

Termination

The **VC2000** series voltage converter is powered with 24 VAC. Wire as shown in Fig. 1 below. When properly wired, the green Power Output LED will light.

NOTE: The selection of the "Hot" and "Neutral" wires for the 24VAC input is very important.

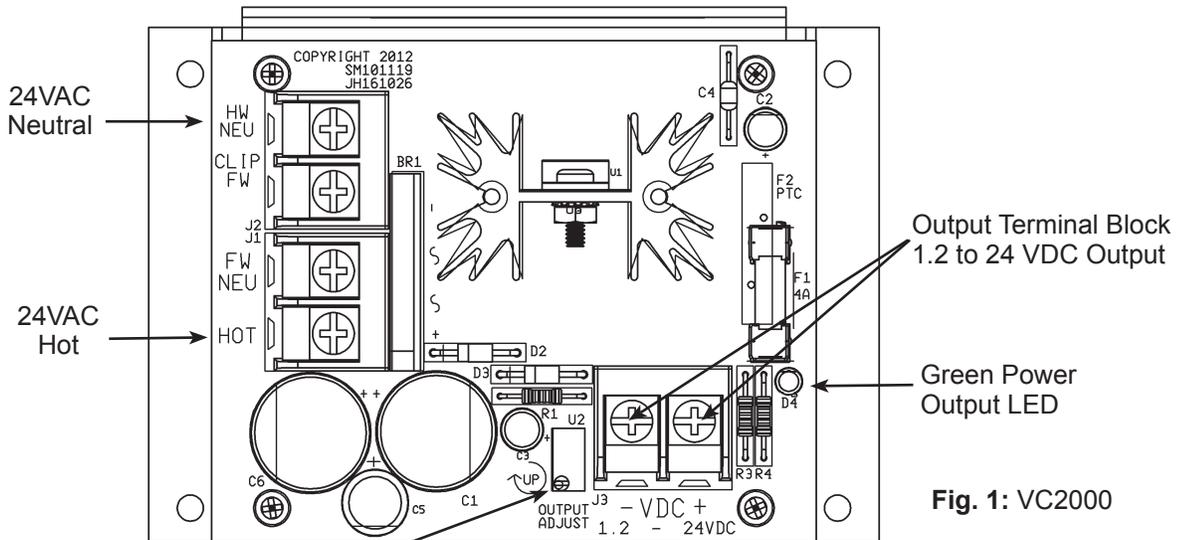


Fig. 1: VC2000

Output Adjust Trim Potentiometer Factory Set at 24 VDC
 The voltage converter output is set at the factory, but can be adjusted in the field (See below).

Rectification Clip Settings and Voltage Output Adjustment

RECTIFICATION SETTINGS

(UNIT SHIPS AS HALF WAVE BUT CAN BE SWITCHED TO FULL WAVE IN THE FIELD)

The AC to DC rectification may be set to either half or full wave. The VC2000 is shipped for half wave. For full wave, attach the supplied clip to terminal block J2 as shown in Fig 2. The clip is taped to the bottom of the metal plate. Always remove 24 VAC power before changing the clip position.

When multiple devices (such as controllers, actuators, and the VC2000) are connected to one transformer, the full wave/half wave rectification of all devices must match. For example, if the controllers being used are half wave and connected to the same transformer that supplies the voltage converter board, then do not use the clip on J2.

VOLTAGE OUTPUT ADJUSTMENT

The output of the unit is adjustable from of 1.2 to 24 VDC. To adjust the output, connect a voltmeter to the "VDC" output terminals, then use a small screwdriver to turn the "Output Adjust" trim potentiometer until the desired voltage is reached.

If an exact output voltage is required, then make the adjustment while the load is connected to the output terminals.

