



MINITACH2-MCU™ Tachometer Relay

The Tempatron MINITACH2-MCU™ multi range tachometer relays are designed to detect not only overspeed/underspeed conditions but also monitor and calculate that the speed lies within a pre-programmed RPM band, providing continuous confirmation that the user's system is operating within the correct speed limits. They combine analogue potentiometer setting simplicity with microprocessor based, digital timing software. Eight different rpm ranges can be selected (via jumper links) covering speeds from 10rpm to 15,000rpm. The DIN rail mounting model is ideal for one off control panel applications whilst the chassis mounting pcb model is ideal for medium volume OEM applications, measuring only 70mm x 45mm. Both models are 12-24Vdc powered and have a 16 Amp changeover relay output which is isolated from the supply voltage and an LED to indicate current rpm or alarm status.

Models Available

MINITACH2-MCU-D

Multi Range Tachometer Relay (DIN Rail)

MINITACH2-MCU-P

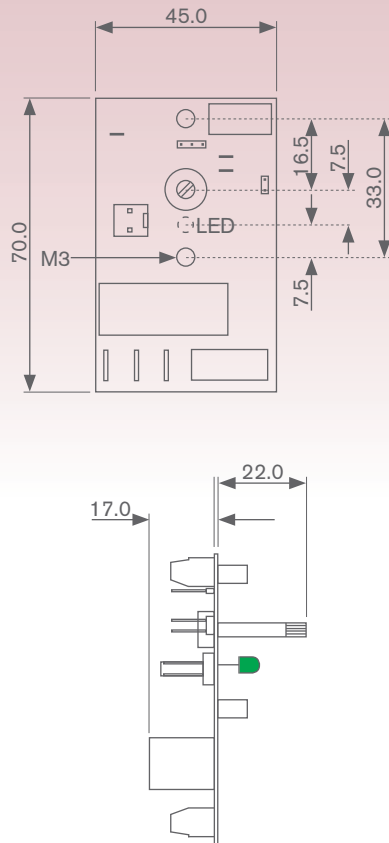
Multi Range Tachometer Relay (PCB)

Product Features

- DIN rail mounting
- PCB model ideal for OEM applications
- 8 ranges (10rpm to 15,000rpm)
- Programmable rpm range feature
- Unique programmable rpm speed band
- PWM analogue rpm output feature
- 16 Amp changeover relay output
- 12 to 24Vdc powered
- LOCKPOT™ operation feature
- LED to indicate rpm or alarm status
- Optional remote LED (pcb model only)
- Dual optocoupler output upon request

For monitoring and control of speed of rotating machinery and equipment

Dimensions - PCB version

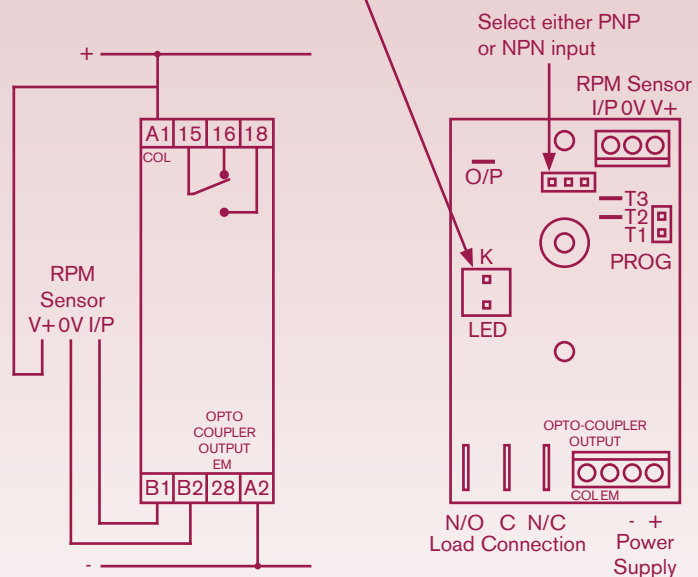


All dimensions in mm

Connections

The unit is set for onboard LED indication.

