



24V DC, control relay, relay

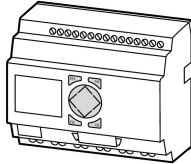


Powering Business Worldwide™

Part no.
Article no.

EASY719-DC-RC
274119

Delivery programme

			
Product range			Control relays easyRelay
Basic function			easy700 (expandable)
Description			erweiterbar: Digital-Ein-/Ausgänge, Bussysteme AS-Interface, PROFIBUS-DP, CANopen®, DeviceNet Customized laser inscription or delivery with user program possible with EASY-COMBINATION-* product (article No. 257823)
Inputs			
Digital input count			digital: 12 digital: 12; of which can be used as analog: 4
Digital			12
of which can be used as analog			4
Outputs			
Type			Relay
Quantity of outputs			Relays: 6
Outputs		Number	6
Additional features			
Display			with display, with keypad
Expansions			Expandable
Supply voltage			24 V DC
Software			EASY-SOFT-BASIC/-PRO

Approbationen

UL approval
CSA approval
Product Standards

UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Degree of Protection

Yes
Yes
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: -

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	107.5 x 90 x 58 (6 PE)
Weight		kg	0.3
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
Condensation			Take appropriate measures to prevent condensation
LCD display (clearly legible)		°C	0 - 55
Storage		°C	-40 - +70
relative humidity		%	nach IEC 60068-2-30, IEC 600068-2-78 5 - 95
Air pressure (operation)		hPa	795 - 1080

Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Vibrations		Hz	nach IEC 60068-2-6 konstante Amplitude 0.15 mm: 10 - 57 konstante Beschleunigung 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

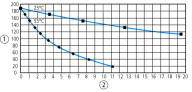
Electromagnetic compatibility (EMC)

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
Electromagnetic fields (RFI), to IEC EN 61000-4-3		V/m	10
Radio interference suppression			EN 55011 Class B, EN 55022 Class B
Burst			according to IEC/EN 61000-4-4
power pulses (Surge)			according to IEC/EN 61000-4-5 1 kV (supply cables, symmetrical)
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

Back-up of real-time clock

Back-up of real-time clock			
			<p>① Backup time (hours) with fully charged double layer capacitor</p> <p>② Service life (years)</p>
Accuracy of real-time clock to inputs		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)		%	± 0.02
Resolution			
Range "S"		ms	10
Range "M:S"		s	1
Range "H:M"		min	1

Retentive memory







Write cycles of the retentive memory			1000000 (10^6)
--------------------------------------	--	--	--------------------

Power supply


Rated operational voltage	U_e	V	24 DC (-15/+20%)
Permissible range			20.4 - 28.8 V DC
Residual ripple		%	≤ 5
Input current			normally 140 mA at U_e
Voltage dips		ms	\leq In accordance with IEC 61131-2 ≤ 10
Fuse		A	≤ 1 A (T)

Digital inputs 24 V DC

Number			12
Inputs can be used as analog inputs			4 (I7, I8, I11, I12)
Status Display			LCD-Display

Potential isolation			from power supply: no between digital inputs: no from the outputs: yes to interface/memory card: no to easyLink: no
Rated operational voltage	U _e	V DC	24
Input voltage		V DC	Signal 0:  5 (I1 - I12, R1 - R12) Signal 1:  15 (I1 - I6, I9, I10),  8 (I7, I8, I11, I12)
Input current at signal 1		mA	I1 - I6, I9, I10: 3.3 (at 24 V DC) I7, I8, I11, I12: 2.2 (at 24 V DC)
Deceleration time		ms	20 (0 -> 1/1 -> 0, Debounce ON) normally 0.25 (0 -> 1, Debounce OFF, I1 - I12)
Cable length		m	100 (unshielded)
Frequency counter			
Number			2 (I3, I4)
Counter frequency		kHz	 1
Pulse shape			Square
Pulse pause ratio			1:1
Cable length		m	 20 (screened)
Rapid counter inputs			
Number			2 (I1, I2)
Cable length		m	 20 (screened)
Counter frequency		kHz	< 1
Pulse shape			Square
Pulse pause ratio			1:1

