

Description



easy control relay

SIMPLY easy – Clever switching and controlling

easy is a compact, user-friendly control relay for simple control applications. Applications range from building and domestic automation to machine and plant control.

easy has built-in user-friendly operating elements and an LCD display. Just connect up easy and draw your circuit diagram on the display by pressing the buttons. easy works with make contacts, break contacts, and relays.

Enter your circuit diagram in easy just like you sketched it on paper. easy has basic and special functions for relay and contactor controls, and lots more.

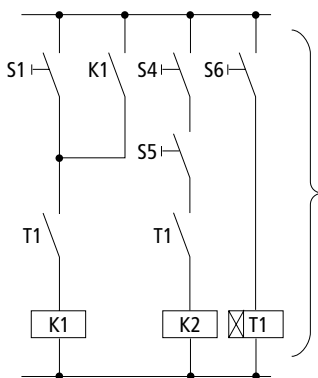
You can make changes to your circuit just by pressing the buttons. Time consuming rewiring is not necessary.

SIMPLY easy – Applications everywhere

- Building and domestic automation, controllers for lighting, doors, window shutters...
- Controls for ventilators, rotating doors, greenhouses, exterior lighting, window controllers, shop display lighting control...
- Controls for temperature, ventilation and brightness levels...
- Controls for machines and plant, presses, conveyor belts, oscillating conveyors, sorters, pumps...

SIMPLY easy – Open for change

The easy circuit diagram can be entered and modified just by pressing the buttons.



SIMPLY easy – Everything built in

(some features depend on the type)

- An LCD display for showing the circuit diagram
- Operation buttons for wiring, value entry or switching
- 4 relay outputs with max. 10 A output current or 0.5 A transistor outputs up to 2 A, suitable for parallel connection
- Circuit diagrams can be created with make contacts, break contacts, relays, series and parallel circuits
- Voltage supply (24 V DC or 115/230 V AC)
- 8/12 digital inputs, expandable to 24 digital inputs (115/230 V AC or 24 V DC)
- 2 analog inputs (DC models only, two digital inputs can also be used for analog signals)
- Non-volatile circuit diagram and parameter memory (EEPROM) (retentive data) (EEPROM)
- Display of message texts, setpoint and actual values for timers, counters, time and analog values
- Socket for external memory card or PC interface cable
- Time switch with time and weekday(s)
- DST setting (summer time/winter time change)
- Protect your circuit diagram and settings against unauthorized changes with a password to protect your know-how
- Optional debounce (input delay) function (reliable switching with fast signals)
- Selectable menu languages, 5 and 10 languages (D, GB, F, I, E, for EASY600 also P, NL, S, PL, TR)
- 4 cursor buttons can also be used as input contacts in the easy circuit diagram (built in manual operation mode)
- Local or remote expansion of inputs and outputs.
Remote expansion by means of two wire cable up to 30 m between basic unit and expansion unit
- Large ambient temperature range from $-25\text{ }^{\circ}\text{C}$ to $+55\text{ }^{\circ}\text{C}$

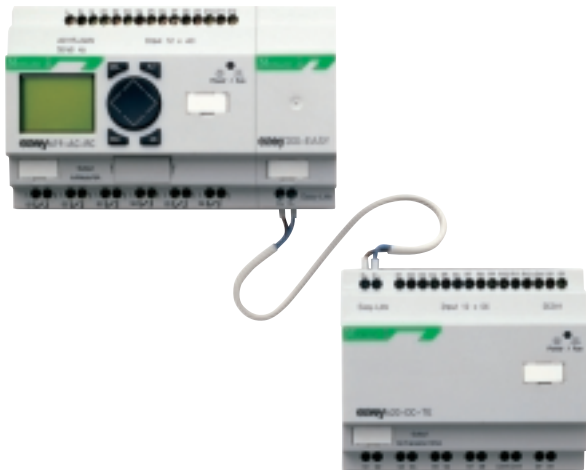
Description

SIMPLY easy – Compact and practical

easy has a 45 mm as a standard dimension (4/6 space units) for installing in standard domestic distribution panels. easy can be clipped to a top-hat rail or screwed to a mounting plate for rugged environments. easy's dimensions are 71.5 × 90 × 53 mm or 107.5 × 90 × 53 mm.

