DATASHEET - EASY-E4-UC-12RCX1



Control relays, Expandable, networkable (Ethernet), 12/24 V DC, 24 V AC, Digital: 8, of which can be used as analog: 4, Quantity of outputs: Relay: 4, screw terminal



Part no. EASY-E4-UC-12RCX1

Catalog No. 197212

EL-Nummer (Norway) 4500547

Delivery program

asyE4 base device
SYLT BUSC UCVICC
ectronic control relay ated operating voltage 12V DC, 24V DC or 24V AC digital inputs with 12 VDC, 24 VDC or 24 VAC these, 4 inputs can also be used as analog inputs and 4 inputs as fast counters relay outputs for 12–250 VAC or 12–240 VDC ith diagnostic LEDs cal-time clock ith Ethernet interface (spandable with the easyE4 series of digital input/output expansions with easy-E4-DNNECT1 connector (Item Y7-197225) (spandable with communications modules EASY-COM crew terminals
elay: 4
spandable etworkable (Ethernet)
7/24 V DC V AC
ASYSOFT-SWLIC/easySoft 7
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Technical data

General

Standards		EN 61000-6-2 EN 61000-6-3 IEC 60068-2-6 IEC 60068-2-27 IEC 60068-2-30 IEC/EN 61131-2 EN 61010 EN 50178
Approvals		
Approvals		cULus
certificate		CE
shipping classification		DNV GL
		DNV·GL
Dimensions (W x H x D)	mn	71.5 x 90 x 58
Weight	kg	0.192
Mounting		Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)
Connection type		screw terminal
Ethernet		
Connections		RJ45 plug, 8-pin
Cable		CAT5

Screw terminals			
Solid		mm^2	0.2 - 4
flexible		mm ²	0.2 - 2.5
Solid or flexible conductor, with ferrule		mm ²	0,2 - 2,5
Solid or stranded		AWG	22 - 12
Standard screwdriver		mm	0.8 x 3.5
Tightening torque		Nm	0.5 - 0.7
Stripping length		mm	6.5
Display			
Status indicator (LED)			Power/RUN Ethernet
Climatic environmental conditions			
Operating ambient temperature		°C	-25 to 55, cold as per IEC 60068-2-1, heat as per IEC 60068-2-2
Condensation			Take appropriate measures to prevent condensation
Storage	8	°C	-40 - +70
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	0.3
Mounting position			Vertical or horizontal

Electromagnetic compatibility (EMC)

Overvoltage category/pollution degree		111/2
Electrostatic discharge (ESD)		
applied standard		nach IEC/EN 61000-4-2
Air discharge	kV	8
Contact discharge	kV	6
Electromagnetic fields (RFI) to IEC EN 61000-4-3	V/m	0.08 - 1.0 GHz: 10 1.4 - 2 GHz: 3 2.0 - 2.7 GHz: 1
Radio interference suppression		EN 61000-6-3 Class B
Burst	kV	according to IEC/EN 61000-4-4 Supply cables: 2 Signal cables: 2
power pulses (Surge)		according to IEC/EN 61000-4-5 1 kV (supply cables, symmetrical) 2 kV (supply cables, asymmetrical)
Immunity to line-conducted interference to (IEC/EN 61000-4-6)	V	10
Insulation resistance		

Clearance in air and creepage distances	nach EN 50178, EN 61010-2-201, UL61010-2-201, CSA-C22.2 NO. 61010-2-201
Insulation resistance	per EN 50178, EN 61010-2-201, UL61010-2-201, CSA-C22.2 NO. 61010-2-201
Death and control of an about	

Back-up of real-time clock

Resolution Range "S"

Back-up of real-time clock			(I)
			Backup time (hours) with fully charged double layer capacitor Service life (years)
Accuracy of the real-time clock	S/	/day	typ. ± 2 (± 0.2 h/Year)
			depending on ambient air temperature fluctuations of up to ±5 s/day (±0.5 h/year) are possible
Repetition accuracy of timing relays			
Accuracy of timing relays (of values)	%	6	± 0.02

