			EASY200-EASY EASY202-RE	EASY512-...
General technical data				
Standards			EN 55011, EN 55022, EN 61000-4, IEC 60068-2-6, IEC 60068-2-27	
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 space units)	71.5 × 90 × 58 (4 space units)
Weight		kg	0.07	0.2
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)	
Terminal capacity				
Solid		mm^2	0.2/4 (AWG 22 – 12)	0.2/4 (AWG 22 – 12)
Flexible with ferrule		mm^2	0.2/2.5 (AWG 22 – 12)	0.2/2.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6
Ambient climatic conditions				
Operational ambient temperature		°C	–25/+55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2	
Condensation			Prevent condensation by means of suitable measures	
LCD display (clearly legible)		°C	0 – 55	0 – 55
Storage		°C	40 – 70	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080
Corrosion resistance				
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1	1
Ambient mechanical conditions				
Pollution degree			2	2
Degree of protection (IEC/EN 60529)			IP20	IP20
Vibrations (IEC/EN 60068-2-6)				
Constant amplitude 0.15 mm		Hz	10 – 57	10 – 57
Constant acceleration, 2 g		Hz	57 – 150	57 – 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1
Mounting position			Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)				
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)				
Air discharge		kV	8	8
Contact discharge		kV	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10	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	2
Signal lines		kV	2	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	10
Insulation resistance				
Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142	
Insulation resistance			EN 50178	EN 50178
Back-up/Accuracy of the real-time clock				
Back-up of real-time clock			–	→ Page 5
Accuracy of the real-time clock			–	Normally ± 5 (± 0.5 h/year)
Repetition accuracy of timing relays				
Accuracy of timing relays (of values)		%	–	± 1
Resolution				
Range "S"		ms	–	10
Range "M:S"		s	–	1
Range "H:M"		min	–	1
Retentive memory				
Write cycles of the retentive memory (at least)			–	1000000 (10^6)

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

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			EASY6..xEASY7...	EASY8..-...
General technical data				
Standards			EN 55011, EN 55022, EN 61000-4, IEC 60068-2-6, IEC 60068-2-27	
Dimensions (W × H × D)		mm	107.5 × 90 × 58 (6 space units)	107.5 × 90 × 72 (6 space units)
Weight		kg	0.3	0.3
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)	
Terminal capacity				
Solid		mm^2	0.2/4 (AWG 22 – 12)	0.2/4 (AWG 22 – 12)
Flexible with ferrule		mm^2	0.2/2.5 (AWG 22 – 12)	0.2/2.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6
Ambient climatic conditions				
Operational ambient temperature		°C	–25/+55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2	
Condensation			Prevent condensation by means of suitable measures	
LCD display (clearly legible)		°C	0 – 55	0 – 55
Storage		°C	40 – 70	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080
Corrosion resistance				
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1	1
Ambient mechanical conditions				
Pollution degree			2	2
Degree of protection (IEC/EN 60529)			IP20	IP20
Vibrations (IEC/EN 60068-2-6)				
Constant amplitude 0.15 mm		Hz	10 – 57	10 – 57
Constant acceleration, 2 g		Hz	57 – 150	57 – 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1
Mounting position			Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)				
Electrostatic discharge (IEC/EN 61000-4-2, severity level 3, ESD)				
Air discharge		kV	8	8
Contact discharge		kV	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10	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	2
Signal lines		kV	2	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	10
Insulation resistance				
Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142	
Insulation resistance			EN 50178	EN 50178
Back-up/Accuracy of the real-time clock (not easy600)				
Back-up of real-time clock			→ Page 5	→ Page 5
Accuracy of the real-time clock			Normally ± 5 (± 0.5 h/year)	Normally ± 5 (± 0.5 h/year)
Repetition accuracy of the timing relays (not easy600)				
Accuracy of timing relays (of values)		%	± 1	± 0.02
Resolution				
Range "S"		ms	10	5
Range "M:S"		s	1	1
Range "H:M"		min	1	1
Retentive memory				
Write cycles of the retentive memory (at least)			1000000 (10^6)	10000000 (10^{10}) (read/write cycles)

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY512-AB-...	EASY719-AB-...
Power supply				
Rated operational voltage	U_e	V	24 AC	24 AC
Admissible range		V AC	20.4 – 26.4	20.4 – 26.4
Frequency		Hz	50/60 (± 5%)	50/60 (± 5%)
Input current				
At 24 V AC 50/60 Hz		mA	Normally 200	Normally 300
Voltage dips (IEC/EN 61131-2)		ms	20	20
Power loss				
At 24 V AC		VA	Normally 5	Normally 7

			EASY512-AB-...	EASY719-AB-...
Digital inputs 24 V DC				
Quantity			8	12
Inputs can be used as analog inputs			2 (I7, I8)	4 (I7, I8, I11, I12)
Status indication			LCD display (if provided)	LCD display (if provided)
Potential isolation				
From power supply			No	No
Between digital inputs			No	No
From the outputs			Yes	Yes
Rated operational voltage	U_e	V	24 AC	24 AC
Rated voltage L (sinusoidal)				
At signal "0"		V AC	0 – 6	0 – 6
At signal "1"	U_e	V	(I7, I8) > 7 AC, > 9.5 DC (I1 - I6) 14 – 26.4 AC	(I7, I8, I11, I12) > 7 AC, > 9.5 DC (I1 - I6, I9, I10) 14 – 26.4 AC
Rated frequency		Hz	50 – 60	50 – 60
Input current at signal "1"				
I1 to I6		mA	4 (at 24 V AC, 50 Hz)	4 (at 24 V AC, 50 Hz)
I7, I8		mA	2 (at 24 V AC, 50 Hz) 2 (at 24 V DC)	2 (at 24 V AC, 50 Hz) 2 (at 24 V DC)
I9, I10		mA	–	4 (at 24 V AC, 50 Hz)
I11, I12		mA	–	2 (at 24 V AC, 50 Hz) 2 (at 24 V DC)
Delay time (0 – 1/1 – 0) I1 - I12				
Debounce ON, 50/60 Hz		ms	80/66⅔	80/66⅔
Debounce OFF, 50/60 Hz		ms	20/16⅔	20/16⅔
Max. admissible cable length (per input)				
Maximum cable length between stripped ends		m	40	40
I9, I10		m	–	Normally 40