Example:

Remote coupling with EASY200-EASY to a two wire cable



Simply network

Connect easy to a data bus as simply as you can expand it.

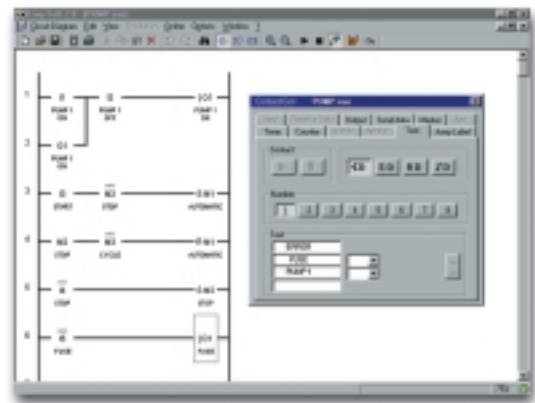
Connect the expansion unit for the AS-Interface and easy can already communicate with the bus master via the AS-Interface.

PROFIBUS-DP is just as simple. easy is always a slave on the bus.

PC software

You can also create easy programs on a PC and download them to easy with the optional PC interface cable. Create, store, simulate and document the circuit diagram offline.

Three display formats are available: DIN EN, ANSI or the easy display.



SIMPLY easy – More than 20 functions in a single device

- Interconnect make contacts and break contacts
- 3 contacts can be connected in series
- Up to 41 circuits (121 for EASY600) can be connected in parallel
- Switch relay coils
- Create switching functions such changeover switches, self-latching relays, single pulse relays, start-delta starters
- Create timing functions such as on-delayed, on-delayed with random switching, off-delayed, off-delayed with random switching, single pulse, flashing, up/down counter
- Time switch
- Compare analog values
- Output texts, setpoint and actual values
- Store retentively the actual values of timing relays, counters, markers, operating hours counters.

Simply expand

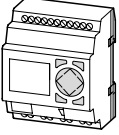
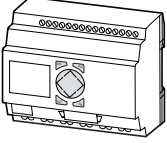
Connect the expansion unit to the basic unit using the connector to add up to 24 inputs and 16 outputs.

The coupling device enables the expansion unit to be expanded up to 30 m away.



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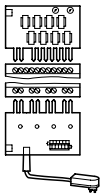
Basic Units, Expansion Units

