



Starter package consisting of EASY-E4-UC-12RC1, XV-102-A0-35TQRB-1E4, Ethernet switch, 3xPatch cable, license easySoft 7

Part no. **XV100-BOX-E4-UC1**  
 Catalog No. **198515**

### Delivery program

Product range			Control relays easyE4
Basic function			Starter kit
Supply voltage			12/24 V DC 24 V AC
Software			EASYSOFT-SWLIC/easySoft 7 SW-GALILEO/Galileo 10

### Technical data

#### General

Standards			EN 55011, EN 55022, IEC/EN 61000-4, IEC 60068-2-6, IEC 60068-2-27
Weight		kg	0.9
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)

#### Terminal capacities

Solid		mm <sup>2</sup>	0.2/4 (AWG 22 - 12)
Flexible with ferrule		mm <sup>2</sup>	0.2/2.5 (AWG 22 - 12)

#### Climatic environmental conditions

Operating ambient temperature		°C	In accordance with IEC 60068-2-1, -25 - +55
Condensation			Take appropriate measures to prevent condensation
LCD display (clearly legible)		°C	0 - 55
Storage	θ	°C	-20 - +60
relative humidity		%	in accordance with IEC 60068-2-30, IEC 60068-2-78 5 - 95
Air pressure (operation)		hPa	795 - 1080

#### Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Vibrations		Hz	In accordance with IEC 60068-2-6 constant amplitude 0.15 mm: 10 - 57 constant acceleration 2 g: 57 - 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1
Mounting position			Vertical or horizontal

#### Electromagnetic compatibility (EMC)

Overvoltage category/pollution degree			III/2
Electrostatic discharge (ESD)			
applied standard			according to IEC EN 61000-4-2
Air discharge		kV	8
Contact discharge		kV	6
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10

#### Insulation resistance

Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142
Insulation resistance			EN 50178

#### Power supply

Voltage dips		ms	≤ 20 ms at 24 V AC 10 ms at 24 V DC 1 ms at 12 V DC
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#### Digital inputs 12 V DC

Number			8
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#### Digital inputs 24 V DC

Number			8
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Inputs can be used as analog inputs		4 (15, 16, 17, 18)
<b>Digital inputs 24 V AC</b>		
Number		8
<b>Analog inputs</b>		
Number		4 (15, 16, 17, 18)
Cable length	m	≤ 30, screened
<b>Relay outputs</b>		
Number		4

## Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	0
Operating ambient temperature max.	°C	50
IEC/EN 61439 design verification		
10.2 Strength of materials and parts		
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 protection of ASSEMBLIES		Meets the product 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 Insulation properties		
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.
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.

## Technical data ETIM 7.0

PLC's (EG000024) / Logic module (EC001417)		
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / Logic module (ecl@ss10.0.1-27-24-22-16 [AKE539014])		
Supply voltage AC 50 Hz	V	20.4 - 28.8
Supply voltage AC 60 Hz	V	20.4 - 28.8
Supply voltage DC	V	12.2 - 28.8
Voltage type of supply voltage		AC/DC
Switching current	A	8
Number of analogue inputs		0
Number of analogue outputs		0
Number of digital inputs		8
Number of digital outputs		4
With relay output		Yes
Number of HW-interfaces industrial Ethernet		1
Number of interfaces PROFINET		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		2
Number of HW-interfaces parallel		0
Number of HW-interfaces Wireless		0
Number of HW-interfaces other		0
With optical interface		No
Supporting protocol for TCP/IP		Yes
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		Yes
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No
Radio standard GSM		No
Radio standard UMTS		No
IO link master		No
Redundancy		No
With display		Yes
Degree of protection (IP)		IP20
Basic device		Yes
Expandable		Yes
Expansion device		No
With timer		Yes
Rail mounting possible		Yes
Wall mounting/direct mounting		Yes
Front build in possible		Yes
Rack-assembly possible		No
Suitable for safety functions		No
Category according to EN 954-1		None
SIL according to IEC 61508		None
Performance level acc. EN ISO 13849-1		None
Appendant operation agent (Ex ia)		No
Appendant operation agent (Ex ib)		No
Explosion safety category for gas		None
Explosion safety category for dust		None

Width	mm	0
Height	mm	0
Depth	mm	0

## Approvals

Product Standards		UL 60950-01; CSA-C22.2 No. 60950-1; IEC/EN 61131-2; CE marking
UL File No.		E208621
North America Certification		UL recognized, certified by UL for use in Canada
Conditions of Acceptability		The investigated Pollution Degree is: 2 The following end-product enclosures are required: Fire The unit must be supplied via a SELV source. The provided Ethernet Connection is only allowed to connect to inhouse networks.
Specially designed for North America		No
Current Limiting Circuit-Breaker		No
Degree of Protection		IEC: IP20, UL/CSA Type: -

## Additional product information (links)

<b>assembly instructions easyE4 IL050020ZU</b>	
assembly instructions easyE4 IL050020ZU	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL050020ZU.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL050020ZU.pdf</a>
<b>easyE4 (MN050009) manual</b>	
easyE4 – Handbuch (MN050009) - Deutsch	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_DE.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_DE.pdf</a>
easyE4 (MN050009) manual - English	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_EN.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_EN.pdf</a>
manuel easyE4 (MN050009) - français	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_FR.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_FR.pdf</a>
Manuale easy E4 (MN050009) - italiano	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_IT.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_IT.pdf</a>
instrukcja easyE4 (MN050009) - polski	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_PL.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN050009_PL.pdf</a>
<b>Instruction manual XV-102 MN04802004Z</b>	
Bedienungsanleitung XV-102 MN04802004Z - Deutsch	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802004Z_DE.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802004Z_DE.pdf</a>
Instruction manual XV-102 MN04802004Z - English	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802004Z_EN.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802004Z_EN.pdf</a>
<b>Quick-start manual XV100 MN04802013Z</b>	
Schnellstart-Handbuch XV100 MN04802013Z - Deutsch	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802013Z_DE.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04802013Z_DE.pdf</a>
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f1=1454;Download Software	<a href="http://applications.eaton.eu/sdlc?LX=11&amp;">http://applications.eaton.eu/sdlc?LX=11&amp;</a>
Product overview (WEB)	<a href="http://www.eaton.eu/easyE4">http://www.eaton.eu/easyE4</a>