

Description

The EXR30 (Electronic eXtra Relay) special solid state relay enables ON and OFF switching of powerful loads by pressing a button. An extra switch is not required.

This special relay fits into standard automotive relay sockets to ISO 7588.

Qualifications

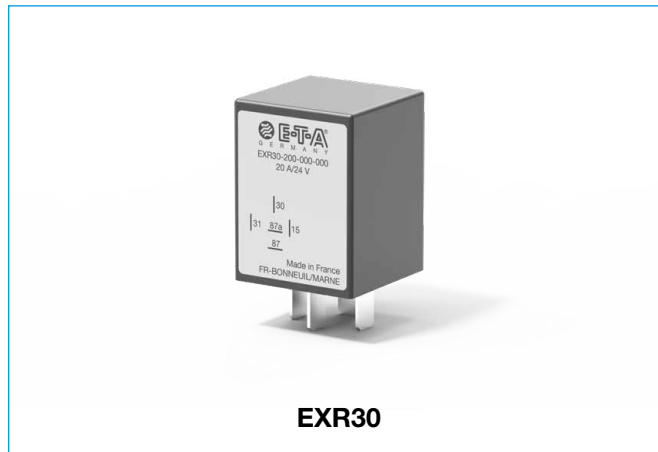
Degree of protection	IP52
Resistance to disturbances	EMC DIN 40839 95/54/EG
E1 number	Upon request

Order numbering code

Type number	
EXR30	Special relay
Operating voltage	
1	12 V
Control	
0	Positive activation
1	Negative activation
Option 1	
0	Without
Option 2	
000	Without
Option 3	
000	Without
Current ratings	
15 A	Pin assignment ALPHA
30 A	Pin assignment ALPHA
40 A	Pin assignment BETA
EX30 - 1 0 0 - 000 - 000 - 40 A	Ordering example

Order numbering code

Type number	
EXR30	Special relay
Operating voltage	
2	24 V
Control	
0	Positive activation
1	Negative activation
Option 1	
0	Without
Option 2	
000	Without
Option 3	
000	Without
Current ratings	
15 A	Pin assignment ALPHA
20 A	Pin assignment BETA
EX30 - 2 0 0 - 000 - 000 - 20 A	Ordering example



EXR30

Applications

The EXR30 special relay is available for DC 12 V and DC 24 V applications.

Scope of applications:

- Trucks and buses
- Agricultural vehicles and forestry equipment
- Construction machinery
- Special vehicles and emergency cars
- Watercraft (ships, motor yachts etc.)

Typical applications:

- The EXR30 toggle relay was developed especially for applications where loads can be switched on and off by pressing a button.

Benefits

- Buttons are much more robust in design than switches, e. g. vandal-proof buttons on bus doors. The EXR30 facilitates the handling with these components.

Technical data EXR30-100-000-000-000-15A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	15 A
Continuous current break contact (Terminal 87)	10 A
Output power at 25 °C	240 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	30 g
Inputs	
Terminal 15	9 V ... 15 V
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-110-000-000-000-15A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	15 A
Continuous current break contact (Terminal 87a)	10 A
Output power at 25 °C	240 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	30 g
Inputs	
Terminal 15	Mass
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-100-000-000-000-30A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	30 A
Continuous current break contact (Terminal 87a)	20 A
Output power at 25 °C	600 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	40 g
Inputs	
Terminal 15	9 V ... 15 V
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-110-000-000-000-30A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	30 A
Continuous current break contact (Terminal 87a)	20 A
Output power at 25 °C	600 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	40 g
Inputs	
Terminal 15	Mass
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-100-000-000-000-40A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	40 A
Continuous current break contact (Terminal 87a)	20 A
Output power at 25 °C	480 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	35 g
Inputs	
Terminal 15	9 V ... 15 V
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	No
Socket assignment different, analogue, not programmable	Yes

Technical data EXR30-110-000-000-000-40A

Rated voltage	12 V
Continuous current make contact (Terminal 87)	40 A
Continuous current break contact (Terminal 87a)	20 A
Output power at 25 °C	480 W
Operating voltage	9 V ... 15 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	35 g
Inputs	
Terminal 15	Mass
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	No
Socket assignment different, analogue, not programmable	Yes