Description		Type Article No.	Price See Price List	Std. pack	
Basic Units					
 	24 V DC, Retentive	<ul style="list-style-type: none"> • 8 digital inputs (2 inputs also usable as analog inputs) • 4 relay outputs • LCD display • Operating buttons • Screw terminals 	EASY412-DC-R 202403		1 off
		Features as per EASY 412-DC-R plus built-in time switch	EASY412-DC-RC 202404		
		Features as per EASY412-DC-RC, without keypad an LCD display	EASY412-DC-RCX 221596		
		<ul style="list-style-type: none"> • 8 digital inputs (2 inputs also usable as analog inputs) • 4 transistor outputs • LCD display • Operating buttons • Screw terminals • Time switch 	EASY412-DC-TC 207808		
		Features as per EASY412-DC-TC, without keypad an LCD display	EASY412-DC-TCX 212307		
		<ul style="list-style-type: none"> • 12 digital inputs (2 inputs also usable as analog inputs) • 8 transistor outputs • LCD display • Operating buttons • Screw terminals • Time switch 	EASY620-DC-TC 212309		
		<ul style="list-style-type: none"> • 12 digital inputs (2 inputs also usable as analog inputs) • 8 transistor outputs • LCD display • Operating buttons • Screw terminals • Time switch • Expandable with EASY.....E 	EASY621-DC-TC 218719		
		Features as per EASY621-DC-TC, without keypad an LCD display	EASY621-DC-TCX 212311		
	115/230 V AC	<ul style="list-style-type: none"> • 8 digital inputs, 115/230 V AC • 4 relay outputs • LCD display • Operating buttons • Screw terminals 	EASY412-AC-R 202405		
		Features as per EASY 412-AC-R plus built-in time switch	EASY412-AC-RC 202406		
	Features as per EASY412-AC-RC, without keypad an LCD display	EASY412-AC-RCX 212308			
115/230 V AC, Retentive	<ul style="list-style-type: none"> • 12 digital inputs, 115/230 V AC • 6 relay outputs • LCD display • Operating buttons • Screw terminals • Time switch 	EASY618-AC-RC 212310			
	<ul style="list-style-type: none"> • 12 digital inputs, 115/230 V AC • 6 relay outputs • LCD display • Operating buttons • Screw terminals • Time switch • Expandable with EASY.....E 	EASY619-AC-RC 218721			
	Features as per EASY619-AC-RC, without keypad an LCD display	EASY619-AC-RCX 212312			
Expansion units					
24 V DC	<ul style="list-style-type: none"> • 12 digital inputs • 8 transistor outputs • With connector 	EASY620-DC-TE 212313		1 off	
115/230 V AC	<ul style="list-style-type: none"> • 12 digital inputs, 115/230 V AC • 6 relay outputs • With connector 	EASY618-AC-RE 212314			
Coupling unit	<ul style="list-style-type: none"> • Coupling unit for connecting to an EASY619/621 basic unit • Terminals for remote expansion up to 30 m to the expansion unit • With connector 	EASY200-EASY 212315			

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




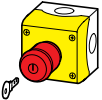

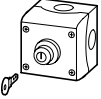






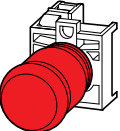




Networking, Accessories, Documentation

Description		Type Article No.	Price See Price List	Std. pack
Networking				
AS-Interface	<ul style="list-style-type: none"> • Linked directly to EASY619/621 • AS-Interface connection • Slave • 4 inputs, 4 outputs, 4 parameter bits • Addressable, 0 to 31 	EASY205-ASI 221598		1 off
PROFIBUS-DP	<ul style="list-style-type: none"> • Linked directly to EASY619/621 • PROFIBUS-DP slave 	EASY204-DP 212316		1 off
Accessories				
Software	CD, menu in 6 languages Installation WIN 95, 98, WIN NT	EASY-SOFT 202407		1 off
Memory card	8K memory card for storing the entire easy circuit diagram for EASY412	EASY-M-8K 202408		
	16K memory card for storing the entire easy circuit diagram for EASY6..	EASY-M-16 212317		
Connection cable	2 m, for connecting to 9-pin serial interface on a PC with interface electronics circuit	EASY-PC-CAB 202409		
Input/output simulator	Simulator with power supply unit, 115/230 V AC / output 24 V DC, suitable for EASY412-DC...	EASY412-DC-SIM 212318		
Fixing feet	For screw fixing on mounting plate, 3 fixing feet per EASY412, 3 fixing feet per EASY6.., 2 fixing feet per EASY200-EASY	ZB4-101-GF1 061360		9 off
Switched-mode power supply unit	Primary-switched mode, stabilised 2, suitable for parallel connection to increase power output or for redundant operation at rated power <ul style="list-style-type: none"> • Rated input voltage 50/60 HZ: 115/230 V AC • Rated output voltage (residual ripple): 24 V DC ($\pm 3\%$) • Rated output current: 1.25 A 	EASY400-POW 212319		1 off
Documentation				
Manual for easy control relay	German	AWB2528-1304-D 205375		1 off
	English	AWB2528-1304-GB 205481		
	French	AWB2528-1304-F 205482		
	Italian	AWB2528-1304-I 205483		
	Spanish	AWB2528-1304-E 205484		
Training guide for easy control relay	German	AWB2528-1316-D 205376		1 off
	English	AWB2528-1316-GB 205485		
	French	AWB2528-1316-F 205486		
	Italian	AWB2528-1316-I 205487		
	Spanish	AWB2528-1316-E 205488		



