

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



EDX20

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

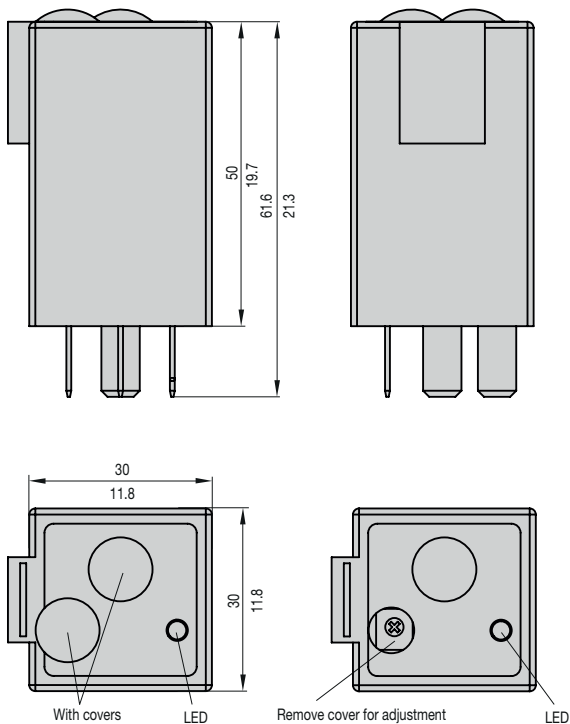
Ordering information

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. $\pm 2\text{ V } U_{in} / U_{out}$)	

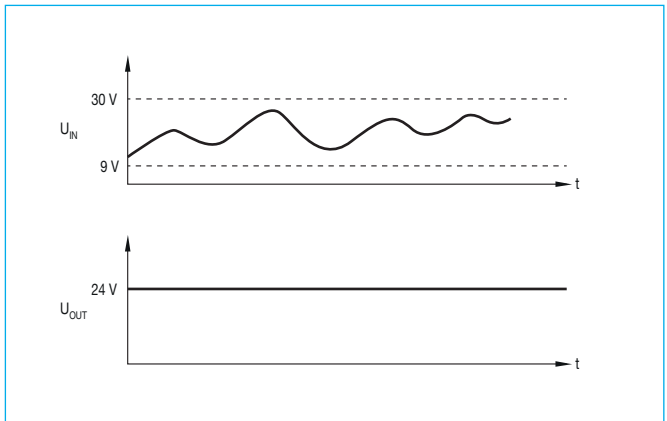
EDX20 - 3 1 0 - 0 0 0 - 000 - 2 A ordering example

Dimensions

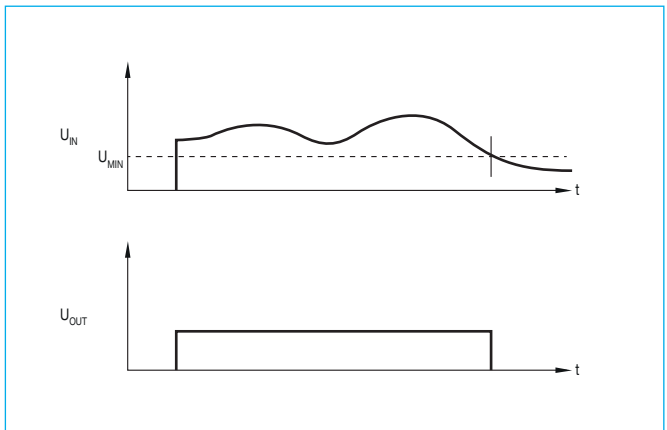
6 PIN



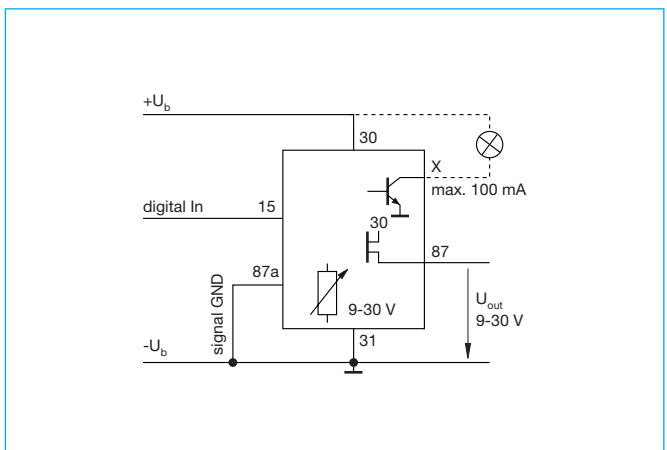
Voltage regulation



Low voltage detection and disconnection



Schematic diagrams / pin assignment



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