



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

Part no. EU6E-SWD-4D4D-1
Catalog No. 183266
Eaton Catalog No. EU6E-SWD-4D4D-1



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			4
Outputs			
Transistor			4
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	8	°C	-25 - +55
Storage / Transport	8	°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)

Overvoltage category			II
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	66
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			
Rated operational voltage	U _e	V	24 DC -15 % / +20 %
Residual ripple on the input voltage		%	≤ 5
Protection against polarity reversal			Yes
Power loss	P	W	1.9

Digital inputs

Number of digital inputs/outputs			8
Quantity			4
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			4
Output current		A	0.5
Short-circuit tripping current		A	max. 1.2 over 3 ms
Lamp load	R _{LL}	W	≤ 3
Overload proof			yes, with diagnostics
Switching capacity			EN 60947-5-1 utilization category DC-13

Supply voltage U_{Aux}

Residual ripple on the input voltage		%	≤ 5
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Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	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	1.9
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature max.		°C	-25
Operating ambient temperature max.		°C	55

Degree of Protection			IP69K
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			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

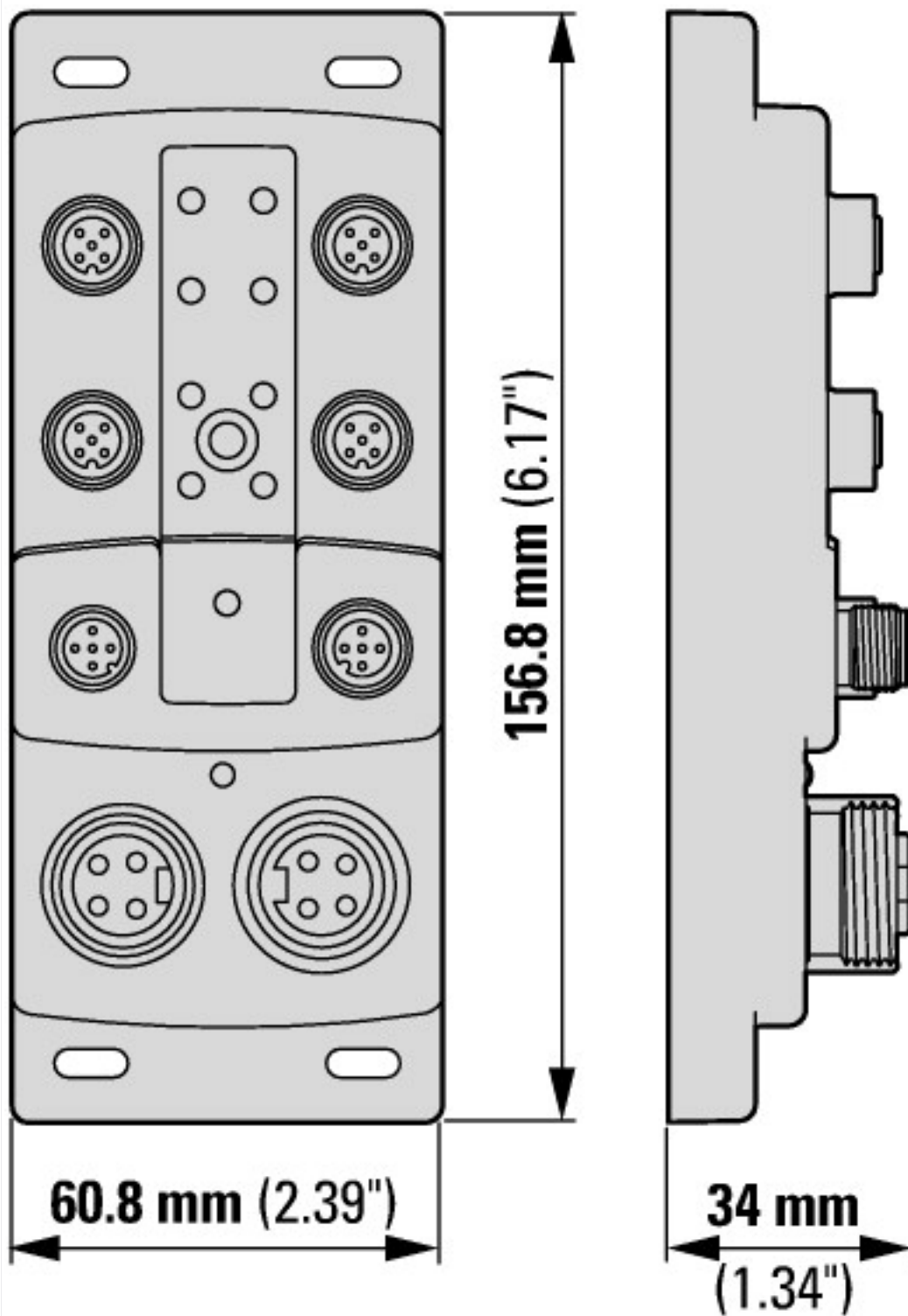
PLC's (EG000024) / Fieldbus, decentr. periphery - digital I/O module (EC001599)			
Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - digital I/O module (ecl@ss8.1-27-24-26-04 [BAA055011])			
Supply voltage 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			4
Number of digital outputs			4
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	A		0.5
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
Rack-assembly possible			Yes
Suitable for safety functions			No
Category according to EN 954-1			
SIL according to IEC 61508			None
Performance level acc. 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	60.8
Height		mm	156.8
Depth		mm	34

