Specification

INPUT DATA

Input source

For details see individual specification

Open circuit response

For details see individual specification.

Input impedance (Voltage input)

>1Mohm at amplifier input. This will be shunted by burnout drive or input conditioning components.

SUPPLY DATA

Power supplies

AC models	115VAC ± 20% 230VAC ± 20%
DC models	24VDC ± 2.5V
2 wire	12 - 60VDC

Consumption

Single transmitter	3VA
Double transmitter	4VA
Transmitter/single trip	4VA
Transmitter/double trip	5VA
Dual channel transmitter	6VA
2 Wire transmitter	250mW

OUTPUT DATA

Output signals (Each output)

Standard units.

Any constant current from 0-100uA to 0-20mA (at up to 20V loop) or any constant voltage from 0-1V to 0-10V (at up to 20mA loading). Double transmitters need not necessarily be specified for similar outputs.

2 Wire units.

4-20mA or 10-50ma into up to 48V loop when operated from a 60VDC power supply.

Response time

<400mSec. Unless otherwise stated.

Relay specification

DP/DT for each trip, unless otherwise stated. Contacts are rated at 250VAC, 5A, 100VA (Resistive).

Relay function

Selected by PC link. Default is normally energised, relay to de-energise on trip (fail safe operation).

Relay status

Indicated by a red LED for each trip, mounted on the front panel. Lit when relay is energised.

Controls

ZERO	± 25%
SPAN	± 50%
TRIP (When fitted)	0-100%
DEADBAND (When fitted)	1-20%

CONDITIONS

Ambient temperature

Working	-20°C to +60°C
Storage	-40°C to +70°C

Humidity

From 5% to 95% R.H.

Vibration

1g at 15Hz to 150Hz.

ELECTRICAL STANDARDS

Insulation Input-output-contacts-earth-channel

1000V RMS continuous. 2000V for 20uSec. Derate to 500VDC for option 'K' enclosures.

Fusing

Power supply fused. Spare fuse mounted on PCB.

WIRING AND MOUNTING

Terminals

For conductors up to 2.5mm².

Weight

1.5kg approximately, when mounted in enclosure.

Position

Any position is acceptable.

Types of mounting

Wall, panel, single end access and rack. Precision extruded aluminium construction. Standard units are Anodised, option 'K' units are 'Alochromed'. An IP65 enclosure is also available for 2 wire units only.

Additional protection

Enclosures are available to NEMA 12 oiltight, NEMA 4 watertight and IP54 for N-protection.

PERFORMANCE

Input/output linearity

<0.1% error, unless otherwise stated.

Series mode rejection

<0.1% error for 50Hz input at 5% of span amplitude.

Common mode rejection

<0.1% error for 250V RMS.

Temperature effect on zero

<0.02% per °C.

Temperature effect on span

<0.01% of span per °C or <0.1°C per °C, whichever is the greater.

Temperature effect on suppression/elevation

<0.02% of suppression/elevation per °C.

Supply voltage effect

<0.01% per % input change.

Trip adjustment

Infinitely variable by single turn 260° dial on front panel, calibrated 0-100 and lockable. Alternatively, by multi-turn potentiometer accessible through front panel.

Deadband

Standard 1%. Also available adjustable from 1 to 20% by single turn 260° dial or by multiturn potentiometer.

RFI rejection

Standard enclosures are inherently RFI proof due to their solid aluminium construction. However, for extra protection to BS6667, specify option 'K'.

Permissible input overload

mV input	20V
DC voltage input	200V
DC current input	500%
AC voltage input	200%
AC current input	500%
Resistance input	6V