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 Features & Functions	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.
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 Degree of protection	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-SW control voltage Uaux IP20
Explosion safety category for dust	None
Explosion safety category for dust Explosion safety category for gas	None None
Explosion safety category for gas	None

Pollution degree	2
Product category	Accessories
Personal	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, 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, Le
	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 mm² (AWG 24 - 16), solid 0.25 - 1.5 mm², 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 Pdiss	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
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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

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 (ec)@ss13-77-74-26-04 [RAA055019])

module (ecl@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	Α	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

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 Priorisale Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		Yes
Radio standard Bluetooth		No
Radio standard WLAN 802.11 Radio standard GPRS		No No
Radio standard GSM		
Radio standard UMTS		No No
10 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	1113	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
		No
Certified for UL hazardous location class I		
Certified for UL hazardous location class I Certified for UL hazardous location class II		No
Certified for UL hazardous location class II		No
Certified for UL hazardous location class II Certified for UL hazardous location class III		No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1		No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1 Certified for UL hazardous location division 2		No No No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1 Certified for UL hazardous location division 2 Certified for UL hazardous location group A (acetylene)		No No No No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1 Certified for UL hazardous location division 2 Certified for UL hazardous location group A (acetylene) Certified for UL hazardous location group B (hydrogen)		No No No No No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1 Certified for UL hazardous location division 2 Certified for UL hazardous location group A (acetylene) Certified for UL hazardous location group B (hydrogen) Certified for UL hazardous location group C (ethylene)		No No No No No No No No
Certified for UL hazardous location class II Certified for UL hazardous location class III Certified for UL hazardous location division 1 Certified for UL hazardous location division 2 Certified for UL hazardous location group A (acetylene) Certified for UL hazardous location group B (hydrogen) Certified for UL hazardous location group C (ethylene) Certified for UL hazardous location group D (propane)		No

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