Technical data EXR30-200-000-000-000-15A

Rated voltage	24 V
Continuous current make contact (Terminal 87)	15 A
Continuous current break contact (Terminal 87a)	10 A
Output power at 25 °C	
Operating voltage	18 V ... 32 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	30 g
Inputs	
Terminal 15	18 V ... 32 V
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-210-000-000-000-15A

Rated voltage	24 V
Continuous current make contact (Terminal 87)	15 A
Continuous current break contact (Terminal 87a)	10 A
Output power at 25 °C	
Operating voltage	18 V ... 32 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	30 g
Inputs	
Terminal 15	Mass
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	Yes
Socket assignment different, analogue, not programmable	No

Technical data EXR30-200-000-000-000-20A

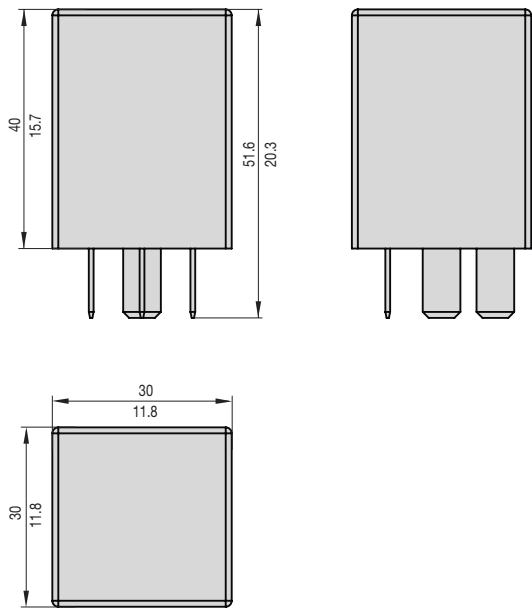
Rated voltage	24 V
Continuous current make contact (Terminal 87)	20 A
Continuous current break contact (Terminal 87a)	10 A
Output power at 25 °C	
Operating voltage	18 V ... 32 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	35 g
Inputs	
Terminal 15	18 V ... 32 V
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244-A6.3- 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	No
Socket assignment different, analogue, not programmable	Yes

Technical data EXR30-210-000-000-000-20A

Rated voltage	24 V
Continuous current make contact (Terminal 87)	20 A
Continuous current break contact (Terminal 87a)	10 A
Output power at 25 °C	
Operating voltage	18 V ... 32 V
Current consumption	10 mA ... 100 mA
Cycles with rated current	100,000
Operating temperature	-40 °C ... +85 °C
Tolerance	5 %
Mass	35 g
Inputs	
Terminal 15	Mass
Outputs	
Terminal 87	Make contact
Terminal 87a	Break contact
Terminal 30	Voltage supply
Terminal 31	Mass
Material	Blade terminals DIN 46244 – A6.3 x 0.8 CuZn 37 F37 Contact material AgSnO2 Housing material PA66-GF30
Microcontroller	No
Socket assignment different, analogue, not programmable	Yes

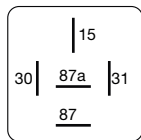
Dimensions

5 PIN

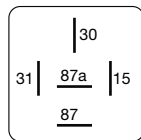


Pin assignment

ALPHA

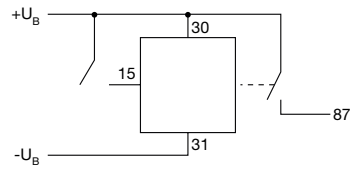


BETA

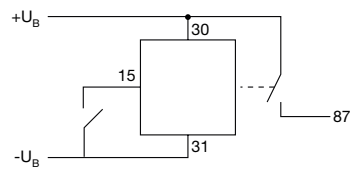


Schematic diagram / pin assignment

Positive control

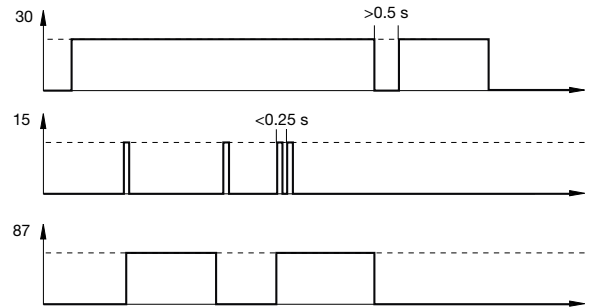


Negative control



Functional diagram

Example for positive control



All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost effectiveness. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. Dimensions, data, drawings and description are not binding! Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.