DATASHEET - DIL-SWD-32-001

Function element, contactor, SmartWire-DT, DIL/MSC

Part no.	**DIL-SWD-32-001**
	118560
EL Number (Norway)	**4519766**

General specifications

Product name			Eaton Moeller® series DIL-SWD SWD contactor module
Part no.			DIL-SWD-32-001
EAN			4015081168309
Product Length/Depth			72 millimetre
Product height			38 millimetre
Product width			45 millimetre
Product weight			0.04 kilogram
Certifications			IEC/EN 60947-4-1
			IEC/EN 60947
			EN 50178
			UL File No.: E29184
			IEC/EN 61131-2
			CE
			CSA
			CSA Class No.: 3211-07
			UL 508
			CSA-C22.2 No. 14-05
			CSA File No.: 2324643
			UL
			UL Category Control No.: NKCR
Product Tradename			DIL-SWD
Product Type			Accessory
Product Sub Type			SWD contactor module
Catalog Notes			1 electrical interlock for the surface mounting of reversing starters
			Minimum length 8 mm.

Features & Functions

Features			Fieldbus connection over separate bus coupler possible
Functions			Contactor actuation
			Display of Switch status Contactor, status of the digital inputs 1 and 2
			For connecting the contactors to SmartWire-DT
Fitted with:			Own supply
Electric connection type			Spring clamp connection

General information

Cable length			≤ 2.8 m, Connection auxiliary contact
Current consumption			40 mA, SmartWire-DT network
Degree of protection			IP20
Input current at signal 1			3 mA
Number of inputs (digital)			2
Number of outputs (digital)			1
Output current			0.5 A
Overvoltage category			II
Pollution degree			2
Product category			SmartWire-DT slave
Protocol			Other bus systems
Type			SWD contactor modules
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 DILM38

Shock resistance		15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 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, Signal cable, according to IEC/EN 61131-2, Level 3 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3
Contact discharge		4 kV, according to IEC/EN 61131-2, Level 2, ESD
Electromagnetic fields		1 V/m at 2.0 - 2.7 GHz (according to IEC/EN 61131-2:2008) 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)
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 (24 - 16 AWG), solid 0.25 - 1.5 mm², flexible with ferrule

Electrical rating

Rated operational voltage		15 V DC (auxiliary contact)
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

Magnet system

Pick-up current		500 mA (for DILM 17-38) 188 mA (for DILM 12-15) 125 mA (for DILM 7-9)
Power consumption		3 W for DILM 7-9 (Pick-up power) 4.5 W for DILM 12-15 (Pick-up power) 4.5 W for DILM 12-15 (Sealing power) 12 W for DILM 17-38 (Pick-up power) 3 W for DILM 7-9 (Sealing power) 0.5 W for DILM 17-38 (Sealing power)
Sealing current		125 mA, SmartWire-DT network for DILM 7-9 21 mA, SmartWire-DT network for DILM 17-38 188 mA, SmartWire-DT network for DILM 12-15

Communication

Addressing		Address set automatically
Connection to SmartWire-DT		Yes
Connection type		Push in terminals, Auxiliary contact SWD: Plug, 8-pole External device plug SWD4-8SF2-5, SmartWire-DT
LED indicator		Status indication of SmartWire-DT network: Green and orange LED
Station		SmartWire-DT slave, SmartWire-DT network

Contacts

Number of auxiliary contacts		2

Safety

Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Connection auxiliary contact: no

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			0.8 W
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 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 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])

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		mA	3
Permitted voltage at input		V	15 - 15
Type of voltage (input voltage)			DC
Type of digital output			None
Output current		A	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			Yes
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		ms	10 - 84
Fieldbus connection over separate bus coupler possible			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
Width		mm	45
Height		mm	38
Depth		mm	72