ADM241X Resistance / Thermistor Signal Splitter / Converter

- AC Supply voltage options: 115Vac / 230Vac +/-20%
- 24Vdc supply option available
- Amelec standard 10 year warranty
- Suitable for SIL 1 & 2 (IEC 61508-2) safety system loop applications, as 1oo1 architecture (HFT:0)

APPLICATION

- Resistance or Thermistor signal Repeat / Splitter
- Signal Isolator / Noise filter
- Signal converter to resolve incompatibility.

TECHNICAL SPECIFICATION

INPUT

Two wire Thermistor (NTC/PTC) or Resistance input.

Note: Excitation for the input sensor will still be from the existing device, now connected to output 1.

OUTPUT 1

Non-Isolated repeat connection of the input signal.

OUTPUT 2

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 up to 10Vdc max @ up to 5mA.
Typical output range: 0 – 10Vdc or 4-20mA

CONTROLS

Zero / Span: 15-turn potentiometers for output calibration.

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity/Accuracy: < ±0.2% resistance span as standard
Response time: Typically < 400mS
'G' option: Additional Linearisation to temperature, req'd for most non-linear thermistor sensor inputs.
'RA' option: Reverse Acting, req'd for NTC sensor inputs.

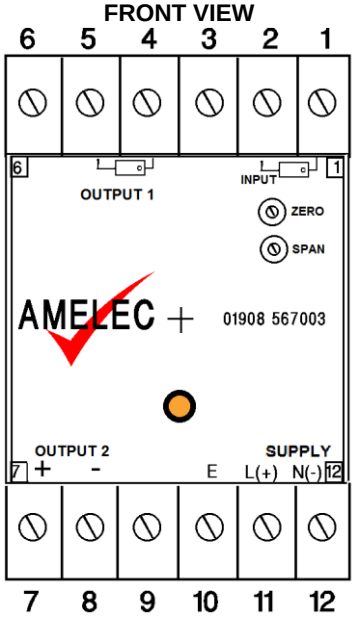
PROTECTION

Input O/C drive: Upscale drive as standard
Isolation 1000V RMS.
(Input+Output1)/Output 2/Supply/Earth
Internal Fuse.
Input over range up to typically 300%.

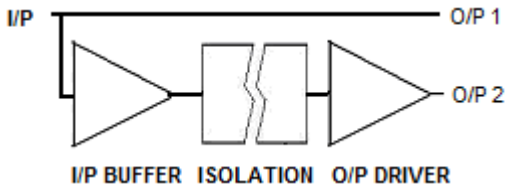
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONs

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 (Controlled EM)

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 110d mm
Mounting: Din rail (TS35) or Surface (by corner fixing holes)
Weight < 400g

ADD ON / OPTIONS

DI: front facia LCD display for local monitoring of input
P: Output 2 Test Point
K: Higher level of EMC/EMI-RFI protection (Generic Industrial)
G: Additional Linearisation to temperature
SINK: Output 2 Current Sink/Passive port
Non standard Power supply ranges also available on request.

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