



3204 Rocky River Road, Heath Springs, SC 29058
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Frequency-to-Voltage Module

Model FTV220-000

Model FTV220-000 (Frequency to Voltage Module) is designed to provide a means of converting digital pulse frequency signals to an analog voltage or current. The frequency input signal is optically isolated from the analog output circuitry. The module also provides an isolated +15VDC power supply (rated at 100mA maximum) to power an external encoder. Calibration of the minimum and maximum input frequency is accomplished by a contact closure connected to the Teach input terminal.

The output signal is conditioned by scaling circuits which can be modified via multi-turn OFFSET, BIAS, and GAIN potentiometer adjustments. Terminal strip connections are provided for an optional external TRIM pot. A multi-turn TRIM RANGE adjustment is also supplied to limit the range of the external TRIM pot. The output circuit can be configured to source either a voltage or current. Typical output ranges are 0 to 10 VDC, 0 to 20 mADC, or 4 to 20 mADC.

Electrical Specifications

D.C. Power Input

- 24 VDC $\pm 10\%$, 150mA max, internally fused

Isolation Voltage

- 500V (DC or AC Peak)

Linearity

- $\pm 0.5\%$ of 10 VDC span

Signal Input

- Square wave
- 0 to 50kHz
- 10-90% Duty cycle
- 2.5V to 24V peak

External Trim Potentiometer (Optional)

- 10K OHMS

Temperature Range

- 0-45°C



Signal Outputs

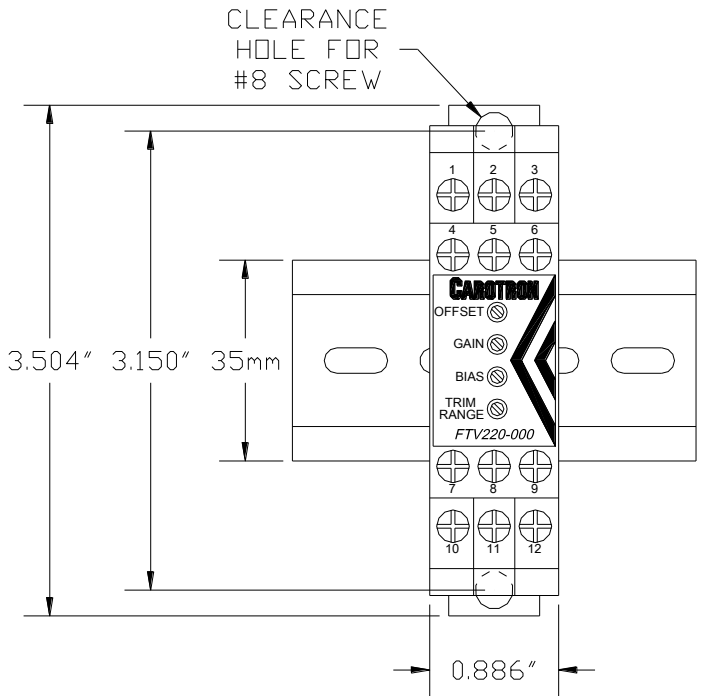
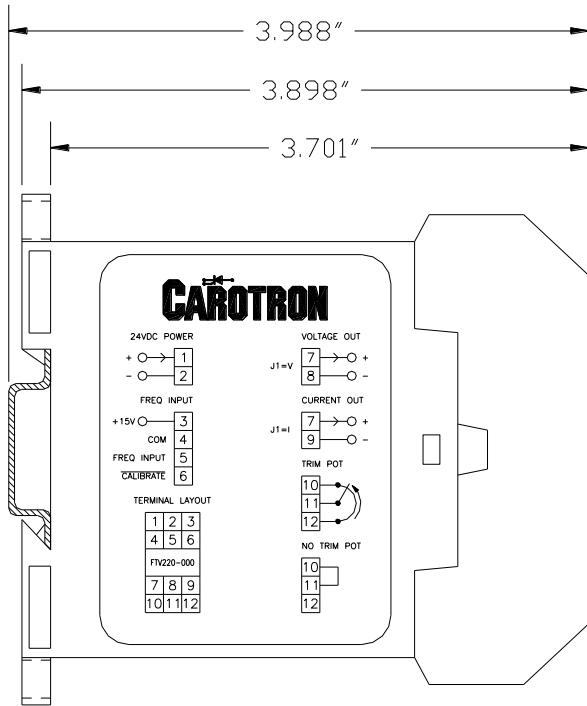
• Voltage Output

Selected by position V on J1. This circuit allows the output to source a voltage level of up to ± 12 VDC into a minimum resistance of 600 Ohms. If resistance is too low, output linearity may be affected.

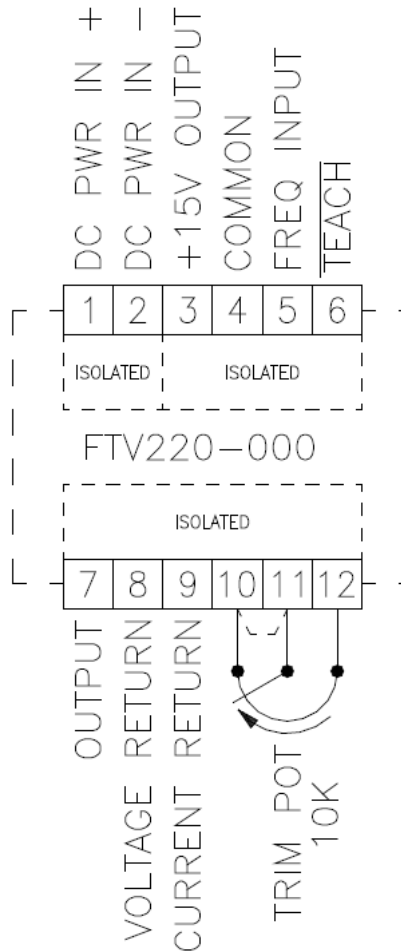
• Current Output

Selected by position I on J1. This circuit allows the output to source a regulated current of up to ± 20 mA into a maximum resistance of 500 Ohms. Using the BIAS pot, the output can source a 4 to 20mA signal.

Physical Dimensions



General Connections



Frequency-to-Voltage Converter Module FTV220-000

Physical Specifications

3.504" H x 0.886" W x 3.898" D

Shipping Weight: 2 lbs.

View or download the complete FTV220-000 Instruction Manual (MAN1054-0A) from www.carotron.com.



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FLY1025-0A Issued 05-10-2012