



Control relay, 100-240VAC, 8DI, 4DO relays, time



Powering Business Worldwide™

Part no. **EASY512-AC-RCX**
 Article no. **274105**
 Catalog No.

Delivery programme

Product range
 Basic function
 Description

Control relays easyRelay
 easy500
 Stand alone
 customized laser inscription or delivery
 with user program possible with EASY-
 COMBINATION-* product (article No.
 2010781)

Inputs
 Digital input count
 Digital

digital: 8
 8

Outputs
 Type
 Quantity of outputs
 Outputs

Number

Relay
 Relays: 4
 4

Additional features
 Display
 Supply voltage
 Software

without display, without keypad
 100 - 240 V AC
 EASY-SOFT-BASIC/-PRO

Approvals

Product Standards

IEC/EN see Technical Data; UL 508; CSA C22.2 No. 142-M1987; CSA C22.2 No. 213-M1987; CE marking
 E135462
 NRAQ
 012528
 2252-01 + 2258-02
 UL listed, CSA certified
 IEC: IP20, UL/CSA Type: -
 BV
 DNV
 GL
 LR

UL File No.
 UL Category Control No.
 CSA File No.
 CSA Class No.
 North America Certification
 Degree of Protection
 shipping classification



General

Standards

		EN 55011, EN 55022, IEC/EN 61000-4, IEC 60068-2-6, IEC 60068-2-27
Dimensions (W x H x D)	mm	71.5 x 90 x 58 (4 PE)
Weight	kg	0.2
Mounting		Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)

Terminal capacities

Solid

	mm ²	0.2/4 (AWG 22 - 12)
Flexible with ferrule	mm ²	0.2/2.5 (AWG 22 - 12)
Standard screwdriver	mm	3.5 x 0.8
Max. tightening torque	Nm	0.6

Climatic environmental conditions

Operating ambient temperature

	°C	In accordance with IEC 60068-2-1, -25 - +55
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Condensation

		Take appropriate measures to prevent condensation
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Storage

θ	°C	-40 - +70
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relative humidity

	%	in accordance with IEC 60068-2-30, IEC 60068-2-78 5 - 95
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Air pressure (operation)

	hPa	795 - 1080
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Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)

		IP20
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Vibrations

Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms
Drop to IEC/EN 60068-2-31

Free fall, packaged (IEC/EN 60068-2-32)

Mounting position

Electromagnetic compatibility (EMC)

Overvoltage category/pollution degree

Electrostatic discharge (ESD)

applied standard

Air discharge

Contact discharge

Electromagnetic fields (RFI) to IEC EN 61000-4-3

Radio interference suppression

Burst

power pulses (Surge)

Immunity to line-conducted interference to (IEC/EN 61000-4-6)

Insulation resistance

Clearance in air and creepage distances

Insulation resistance

Back-up of real-time clock

Back-up of real-time clock

Accuracy of real-time clock to inputs

Repetition accuracy of timing relays

Accuracy of timing relays (of values)

Resolution

Range "S"

Range "M:S"

Range "H:M"

Retentive memory

Write cycles of the retentive memory

Power supply

Rated operational voltage

Permissible range

Frequency

Input current

Voltage dips

Fuse

Digital inputs 115/230 V AC

Number

Status Display

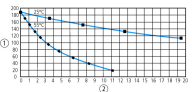
Potential isolation

Input voltage (sinusoidal)

	Hz	In accordance with IEC 60068-2-6 constant amplitude 0.15 mm: 10 - 57 constant acceleration 2 g: 57 - 150
	Impacts	18
Drop height	mm	50
	m	1
		Vertical or horizontal


		III/2
		according to IEC EN 61000-4-2
	kV	8
	kV	6
	V/m	10
		EN 55011 Class B, EN 55022 Class B
	kV	according to IEC/EN 61000-4-4 Supply cables: 2 Signal cables: 2
		according to IEC/EN 61000-4-5 2 kV (supply cables, symmetrical)
	V	10

		EN 50178, UL 508, CSA C22.2, No. 142
		EN 50178

		
		<p>① Backup time (hours) with fully charged double layer capacitor</p> <p>② Service life (years)</p>
	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

	%	± 1
	ms	10
	s	1
	min	1



		1000000 (10 ⁶)
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U _e	V	100/110/115/120/230/240 AC (-15/+10%)
U _e		85 - 264 V AC
	Hz	50/60 (± 5%)
		normally 40 mA at 115/120 V AC 60 Hz normally 20 mA at 230/240 V AC 50 Hz
	ms	≤ In accordance with IEC 61131-2 ≤ 20
	A	 1A (T)