5

Recogn MS				
Power super supe	Range "M:S"		S	1
Pictor programment Up 100 mercy (2000 mercy) Value (1000 mercy) <th< td=""><td></td><td></td><td>min</td><td>1</td></th<>			min	1
March Marc				
Medical rigida Fraguescy Medical regions platchy reversal Fraguescy Medical regions platchy reversal Medical rigida (Medical regions platchy reversal Medical rigida (Medical ri	Rated operational voltage	U _e	V	
Protection against planty reversal Frequency Fr	Permissible range	U _e		
Propositions	Residual ripple		%	≦5
Input carrent Voltage dips Voltage Power loss Power loss Power loss Power loss Voltage	Protection against polarity reversal			yes
Notage dips	Frequency		Hz	50/60 (± 5%)
Notage dips 80 mm 20 mm at 34 M AC met at 17 M DC met	Input current			max. 200 mA at 12 V DC
Fixe				max. 125 mA at 24 V DC
Pear 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Voltage dips		ms	10 ms at 24 V DC
Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V	Fuse		Α	≥ 1A (T)
Digital inputs 12 V DC Variable inputs in the memory carcine to the memory carcine t	Power loss	Р	W	Normally 3
Number	Heat dissipation at 24 V DC		W	3
Petential isolation Rated operational voltage	Digital inputs 12 V DC			
Rated operational voltage Rated operational voltage Ruted operational voltage Ug VCC 12 Input voltage VCC Condition 0: 55 (11 - 18) Condition 1: 2 6(1 - 18) Condition	Number			8
Input voltage Input current at signal 1 Inpu	Potential isolation			to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes
Input current at signal 1 Input current at	Rated operational voltage	U _e	V DC	12
Daceleration time Daceleration	Input voltage		V DC	
Cable length Cable length Frequency counter Note Note Note Note Rapid counter inputs Note Note Note Note Rapid counter inputs Note Note Note Note Note Note Note Note	Input current at signal 1		mA	
Frequency counter Note Note Note Note Note Note Note Note	Deceleration time		ms	
Note On this, see under Digital inputs 24 V DC Incremental counter Note Note On this, see under Digital inputs 24 V DC Repid counter inputs Note On this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this digital inputs 24 V DC Notes on this, see under Digital inputs	Cable length		m	100 (unshielded)
Incremental counter Note Note Note Note Note Note Note on this, see under Digital inputs 24 V DC Rapid counter inputs Note Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Number See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC See Under Digital inputs 24 V DC Number See Under Digital inputs 24 V DC See Unput seed as analog inputs See Under See Under Digital inputs 24 V DC See Unput seed us analog inputs See Under See Under Digital inputs 24 V DC See Unput see Unput see Unput see Unput see	Frequency counter			
Note Rapid counter inputs Note Note Note Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Number Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC Notes on this, see under Digital inputs 24 V DC 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Note			Notes on this, see under Digital inputs 24 V DC
Rapid counter inputs Notes on this, see under Digital inputs 24 V DC Digital inputs 24 V DC Number 8 Inputs can be used as analog inputs 4 (15, 16, 17, 18) Potential isolation from power supply: no to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes to expansion devices: yes Rated operational voltage V DC 24 Input voltage V DC 25 (11 - 18) Input current at signal 1 mA 3.3 (11 - 14) 1.8 (15 - 18) Deceleration time mB 20 (0 - 3/17 - 0, Debounce ON) type 0.015 (0 - 3/17 - 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter MR 4 (11, 12, 13, 14) Number 4 (11, 12, 13, 14) 4 (11, 12, 13, 14) Counter frequency KHz ≤ 5 Square Pulse shape Pulse shape Square 1:1	Incremental counter			
Note Digital inputs 24 V DC Number Inputs can be used as analog inputs Potential isolation Potential voltage Input current at signal 1 Deceleration time Deceleration time Number Number Number Notes on this, see under Digital inputs 24 V DC 8 4 (15, 16, 17, 18) from power supply: no to the memory card: no to the mory card: no to the memory card: no to the mory card: no t	Note			Notes on this, see under Digital inputs 24 V DC
