PSU-24

Instrument Power Supply

This instrument power supply is designed differently from a general purpose power supply. Emphasis is placed on withstanding and rejecting EMI events, such as transients associated with close by unsnubbered contactors etc.

E2180

This is achieved by:

- Second and third stage filtering in both common and normal mode configurations
- Constructing the transformer with inherent shielding to reject unwanted signals

This combination of techniques eliminates the need for a Y cap between the primary and secondary, increasing the impedance to high frequency transients by an order of magnitude or more.

- Powers up to 10x 4-20mA 2-wire loops
- Overload protection
- Low noise
- High accuracy (2%)
- Compact DIN rail mounting unit

Specifications

Input voltage supply 85–265V AC/DC

Output voltage 24V DC

Output current 200mA max

Output ripple 4mV rms/25mVpp max

Load regulation < 0.1%

Line regulation < 0.1%

Short circuit tolerance Indefinite

EMC compliance Emission: EN55022-A. Immunity: EN50082-1. Safety: EN60950.

Mains isolation 250V AC

Isolation test voltages Mains to output: 3000V AC, 50Hz. Mains to earth: 1500V AC, 50Hz.

Ambient drift ≤ ±0.01%/°C FSO typical

RF immunity < 1% effect FSO typical

Operating temperature 0 to 60°C (32–140°C)

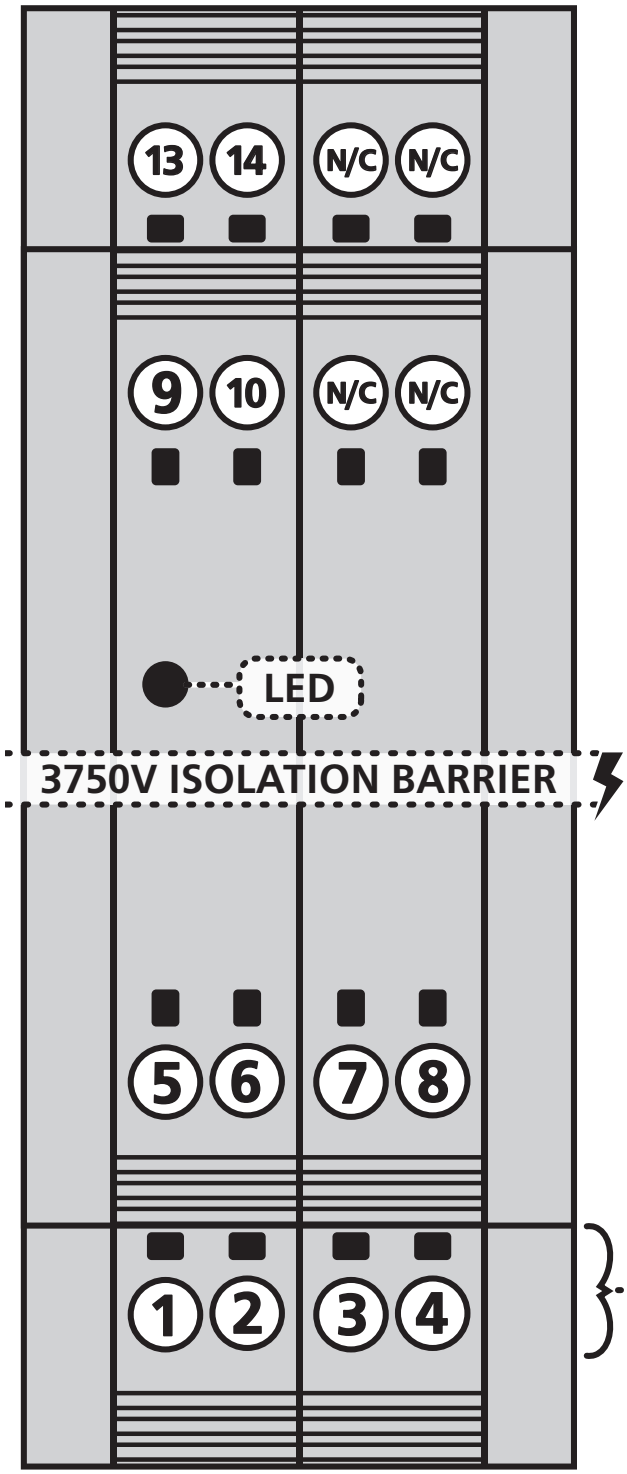
Storage temperature -20 to 80°C (-4 to 176°F)

Operating humidity 5–85% RH max

Casing (H x W x D) 79 x 30 x 70mm (3.11 x 1.18 x 2.76")

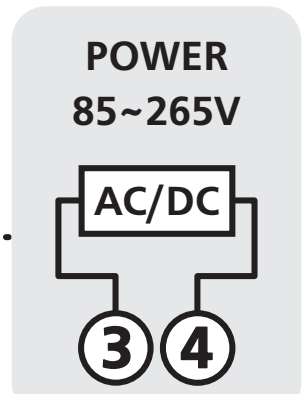
Mounting 35mm DIN rail mount

Wiring



KEY

1	+24V DC	9	+24V DC
2	+24V DC	10	+24V DC
3	AC/DC PWR	13	– (NEG)
4	AC/DC PWR	14	– (NEG)
5	– (NEG)		
6	– (NEG)		
7	EARTH		
8	EARTH		



LED Indicator

LED On Output exceeds 18V

LED Off No output

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