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY512-AC-R..	EASY618-AC-RE
Power supply				
Rated operational voltage	U_e	V	100/110/115/120/230/240 AC (+10/-15 %)	100/110/115/120/230/240 AC (+10/-15 %)
Admissible range		V AC	85 – 264	85 – 264
Frequency		Hz	50/60 (± 5%)	50/60 (± 5%)
Input current				
At 115/120 V AC 60 Hz		mA	Normally 40	Normally 70
At 230/240 V AC 50 Hz		mA	Normally 20	Normally 35
Voltage dips (IEC/EN 61131-2)		ms	20	20
Power loss				
At 115/120 V AC		VA	Normally 5	Normally 10
At 115/230 V AC		VA	Normally 5	Normally 10

			EASY512-AC-R..	EASY618-AC-RE
Digital inputs 115/230 V AC				
Quantity			8	12
Status indication			LCD display (if provided)	LCD display (if provided)
Potential isolation				
From power supply			No	No
Between digital inputs			No	No
From the outputs			Yes	Yes
Rated voltage L (sinusoidal)				
At signal "0"		V AC	0 – 40	0 – 40
At signal "1"		V AC	79 – 264	79 – 264
Rated frequency		Hz	50 – 60	50 – 60
Input current at signal "1"				
R1 to R12		mA	–	12 × 0.25 (at 115 V AC, 60 Hz) 12 × 0.5 (at 230 V AC, 50 Hz)
I1 to I6		mA	6 × 0.25 (at 115 V AC, 60 Hz) 6 × 0.5 (at 230 V AC, 50 Hz)	–
I7, I8		mA	2 × 4 (at 115 V AC, 60 Hz) 2 × 6 (at 230 V AC, 50 Hz)	–
Delay time				
Delay time (0 – 1/1 – 0) I1 - I6, I9 - I12, R1 - R12				
Debounce ON, 50/60 Hz		ms	80/66⅔	80/66⅔
Debounce OFF, 50/60 Hz		ms	20/16⅔	20/16⅔
Delay time I7, I8 (1 – 0)				
Debounce ON, 50/60 Hz		ms	160/150	80/66⅔
Debounce OFF, 50/60 Hz		ms	100/100	20/16⅔
Delay time I7, I8 (0 – 1)				
Debounce ON, 50/60 Hz		ms	80/66⅔	80/66⅔
Debounce OFF, 50/60 Hz		ms	20/16⅔	20/16⅔
Max. admissible cable length (per input)				
R1 to R12		m	–	Normally 40
I1 to I6		m	Normally 40	Normally 40
I7, I8		m	Normally 100	Normally 100
I9 to I12		m	–	Normally 40

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY719-AC-...	EASY819-AC-RC.
Power supply				
Rated operational voltage	U_e	V	100/110/115/120/230/240 AC (+10/-15 %)	100/110/115/120/230/240 AC (+10/-15 %)
Admissible range		V AC	85 – 264	85 – 264
Frequency		Hz	50/60 (± 5%)	50/60 (± 5%)
Input current				
At 115/120 V AC 60 Hz		mA	Normally 70	Normally 70
At 230/240 V AC 50 Hz		mA	Normally 35	Normally 35
Voltage dips (IEC/EN 61131-2)		ms	20	20
Power loss				
At 115/120 V AC		VA	Normally 10	Normally 10
At 115/230 V AC		VA	Normally 10	Normally 10

			EASY719-AC-R..	EASY819-AC-R..
Digital inputs 115/230 V AC				
Quantity			12	12
Status indication			LCD display (if provided)	LCD display (if provided)
Potential isolation				
From power supply			No	No
Between digital inputs			No	No
From the outputs			Yes	Yes
From the PC interface, memory card NET network, EASY-Link			–	Yes
Rated voltage L (sinusoidal)				
At signal "0"		V AC	0 – 40	0 – 40
At signal "1"		V AC	79 – 264	79 – 264
Rated frequency		Hz	50 – 60	50 – 60
Input current at signal "1"				
I1 to I6		mA	6 × 0.25 (at 115 V AC, 60 Hz) 6 × 0.5 (at 230 V AC, 50 Hz)	6 × 0.25 (at 115 V AC, 60 Hz) 6 × 0.5 (at 230 V AC, 50 Hz)
I7, I8		mA	2 × 4 (at 115 V AC, 60 Hz) 2 × 6 (at 230 V AC, 50 Hz)	2 × 4 (at 115 V AC, 60 Hz) 2 × 6 (at 230 V AC, 50 Hz)
I9 to I12		mA	4 × 0.25 (at 115 V AC, 60 Hz) 4 × 0.5 (at 230 V AC, 50 Hz)	4 × 0.25 (at 115 V AC, 60 Hz) 4 × 0.5 (at 230 V AC, 50 Hz)
Delay time				
Delay time (0 – 1/1 – 0) I1 - I6, I9 - I12, R1 - R12				
Debounce ON, 50/60 Hz		ms	80/66⅔	80/66⅔
Debounce OFF, 50/60 Hz		ms	20/16⅔	20/16⅔
Delay time I7, I8 (1 – 0)				
Debounce ON, 50/60 Hz		ms	80/66⅔	120/100
Debounce OFF, 50/60 Hz		ms	20/16⅔	40/33⅓
Delay time I7, I8 (0 – 1)				
Debounce ON, 50/60 Hz		ms	80/66⅔	80/66⅔
Debounce OFF, 50/60 Hz		ms	20/16⅔	20/16⅔
Max. admissible cable length (per input)				
I1 to I6		m	Normally 40	Normally 60
I7, I8		m	Normally 100	Normally 100
I9 to I12		m	Normally 40	Normally 60

