

**SWD Block module I/O module IP69K, 24 V DC, 4 inputs with power supply, 4 outputs with separate power supply, 8 M12 I/O sockets**

**Part no. EU8E-SWD-4D4D-1**  
**Catalog No. 183272**  
**Eaton Catalog No. EU8E-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
<b>Inputs</b>			
Digital			4
<b>Outputs</b>			
Transistor			4
Connection to SmartWire-DT			yes

## Technical data

### General

Standards			IEC/EN 61131-2
Dimensions (W x H x D)		mm	60 x 210,3 x 34
Weight		kg	0.3
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	θ	°C	-25 - +55
Storage / Transport	θ	°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	79
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	2.2

### 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
Status display outputs		LED	yellow

### Supply voltage $U_{Aux}$

Residual ripple on the input voltage		%	 5
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## Potential isolation

Inputs for SmartWire-DT			No
Outputs to SmartWire-DT			Yes
Input to input			No
Output to input			yes

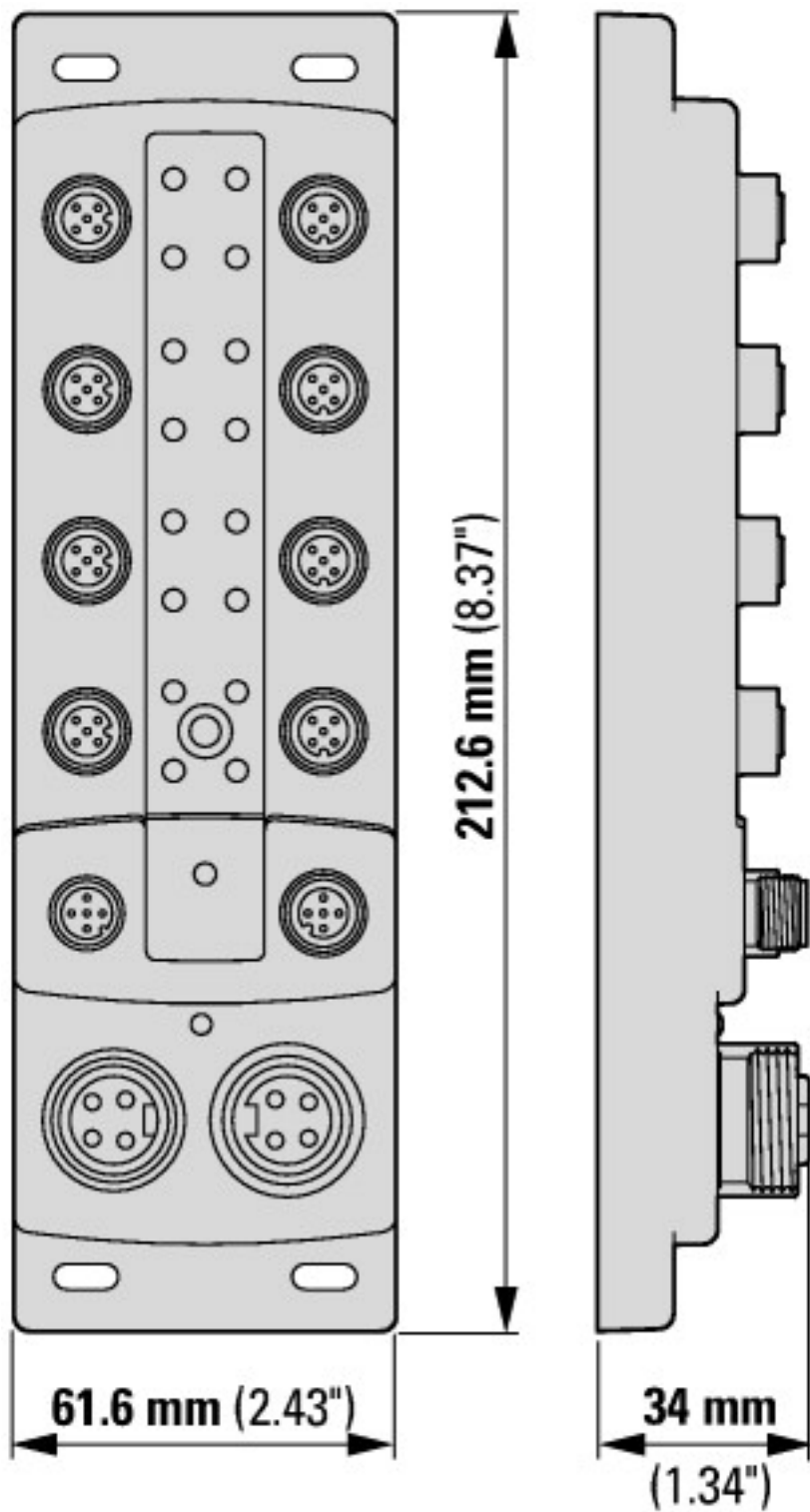
## Design verification as per IEC/EN 61439

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	2.2
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature max.		°C	-25
Operating ambient temperature max.		°C	55
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.
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.

