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### 197225

Eaton Moeller® series EASY 3 x Bus connector plug between base unit and expansion unit/bus module and 3 x end covers, For use with easyE4

#### 197509

Eaton Moeller® series EASY easyE4 control relay, basic unit (expandable, Ethernet), 100–240 VAC, 100–240 VDC (cULus: 100–110 VDC), digital inputs: 8, digital outputs: 4 relay, push-in

#### 197214

Eaton Moeller® series EASY Control relays, easyE4 (expandable, Ethernet), 24 V DC, Inputs Digital: 8, of which can be used as analog: 4, screw terminal

#### 197505

Eaton Moeller® series EASY Corelays, easyE4 (expandable, Ethe V DC, 24 V AC, Inputs Digital: can be used as analog: 4, push-in

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## GENERAL SPECIFICATIONS

General specifications	>	PRODUCTNAME	Eaton Moeller® series EASY I/O expansion
		CATALOG NUMBER	197223
Product specifications	>	MODEL CODE	EASY-E4-DC-6AE1
		EAN	4015080892847
		PRODUCT LENGTH/DEPTH	58 mm
		PRODUCTHEIGHT	90 mm
		PRODUCTWIDTH	36 mm
		PRODUCTWEIGHT	0.1 kg
		CERTIFICATIONS	CSA-C22.2 No. 61010 IEC/EN 61000-4-2 EN 61010 IEC/EN 61131-2 IEC/EN 61000-6-2 EN 50178 IEC/EN 61000-6-3 CULus per UL 61010 IEC 60068-2-27 IEC 60068-2-30 IEC 60068-2-6 UL Listed UL Category Control No.: NRAQ, NRAQ7 UL File No.: E205091 DNV GL CE UL hazardous location class I UL hazardous location division 2 UL hazardous location group A (acetylene) UL hazardous location group B (hydrogen) UL hazardous location group C (ethylene) UL hazardous location group D (propane)

## PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility.
DATED OBEDATIONAL VOLTAGE	20.4 - 28.8 V DC
RATED OPERATIONAL VOLTAGE	24 V DC (-15 %/+ 20 % - power supply)
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
	Front build in possible
	Rail mounting possible
MOUNTING METHOD	Wall mounting/direct mounting
	Top-hat rail fixing (according to IEC/EN 60715, 3
	Screw fixing using fixing brackets ZB4-101-GF1

AIR PRESSURE	795 - 1080 hPa (operation)
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STO RAGE TEMPERATURE - MIN	40 °C
SURGE RATING	0.5 kV, Supply cables, symmetrical, power pulses According to IEC/EN 61000-4-5, power pulses (Su 1 kV, Supply cables, asymmetrical, power pulses (Su
VIBRATION RESISTANCE	57 - 150 Hz, 2 g constant acceleration 10 - 57 Hz, 0.15 mm constant amplitude According to IEC/EN 60068-2-6
EXPLOSION SAFETY CATEGORY FOR GAS	None
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
SWITCHING CURRENT	0 A
FEATURES	Expandable Expansion device
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
NUMBER OF HW-INTERFACES (SERIAL TIY)	0
SUPPLY VOLTAGE AT AC, 60 HZ - MAX	0 VAC
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Meets the product standard's requirements.
VOLTAGE TYPE	DC
CATEGORY (EN 954-1)	None
PRODUCT CATEGORY	Control relays easyE4
POTENTIAL ISOLATION	Between Analog inputs and Power supply: no Between Analog inputs and Inputs/Outputs: no Between Analog outputs and Inputs/Outputs: no Between Analog inputs and expansion devices: yes Between Analog outputs and Power supply: no Between Analog outputs and expansion devices: no
RADIO INTERFERENCE CLASS	Class B (EN 61000-6-3)
RESIDUAL RIPPLE	≤5 %
TERMINAL CAPACITY	0.2 - 2.5 mm <sup>2</sup> (22 - 12 AWG), flexible with femule 0.2 - 4 mm <sup>2</sup> (AWG 22 - 12), solid
HEAT DISSIPATION CAPACITY PDISS	0 W
NUMBER OF HW-INTERFACES (RS-422)	0
INSULATION RESISTANCE 4/9	According to EN 50178, EN 61010-2-201, UL6101 NO. 61010-2-201

