

Type: **EASY512-DC-RCX**  
 Article No.: **274110**



**Ordering information**

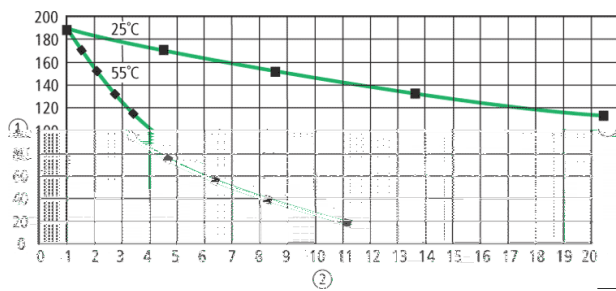
Relay outputs		Quantity	4
Power supply		V DC	24 V DC

**Description**

- 8 digital inputs (2 inputs available as analog inputs)
- 4 relay outputs
- Screw terminals
- Timer

**Notes concerning the product group**

Backup of real-time clock (only for appropriate devices)



① Backup time (hours)

② Operating time (years)

<b>General</b>			
Standards			EN 55011, EN 55022, IEC/EN 61000-4, IEC 60068-2-6, IEC 60068-2-27
Dimensions (W × H × D)		mm	71.5 × 90 × 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)
<b>Terminal capacities</b>			
Solid		mm <sup>2</sup>	0.24 (AWG 22 – 12)
Flexible with ferrule		mm <sup>2</sup>	0.22.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8
Max. tightening torque		Nm	0,6
<b>Climatic environmental conditions</b>			
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
LCD display (clearly legible)		° C	055
Storage		° C	-40/+70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95
Air pressure (operation)		hPa	795 – 1080
Corrosion resistance			
IEC/EN 60068-2-42	4 days SO <sub>2</sub>	cm <sup>3</sup> /m <sup>3</sup>	10
IEC/EN 60068-2-43	4 days H <sub>2</sub> S	cm <sup>3</sup> /m <sup>3</sup>	1
<b>Ambient conditions, mechanical</b>			
Pollution degree			2
Degree of protection (IEC/EN 60529)			IP 20
Vibrations (IEC/EN 60068-2-6)			
Constant amplitude 0.15 mm		Hz	10 – 57
Constant acceleration 2 g		Hz	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			horizontal/vertical
<b>Electromagnetic compatibility (EMC)</b>			
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)			
Air discharge		kV	8
Contact discharge		kV	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10
Radio interference suppression (EN 55011)			EN 55011 Class B, EN 55022 Class B
Burst pulses (IEC/EN 61000-4-4, level 3)			
Supply cables		kV	2
Signal lines		kV	2
High-energy pulses (surge) (IEC/EN 61000-4-5)		kV	2 (supply cables, symmetrical, EASY...AC)
High-energy pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	0.5 (supply cables, symmetrical, EASY...DC)
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10
<b>Insulation resistance</b>			
Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, no. 142
Insulation resistance			EN 50178
<b>Backup/accuracy of the real-time clock</b>			
Accuracy of the real-time clock			typ. $\pm 5$ ( $\pm 0.5$ annually)
<b>Repetition accuracy of timing relays</b>			
Accuracy of timing relays (of values)		%	$\pm 1$
Resolution			
Range "S"		ms	10
Range "M:S"		s	1
Range "H:M"		min	1
<b>Retentive memory</b>			
Write cycles of the retentive memory			1000000 ( $10^6$ )
<b>Power supply</b>			
Rated operational voltage	$U_e$	V	24 DC ( $-15/+20\%$ )
Admissible range		V DC	20,4 – 28,8
Residual ripple		%	5
Input current			

Input current 115/230 V AC		mA	Normally 80
Voltage dips (IEC/EN 61131-2)		ms	10
Heat dissipation		W	Normally 2
<b>Digital inputs 24 V DC</b>			
Number			8
Inputs can be used as analog inputs			2 (I7, I8)
Status indication			LCD-display (if present)
Potential isolation			
From power supply			No
Between digital inputs			No
From the outputs			Yes
Rated operational voltage	$U_e$	V DC	24
On 0 signal	$U_e$	V DC	< 5 (I1 – I8)
On 1 signal	$U_e$	V DC	> 15 (I1 – I6), > 8 (I7, I8)
Input current on 1 signal			
I1 to I6		mA	3.3 (at 24 V DC)
I7, I8		mA	2.2 (at 24 V DC)
Delay time from 0 to 1			
Debounce ON		ms	20
Debounce OFF		ms	Normally 0.25 (I1 – I8)
Delay time from 1 to 0			
Debounce ON		ms	20
Cable length (unscreened)		m	100
Frequency counter			
Quantity			2 (I3, I4)
Counter frequency		kHz	< 1
Pulse shape			Square
Pulse pause ratio			1:1
Rapid counter inputs			
Number			2 (I1, I2)
Counter frequency		kHz	< 1
Pulse shape			Square
Pulse pause ratio			1:1
<b>Analog inputs</b>			
Quantity			2 (I7, I8)
Potential isolation			
From power supply			No
From the digital inputs			No