RMQ Titan

Range Selection

Button plate	Contacts M = make contact, B = break contact, ⊖ = Safety function by means of positive opening to IEC/EN 60 947-5-1	Colour Plunger	Type Article No.	Price See Price List	Std. pack
Complete units for surface mounting to IP 66					
Emergency-stop actuator, tamper-proof to ISO 13 850/EN 418 Pull to release Max. configuration: 3x M22-(C)K...					
   	1 M 1 B		M22-PV-KC11/I 216525		2 off
Key-release mushroom buttons					
With 1 key MS 1 lock mechanism					
	1 M 1 B ⊖		M22-PVS/KC11/IY 216523		2 off
Key-operated buttons					
With two keys, Two positions, stay-put MS 1 lock mechanism					
	1 M 1 B ⊖		M22-WRS/KC11/I 216526		2 off
Push-button					
Flush					
	1 B ⊖		M22-D-R-X0/K01 216510		5 off
	1 M -		M22-D-G-X1/K10 216512		5 off
Selector switch, thumb-grip black					
Stay-put/spring-return function can be changed using M22-XC-. coding adapters Two positions, stay-put					
	1 M -		M22-WRK/K10 216518		5 off
Complete units for front mounting, IP 66					
Emergency-stop actuator, tamper-proof to ISO 13 850/EN 418 Yellow base Pull to release					
  	1 B ⊖		M22-PV/K01 216515		5 off
IVS top-hat rail adapter					
Front fixing					
			M22-IVS 216400		1 off

Notes

Other products are available in the Moeller catalogue supplement, NK 1160-1033 GB

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Technical Data

	EASY200-EASY	EASY412-...	EASY6-...
General			
Standards and regulations	EN 55 011, EN 55 022, IEC/EN 61 000-4, IEC 60 068-2-6, IEC 60 068-2-27		
Dimensions	W × H × D [mm]	35.5 × 90 × 53 (2 space units)	71.5 × 90 × 53 (4 space units)
Weight	70 g	200 g	300 g
Mounting	Top-hat rail, DIN 50 022, 35 mm or screw fixing with ZB 4-101-GF1 fixing feet (accessories)		
Ambient temperature			
Operating ambient temperature	-25 to +55 °C		
Horizontal/vertical mounting	Cold to IEC 60 068-2-1 Heat to IEC 60 68-2-2		
Condensation	Prevent condensation with suitable measures		
LCD display (clearly visible)	0 to +55 °C		
Storage/transport temperature	-40 to +70 °C		
Relative humidit	5 to 95%, non-condensing (IEC 60 068-2-30)		
Air pressure (operation)	795 to 1080 hPa		
Corrosion resistance	SO ₂ 10 cm ³ /m ³ , 4 days (IEC 60 068-2-42) H ₂ S 1 cm ³ /m ³ , 4 days (IEC 60 068-2-43)		
Mechanical environmental conditions			
Pollution degree	2	2	2
Degree of protection (EN 50 178, IEC 60 529, VBG4)	IP 20	IP 20	IP 20
Oscillations (IEC 60 068-2-6)	10 to 57 Hz (constant amplitude 0.15 mm) 57 to 150 Hz (constant acceleration 2 g)		
Shock (IEC 60 068-2-27)	18 shocks (semi-sinusoidal 15 g/11 ms)		
Dropping (IEC 60 068-2-31)	Drop height 50 mm		
Free fall, in packaging (IEC 60 068-2-32)	1 m		
Electromagnetic compatibility (EMC)			
Electrostatic discharge (IEC/EN 61 000-4-2, Level 3)	8 kV air discharge 6 kV contact discharge		
Electromagnetic fields (IEC/EN 61 000-4-3)	Field strength 10 V/m		
Emitted interference, interference immunity	EN 55 011 Class B, EN 55 022 Class B		
Burst (Level 3) (IEC/EN 61 000-4-4)	Power cables	2 kV	
	Signal lines	2 kV	
High-energy pulses (surge) easy-AC (IEC/EN 61 000-4-5)	2 kV power cables symmetrical		
High-energy pulses (surge) easy-DC (IEC/EN 61 000-4-5, Level 2)	0.5 kV power cables symmetrical		
Dielectric strength			
Measurement of the air clearance and creepage distance	EN 50 178, UL 508, CSA C22.2, No 142		
Dielectric strength	EN 50 178		
Tools and cable cross-sections			
Single-core	min. 0.2 mm ² , AWG 24 max. 4 mm ² , AWG 12		
Flexible with ferrule	min. 0.2 mm ² , AWG 24 max. 2.5 mm ² , AWG 13		
Slot-head screwdriver, width	3.5 × 0.8 mm		
Tightening torque	0.5 – 0.7 Nm		
Backup/accuracy of real-time clock (only with easy-C)			
Clock battery back-up	at 25 °C	–	Normally 64 h
	at 40 °C	–	Normally 24 h
Accuracy of the real-time clock		–	Normally ± 5 s/day, ~ ± 0.5 h/year
Repetition accuracy of timing relays			
Accuracy of timing relays			± 1 % of value
Resolution	Range "s"	–	10 ms
	Range "M:S"	–	1 s
	Range "H:M"	–	1 min.
Retentive memory			
Write cycles of the retentive memory		–	≧ 100 000

