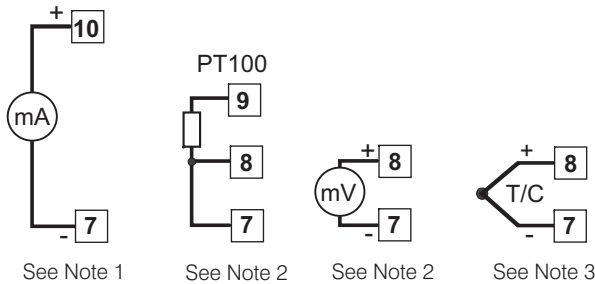


# Electrical installation



**WARNING:** Ensure that power to the instrument is switched off and signal wiring isolated from hazardous voltages before working on any electrical connection.



## Terminals

Wire capacity 2.5mm maximum  
Use 3mm screwdriver

## Universal Input Connection

For cable length less than three metres no screen or twisted pair is required. Thermocouple inputs must use the correct compensation cable. For PT100 inputs all three wires must be of equal length (resistance).

Use recommended types for cable lengths 3 to 30 metres.

**NB** Where screened cable is used, the screen must be connected at one end only.

### Note 1

Twisted pair or screened cable.

### Note 2

Screened cable.

### Note 3

TC compensation cable.

## Output Relays Connection

Maximum relay contact rating is 1 Amp @ 250 V AC (30 V DC). Any circuit connected to a relay contact must be via a 2 Amp (T) fuse.

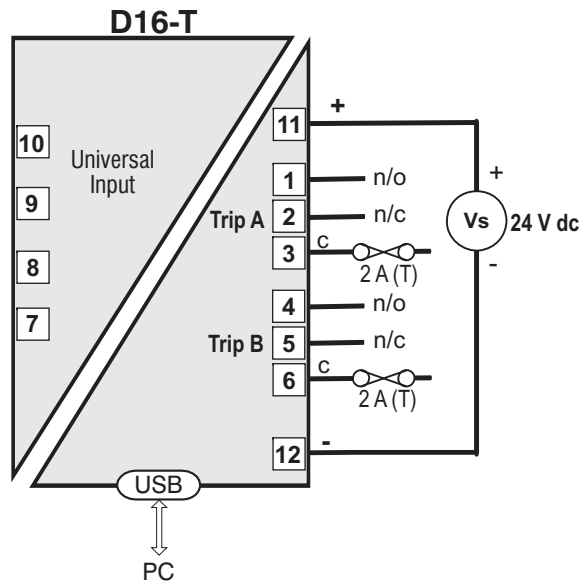
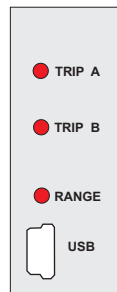
## Power Supply

Maximum cable length 30 metres

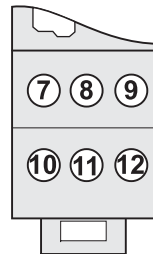
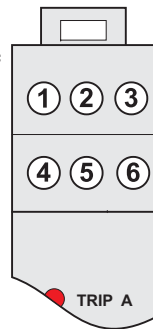
## Front Panel Indication

Trip A and Trip B LEDs: *ON* in alarm state

Range LED: *ON* when input is out of range



Location of terminals



**SIL**

# UNIVERSAL INPUT TRIP AMPLIFIER

Type D16-T

User Guide



**IMPORTANT - Potentially hazardous situations. Persons responsible for the installation and operation of this equipment must be fully aware of all aspects of this guide.**

Every effort has been taken to ensure the accuracy of this document, however we do not accept responsibility for damage, injury, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.

## IMPORTANT - CE & SAFETY REQUIREMENTS



This product is suitable for environment installation category II pollution degree. This product is classified as "PERMANENTLY CONNECTED EQUIPMENT".



Product must be DIN rail mounted, inside a suitable enclosure providing environmental protection to IP65 or greater.



To maintain CE EMC requirements, input and supply wires must be shorter than 30 metres.



DC supply must be derived from a local supply and not a distribution system.

Maximum relay contact rating is 1 Amp @ 250 V AC, 1 Amp @ 30 V DC. Any circuit connected to a relay contact must be with a 2 Amp (T) fuse.

The product contains no serviceable parts, or internal adjustments, no attempt must be made to repair this product. Faulty units must be returned to supplier for repair.

This product must be installed by a qualified person. All electrical wiring must be carried out in accordance with the appropriate regulations for the place of installation.

