

AEC231-EX Signal Isolator/Splitter Power Supply

- Suitable for combinations of Process I/V Input & Outputs
- True universal AC/DC supply voltage 21V through 265V AC/DC

Technical Specifications

Input

The input signal range is 4-20mA as std, from the hazardous area via the associated EX Barrier supplied alongside.

The barrier provides a fully floating dc Excitation supply for energising a conventional 2 or 3-wire transmitter located in the hazardous area. In turn, the AEC231 isolates, splits and repeats the current to drive into two independent loads in the safe area.

Output

The output signal ranges are 4-20mA repeats (Active ports, into 650Ω max loads) as std.

Other output ranges are available on request, typically including; 0-10mA, 0-20mA, 1-5mA, 0-1V, 0-2V, 0-5V, 0-10Vdc or 1-5V dc.

The mA outputs are configured as Active/Source ports as std. Passive/Sink port options are available on request.

Performance

Accuracy/Linearity: $< \pm 0.1\%$ span

Response time: $< 250\text{ms}$ (0-100% input step change)

Isolation: 1000V RMS Input/Output/Output/Supply

AEC231 Supply: Universal 21V up to 265V (AC or DC)

Assoc. Barrier Supply: 20-35Vdc

Supply consumption: $< 3\text{VA}$

Input O/C response: Downscale drive

Environmental Conditions

Storage Temperature: -20°C to $+70^{\circ}\text{C}$

Operating Ambient: -16°C to $+55^{\circ}\text{C}$

Relative Humidity: 5 – 95% RH (Non-condensing)

EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

Dimensions & Mounting

Safe Area mounting, accepting input from hazardous area.

AEC 231 = 22.5w x 75h x 105d mm enclosure

EX Barrier = 16.0w x 109.8h x 123.6d mm enclosure

Suitable for Din Rail (TS35) mounting

WIRING

