

## Voltage to Frequency Module

Model VTF230-XXX

**Model VTF230-XXX (Voltage to Frequency Module)** is designed to provide a means of converting analog signals to a digital pulse train. The module will accept a voltage and/or a process current input (the signals are summed together internally). A +10VDC power supply is provided to allow a potentiometer to be easily connected as the input. Calibration of the minimum and maximum analog levels is accomplished by a contact closure connected to the Teach input terminal.

The total summed reference can be ramped from 0 to 60 seconds with adjustable ACCEL and DECEL potentiometers. The reference is enabled via a contact closure connected to the Enable input terminal. The frequency output is generated via an open collector transistor output.

The minimum and maximum frequency output levels can be set via the BIAS and GAIN potentiometers. An optional pull-up resistor is also provided on board.

### Electrical Specifications

#### D.C. Power Input

- 24 VDC  $\pm 10\%$ , 60mA max, internally fused

#### Voltage Input Range: 0-10VDC

- Input Impedance:  $10^{12} \Omega$

#### Current Input

- Range: 0-20mA DC
- Input Impedance: 250 Ohms

#### Frequency Output

- Range:
  - VTF230-000: 0 to 50kHz
  - VTF230-001: 0 to 1kHz
- Max Current (sink): 20mA
- Max Voltage: 24V



#### Pull-up Resistor

- $10k \Omega$  to +15VDC

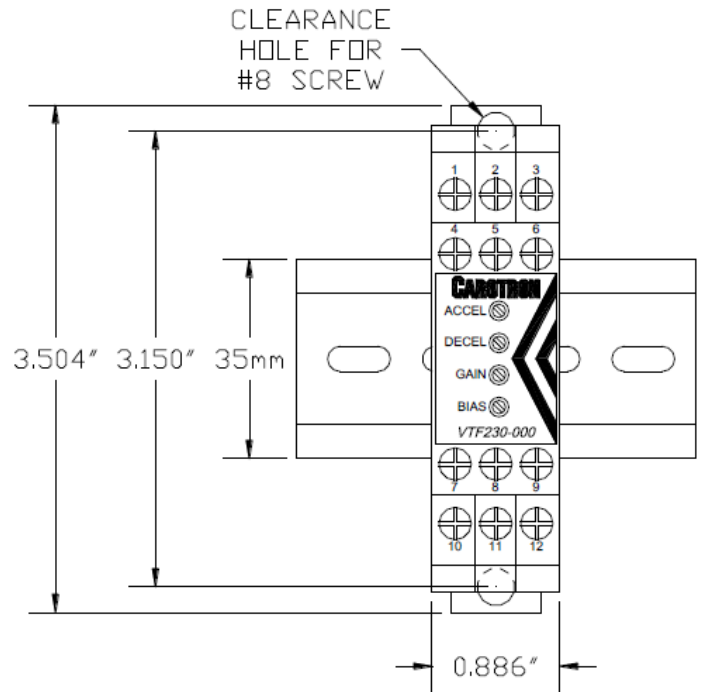
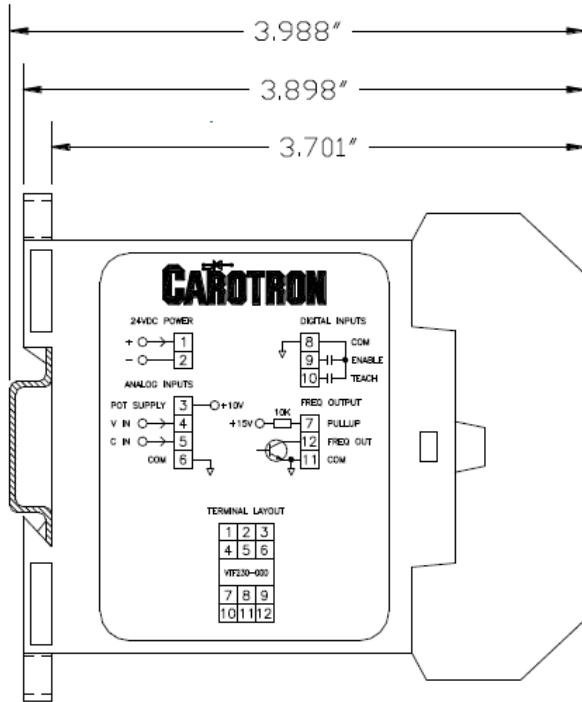
#### Potentiometers

- Turns: 15
- Accel/Decel Range: 0 to 60s
- Bias Range: 0 to 5kHz
- Gain Range: 0 to 50kHz

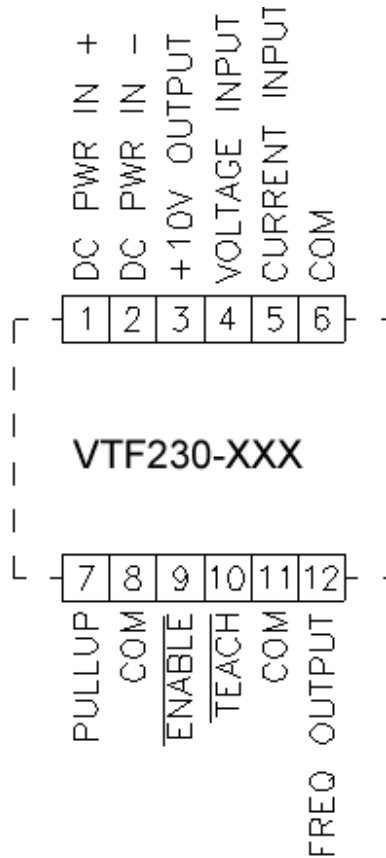
#### Temperature Range

- 0-55°C

# Physical Dimensions



## General Connections



## Voltage to Frequency Module VTF230-XXX

Physical Specifications

3.504" H x 0.886" W x 3.898" D

Shipping Weight: 2 lbs.

View or download the complete Voltage to Frequency Module Instruction Manual (1055-00) from [www.carotron.com](http://www.carotron.com).



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