

ADT131TXL-DC-DNB Time Elapsed Trip Relay 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)

Time Elapsed Trip Relay module is Energised via Input 1 external Reset pushbutton Contact Closure, with Latching Relay1 output contact used to maintain the 50Vdc supply thereafter (across 2-3), whilst Relay 1a output contact makes the Alarm circuit (across 5-6) Timer cycle is activated via Input 2 external volt-free contact Opening across 7-8. Relay module remains Energised during the Timing period, De-latching & De-energising when the run Time has Elapsed. (Relay remains unaffected/ Energised if Input2 contact Closes again during the timing period)

TECHNICAL SPECIFICATION

INPUT

50Vdc applied via input1 Supply/Reset Contact Closure from remote pushbutton to Energise & Latch, Volt- free input2 contact Opens to Run/Initiate Timer.

TRIP / RELAY (Output)

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

CONTROLS

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

INDICATOR

Power ON: LED, Amber **ON** Healthy / Energised
Relay status: LED, Red **ON** Energised / Latched

PERFORMANCE

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

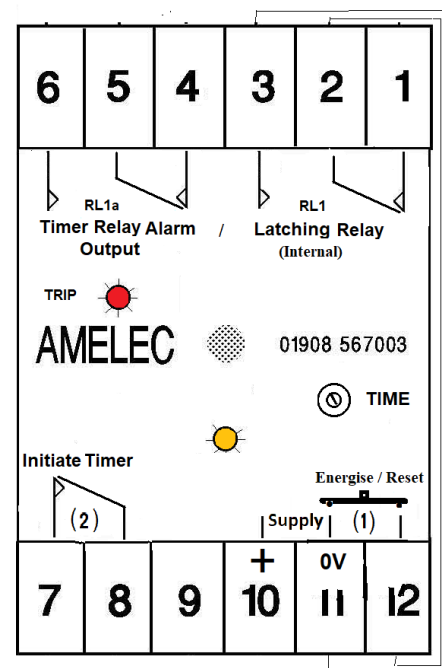
PROTECTION

Failsafe Relay: De-energise on loss of power

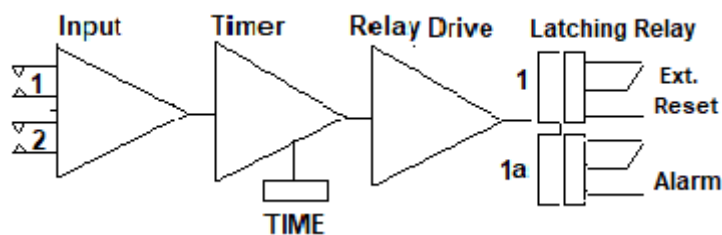
TERMINATION

	1
Ext. Link to TB12	2
Ext. Link to TB11	3
RL1a-NC	4
RL1a-COM	5
RL1a-NO	6
Volt free contacts	7
Volt free contacts	8
	9
Supply/ +50V	10
Supply/ 0V	11
Ext. Pushbutton	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



(External Wiring to include: TB3—TB11, TB2—TB12)

ENVIRONMENTAL CONDITIONS

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

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 110d mm
Mounting: Din rail (TS35) or Surface (by corner fixing holes)
Weight < 350g

ADD ON / OPTIONS

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