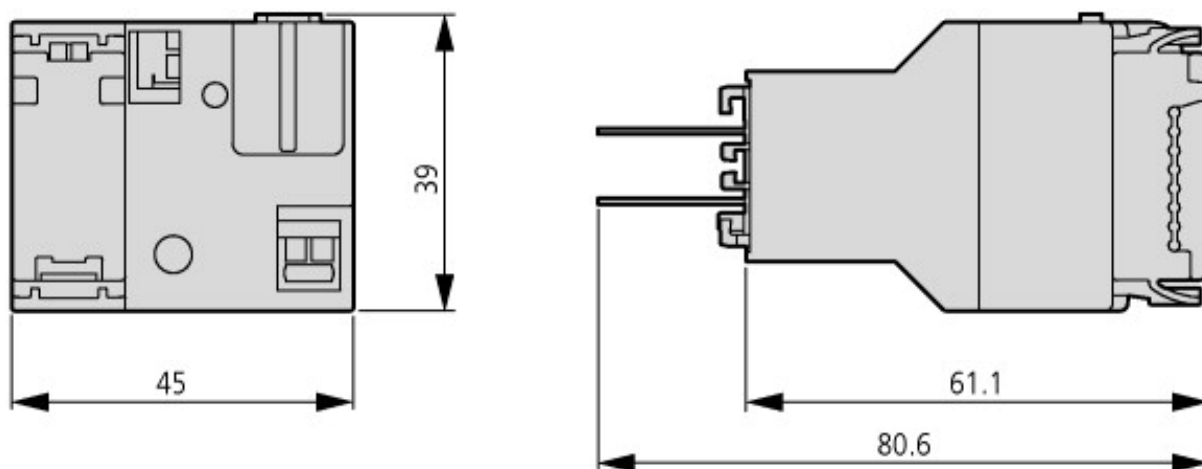
### Technical data ETIM 4.0

|  |  |  |    |
|--|--|--|----|
| Radiostandard Bluetooth                            |  |  | No |
| Short-circuit protective device, outputs available |  |  | No |
| Type of voltage (input voltage)                    |  |  | DC |

|   |    |                         |
|---|----|-------------------------|
| Flush mounting plates possible                          |    | No                      |
| Height  | mm | 38                      |
| Performance level acc. to EN ISO 13849-1                |    | A                       |
| Number of HW-interfaces other                           |    | 2                       |
| Number of outputs                                       |    | 1                       |
| Supporting protocol for PROFIsafe                       |    | No                      |
| Supply voltage DC                                       | V  | 15                      |
| Supply voltage AC 60 Hz                                 | V  | 0                       |
| Supporting protocol for EtherNet/IP                     |    | No                      |
| IO link master  |    | No                      |
| Number of HW-interfaces USB                             |    | 0                       |
| Supporting protocol for TCP/IP                          |    | No                      |
| With optical interface                                  |    | No                      |
| Wall mounting/direct mounting                           |    | No                      |
| Number of HW-interfaces serial TTY                      |    | 0                       |
| Appendant apparatus (Ex ib)                             |    | No                      |
| Supporting protocol for other bus systems               |    | YES                     |
| Supporting protocol for DeviceNet Safety                |    | No                      |
| Protection type (IP)                                    |    | IP20                    |
| Supporting protocol for PROFINET IO                     |    | No                      |
| Supporting protocol for Data-Highway                    |    | No                      |
| Voltage type of supply voltage                          |    | DC                      |
| Supporting protocol for CAN                             |    | No                      |
| Type of electric connection                             |    | Spring clamp connection |
| Category to EN 954-1                                    |    | 1                       |
| Number of inputs  |    | 0                       |
| Permitted voltage at input                              | V  | 15                      |
| Number of HW-interfaces RS232                           |    | 0                       |
| Rack-mounting possible                                  |    | No                      |
| Input current at signal 1                               | mA | 0                       |
| Width   | mm | 45                      |
| System component  |    | YES                     |
| Explosion safety category for dust                      |    | without                 |
| Supporting protocol for INTERBUS-Safety                 |    | No                      |
| Supporting protocol for SUCONET                         |    | No                      |
| Supporting protocol for DeviceNet                       |    | No                      |
| Supporting protocol for SafetyBUS p                     |    | No                      |
| Fieldbus connection over separate bus terminal possible |    | YES                     |
| Depth   | mm | 77.3                    |
| SIL according to IEC 62061                              |    | 0                       |
| Supporting protocol for EIB                             |    | No                      |
| SIL according to IEC 61508                              |    | 0                       |
| Output current  | A  | 0.5                     |
| Type of digital output                                  |    | -                       |
| Radiostandard WLAN 802.11                               |    | No                      |
| Associated apparatus (Ex ia)                            |    | No                      |
| Delay time on signal change                             | ms | 84                      |
| Number of HW-interfaces Wireless                        |    | 0                       |
| Supporting protocol for MODBUS                          |    | No                      |
| Supporting protocol for SERCOS                          |    | No                      |
| Safety class according to DIN V 19250                   |    | 0                       |
| Supporting protocol for Foundation Fieldbus             |    | No                      |
| Supporting protocol for LON                             |    | No                      |
| Supporting protocol for INTERBUS                        |    | No                      |
| Type of output voltage                                  |    | DC                      |

|   |   |         |
|---|---|---------|
| Supporting protocol for PROFIBUS                    |   | No      |
| Number of Industrial Ethernet HW interfaces         |   | 0       |
| Number of HW-interfaces PROFINET                    |   | 0       |
| Permitted voltage at output                         | V | 28.8    |
| Supporting protocol for AS-Interface Safety at Work |   | No      |
| Number of HW-interfaces RS485                       |   | 0       |
| Explosion protection for gas                        |   | without |
| Supporting protocol for AS-Interface                |   | No      |
| Supporting protocol for PROFINET CBA                |   | No      |
| Supply voltage AC 50 Hz                             | V | 0       |
| Number of HW-interfaces parallel                    |   | 0       |
| Rail mounting possible                              |   | No      |
| Number of HW-interfaces RS422                       |   | 0       |
| In-/outputs configurable                            |   | No      |
| Suitable for safety functions                       |   | No      |

## Dimensions



SmartWire-DT PKE module (motor-starter combinations)

## Additional product information (links)

### IL03402024Z (AWA1210-2706) SmartWire-DT: Function element for PKE12/32, MSC-DEA

|   |   |
|---|---|
| IL03402024Z (AWA1210-2706)<br>SmartWire-DT: Function element for<br>PKE12/32, MSC-DEA | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402024Z2010_08.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402024Z2010_08.pdf</a> |
|---|---|

### MN05006001Z-EN(AWB2723-1613) SmartWire-DT, Unit

|   |   |
|---|---|
| MN05006001Z-EN(AWB2723-1613)<br>SmartWire-DT, Unit - Deutsch                  | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_DE.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_DE.pdf</a> |
| MN05006001Z-EN(AWB2723-1613)<br>SmartWire-DT, Unit - English                  | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_EN.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_EN.pdf</a> |
| MN05006001Z-IT (AWB2723-1613)<br>SmartWire-Darwin utenti - italiano           | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_IT.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_IT.pdf</a> |
| Motor starters and "Special Purpose<br>Ratings" for the North American market | <a href="http://www.moeller.net/binary/ver_techpapers/ver953en.pdf">http://www.moeller.net/binary/ver_techpapers/ver953en.pdf</a>                   |
| Busbar Component Adapters for<br>modern Industrial control panels             | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>                   |