



Eaton 116382

Eaton EU5E SWD I/O module, 24 V DC, 4 digital inputs, 4 digital transistor -outputs 0, 0.5A

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PRODUCT NAME	Eaton EU5E I/O module
CATALOG NUMBER	116382
PRODUCT LENGTH/DEPTH	102 mm
PRODUCT HEIGHT	90 mm
PRODUCT WIDTH	35 mm
PRODUCT WEIGHT	0.09 kg
CERTIFICATIONS	UL File No.: E29184 IEC/EN 61131-2 UL Category Control No.: NKCR CSA Class No.: 3211-07 CSA File No.: 2324643 CSA UL

TYPE	Digital modules
FEATURES	Fieldbus connection over separate bus coupler possible Overload proof (with diagnostics) Fieldbus connection over separate bus coupler possible
AIR DISCHARGE	8 kV, according to IEC 61131-2, level 3, ESD
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.
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	Meets the product

DECLARATIONS OF CONFORMITY	eaton-i-o-module-declaration-of-conformity-uk250998en.pdf
□□□	eaton-modular-plc-power-supply-eu5e-i-o-module-wiring-diagram-003.eps
□□□□	eaton-smartwire-dt-intelligent-wiring-brochure-br120001en-en-us.pdf
□□□	eaton-electro-hydraulic-module-eu1h-flyer-fl120003en-en-us.pdf
	eaton-modular-plc-eu5e-i-o-module-dimensions-002.eps
	eaton-modular-plc-eu5e-i-o-module-dimensions.eps
	eaton-general-eu5e-i-o-module-symbol.eps
□□	eaton-modular-plc-swd-eu5e-i-o-module-3d-drawing.eps
	eaton-general-approval-easy-control-relays-standards.jpg
	eaton-general-easy-control-relays-symbol-002.tif

PROTECTION OF ASSEMBLIES	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.
10.9.2 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.
ELECTRIC CONNECTION TYPE	Flat plug-in connection
NUMBER OF INPUTS (DIGITAL)	4
POLLUTION DEGREE	2
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 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3
CLIMATIC PROOFING	Dry heat to IEC 60068-2-2 Damp heat, constant, to IEC 60068-2-3
CONNECTION TO SMARTWIRE-DT	Yes
AIR PRESSURE	795 - 1080 hPa (operation)
CATEGORY (EN 954-1)	None
EXPLOSION SAFETY CATEGORY FOR DUST	None
ENVIRONMENTAL CONDITIONS	Condensation: prevent with appropriate measures
EXPLOSION SAFETY CATEGORY FOR GAS	None

OUTPUT CURRENT	0.5 A
MOUNTING METHOD	Wall mounting/direct mounting Rail mounting possible Top-hat rail fixing (according to IEC/EN 60715, 35 mm)
CURRENT CONSUMPTION	33 mA, SmartWire-DT network
VOLTAGE TYPE	DC
MOUNTING POSITION	As required
OUTPUT	4 Transistor Outputs
CONTACT DISCHARGE	4 kV, according to IEC/EN 61131-2, Level 2, ESD
OVERVOLTAGE CATEGORY	II
SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)	None
SIL (IEC 61508)	None
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0 W
HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m
INPUT CURRENT AT SIGNAL 1	4 mA
NUMBER OF HW-INTERFACES (INDUSTRIAL ETHERNET)	0
NUMBER OF HW-INTERFACES (OTHER)	0
NUMBER OF HW-INTERFACES (PARALLEL)	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 (USB)	0
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
SURGE RATING	0.5 kV, Surge power cables, Surge (IEC/EN 61131-2:2008, Level 1), EMC 1 kV, Surge I/O cables, Surge (IEC/EN 61131-2:2008, Level 1), EMC
POTENTIAL ISOLATION	Outputs to SmartWire-DT: yes Inputs for SmartWire-DT: yes
POWER LOSS	1.1 W
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)
PROTECTION AGAINST POLARITY REVERSAL	Yes Yes, for supply voltage (Siemens MPI optional)
RADIATED RFI	10 V (IEC/EN 61131-2:2008, Level 3)
DROP AND TOPPLE	50 mm Drop height, Drop to IEC/EN 60068-2-31
PROTOCOL	Other bus systems
RADIO INTERFERENCE CLASS	Class A (EN 55011)
NUMBER OF OUTPUTS (DIGITAL)	4
RELATIVE HUMIDITY	5 - 95 % (non-condensing, IEC/EN 60068-2-30)
CONNECTION TYPE	Plug, 8-pole, SmartWire-DT Connection plug: external device plug SWD4-8SF2-5, SmartWire-DT Push in terminals, Supply

	and I/O sensor
RESIDUAL RIPPLE	≤ 5 % (input voltage)
DATA TRANSMISSION TYPE	Other
RATED OPERATIONAL VOLTAGE	24 V DC (-15 %/+ 20 % - power supply)
DATA TRANSFER RATE	Setting automatically 250 kBit/s, SmartWire-DT
DEGREE OF PROTECTION	IP20
STATION	SmartWire-DT slave, SmartWire-DT network
INPUT DELAY	< 0.2 ms
SHOCK RESISTANCE	15 g, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 11 ms, 9 Impacts
SHORT-CIRCUIT PROTECTION	Outputs are short-circuit proof
SHORT-CIRCUIT TRIPPING CURRENT	Max. 1.2 A over 3 ms, Digital semi-conductor outputs
LAMP LOAD	≤ 3 W (at RLL)
FUNCTIONS	For connection of digital I/O signals
SYSTEM ACCESSORY	Yes
LIMIT VALUE TYPE 1	High: > 15 V DC Low: < 5 V DC
INPUT CURRENT	4 mA (at 24 V DC, Digital inputs)
TERMINAL CAPACITY	0.2 - 1.5 mm ² (AWG 24 - 16), solid, Terminal for I/O sensor 0.25 - 1.5 mm ² (24 - 16 AWG), flexible with ferrule, Terminal for I/O sensor
LED INDICATOR	Status indication of SmartWire-DT network: Green LED Status indication of input: Yellow LED Status indication of display outputs: Yellow LED
NUMBER OF HW- INTERFACES (WIRELESS)	0
NUMBER OF INTERFACES (PROFINET)	0
OPERATING TEMPERATURE - MAX	55 °C
OPERATING TEMPERATURE - MIN	-25 °C

PERMITTED VOLTAGE AT INPUT - MAX	28.8 V
PERMITTED VOLTAGE AT INPUT - MIN	20.4 V
PERMITTED VOLTAGE AT OUTPUT - MAX	28.8 V
PERMITTED VOLTAGE AT OUTPUT - MIN	20.4 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	1.1 W
SUPPLY VOLTAGE AT DC - MAX	28.8 VDC
SUPPLY VOLTAGE AT DC - MIN	20.4 VDC
PRODUCT CATEGORY	SmartWire-DT slave
SWITCHING CAPACITY	IEC/EN 60947-5-1, utilization category DC-13, Digital outputs



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