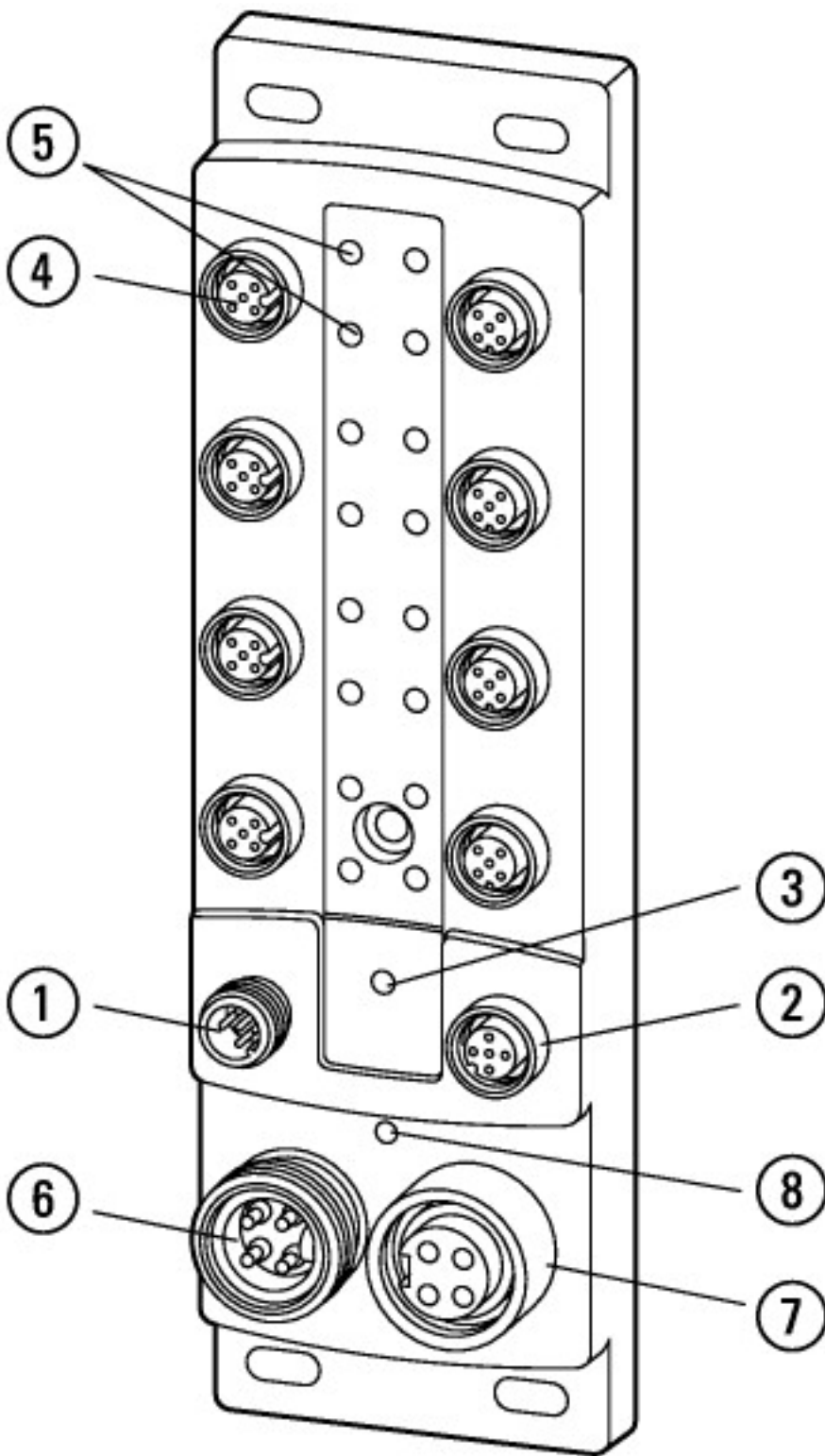
## Approvals

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

## Dimensions



SmartWire-DT I/O modules, EU8E-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...X8
- 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](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN120006_DE.pdf)

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