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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

061360

Eaton Moeller® series EASY Fixing bracket, for easy500, 700, 800, EC4P, ES4P, easy200, MFD-CP8/CP10

197507

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

197505

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

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GENERAL SPECIFICATIONS

General specifications

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PRODUCT NAME Eaton Moeller® series EASY I/O expansion

CATALOG NUMBER 197222

Product specifications

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MODEL CODE EASY-E4-AC-16RE1

EAN 4015081939428

PRODUCT LENGTH/DEPTH 58 mm

PRODUCT HEIGHT 90 mm

PRODUCT WIDTH 72 mm

PRODUCT WEIGHT 0.25 kg

CERTIFICATIONS

CULus per UL 61010
IEC 60068-2-30
IEC/EN 61131-2
CSA-C22.2 No. 61010
EN 50178
IEC 60664
IEC/EN 61000-4-2
EN 61010
IEC 60068-2-27
IEC/EN 61000-6-2
IEC/EN 61000-6-3
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)

CATALOG NOTES

fitted with two controlled relays

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 0 A

10.11 SHORT-CIRCUIT RATING

Is the panel builder's responsibility.

RATED OPERATIONAL VOLTAGE

85 - 264 V AC
Max. 300 V AC
Max. 300 V DC
110/120 V DC (power supply)
240 V AC
100/110/115/120/230/240 AC (-15 %/+10 %)

10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
MOUNTING METHOD	Wall mounting/direct mounting Top-hat rail fixing (according to IEC/EN 60715, 35) Rail mounting possible Screw fixing using fixing brackets ZB4-101-GF1 (ac Front build in possible
AIR PRESSURE	795 - 1080 hPa (operation)
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
SURGE RATING	According to IEC/EN 61000-4-5, power pulses (Sur 1 kV, Supply cables, symmetrical, power pulses (S 2 kV, Supply cables, asymmetrical, power pulses (S
FITTED WITH:	Relay output
VIBRATION RESISTANCE	57 - 150 Hz, 2 g constant acceleration 10 - 57 Hz, 0.15 mm constant amplitude According to IEC/EN 60068-2-6
MAKING/BREAKING CAPACITY	3600/360 VA (AC, at B 300) 28/28 VA (DC, at R 300)
EXPLOSION SAFETY CATEGORY FOR GAS	None
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
SWITCHING CURRENT	5 A
SWITCHING FREQUENCY	2 Hz, Resistive load/lamp load, Relay outputs 0.5 Hz, Inductive load, Relay outputs 10 Hz, Relay outputs
FEATURES	Expandable Expansion device
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
NUMBER OF HW-INTERFACES (SERIAL TIY)	0
SUPPLY VOLTAGE AT AC, 60 HZ - MAX	264 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	AC
CATEGORY (EN 954-1)	None
PRODUCT CATEGORY	Control relays easyE4
	Between Relay outputs and expansion devices: yes Between Digital inputs 115/230 V AC and Outputs Between Digital inputs 115/230 V AC and expansio Between Relay outputs and Inputs: yes

POTENTIAL ISOLATION	Between Digital inputs 115/230 V AC and base unit Between Digital inputs 115/230 V AC and Power supply Between Digital inputs 115/230 V AC: no Basic isolation: 600 V AC (Relay outputs) Between Relay outputs and Power supply: yes Between Relay outputs: yes Safe isolation according to EN 50178: 300 V AC (R
RADIO INTERFERENCE CLASS	Class B (EN 61000-6-3)
RESIDUAL RIPPLE	≤ 5 %
TERMINAL CAPACITY	0.2 - 2.5 mm ² (22 - 12 AWG), flexible with ferrule 0.2 - 4 mm ² (AWG 22 - 12), solid
HEAT DISSIPATION CAPACITY PDISS	0 W
NUMBER OF HW-INTERFACES (RS-422)	0
INSULATION RESISTANCE	According to EN 50178, EN 61010-2-201, UL61010 NO. 61010-2-201
OUTPUT	8 Relay Outputs > 500 mA (Relay outputs, Recommended for load: Relay outputs in groups of 1 Voltage Current
ELECTROMAGNETIC FIELDS	10 V/m at 0.8 - 1.0 GHz (according to IEC EN 61010-2-201) 3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-6-3) 1 V/m at 2.0 - 2.7 GHz (according to IEC EN 61000-6-3)
CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	5 A
INRUSH CURRENT	12.5 A (for 6 ms)
PROTOCOL	MODBUS TCP/IP
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20
PARALLEL SWITCHING	Not permitted
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
INPUT VOLTAGE	Condition 0: 0 - 40 V AC, Digital inputs, 115/230 V AC Condition 1: 79 - 264 V AC, Digital inputs, 115/230 V AC
POLLUTION DEGREE	2
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6 kV (contact-coil)
SIL (IEC 61508)	None
TIGHTENING TORQUE	0.6 Nm, Screw terminals
INPUT FREQUENCY	50/60 Hz (Digital inputs, at 115/230 V AC) 50/60 Hz (Digital inputs, at 24 V DC)

