

POWER SUPPLIES

DC POWER SUPPLY MODEL DCP-1.5-W

DESCRIPTION

The **Model DCP-1.5-W** is a regulated 1.5 amp power supply that accepts 24 VAC at the input and provides 24 VDC at the output. The **DCP-1.5-W** can be ordered with any output voltage from 1.5V to 27 VDC. Field voltage adjustments may also be made using only a screwdriver. The power supply is provided with a mounting track for easy field application.

These low cost power supplies feature good regulation and have full overcurrent protection.

FEATURES

- **Low cost**
- **Regulated DC output**
- **Snap-track mounted**
- **Screw terminals with pressure plates**

APPLICATION NOTES

• **In general, the output current rating will be reduced by the ratio of the output voltage divided by the input voltage.** For example, a 6 VDC supply powered by a 24 VAC transformer will have a reduced rated output current of 375 mA. $(6/24) \times 1.5 = 0.375$

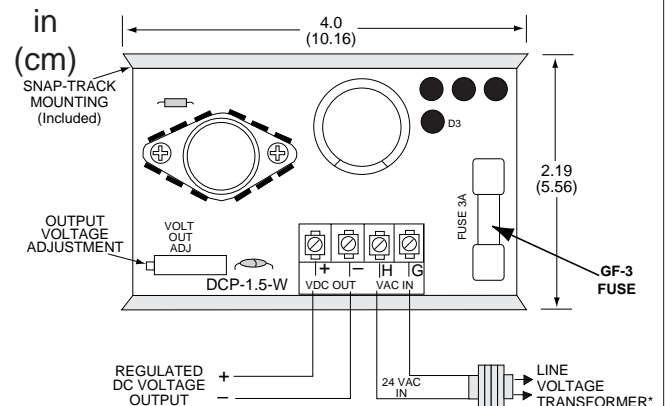
To obtain the full rated output current at reduced output voltages, the standard power supply input voltage must be reduced. It is a good practice to maintain the same AC input voltage as the desired DC output voltage.

• **A grounded DC minus terminal and a grounded secondary 24 VAC input transformer will blow the unit's fuse.** If this is a problem, there are 3 possible solutions:

- Option 1:* Remove the ground on the transformer secondary to float the voltage output or use a separate ungrounded transformer.
- Option 2:* Add a **Y65G13-0** 40 VA Isolation Transformer. (This reduces power supply capacity to 920 mA.)
- Option 3:* Remove diode D3 (marked on board). Jumper the VDC (-) terminal to the AC (G) terminal. The grounded side of the AC supply should be wired to the AC (G) terminal. (This reduces the power supply capacity to 400 mA.)



DIMENSIONS / WIRING



* INPUT TRANSFORMER REQUIRED VA RATING AT 24 VAC = $43.2 \times$ DESIRED DC OUTPUT CURRENT

FOR FULL 1.5 AMP CAPACITY, USE A 75 VA TRANSFORMER.

SPECIFICATIONS

Input voltage	24 VAC, 50/60 Hz
Output voltage	24 VDC (full wave rectified and regulated) adjustable 1.5V- 27 VDC
Output current	1.5 amps
Regulation	1.5% at full rated current
Temperature stability	1%
Over-current protection	3 amp fuse (GF-3)
Mounting	snap-track included
Operating conditions	32° to 130°F (0 to 55°C) 95% RH, noncondensing
Weight	0.4 lb (0.18 kg)

ORDERING INFORMATION

DCP-1.5-W	Power Supply, 24 VAC IN to 24 VDC OUT
DCP-1.5-W-C	Power Supply, 24 VAC IN to Special DC output*
	*Specify output voltage when ordering (1.5 to 27 VDC)