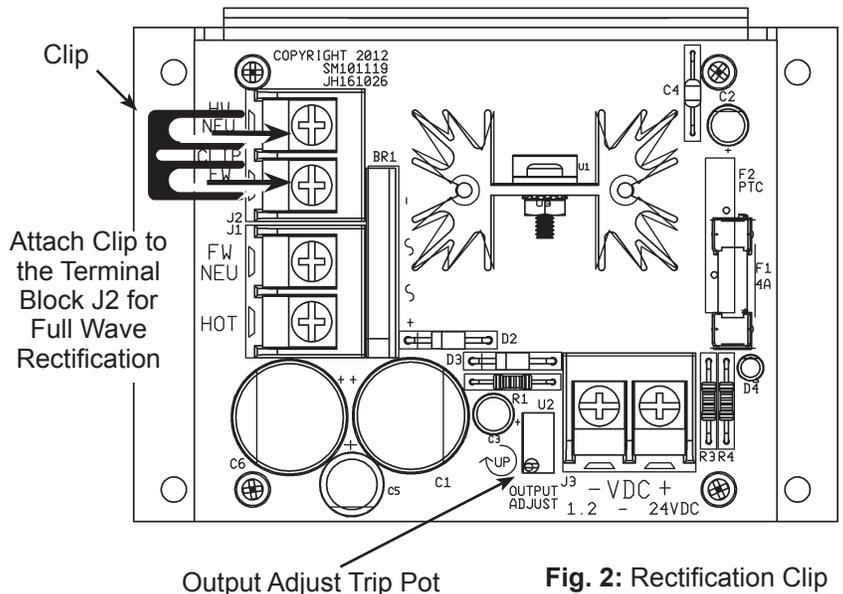


Fig. 2: Rectification Clip and Output Adjustment

Specifications subject to change without notice.

Mounting

Mount the unit with the backplate or heatsink stands toward the top (as shown in the Fig 3) to protect the components from any falling debris.

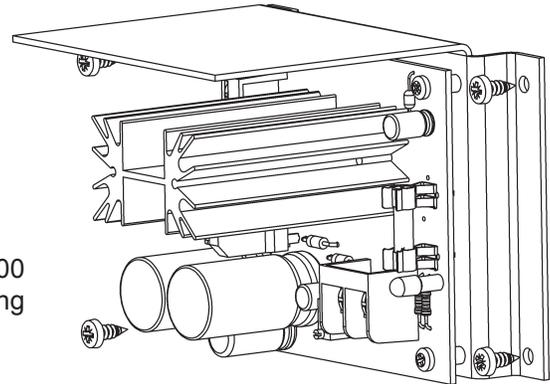


Fig. 3: VC2000 Mounting

Diagnostics

POSSIBLE PROBLEMS:

No voltage on output

POSSIBLE SOLUTIONS:

- Verify that input voltage is correct
- If the unit has a replaceable glass fuse, check it for continuity. If a replacement fuse is needed, replace it with a 4.0 A fuse.
- If the unit has a resettable fuse and the fuse is tripped, it may be an output short circuit or overload. Remove input power and determine the problem. When the problem is corrected, reapply power to the unit.

Voltage on output is reading low or high

- Verify that input voltage is correct
- Verify that the “Output Adjust” trim potentiometer is set correctly using the “Voltage Output Adjustment” procedure shown above
- Check wiring for proper termination

Specifications

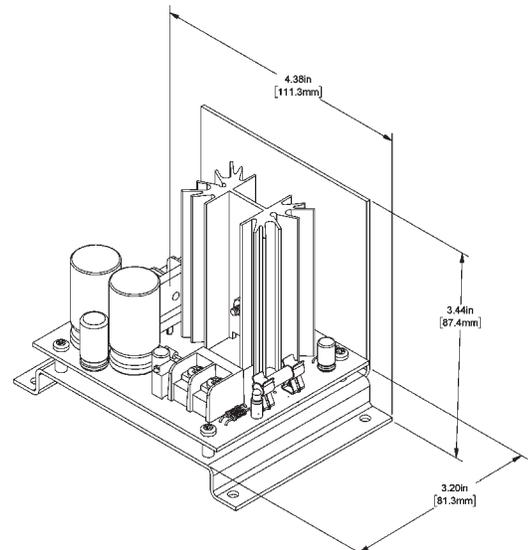
Half Wave

Input Voltage 18 to 28 VAC
Input Current 2.2 Amps AC max @ 24 VAC (53 VA)
Output Voltage 1.2 to 24 VDC @ 1 Amp max
Output Ripple 20 mV max

Full Wave

Input Voltage 18 to 28 VAC
Input Current 3.5 Amps AC max @ 24 VAC (84 VA)
Output Voltage 1.2 to 24 VDC @ 2 Amps max
Output Ripple 25 mV max

Note: The VC2000 is a Class 2 circuit when it is powered from a UL Class 2 power supply.



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