

VR10

Sub-Assembly Voltage Regulator

Installation Guide

Overview:

Altronix VR10 voltage regulator is designed to convert a 24VDC input into a regulated 5VDC or 12VDC output. It reduces the cost of adding an additional power supply to achieve 24VDC and 12VDC or 5VDC simultaneously. For use with Maximal, eFlow, ULX, and Trove series of power supplies.

Specifications:

Power Input / Output:

- Input: 24VDC @ 3A – Output: 5VDC @ 10A.
Input: 24VDC @ 6A – Output: 12VDC @ 10A.

Output:

- 5VDC or 12VDC regulated output.
- Output rating 10A max. non power-limited.
- Surge suppression.

LED Indicators:

- Input and output LEDs.

Electrical:

- Operating temperature: 0° C to 49° C ambient.
- Humidity: 20 to 85%, non-condensing.

Mechanical:

- Product weight (approx.): 0.4 lb. (0.18 kg).
- Shipping weight (approx.): 0.5 lb. (0.23 kg).

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/NFPA 72/ANSI, with Canadian Electrical Code CSA C22.1, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only and should be installed by qualified personnel.

1. Mount VR10 in the desired location/enclosure.

Note: If VR10 needs to be elevated above the mounting surface, use included spacers (regular for VR10 only, male/female for mounting with PDS8/PDS8CB). Make sure to use metal spacer under the mounting hole with star pattern (*Fig. 2b, pg. 3*).

2. Connect 24VDC power source to the terminals marked [+ IN -] (*Fig. 1 pg. 2*).
3. Select output voltage 5VDC or 12VDC using switch [S1].
4. Connect power distribution module to the terminals marked [+ OUT -] (*Fig. 1 pg. 2*).

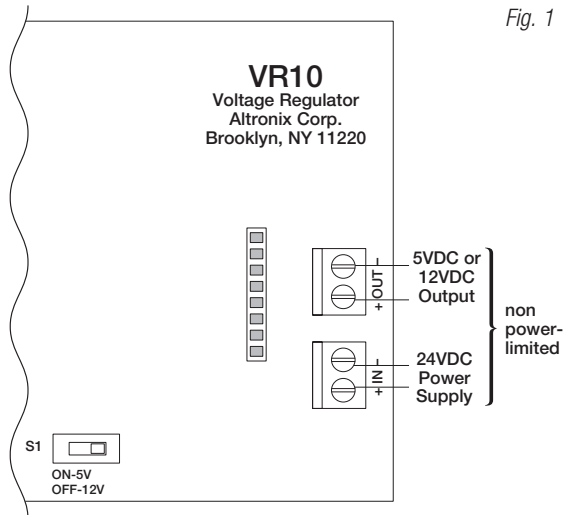


Fig. 1

Connecting PDS8/PDS8CB Board to VR10:

Refer to PDS8/PDS8CB Installation Guide Rev. 070116

1. Mount VR10 in the desired location/enclosure.
2. Plug-in male 8-pin connector to female 8-pin receptacle on VR10 board (Fig. 2a, pg. 3).
3. Fasten spacers (Fig. 2, pg. 3). Use metal spacer over mounting hole with star pattern (Fig. 2b, pg. 3).
4. Align 8-pin male connector with female receptacle of PDS8/PDS8CB, then mount (Fig. 2, pg. 2, Fig. 3a, pg. 4).
5. Connect 24VDC power supply to terminal marked [+ IN1 -] of PDS8/PDS8CB (Fig. 2, pg. 3).
6. Set each output (OUT1-OUT8) on PDS8/PDS8CB to route power from power supply 1 or 2 (jumper positions <1 OFF 2>) (Fig. 3, pg. 4).

Note: Measure output voltage before connecting devices. This helps avoiding potential damage.

7. Turn power off before connecting devices.
8. Connect devices to terminal pairs 1 to 8, marked [P (Positive) - OUT1-OUT8, N (Negative)] (Fig. 3, pg. 4).

Note: For DC devices carefully observe polarity.

9. After all devices have been connected turn power on.

Input/Output Chart:

Input	5VDC Output	12VDC Output
24VDC @ 3A	10A max.	N/A
24VDC @ 6A	N/A	10A max.

