

- 4-digit displays
- Universal programmable input
- Various control algorithms including auto-tuning
- PID-pulse, PID for motor valves
- Analog output
- Programmable digital filter
- Calibration and self-calibration
- Manual mode for bumpless switching
- RS485 serial interface (option)

DESCRIPTION

BTC706-R is a multifunctional programmable controller with universal input for the most common thermoresistances, thermocouples, and linear signals, especially designed for rail mounting. The input has a built-in automatic software compensation of line resistance and cold junction temperature as well as automatic software compensation of temperature drift, and can be calibrated manually. BTC706-R is also equipped with a programmable input filter and a 4-digit display with programmable refresh rate. Available are various options for access restriction. The device can have up to 2 outputs (2 relays or 1 relay and 1 analog output), which can control variety of actuators through different programmable control algorithms. BTC706-R can work in manual or automatic mode, and an RS485 serial interface enables networking.

TECHNICAL SPECIFICATIONS

Construction : DIN-rail design
Wiring : Screw terminals
Housing : Plastic
Isolation : Input to supply to output (3-way)
Indication : LED 4-digit

INPUT

Thermocouple R S : 0-1700 °C
K : 0-1300 °C
J : 0-1000 °C
B : 100-1800 °C
C : 0-2300 °C
L-GOST : 0-600 °C
Pt-100 3-wire : -100 – 600 °C JIS or DIN
Cu100 3-wire : -50 – 200°C JIS or DIN
Voltage : 0 – 50mV
Current : 0-20, 4-20mA
Indication : -1999 till +9999
Scaling : -1999 to +9999
Decimal point : Programmable
Digital filter : Programmable
Input type : Programmable
Input calibration : Programmable

OUTPUT (Up to 2 outputs)

Relay : 250VAC 5A, NO/NC contact
SSR : 250VAC 1A
MOS gate : 60V/100mA
Extern SSR : 5-24VDC/30mA
Operating modes : Manual and automatic
Control algorithm : ON/OFF, PID-pulse, PID for Motor valves, PID analog, programmable
Auto tuning : Programmable
Alarms : Programmable
Other controls : BUMPLESS and ANTI-WINDUP
Analog : 0-20, 4-20mA or 0-10V isolated
Communication : RS485 isolated
Transmitter supply : 24VDC


INSTALLATION

Supply : 85 to 265VAC/DC 12/24VDC, 24VAC or 12 to 24VAC/DC
Ambient temp : -10 to +60°C, RH 0 till 85%
Storage temp : -20 to +80°C
Mounting : Panel with bracket or DIN-rail
Protection class : IP40 front, IP20 rear
Dimension : B45 x H78 x D124mm (type R)
Weight : 400g

PERFORMANCE

Accuracy error : < ±0.15% FS
Display : 4-digit LED, red LEDs for output state
Keyboard : 3 membrane keys
Power consumption : 5 VA
Self-calibration : Automatic software
Cold junction comp : Automatic software
RTD line comp : Automatic software


ORDER INFORMATION

BTC706 TYPE	SUPPLY	RELAY OUTPUT	INTERFACE
R DIN-rail	A 230VAC B 115VAC C 85-265V AC/DC R 24VAC Q 12-24VAC/DC	X None C Relay D SSR M MOS J Ext. SSR	X None B RS485 ASCII

ANALOG OUTPUT

X None
E 0-20mA
F 4-20mA
K 0-10V