

Case Dimension: H = 3.75" W = 2.62" D = 1.68"

The Electro FDC Series Frequency to DC Convertors combine full range frequency to DC conversion in one module via dip switch frequency range selection. The convertors are designed to provide an analog voltage and current output proportional to the rate of an incoming pulse train. The units can be powered by AC or DC and provide 4-20mA and 0-10V analog outputs.

MOUNTING: Modules plug into 11 pin octal socket #58410 (not included), suitable for panel or DIN rail mounting. All electrical connections are via screw terminals.

POWER REQUIREMENTS MODEL FDC: 97 to 132 VAC, 50/60 Hz, 3 VA, or 15 to 30 VDC @ 200 mA. MODEL FDC-230: 196 to 264 VAC, 50/60 Hz, 3VA, or 15 to 30 VDC @ 200 mA.

OPER. TEMP. RANGE: -40 to 185F (-40 to 85C)

INPUT SIGNAL: A or B (switch selectable) 100 V peak max.

A) 100 mV peak min.; 10% to 65% duty cycle; low level must be < 100 mV.

B) 1.0 V peak min.; 10% to 90% duty cycle; low level must be < 1.0 V.

INPUT WAVEFORM: Sine, square, sawtooth or triangle.

INPUT IMPEDANCE: 20 K ohms.

OUTPUT SIGNAL: 0 to 10 VDC into 1.5K ohm min. and 4 to 20 mA DC into 400 ohms max. Ripple is 50 mV max. using factory settings. Ripple vs. response time can be user optimized.

NON-LINEARITY: ± 1% of full scale @ fixed temperature and power supply.

POWER OUTPUT: 12VDC @ 60 mA max. for active sensor requirements.

| Typical Response Time @ V Ripple ≤ 50 mV | | | |
|---|---|--------------------------|---|
| FULL SCALE ADJ. RANGE | RESPONSE TO 90% OF FULL SCALE OUTPUT | FULL SCALE ADJ. RANGE | RESPONSE TO 90% OF FULL SCALE OUTPUT |
| 25-30 Hz | 15.0 Seconds | 800-1100 Hz | 800 Milliseconds |
| 30-50 Hz | 10.5 Seconds | 1100-1600 Hz | 550 Milliseconds |
| 50-100 Hz | 6.0 Seconds | 1600-3000 Hz | 300 Milliseconds |
| 100-180 Hz | 3.0 Seconds | 3000-6000 Hz | 160 Milliseconds |
| 180-275 Hz | 2.2 Seconds | 6000-9000 Hz | 75 Milliseconds |
| 275-500 Hz | 1.4 Seconds | 9000-18000 Hz | 40 Milliseconds |
| 500-1000 Hz | .7 Seconds | 18000-30000 Hz | 25 Milliseconds |

*Note: Response time will decrease if V ripple is increased.

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