

- ◆ 2 independent control channels in one device
- ◆ 2 DIN cases – horizontal and vertical
- ◆ Universal input for 4 RTDs, 4 T/Cs, and 3 linear types
- ◆ ON/OFF- pulse-mode control
- ◆ RH, pH, and Δt variants available
- ◆ RS485 serial interface available

DESCRIPTION

BTC180 offers an exceptionally convenient and inexpensive solution for 2 loop-control applications within 1 machine or 2 adjacent ones. The universal programmable inputs make sensor change easy and convenient, and allow on-site configuring of variety of inputs and controlled physical values. The controller may be used for measurement and control of temperature difference (variant 'D'), pH and temperature (variant 'P'), relative humidity through the "wet-and-dry-bulb thermometer" method (variant 'R'), and in other cases in which 1 device measures and controls 2 physical values. All of this make BTC180 widely applicable for both industry and laboratory use.

TECHNICAL SPECIFICATIONS

Construction : Panel design to standard DIN
Housing : Plastic
Isolation : Input to output to supply
Indication : 2 x LED 3-digit height 10mm 2 status LED

INPUT (1 per channel programmable)

Thermocouple K : 0-999 °C
J : 0 -900 °C
L : 0-600 °C
GOST L : 0-600 °C
Other thermocouple : 0-999 °C
Pt-100 3-wire : -19,9 - 99,9 (-19,9 – 500) °C DIN
Pt-50 3-wire : -99 – 500 °C DIN
Cu-100 3-wire : -9,9 – 99,9 (-50 -200) °C
Cu-50 3-wire : -99 - 200 °C
Voltage : 0-50mV
Current : 0-20, 4-20mA
Custom linear : Specify
pH/ORP : 0-14pH or +2000 to -2000 mV (1 channel only)
Indication : -99 till +999
Scaling : -99 to +999

OUTPUT

Relay : 250VAC 5A, NO/NC contact
SSR : 250VAC 1A
MOS gate : 60V/100mA (isolated)
Extern SSR : 5-24VDC/30mA
Control algorithm : ON/OFF- pulse mode
Communication : RS485 isolated (ASCII)



INSTALLATION

Supply : 85 to 265V or 12 to 24VAC/DC
Ambient temp : -10 to +65°C, RH 0 till 85%
Mounting : Panel with bracket
Protection class : IP54 or IP65 front, IP20 rear
Dimension : B48 x H96, B96 x H48x D98mm
Weight : 300g with bracket

PERFORMANCE

Accuracy error : < $\pm 0.15\%$ FS
Display : 2 x 3-digit LED
 2 LEDs for output state
Keyboard : 4 membrane keys
Power consumption : 3 VA
Calibration : Automatic software
Manual calibration : Trough keyboard
Cold junction comp : Automatic software
Line resistance comp : Automatic software



ORDER INFORMATION

BTC180 TYPE	CASE	SUPPLY	OUTPUT	INTERFACE
N Standard	H 96x48	A 230VAC	X None	X None
P pH-controller	V 48x96	B 115VAC	C Relay	B RS485
D Temp-difference		C 90-250V	D SSR	
R Humidity		Q 12-24V	M MOS	
Z Specify		R 24VAC	J Extern SSR	

PROTOCOL	FRONT	CUSTOM LINEAR
A ASCII	X None	X None
	P IP65	Z Specify