

ADT112 Thermocouple Dual Trip Amplifier

- Suitable for SIL 1, SIL 2 or SIL 3 rated (EN 61508-2) Safety Instrumented System (SIS) loop applications
- Supply Voltage options:
 - 20Vac $\pm 20\%$
 - 115Vac $\pm 20\%$
 - 230Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- Front fascia Digital Display available ('DI' option)
- Time delay into Trip available, fixed or variable ('T' option)
- Non-Smart / Non-uProcessor based Type A instrument
- AMELEC Standard 10 year warranty

Technical Specifications

Input

mV signal developed from any Thermocouple type; J,K,N,R,S or T, with a minimum 4mV span as std.
 ('Other' special input signal ranges available on request – 'X' option)

Relay Outputs

Each Trip output is a set of changeover contacts (S.P.C.O) rated at 250VAC, 2A, 100VA resistive.
 Relays De-energise on Trip & Fail Safe on loss of power as std
 Red LED indication of each relay status; **ON** Energised / healthy, Extinguished in Trip / De-energised state.
 Latching relay with local or Remote Reset facility 'L' option available

Isolation

1000V RMS* Input/Contacts/Contacts/Supply/Earth
 *(500Vdc when option 'K' is specified)

Performance

Trip settability: $\pm 1\%$
 Trip repeatability: $\pm 0.1\%$
 Response time: $< 100\text{mS}$ (0-100% input step change)
 Deadband: 1% Span as std.
 (Variable hysteresis 0.5%-20% available – 'V' option)
 Input Open Circuit response: Upscale drive as std
 (O/C Downscale drive available on request if preferred)

Environmental Conditions

Storage Temperature: -40°C to $+70^{\circ}\text{C}$
 Operating Ambient: -15°C to $+55^{\circ}\text{C}$
 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)

Dimensions/Mounting

50w x 75h x 110d mm, Din Rail (TS35) **or** Surface
 ('K' option enclosure = 182d mm)