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY512-DA-...	EASY719-DA-...	EASY512-DC-...
Power supply					
Rated operational voltage	U_e	V	12 DC (-15/+30%)	12 DC (-15/+30%)	24 DC (-15/+20%)
Admissible range		V DC	10.2 – 15.6	10.2 – 15.6	20.4 – 28.8
Residual ripple		%	≦ 5	≦ 5	≦ 5
Input current					
At rated voltage		mA	Normally 140	Normally 200	Normally 80
Voltage dips (IEC/EN 61131-2)		ms	10	10	10
Power loss		W	Normally 2	Normally 3.5	Normally 2

			EASY512-DA-...	EASY719-DA-...
Digital inputs 12 V DC				
Quantity			8	12
Inputs can be used as analog inputs			(2) I7, I8	(4) I7, I8, I11, I12
Status indication			LCD display (if provided)	LCD display (if provided)
Potential isolation				
From power supply			No	No
Between digital inputs			No	No
From the outputs			Yes	Yes
Rated operational voltage	U_e	V DC	12	12
At signal "0"	U_e	V DC	4 (I1 – I8)	4 (I1 – I12)
At signal "1"	U_e	V DC	8 (I1 – I8)	8 (I1 – I12)
Input current at signal "1"				
I1 to I6		mA	3.3 (at 12 V DC)	3.3 (at 12 V DC)
I7, I8		mA	1.1 (at 12 V DC)	1.1 (at 12 V DC)
I9 to I12		mA	–	3.3 (at 12 V DC)
Delay time from 0 to 1				
Debounce ON		ms	20	20
Debounce OFF		ms	Normally 0.3 (I1 – I6), 0.35 (I7, I8)	Normally 0.3 (I1 – I6, I9, I10), 0.35 (I7, I8, I11, I12)
Delay time from 1 to 0				
Debounce ON		ms	20	20
Debounce OFF		ms	Normally 0.3 (I1 – I6), 0.15 (I7, I8)	Normally 0.4 (I1 – I6, I9, I10), 0.35 (I7, I8, I11, I12)
Cable length (unscreened)		m	100	100
Frequency counter			2 (I3, I4)	2 (I3, I4)
High-speed counter inputs			2 (I1, I2)	2 (I1, I2)
Counter frequency			< 1	< 1
Pulse shape			Square	Square
Pulse pause ratio			1:1	1:1
Cable length, screened			< 20	< 20

			EASY512-AB-..., DA, DC	EASY719-AB-..., DA, DC	EASY8..-DC-...
Analog inputs					
Quantity			2 (I7, I8)	4 (I7, I8, I11, I12)	4 (I7, I8, I11, I12)
Potential isolation					
From power supply			No	No	No
From the digital inputs			No	No	No
From the outputs			Yes	Yes	Yes
From the PC interface, memory card NET network, EASY-Link			No	No	Yes
Type of input			DC voltage	DC voltage	DC voltage
Signal range		V DC	0 – 10	0 – 10	0 – 10
Resolution, analog		V	0.01	0.01	0.01
Resolution, digital		V	0.01	0.01	0.01
Resolution, digital		Bit	10 (value 1 – 1023)	10 (value 0 – 1023)	10 (value 0 – 1023)
Input impedance		kΩ	11.2	11.2	11.2
Accuracy of actual value					
Two EASY devices		%	± 3	± 3	± 3
Within a single device		%	± 2, ± 0.12 V	± 2, ± 0.12 V	± 2
Conversion time, analog/digital		ms	Input delay ON: 20; Input delay OFF: each cycle time		Every CPU cycle
Input current		mA	< 1	< 1	< 1
Cable length screened		m	< 30	< 30	< 30

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY6..-DC-.E	EASY7..-DC-...	EASY8..-DC-...
Power supply					
Rated operational voltage	U_e	V	24 DC (-15/+20%)	24 DC (-15/+20%)	24 DC (-15/+20%)
Admissible range		V DC	20.4 – 28.8	20.4 – 28.8	20.4 – 28.8
Residual ripple		%	≦ 5	≦ 5	≦ 5
Input current					
At rated voltage		mA	Normally 140	Normally 140	Normally 140
Voltage dips (IEC/EN 61131-2)		ms	10	10	10
Power loss		W	Normally 3.4	Normally 3.5	Normally 3.4