Digital inputs 24 V DC Number 8 4 (15, 16, 17, 18) Inputs can be used as analog inputs 4 (15, 16, 17, 18) Potential isolation 5 (17, 18) Rated operational voltage 9 (24) Input voltage 9 (24) Input current at signal 1 7 (25, 16, 17, 18) Input current at signal 1 8 (25, 16, 17, 18) Deceleration time 9 (25, 16, 17, 18) Deceleration time 9 (25, 16, 17, 18) Base (10, 12, 13, 14) 1 (15, 18, 18, 18, 18, 18, 18, 18, 18, 18, 18	Rapid counter inputs			
Number 8 Inputs can be used as analog inputs 4 (IIS, I6, I7, I8) Potential isolation from power supply: no to the memory card: no to Ethernet; yes between inputs: no from the outputs: yes to expansion devices: yes Rated operational voltage Ue V DC 24 Input voltage V DC Signal 0: \$5 (I1 - I8) Condition 1: \$15 (II - I8) Condition 1: \$15 (II - I8) Input current at signal 1 mA 3.3 (I1 - I4) 1.8 (I5 - I8) Deceleration time mB 20 (0 -> 1/1 -> 0, Debounce ON) type 0.015 (0 -> 1/1 -> 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter MINDER 4 (II, I2, I3, I4) Counter frequency KHZ \$5 Pulse shape Square Square Pulse pause ratio 1:1	Note			Notes on this, see under Digital inputs 24 V DC
Inputs can be used as analog inputs 4 (15, 16, 17, 18) Potential isolation from power supply: no to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes Rated operational voltage Ue V DC 24 Input voltage V DC Signal 0: ≤ 5 (11 - 18) Condition 1: ≥ 15 (11 - 18) Input current at signal 1 mA 3.3 (11 - 14) 1.8 (15 - 18) Deceleration time ms 20 (0 > 1/1 > 0, Debounce ON) type 0.015 (0 > 1/1 > 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter 4 (11, 12, 13, 14) Number 4 (11, 12, 13, 14) Counter frequency KHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Digital inputs 24 V DC			
Potential isolation from power supply: no to the memory card: no to the thermory between the memory card: no to the memory card: no to the thermory card: no to the memory card: no to the thermory card: no to the memory card: no to expansion devices: yes	Number			8
to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes to expansion devices: yes Rated operational voltage Ue VDC Signal 0: ≤ 5 (11 - 18) Condition 1: ≥ 15 (11 - 18) Input current at signal 1 mA 3.3 (11 - 14) 1.8 (15 - 18) Deceleration time ms 20 (0 -> 1/1 -> 0, Debounce ON) type 0.015 (0 -> 1/1 -> 0, Debounce OFF) Cable length Frequency counter Number Counter frequency Pulse shape Pulse pause ratio to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes to expansion devices: yes VDC Signal 0: ≤ 5 (11 - 18) Condition 1: ≥ 15 (11 - 18) Nondition 1: ≥ 15 (11 - 18) MA 3.3 (11 - 14) 1.8 (15 - 18) Pulse pause ratio	Inputs can be used as analog inputs			4 (15, 16, 17, 18)
Input voltage V DC Signal 0: ≤ 5 (11 - 18) Condition 1: ≥ 15 (11 - 18) Input current at signal 1 mA 3.3 (11 - 14) 1.8 (15 - 18) Deceleration time ms 20 (0 -> 1/1 -> 0, Debounce ON) type 0.015 (0 -> 1/1 -> 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter 4 (11, 12, 13, 14) Number 4 (11, 12, 13, 14) Counter frequency kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1				to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes
Input current at signal 1 mA 3.3 (11 – 14) 1.8 (15 – 18) Deceleration time ms 20 (0 -> 1/1 -> 0, Debounce ON) type 0.015 (0 -> 1/1 -> 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter 4 (11, 12, 13, 14) Number 4 (11, 12, 13, 14) Counter frequency kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Rated operational voltage	U _e	V DC	24
Deceleration time 1.8 (I5 – I8) Deceleration time 20 (0 -> 1/1 -> 0, Debounce ON) type 0.015 (0 -> 1/1 -> 0, Debounce OFF) Cable length m 100 (unshielded) Frequency counter 4 (I1, I2, I3, I4) Number 4 (I1, I2, I3, I4) Counter frequency KHZ ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Input voltage		V DC	
Cable length m 100 (unshielded) Frequency counter 4 (11, 12, 13, 14) Number kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Input current at signal 1		mA	
Frequency counter 4 (I1, I2, I3, I4) Number 4 (I1, I2, I3, I4) Counter frequency kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Deceleration time		ms	
Number 4 (11, 12, 13, 14) Counter frequency kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Cable length		m	100 (unshielded)
Counter frequency kHz ≤ 5 Pulse shape Square Pulse pause ratio 1:1	Frequency counter			
Pulse shape Square Pulse pause ratio 1:1	Number			4 (11, 12, 13, 14)
Pulse pause ratio 1:1	Counter frequency		kHz	≦ 5
Pulse pause ratio	Pulse shape			Square
	Pulse pause ratio			
	Cable length		m	≤ 20 (screened)
Incremental counter				

