

EASYE4 PROGRAMMABLE RELAYS
197224


Overview


Specifications


Resources

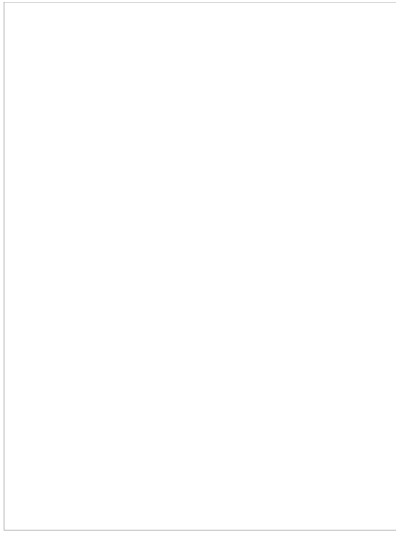
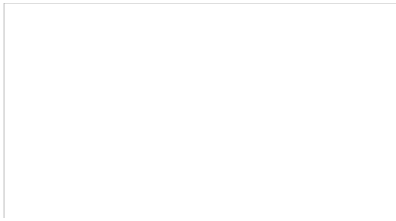
How to buy

197224

Eaton Moeller® series EASY I/O expansion, For use with
Inputs expansion (number) analog: 4, screw terminal

How to buy

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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

197211

Eaton Moeller® series EASY C easyE4 with display (expandable 12/24 V DC, 24 V AC, Inputs D which can be used as analog: 4, terminal

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GENERAL SPECIFICATIONS

General specifications

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PRODUCT NAME Eaton Moeller® series EASY I/O expansion

CATALOG NUMBER 197224

Product specifications

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MODEL CODE EASY-E4-DC-4PE1

EAN 4015080892854

PRODUCT LENGTH/DEPTH 58 mm

PRODUCT HEIGHT 90 mm

PRODUCT WIDTH 36 mm

PRODUCT WEIGHT 0.1 kg

CERTIFICATIONS

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

RATED OPERATIONAL VOLTAGE 24 V DC (-15 %/+ 20 % - power supply)
20.4 - 28.8 V DC

10.4 CLEARANCES AND CREEPAGE DISTANCES Meets the product standard's requirements.

MOUNTING METHOD

Rail mounting possible
Top-hat rail fixing (according to IEC/EN 60715, 35)
Wall mounting/direct mounting
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
SURGERATING	According to IEC/EN 61000-4-5, power pulses (Surge) 0.5 kV, Supply cables, symmetrical, EASY...DC, 1 EMC 1 kV, Supply cables, asymmetrical, power pulses (S
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	Additional measurement aids: Filtering (software), s input signal (PT1 behavior), only with set sampling sensor: yes Expandable Expansion device Measuring principle: Two or three wire per sensor, s connection of sensor
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
NUMBER OF HW-INTERFACES (SERIAL TTY)	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 PT 100 or Ni1000 and Pow Between Analog inputs PT 100 or Ni1000 and expa Between Analog inputs PT 100 or Ni1000 and Input
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
POWER LOSS	1 W
ELECTROMAGNETIC FIELDS	10 V/m at 0.8 - 1.0 GHz (according to IEC EN 61010-2-201) 1 V/m at 2.0 - 2.7 GHz (according to IEC EN 61010-2-201) 3 V/m at 1.4 - 2 GHz (according to IEC EN 61010-2-201)
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
FUNCTIONS	Card diagnostic Diagnostics below lower measurement range
TIGHTENING TORQUE	0.6 Nm, Screw terminals
TYPE	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	Condensation: prevent with appropriate measures Clearance in air and creepage distances according to EN 61010-2-201, UL61010-2-201, CSA-C22.2 NO. 61010-2-201
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)	4
INPUT CURRENT	40 mA
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted
NUMBER OF HW-INTERFACES (RS-485)	0
NUMBER OF HW-INTERFACES (INDUSTRIAL ETHERNET)	0

INPUT	Input type resistance sensor: Platinum sensor Pt100 (EN 60751, IEC 751) Input type resistance sensor: Nickel sensor Ni1000 (IEC 6043760)
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	1 W
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
NUMBER OF HW-INTERFACES (RS-232)	0
NUMBER OF INPUTS (DIGITAL)	0
CABLE LENGTH	≤ 30 m, unscreened, Analog inputs temperature resistors, Ni1000 sensors
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be protected
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 instructions in the 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
RESOLUTION	12 Bit (0- 4095, digital, scaling per sensor)
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	0 VAC
HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
NUMBER OF OUTPUTS (ANALOG)	0

NUMBER OF OUTPUTS (ANALOG)	0
AIR DISCHARGE	8 kV
NUMBER OF HW-INTERFACES (USB)	0
HEAT DISSIPATION	3.4 W (at 24 V DC)
NUMBER OF OUTPUTS (DIGITAL)	0
POWER CONSUMPTION	1 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 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 According to IEC/EN 61000-4-4 2 kV, Supply cable
BASE TYPE	No
NUMBER OF INTERFACES (PROFINET)	0



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eCAD model

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mCAD model

Sales notes

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