To select **remote LED** indication, 'spin cut' the copper pad adjacent to the LED to disconnect the onboard LED. Connect the remote LED to the 2-pin **LED** Molex header (ensuring LED cathode is connected to pin **K**).



Links T2 & T3

Link T2 and T3 for range of 1000 to 10000 rpm (programmable 1500 to 15000 rpm)

Link T3 only for range of 500 to 5000 rpm (programmable 750 to 7500 rpm)

Link T2 only for range of 100 to 1000 rpm (programmable 250 to 2500 rpm)

Remove both T2 and T3 links for range of 50 to 500 rpm (programmable 10 to 100 rpm)

Ordering information

Model	Code	Description
	MINITACH2-MCU-D	Multi Range Tachometer Relay DIN Rail Mounting
	MINITACH2-MCU-P	Multi Range Tachometer Relay PCB

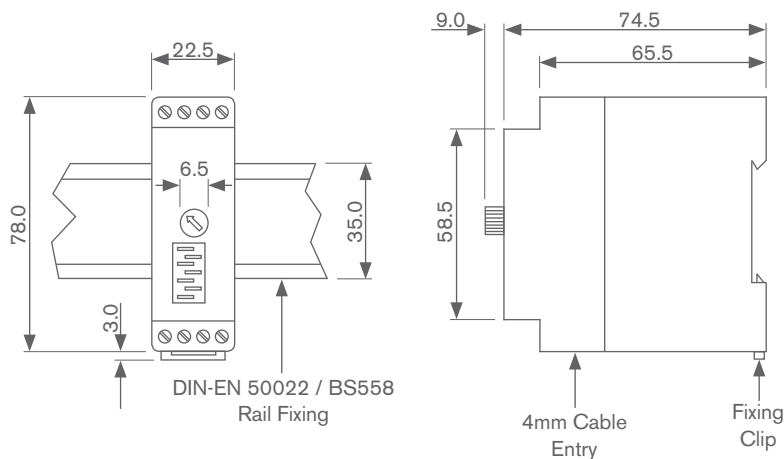
Example **MINITACH2-MCU-P**

Output Options

Relay as alarm and optocoupler as in-range outputs (link O/P) or

Relay as alarm and optocoupler as pwm outputs (programmable) or

Optocoupler as alarm and relay as in-range outputs (remove O/P link)

Dimensions - DIN rail mounting version

All dimensions in mm

Specification**Power Supply Voltage:**

- 12 to 24Vdc

Burden:

- 7.5mA nominal (outputs off)
- 45mA nominal (outputs active)

Sensor Input:

- NPN or PNP open collector

Input RPM Ranges:

- T1: 1000 - 10000 rpm - link T2 and T3
- T1H: 1500 - 15000 rpm (programmable)
- T2: 500 - 5000 rpm - link T3
- T2H: 750 - 7500 rpm (programmable)
- T3: 100 - 1000 rpm - link T2
- T3H: 250 - 2500 rpm (programmable)
- T4: 50 - 500 rpm - no links
- T4L: 10 - 100 rpm (programmable)

Relay Output:

- Single pole changeover relay contact
- 16A at 240Vac/30Vdc (resistive)

Status LED Indication:

- Display RPM status: (under/overrange, 20, 40, 60, 80, 100%) - factory set
- Display RPM alarm status: (under/overrange, alarm active/inactive) - programmable

Electrical Connections on PCB version:

- Three 6.3mm blades for relay output (N/C, C, N/O)
- 4 way screw terminals for DC supply and optocoupler output
- 3 way screw terminals for tacho input
- 2-pin molex connector for remote LED
- 2-pin header for programming plug

Mounting:

- Two M3 fixing pillars spaced 33mm

Operating Temperature:

- -20°C to 65°C

Enclosure Code:

- DIN Rail: case IP50, terminals IP10
- PCB: IP00

Weight:

- 35g

Specification subject to change without notice.

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

TEMPATRON

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