#### Function element, contactor, SmartWire-DT, DIL/MSC, manual/auto

Part no. DIL-SWD-32-002 Catalog No. 118561

**Alternate Catalog** DIL-SWD-32-002

**EL-Nummer** 4519767

(Norway)



### **Delivery program**

Product range	SmartWire-DT slave
Accessories	SWD contactor modules
Function	For connecting the contactors to SmartWire-DT
Description	Per contactor 1 module necessary. 1 electrical interlock for the surface mounting of reversing starters Two self-supply digital inputs for potential-free contacts 1-0-A switch for manual or automatic operation.
Messages	Contactor switching position, status of the digital inputs 1 and 2, 1-0-A switch position
Commands	Contactor actuation
Connection to SmartWire-DT	yes
For use with	DILM(C)7 DILM(C)32 DILM38 DILA DILMP20 DILMP32 DILMP45 MSC-D(E)(24VDC)
Setting	Rotary switch

#### Notes

For current consumption of the contactor coils > 3 A (UL: 2 A) use additional power feed module.

A2 connections must not be bridged.

Wiring sets DILM 12-XRL and PKZM0-XRM12 cannot be used.

 $\label{lem:connection} \textbf{Connection terminals for electrical interlocking are not suitable for safety technology.}$ 

### **Technical data**

#### General

Standards			IEC/EN 61131-2
			EN 50178 IEC/EN 60947
Dimensions (W x H x D)		mm	45 x 38 x 76
Weight		kg	0.04
Mounting			on DILM7DILM38
Mounting position			as DILM7 to DILM38
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
		V/III	
Radio interference suppression (SmartWire-DT)			EN 55011 Class A
Burst (IEC/EN 61131-2:2008, Level 3)		134	
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)		°C	- 25 - +60
Condensation		U	Take appropriate measures to prevent condensation
Storage		°C	- 30 - 70
-		%	5 - 95
Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network		70	5 - 30
Station type			SmartWire-DT slave
Address allocation			automatic
SmartWire-DT status LED		LED	green/orange
Connections			Plug, 8-pole
Plug connectors			External device plug SWD4-8SF2-5
Current consumption		mA	40
Pick-up power		IIIA	40
		14/	
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			via Rotary switch
Connection auxiliary contact			
Number			2
Rated voltage	U <sub>e</sub>	V DC	15
Input current at 1 signal, typical		mA	3
Potential isolation			No
Cable length		m	≦ 2.8
Connection type			Push in terminals
Terminal capacities		_	22 47 (11/22) 42)
Solid		mm <sup>2</sup>	0.2 - 1.5 (AWG 24 - 16)
Flexible with ferrule		$\text{mm}^2$	0.25 - 1.5
Notes			own supply
			Minimum length 8 mm.

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0.8

Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

### **Technical data ETIM 8.0**

Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - digital I/O module (EC001599)

Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - digital I/O module (ecl@ss10.0.1-27-24-26-04

[BAA055014])	i bao, accontranzoa port	mpriera / Freiu bus, decentralized pempriera - digital 1/0 module (eci@ss10.0.1-27-24-20
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	15 - 15
Voltage type of supply voltage		DC
Number of digital inputs		2
Number of digital outputs		1
Digital inputs configurable		No
Digital outputs configurable		No
Input current at signal 1	m/	nA 3
Permitted voltage at input	V	/ 15 - 15
Type of voltage (input voltage)		DC
Type of digital output		None
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			1
With optical interface			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 SafetyBUS p			No
Supporting protocol for other bus systems			No
Radio standard Bluetooth			No
Radio standard Wi-Fi 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 exchange	m	me	10 - 84
Fieldbus connection over separate bus coupler possible	"	ns	Yes
Rail mounting possible  Well mounting/direct mounting			No No
Wall mounting/direct mounting			No No
Front built-in possible			No No
Rack-assembly possible			No 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
Width	m	mm	45
Height	m	mm	38
Depth	m	mm	72

Approvals	
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	2324643
CSA Class No.	3211-07

UL listed, CSA certified

No

### **Dimensions**

North America Certification

Specially designed for North America

SmartWire-DT protective modules	
DIL-SWD-32	

## **Additional product information (links)**

MN05006001Z SmartWire-DT, modules		
MN05006001Z SmartWire-DT, Module - Deutsch	https://es-assets.eaton.com/D0CUMENTATION/AWB_MANUALS/MN05006001Z_DE.pdf	
MN05006001Z SmartWire-DT, modules - English	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05006001Z_EN.pdf	
MN05006001Z SmartWire-DT, modulo - italiano	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05006001Z_IT.pdf	
MN05006002Z (AWB2723-1617) SmartWire-DT, The system		
MN05006002Z (AWB2723-1617) SmartWire-DT, Das System - Deutsch	https://es-assets.eaton.com/D0CUMENTATION/AWB_MANUALS/MN05006002Z_DE.pdf	
MN05006002Z (AWB2723-1617) SmartWire-DT, The system - English	https://es-assets.eaton.com/D0CUMENTATION/AWB_MANUALS/MN05006002Z_EN.pdf	
MN05006002Z (AWB2723-1617) SmartWire-DT, il sistema - italiano	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05006002Z_IT.pdf	