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

Power

Standard: 115 VAC ±10%, 50/60 Hz, 2.5 W max.
A230 option: 230 VAC ±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 ±0.5% of output for V_{in} ±10%
Load: Less than ±3% for load range of 10 to 100% of rating

Output Adjustment (9046)

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

Output Adjustment (9046-CH)

None

Ambient Temperature Range

–10°C to +60°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 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** 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. he **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

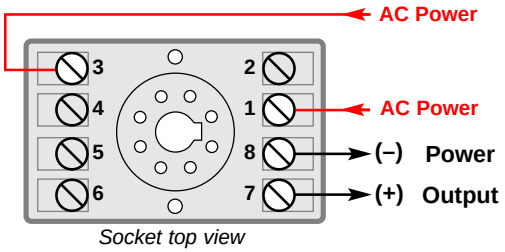
Model	Voltage	Current	Power
API 9046-05	5 VDC	250 mA max.	115 VAC
API 9046-06	6 VDC	200 mA max.	115 VAC
API 9046-09	9 VDC	150 mA max.	115 VAC
API 9046-10	10 VDC	140 mA max.	115 VAC
API 9046-12	12 VDC	125 mA max.	115 VAC
API 9046-15	15 VDC	100 mA max.	115 VAC
API 9046-18	18 VDC	85 mA max.	115 VAC
API 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

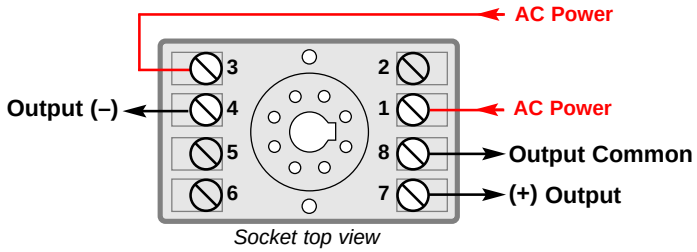
Accessories—Order as separate line item

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



Socket top view

API 9046 Series



Socket top view

API 9046-CH Bipolar Output Models

DC Supplies

B 812 Loop Power Supplies with Signal Transfer Output

- *17 VDC Output*
- *HART Communications Standard*
- *Diagnostic LEDs for Operational Status & Loop Fault*
- *Removable Plugs for Easy Hookup*

HART® FIELD COMMUNICATIONS PROTOCOL

CE

ISO 9001 : 2000

B 812

Removable Plugs for Easy Hookup

Specifications

Input
4-20 mA

Output
4-20 mA, 17 VDC no load

Indicators
Green power LED
Red LED for open or short circuit monitoring

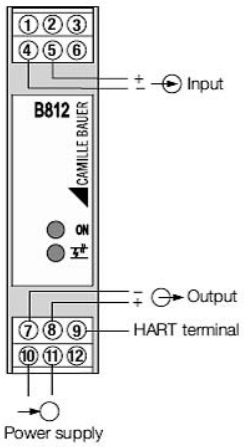
Source Resistance
350 Ω

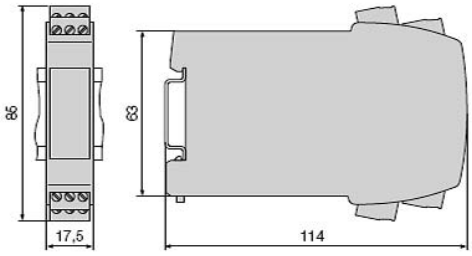
Burden
Permitted load: 750 Ω, 550 Ω with HART

Temperature
Operation: –20 to 50°C
Storage: –20 to 70°C

Dielectric Test
3600 VAC

Power
20-70 VAC/VDC or 60-265 VAC/VDC
45-400 Hz for AC





Description and Features

The **B 812** power supply unit provides DC power for 2-wire transmitters and transfers the measured variable unchanged to the electrically isolated output. Standard FSK communication is used with intelligent HART capable 2-wire transmitters.

Provision is made for monitoring the measurement/supply to detect short and open-circuits . Either of these faults is signalled by the red LED.

Models

Model	Output	Power
812-155110	17 V @ 0 mA 4-20 mA, HART	20-70 VAC/VDC
812-155128	17 V @ 0 mA 4-20 mA, HART	60-265 VAC/VDC

See www.apicb.com for technical data sheet or consult factory.

API maintains a constant effort to upgrade and improve its products. Specifications are subject to change without notice. Consult factory for your specific requirements.

B 840 Four Channel Loop Power Supplies

- *4 Isolated Power Supplies in One Package*
- *24 VDC Output Limited to 25 mA*
- *LED Monitor for Each Channel*

Specifications

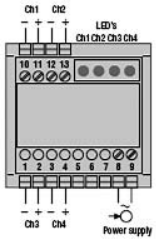
Input
Four independent 4-20 mA loops

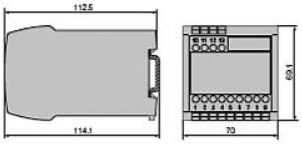
Supply Voltage
24 V at 20 mA

Burden
Permitted load: 750 Ω

Temperature
Operation: –10 to 55°C
Storage: –40 to 70°C

Power Supply
24 VAC, 115 VAC, or 230 VAC





CE

ISO 9001 : 2000

B 840

The **B 840** provides DC power for 2-wire 4-20 mA transmitters. There are four power supply outputs available. Each power supply output is monitored by a green LED. The corresponding green LED is continuously lit when the measuring/supply circuit is closed.