		8
		LCD-Display
		from power supply: no between digital inputs: no from the outputs: yes to interface/memory card: no
U _e	V AC	Signal 0: 0 - 40 Signal 1: 79 - 264

Rated frequency	Hz	50 - 60
Input current at signal 1	mA	I1 - I6: 6 x 0.25 (at 115 V AC, 60 Hz) I7, I8: 2 x 4 (at 115 V AC, 60 Hz) I1 - I6: 6 x 0.5 (at 230 V AC, 50 Hz) I7, I8: 2 x 6 (at 230 V AC, 50 Hz)
Deceleration time	ms	80/66% (0 -> 1/1 -> 0, debounce ON 50/60Hz, I1 - I6, I9 - I12, R1 - R12) 20/16% (0 -> 1/1 -> 0, debounce OFF 50/60Hz, I1 - I6, I9 - I12, R1 - R12) 160/150 (1 -> 0, debounce ON 50/60Hz, I7, I8) 100/100 (1 -> 0, Debounce OFF 50/60Hz, I7, I8) 80/66% (0 -> 1, debounce ON 50/60Hz, I7, I8) 20/16% (0 -> 1, debounce OFF 50/60Hz, I7, I8)
Cable length	m	Normally 40 I1 to I6 (max. permissible per input) Normally 100 I7, I8 (max. permissible per input)

Relay outputs

Number		4
Outputs in groups of		1
Parallel switching of outputs for increased output		Not permissible
Protection of an output relay		Miniature circuit-breaker B16 or fuse 8 A (slow)
Potential isolation		from power supply: yes From the inputs: yes Safe isolation according to EN 50178: 300 V AC Basic isolation: 600 V AC
Lifespan, mechanical	Operations	x 10 ⁶ 10
Contacts		
Conventional thermal current (10 A UL)	A	8
Recommended for load: 12 V AC/DC	mA	> 500
Short-circuit-proof $\cos \varphi = 1$, characteristic B16 at 600 A	A	16
Short-circuit-proof $\cos \varphi = 0.5$ to 0.7, characteristic B16 at 900 A	A	16
Rated impulse withstand voltage U_{imp} of contact coil	kV	6
Rated operational voltage	U_e	V AC 250
Rated insulation voltage	U_i	V AC 250
Safe isolation according to EN 50178	V AC	300 between coil and contact 300 between two contacts
Making 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
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	A	10
Uninterrupted current at 24 V DC	A	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	A	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	A	1
Max. make/break capacity at R 300	VA	28/28

Technical data ETIM 5.0

PLC's (EG000024) / Logic module (EC001417)

Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / Logic module (ecI@ss8-27-24-22-16 [AKE539010])

