



BZ 897T

Minimum voltage Relay 24VDC

B+Z Art.Nr. 654
(Available in level-1 or level-2)

According to standard EN 50155

Electronic devices in rolling stock



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Application / function

Application

Electronic voltage relay for use in DC environment usually for monitoring the battery voltage.
The device has three switching thresholds which are factory set.
This device is available with settings as variant -1 or -2.

Function

This minimum voltage relay detects three voltage thresholds that can be set in a defined range using the internal potentiometers. 2 changeover contacts are always activated at the upper switching threshold. The one contact changes at the mean threshold, the other contact switches at the lower threshold. From the factory, the values specified on the device are preset, but are otherwise adjustable on request.

Technical data

Type designation: **BZ897T 24V**

• Standards

The product is manufactured in accordance with the following standards:

ISO 9001:2015

Electronic equipment used on rolling stock: EN50155

Electromagnetic compatibility: EN50121-3-2

Isolation: EN50124-1

Shock and vibration: EN50155/EN61373

Fire protection according to EN 45545

The standards applicable to this product are dependent on the version available at the time of development.

Electrical data

• Operating voltage

Nominal input voltage : 24VDC (+25% -30%)

Current : ca. 35mA (both relays activated)
ca. 10mA (both relays not active)

• Output contact load

Two independent potential-free change-over contacts: 6A / 250VAC

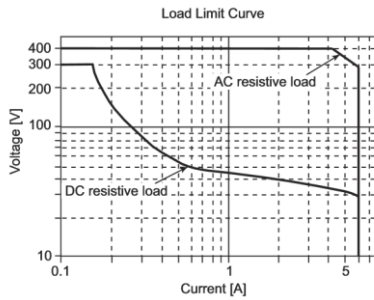


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Load type	Voltage	Current	Ambient temperature	No. of ops.
Resistive load	250V AC	6 A	85°C 185°F	30,000
Inductive load	AC 15	3 A	25°C 77°F	20,000
	DC 13	2 A	25°C 77°F	6,000

Notes: 1. Switch contacts are all on N.O. side.
2. AC 15 and DC 13 comply with IEC-60947-5-1 testing conditions.

• Internal electrical protection

Transzorbdiode protecting against voltage spikes
Polarity protection diode

Mechanical data

• Measure

Width x Height x Depth : 22,5 x 85 x 95mm
Maximum installation depth: with connection plug ca. 114mm
Weight: ca. 100g (without connection plug)

• Materials

Housing: Macrolon
Front: Plastic
PCB : Epoxy

• Mounting

Mounting : on DIN rail 35mm, EN 50022

• Front connector

8-pin connector: WAGO (codable), grid 5.08mm

• Counter connector

8-pin: WAGO , Grid 5.08mm. (included at delivery)



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- **Labels**

On case front: BZ 897T- (1 or 2) the number in parentheses explains the variant setting.
 Side of housing: Connecting / wiring diagram

Other conditions

2.3. Other conditions

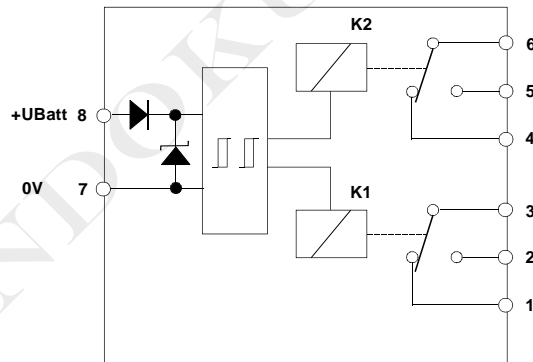
- **Climatic conditions**

Ambient temperature: -25°C bis +60°C
 Humidity: up to 90% rF, at 30°C,

- **Disposal**

According to local regulations

Connection / Wiring diagram



Function / switching levels:

(Factory settings)

Device BZ897T-1:	K1 + K2	ON	(P1)	Adjusted at :	23.3 VDC +/-0,2V
	K1	OFF	(P2)	Adjusted at:	20.6 VDC +/-0,2V
	K2	OFF	(P3)	Adjusted at:	19 VDC +/-0,2V
Device BZ897T-2:	K1 + K2	ON	(P1)	Adjusted at:	21.5 VDC +/-0,2V
	K1	OFF	(P2)	Adjusted at:	20.6 VDC +/-0,2V
	K2	OFF	(P3)	Adjusted at:	19 VDC +/-0,2V



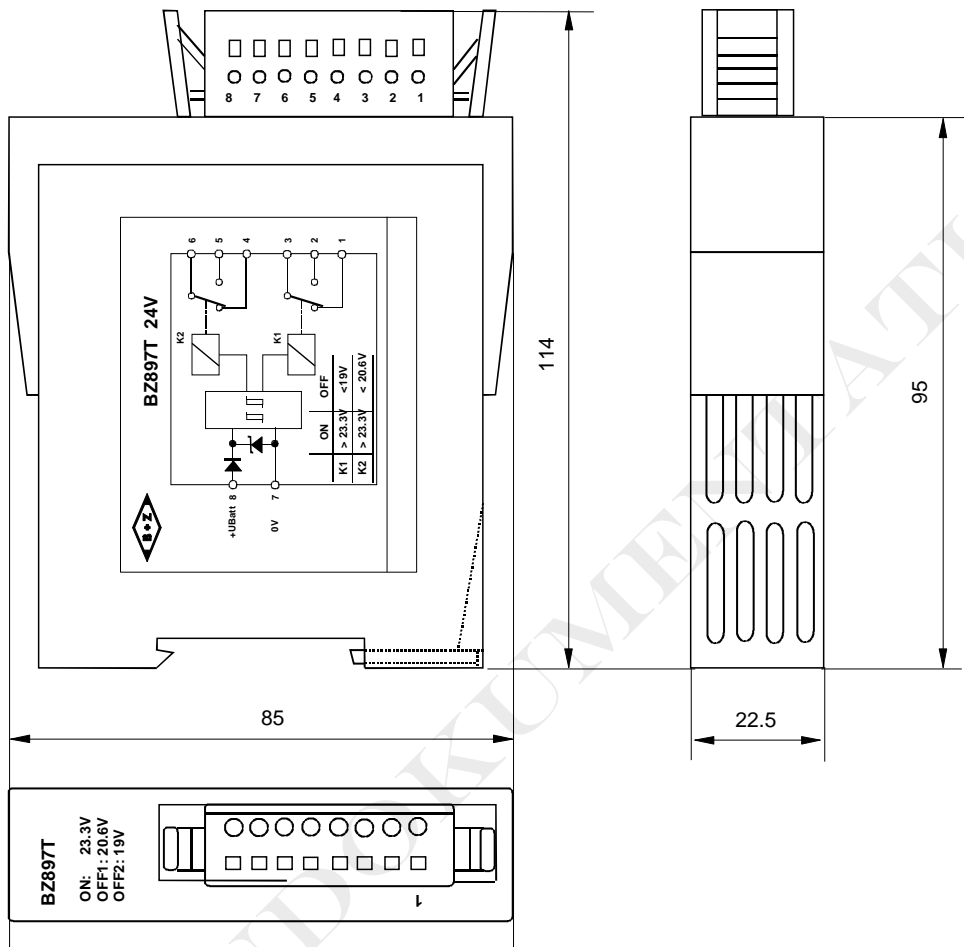
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Measures / mounting / enclosure



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