



150614  
PKE-SWD-SP

Overview

Specifications

Resources



Delivery program

Technical data

Design verification as  
per IEC/EN 61439

Technical data ETIM 7.0

Approvals

Dimensions

## DELIVERY PROGRAM

Product range  
SmartWire-DT slave

Subrange  
SmartWire DT PKE module for motor protection  
switch

Basic function  
Motor protection  
Motor protection for heavy starting duty

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  
Motor current in %  
Thermal motor image in %  
Trip indications (Overload, Short-circuit,...)  
Set value of overload releases  
Set time lag (CLASS)  
Part no. of trip block

Commands  
Remote disconnection of motor-protective circuit-breaker

For use with  
PKE12  
PKE32  
PKE65

Connection to SmartWire-DT  
yes

#### Instructions

For motor-starter combinations, please use the following connectors:  
PKZM0-XDM15ME (for motor-starter combinations with DILM7...15 to 7.5 kW (400 V, 50 Hz)  
PKZM0-XDM32ME (for motor-starter combinations with DILM17...38 to 18.5 kW (400 V, 50 Hz)

## TECHNICAL DATA

### General

Standards  
IEC/EN 61131-2

Dimensions (W x H x D)  
45 x 46.8 x 70.3 mm

Weight  
0.02 kg

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  
5 - 8.4 Hz

Vibrations (IEC/EN 61131-2:2008)  
Constant acceleration 1 g  
8.4 - 150 Hz

Mechanical shock resistance (IEC/EN 60068-2-27)  
semi-sinusoidal 15 g/11 ms  
9 Impacts

Drop to IEC/EN 60068-2-31 [Drop height]  
50 mm

Free fall, packaged (IEC/EN 60068-2-32)  
0.3 m

## Electromagnetic compatibility (EMC)

Overvoltage category  
II

Pollution degree  
2

Electrostatic discharge (IEC/EN 61131-2:2008)  
Air discharge (Level 3)  
8 kV

Electrostatic discharge (IEC/EN 61131-2:2008)  
Contact discharge (Level 2)  
4 kV

Electromagnetic fields (IEC/EN 61131-2:2008)  
80 - 1000 MHz  
10 V/m

Electromagnetic fields (IEC/EN 61131-2:2008)  
1.4 - 2 GHz  
3 V/m

Electromagnetic fields (IEC/EN 61131-2:2008)  
2 - 2.7 GHz  
1 V/m

Radio interference suppression  
EN 55011 Class A (SmartWire-DT)

Burst (IEC/EN 61131-2:2008, Level 3)  
SmartWire-DT cables  
Signal lines  
1 kV

Burst (IEC/EN 61131-2:2008, Level 3)  
CAN/DP-bus cable  
SmartWire-DT cables  
1 kV

Radiated RFI (IEC/EN 61131-2:2008, Level 3)  
10 V

## Climatic environmental conditions

Operating ambient temperature (IEC 60068-2)  
Ambient temperature  
-25 - +60 °C

Condensation  
Take appropriate measures to prevent  
condensation

Storage [9]  
-30 - +70 °C

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  
Green LED

Connections  
Plug, 8-pole

Connection  
External device plug SWD4-8SF2-5

Current consumption  
15-V-SWD supply  
35 mA

## DESIGN VERIFICATION AS PER IEC/EN 61439

### Technical data for design verification

Rated operational current for specified heat  
dissipation [ $I_n$ ]  
0 A

Heat dissipation per pole, current-dependent [ $P_{vid}$ ]  
0 W

Equipment heat dissipation, current-dependent  
[ $P_{vid}$ ]  
0 W

Static heat dissipation, non-current-dependent [ $P_{vs}$ ]  
0.5 W

Heat dissipation capacity [ $P_{diss}$ ]  
0 W

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.  
+55 °C

## 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 Strength of materials and parts  
10.2.3.1 Verification of thermal stability of enclosures  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
10.2.3.2 Verification of resistance of insulating materials to normal heat  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
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 Strength of materials and parts  
10.2.4 Resistance to ultra-violet (UV) radiation  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
10.2.5 Lifting  
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts  
10.2.6 Mechanical impact  
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts  
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 Insulation properties  
10.9.3 Impulse withstand voltage  
Is the panel builder's responsibility.

10.9 Insulation properties  
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 7.0

Low-voltage industrial components (EG000017) / Accessories for low-voltage switch technology (EC002498)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Component for low-voltage switch technology (accessories) (ec1@ss10.0.1-27-37-13-92 [AKN570013])

Type of accessory  
Connection technique

## APPROVALS

Product Standards  
UL508; CSA-C22.2 No. 14; IEC60947-4-1; 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)

