AEC 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	Universal 21-265V ac
DC models	Universal 21-265V dc

2 wire

Consumption

Transmitter / Trip amplifier	<2VA
Trip transmitter/ Splitter	<3VA
2 Wire transmitter	<3VA

OUTPUT DATA

Standard units

Any constant current from 0-100uA to 0-20mA (at up to 13V loop) or any constant voltage from 0-1V to 0-10V (at up to 2mA loading).

2-wire units

4-20mA or currents up to 21mA as modulation of supply voltage.

Response time

<400mSec. Unless otherwise stated.

Typical response time for a Trip with 4-20mA input; <10mS for 1% step change and <100mS for 100% step change.

Relay specification

SP/ST for each trip, unless otherwise stated. Contacts are rated at 120 VAC, 2A, 100 VA (Resistive).

Relay function

Selected by Dip switch. Default is normally energised, relay to De-energise on Trip (fail safe operation).

Relay status

Indicated by green LED mounted on the front fascia for each trip point. Default is ON when relay Energised, Extinguished in Trip/ De-energised state.

Controls

ZERO	± 20%
SPAN	±20%
TRIP (When fitted)	0-100%
HYSTERISIS (When fitted)	1-4%

CONDITIONS

Ambient temperature

Working	-10°C to +50°C
Storage	-20°C to +70°C

Humidity
From 5% to 95% RH.

Vibration

1g at 15Hz to 150Hz.

ELECTRICAL STANDARDS

Insulation Input-output-contacts

1000V RMS continuous, 2000V for 2O uSec.

Fusing

Power supply fused.

WIRING AND MOUNTING

Terminals

For conductors up to 2.5mm²

Weight

<150g

Position

Ideally vertical but can be any position with ventilation

Mounting

Standard units will fit onto a low profile 35mm DIN rail.

Additional protection

Enclosures are available to NEMA 12 oil tight, 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.

Adjustments

By multi-turn blindset potentiometers, which are accessible through the front fascia.

RFI rejection

Standard units meet the CE requirements, however for additional RFI protection to IEC61000-4-3:2006/A2:2010 please refer to the Compact A/AD series units with additional option ‘K’.

Permissible Input overload

mV input	20V
DC voltage Input	200V
DC current Input	500%
Resistance Input	O/C or S/C