

ADM221X-1X RTD Signal Splitter with Dual Isolated Outputs

Suitable for SIL 1 & SIL 2 rated (EN 61508) Safety Instrumented system (SIS) loop applications, as 1001 architecture (HFT:0)

Non-Smart / Non-uProcessor based, Type A instrument

Supply voltage options: 115Vac ±20%

240Vac ±20% 24Vdc ±10% 48Vdc ±10%

RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)

AMELEC Standard 10 year warranty

Technical Specifications

Input

Any 2/3-Wire RTD BS1904, PT100, PT130, PT500, PT1000 with a temp span >25°C may be specified. (nom 0.6mA Excitation)

Output 1

Isolated repeat of the RTD input signal. (Excitation current being derived from the existing or new RTD input controller or plc is to be confirmed by way of a simple survey if not known)

RTD Extension wire should be used between the output1 terminals & the original or new control system device input port.

Output 2

Any standard process Current or Voltage combinations; Current source up to 20mA, with Drive voltage 12Vdc Voltage source up to 10Vdc as std

Performance

Accuracy/Linearity: <±0.1% resistance span

Isolation: 1000V RMS*. Input/Output1/Output2/Supply/Earth

*(500Vdc if RFI option 'K' is specified) Input O/C response: Upscale drive as std

(O/C response Downscale drive option available if required)

Response time: Typically <200mS

Supply consumption: 3VA

Environmental Conditions

Storage Temperature: -40 to +70°C Operating Ambient: -15 to +55°C

Relative Humidity: 5 – 95% RH (Non-Condensing) EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM) ('K' option to the highest Generic Industrial levels, with

RF Immunity: 20MHz-3GHz/5.25GHz 10V/m,

80MHz-1GHz/5.6GHz 30V/m, 889MHz/1.75GHz 40V/m)

Protection

Internal Fuse.

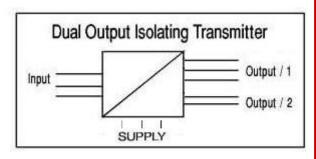
Input over range up to typically 300%.

RTD Scrn Input +Ve -Ve 5 3 -Ve +Ve **OUTPUT 2** (Ø) ZERO 1 O SPAN 1 AMELEC 01908 567003 (Ø) ZERO 2 (SPAN 2 SUPPLY OUTPUT 1 N 12 8 9 10 11 12 (-Ve) E Supply Output 1

WIRING

Output 2

W-50 H-75 D-110 (mm)



Mounting

Std enclosure: Din Rail (TS35) or Surface by corner fixing holes.

K option enclosure: Din Rail (TS35) or Surface by seismic Keyhole plate (50w x 130h mm).

Dimensions

Standard enclosure: 50w x 75h x 110d mm (K option RFI enclosure: 50w x 75h x 182d mm)

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