



# BZ876 T

## Safety Relay 24V DC

B+Z Art. Nr. 642

### According to standard EN 50155

Electronic devices in rolling stock



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**B + Z Elektronik AG**  
CH-8108 Dällikon  
Tel: +41(0)44 8440355  
[www.bahnelektronik.ch](http://www.bahnelektronik.ch)

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## Application / function

### Application

This safety relay is designed for use in industrial continuous operation applications. Safety relay according to standard EN61810 type A with forcibly guided contacts and integrated circuit protection for mounting on standard T Rail system.

The LED on the front panel indicates when power is applied to the coil.

- Contacts : 4 NO / 2 NC
- Nominal voltages available for 15VDC / 36VDC / 48VDC / 72VDC / 110V DC
- With reverse polarity protection, overvoltage surge protection, LED status indicator
- Wire connector : 1 wire terminal block on all pins
- Screwless front connector - wires directly plugable; AWG 24-16
- Optional front connector block for looping through on all pins available

### Technical data

Type designation: **BZ876T 24V (Example for 24V version)**

#### • Standards

The product is manufactured in accordance with the following standards:

ISO 9001:2015

Electronic equipment used on rolling stock: EN50155

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.

#### • Operating Voltage

Nominal voltage: 24V DC  
Tolerance according to railway standard: -30% +25%

Current : ca. 38mA at 24VDC

Hold power: 0.2Watt

Protection circuits: Reverse polarity protection, protective circuit for relay coil and Transients supression diodes



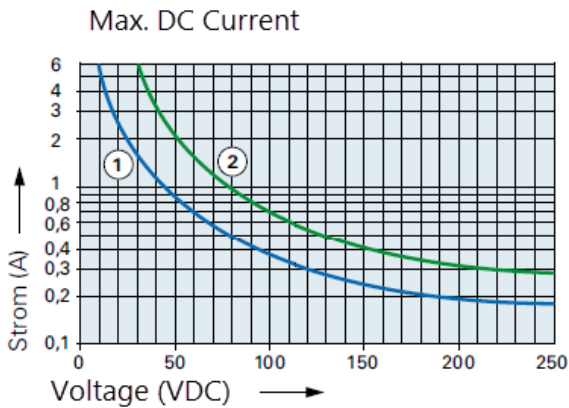
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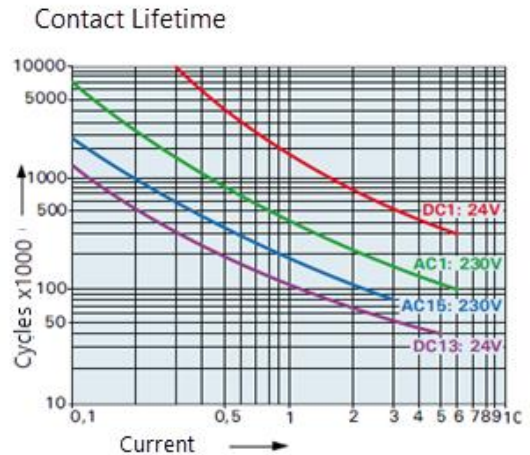
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• **Contact loads**

Relay type: A, according to EN61810  
 Max. load current: according to table ohm = 50V/2A, induktive = 50V/0.8A  
 Minimum current: 10mA at 10 VDC



- 1) Inductive load L/R 40 ms
- 2) Ohm load



Max. Switching cycles: DIN EN 60947-4-1 / EN 60947-5-1):  
 AC 1: 250V/6A AC 15: 230V/3A  
 DC 1: 24V/6A DC 13: 24V/5A/0,1 Hz  
 UL 508: B300 / R300

• **Screwfree front edge connector**

14-pin edge connector: WAGO (codeable)

• **Counter connector (optional)**

14-pin female connector strip: WAGO single row or double row available  
 Grid 5.08mm. (not included at delivery)

• **Internal electrical protection**

Transzorbdiode protecting against voltage spikes  
 Polarity protection diode



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## Mechanical data

Measures (WxHxD): 22,5 x 85 x 72mm  
Weight: ca. 95g (without counterconnector)

### • Materials

Housing: Plastic  
PCB: Epoxy resin

Mounting: Horizontal on standard Rail 35mm, (EN-50022-35)  
Connector type: 14-pin single row terminal strip, Type WAGO

### • Marking / Labeling

Wiring label on housing

## Other conditions

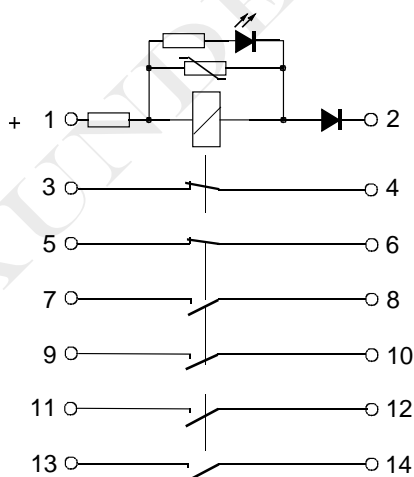
### • Climatic conditions

Environment temperature: -20°C bis +70°C Class T3  
Humidity : max 90% rF, at30°C, non condensing.

### • Disposal / Recycling

According to local regulations

## Connection / Wiring diagram



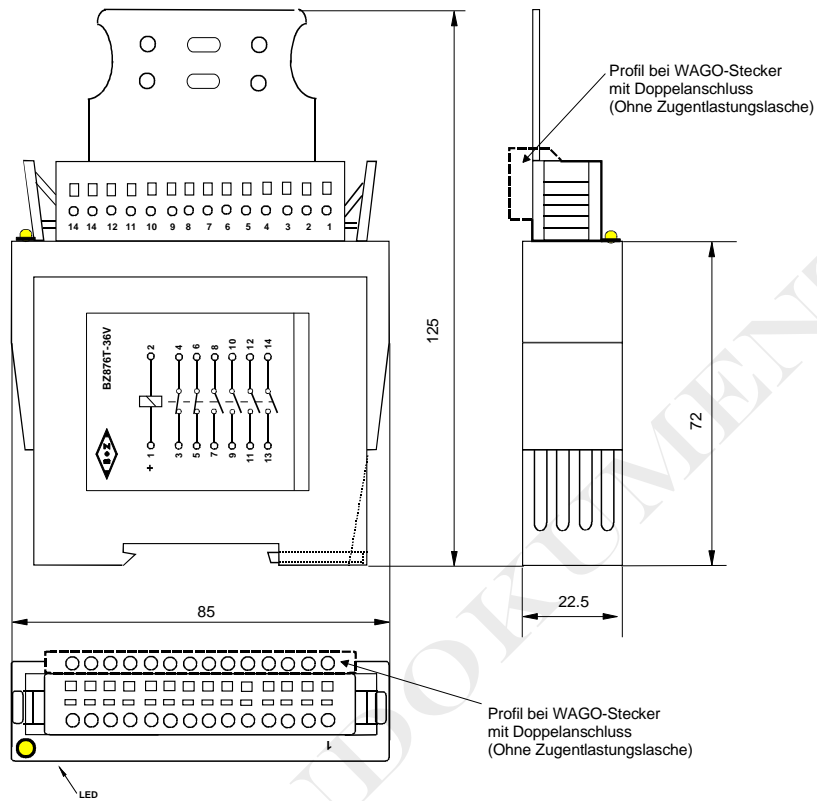
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## Measures / mounting



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