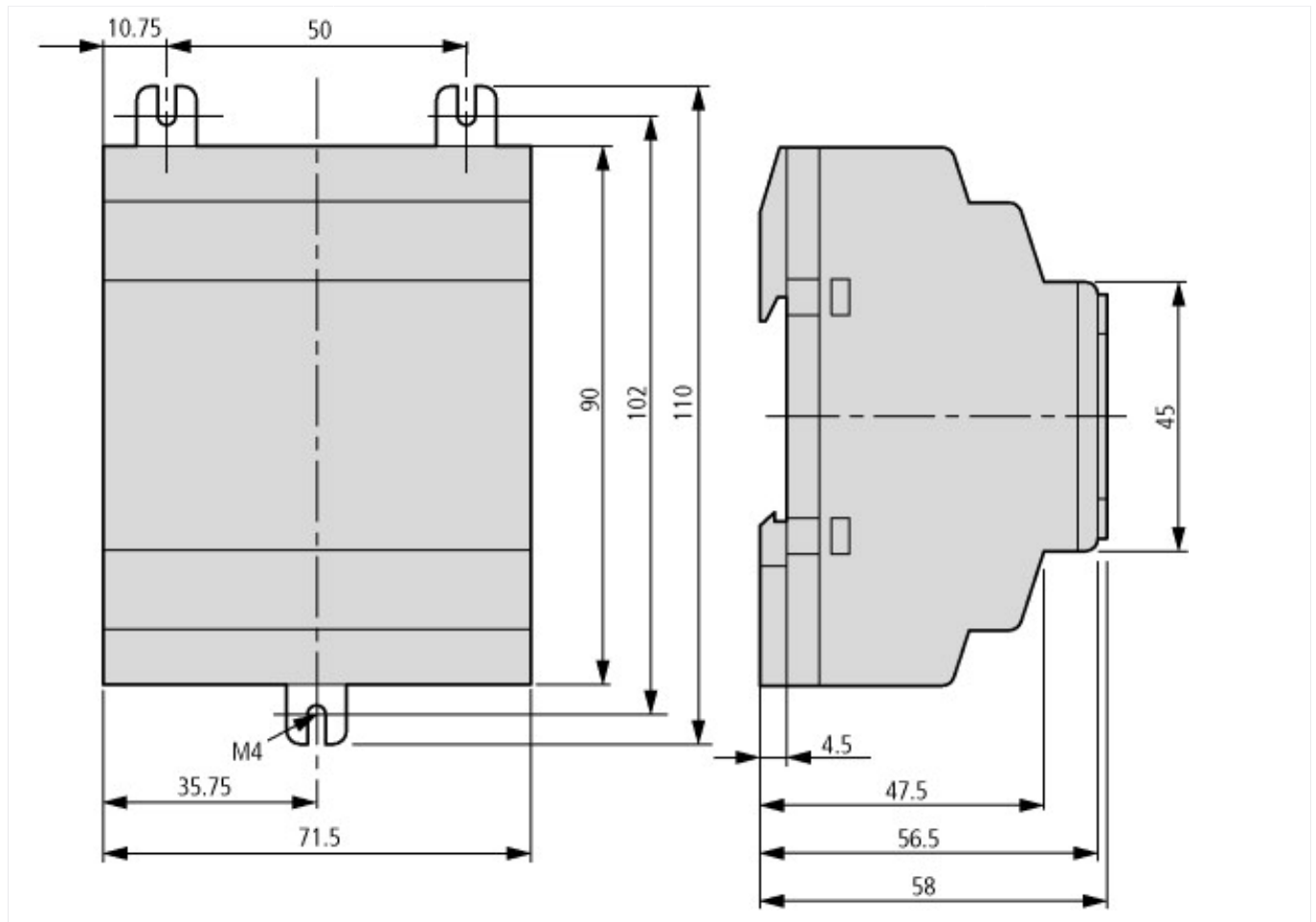
Supply voltage AC 50 Hz	V	85 - 264
Supply voltage AC 60 Hz	V	85 - 264
Supply voltage DC	V	0 - 0
Voltage type of supply voltage		AC
Switching current	A	8
Number of analogue inputs		0
Number of analogue outputs		0
Number of digital inputs		8
Number of digital outputs		4
With relay output		Yes
Number of HW-interfaces industrial Ethernet		0
Number of HW-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		No
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		No
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		No
Safety at Work		
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
Radiostandard Bluetooth		No
Radiostandard WLAN 802.11		No
Radiostandard GPRS		No
Radiostandard GSM		No
Radiostandard UMTS		No
IO link master		No
Redundancy		No
With display		No
Degree of protection (IP)		IP20
Basic device		Yes
Expandable		No
Expansion device		No
With timer		No
Rail mounting possible		Yes
Wall mounting/direct mounting		Yes
Front build in possible		No
Rack-assembly possible		No
Suited for safety functions		No
Category according to EN 954-1		-
SIL according to IEC 61508		0
Performance level acc. to EN ISO 13849-1		-
Appendant operation agent (Ex ia)		No
Appendant operation agent (Ex ib)		No
Explosion safety category for gas		None

Explosion safety category for dust
 Width
 Height
 Depth

mm
 mm
 mm

None
 72
 90
 60

Dimensions



Additional product information (links)

IL05013015Z (AWA2528-2105) Control relay easy

IL05013015Z (AWA2528-2105) Control relay easy

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05013015Z2010_11.pdf

MN05013003Z-EN (AWB2528-1508) control relay easy500, easy700

MN05013003Z-DE (AWB2528-1508)
 Steuerrelais easy500, easy700 -
 Deutsch

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05013003Z_DE.pdf

MN05013003Z-EN (AWB2528-1508)
 control relay easy500, easy700 -
 English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05013003Z_EN.pdf

Labeleditor

<http://downloadcenter.moeller.net/de/software.f6023a63-5acb-42c7-a51c-ccf99091cace>