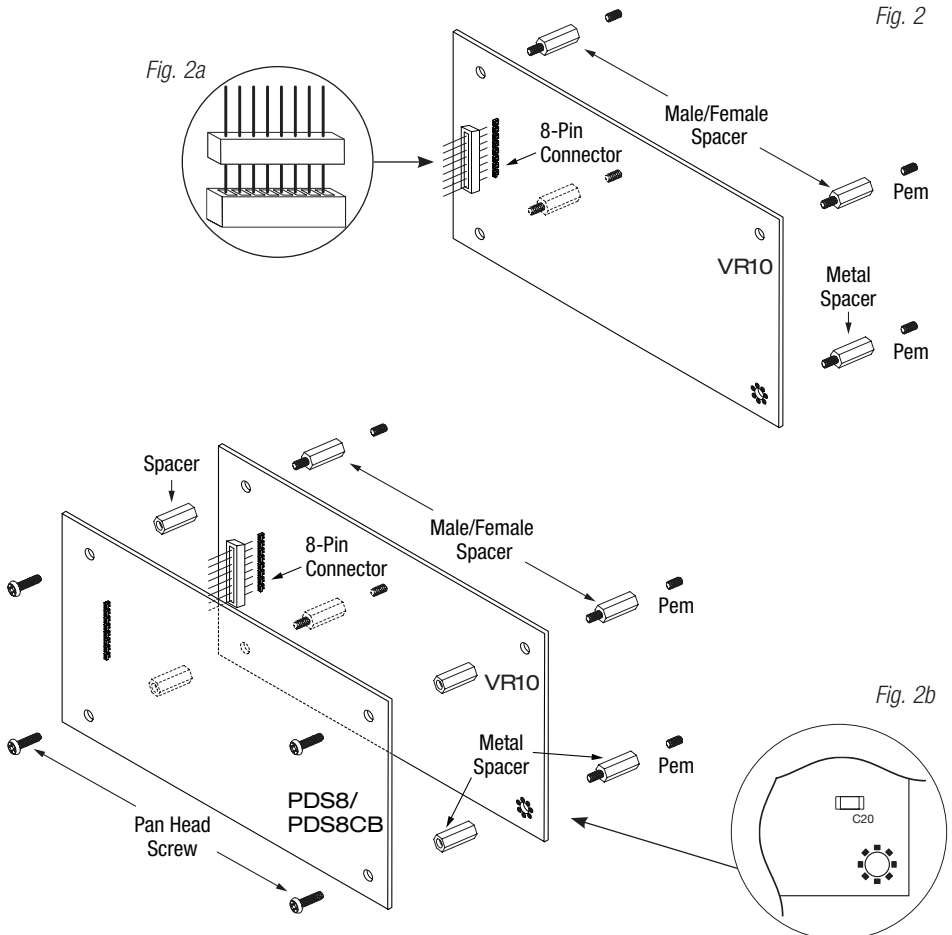


Fig. 3 - PDS8(CB)

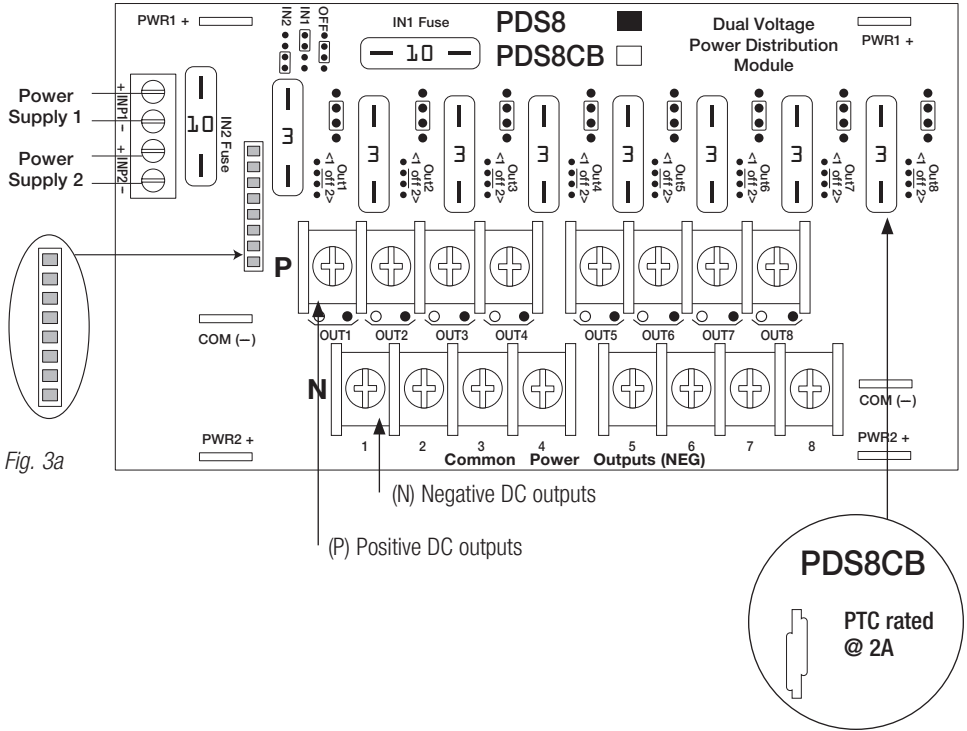


Fig. 3a

Altronix is not responsible for any typographical errors.

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