Number of counter inputs			2 (11 + 12, 13 + 14)
Value range			-2147483648 to +2147483647
Counter frequency		kHz	≤ 5
Pulse shape			Square
Signal offset			90°
Pulse pause ratio			1:1
Cable length		m	≤ 20 (screened)
Rapid counter inputs			
Number			4 (11, 12, 13, 14)
Value range			-2147483648 to +2147483647
Counter frequency		kHz	≦ 10
Pulse shape			Square
Pulse pause ratio			1:1
Cable length		m	≤ 20 (screened)
Digital inputs 24 V AC			
Number			8
Potential isolation			from power supply: no to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes to expansion devices: yes
Rated operational voltage	U _e	V AC	24
Input voltage (AC = sinusoidal)	U _e	V	Status 0: ≦ 5 (I1 - I8) Condition 1: ≧ 14 (I1 - I8)
Rated frequency		Hz	50/60
Input current at signal 1		mA	11 - 14: 3.5 (at 24 VAC/DC) 15 - 18: 1.8 (at 24 VAC/DC)
Deceleration time		ms	45/38 (0 -> 1/1 -> 0, debounce ON 50/60Hz) type 25/21 (0 -> 1/1 -> 0, debounce OFF 50/60Hz)
Cable length		m	40 (unshielded)
Analog inputs			
Number			4 (15, 16, 17, 18)
Potential isolation			from power supply: no to the memory card: no to Ethernet: yes between inputs: no from the outputs: yes to expansion devices: yes
Input type			DC voltage
Signal range			0-10 V DC
Resolution			12 Bit (value 0 - 4095)
Input impedance		kΩ	13.3
Accuracy of actual value			
two devices from series		%	± 3 , ± 0.12 V
Within a single device		%	± 2, ± 0.12 V
Conversion time, analog/digital		ms	each CPU cycle
Input current		mA	<1
Cable length		m	≤ 30, screened
Relay outputs			
Number			4
Outputs in groups of			1
Parallel switching of outputs for increased output			Not allowed
Protection of an output relay Potential isolation			Miniature circuit-breaker B16 or slow-blow 8 A fuse Safe isolation according to EN 50178: 300 V AC Basic isolation: 600 V AC from power supply: yes From the inputs: yes between outputs: yes to Ethernet: yes to expansion devices: yes
			to expansion devices. Yes
Contacts			to expansion devices. Yes
Contacts Conventional thermal current (10 A UL)		A	8

