

Chassis Optional

GENERAL DESCRIPTION

The FENNER FREQUENCY TO VOLTAGE CONVERTER is a digital to analog converter that changes a train of logic pulses or an AC sinusoidal signal to a DC voltage that is proportional to frequency. With a rotary pulse generator having a two-phase output, the direction of rotation determines the polarity of the analog output voltage.

It can be used as a digital tach, replacing AC or DC tachometer generators. It can also be used for speed indication by connecting an analog or digital meter to the appropriate output terminal.

Advanced circuit design insures a high level of accuracy, noise immunity and reliability in industrial environments. A field-proven mounting arrangement provides reliable connection, but allows easy removal without disturbing permanent wiring. Front access and detailed technical manual makes installation and service easy.

The FREQUENCY TO VOLTAGE CONVERTER can be used with other FENNER SERIES 200 CONTROL MODULES and POWER CONVERTERS for smooth, stepless control in many applications. It is compatible with equipment of other manufacturers.

OPTIONS

- Compatible with other Series 200 Controls (See Bulletin SB200)

REFLEX FREQUENCY TO VOLTAGE CONVERTER

(Digital Tach) Part No. 12M03-00145

SPECIFICATIONS

SUPPLY: 120V AC \pm 10% 50/60 Hz, Single Phase

AMBIENT TEMPERATURE: 0°–40°C (32°–104°F) 50°C in Cabinet

INPUT: Sine Wave or Pulse of 50mV or greater. May require higher voltages below 60 Hz depending on waveform. Common Logic Families (TTL, CMOS, etc.). Frequency can go to zero. Frequency: 0 to 50K Hz in five ranges: 2.5K, 5K, 10K, 25K and 50K (intermediate ranges with switch combinations). Quadrature input for two-phase pulse generator provides reversal of output polarity for direction of rotation logic.

OUTPUT: 0 to 10V DC @ 5mA positive or negative. Single pole filter with a time constant from .009 to .36 seconds selectable by four DIP switches. Conditional Frequency Output: Amplified and squared signal from Main Input. Digital Directional Output: 15 Volt DC logic signal (0 or 1) indicating direction of rotation.

LINEARITY: Within 0.1% of full scale.

DRIFT: 100 PPM per degree C maximum from 0° to 50°C.

ADJUSTMENTS: Input Attenuator, Output Trim, Frequency Select Switch, Filter Select Switch.

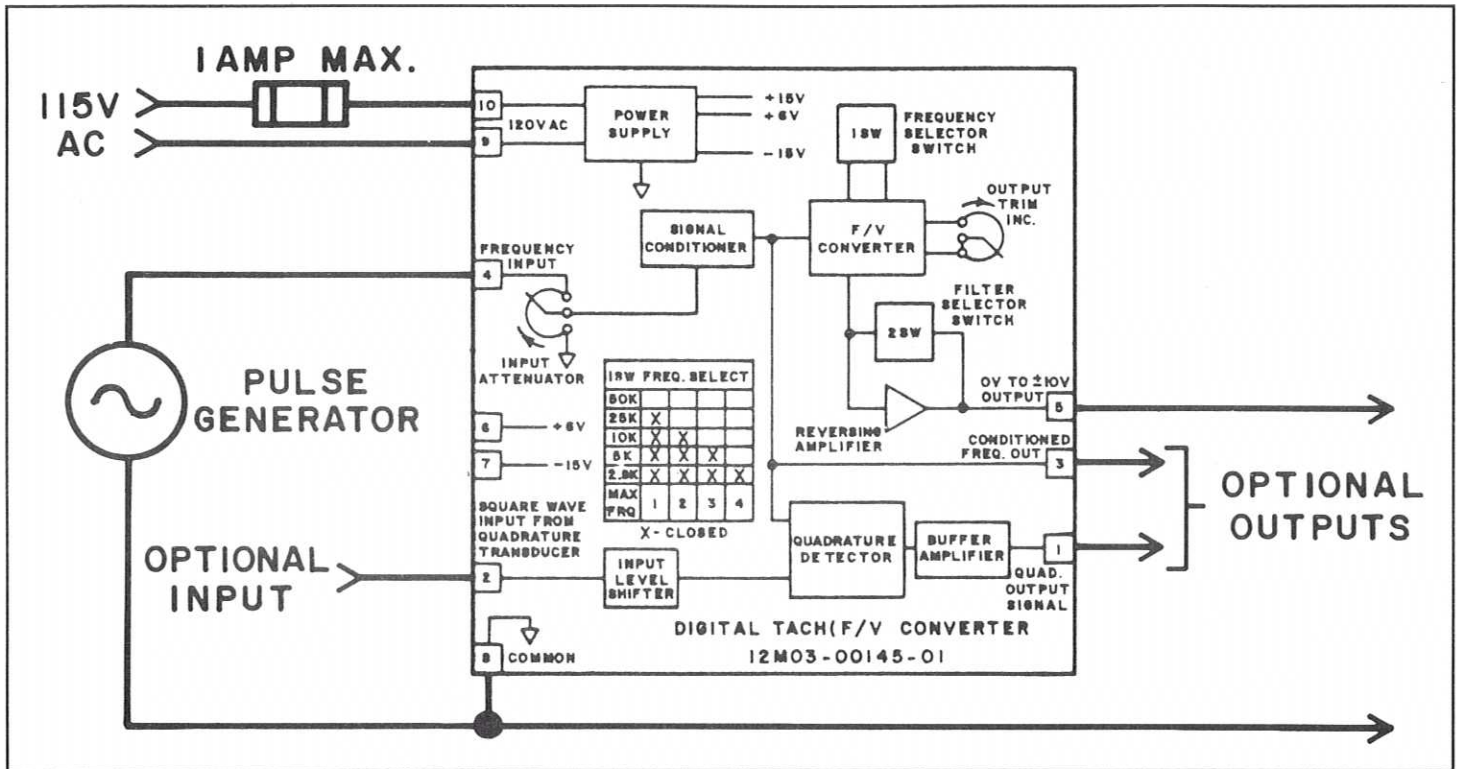
STANDARD FEATURES

- Compact, Self-Contained
- Moderately Priced
- Wide Range of Adjustment
- Compatible with Packaged Drives of Most Manufacturers
- Positive Front-Access Connection
- Easily Removed, Repaired or Replaced
- Conservatively Rated for Reliability
- Detailed Technical Manual

TYPICAL APPLICATIONS

- Feedback for DC, AC and Eddy Current Drives
- Inexpensive Speed Metering of Machine Shaft
- Overspeed or Underspeed Protection
- Zero Speed Detection

FREQUENCY TO VOLATAGE CONVERTER



FENNER REFLEX ELECTRONIC CONTROL COMPONENTS

- Universal Eddy Current Drive
- M-G Set or Regulator Replacement
- Firing Circuits and Regulators to replace electronic boards in obsolete single and three phase DC motor drives
- DC Shunt Motor Field Crossover Control
- Wound Rotor Motor Secondary Control
- Power Supplies for Plating, Heating and Annealing
- Winders
- Custom Multi-Motor Drive Systems
- Special and Hard-to-Find Controls

Fenner

Fenner Industrial Controls

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