

- Ready to incorporate temperature or other sensor
- Direct in-process mounting
- Relay control output switching power supply
- Semi-universal input
- Mains or low-voltage power supply
- Fully programmable parameters
- Low cost

DESCRIPTION

BTC38-Y is a cheap programmable ON/OFF controller, designed for direct control over temperature or other processes when coupled with a TSEC temperature probe or other sensor. The device is equipped with a 3-digit LED display and a control relay transferring the power supply voltage to an external actuator. Available are 2 universal-input versions – RTD (for 7 selectable Ptx and 4 Cux sensor types) and T/C (for 3 selectable thermocouples) – as well as versions for linear current and voltage signals. The controller can be ordered either for mains or for low-voltage power supply and allows an 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. BTC38-Y is enclosed in a robust plastic box with IP66 connector and enables easy and firm sensor assembly. Thanks to its design, BTC38-Y is widely applicable in cases, in which direct control of electrical actuators is required.

TECHNICAL SPECIFICATIONS

Construction : Field mount design to IP66
Wiring : 4-pins connector M12
Housing : Plastic
Isolation : Input to supply
Indication : LED 3-digit height 14mm

INPUT

Thermocouple K : -20-999 °C or °F
J : -20-999 °C or °F
T : -40-400 °C or °F
Pt-50 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Pt-100 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Pt-500 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Pt-1000 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Cu100 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Cu50 3-wire : -100 – 600 °C DIN 1,385 (GOST 1,391)
Voltage : 0 – 10V
Current : 0-20, 4-20mA
Indication : -199 to +999 programmable
Scaling : -199 to +999 programmable
Measuring unit : °C or °F programmable
Decimal point : Programmable

OUTPUT

Control output : OFF open circuit, ON supply voltage
Setpoint : Within input range limits
Alarm parameters : Programmable
Control algorithm : ON/OFF



INSTALLATION

Supply : 115, 230VAC 12 to 24VAC/DC
Consumption : Max 1,5VA
Ambient temp : -10 to +65°C, RH 0 till 85%
Mounting : Field mount
Protection class : IP66
Dimension : 92 x 92 x 60mm
Weight : 350g

PERFORMANCE

Accuracy error : < ±0.15% FS
Display : 3-digit red LED, height 14mm
LED : For relay status
Keyboard : 3 membrane keys
Power consumption : 1,5 VA
Cold junction comp : Automatic -10 to 80 °C
EMC : EN 50081-1, EN 50082-2, EN 61010-1
 73/23/EEC & 89/336/EEC



ORDER INFORMATION

BTC38Y

SUPPLY	INPUT	SENSOR CONNECTION
A 230VAC	B RTD	IA Direct axial
B 115VAC	C TC	IR Direct radial
Q 12-24VADC	D 0/4-20mA	EA Via axial connector
R 24VAC	DK 0-10V	ER Via radial connector

(3) Suitable for assembly is temperature probe type TSEC (see 'Temperature Probes')