Rated impulse with stand voltage \boldsymbol{U}_{imp} of contact coil		kV	6
Rated operational voltage	U _e	V AC	240
Rated insulation voltage	U_{i}	V AC	240
Safe isolation according to EN 50178		V AC	300 between coil and contact 300 between two contacts
Making capacity			
AC15, 250 V AC, 3 A (600 ops./h)	Operations		300000
DC-13, L/R ≤ 150 ms, 24 V DC, 1 A (500 S/h)	Operations		200000
Breaking capacity			
AC-15, 250 V AC, 3 A (600 Ops./h)	Operations		300000
DC-13, L/R ≤ 150 ms, 24 V DC, 1 A (500 S/h)	Operations		200000
Filament bulb load			
1000 W at 230/240 V AC	Operations		25000
500 W at 115/120 V AC	Operations		25000
Fluorescent lamp load			
Fluorescent lamp load 10 x 58 W at 230/240 V AC			
With upstream electrical device	Operations		25000
Uncompensated	Operations		25000
Fluorescent lamp load 1 x 58 W at 230/240 V AC, conventional, compensated	Operations		25000
Switching frequency			
Mechanical operations		x 10 ⁶	10
Switching frequency		Hz	10
Resistive load/lamp load		Hz	2
Inductive load		Hz	0.5
UL/CSA			
Uninterrupted current at 240 V AC		Α	10
Uninterrupted current at 24 V DC		Α	8
AC			
Control Circuit Rating Codes (utilization category)			B 300 Light Pilot Duty
Max. rated operational voltage		V AC	300
max. thermal continuous current cos ϕ = 1 at B 300		Α	5
max. make/break cos φ ≠ capacity 1 at B 300		VA	3600/360
DC			
Control Circuit Rating Codes (utilization category)			R 300 Light Pilot Duty
Max. rated operational voltage		V DC	300
Max. thermal uninterrupted current at R 300		Α	1
Max. make/break capacity at R 300		VA	28/28
Ethernet			
Data transfer rate		Mbit/s	10/100

Design verification as per IEC/EN 61439

Connections

Cable

Technical data for design verification			
Static heat dissipation, non-current-dependent	P_{vs}	W	3
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
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.