			EASY512-DC-...	EASY6..-DC-.E	EASY7..-DC-...	EASY8..-DC-...
Digital inputs 24 V DC						
Quantity			8	12	12	12
Inputs can be used as analog inputs			2 (I7, I8)	–	4 (I7, I8, I11, I12)	4 (I7, I8, I11, I12)
Status indication			LCD display (if provided)			
Potential isolation						
From power supply			No	No	No	No
Between digital inputs			No	No	No	No
From the outputs			Yes	Yes	Yes	Yes
From the PC interface, memory card NET network, EASY-Link			–	–	–	Yes
Rated operational voltage	U_e	V DC	24	24	24	24
At signal "0"	U_e	V DC	< 5 (I1 – I8)	< 5 (I1 – I12, R1 – R12)	< 5 (I1 – I12, R1 – R12)	< 5 (I1 – I6, I9, I10) < 8 (I7, I8, I11, I12)
At signal "1"	U_e	V DC	> 15 (I1 – I6), > 8 (I7, I8)	–	> 15.0 (I1 – I6, I9, I10), > 8.0 (I7, I8, I11, I12)	> 15.0 (I1 – I6, I9, I10), > 8.0 (I7, I8, I11, I12)
Input current at signal "1"						
R1 to R12		mA	–	3.3 (at 24 V DC)	–	–
I1 to I6		mA	3.3 (at 24 V DC)	–	3.3 (at 24 V DC)	3.3 (at 24 V DC)
I7, I8		mA	2.2 (at 24 V DC)	–	2.2 (at 24 V DC)	2.2 (at 24 V DC)
I9, I10		mA	–	–	3.3 (at 24 V DC)	3.3 (at 24 V DC)
I11, I12		mA	–	–	2.2 (at 24 V DC)	2.2 (at 24 V DC)
Delay time from 0 to 1						
Debounce ON		ms	20	20	20	20
Debounce OFF		ms	Normally 0.25 (I1 – I8)	Normally 0.25 (R1 – R12)	Normally 0.25 (I1 – I12)	Normally 0.1 (I1 – I4), Normally 0.25 (I5 – I12)
Delay time from 1 to 0						
Debounce ON		ms	20	20	20	20
Debounce OFF		ms	–	–	–	Normally 0.1 (I1 – I4), Normally 0.4 (I5, I6, I9, I12), Normally 0.2 (I7, I8, I11, I12)
Cable length (unscreened)		m	100	100	100	100
Frequency counter			2 (I3, I4)	–	2 (I3, I4)	4 (I1, I2, I3, I4)
Counter frequency		kHz	< 1	–	< 1	< 5
Pulse shape			Square	–	Square	Square
Pulse pause ratio			1:1	–	1:1	1:1
Incremental counter			–	–	–	2 (I1 + I2, I3 + I4)
Counter frequency		kHz	–	–	–	< 3
Pulse shape			–	–	–	Square
Counter inputs I1 and I2, I3 and I4			–	–	–	2
Signal offset			–	–	–	90°
Pulse pause ratio			–	–	–	1:1
High-speed counter inputs			2 (I1, I2)	–	2 (I1, I2)	4 (I1, I2, I3, I4)
Counter frequency		kHz	< 1	–	< 1	< 5
Pulse shape			Square	–	Square	Square
Pulse pause ratio			1:1	–	1:1	1:1
Cable length, screened		m	–	–	–	< 20

Notes For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY202-RE	EASY512-..-R..
Relay outputs				
Quantity			2	4
Outputs in groups of			2	1
Parallel switching of outputs to increase performance			Not permissible	Not permissible
Protection of an output relay			Miniature circuit-breaker B16 or fuse 8 A (slow)	
Potential isolation				
From power supply			Yes	Yes
From the inputs			Yes	Yes
From the PC interface, memory card, NET network, EASY-Link			No	No
Safe isolation		V AC	300	300
Basic insulation		V AC	600	600
Lifespan, mechanical	Operations	× 10^6	10	10
Contacts				
Conventional thermal current (10 A UL)		A	8	8
Recommended for load: 12 V AC/DC		mA	> 500	> 500
Short-circuit proof cos φ = 1, characteristic B16 at 600 A		A	16	16
Short-circuit proof cos φ = 0.5 - 0.7; characteristic B16 at 900 A		A	16	16
Rated impulse withstand voltage U_{imp} contact to coil		kV	6	6
Rated operational voltage	U_e	V AC	250	250
Rated insulation voltage	U_i	V AC	250	250
Safe isolation to EN 50178 between coil and contact		V AC	300	300
Safe isolation to EN 50178 between 2 contacts		V AC	300	300
Making capacity				
AC–15, 250 V AC, 3 A (600 ops./h)	Operations		300000	300000
DC-13, L/R ≦ 150 ms, 24 V DC, 1 A (500 ops./h)	Operations		200000	200000
Breaking capacity				
AC–15, 250 V AC, 3 A (600 ops./h)	Operations		300000	300000
DC-13, L/R ≦ 150 ms, 24 V DC, 1 A (500 ops./h)	Operations		200000	200000
Filament bulb load				
1000 W at 230/240 V AC	Operations		25000	25000
500 W at 115/120 V AC	Operations		25000	25000
Fluorescent lamp load				
Fluorescent lamp load 10 × 58 W at 230/240 V AC				
With series-connected electrical device	Operations		25000	25000
Uncompensated	Operations		25000	25000
Fluorescent lamp load 1 × 58 W at 230/240 V AC conventionally compensated	Operations		25000	25000
Switching frequency				
Mechanical operations		× 10^6	10	10
Switching frequency		Hz	10	10
Resistive load/lamp load		Hz	2	2
Inductive load		Hz	0.5	0.5
UL/CSA				
Uninterrupted current at 240 V AC		A	10	10
Uninterrupted current at 24 V DC		A	8	8
AC				
Control circuit rating codes (utilization category)			B 300 Light Pilot Duty	B 300 Light Pilot Duty
Max. rated operational voltage		V AC	300	300
Max. uninterrupted thermal current cos φ = 1 at B 300		A	5	5
Max. make/break capacity cos φ ≠ 1 at B 300		VA	3600/360	3600/360
DC				
Control circuit rating codes (utilization category)			R 300 Light Pilot Duty	R 300 Light Pilot Duty
Max. rated operational voltage		V DC	300	300
Max. thermal uninterrupted current at R 300		A	1	1
Max. make/break capacity at R 300		VA	28/28	28/28

