AD SERIES GENERAL 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	115 / 230 VAC ±20%
DC models	24 / 48 VDC ±10%
2 wire	12- 60 VDC

Consumption

Transmitter / Trip amplifier	3VA
2 Wire transmitter	250mW

OUTPUT DATA

Output signals

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).

2-wire units

4-20mA or 10-50mA as modulation of supply voltage.

Response time

<400mSec. Unless otherwise stated.

Typical response time for a Trip with 4-20mA input; <100mS for 100% step change.

Relay specification

DP/DT or SP/DT for each trip, unless otherwise stated. Contacts are rated at 250 VAC, 2A, 100 VA (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% RH.

Vibration

1g at 15Hz to 150Hz.

ELECTRICAL STANDARDS

Insulation Input-output-contacts-earth

1000V RMS continuous. 2000V for 2OuSec.
Derate to 500VDC for option 'K' enclosures.

Fusing

Power supply fused.

WIRING AND MOUNTING

Terminals

For conductors up to 2.5mm² (Torque 0.65 Nm max)

Weight

<1kg per module.

Position

Any position is acceptable.

Mounting

Standard units will fit onto a low profile 35mm DIN rail or be surface mounted by corner fixing holes. Option 'K' and 'DI' have enclosures suitable for Din rail, Surface or front of Panel mounting.

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

<01% error for 50Hz input at 5% of span amplitude.

Common mode rejection

<01% 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

By fifteen-turn blindset potentiometers as standard, which are accessible through the unit front fascia.

Deadband

Standard fixed *nom* 1% span hysteresis. Option adjustable from 1 to 20% span by fifteen-turn potentiometer available on request

RFI rejection

Standard units meet the CE requirements for use in Controlled Environments. For additional RFI protection, 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