

## ADT131TX-DC-DNB Time Elapsed Trip module

- Non-smart / Non-uProcessor based design.
- Supply options: 24Vdc or 48Vdc (+/-10%)
- Amelec standard 10 year warranty
- Suitable for SIL 1 & SIL 2 rated safety instrumented system (SIS) loop applications, as 1oo1 architecture, HFT:0 (EN 61508-2:2010)

Timer cycle can be activated with contact closure or opening to both input s. Trip Relay shall be energised during timing period, de-energising when the run time has elapsed. Timer can be put on hold during the timing cycle by opening input 1 contacts. Closing the contacts again shall resume the timer.

### TECHNICAL SPECIFICATION

#### INPUT

Volt free contact or 24V / 48Vdc applied contact can be specified  
Open or Close = Run/ Energise or De-energise output relay, either for the Time period set or once the time period set has elapsed.

#### TRIP / RELAY

DPCO contacts, rated at 250VAC, 2A, 100VA resistive as std.  
(Relay De-energised on Time Elapsed)

#### CONTROLS

TIME: 15-turn blindset potentiometer to set the time period in the range of 1 to 10 Seconds.  
Other ranges may be specified, up to 300 minutes.

#### INDICATOR

Power ON: LED, Amber (**ON** Healthy / OFF Loss of Supply)  
Relay status: LED, Red (**ON** Energised / OFF Trip)

#### PERFORMANCE

Trip settability: better than  $\pm 1\%$   
Trip repeatability: better than  $\pm 0.1\%$   
Response time: Typically < 200ms  
Power consumption: <3VA  
EMC: 2014/30/EU, EN 61326-1: 2013 (controlled EM)

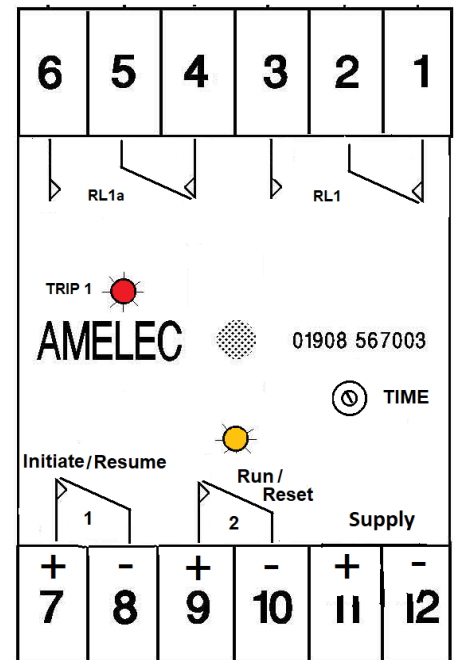
#### PROTECTION

Isolation 1000V RMS. Output/Contacts/Supply/Earth  
Internal Fuse.  
Failsafe Relay: De-energise on loss of power

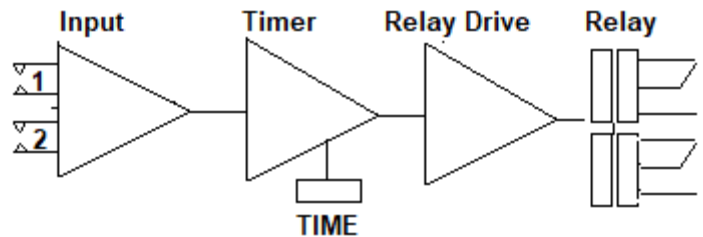
#### TERMINATION

|                    |    |
|--------------------|----|
| RL1-NC             | 1  |
| RL1-COM            | 2  |
| RL1-NO             | 3  |
| RL1a-NC            | 4  |
| RL1a-COM           | 5  |
| RL1a-NO            | 6  |
| Volt free contacts | 7  |
| Volt free contacts | 8  |
| Volt free contacts | 9  |
| Volt free contacts | 10 |
| Supply/ +Ve        | 11 |
| Supply/ -Ve        | 12 |

#### FRONT VIEW



#### FUNCTION BLOCK DIAGRAM



#### ENVIROMENTAL CONDITION

Storage temperature: - 40 to +70 °C  
Operating Ambient: -15 to +55 °C  
Relative Humidity: 5 to 95% RH (Non-Condensing)

#### MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm  
Mounting: Din rail (TS35) or Surface by corner fixing holes  
Weight < 300g

#### ADD ON / OPTIONS

K: RFI protection to EN 61000-4-3 (20-1000MHz,  $\leq 10V/m$ )  
Non standard Power supply ranges available