

- 11-pin box for DIN-rail mounting
- Bright 3-digit 10 mm LED display
- Semi-universal input
- RTDs, 3 T/Cs, and 3 linear types
- Auxiliary output for powering external transmitters
- Fully programmable parameters
- Keyboard adjustment controls

**DESCRIPTION**

BTC7837 is designed for wide range of applications. It is equipped with a 3-digit LED display, a semi universal input for RTD, PTC, 3 thermocouple types as well as for linear current and voltage signals from external transmitters and can have 1 programmable relay control/alarm output. BTC7806 have a built-in circuit for self-testing and self-calibration, manual measurement offset setting, and automatic software compensation of line resistance and cold junction temperature. The display-to-input correspondence (in case of linear input), decimal point position, temperature measurement unit, and offset value are also programmable and excellent price-to-performance ratio, BTC7837 is an exceptionally widely applicable device.



**TECHNICAL SPECIFICATIONS**

- Construction** : Plug-in to 11-pin socket for DIN-rail  
**Wiring** : Screw terminals on socket  
**Housing** : Plastic  
**Isolation** : Input to supply to output  
**Indication** : LED 3-digit height 10mm

**INPUT**

- Thermocouple T** : -40-400 °C  
**J** : -20-999 °C  
**K** : -20-999 °C  
**RTD, DIN** : Pt50, Pt100, Pt500, Pt1000 (3-wire)  
**RTD, GOST** : Pt46, Pt50, Pt100, Cu50, Cu100 (3-wire)  
**RTD range** : -100 – 600°C  
**Voltage** : 0 – 10V  
**Current** : 0-20, 4-20mA, 4-20 extern transmitter  
**Indication** : -199 to +999  
**Scaling** : -199 to +999  
**Unit** : °C or °F programmable  
 Input, decimal point, offset fully programmable.

**OUTPUT**

- Relay** : 250VAC 5A, NO/NC contact  
**Relay** : 10<sup>7</sup> operations  
**SSR** : 250VAC 1A  
**MOS gate** : 60V/100mA isolated  
**Extern SSR** : 5-24VDC/30mA

**INSTALLATION**

- Supply** : 115 or 230VAC or 12 to 24VAC/DC  
**Ambient temp** : -10 to +65°C, RH 0 to 85%  
**Storage temp** : -20 to +80°C  
**Mounting** : In 11-pin socket or on DIN rail  
**Protection** : IP44/IP20  
**Size** : W35 x H78 x D91mm with socket  
**Weight** : 180g

**PERFORMANCE**

- Accuracy error** : < ±0.15% FS  
**Display** : LED 3-digit, Height 10mm  
**Power consumption** : 1,5VA  
**Isolation** : Input to supply to output  
**RTD line compensation** : Automatic -10 to 80 °C  
**Cold junction compensation**: Automatic up to 2 x 25 ohm



**ORDER INFORMATION**

**BTC7837**

SUPPLY	OUTPUT	INPUT
230VAC	X None	B RTD
B 115VAC	C Relay	C TC
E 9/12VAC	D SSR	D 0 (4)-20mA
Q 12-24V	M MOS	DK 0-10V
R 24VAC	J Ext.SSR	