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Technical Data

	EASY412-AC-...	EASY618/619-AC-RC(X) EASY618-AC-RC
Power supply		
Rated voltage (sinusoidal)	115/120/230/240 V AC +10/-15 %	100/110/115/120/230/240 V AC +10/-15
Permissible range	90 to 264 V AC	85 to 264 V AC
Frequency, rated value, tolerance	50/60 Hz, ± 5 %	50/60 Hz, ± 5 %
Input current consumption		
at 115/120 V AC 60 Hz	Normally 40 mA	Normally 70 m
at 230/240 V AC 50 Hz	Normally 20 mA	Normally 35 m
Voltage dips (IEC/EN 61 131-2)	20ms	20ms
Heat dissipation		
at 115/120 V AC	Normally 5 VA	Normally 10 VA
at 230/240 V AC	Normally 5 VA	Normally 10 VA
Power supply		
Rated voltage		
Rated value	24 V DC, -15 %, +20 %	24 V DC, -15 %, +20 %
Permissible range	20.4 to 28.8 V DC	20.4 to 28.8 V DC
Residual ripple	≤ 5 %	≤ 5 %
Input current at 24 V DC	Normally 80 mA	Normally 140 m
Voltage dips (IEC/EN 61 131-2)	10ms	10ms
Power dissipation at 24 V DC	Normally 2 W	Normally 5 W
Power supply		
Rated voltage		
Rated value	24 V DC, -15 %, +20 %	24 V DC, -15 %, +20 %
Permissible range	20.4 to 28.8 V DC	20.4 to 28.8 V DC
Residual ripple	≤ 5 %	≤ 5 %
Input current at 24 V DC	Normally 80 mA	Normally 140 m
Voltage dips (IEC/EN 61 131-2)	10ms	10ms
Power dissipation at 24 V DC	Normally 2 W	Normally 5 W
Power supply		
Rated voltage		
Rated value	24 V DC, -15 %, +20 %	24 V DC, -15 %, +20 %
Permissible range	20.4 to 28.8 V DC	20.4 to 28.8 V DC
Residual ripple	≤ 5 %	≤ 5 %
Input current at 24 V DC	Normally 80 mA	Normally 140 m
Voltage dips (IEC/EN 61 131-2)	10ms	10ms
Power dissipation at 24 V DC	Normally 2 W	Normally 5 W
Digital inputs 115/230 V AC		
Number	8	12
Status display	LCD display (if provided)	LCD display (if provided)
Electrical isolation		
To power supply	No	No
Between each other	No	No
To the outputs	Yes	Yes
Rated voltage L (sinusoidal)		
0 signal	0 to 40 V AC	0 to 40 V AC
1 signal	79 to 264 V AC	79 to 264 V AC
Rated frequency	50/60 Hz	50/60 Hz
Input current on 1 signal R1 to R12, I1 to I6 (EASY 618/619 also I9 to I12)	6 × 0.5 mA at 230 V AC 50 Hz 6 × 0.25 mA at 115 V AC 60 Hz	10 (12) × 0.5 mA at 230 V AC 50 Hz 10 (12) × 0.25 mA at 115 V AC 60 Hz
Input current on 1 signal I7, I8	2 × 6 mA at 230 V AC 50 Hz 2 × 4 mA at 115 V AC 60 Hz	2 × 6 mA at 230 V AC 50 Hz 2 × 4 mA at 115 V AC 60 Hz
Delay time for 0 to 1 and 1 to 0		
Debounce ON (I1 to I6/I12)	80 ms (50 Hz), 66⅔ ms (60 Hz)	80 ms (50 Hz), 66⅔ ms (60 Hz)
Debounce OFF (I1 to I6/I9 to I12)	20 ms (50 Hz), 16⅔ ms (60 Hz)	20 ms (50 Hz), 16⅔ ms (60 Hz)
Delay time I7, I8 for 1 to 0		
Debounce ON	160 ms (50 Hz), 150 ms (60 Hz)	80 ms (50 Hz), 66⅔ ms (60 Hz)
Debounce OFF	100 ms (50 Hz/60 Hz)	20 ms (50 Hz), 16⅔ ms (60 Hz)
Delay time I7, I8 for 0 to 1		
Debounce ON	80 ms (50 Hz), 66⅔ ms (60 Hz)	80 ms (50 Hz), 66⅔ ms (60 Hz)
Debounce OFF	20 ms (50 Hz), 16⅔ ms (60 Hz)	20 ms (50 Hz), 16⅔ ms (60 Hz)
Max. permissible cable length (per input)		
R1 to R12, I1 to I6 (with EASY 618/619 also I9 to I12)	Normally 40 m	Normally 40 m
I7, I8	Normally 100 m	Normally 100 m