Analog inputs

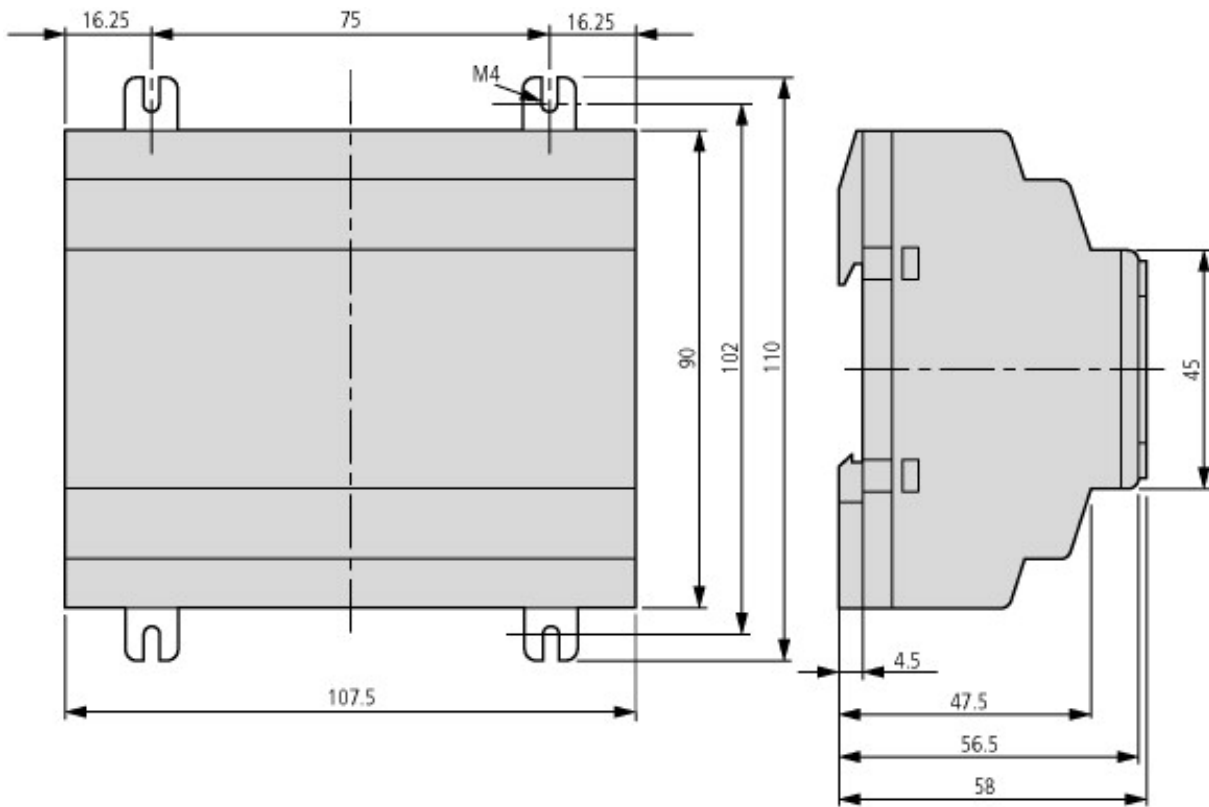
Number			4 (I7, I8, I11, I12)
Potential isolation			from power supply: no between digital inputs: no from the outputs: yes to interface/memory card: no to easyLink: no
Input type			DC voltage
Signal range			0-10 V DC
Resolution			0.01 V analog 0.01 V digital 10 Bit (value 0 - 1023)
Input impedance		kΩ	11.2
Accuracy of actual value			
Two EASY devices		%	± 3
Within a single device		%	± 2, (I7, I8, I11, I12) ± 0.12 V
Conversion time, analog/digital		ms	Input delay ON: 20; Input delay OFF: each cycle time
Input current		mA	< 1
Cable length		m	 30, screened

Relay outputs

Number			6
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 φ = 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 \leq 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 \leq 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		$\times 10^6$	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 $\cos \varphi = 1$ at B 300		A	5
max. make/break $\cos \varphi \neq$ 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

Dimensions



6

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

ftp://ftp.moeller.net/MFD/EASY-SOFT-PRO/labeleditor_206.exe