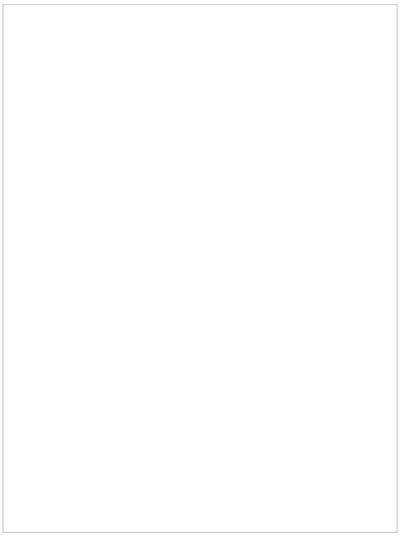
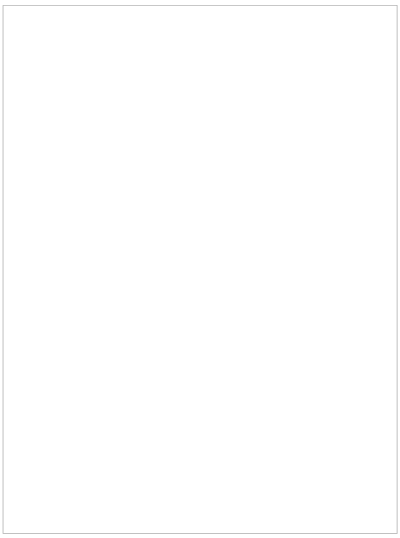
EASYE4 PROGRAMMABLE RELAYS
197216





197216

Eaton Moeller® series EASY Control relays, easyE
100 - 240 V AC, 110 - 220 V DC (cULus: 100 - 110 V
terminal

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197218

Eaton Moeller® series EASY I/O expansion, For use with easyE4, 12/24 V DC, 24 V AC, Inputs expansion (number) digital: 8, screw terminal

197223

Eaton Moeller® series EASY I/O expansion, For use with easyE4, 24 V DC, Inputs expansion (number) analog: 4, screw terminal EASY-E4-DC-6AE1

198513

Eaton XV-102 Touch display for easyE4, 24 V DC, 3.5z, TFTcolor, ethernet

197217

Eaton Moeller® series EASY I/O For use with easyE4, 12/24 V D AC, Inputs expansion (number) screw terminal

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GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller® series EASY Control relay
CATALOG NUMBER	197216
MODEL CODE	EASY-E4-AC-12RCX1
EAN	4015080892779
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 61000-4-2 IEC/EN 61131-2 EN 61010 IEC 60068-2-27 EN 50178 IEC 60068-2-6 IEC/EN 61000-6-2 CSA-C22.2 No. 61010 IEC 60664 IEC/EN 61000-6-3 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	Accuracy of the real-time clock depending on ambie fluctuations of up to ± 5 s/day (± 0.5 h/year) are poss

