

DC Power Supplies, Regulated

API 9046 G



Input: 115 VAC or Optional 230 VAC
Output: 5 VDC to 32 VDC or ± 5 VDC to ± 15 VDC

- Wide Range of Output Voltages
- High Output Capability
- Conservative Design for High Reliability
- Available as 115 VAC or 230 VAC Powered
- Power Indicator LED

Applications

- Power Passive 4-20 mA Sensors
- Easy to Install Plug-in Loop Supply
- Reliable, Proven Design

Specifications

Input Voltage

Standard: 115 VAC $\pm 10\%$, 50/60 Hz, 2.5 W max.
 A230 option: 230 VAC $\pm 10\%$, 50/60 Hz, 2.5 W max.

Output Voltages and Currents

See table below right
 Other output voltages available. Consult factory with your requirements

Noise and Ripple

Less than 5 mV

Regulation

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

Output Adjustment (9046)

Potentiometer for fine output adjustment
 $\pm 10\%$ of span adjustment range typical

Output Adjustment (9046-CH)

None

Ambient Temperature Range

-10°C to $+60^{\circ}\text{C}$ operating ambient

Description and Features

The API 9046 and API 9046-CH features include a power indicator LED and 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 reliability, 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 and API 9046-CH plug into an industry standard 8-pin socket sold separately. The convenient plug-in design simplifies installation and wiring. Sockets API 008 and finger-safe API 008 FS allow either DIN rail or panel mounting.

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-CH bipolar power supplies are designed to work with devices requiring dual, balanced DC supplies with excellent line and load regulation while maintaining output voltage ripple at a minimum. The API 9046-CH output voltage is factory set. The red power LED provides a visual indication that the unit is functioning.



Installation and Operation

ELECTRICAL CONNECTIONS

WARNING! All wiring must be performed by qualified personnel only. Order API 008 or finger-safe API 008 FS socket separately.

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. The API 9046-CH is factory set and has no output adjustments.

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

Models & Options

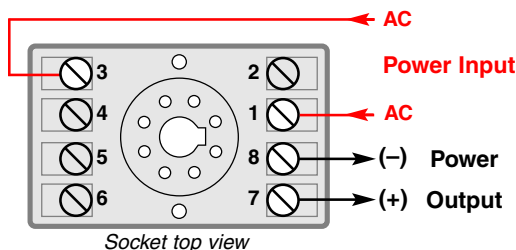
Model	Voltage	Current	Power
API 9046-05	5 VDC	250 mA max.	115 VAC
API 9046-06	6 VDC	200 mA max.	115 VAC
API 9046-09	9 VDC	150 mA max.	115 VAC
API 9046-10	10 VDC	140 mA max.	115 VAC
API 9046-12	12 VDC	125 mA max.	115 VAC
API 9046-15	15 VDC	100 mA max.	115 VAC
API 9046-18	18 VDC	85 mA max.	115 VAC
API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

Optional—Add to end of model number

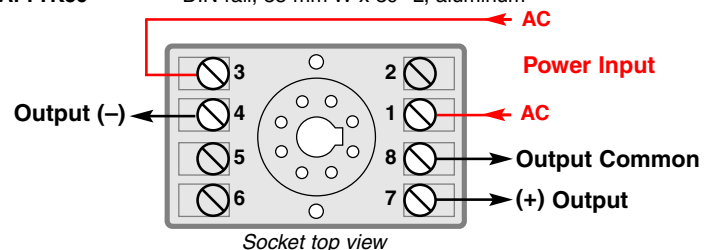
- A230 Powered by 230 VAC, 50/60 Hz
- U Conformal coating for moisture resistance

Accessories—Order as separate line item

- API 008 8-pin socket
- API 008 FS 8-pin finger safe socket
- API TK36 DIN rail, 35 mm W x 39" L, aluminum



API 9046 Series



API 9046-CH Bipolar Output Models