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	EASY412-DC...	EASY620/621-DC-TC(X) EASY620-TC-TE
Digital inputs 24 V AC		
Number	8, 2 of which (I7,I8) can be used as analog inputs	12, 2 of which (I7,I8) can be used as analog inputs, with basic unit
Status display	LCD display (if provided)	LCD display (if provided)
Electrical isolation		
To power supply	No	No
Between each other	No	No
To the outputs	Yes	Yes
24 V DC power supply		
Rated value	24 V DC	24 V DC
0 signal	< 5.0 V DC I1 to I8	< 5.0 V DC I1 to I12, R1 to R12
1 signal	> 15.0 V DC I1 to I6	> 15.0 V DC I1 to I6, I9 to I12, R1 to R12
Input current on 1 signal R1 to R12, I1 to I6 (EASY 620/621 also I9 to I12)	3.3 mA at 24 V DC	3.3 mA at 24 V DC
Input current on 1 signal I7, I8	2.2 mA at 24 V DC	2.2 mA at 24 V DC
Delay time for 0 to 1		
Debounce ON	20 ms	20 ms
Debounce OFF	Normally 0.25 ms (I1 to I6)	Normally 0.25 ms (I1 to I6, I9 to I12)
Delay time for 1 to 0		
Debounce ON	20 ms	20 ms
Debounce OFF	Normally 0.4 ms, I1 to I6 Normally 0.2 ms I7, I8	Normally 0.4 ms I1 to I6, I9 to I12 Normally 0.2 ms I7, I8
Cable length (unshielded)	100 m	100 m

	EASY412-DC...	EASY620/621-DC-TC(X)
Analog inputs		
Number	2	2
Electrical isolation		
To power supply	No	No
To the digital inputs	No	No
To the outputs	Yes	Yes
Input type	DC voltage	DC voltage
Signal range	0 to 10 V DC	0 to 10 V DC
Resolution analog	0.1 V	0.1 V
Resolution digital	0.1	0.1
Input impedance	11.2 kΩ	11.2 kΩ
Accuracy of		
Two easy devices	± 3 % of actual value	
Within a single device	± 2 % of actual value (I7, I8), ± 0.12 V	
Conversion time, analog/digital	Debounce ON: 20 ms Debounce OFF: every cycle	
Input current	< 1 mA	
Cable length (shielded)	30 m	

