

ADT131DITX Contact Repeater Module with Time Delay

- Suitable for SIL 1 & SIL 2 rated (EN 61508) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 = option 'K'
- AMELEC Standard 10 year warranty

Technical Specifications

Function

Open or Closure of the input contact shall initiate the timer count, the output relay can either energise/relay contacts Close or De-energise/ relay contacts open for the time period set, or after the time has elapsed.

The timer is to count up to the time period set before the output relay either de-energises or energises again, and then waits for the next input contact state change to initiate the next timer count event.

(any further input contact changes within the timing period can either be ignored or immediately Reset in the meantime, specified to suit applications)

Input

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

Time Delay

Fixed or variable Time delay from 10secs up to 33mins may be specified.
Once the timer function is initiated, the time elapsed counts up on the front fascia Display (3.5 digit LCD) to 1999 seconds max.

Output

The output relay has a set of D.P.C.O contacts, rated at 250VAC, 2A, 100VA (resistive), with Red LED indication of relay status
(Can be configured for just a momentary change of state if required)

Controls

Unit Functional/Calibration spec. is factory set.
Variable Time delay Set Point adjustment via a 15-turn blindset potentiometer through front fascia.

Indicator

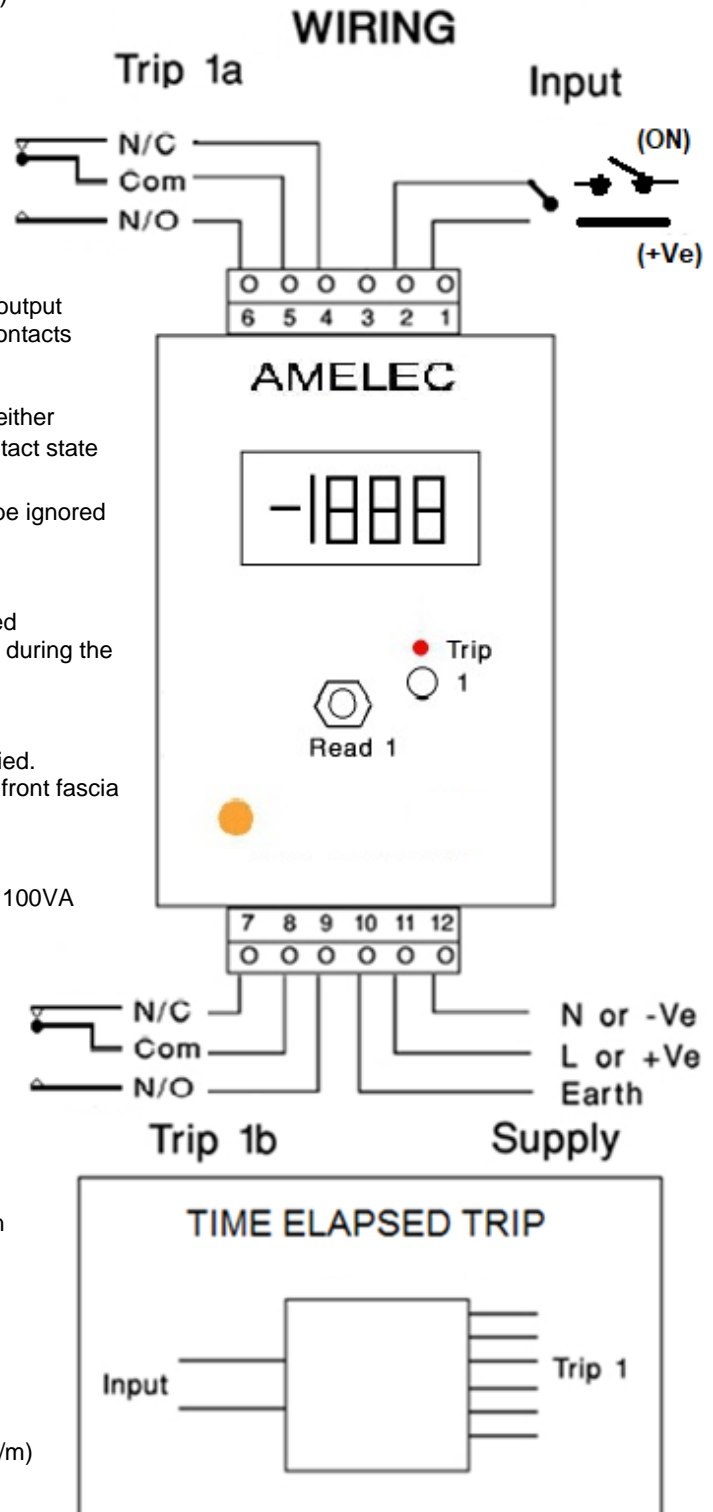
Power ON: LED, Amber.
Relay contact status: Red LED ON either during timing period or when output contacts open/close, to suit applications.

Performance

Trip repeatability: $\pm 1\%$
Response time: $< 100\text{ms}$ as standard
Isolation: 500Vdc Input/Contacts/Supply/Earth
Option 'K': RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$,
(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$)

Environmental Conditions

Storage Temperature: -40 to $+70^\circ\text{C}$
Operating Ambient: -15 to $+55^\circ\text{C}$
Relative Humidity: 5 – 95% RH (Non-Condensating)
EMC: 2014/30/EU, EN61326-1:2013 (Controlled EM)
(‘K’ option to the highest Generic Industrial levels)



Dimensions:

ADT131DITX: 50w x 75h x 145d mm,
ADT131DIKTX: 50w x 75h x 182d mm