Before attempting any electrical connection work, please ensure all supplies are switched off.

## ABSOLUTE MAXIMUM OPERATING CONDITIONS:-

**Supply Voltage:** ± 30 V dc (Protected for over voltage and reverse connection)

**Current with over voltage:** ± 200 mA

**Input Voltage:** ± 5 V between any terminals

**Input Current:** ± 100 mA between terminals 7 & 10

**Ambient:** Temperature: -30 to 75 °C

Humidity: 10 to 95 % RH (Non condensing)

**SIL**

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## Product specification

Please refer to the product data sheet for full specification, available to download at [www.sil.co.uk](http://www.sil.co.uk).

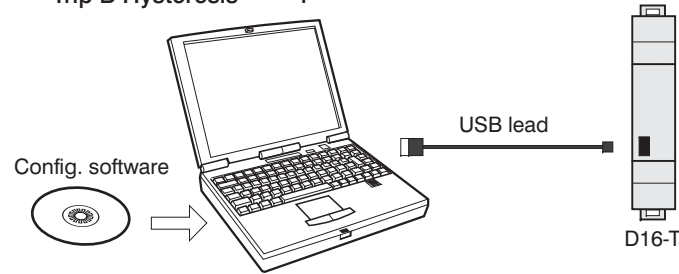
## Receipt and unpacking

Please inspect the packaging and instrument thoroughly for any signs of transit damage. If the instrument has been damaged, please notify your supplier immediately.

## Configuration

Unless otherwise pre-configured to order, the D16-T is supplied set to the following factory defaults:

|                   |      |
|-------------------|------|
| Input type        | = P  |
| Units             | = °C |
| Trip A Type       | = H  |
| Trip A Set-point  | = 50 |
| Trip A Hysteresis | = 1  |
| Trip B Type       | = H  |
| Trip B Set-point  | = 50 |
| Trip B Hysteresis | = 1  |



Connect the D16-T to a PC via a standard USB cable. The unit does not need to be wired to a power supply during configuration, it is powered by the USB port on your computer.



**IMPORTANT** The D16-T can be configured whilst connected and powered, but a portable battery powered computer must be used to avoid the effects of ground loops.

The configuration software (*download from [www.sil.co.uk](http://www.sil.co.uk)*) will download the existing configuration data from the D16-T and guide you through any changes you wish to make. Software installation instructions are provided in the software ZIP file. The following parameters are configurable :-

|                        |  |
|------------------------|--|
| Input type:            | PT 100<br>Thermocouple types K, J, E, N, T, R, S<br>mV<br>mA |
| Trip A & B Type:       | High or Low  |
| Trip A & B Set-point:  | set in engineering units (see units)                         |
| Trip A & B Hysteresis: | set in engineering units (see units)                         |
| Units:                 | °F, °C, mV, mA   |

## Mechanical installation

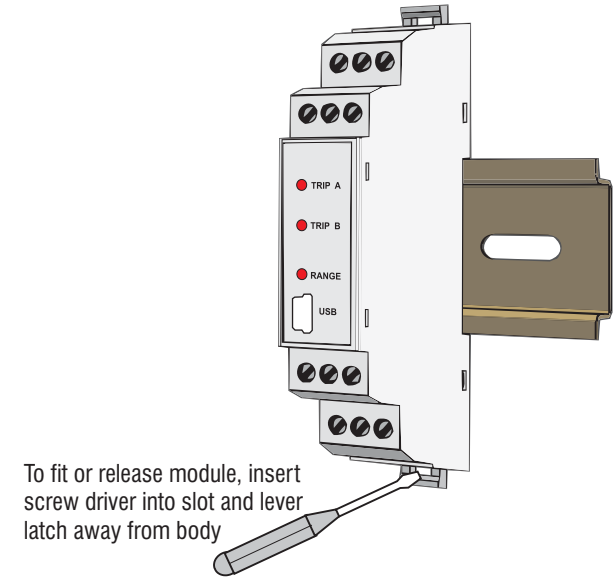
Dimensions: 90 (H) x 17.5 (W) x 56.4 (D)  
For mounting on DIN rail to EN50022



This unit must be mounted inside a suitable enclosure providing environmental protection to IP65 or greater.



**NB** Maximum operating temperature range -20°C to +70°C, 10 to 95% RH non-condensing.



To fit or release module, insert screw driver into slot and lever latch away from body