

Model Q-12 & Q-24 DC Power Supply



Q24
POWER SUPPLY

24 VOC
(SAMPA)

AND CON
RESTANCE OFF

FURES INSOE (SAMPA)

- Plug-in regulated power supplies rated for 5 Amps continuous load
- Switching design provides high efficiency
- Power factor greater than 0.95
- Power switch controls AC line voltage
- AC input is fuse protected
- DC output is fuse protected
- Input voltage 85 to 135 VAC, 50/60 Hz
- Model Q-12 12 VDC
- **Model Q-24 24 VDC**

Pin connections compatible with

Reno A & E Model Q-2 and Q-4 power supplies



Model Q-12 & Q-24 Specifications

General Description: The Models Q-12 and Model Q-24 power supplies are powered from 120 VAC, 50/60 Hz line voltage and provide either 12 VDC or 24 VDC at 5 Amps. The input line voltage and DC output voltage are separately fused. A single regulated output voltage is connected to eight connector pins.

Output Indicator: A single LED provides front panel indication when the DC voltage is greater than 10.6 VDC for the Model Q- 12 and greater than 21.6 VDC for the Model Q-24.

Power Switch: A front panel power switch controls the input line voltage.

Fuse Protection: The AC line is protected with a 2 Amp slow blow fuse. The DC output is protected with a 5 Amp fast blow fuse. Fuses are located on the PC board.

Input Line Voltage: 85 VAC to 135 VAC. **Input Line Frequency:** 47 to 63 Hz. **Power Factor:** Greater than 0.95.

Output Voltage: Model Q-12: 12 VDC ±2%.

Model Q-24: 24 VDC ±2%.

Output Ripple Voltage: Less than 80 mV (peak to peak).

Maximum Output Current: 5 Amps.

Load Regulation: Equal to or less than $\pm 2\%$. **Line Regulation:** Equal to or less than $\pm 0.1\%$.

Minimum Efficiency: Greater than 76%.

Circuit Board: The printed circuit board is 0.062 inch thick FR4 material with 2 oz. copper on both sides. All holes are plated through. Circuit boards and components are conformal coated with polyurethane.

Connector: 2 x 22 contact edge card connector with 0.156 inch contact centers. Key slots located between pins B/2 & C/3, E/5 & F/6, and M/11 & N/12. (See Pin Assignments table.)

Operating Temperature: -40° F to +180° F.

Weight: 0.862 lb.

Size: 4.50 inches high \times 2.00 inches wide \times 6.88 inches deep. Handle adds 1.00 inch to depth.

Pin Assignments			
PIN	<u>Function</u>	PIN	<u>Function</u>
1	Output (DC Common)	А	Output (DC Common)
2	Output (+12 VDC / +24 VDC)	В	Output (+12 VDC / +24 VDC)
3	Output (+12 VDC / +24 VDC)	С	Output (+12 VDC / +24 VDC)
4	No Contact Pad	D	No Contact Pad
5	No Contact Pad	Е	No Contact Pad
6	No Contact Pad	F	No Contact Pad
7	No Contact Pad	G	No Contact Pad
8	No Contact Pad	Н	No Contact Pad
9	No Contact Pad	J	No Contact Pad
10	Chassis Ground	L	Chassis Ground
11	AC Neutral	М	AC Neutral
12	AC Line	N	AC Line
13	No Contact Pad	Р	No Contact Pad
14	No Contact Pad	R	No Contact Pad
15	No Contact Pad	S	No Contact Pad
16	No Contact Pad	Т	No Contact Pad
17	Output (+12 VDC / +24 VDC)	U	Output (+12 VDC / +24 VDC)
18	Output (+12 VDC / +24 VDC)	V	Output (+12 VDC / +24 VDC)
19	No Contact Pad	W	No Contact Pad
20	No Contact Pad	X	No Contact Pad
21	No Contact Pad	Υ	No Contact Pad
22	No Contact Pad	Z	No Contact Pad