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	EASY412-...-R...	EASY618/619-R...
Relay outputs		
Number	4	6
Type of outputs	Relay	
In groups of	1	
Parallel connection of outputs to increase current rating	Not permissible	
Circuit-breaker B 16 or fuse 8 AT	Miniature circuit-breaker B16 or 8 A fuse (slow)	
Potential isolation to mains supply, inputs	Yes 300 V _{eff} AC (safe isolation) 600 V _{eff} AC (Basic isolation)	
Mechanical lifespan (operations)	10 × 10 ⁶	
Contacts relays		
Conventional free air thermal current	8 A (10 A UL)	
Recommended for load	> 500 mA, 12 V AC/DC	
Short-circuit resistance cos 1	16 A characteristic B (B16) at 600 A	
Short-circuit resistance cos 0.5 to 0.7	16 A characteristic B (B16) at 900 A	
Rated impulse withstand voltage U _{imp} contact coil	6 kV	
Rated insulation voltage U _i	250 V AC	
Rated operational voltage U _e	250 V AC	
Safe isolation to EN 50 178 between coil and contact	250 V AC	
Safe isolation to EN 50 178 between two contacts	250 V _{eff}	
Making capacity		
AC-15 250 V AC, 3 A (600 Ops/h)	300 000 switching operations	
DC-13 L/R ≤ 150 ms 24 V DC, 1 A (500 Ops/h)	200 000 switching operations	
Breaking capacity		
AC-15 250 V AC, 3 A (600 Ops/h)	300 000 switching operations	
DC-13 L/R ≤ 150 ms 24 V DC, 1 A (500 Ops/h)	200 000 switching operations	
Filament lamp load		
1000 W at 230/240 V AC	25 000 switching operations	
500 W at 115/120 V AC	25 000 switching operations	
Fluorescent tube		
10 × 58 W at 230/240 V AC		
With ballast	25 000 switching operations	
Uncompensated	25 000 switching operations	
1 × 58 W at 230/240 V AC		
Conventional, compensated	25 000 switching operations	
Operating frequency, relays		
Device lifetime	10 million (10 ⁷)	
Mechanical switching frequency	10 Hz	
Resistive lamp load	2 Hz	
Inductive load	0.5 Hz	
EASY400-POW		
Input voltage	115, 230 V AC	
Range	85 to 264 V AC	
Mains frequency	50/60 Hz	
Range	47 to 63 Hz	
Output voltage (tolerance)	24 V DC (± 3%)	
Output current	1.25 A	
Overcurrent limit	From 1.4 A	
Not adversely affected by no-load operation and protected against short-circuit	Yes	
Terminals	Single-core Flexible with ferrule	
Single-core	0.2 to 4 mm ² , AWG 24 to 12	
Flexible with ferrule	0.2 to 2.5 mm ² , AWG 24 to 13	
Emitted interference, interference immunity	EN 50 081-1 Class B; 50 082-2	
Potential isolation, primary/secondary	Yes, SELV (VDE 0100 T410; IEC 364-4-41)	
Protection class	IP20	
Ambient temperature	-25 to +55°C	
Storage temperature	-40 to +70 °C	

