

ADT182WK Dual Channel Input Frequency Trip Amplifier

Suitable for SIL 1 & SIL 2 rated (EN 61508-2) Safety Instrumented

System (SIS) loop applications, as 1001 architecture (HFT:0)

Supply voltage options: 115Vac ±20%

230Vac ±20% 24Vdc ±10%

48Vdc ±10%

RFI Protection to EN61000-4-3:2006/A2:2010

• AMELEC Standard 10 year warranty

 Digital Indication of input Frequency & Trip Set Points available ('DI' option, LCD or LED)

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

Technical Specifications

Inputs

Typically regular pulses from either an encoder or proximity sensors, with a nominal 90° phase shift between the input signals.

Minimum 25Hz calibrated span (maximum 12KHz span) as standard.

Green LED indication ON for each direction of travel/rotation.

Outputs

Each trip Relay output is a set of SPCO contacts, rated at 250VAC, 2A, 100VA resistive. Red LED indication of each Relay status; ON Energised, Extinguished in Trip/De-energised state as standard. Each trip Set Point is independently adjustable over the full input frequency range.

Deadband

Fixed nominal 1% Span Trip Hysteresis as standard. (Variable 0.5-20% span deadband also available: 'V' option)

Performance

Isolation: 500Vdc Inputs/Contacts/Contacts/Supply/Earth

Trip settability: ±0.1%
Trip repeatability: ±0.1%
Deadband: ±0.1%
1% standard

Response time: <200mS (0-100% input step change) (Fixed or Variable Time delay into Trip also available: 'T' option)

Input O/C response: Downscale drive

(other special requirements also available on request: 'X' options)

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 (Generic Industrial)

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

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

Customer Termination

Fixed screw terminals as towards rear of enclosure standard.

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WIRING

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5 4 3

AMELEC

(Front View

Input

TRIP 1

(Ø) TRIP 2

. 0V

-Input B (+)

Input A (+)

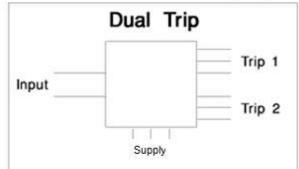
Trip 1_(CW)

CCW O

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Mounting/Dimensions

Enclosure: 50w x 75h x 182d mm

Heavy duty DIN Rail (TS35) mounting as standard.

Surface by Seismic Keyhole mounting plate (50w x 130h mm) and Front Panel mounting options also available on request.

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