

Description

The EDX product family (electronic diverse components) bundles components that cannot be classified as classic relays, but whose functions are built into a relay housing.

The EDX20 is a voltage stabiliser in a relay enclosure. It keeps the output voltage at a constant level even if the input voltage fluctuates (step-up and step-down converter).

The output voltage can be adjusted between 9 V and 30 V with a potentiometer (screw) on the housing top. The EDX diverse component also has a green LED on the housing top. This LED is permanently lighted as long as the output voltage does not deviate more than 10% from the set value.

In addition, the EDX20 provides internal temperature monitoring. If the acceptable temperature range is exceeded, the EDX20 changes into a safe operating condition. This condition is indicated by continuous blinking of the LED.

The EDX20 is suitable for standard automotive relay sockets to ISO 7588 (ISO Mini).

Applications

The EDX20 voltage stabiliser is available for DC 12 V and DC 24 V applications.

Scope of applications:

- Trucks
- Buses
- Agricultural vehicles and forestry equipment
- Construction machinery and emergency cars

Typical applications:

- Allows the use of control units, sensors and other loads requiring a steady supply voltage. Voltages in a vehicle's on-board electrical system fluctuate quite strongly, e.g. radio.

Benefits

- Easy and quick solution for critical voltage fluctuations. Only a free relay slot is required on the power distribution board.

Qualifications

Degree of protection	IP 52
Housing material	PA6GF
Blade terminals	DIN 46244 – A6.3 x 0.8 DIN 46244 – A2.8x0.8 CuZn 37 F37



Technical data 25 °C

Voltage ratings	12 V/ 24 V		
Operating voltage	9 V ... 30 V		
Outputs			
Description	open collector		
Pin C	yes >100 mA		
Pin 87	no	9V...30 V	max. 2 A (± 5%)
Continuous duty < 5 min.	max. 2.5 A input <=> output: ± 2 V		
Continuous duty > 1 hr	max. 2.0 A input <=> output: ± 2 V		
Input			
Pin 15	Digital In	9 V ... 30 V	
Power supply			
Pin 30	9 V ... 30 V		
Pin 31	ground		
Pin 87a	ground		
Operating temperature	-40° C ... +85° C		
Mass	> 40 g		

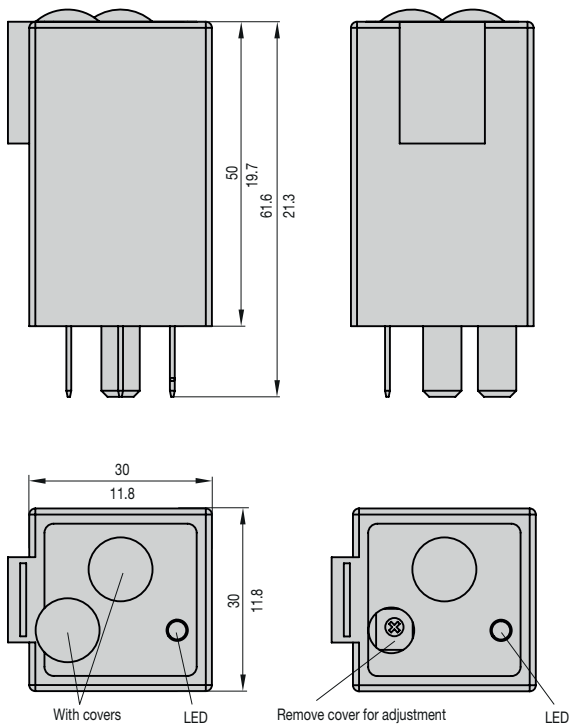
Ordering information

Type no.	EDX20	special relay
Operating voltage	3	12 V/24 V
Function / control	1	Voltage regulation / type A
Low voltage monitoring	0	no
	1	yes (switching threshold 11 V)
	2	yes (switching threshold 18 V)
Signal output	0	no
	1	yes
Option 1	0	step up and step down
	1	step up only
	2	step down only
Option 2	0	without
Option 3	000	none
Rated current	2 A (max. $\pm 2\text{ V } U_{in} / U_{out}$)	

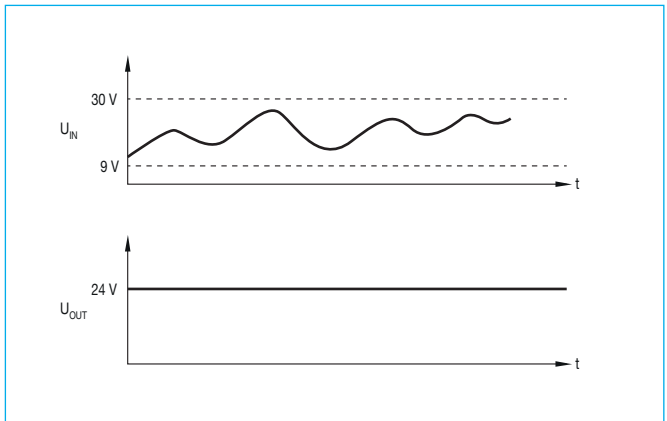
EDX20 - 3 1 0 - 0 0 0 - 000 - 2 A ordering example

Dimensions

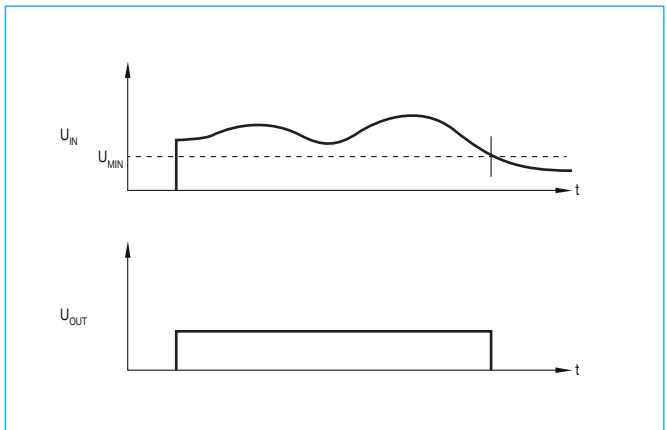
6 PIN



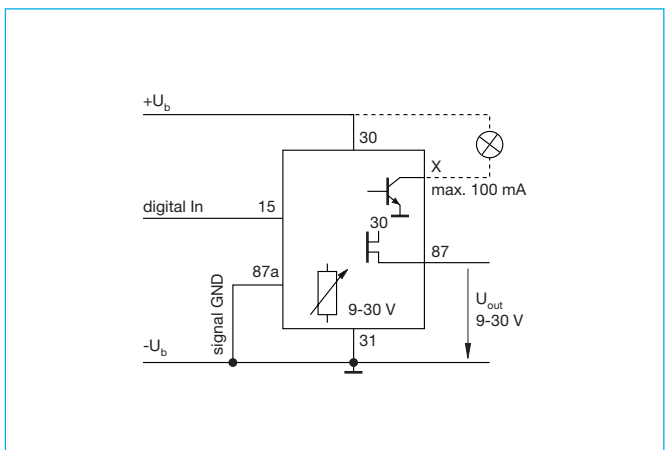
Voltage regulation



Low voltage detection and disconnection



Schematic diagrams / pin assignment



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. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.

5