Notes

For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY618/719-..-R..	EASY8..-...-R...
Relay outputs				
Quantity			6	6
Outputs in groups of			1	1
Parallel switching of outputs to increase performance			Not permissible	Not permissible
Protection of an output relay			Miniature circuit-breaker B16 or fuse 8 A (slow)	Miniature circuit-breaker B16 or fuse 8 A (slow)
Potential isolation				
From power supply			Yes	Yes
From the inputs			Yes	Yes
From the PC interface, memory card, NET network, EASY-Link			No	Yes
Safe isolation		V AC	300	300
Basic insulation		V AC	600	600
Lifespan, mechanical	Operations	$\times 10^6$	10	10
Contacts				
Conventional thermal current (10 A UL)		A	8	8
Recommended for load: 12 V AC/DC		mA	> 500	> 500
Short-circuit proof cos φ = 1, characteristic B16 at 600 A		A	16	16
Short-circuit proof cos φ = 0.5 - 0.7; characteristic B16 at 900 A		A	16	16
Rated impulse withstand voltage U_{imp} contact to coil		kV	6	6
Rated operational voltage	e	V AC	250	250
Rated insulation voltage	i	V AC	250	250
Safe isolation to EN 50178 between coil and contact		V AC	300	300
Safe isolation to EN 50178 between 2 contacts		V AC	300	300
Making capacity				
AC–15, 250 V AC, 3 A (600 ops./h)	Operations		300000	300000
DC-13, L/R ≦ 150 ms, 24 V DC, 1 A (500 ops./h)	Operations		200000	200000
Breaking capacity				
AC–15, 250 V AC, 3 A (600 ops./h)	Operations		300000	300000
DC-13, L/R ≦ 150 ms, 24 V DC, 1 A (500 ops./h)	Operations		200000	200000
Filament bulb load				
1000 W at 230/240 V AC	Operations		25000	25000
500 W at 115/120 V AC	Operations		25000	25000
Fluorescent lamp load				
Fluorescent lamp load 10 × 58 W at 230/240 V AC				
With series-connected electrical device	Operations		25000	25000
Uncompensated	Operations		25000	25000
Fluorescent lamp load 1 × 58 W at 230/240 V AC conventionally compensated	Operations		25000	25000
Switching frequency				
Mechanical operations		$\times 10^6$	10	10
Switching frequency		Hz	10	10
Resistive load/lamp load		Hz	2	2
Inductive load		Hz	0.5	0.5
UL/CSA				
Uninterrupted current at 240 V AC		A	10	10
Uninterrupted current at 24 V DC		A	8	8
AC				
Control circuit rating codes (utilization category)			B 300 Light Pilot Duty	B 300 Light Pilot Duty
Max. rated operational voltage		V AC	300	300
Max. uninterrupted thermal current cos φ = 1 at B 300		A	5	5
Max. make/break capacity cos φ ≠ 1 at B 300		VA	3600/360	3600/360
DC				
Control circuit rating codes (utilization category)			R 300 Light Pilot Duty	R 300 Light Pilot Duty
Max. rated operational voltage		V DC	300	300
Max. thermal uninterrupted current at R 300		A	1	1
Max. make/break capacity at R 300		VA	28/28	28/28

Notes

For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY512-DC-T..	EASY620-DC-TE
Transistor outputs				
Quantity			4	8
Rated operational voltage [transistor outputs]	U_e	V DC	24	24
Admissible range	U_e	V DC	20.4 – 28.8	20.4 – 28.8
Residual ripple		%	≦ 5	≦ 5
Supply current				
At signal "0"	Normally/max.	mA	9/16	18/32
At signal "1"	Normally/max.	mA	12/22	24 – 44
Protection against polarity reversal			Yes (Caution: A short circuit will result if voltage is applied to the outputs in the event that the supply voltage is connected to the wrong poles.)	
Potential isolation				
From power supply			Yes	Yes
From the inputs			Yes	Yes
From the PC interface, memory card, NET network, EASY-Link			–	–
Rated operational current at signal "1" DC	I_e	A	max. 0.5	max. 0.5
Lamp load without R_v		W	5	5
Residual current at signal "0" per channel		mA	< 0.1	< 0.1
Max. output voltage				
With condition "0" at external load < 10 MΩ		V	2.5	2.5
With condition "1" at I_e = 0.5 A		V	$U = U_e$ -1 V	$U = U_e$ -1 V
Short-circuit protection			Yes, thermal (analysis via diagnostics input I16, I15; R15, R16)	
Short-circuit tripping current for R_a ≦ 10 mΩ		A	0.7 ≦ I_e ≦ 2 per output	0.7 ≦ I_e ≦ 2
Total short-circuit current		A	8	16
Peak short-circuit current		A	16	32
Thermal cutout			Yes	Yes
Max. operating frequency at constant resistive load R_L < 100 kΩ (dependent on program and load)		Ops/h	40000	40000
Parallel connection of outputs				
With resistive load, inductive load with external suppressor circuit, combination within a group			Group 1: Q1 to Q4	Group 1: S1 - S4 Group 2: S5 - S8
Number of outputs	max.		4	4
Total max. current		A	2 (Caution! Outputs must be actuated simultaneously and for the same length of time.)	
Status indication of outputs			LCD display (if provided)	LCD display (if provided)
Inductive load[1)]				
Without external suppressor circuit				
$T_{0.95}$ = 1 ms, R = 48 Ω, L = 16 mH				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
DC-13, $T_{0.95}$ = 72 ms, R = 48 Ω, L = 1.15 H				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
$T_{0.95}$ = 15 ms, R = 48 Ω, L = 0.24 H				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
With external suppressor circuit				
Utilization factor		g	1	1
Duty factor		% DF	100	100
Max. switching frequency, max. duty factor		Operations	Depending on the suppressor circuit	

Notes

1) $T_{0.95}$ = Time in ms, until 95 % of the steady-state current has been reached. $T_{0.95} \approx 3 \times T_{0.65} = 3 \times L/R$. Bus lengths greater than 40 m can only be achieved with enhanced cross-section conductors and terminal adapters.

