

ADC371 Rate of Change Transmitter / Isolator

- Suitable for SIL 1, 2 & 3 safety system loop applications
- Non-Smart / Non-uProcessor based, Type A instrument
- Supply voltage options:
 - 115Vac ±20%
 - 240Vac ±20%
 - 24Vdc ±10%
 - 48Vdc ±10%
 - 110Vdc ±20%
- RFI protection to EN 61000-4-3:2006/A2:2010 available (option 'K': 20-3000 MHz ≤10V/m, 80-1000MHz ≤30V/m)
- Amelec standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT

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

Current up to 100mA max (Passive/Sink port)
Voltage up to 150V max
Typical input: 4-20mA (Passive port, impedance 20Ω)

OUTPUT

Signal Proportional to the input Rate of Change, customised & calibrated as requested at time of orders to suit the application.
DC current or voltage signal can be specified in the range of:
Current up to 22mA max, Source configuration (Internally powered)
(Current up to 100mA max in Sink/external powered configuration)
Voltage up to 20Vdc max
Typical output range: 4-20mA (Active/Source port, into 550Ω max)
E.g; for $d/dt=0\%$ of span per second, output=4mA,
For $d/dt=1/16^{\text{th}}$ of span per second, output=20mA.

CONTROLS

15 turn potentiometers.
Zero ± 25%
Span ± 25%

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Response time: Typically ≤1Sec
Accuracy: ≤ ±0.5% span
Supply regulation: DC ±10%, AC ±20%
Supply consumption: <3VA

PROTECTION

Isolation 1000V RMS: Input/Output/Supply/Earth
Internal Fuse.
Input over range up to typically 300%.

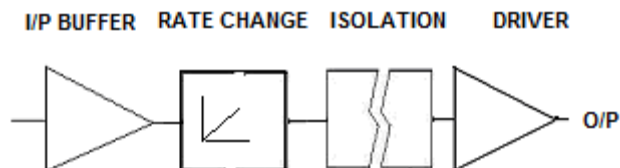
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN61326-1:2013 (Controlled EM)
(‘K’ option to the highest Generic Industrial levels)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm ('k' option encl.=182d mm)
Mounting: DIN Rail (TS35) or Surface by corner fixing holes
Weight < 300g

ADD ON / OPTIONS

J : Input injection jack socket
T: Trip (SPCO contacts)
Non standard Power supply options available

(Input-Output rate of change calibration req's T.B.A on orders)