



# POWER SUPPLIES

## DIN Rail Mounting Type C16-9

### Features

- **Universal AC/DC powered**
- **Dual isolated outputs**
- **High efficiency - cool running**
- **DIN rail mounting**
- **Removable terminal blocks**
- **5 year warranty**



A general purpose instrumentation power supply for powering two-wire transmitters operating on 4-20mA signals or providing DC power for transducers, 24V signal conditioning modules, etc. Outputs of up to 36V are available, each output supplying a maximum current of 40mA per output. Higher voltages may be obtained by connecting outputs in series.

### SPECIFICATION

#### Outputs

Standard unit: 2 x 24 Volts  $\pm$  0.2V @ 40mA

Notes:

1. Outputs can be connected in series to provide a single output at higher voltages.
2. Other output voltages are available  
e.g. 2 x 12 Volts  $\pm$  0.2V @ 40mA  
2 x 36 Volts  $\pm$  0.2V @ 40mA
3. Outputs may be of mixed type  
e.g. 1 x 12 Volts  $\pm$  0.2V @ 40mA  
1 x 24 Volts  $\pm$  0.2V @ 40mA

#### Output ripple

$\leq$  0.1% RMS of output voltage

#### Load effect on output

0.02% of output voltage / mA load change

#### Input supply voltage rejection

$\leq$  0.01% Vout / Volt

#### Input power

Universal 85-240Vac 50/60Hz 2.5VA; 24-200Vdc  
Protected by a fuse.

#### Stability

Over 24 hours:  $\pm$  0.1% Vout  
Over 1 year:  $\pm$  0.5% Vout

#### Isolation

The outputs are isolated from each other and the input power.  $>10$  Mohms @1000 Vdc

#### Temperature coefficient

$\pm$  0.03% Vout /  $^{\circ}$ C

#### Temperature range

Operating:  $-10^{\circ}$ C to  $+60^{\circ}$ C  
Storage:  $-20^{\circ}$ C to  $+70^{\circ}$ C

#### Safety & EMC

Safety: EN61010-1  
Immunity: EN50082-1  
Emissions: EN50081-1  
CE certified

#### Mechanical

Weight: approx. 0.5kg, Dimensions (mm): 116D\* x 22.5W x 99.5H \*Depth is 117.9 when mounted on DIN rail TS3/TS35D

### Information required when ordering

#### Standard units

Standard units are supplied with dual 24 Volt outputs.

Order code: **C16-9**

#### Units configured to order

- Specify type **C16-10 /9** followed by:-
- Output 1 Voltage
- Output 2 Voltage



### WARNING!

It is important that this information is read and fully understood before attempting installation or commissioning of the instrument. Instructions appearing in this document, and current safety legislation, must be observed to ensure personal safety and to prevent damage to the instrument or equipment connected to it. The instrument should be installed, commissioned and operated only by suitably qualified and authorised personnel.



The specifications for the instrument must not be exceeded. If the instrument is used in a manner not specified, the protection provided by the instrument may be compromised.



The instrument must be installed in an enclosure that provides adequate protection against electric shock.



Ensure that power to the instrument is switched off and signal wiring isolated from hazardous voltages before carrying out installation or maintenance.



The instrument is designed for installation in a clean, dry environment (Pollution degree 1).



The unit contains no user serviceable parts and should be returned to Stroud Instruments Ltd for repairs.



The instrument is double insulated

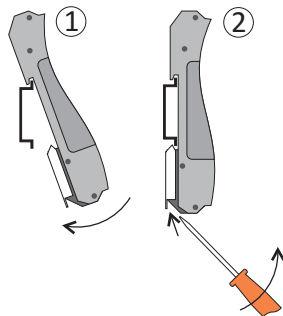
## Installation

### Location

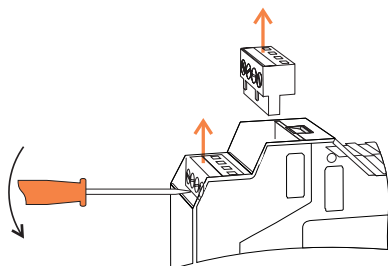
- The instrument is designed for installation in a clean, dry environment
- Do not install near to switch gear, motor controllers or other sources of strong magnetic fields.
- Avoid exposure to direct sunlight and ensure the ambient temperature inside the enclosure that the unit is mounted in will not exceed our specification.

### DIN rail mounting

1. Hook the top DIN rail recess over the DIN rail, and press the bottom edge against the DIN rail until the spring-loaded latch clicks home.
2. To remove the instrument from the DIN rail, insert a small bladed screwdriver into the slot in the spring-loaded latch and gently lever the screwdriver up until the latch releases from the DIN rail.

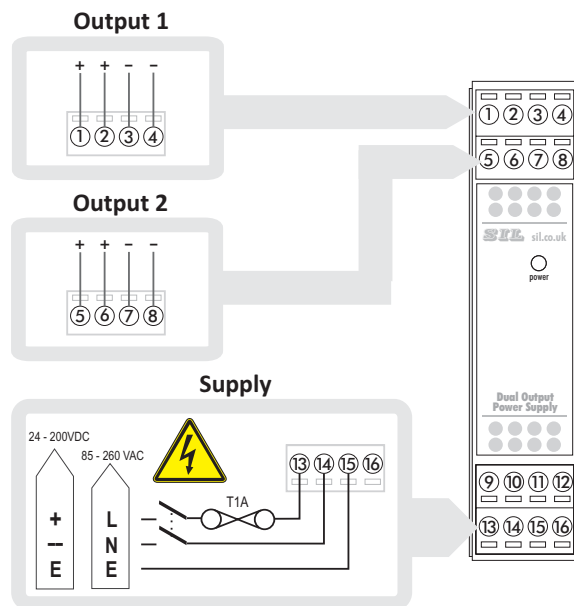


Note: terminal connectors are removable.

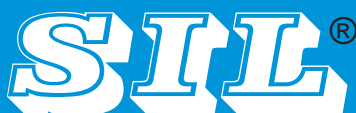


### Wiring and connections

- Connections should be made using ferrules to avoid short-circuits between adjacent terminals.
- This instrument is equipped with a universal power supply and may be operated from either of the following supply ranges:  
DC supplies: 24 VDC to 200 VDC  
or AC supplies: 85 VAC to 260VAC
- Power supply wiring to the instrument should be protected by a 1A time-delay fuse and double pole switch - see below. The switch should be clearly marked as the isolating switch for the instrument.



Continuous development may necessitate changes in these details without notice



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