For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

			EASY721-DC-TC.	EASY8..-DC-TC.
Transistor outputs				
Quantity			8	8
Rated operational voltage	U_e	V DC	24	24
Admissible range	U_e	V DC	20.4 – 28.8	20.4 – 28.8
Residual ripple		%	≦ 5	≦ 5
Supply current				
At signal "0"	Normally/max.	mA	18/32	18/32
At signal "1"	Normally/max.	mA	24 – 44	24 – 44
Protection against polarity reversal			Yes (Caution: A short circuit will result if voltage is applied to the outputs in the event that the supply voltage is connected to the wrong poles.)	
Potential isolation				
From power supply			Yes	Yes
From the inputs			Yes	Yes
From the PC interface, memory card NET network, EASY-Link			–	Yes
Rated operational current at signal "1" DC	I_e	A	max. 0.5	max. 0.5
Lamp load without R_v		W	5	3 (Q1 – Q4) 5 (Q5 – Q8)
Residual current at signal "0" per channel		mA	< 0.1	< 0.1
Max. output voltage				
With condition "0" at external load < 10 MΩ		V	2.5	2.5
With condition "1" at I_e = 0.5 A		V	$U = U_e$ -1 V	$U = U_e$ -1 V
Short-circuit protection			Yes, thermal (analysis via diagnostics input I16, I15; R15, R16)	Yes, electronic (Q1 – Q4), thermal (Q5 – Q8), (analysis via diagnostics input I16, I15)
Short-circuit tripping current for R_a ≦ 10 mΩ		A	0.7 ≦ I_e ≦ 2 per output	0.7 ≦ I_e ≦ 2 per output
Total short-circuit current		A	16	16
Peak short-circuit current		A	32	32
Thermal cutout			Yes	Yes
Max. operating frequency at constant resistive load R_L < 100 kΩ (dependent on program and load)		Ops/h	40000	40000
Parallel connection of outputs				
With resistive load, inductive load with external suppressor circuit, combination within a group			Group 1: Q1 to Q4 Group 2: Q5 - Q8	Group 1: Q1 to Q4 Group 2: Q5 - Q8
Number of outputs	max.		4	4
Total max. current		A	2 (Caution! Outputs must be actuated simultaneously and for the same length of time.)	
Status indication of outputs			LCD display (if provided)	LCD display (if provided)
Inductive load[1)]				
Without external suppressor circuit				
$T_{0.95}$ = 1 ms, R = 48 Ω, L = 16 mH				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
DC-13, $T_{0.95}$ = 72 ms, R = 48 Ω, L = 1.15 H				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
$T_{0.95}$ = 15 ms, R = 48 Ω, L = 0.24 H				
Utilization factor		g	0.25	0.25
Duty factor		% DF	100	100
Max. operating frequency f = 0.5 Hz (max. DF = 50 %)		Operations	1500	1500
With external suppressor circuit				
Utilization factor		g	1	1
Duty factor		% DF	100	100
Max. switching frequency, max. duty factor		Operations	Depending on the suppressor circuit	

Notes

[1)] $T_{0.95}$ = Time in ms, until 95 % of the steady-state current has been reached. $T_{0.95} \approx 3 \times T_{0.65} = 3 \times L/R$.
Bus lengths greater than 40 m can only be achieved with enhanced cross-section conductors and terminal adapters.

For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

		EASY820-DC-RC(X) EASY822-DC-TC(X)
Analog outputs		
Quantity		1
Potential isolation		
From power supply		No
From the digital inputs		No
From the digital outputs		Yes
From the PC interface, memory card NET network, EASY-Link		Yes
Type of output		DC voltage
Signal range	V DC	0 – 10
Max. output current	A	0.01
Load resistance		1 kΩ
Overload and short-circuit protection		Yes
Resolution, analog	V DC	0.01
Resolution, digital	Bit	10, (value: 0 – 1023)
Recovery time	µσ	100
Accuracy		
–25 °C to 55 °C	%	2
25 °C	%	1
Conversion time, analog/digital	ms	Every CPU cycle
Notes		For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB

		EASY8..-..-...
NET network		
Stations	Quantity	max. 8
Data transfer rate/distance		1000 KBit/s, 6 m 500 KBit/s, 25 m 250 KBit/s, 60 m 125 KBit/s, 125 m 50 KBit/s, 300 m 20 KBit/s, 700 m 10 KBit/s, 1000 m
Potential isolation		
From power supply		Yes
From the inputs		Yes
From the outputs		Yes
From the PC interface, memory card NET network, EASY-Link		Yes
Bus termination (first and last station)		Yes
Terminations		RJ45, 8-pole
Notes		For additional Technical Data EASY5... and EASY7... → AWB2528-1508GB, EASY8... → AWB2528-1423GB The following applies to data transfer rate/distance in the NET network: Bus lengths greater than 40 m can only be achieved with enhanced cross-section conductors and terminal adapters.

			EASY205-ASI	EASY204-DP
General technical data				
Standards			EN 55011, EN 55022, IEC/EN 61000-4, IEC/EN 60068-2-27, EN 50295	
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 space units)	35.5 × 90 × 58 (2 space units)
Weight		kg	0.12	0.15
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)	
Terminal capacity				
Solid		mm^2	0.2/4 (AWG 22 – 12)	0.2/4 (AWG 22 – 12)
Flexible with ferrule		mm^2	0.2/2.5 (AWG 22 – 12)	0.2/2.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6
Ambient climatic conditions				
Operational ambient temperature		°C	–25/+55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2	
Condensation			Prevent condensation by means of suitable measures	
Storage		°C	40 – 70	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080
Corrosion resistance				
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1	1
Ambient mechanical conditions				
Pollution degree			2	2
Degree of protection (IEC/EN 60529)			IP20	IP20
Vibrations (IEC/EN 60068-2-6)				
Constant amplitude 0.15 mm		Hz	10 – 57	10 – 57
Constant acceleration, 2 g		Hz	57 – 150	57 – 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1
Mounting position			Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)				
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)				
Air discharge		kV	8	8
Contact discharge		kV	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10	10
Radio interference suppression (EN 55011)			EN 55011 Class B, EN 55022 Class B	EN 55011 Class A, EN 55022 Class A
Burst pulses (IEC/EN 61000-4-4, level 3)				
AS-Interface cables		kV	2	–
Supply cables		kV	–	2
Signal lines		kV	–	2
High-energy pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	–	0.5 (supply cables, symmetrical)
Immunity to line-conducted interference (IEC/EN 61000-4-6)		V	10	10
Insulation resistance				
Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142	
Insulation resistance			EN 50178	EN 50178
Power supply				
Rated operational voltage	U_e	V	26.5 – 31.6	24 (-15/+20 %)
Admissible range		V DC	–	20.4 – 28.8
Total power consumption of the AS-Interface		mA	≦ 30	–
Residual ripple		%	–	< 5
At 24 V DC		mA	–	Normally 200
Voltage dips (IEC/EN 61131-2)		ms	–	10
Heat dissipation at 24 V DC		W	–	4.8
Protection against polarity reversal				
AS-Interface protection against polarity reversal			Yes	–
AS-Interface profile			7F (hex)	–
Slave addresses			0 – 31	–
Addressing unit interface			3.5 mm socket	–
Power supply			–	Yes

