

ADM282 Pulse/Frequency Trip Transmitter/Isolator

Output

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

Supply voltage options: 115Vac ±20%

240Vac +20% 24Vdc ±10% 48Vdc ±10%

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

Digital Display available ('DI' option)

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

AMELEC Standard 10 year warranty

Technical Specification

Input Pulse/Frequency

Any regular pulse or repetitive wave form incl; Namur, Sine, Square or Sawtooth. Min 25Hz calibrated Span, Max 50KHz.

Input level may be anywhere between 50mV and 200V p-p.

Front Plate pot screened Cut Off to set minimum signal Voltage (Factory set @ 100mV or 1V)

Voltage pulses up to 200V or Volt free contacts (wetted with 10V @3mA)

Current from 100uA

(AC/NPN/PNP/TTL/OPEN COLLECTOR/RELAY inputs available)

Up to 24Vdc @22mA I/P loop/sensor Excitation available ('M' option)

Analogue + Trip Output

Any standard process current or voltage signal. Current source up to 20mA, with Drive voltage 11Vdc. Current sink up to 20mA, with External Drive <30Vdc. Voltage source up to 10V, max current 20mA. Typically: 4-20mA (max load 550 Ω) or 0-10Vdc (min load 500 Ω).

A set of S.P.C.O contacts, rated 250VAC, 2A, 100VA (resistive) Latching relay option 'L' available with Local or Remote Reset. Red LED indication of Relay status, ON Energised/healthy, Extinguished in Trip/De-energised state as standard. (Red/Green BI-colour LED optional)

Performance

Isolation: 1000V RMS* Input/Output/Contacts/Supply/Earth *(500Vdc when RFI protection option 'K' is specified)

Accuracy/Linearity/Trip repeatability: ±0.1%

Deadband: 1% span as std (adjustable 1-20% span optional 'V') Response time: <400mS as std (0-100% input step change)

Supply consumption: <4VA

Input O/C response: Downscale drive as standard

Fail Safe Relays: De-energise on Trip & Loss of Power as std

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: EMC/EMI/RFI protection to the highest Generic

Industrial Standards)

Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

Scn (ov) scrn √ (Sig -) √ (Exc+) 6 5 3 2 1 +Ve +Ve Scn Scn -Ve -Ve (0) ZERO (0) SPAN (0 TRIP 01908 567003 **CUT OFF** (ø) TRIP SUPPLY N 7 12 10 11 8 N/C Com N/O Trip Supply

WIRING

Input

Signal Trip Transmitter Output Input Supply

Mounting / Demensions

Either Din Rail (TS35) or Surface by corner fixing holes in standard 50w x 75h x 110d mm enclosure.

('DI' option = 145d mm, 'K' option = 182d mm)

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