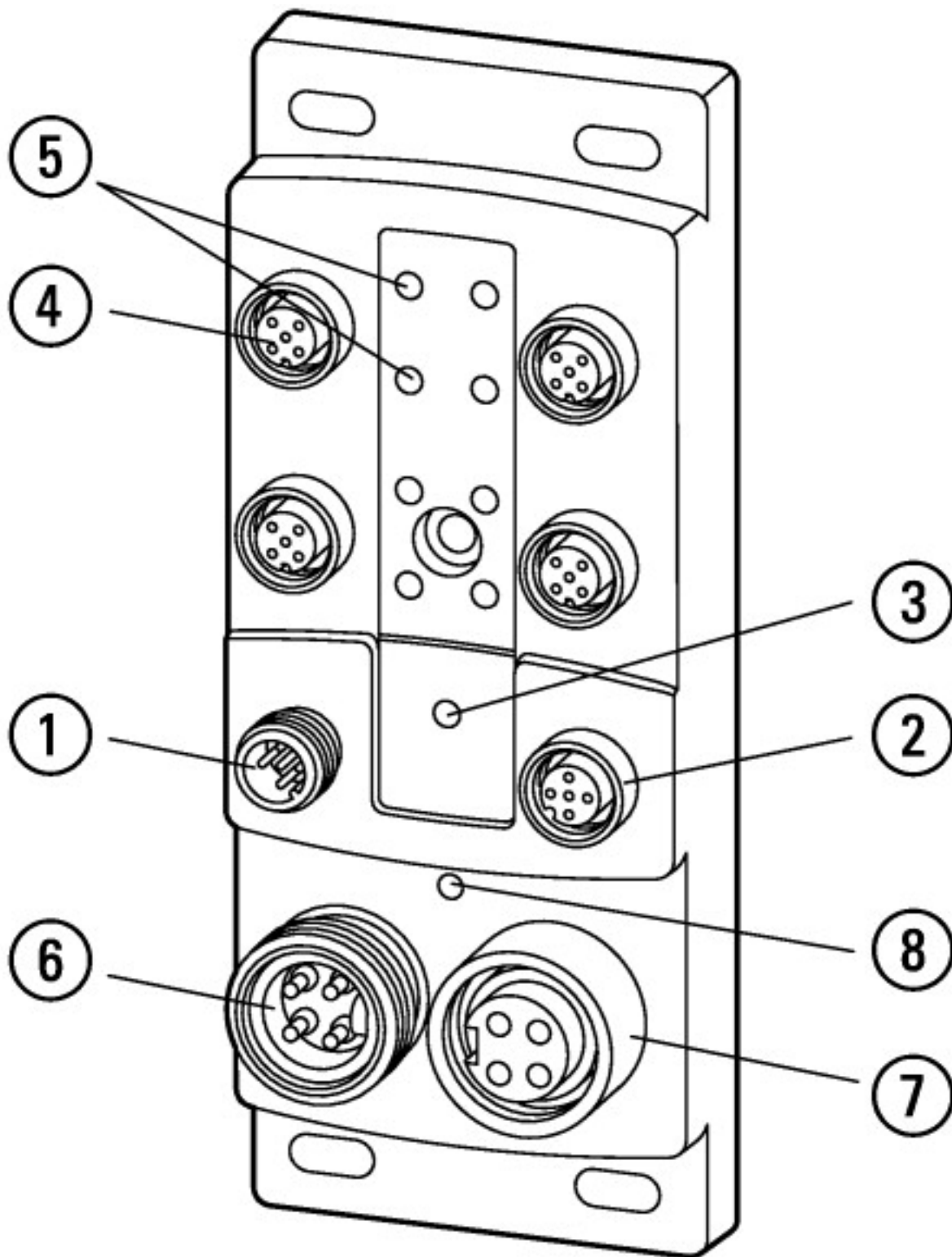
Approvals

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

Dimensions



SmartWire-DT I/O modules, EU6E-SWD-... block module with external supply



- ① SmartWire-DT connection SWD IN
- ② SmartWire-DT connection SWD OUT
- 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
- ⑦ PWR OUT used to forward the power from external power supply
- ⑧ 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/DOCUMENTATION/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&amp