OUTPUT	Current Voltage
ELECTROMAGNETIC FIELDS	3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-1 V/m at 2.0 - 2.7 GHz (according to IEC EN 6100-10 V/m at 0.8 - 1.0 V/m at 0.8 - 1.0 V/m at 0.0 V/m at
INRUSH CURRENT	12.5 A (for 6 ms)
PROTOCOL	TCP/IP MODBUS
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
POLLUTION DEGREE	2
SIL (IEC 61508)	None
TIGHTENING TO RQUE	0.6 Nm, Screw terminals
ТҮРЕ	easyE4 extension
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
ENVIRONMENTAL CONDITIONS	Clearance in air and creepage distances according to 61010-2-201, UL61010-2-201, CSA-C22.2 NO. 61 Condensation: prevent with appropriate measures
PROTECTION AGAINST POLARITY REVERSAL	Yes, for supply voltage (Siemens MPI optional)
SIGNAL RANGE	4 - 20 mA, Analog outputs 0 - 20 mA, Analog inputs 0 - 10 V DC, Analog inputs 0 - 10 V DC, Analog outputs 4 - 20 mA, Analog inputs 0 - 20 mA, Analog outputs
SHOCK RESISTANCE	15 g, Mechanical, according to IEC/EN 60068-2-27 shock 11 ms, 18 Impacts
NUMBER OF INPUTS (ANALOG)	4
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
NUMBER OF HW-INTERFACES (RS-485)	0
NUMBER OF HW-INTERFACES (INDUSTRIAL ETHERNET)	0
5/9	Voltage

INPUT	Current
FREQUENCY RATING	6.5 Hz
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
IMMUNITY TO LINE-CONDUCTED INTERFERENCE	10 V (according to IEC/EN 61000-4-6)
CONTACT DISCHARGE	6 kV
SUPPLY VOLTAGE AT DC - MIN	20.4 VDC
NUMBER OF HW-INTERFACES (WIRELESS)	0
STATIC HEAT DISSIPATION, NON-CURRENT- DEPENDENT PVS	2.5 W
INPUT IMPEDANCE	$11.2 \text{ k}\Omega$
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
NUMBER OF HW-INTERFACES (RS-232)	0
NUMBER OF INPUTS (DIGITAL)	0
CABLELENGTH	≤ 30 m, screened, Analog outputs ≤ 30 m, screened, Analog inputs 10 m, screened, Analog inputs
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
VOLTAGE DIPS	20 ms ≤10 ms, Bridging voltage dips
SUPPLY VOLTAGE AT DC - MAX	28.8 VDC
MOUNTING POSITION	Horizontal Vertical
SOFTWARE	EASYSOFT-SWLIC/easySoft7
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the intinstruction leaflet (IL) is observed.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0 W
SAFEIY PERFORMANCE LEVEL (EN ISO 13849-1)	None
RESOLUTION	<ul> <li>12 Bit (value 0 - 4095, Analog inputs)</li> <li>12 Bit (value 0 - 4095, Analog outputs)</li> </ul>
SHORT-CIRCUIT PROTECTION	$\geq$ 1A (T), Fuse, Power supply
DROP AND TOPPLE	50 mm Drop height, Drop to IEC/EN 60068-2-31
SUPPLY VOLTAGE AT AC, 60 HZ - MIN	0 VAC
HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m

DEPENDENT PVID	0 W
NUMBER OF OUTPUTS (ANALOG)	2
AIR DISCHARGE	8 kV
NUMBER OF HW-INTERFACES (USB)	0
HEAT DISSIPATION	3.4 W (at 24 V DC)
ACCURACY	1 %, Analog inputs at -25 °C - 55 °C
NUMBER OF OUTPUTS (DIGITAL)	0
POWER CONSUMPTION	2.5 W
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.
CONNECTION TYPE	Screw terminal
NUMBER OF HW-INTERFACES (OTHER)	0
RELATIVE HUMIDITY	5 - 95 % (IEC 60068-2-30, IEC 60068-2-78)
SUPPLY VOLTAGE AT AC, 50 HZ - MIN	0 VAC
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	0 VAC
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
NUMBER OF HW-INTERFACES (PARALLEL)	0
EXPLOSION SAFETY CATEGORY FOR DUST	None
SCREWDRIVER SIZE	3.5 x 0.8 mm, Terminal screw
BURSTIMPULSE	According to IEC/EN 61000-4-4 2 kV, Supply cable 2 kV, Signal cable
BASETYPE	No
NUMBER OF INTERFACES (PROFINEI)	0

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