

SWD Block module I/O module IP69K, 24 V DC, 2 inputs with power supply, 2 outputs 2A with separate power supply, 4 M12 I/O sockets



Part no. EU6E-SWD-2D2D-2

Catalog No. 183265

Eaton Catalog No. EU6E-SWD-2D2D-2

Similar to illustration

Delivery program			
Product range			SmartWire-DT slave
Basic function			Digital modules
Function			For connection of digital I/O signals
Short Description			with supply
Inputs			
Digital			2
Outputs			
Transistor			2
Connection to SmartWire-DT			yes
Technical data General			
Standards			IEC/EN 61131-2
Dimensions (W x H x D)		mm	60 x 157 x 34
Weight		kg	0.25
Mounting			Screw fixing (M4)
Mounting position			As required
Climatic environmental conditions			
Climatic proofing			Dry heat to IEC 60068-2-2 Damp heat as per EN 60068-2-3
Air pressure (operation)		hPa	795 - 1080
Ambient temperature			
Operation	9	°C	-25 - +50
Storage / Transport	9	°C	-40 - +70
Relative humidity			
Condensation			permissible
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 - 95
Ambient conditions, mechanical			
Protection type (IEC/EN 60529, EN50178, VBG 4)			IP69K
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 30 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)			I
Overvoltage category			-
Pollution degree			3
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)			

Supply cable		kV	2
Signal lines		kV	1
SmartWire-DT cables		kV	1
Surge (IEC/EN 61131-2:2008, Level 1)			
Surge power cables		kV	0.5
Surge I/O cables		kV	1
Radiated RFI (IEC/EN 61131-2:2008, Level 3)		V	10
SmartWire-DT network			
Station type			SmartWire-DT slave
Setting the baud rate			automatic
Baud rate (data transfer speed)		kbps	maximum 2000
Status SmartWire-DT		LED	Green
SWD-IN			M12 plug (A-keyed), 5 pole
SWD-OUT			M12 socket (A-keyed), 5 pole
Current consumption (24V, without sensor and without I/O supply)		mA	
Current consumption (24 V SWD supply)		mA	50
Sensor supply			
Max. current consumption per M12 I/O plug		mA	70
Overload and short-circuit proof			yes, with diagnostics
Connection supply and I/O			
Terminal for I/O sensor			
Connection type			5-pin M12 socket (A-keyed)
24 V DC supply for output supply			
Power supply			
Power loss	P	W	1.3
Digital inputs			
Number of digital inputs/outputs			2
Quantity			2
Input current		mA	Normally 4 at 24 V DC
Limit value type 1			Low < 5V DC;High > 15V DC
Input delay			High Low typ. < 0.2 ms Low High typ. < 0.2 ms
Status display inputs		LED	yellow
Digital semi-conductor outputs			
Quantity			2
Output current		Α	2
Short-circuit tripping current		Α	max. 6 over 3 ms
Lamp load	R _{LL}	W	≦ ₃
Overload proof			yes, with diagnostics

Design verification as per IEC/EN 61439

Switching capacity

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	1.3
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature max.		°C	-25
Operating ambient temperature max.		°C	50
Degree of Protection			IP67
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.

EN 60947-5-1 utilization category DC-13

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	Meets the product standard's requirements.
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.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

PLC's (EG000024) / Fieldbus, decentr. periphery - digital I/O module (EC001599)
Flectric engineering, automation, process control engineering / Control / Field hus, decentralized peripheral / Field hus, decentralized peripheral - digital I/O module (ec)@ss8 1-27-24-26-04

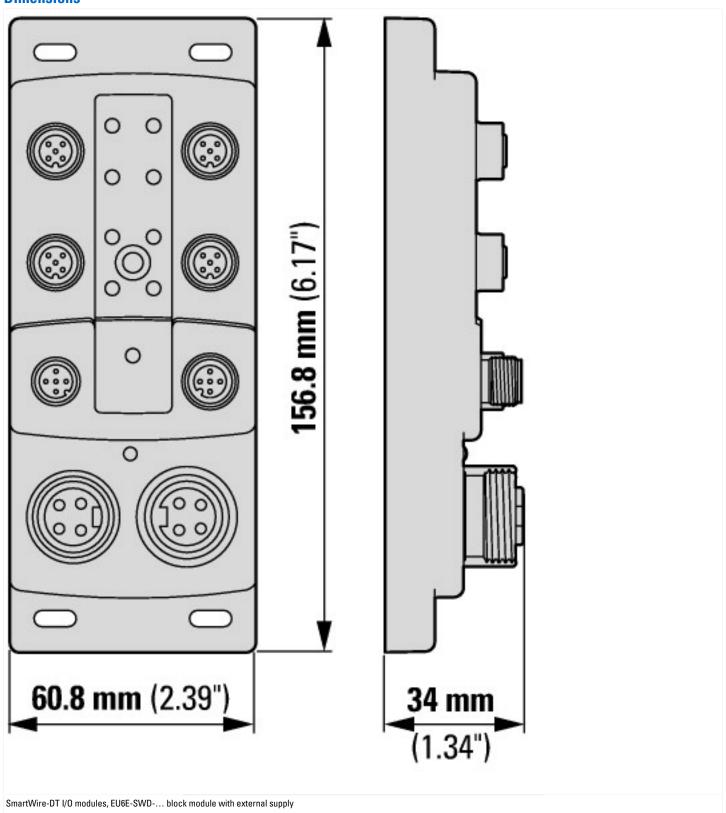
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Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	20.4 - 28.8
Voltage type of supply voltage		DC
Number of digital inputs		2
Number of digital outputs		2
Digital inputs configurable		No
Digital outputs configurable		No
Input current at signal 1	mA	4
Permitted voltage at input	V	20.4 - 28.8
Type of voltage (input voltage)		DC
Type of digital output		
Output current	Α	2
Permitted voltage at output	V	20.4 - 28.8
Type of output voltage		DC
Short-circuit protection, outputs available		Yes
Number of HW-interfaces industrial Ethernet		0
Number of HW-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 other		0
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