	EASY205-ASI	EASY204-DP
LED displays		
Power supply	Power: green	Power LED (POW): green
LED display	Com Error: red	LED-PROFIBUS-DP (BUS): red
Logic links		
easy700/easy800 contact and coil ↔ AS-Interface	S1 → input 0 S2 → input 1 S3 → input 2 S4 → input 3 R1 ← output 0 R2 ← output 1 R3 ← output 2 R4 ← output 3 R5 ← PARAMETEROUTPUT 0 R6 ← PARAMETEROUTPUT 1 R7 ← PARAMETEROUTPUT 2 R8 ← PARAMETEROUTPUT 3	–
PROFIBUS DP		
Terminations	–	SUB-D 9-pole, socket
Potential isolation	–	Between bus and power supply (simple), between bus and power supply and easy base unit (safe isolation)
Function	–	PROFIBUS DP slave
Interface	–	RS 485
Bus protocol	–	PROFIBUS DP
Baud rates	–	Automatic search up to 12 MBit/s
Bus terminating resistors	–	Can be connected via plug
Bus addresses	–	1 – 126, can be addressed via easy base unit with display or via EASY-SOFT
Services		
Cyclical	–	All data R1 – R16, S1 – S8
Acyclical	–	Read/write, real-time, day, summer-/winter time, all the parameters of the EASY function relay

			EASY221-CO	EASY222-DN
General technical data				
Standards			EN 55011, EN 55022, EN 61000-4, IEC 60068-2-6, IEC 60068-2-27	
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 space units)	35.5 × 90 × 58 (2 space units)
Weight		kg	0.15	0.15
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)	
Terminal capacity				
Solid		mm^2	0.2/4 (AWG 22 – 12)	0.2/4 (AWG 22 – 12)
Flexible with ferrule		mm^2	0.2/2.5 (AWG 22 – 12)	0.2/2.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6
Ambient climatic conditions				
Operational ambient temperature		°C	–25/+55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2	
Condensation			Prevent condensation by means of suitable measures	
Storage		°C	40 – 70	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080
Corrosion resistance				
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1	1
Ambient mechanical conditions				
Pollution degree			2	2
Degree of protection (IEC/EN 60529)			IP20	IP20
Vibrations (IEC/EN 60068-2-6)				
Constant amplitude 0.15 mm		Hz	10 – 57	10 – 57
Constant acceleration, 2 g		Hz	57 – 150	57 – 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1
Mounting position			Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)				
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)				
Air discharge		kV	8	8
Contact discharge		kV	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10	10
Radio interference suppression (EN 55011)			EN 55011 Class B, EN 55022 Class B	
Burst pulses (IEC/EN 61000-4-4, level 3)				
AS-Interface cables		kV	–	–
Supply cables		kV	2	2
Signal lines		kV	2	2
High-energy pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	0.5 (supply cables, symmetrical)	
Immunity to line-conducted interference (IEC/EN 61000-4-6)		V	10	10

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			EASY221-CO	EASY222-DN
Insulation resistance				
Clearance in air and creepage distances			EN 50178, UL 508, CSA C22.2, No. 142	
Insulation resistance			EN 50178	EN 50178
Power supply				
Rated operational voltage	U_e	V	24 (-15/+20 %)	24 (-15/+20 %)
Admissible range		V DC	20.4 – 28.8	20.4 – 28.8
Residual ripple		%	< 5	< 5
At 24 V DC		mA	Normally 200	Normally 200
Voltage dips (IEC/EN 61131-2)		ms	10	10
Heat dissipation at 24 V DC		W	4.8	4.8
Protection against polarity reversal				
Power supply			Yes	Yes
LED displays				
Power supply			RUN LED (RUN): green	Module status LED (MS): green
LED display			LED ERROR (ERR): red	Network status LED (NS): red/green
Network				
Terminations			RJ45	5-pole, pluggable screw terminal
Potential isolation			Between bus and power supply (simple), between bus and power supply and easy base unit (safe isolation)	Between bus and power supply (simple), between bus and power supply and easy base unit (safe isolation)
Function			CANopen slave	DeviceNet slave
Interface			CAN	CAN
Bus protocol			CANopen	DeviceNet
Baud rates			Automatic search up to 1 MBit/s	Automatic search up to 500 kBit/s
Bus terminating resistors			Separate external bus termination required (120 Ω)	Separate external bus termination required (120 Ω)
Bus addresses			1 – 127, can be addressed via easy base unit with display or via EASY-SOFT	0 – 63, can be addressed via easy base unit with display or via EASY-SOFT
Services				
Cyclical			All data R1 – R16, S1 – S8	All data R1 – R16, S1 – S8
Acyclical			Read/write, real-time, day, summer-/winter time, all the parameters of the EASY function relay	Read/write, real-time, day, summer-/winter time, all the parameters of the EASY function relay