RJ45 plug, 8-pin

CAT5

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

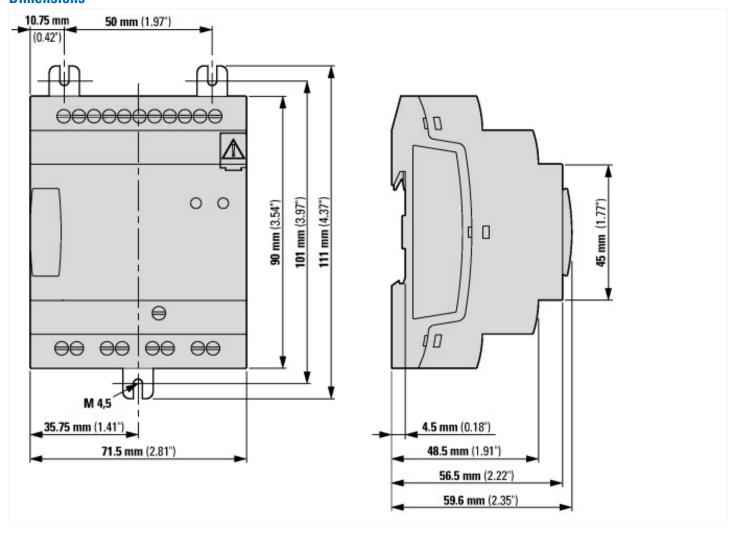
PLC's (EG000024) / Logic module (EC001417)				
Electric engineering, automation, process control engineering / Control / Programm	nable logic control (SI	PS) / Logic module (ecl@ss10.0.1-27-24-22-16 [AKE539014])		
Supply voltage AC 50 Hz	V	20.4 - 28.8		
Supply voltage AC 60 Hz	V	20.4 - 28.8		
Supply voltage DC	V	10.2 - 28.8		
Voltage type of supply voltage		AC/DC		
Switching current	Α	8		
Number of analogue inputs		4		
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		0		
Number of HW-interfaces parallel		0		
Number of HW-interfaces Wireless		0		
Number of HW-interfaces other		1		
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 SSRDOS No Supporting protocol for Foundation Ideblus No Supporting protocol for Foundation Ideblus No Supporting protocol for Foundation Interflucts Safety No Supporting protocol for Interflucts-Safety No Supporting protocol for INTERIUS-Safety No Supporting protocol for Interflucts-Safety No Supporting protocol for INTERIUS-Safety No Supporting protocol for INTERIUS-Safety No Supporting protocol for SafetyBUSP No Radio standard Bustooch No Radio standard Bustooch No Radio standard WALN MUZ11 No Radio standard WALN MUZ14 No Radio standard WALN MUZ15 No Radio standard WALN MUZ14 No Radio standard WALN MUZ14 No Redundancy No Redundancy No Redundancy No Redundancy No Redundancy No Redundancy Yes Redundancy Yes Redundancy			
Supporting protocol for AS-Interface Salety at Work No Supporting protocol for AS-Interface Salety at Work No Supporting protocol for AS-Interface Salety at Work No Supporting protocol for NITERBUS-Safety No Supporting protocol for SafetyBUS PARISHAM No Supporting protocol for SafetyBUS PARISHAM No Radio standard Blutooth No Radio standard Blutooth No Radio standard SM No Radio standard SM No Radio standard SM No Radio standard UMTS No In Interstar No Redundancy No Multi risplay No Degree of protection (IP) No Basic reckee Yes Expandable Yes Brain in unriting pessible Yes With time Yes Rail mounting pessible Yes Wall mounting/intert mounting Yes Front build in possible No Rack-casembly possible No Category according to EN 964-1	Supporting protocol for SERCOS		No
Supporting protocol for Devise American Safety 1 No Supporting protocol for Devise American Safety No Supporting protocol for Devise American Safety No Supporting protocol for PDFIstate No Supporting protocol for PDFIstate No Supporting protocol for Devis systems No Radio standard Blustood No Radio standard SUAMA M02.11 No Redio standard SUAMA M02.11 No Reside standar	Supporting protocol for Foundation Fieldbus		No
Supporting protocol for PoliceNet Safety Na Supporting protocol for INTERBUS: Safety No Supporting protocol for PoliceNet No Supporting protocol for PoliceNet No Supporting protocol for PoliceNet No Supporting protocol for Coller bus systems No Redic standard Blustooth No Redic standard WLAN 882.11 No Redic standard GPRS No Redic standard UMTS No Redic standard MUTS No Redic standard UMTS No No International Collection (IP) No Redict standard Muth No Supporting protocol of retail (IP) No Redict standard MLAN 88.21 No Supporting protocol of retail (IP) No Supporting protocol (IP) Yes Supporting protocol (IP) Yes Supporting protocol (IP) Yes Supporting protocol (IP)	Supporting protocol for EtherNet/IP		No
Supporting protocol for NTERBUS Saluty Mo Supporting protocol for PROFISES No Supporting protocol for SafetyBUS p No Supporting protocol for Orther bus systems No Radio standard Blustooth No Radio standard Blustooth No Radio standard DRS No Radio standard DRS No Radio standard UMTS No Rodundard UMTS No Rodundard PMS No Rodundard UMTS No Rodundard PMS No Rodundard UMTS No Rodundard PM No Rodundard UMTS No Rodundard PM No Rodundard PM No Rodundard PM No Supporting protocol for Articles No Rodundard UMTS No <	Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for PROFISEGE No Supporting protocol for SafeyBUS p No Supporting protocol for other bus systems No Radio standard WLAN 80211 No Radio standard WLAN 80211 No Radio standard GSM No Radio standard GMTS No Radio standard GMTS No Redict standard JMTS No Suppose Standard Standard JMTS No Redict standard JMTS No Suppose Standard Standard JMTS No Reserved Standard Standard JMTS No Will timer Yes Rall mounting for stall functions Yes Subble for safety functions Yes	Supporting protocol for DeviceNet Safety		No