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

10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
CABLE TYPE	CAT5
MOUNTING METHOD	Front build in possible Top-hat rail fixing (according to IEC/EN 60715, 35 Wall mounting/direct mounting Rail mounting possible Screw fixing using fixing brackets ZB4-101-GF1 (ac
LED INDICATOR	Status indication of Ethernet: LED Status indication of Power/RUN
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 (Su 2 kV, Supply cables, asymmetrical, power pulses (S
FITTED WITH:	Timer Real time clock Relay output
VIBRATION RESISTANCE	According to IEC/EN 60068-2-6 10 - 57 Hz, 0.15 mm constant amplitude 57 - 150 Hz, 2 g constant acceleration
MAKING/BREAKING CAPACITY	28/28 VA (DC, at R 300) 3600/360 VA (AC, at B 300)
EXPLOSION SAFETY CATEGORY FOR GAS	None
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
SWITCHING CURRENT	8 A
SWITCHING FREQUENCY	10 Hz, Relay outputs 2 Hz, Resistive load/lamp load, Relay outputs 0.5 Hz, Inductive load, Relay outputs
FEATURES	Expandable Networkable (Ethernet)
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
NUMBER OF HW-INTERFACES (SERIAL TTY)	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
POTENTIAL ISOLATION	Between Relay outputs and Ethernet: yes Between Digital inputs 115/230 V AC: no Between Digital inputs 115/230 V AC and base uni Between Relay outputs and expansion devices: yes Basic isolation: 600 V AC (Relay outputs) Between Digital inputs 115/230 V AC and Outputs Between Relay outputs and Inputs: yes Between Digital inputs 115/230 V AC and expansio Between Digital inputs 115/230 V AC and Memory Between Digital inputs 115/230 V AC and Ethernet Between Digital inputs 115/230 V AC and Power s Safe isolation according to EN 50178: 300 V AC (R Between Relay outputs and Power supply: yes Between Relay outputs: yes Between Digital inputs 115/230 V AC and Interface
RADIO INTERFERENCE CLASS	Class B (EN 61000-6-3)
RESIDUAL RIPPLE	≤ 5 %
INDICATION	LCD-display used as status indication of Digital inp
TERMINAL CAPACITY	0.2 - 2.5 mm² (22 - 12 AWG), flexible with ferrule 0.2 - 4 mm² (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, UL6101 NO. 61010-2-201
POWER LOSS	10 W
OUTPUT	Relay outputs in groups of 1 4 Relay Outputs > 500 mA (Relay outputs, Recommended for load: Voltage Current
ELECTROMAGNETIC FIELDS	1 V/m at 2.0 - 2.7 GHz (according to IEC EN 6100 10 V/m at 0.8 - 1.0 GHz (according to IEC EN 610 3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-
CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	8 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 Condition 1: 79 - 264 V AC, Digital inputs, 115/2
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 base device
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	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)
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 0.5 mA (I1 - I6, at 230 V AC, 50 Hz, at signal 2 x 4 mA (I7 - I8, at 115 V AC, 60 Hz, at signal 1) 6 x 0.25 mA (I1 - I6, at 115 V AC, 60 Hz, at signa 2 x 6 mA (I7 - I8, at 230 V AC, 50 Hz, at signal 1) 6 x 0.25 mA (I1 - I8, at 115 V AC, 60 Hz, at signa
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)	1
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 (Fluorescent lamp load 1 x 58 W conventional, compensated) 25,000 Operations (Fluorescent lamp load 10 x 58 W uncompensated) 25,000 Operations (Filament bulb load at 500 W, 1 25,000 Operations (Filament bulb load at 1000 W, 25,000 Operations (Fluorescent lamp load 10 x 58 W with upstream electrical device)
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	4 W
DISPLAY TEMPERATURE - MIN	0 °C
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	B 300 Light Pilot Duty, UL/CSA Control Circuit R R 300 Light Pilot Duty, UL/CSA Control Circuit R
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 (max. permissible per input I7 to I8), Digital AC 40 m (max. permissible per input I1 to I6), Digital
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
USED WITH	easyE4
MOUNTING POSITION	Horizontal Vertical
SOFTWARE	EASYSOFT-SWLIC/easySoft7
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.
DISPLAY TEMPERATURE - MAX	55 °C
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0 W
SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)	None
RESOLUTION	• 1 min (Range H:M) • 1 s (Range M:S)

	• 5 ms (Range S)
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	8 A AC, at 240 V AC (UL/CSA) 1 A DC, at R 300 (UL/CSA) 8 A DC, at 24 V DC (UL/CSA) 5 A AC, max. thermal continuous current cos ϕ = 1
HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	4 W
NUMBER OF OUTPUTS (ANALOG)	0
AIR DISCHARGE	8 kV
NUMBER OF HW-INTERFACES (USB)	0
ACCURACY	± 1 %, Repetition accuracy of timing relays (of valu ± 2 s/day, Real-time clock to inputs (± 0.2 h/Year)
DELAY TIME	20 ms typ., Digital Inputs 100 - 240 V DC (I1 - I8) to 1, Debounce ON 20 ms, Digital inputs 115/230 V AC 50 Hz (I7, I8) to 0, Debounce OFF 20 ms typ., Digital Inputs 100 - 240 V DC (I1 - I8) to 0, Debounce ON 21 ms typ., Digital Inputs 100 - 240 V AC 60 Hz (from 0 to 1, Debounce OFF 21 ms typ., Digital Inputs 100 - 240 V AC 60 Hz (from 1 to 0, Debounce OFF 16⅔ ms, Digital inputs 115/230 V AC 60 Hz (I7, I to 0, Debounce OFF 0.03 ms typ., Digital Inputs 100 - 240 V DC (I1 - I to 1, Debounce OFF 0.03 ms typ., Digital Inputs 100 - 240 V DC (I1 - I to 0, Debounce OFF
DATA TRANSFER RATE	10/100 MBit/s
NUMBER OF OUTPUTS (DIGITAL)	4
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 Ethernet: RJ45 plug, 8-pole
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 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
BURST IMPULSE	2 kV, Supply cable According to IEC/EN 61000-4-4 2 kV, Signal cable
BASE TYPE	Yes
NUMBER OF INTERFACES (PROFINET)	0
RATED INSULATION VOLTAGE (UI)	240 V

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