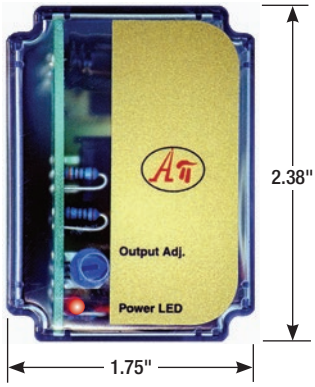
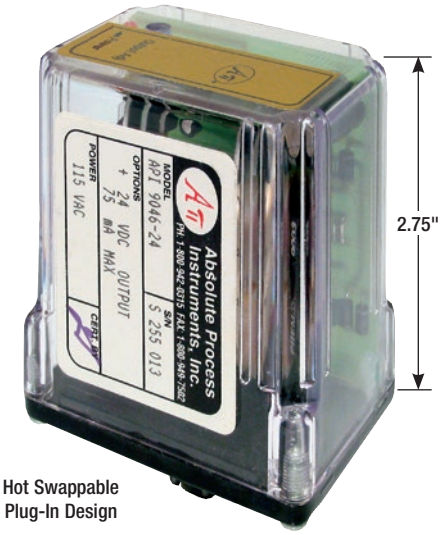
# DC Power Supplies, Regulated

# API 9046

**Power:** 115 VAC or 230 VAC
**Output:** 5 VDC to 32 VDC

- *Wide Range of Output Voltages*
- *High Output Capacity*
- *Conservative Design for High Reliability*
- *Power Indicator LED*
- *Power Passive 4-20 mA Sensors*
- *Easy to Install Plug-in Design*




Hot Swappable
Plug-In Design

LIFETIME WARRANTY

MADE IN USA

Quick Link
api-usa.com/9046

## Specifications

### Input Voltage
Standard: 115 VAC ±10%, 50/60 Hz, 2.5 W max.
**A230** option: 230 VAC ±10%, 50/60 Hz, 2.5 W max.

### Indicator
Red LED power indicator

### DC Output Ranges
See table below right
Consult factory for other output voltages

### Regulation
Line: Less than ±0.5% of output for $V_{in}$ ±10%
Load: Less than ±3% for load range of 10 to 100% of rating

### Output Adjustment
Potentiometer for fine output adjustment
±10% of span adjustment range typical

### Ripple and Noise
Less than 5 mVRMS ripple and noise

### Ambient Temperature Range
–10°C to +60°C operating ambient

### Housing and Sockets
IP 40, requires installation in panel or enclosure
Socket mounts to 35 mm DIN rail or can be surface mounted
Use API 008 or API 008 FS socket

### Description
The API 9046 power supplies are designed to provide DC power to two-wire transmitters, panel meters, or any device requiring a source of well-regulated DC voltage.

The API 9046 output voltage is factory selected and may be fine-tuned by adjusting the top-accessible fine adjust potentiometer. The red power LED provides a visual indication that the unit is functioning.

The API 9046 features short-circuit protection for the output. The transformer secondary is full-wave rectified, filtered and regulated by an IC regulator which also provides output short-circuit protection.

The designs include high-rated temperature components, increased regulator heat sinking for excellent reliably, and greater output current capabilities than competitive designs. Input voltages of 115 VAC or 230 VAC are factory configured via a dual primary power transformer.

The API 9046 plugs into an industry standard 8-pin socket sold separately. The convenient plug-in design simplifies installation and wiring.

| Model | Voltage | Max. Current | Power |
|---|---|---|---|
| **API 9046-05** | 5 VDC | 250 mA | 115 VAC |
| **API 9046-06** | 6 VDC | 200 mA | 115 VAC |
| **API 9046-09** | 9 VDC | 150 mA | 115 VAC |
| **API 9046-10** | 10 VDC | 140 mA | 115 VAC |
| **API 9046-12** | 12 VDC | 125 mA | 115 VAC |
| **API 9046-15** | 15 VDC | 100 mA | 115 VAC |
| **API 9046-18** | 18 VDC | 85 mA | 115 VAC |
| **API 9046-24** | 24 VDC | 75 mA | 115 VAC |
| **API 9046-28** | 28 VDC | 60 mA | 115 VAC |
| **API 9046-32** | 32 VDC | 50 mA | 115 VAC |

| Model | Voltage | Max. Current | Power |
|---|---|---|---|
| **API 9046-05-A230** | 5 VDC | 250 mA | 230 VAC |
| **API 9046-06-A230** | 6 VDC | 200 mA | 230 VAC |
| **API 9046-09-A230** | 9 VDC | 150 mA | 230 VAC |
| **API 9046-10-A230** | 10 VDC | 140 mA | 230 VAC |
| **API 9046-12-A230** | 12 VDC | 125 mA | 230 VAC |
| **API 9046-15-A230** | 15 VDC | 100 mA | 230 VAC |
| **API 9046-18-A230** | 18 VDC | 85 mA | 230 VAC |
| **API 9046-24-A230** | 24 VDC | 75 mA | 230 VAC |
| **API 9046-28-A230** | 28 VDC | 60 mA | 230 VAC |
| **API 9046-32-A230** | 32 VDC | 50 mA | 230 VAC |

**Option—add to end of model number**
**U** Conformal coating for moisture resistance

**Accessories—order as separate line item**
**API 008** 8-pin socket
**API 008 FS** 8-pin finger-safe socket

**API CLP1** Module hold-down spring for high vibration or mobile applications


API 008 FS
300 V Rating


API 008
600 V Rating


API CLP1

## Instructions

### Precautions
WARNING! All wiring must be performed by a qualified electrician or instrumentation engineer. See diagram for terminal designations and wiring examples. Consult factory for assistance.

WARNING! Avoid shock hazards! Turn power off before connecting or disconnecting wiring, or removing or installing module.

### Précautions
ATTENTION! Tout le câblage doit être effectué par un électricien ou ingénieur en instrumentation qualifié. Voir le diagramme pour désignations des bornes et des exemples de câblage. Consulter l'usine pour assistance.

ATTENTION! Éviter les risques de choc! Fermez et l'alimentation électrique avant de connecter ou de déconnecter le câblage, ou de retirer ou d'installer le module.

Use API 008 or finger-safe API 008 FS socket.

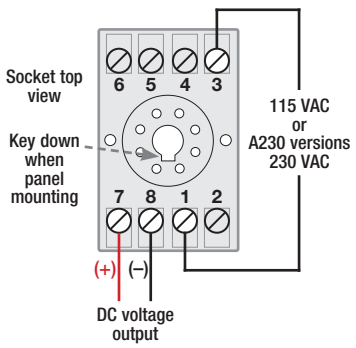
### Power Input
Power supplies operate on 115 VAC.

Models with **A230** option operate on 230 VAC.

### Power Output
Polarity must be observed when connecting the power output to the load.

### Calibration
The **API 9046** is factory calibrated and should not require adjustment in the field.

1. Wire unit as shown, apply power, and allow a 20 minute warm-up time.
2. Using an accurate voltmeter, adjust the top accessible Output Adj. potentiometer to the desired output voltage.





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