

ADC311KX Scale & Bias Transmitter / Isolator with Dual Output

 Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications

 Supply voltages: 115Vac ±20% 240Vac ±20%

24Vdc ±2.5V 48Vdc ±5V

- RFI Protection to EN 61000-4-3:2006/A2:2010
- Non Smart / Non-uProcessor, Type A instrument
- AMELEC Standard 10 year warranty

APPLICATION

 Any application where DC voltage or current signals need to be scaled, isolated, split and re-transmitted.

TECHNICAL SPECIFICATION

INPUT

DC current / voltage can be specified in the range of:

Current up to 100mA max (Passive) as std

Voltage up to 100V max as std

Typical input: 0-10uA, 20-4mA, 4-8mA or -10V to +10Vdc

OUTPUTS

(may be specified the same or different to each other)

DC current or voltage specified in the range of:

Current up to 100mA max in Sink configuration (externally powered)

Current up 22mA max Source configuration (Internally powered)

Voltage: any range up to 20Vdc max may be specified. Typical output: 0-100uA, 20-4mA, 8-12mA or -1V to +1Vdc

CONTROLS

15 turn potentiometers for each output channel. Zero \pm 25%

Span ± 50%

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: < ±0.1% span

Response time: Typically < 100mS (0-100% step change)

Accuracy: < ±0.1% span

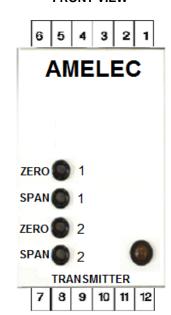
Supply regulation: AC supply \pm 20%, DC supply \pm 10%

Supply consumption: <3VA

TERMINATION

FRONT VIEW

Input +	1
Input -	2
Scn	3
Scn	4
OUTPUT 2 +	5
OUTPUT 2 -	6
OUTPUT 1+	7
OUTPUT 1 -	8
Scn	9
Earth	10
Live / +	11
Neutral / -	12



ENVIROMENTAL CONDITION

Storage temperature: -40 to +70 ℃ Operating Ambient: -15 to +55 ℃

Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial Levels)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm Mounting: Din Rail (TS35) as std

(optional Seismic/Surface Keyhole plate, 50w x 130h mm)

Weight <500g

RF Immunity

20MHz-3GHz/5.25GHz \leq 10V/m, 80MHz-1GHz/5.6GHz \leq 30V/m, 889MHz/1.75GHz <40V/m .

Protection

Isolation: 500Vdc: Input/Output/Output/Supply/Earth.

Internal Fuse.

Input over range: typically up to 300%.

Input Open Circuit response: Downscale drive as std (O/C Upscale drive option available if required)