Supporting protocol for stratySUS p 6 6 7 8 7 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	Supporting protocol for INTERBUS-Safety		No
Supporting protocol for other bus systems 6 6 70 Radio standard Bluetooth 6 70 70 Radio standard WAN 802.11 6 70 70 Radio standard GSM 70 70 70 Radio standard UMTS 70 70 70 Redundancy 70 70 70 Redundancy 70 70 70 Redundancy 70 70 70 Redundancy 70 70 70 With display 70 70 70 Basic device 10 70 70 Expandable 10 70 70 Expandable 70 70 70 Bail mounting possible 70 70 70 Will mounting/direct mounting 70 70 70 Recassably possible 70 70 70 Subseparation for select functions 70 70 70 Subseparation for select functions 70	Supporting protocol for PROFIsafe		No
Radio standard Buetooth Image: Comment of the Comment of Standard GPRS Image:	Supporting protocol for SafetyBUS p		No
Radio standard WLAN 802.11 No Radio standard GPRS No Radio standard GSM No Radio standard UMTS No 10 link master No With display No Beaded adevice No Expandable Po Expandable No Expandable No Expandable No Expandable No Expandable No Expandable No With timer No Rail mounting possible Yes Wall mounting/direct mounting Yes Fort build in possible Yes Rack-assembly possible No Suitable for safety functions Yes Suitable for safety functions No State-assembly possible No Student operation agent [Ex in) No Appendant operation agent [Ex in) No Appendant operation agent [Ex in) No Appendant operation agent [Ex in) No Explosions afty category for	Supporting protocol for other bus systems		No
Radio standard GPRS No Radio standard SMM No Radio standard UMTS No 10 link master No Redundancy No With display No Degree of protection (IP) IP20 Basic device IP20 Expandable Yes Expandable Yes Expandable Yes Expandable Yes With timer Yes Rail mounting forestable Yes Wall mounting direct mounting Yes Rack-assembly possible No Rack-assembly possible No Rack-assembly possible No Rack-assembly possible No Stateble for safety functions Yes Stateble for safety functions Yes Stateble for safety functions Yes Appendant operation agent (Ex ia) None Appendant operation agent (Ex ia) None Appendant operation agent (Ex ia) None Explosion safety category for dust None	Radio standard Bluetooth		No
Radio standard GSM No Radio standard UMTS No 10 link master No Redundancy No With display No Use per eo f protection (IP) P20 Basic davice Yes Expandable Yes Expandable Yes With timer Yes Rail mounting possible Yes Wall mounting/direct mounting Yes Vall mounting/direct mounting Yes Suitable for safety functions Yes Suitable for safety for safety No Suitabl	Radio standard WLAN 802.11		No
Radio standard UMTS No 10 link master No Redundancy No With display No Degree of protection (IP) 120 Basic device 122 Expandable 123 Expandable 124 Expandable 126 Expandable 126 Expandable 126 Expandable 126 Expandable 126 Expandable 128 Wall mounting/direct mounting 128 Forth build in possible 128 Suitable for safety functions 129 Suitable for safety functions 129 Stategory according t	Radio standard GPRS		No
IO link master No Redundancy No With display No 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 Rack-assembly possible Yes Rack-assembly possible No Suitable for safety functions Yes Catagory according to EN 954-1 No SIL according to EN 954-1 None SIL according to EN 954-1 None SIL according to EN 954-1 None Appendant operation agent (Ex ia) None Appendant operation agent (Ex ia) No Appendant operation agent (Ex ia) None Explosion safety category for gas None Explosion safety category for dust None Width None Explosion safety category for dust None Width None Appendant operation a	Radio standard GSM		No
Redundancy No With display No 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 No Stl according to EC 61508 No Performance level acc. EN ISO 13849-1 No Appendant operation agent (Ex ia) No Appendant operation agent (Ex ia) No Explosion safety category for gas No Explosion safety category for dust No Width No	Radio standard UMTS		No
With display No 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 Yes Suitable for safety functions Yes Category according to EN 954-1 No SIL according to IEC 61508 None Performance level acc. EN ISO 13849-1 None Appendant operation agent (Ex ia) No Appendant operation agent (Ex ia) No Explosion safety category for gas None Explosion safety category for dust None Width None None <td>10 link master</td> <td></td> <td>No</td>	10 link master		No