			EASY200-POW	EASY400-POW
General technical data				
Standards			EN 55011, EN 55022, IEC/EN 61000-4..., IEC/EN 60068-2-27	
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 space units)	71.5 × 90 × 58 (4 space units)
Weight		kg	0.1	0.25
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)	
Terminal capacity				
Solid		mm^2	0.2/4 (AWG 22 – 12)	0.2/4 (AWG 22 – 12)
Flexible with ferrule		mm^2	0.2/2.5 (AWG 22 – 12)	0.2/2.5 (AWG 22 – 12)
Standard screwdriver		mm	3.5 × 0.8	3.5 × 0.8
Max. tightening torque		Nm	0.6	0.6
Ambient climatic conditions				
Operational ambient temperature		°C	–25/+55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2	
Condensation			Prevent condensation by means of suitable measures	
Storage		°C	40 – 70	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080	795 – 1080
Corrosion resistance				
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1	1
Max. installation altitude above sea level, observe derating at higher altitudes		m	2000	2000
Ambient mechanical conditions				
Pollution degree			2	2
Degree of protection (IEC/EN 60529)			IP20	IP20
Vibrations (IEC/EN 60068-2-6)				
Constant amplitude 0.15 mm		Hz	10 – 57	10 – 57
Constant acceleration, 2 g		Hz	57 – 150	57 – 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	18	18
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	1	1
Mounting position			Horizontal/vertical	Horizontal/vertical
Electromagnetic compatibility (EMC)				
Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)				
Air discharge		kV	8	8
Contact discharge		kV	6	6
Electromagnetic fields (IEC/EN 61000-4-3, RFI)		V/m	10	10
Radio interference suppression (EN 55011)			EN 50011 Class B; EN 60715 Class B, EN 50081-2 Class B	
Burst pulses (IEC/EN 61000-4-4, level 3)		kV	2	2
High-energy pulses (surge) (IEC/EN 61000-4-5)		kV	2 (supply cables, symmetrical, EASY...AC)	
High-energy pulses (surge) (IEC/EN 61 000-4-5, level 2), 24 V		kV	0,5 (output cables, symmetrical)	
Immunity to line-conducted interference (IEC/EN 61000-4-6)		V	10	10
Surge voltage (EN 50178), 24 V		kV	6	6
Insulation resistance				
Clearance in air and creepage distances			EN 50178	EN 50178
Insulation resistance			EN 50178	EN 50178
Protection class U_{out} against U_{in}			Class II to IEC 60536	Class II to IEC 60536
Potential isolation primary/secondary			Yes, SELV (VDE 0100 Part 410; IEC 60364-4-41, HD 384.4.41 S2) EN 60950	
Input voltage				
Rated input voltage AC		V	100/120/230/240 (–15/+10 %)	100/120/230/240 (–15/+10 %)
Protective switches AC			FAZ-C1/1 or FAZ-B6/1	FAZ-C2/1 or FAZ-B6/1
Rated input voltage DC		V	85 – 265	85 – 265
DC protective switches			FAZ-C2/1-DC	FAZ-C2/1-DC
Voltage range		V AC	85 – 264	85 – 264
Frequency range		Hz	47 – 63	47 – 63
Power failure bridging 115/230 V		ms	> 10/> 20	> 10/> 20
Fuse 115/230 V		A	1.5 slow	2/1 slow

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		EASY200-POW	EASY400-POW
Rating data			
Efficiency	%	> 81	> 87
Power consumption	W	Normally 7	Normally 35
Power loss	W	Normally 1	Normally 5
Input current			
Rated input current value 115/230 V AC	A	Approx. 0.17/0.05	Approx. 0.3/0.15
Inrush current at 25 °C 230 V	A	< 5	< 5
Output voltage			
12 V DC (reference voltage)			
Rated value	V DC	12	–
Tolerance	%	± 4	–
Switching peaks	mV_{SS}	< 7	–
Effect of input voltage	%	± 1	–
Effect with 25 – 100 % load change	%	± 1	–
24 V DC			
Rated value	V DC	24	24
Tolerance	%	± 3	± 5
Switching peaks 115/230	mV_{SS}	< 50/30	< 5
Effect of input voltage	%	± 1	± 1
Effect with 25 – 100 % load change	%	± 1	± 2
Output current			
12 V DC (reference voltage)			
Output current	mA	0 – 20	–
Effectiveness of current limitation	mA	20	–
Reduction of output voltage after current limitation	V	< 12	–
Overload proof		Yes, by current limitation permanently short-circuit proof	–
Proof against sustained short circuit		Yes	–
24 V DC			
Output current	A	0 – 0.25	0 – 1.25
Effectiveness of current limitation	A	> 0.3	> 1.25
Reduction of output voltage after current limitation	V	–	< 18
Overload proof		Yes, by current limitation	Yes, by current limitation
Proof against sustained short circuit		Yes, hickup-mode	Yes, hickup mode, approx. 10 Hz
Special load conditions			
Lamp load, cold, 24 V DC	W	2	10
Base load present	W	2	5
Behaviour in the event of Emergency-Stop in 24 V circuit, switch Off using contactor (contactor load, no damage)	W	6	30
Displays			
Indication of output voltage (LED, continuous green light = OK)	V DC	24	24

			EASY256-HCI
General technical data			
Standards			EN 55011, EN 55022, IEC/EN 61000-4, IEC 60068-2-6, IEC 60068-2-27
Dimensions (W × H × D)		mm	35.5 × 90 × 58 (2 space units)
Mounting			Top-hat rail IEC/EN 60715, 35 mm or screw fixing using fixing brackets ZB4-101-GF1 (accessories)
Channels		Quantity	6
Voltage range at U_e			0 – 264
Current increase 115/230 V AC		mA	4/6
Extension of the Off-delay of each EASY input ("1" after "0") 50/60 Hz		ms	40/37
Cable length		m	100
Parallel switching of outputs to increase performance			Several possible (Off-delay extended depending on the number of parallel channels)
Kind of resistor			Capacitive
Terminal capacity			
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 × 0.8
Max. tightening torque		Nm	0.6
Ambient climatic conditions			
Operational ambient temperature		°C	-25 to 55, low temperatures to IEC 60068-2-1, high temperatures to IEC 60068-2-2
Condensation			Prevent condensation by means of suitable measures
Storage		°C	40 – 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 – 95
Atmospheric pressure (operation)		hPa	795 – 1080
Corrosion resistance			
IEC/EN 60947-2-42	4 days SO_2	cm^3/m^3	10
IEC/EN 60068-2-43	4 days H_2S	cm^3/m^3	1
Ambient mechanical conditions			
Pollution degree			2
Degree of protection (IEC/EN 60529)			IP20
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
Electromagnetic compatibility (EMC)			
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
High-energy pulses (surge) (IEC/EN 61000-4-5)		kV	2 (supply cables, symmetrical, EASY...AC)
Immunity to line-conducted interference (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