Model	Output	Power Supply
840-147-464	4 Channels, 24 V@ 20 mA	24 VAC
840-147-472	4 Channels, 24 V@ 20 mA	115 VAC
840-147-480	4 Channels, 24 V@ 20 mA	230 VAC

See www.apicb.com for technical data sheet or consult factory.

DC Supplies

ABSOLUTE PROCESS INSTRUMENTS, Inc.
1220 American Way Libertyville, IL 60048
Phone: 800-942-0315 Fax: 800-949-7502
For latest product information or to contact your local representative visit *api-usa.com*

DC Power Supplies, Regulated

DPP15-24, DPP30-24

Input: ***85-264 VAC or 90-375 VDC***
Output: ***24 VDC, 630 mA or 1300 mA***

- ***Universal Power Input***
- ***High Output Capability***
- ***2 Year Warranty***
- ***Voltage Adjustment Potentiometer***
- ***Power Indicator LED***

Applications

- **Power Passive 4-20 mA Sensors**
- **Inexpensive Loop Supply**

Specifications

Power
85-264 VAC 47-63 Hz or 90-375 VDC

Output Voltage and Current
DPP15-24: 24 VDC, 630 mA, 15 W
DPP30-24: 24 VDC, 1300 mA, 30 W
Other output voltages available. Consult factory with your requirements

Connections
Use copper wire 24 AWG to 12 AWG (0.5-2.5 mm²)

Noise and Ripple
Less than 50 mV

Regulation
Line: Less than ±0.5% of output
Load: Less than ±0.5%

Output Adjustment
Potentiometer for output adjustment
±1% of span adjustment range, approximately 22.5-28.5 VDC
24 VDC output pre-set to 24.5 VDC

Ambient Temperature Range
–10°C to +71°C operating ambient
Convection cooled
25 mm clearance required on all sides

Agency Approvals
UL1310 Class 2
UL60950-1
UL508
NEC Class 2(2)
EN60950-1
CE Mark
ISA 12.12

Dimensions
DPP15-24: 0.9" W x 2.95" H x 3.81" D
DPP30-24: 1.77" W x 2.95" H x 3.58" D

Description and Features

The **DPP15-24** and **DPP30-24** 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 output voltage is factory set and may be fine-tuned by adjusting the voltage output potentiometer. The green power LED provides a visual indication that the unit is functioning. The **DPP15-24** and **DPP30-24** feature short-circuit protection for the output. Units can be mounted to an industry standard DIN rail sold separately.

Installation and Operation

ELECTRICAL CONNECTIONS

WARNING! All wiring must be performed by qualified personnel only.

Wire unit as shown on front of unit and apply power.

Power Input – Power supplies operate on any voltage within the ranges 85-264 VAC 47-63 Hz or 90-375 VDC

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

In Case of Overload – Cycle input power to reset unit.

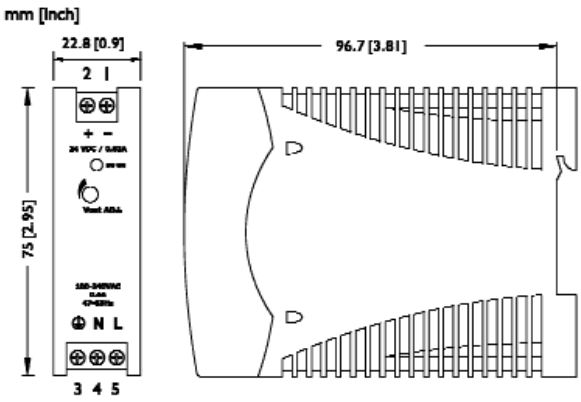
VOLTAGE ADJUSTMENT

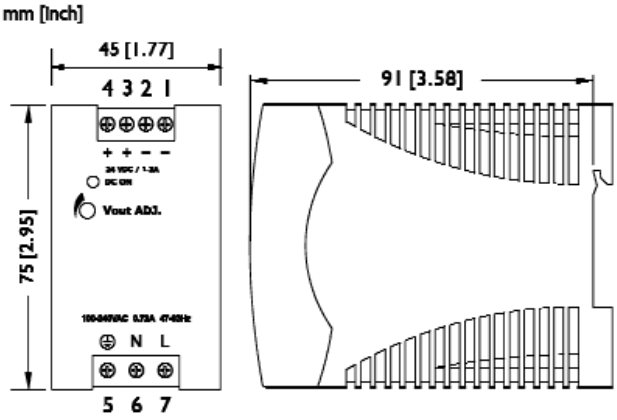
The **DPP15-24** and **DPP30-24** are factory set to approximately 24.5 VDC. For best output voltage accuracy, allow a 20 minute warm-up time before adjusting voltage. Using an accurate voltmeter and with a normal load on the output, adjust the Vout ADJ. potentiometer to the desired voltage.

Models

Model	Voltage	Current	Power
DPP15-24	24 VDC	630 mA max.	Universal
DPP30-24	24 VDC	1300 mA max.	Universal

Accessories—Order as separate line item
API TK36 DIN rail, 35 mm W x 39" L, aluminum





DC Supplies