

Datasheet

Dual level trip amplifier, BD120/2 115Vac

RS Stock number 466-2292



SPECIFICATIONS

INPUTS:

Please note that the following are typical ranges. Other ranges available, please contact sales office.

DC Current

Standard Ranges
 0 to 10mA into 100 ohms
 4 to 20mA into 62 ohms
 Optional Ranges
 0 to 1mA into 100 ohms
 0 to 10mA into 10 ohms
 4 to 20mA into 10 ohms

Option: Upscale drive on loss of 4 to 20mA input signal

Other current inputs as required
 Minimum current 10µA,
 Maximum current 100mA

D C Voltage

Between -250 and +250 Volts DC
 Minimum voltage span 5mV
 Maximum voltage span 500V
 Input Impedance: 1MΩ greater

A C Current

0 – 1A

A C Voltage

0 – 250 V

Resistance (2 wire)

Between 0 and 20K ohms
 Minimum span 5 ohms
 Maximum span 20K ohms

Potentiometers (3 wire)

Between 0 and 10K ohms
 Minimum span 10 ohms
 Maximum span 10K ohms

Resistance Thermometers (RTDs, PT100s)

2 or 3 wire
 100 or 130 ohms at 0°C
 Measurable range, -200°C to +800°C
 Minimum temperature span 10°C
 Maximum temperature span 600°C
 Input is linearised

Thermocouples

Type B, E, J, K, N, R, S & T
 Temperature covered:

Type	Range	MinTemp	Change
B	600 to 1800°C	400°C	
E	-260 to 1000°C	65°C	
J	-200 to 1200°C	80°C	
K	-260 to 1370°C	100°C	
N	0 to 1300°C	150°C	
R	50 to 1760°C	400°C	
S	80 to 1760°C	400°C	
T	-260 to 400°C	100°C	

Automatic cold junction compensation
 Open circuit thermocouple monitoring
 upscale or downscale drive

OUTPUTS:

DC Current

0 to 10mA into 10 to 1500 ohms
 4 to 20mA into 10 to 750 ohms
 Other ranges as required
 Minimum span 1mA
 Maximum span 20mA

DC Voltage

The voltage output is derived from passing a mA signal through an internal resistor

0 to 1 Volt DC thru 51 ohms
 0 to 10 Volt DC thru 510 ohms
 1 to 5 Volt DC thru 240 ohms
 Other ranges as required
 Minimum span 1 Volt DC
 Maximum span 10 Volt DC

Input/Output/Supply Isolation

600 Volts > 20M ohms

N.B. Each output can be of a different type and range i.e.
1 x 4 to 20mA and
1 x 1 to 5 Volts

SUPPLY:

Power Supplies

115 Volt AC ±15% 50/60 Hz
 230 Volt AC ±15% 50/60 Hz

Power Required

3VA Maximum

Pilot Light

Red LED shows Power ON

GENERAL:

Linearity Error

Proportional to input ±0.1% of span

Response Time

<50mS - Step 0 to 65%
 -3dB at 4.5KHz

Temperature Coefficient

±0.1% of span/_10°C

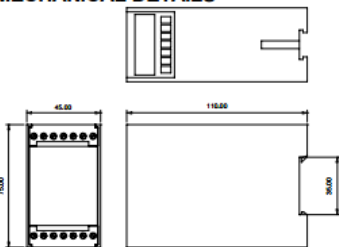
Operating Storage / Temperature Range

0 to +45°C / -20 to +60°C

Weight




345 gms

MECHANICAL DETAILS



TERMINATION DETAILS

- | | |
|----------------------------------------------|-------------------------------------|
| Terminal | Terminal |
| 1 | 8 Output B Active -ve / Passive +ve |
| 2 Inputs - See below | 9 Output B Active +ve |
| 3 | 10 Output B Passive -ve |
| 4 Unused | 11 Unused |
| 5 Output A Passive -ve | 12 230 Volt ±15% 50/60 Hz |
| 6 Output A Active +ve | 13 115 Volt ±15% 50/60 Hz |
| 7 Output A Active -ve / Output A Passive +ve | 14 Neutral |

Inputs	AC Current	AC Volts	DC mA	DC mV/V	T/Cs	2 Wire Slidewire	3 Wire Pot	Resistance Thermometer	Dual Inputs
1	~	~	-ve	-ve	-ve	0%	0%		B+
2	~	~	+ve	+ve	+ve	100%	Wiper		A+
3							100%		Common