



TR4800 Tachometer Relays

The Tempatron TR4800 tachometer relays are designed to monitor and control speed by energising the relay output when the monitored speed exceeds the setting on the user adjustable front dial. Three models are available to cover speeds from 5rpm to 10,000rpm. All models have an internal 15Vdc power supply for powering active sensors and a 0-1mA meter output for displaying the speed.

The tachometer relays are housed in a compact DIN48 square enclosure which can either panel mount or surface/DIN rail mount to a socket and they are auxiliary powered from either 24Vac/dc or 110/230Vac. The 5 Amp rated single pole changeover relay output contact is isolated from the supply voltage and the relays have two LEDs to indicate both power and relay status.

Models Available

TR4801-01 5-100rpm Tacho Relay

TR4801-02 50-1000rpm Tacho Relay

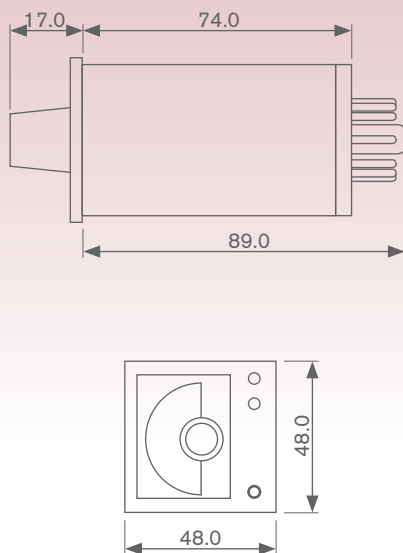
TR4801-03 500-10,000rpm Tacho Relay

Product Features

- 3 models for 5rpm to 10,000rpm
- NPN sensor or voltage free input
- 24Vac/dc or 110/230Vac
- 0-1mA output for rpm meter
- Internal 15Vdc supply for sensor
- Standard DIN48 square size
- Plug-in socket or panel mounting
- Lockable dial to prevent tampering
- Matching timers available
- Matching temp. controllers available
- Plug-in sockets also available

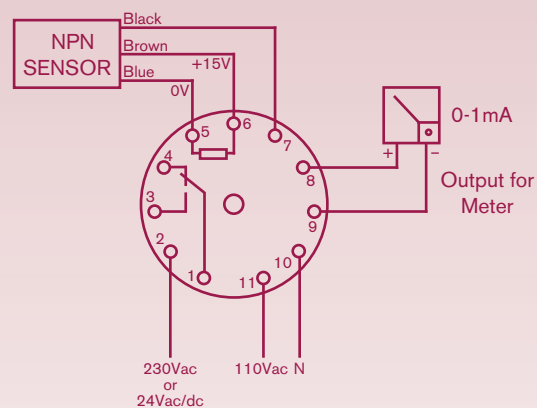
For monitoring and control of speed of rotating machinery and equipment

Dimensions



Panel cutout 45mm square (-0.0/+0.5)

Connections



Note:

A switch input (relay contact, reed switch or open collector transistor etc.) may be used across terminals 5 and 7 as an alternative input to the unit instead of the NPN proximity sensor. When using a switch input, a resistor (approximate value 4.7k ohm) must be connected between terminals 5 and 6.

Ordering information

Model	Code	Description
	TR4801	Tachometer Relay

Speed Range	Code	Description
	01	5rpm to 100rpm
	02	50rpm to 1000rpm
	03	500rpm to 10,000rpm

Auxiliary Power	Code	Description
	24VAC/DC	24Vac/dc
	110/230VAC	110Vac and 230Vac

Plug-in Bases	Code	Description
	CDSR11	11 Pin Rear Screw Panel Socket
	AZ611	11 Pin DIN Rail/Panel Mount Socket
	S11P	11 Pin DIN Rail/Panel Mount Socket

Example **TR4801-01-110/230VAC**

Specification**Repeat Accuracy:**

- $\pm 2\%$ of full scale

Power Supply Voltage:

- 24Vac/dc ($\pm 15\%$)
- 110Vac and 230Vac ($\pm 15\%$)

Burden:

- $< 3VA$ or 2W

Frequency:

- 50/60Hz

Response Time:

- < 0.4 seconds at 150rpm

Input Sensor:

- Voltage free contact (no bounce)
- 3 wire active sensor with power consumption $< 25mA$ at 15Vdc

Minimum Pulse Width:

- TR4801-01: 1.5ms
- TR4801-02: 150 μs
- TR4801-03: 15 μs

Meter Output:

- 0-1mA at 75ohms

Relay Output:

- Single pole changeover contact

Contact Rating:

- 5A at 240Vac/30Vdc (resistive)

Electrical Contact Life:

- 100,000 operations at 5A

Operating Temperature:

- $-10^{\circ}C$ to $60^{\circ}C$

Enclosure Code:

- Case IP40

Weight:

- 200g

Markings:

- CE marked (meets EN61010-1 low voltage and EN50081-1/50082-1 EMC directives)

Specification subject to change without notice.

Tempatron: Eltime House, Hall Road, Maldon, Essex, CM9 4NF UK.

TEMPATRON

Tempatron Industrial Controls is a division of Eltime Ltd.

© Eltime Ltd. Tempatron TR4800 Tachometer Relays 04/2011