TYPE	easyE4 extension
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
SUPPLY FREQUENCY	50/60 Hz (± 5%)
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	Condensation: prevent with appropriate measures Clearance in air and creepage distances according to 61010-2-201, UL61010-2-201, CSA-C22.2 NO. 61
PROTECTION AGAINST POLARITY REVERSAL	Yes, for supply voltage (Siemens MPI optional)
SHOCK RESISTANCE	15 g, Mechanical, according to IEC/EN 60068-2-27 shock 11 ms, 18 Impacts
NUMBER OF INPUTS (ANALOG)	0
INPUT CURRENT	6 x 0.25 mA (I1 - I8, at 115 V AC, 60 Hz, at signal) 6 x 0.5 mA (I1 - I8, at 230 V AC, 50 Hz, at signal)
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
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)
PROTECTION	B16 circuit breaker or 8 A (T) fuse, Protection of an
CONTACT DISCHARGE	6 kV
SUPPLY VOLTAGE AT DC - MIN	85 VDC
NUMBER OF HW-INTERFACES (WIRELESS)	0
LIFESPAN, ELECTRICAL	25,000 Operations (Filament bulb load at 1000 W, 25,000 Operations (Fluorescent lamp load 10 x 58 W with upstream electrical device) 25,000 Operations (Filament bulb load at 500 W, 1 25,000 Operations (Fluorescent lamp load 1 x 58 W conventional, compensated) 25,000 Operations (Fluorescent lamp load 10 x 58 W uncompensated)
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	4 W
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	R 300 Light Pilot Duty, UL/CSA Control Circuit I B 300 Light Pilot Duty, UL/CSA Control Circuit I

NUMBER OF HW-INTERFACES (RS-232)	0
NUMBER OF INPUTS (DIGITAL)	8
RATED BREAKING CAPACITY	300000 Operations at AC-15, 250 V AC, 3 A (600 200000 Operations at DC-13, 24 V DC, 1 A (500 C
CABLE LENGTH	≤ 100 m per input (I1 - I6, I9 - I12, debounce ON), 115/230 V AC ≤ 60 m per input (I1 - I8), Digital inputs 115/230 V 40 m (max. permissible per input R1 to R12), Digi AC
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
SAFE ISOLATION	300 V AC, Between coil and contact, According to 300 V AC, Between two contacts, According to EN
VOLTAGE DIPS	10 ms
SUPPLY VOLTAGE AT DC - MAX	264 VDC
MOUNTING POSITION	Horizontal Vertical
SOFTWARE	EASYSOFT-SWLIC/easySof7
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the inf instruction 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
SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)	None
SHORT-CIRCUIT PROTECTION	≥ 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	85 VAC
UNINTERRUPTED CURRENT	1 A DC, at R 300 (UL/CSA) 5 A AC, max. thermal continuous current $\cos \phi = 1$ 8 A DC, at 24 V DC (UL/CSA) 8 A AC, at 240 V AC (UL/CSA)
HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	2 W
NUMBER OF OUTPUTS (ANALOG)	0
AIR DISCHARGE	8 kV
NUMBER OF HW-INTERFACES (USB)	0
	39 ms typ., Digital Inputs 100 - 240 V AC 50 Hz (C from 1 to 0, Debounce OFF 32 ms typ., Digital Inputs 100 - 240 V AC 60 Hz (C

DELAY TIME	from 1 to 0, Debounce OFF 80 ms, Digital inputs 115/230 V AC 50 Hz (I7, I8) to 1, Debounce ON 0.5 ms typ., Digital Inputs 100 - 240 V DC (I1 - I8) to 0, Debounce OFF 39 ms typ., Digital Inputs 100 - 240 V AC 50 Hz (I7, I8) from 0 to 1, Debounce OFF 32 ms typ., Digital Inputs 100 - 240 V AC 60 Hz (I7, I8) from 0 to 1, Debounce OFF 0.5 ms typ., Digital Inputs 100 - 240 V DC (I1 - I8) to 1, Debounce OFF
NUMBER OF OUTPUTS (DIGITAL)	8
POWER CONSUMPTION	4 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
LIFESPAN, MECHANICAL	1,000,000 Operations
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	85 VAC
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	264 VAC
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise. Eaton will provide heat dissipation data for the device.
NUMBER OF HW-INTERFACES (PARALLEL)	0
EXPLOSION SAFETY CATEGORY FOR DUST	None
SCREWDRIVER SIZE	3.5 x 0.8 mm, Terminal screw
BURST IMPULSE	2 kV, Signal cable 2 kV, Supply cable According to IEC/EN 61000-4-4
BASE TYPE	No
NUMBER OF INTERFACES (PROFINET)	0
RATED INSULATION VOLTAGE (UI)	240 V



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