

ADM211XKX Thermocouple Repeater/ mV Splitter

- Suitable for SIL 1, SIL 2 & SIL 3 rated (IEC61508) safety system loop applications
- Supply voltage options: Universal 95-250Vac, 115Vac $\pm 20\%$ or 240Vac $\pm 20\%$
24Vdc $\pm 2.5V$
48Vdc $\pm 5V$
- RFI Protection to IEC61000-4-3:2006/A2:2010
- AMELEC Standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT

mV signal developed from any thermocouple type; J, K, N, R, S or T, with a minimum 4mV span.
Automatic cold junction compensation fitted as standard.

OUTPUT 1

Non-Isolated repeat of input signal with automatic cold junction compensation

(T/C extension wire to be used between o/p1 & the original temperature monitoring system/ control device input port)

OUTPUT 2

Isolated repeat of mV input signal, with automatic cold junction compensation

(T/C extension wire to be used between o/p2 & the new additional monitoring system/ control device input port)

CONTROLS

15 turn potentiometers for Output 2
Zero $\pm 25\%$, Span $\pm 50\%$

INDICATOR

PowerON: LED, Amber.

PERFORMANCE

Linearity: $< \pm 0.1\%$ mV span
Response time: Typically $< 200\text{ms}$
Accuracy: $< \pm 0.1\%$ span
Supply regulation: $\pm 20\%$ AC, $\pm 10\%$ DC
Supply consumption: $< 2\text{VA}$

PROTECTION

Isolation: 500Vdc : (Input+Output1)/Output 2/Supply/Earth
Internal Fuse.
Input over range up to typically 300%.

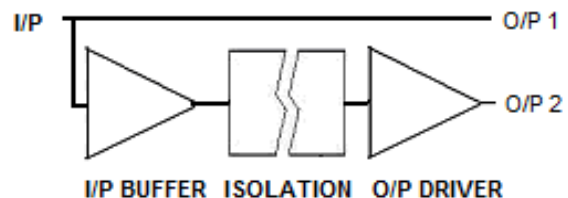
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIROMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm
Mounting: Heavy duty Din Rail as standard.
(Surface by Seismic key hole plate option available, mounting plate dimensions 50w x 130h mm)

RFI Protection

RF immunity: $< 1\%$ error over 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$
(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz-1.75GHz $\leq 40\text{V/m}$)