

# **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 1001 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 input 1 contacts again shall resume the timer.

#### **TECHNICAL SPECIFICATION**

#### **INPUT**

50Vdc applied input1 Contact to Initiate/Resume, Volt- free input2 contact to Run/Reset, Input1 Closed/Input2 Open = Run/ Energise output relay for the Time period set Input2 Closed to Reset once time period has elapsed.

### TRIP / RELAY

DPCO 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 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 ±1% Trip repeatability: better than ±0.1% Response time: Typically < 200mS

Power consumption: <3VA

EMC: 2014/30/EU, EN 61326-1: 2013 (controlled EM)

### **PROTECTION**

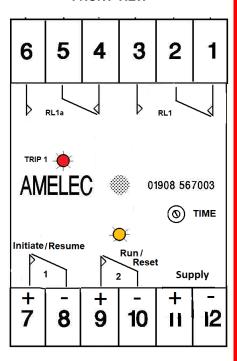
Isolation 1000V RMS. Output/Contacts/Supply/Earth Internal Fuse.

Failsafe Relay: De-energise on loss of power

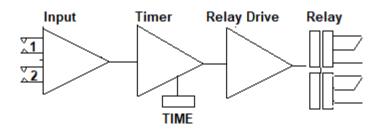
### **TERMINATION**

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 ℃ Operating Ambient: -15 to +55 ℃

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, <10V/m) Non standard Power supply ranges available