From the outputs			Yes
From the PC interface, memory card NET network, EASY-Link			No
Input type			DC voltage
Signal range		V DC	0 – 10
Resolution, analog		V	0,01
Resolution, digital		V	0,01
Resolution, digital		Bit	10 (value 1 – 1023)
Input impedance		k	11,2
Accuracy of actual value			
Two EASY devices		%	± 3
Within a single device		%	± 2, ± 0.12 V
Conversion time, analog/digital		ms	Debounce ON: 20; Debounce OFF: every cycle time
Input current		mA	< 1
Cable length screened		m	< 30
<b>Relay outputs</b>			
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
From the PC interface, memory card NET network, EASY-Link			No
Safe isolation		V AC	300
Basic insulation		V AC	600
Lifespan, mechanical	Operations	× 10 <sup>6</sup>	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 φ = 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 to EN 50178 between coil and contact		V AC	300
Safe isolation to EN 50178 between 2 contacts		V AC	300
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 Ops./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 Ops./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 × 58 W at 230/240 V AC			
With upstream electrical device	Operations		25000
Uncompensated	Operations		25000
Fluorescent lamp load 1 × 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 uninterrupted current = 1 at B 300		A	5

Max. make/break capacity 1 at B 300		VA	3600360
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	2828
<b>Analog outputs</b>			
Potential isolation			
From power supply			No
From the digital inputs			No
Signal range		V DC	0 – 10
Conversion time, analog/digital		ms	Debounce ON: 20; Debounce OFF: every cycle time
<b>Notes</b>			
<b>Dimensions</b>			

---

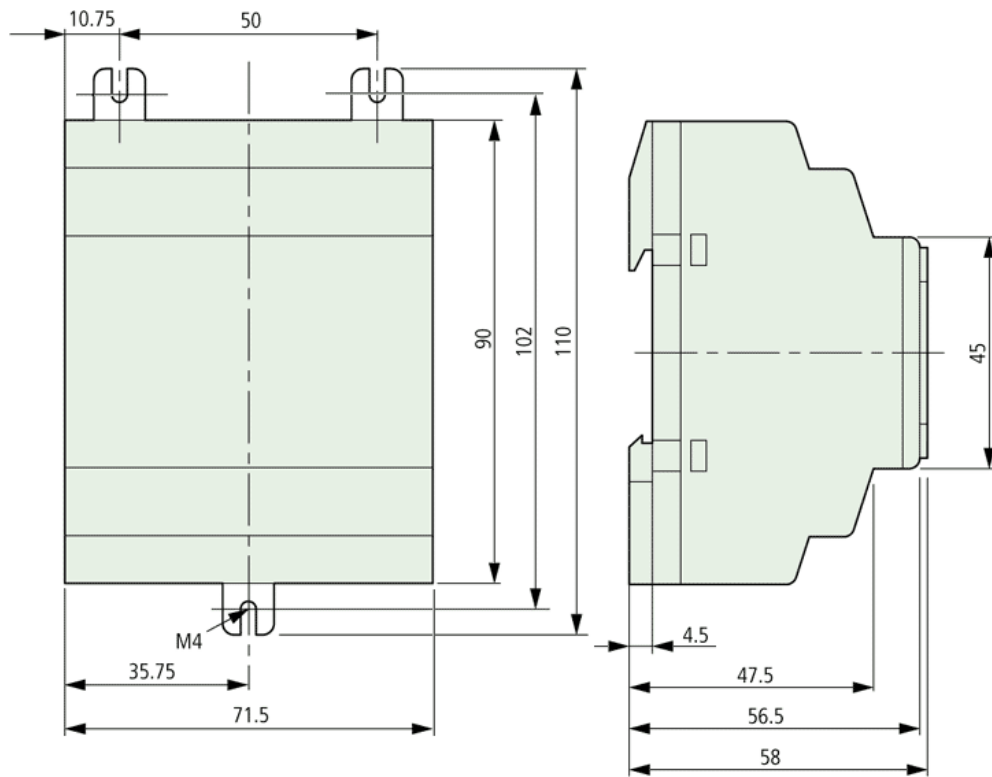
### Notes

For additional Technical Data EASY5... and EASY7... → AWB2528–1508GB,

EASY8... → AWB2528–1423D

---

### Dimensions



---

Moeller GmbH, Hein-Moeller-Str. 7-11, D-53115 Bonn  
E-Mail: [catalog@moeller.net](mailto:catalog@moeller.net), Internet: [www.moeller.net](http://www.moeller.net), <http://catalog.moeller.net>  
Copyright 2006 by Moeller GmbH. Subject to modifications. HPL-C2006GB-INT V2.3