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Datasheet

Dual level trip amplifier,BD120/1 230Vac

RS Stock number 466-2400

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

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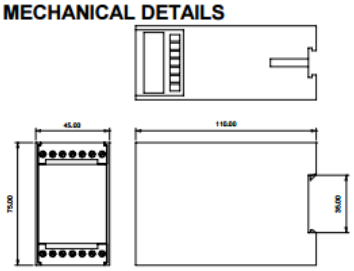
MECHANICAL DETAILS



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