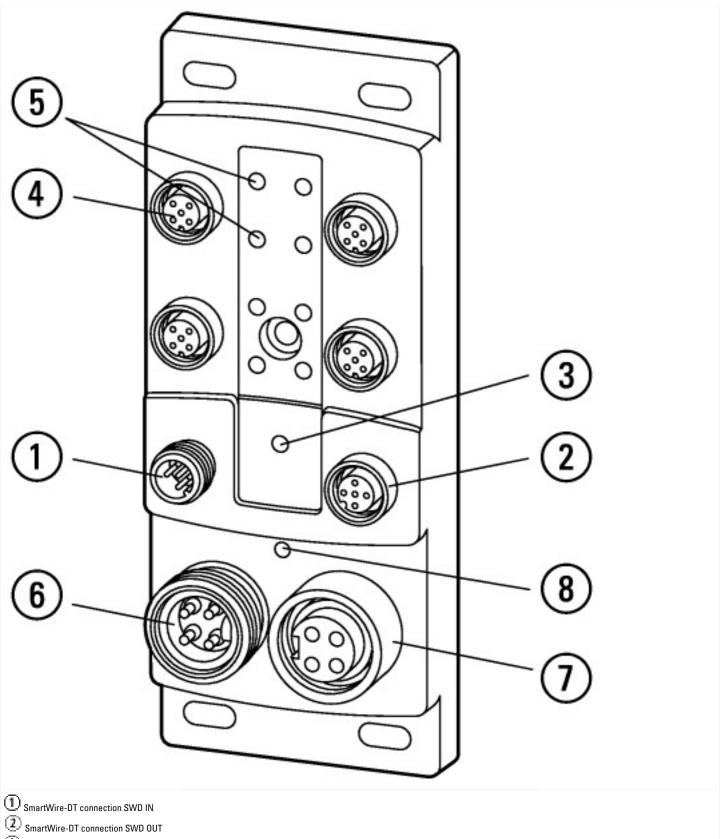
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol 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 WLAN 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)		IP69K
Type of electric connection		Screw connection
Time delay at signal exchange	ms	0 - 0
Fieldbus connection over separate bus coupler possible		Yes
Rail mounting possible		No
Wall mounting/direct mounting		Yes
Front build in possible		No
Front build in possible Rack-assembly possible		No Yes
Rack-assembly possible		Yes
Rack-assembly possible Suitable for safety functions		Yes
Rack-assembly possible Suitable for safety functions Category according to EN 954-1		Yes No
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508		Yes No None
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. to EN ISO 13849-1		Yes No None
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. to EN ISO 13849-1 Appendant operation agent (Ex ia)		Yes No None None
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. to EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib)		Yes No None None No
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. to EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas	mm	Yes No None None No No No
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. to EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust	mm	Yes No None None No No No No No No None

Approvals

North America Certification	UL listed, CSA certified
Specially designed for North America	No

Dimensions





- 3 SmartWire-DT diagnostics LED
- 4 I/O connection X1...X4
- (5) I/O status indicators
- 6 PWR IN used to feed power from external power supply
- ${\color{red}\overline{\mathcal{D}}}$ PWR OUT used to forward the power from external power supply
- (B) Status indicator for external power supply

Additional product information (links)

Manual SmartWire-DT, SWD module IP6x MN120006

Handbuch SmartWire-DT, SWD-Teilnehmer IP6x MN120006 - Deutsch

 $ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN120006_DE.pdf$

Manual SmartWire-DT, SWD module IP6x MN120006 - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN120006_EN.pdf		
MN05006002Z SmartWire-DT manual, The System			
MN05006002Z Handbuch SmartWire-DT, Das System - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_DE.pdf		
MN05006002Z SmartWire-DT manual, The System - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_EN.pdf		
MN05006002Z Manuale SmartWire-DT, il sistema - italiano	ftp://ftp.moeller.net/D0CUMENTATION/AWB_MANUALS/MN05006002Z_IT.pdf		
SmartWire-DT product range catalog	http://ecat.moeller.net/flip-cat/?edition=SWKAT&startpage=Titel		
Technical data	http://ecat.moeller.net/flip-cat/?edition=SWKAT&startpage=62		
f1=1457&f2=1181&f3=1188;SWD-ASSIST	http://applications.eaton.eu/sdlc?LX=11&		