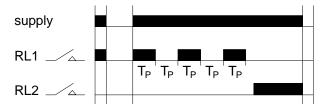
## **TR900**

#### 3 ATTEMPT START TIMERS

A range of time relays designed for use in the automatic or semi-automatic control of engine starter motor circuits.

Each unit has two relay outputs: Relay RL1 is used to control the engine starter motor; RL2 is typically used to give signalling of an engine 'start fail':-



When power is applied, RL1 gives three 10 second crank 'pulses' (Tp above, contacts close), separated by two 10 second 'dwell' (or 'crank rest') periods (contacts open). In typical use, an external control circuit is used to power down and reset the TR900 (turning off the starter motor) as soon as a healthy engine speed is detected.

If a healthy engine speed is not detected by the end of the 3 attempts to start (i.e. if the supply power is maintained), relay RL2 will energise (contacts close) and remain energised until power is removed.

The TR900 is available in two versions: 12VDC or 24VDC two versionsmodels, for use with either 12VDC or 24VDC battery supplies. Electrical connection of power supply and relay outputs is via a standard 8 pin, octal base (not supplied). Each TR900 is housed in a robust black polycarbonate case.



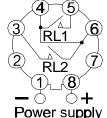
# **Product Specifications**

	12VDC	24VDC
Input/Power supply: steady state voltage range minimum holding voltage (RL1)	· ·	18 - 32 VDC VDC 3 W
power consumption  Time scale	3 attempts (RL1): 10 seconds 'pulse', 10 seconds 'dwell'	
Relay output (RL1 and RL2):	normally open contacts, rated 5A @ 24VDC (resistive load), 3 x 10 <sup>5</sup> operations	
General: operating temperature range weight	-10 to +55°C approx. 130 g	

### Connection

**Dimensions** 

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Relays shown de-energised

80

# When ordering, please specify:-

Stock number Model - description 21.70.0149 TR900/A - 12VDC operation TR900/B - 24VDC operation 21.70.0005

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