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 Yes Suitable for safety functions Yes Category according to EN 954-1 No SIL according to EC 61508 None Performance level acc. EN ISO 13849-1 None Appendant operation agent (Ex ia) No Appendant operation agent (Ex ia) No Appendant operation agent (Ex ia) No Explosion safety category for gas No Explosion safety category for dust None Width None Width None Height None Width None Width None Width None Width None Width None Width	Redundancy		No
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ExpandableYesExpansion deviceNoWith timerYesRail mounting possibleYesWall mounting/direct mountingYesFront build in possibleYesRack-assembly possibleNoSuitable for safety functionsNoCategory according to EN 954-1NoneSIL according to IEC 61508NonePerformance level acc. EN ISO 13849-1NoneAppendant operation agent (Ex ia)NoAppendant operation agent (Ex ib)NoExplosion safety category for gasNoneExplosion safety category for dustNoneWidthmm71.5Heightmm90	Degree of protection (IP)		IP20
Expansion device With timer Rail mounting possible Wall mounting/direct mounting Front build in possible Rack-assembly possible Rack-assembly possible Ruck-assembly possible No Category according to EN 954-1 SIL according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Ruck-assembly possible No Ruck-assembly possible No Appendant operation agent (Ex ib) Ruck-assembly possible No Ruck-assembly possible No None Rydith Minum 71.5 Height	Basic device		Yes
With timer Rail mounting possible Wall mounting/direct mounting Front build in possible Rack-assembly possible Rack-assembly possible Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width Height Min mm Min go Yes Yes Yes No No No No No No No No No N	Expandable		Yes
Rail mounting possible Wall mounting/direct mounting Front build in possible Rack-assembly possible Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) No Explosion safety category for gas Explosion safety category for dust Width mm 71.5 Height	Expansion device		No
Wall mounting/direct mounting Front build in possible Rack-assembly possible Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width Height Yes Yes Yes Yes No No No No No No None None None None N	With timer		Yes
Front build in possible 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 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for dust Width Height Yes No	Rail mounting possible		Yes
Rack-assembly possible Suitable for safety functions No Category according to EN 954-1 None SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width Height No No None None None None None None None None None None None None None None None None None None None None None None None	Wall mounting/direct mounting		Yes
Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas None Explosion safety category for dust Width Midth Mi	Front build in possible		Yes
Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width Mone Width mm 71.5 Height None	Rack-assembly possible		No
SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width Mone Width mm 71.5 Height None	Suitable for safety functions		No
Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 71.5 Height None None None None 90	Category according to EN 954-1		None
Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 71.5 Height No No None	SIL according to IEC 61508		None
Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 71.5 Height No None None None 90	Performance level acc. EN ISO 13849-1		None
Explosion safety category for gas Explosion safety category for dust Width mm 71.5 Height None	Appendant operation agent (Ex ia)		No
Explosion safety category for dust Width mm 71.5 Height mm 90	Appendant operation agent (Ex ib)		No
Width mm 71.5 Height mm 90	Explosion safety category for gas		None
Height mm 90	Explosion safety category for dust		None
	Width	mm	71.5
Depth mm 58	Height	mm	90
	Depth	mm	58

Approvals

UL File No.	E205091
UL Category Control No.	NRAQ/7
North America Certification	UL listed
Degree of Protection	IEC: IP20, UL/CSA Type: -

Dimensions



Additional product information (links)

f1=1454&f2=1174&f3=1755;Download Software easySoft V7	http://applications.eaton.eu/sdlc?LX=11&
Product overview (WEB)	http://www.eaton.eu/easyE4