



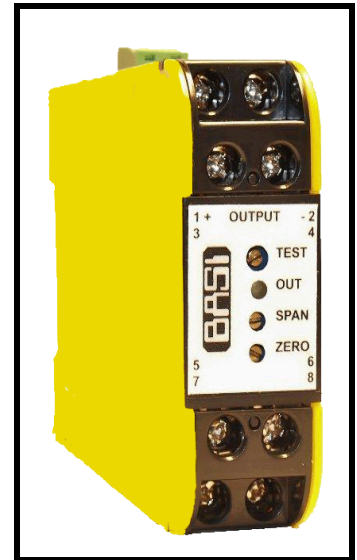
Thermocouple Transmitter v1 BTCT286

DESCRIPTION

The BTCT286 is a separately powered isolating transmitter that converts a thermocouple signal to a standard process signal that represents temperature. The thermocouple conditioning features:

- Automatic cold junction compensation.
- Front-end zero suppression.
- Upscale or downscale burnout.
- Linearised measurement for thermocouple types K, J, T, N, R and S.

Final calibration is trimmed using the front accessible zero and span 15-turn trim adjustments and a link selectable output range. A wide range ac/dc supply powers the input and the output circuit with three way power/input/output isolation.

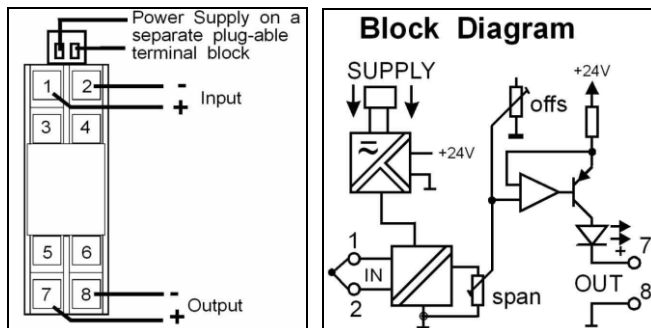


General Specifications

Size:	23.5W x 71.5H x 109D (mm).
Mounting:	Clip for 35mm DIN-Rail.
Housing material:	ABS.
Connection:	Screw terminals.
Weight:	106 g.
Protection class:	IP40.
Front SPAN adjust:	±25% typical.
Front ZERO adjust:	+20/ -10% typical.
Operating temperature:	-10...+65°C.
Output:	Programmable - see table overleaf.
Output drive:	10mA into 0 - 2kΩ, 20mA into 0 - 1kΩ.
Response time:	Programmable - see table overleaf.
Calibration accuracy:	<0.2%.
Linearity:	<0.2%.
Temperature drift error:	0.02% / °C within operating range.
Cold junction compensation:	0.02% per °C C/J change
Input offset (Zero suppression):	200% of range.
Input range:	4mV up to 80mV.
Input impedance:	> 1MΩ.
Supply voltage:	85-265Vac 50/60Hz (90-280Vdc) 16-42Vac 50/60Hz (10-60Vdc) .
Supply/Input/Output Isolation:	>2kV r.m.s.
Electromagnetic compatibility:	Complies with EN 50081-1, EN 50082-2, EN 61010-1



Connections



For input / output combinations refer to TYPE NO. DESIGNATION overleaf.

BTCT286 -X X X X X

TYPE NO. DESIGNATION

Power Supply:

1 = 85-265Vac 50/60Hz (90-280Vdc) 2 = 16-42Vac 50/60Hz (10-60Vdc) .

Input:

1 = Thermocouple, Specify
 Type: (J, T, K, R, N, S or E)
 Calibration range: ? - ? C
 Burn out: (upscale or downscale).

*) Z = Other specify.

Output:

0 = Link Selectable. *) 9 = Other (Specify).

Action:

1 = Direct. 2 = Reverse.

Options:

0 = None.
 *) Z = Other (Specify).

*) = Price Extra.

Response time Table 0

These filter times are applied after the input card filtering and may have no effect.

	LK1/6	LK1/7
5ms		
50ms	X	
500ms		X

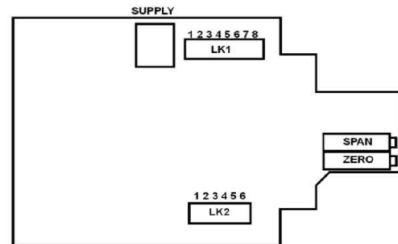
Output Table 5

Output	LK2					
	1	2	3	4	5	6
4-20mA	X		X			
0-20mA		X				
0-10mA				X		
0-5V		X				X
1-5V	X		X			X
0-10V		X			X	

To change ranges

1. Unplug supply plug.
2. Remove terminal covers.
3. Slightly depress lid to base clips and withdraw from housing.
4. Set coding plugs as required.
5. Reassemble unit and connect power.
6. Adjust SPAN and ZERO pots to recalibrate.
7. Change the label information to the new input/output values.

Coding Plug Location Diagram



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