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Technical Data

	EASY412-DC-T...	EASY620/621-DC-T...
Transistor outputs		
Number	4	8
Contacts	Semiconductors	Semiconductors
Rated voltage U_e	24 V DC	24 V DC
Permissible range	20.4 to 28.8 V DC	20.4 to 28.8 V DC
Residual ripple	$\leq 5\%$	$\leq 5\%$
Supply current		
0 signal	Normally 9 mA, max. 16 mA	Normally 18 mA, max. 32 mA
1 signal	Normally 12 mA, max. 22 mA	Normally 24 mA, max. 44 mA
Reverse polarity protection	Yes	
Potential isolation to inputs, power supply	Yes	
Rated current I_e for 1 signal	max. 0.5 A DC	
Lamp load	5 watts without R_V	
Residual current with 0 signal per channel	< 1.0 mA	
Max. output voltage		
with 0 signal with external load < 10 M Ω	2.5 V	
with 1 signal, $I_e = 0.5$ A	$U = U_e - 1$ V	
Short-circuit protection	Yes, (detected via diagnostics input I16, I15; R15; R16)	
Short-circuit tripping current for $R_a \leq 10$ m Ω	0.7 A $\leq I_e \leq 2$ A	
Max. total short-circuit current	8 A	16 A
Peak short-circuit current	16 A	32 A
Thermal cutout	Yes	Yes
Maximum operating frequency at constant resistive load $R_L < 100$ k Ω : operations per hour	40 000 (depends on circuit diagram and load)	
Parallel connection of outputs with resistive load; inductive load with external suppression circuit, combination within a group	Group 1: Q1 to Q4	Group 1: Q1 to Q4, S1 to S4 Group 2: Q5 to Q8, S5 to S8
Number of outputs	max. 4	max. 4
Total maximum current	2.0 A	
Status display of the outputs	LCD display (if provided)	LCD display (if provided)
Approvals	currently UL/CSA approved; others in preparation: EASY412-DC-R EASY412-DC-RC EASY412-DC-TC EASY412-DC-TCX EASY412-AC-R EASY412-AC-RC EASY412-AC-RX EASY620-DC-TC EASY618-AC-RC	

Notes

For more detailed technical specifications refer to technical data in AWB 2528-1304-GB

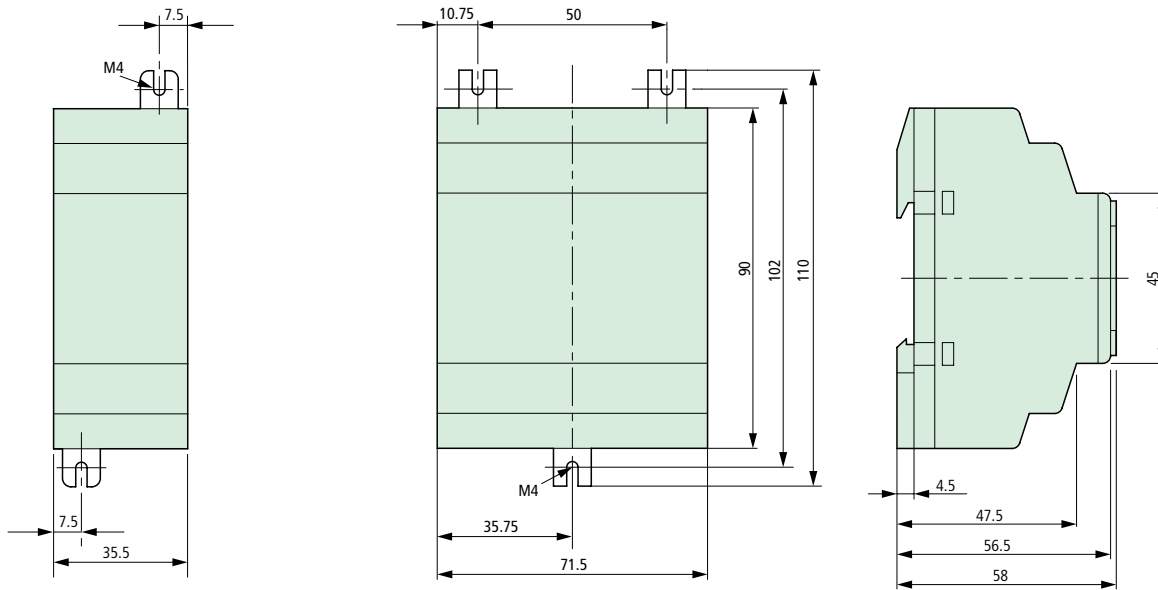
easy Control Relay

Dimensions

Control Relay

EASY200-EASY

EASY4...



EASY618-...
EASY619-...
EASY620-...
EASY621-...

