

Series ED

Oscillator/Demodulator

The Series ED Oscillator/Demodulator is designed to simplify installation for 35mm DIN Rail and Panel Mount applications. It provides DC-in/DC-out operation for AC LVDTs and is internally regulated for additional stability of the output signal. Optimized for 3 kHz or 7kHz performance. A variety of voltage outputs are available as well as 4-20 mA; all with zero offset and span adjustment.



KEY FEATURES

Works with 5 and 6 wire LVDTs	Internally Regulated
DC Voltage Output	Small Size and Low Cost

INDICATOR SPECIFICATIONS

	(7KHz Oscillator @ 5.0 +/- .75 VRMS Output Phase >10 Degrees) *					(7KHz Oscillator @ 5.0 +/- .75 VRMS Output Phase >10 Degrees) *					(7KHz Oscillator @ 5.0 +/- .75 VRMS Output Phase <10 Degrees) *					
MODEL #	ED100-03-555	ED100-03-155	ED110-03-P1S	ED110-03-N1S	ED110-03-42S	ED210-07-55S	ED210-07-11S	ED210-07-P1S	ED210-07-N1S	ED210-07-N1S	ED310-07-55S	ED310-07-11S	ED310-07-P1S	ED310-07-N1S	ED310-07-42S	
INPUT VOLTAGE V DC	22 TO 30 VDC															
INPUT CURRENT ma + XDCR	100 mA															
Non Linearity %	.05%															
OUTPUT Z Ohms Nominal	5 Ω			>1G Ω		5 Ω			>1G Ω		5 Ω			>1G Ω		
OUTPUT I +/- ma	3			N/A		3			N/A		3			N/A		
FREQ RESPONSE -3 dB Hz	500 Hz					1000 Hz										
TEMP. OPER. DEG. F	+32°F to +158°F (0°C TO 70°C)															
TEMP. STORAGE DEG. F	-67°F to +257°F (-55°C TO 125°C)															
WIRE TERMINATION	UP TO 14 AWG.															
ZERO OFFSET ADJ. MIN.	± .04 VDC			1.2 mA		± .04 VDC			1.2 mA		± .04 VDC			1.2 mA		
OUTPUT RIPPLE MAX.	.015 C RMS			.024 mA RMS		.015 V RMS			.024 mA RMS		.015 V RMS			.024 mA RMS		
OUTPUT DC ** NOMINAL ADJUSTABLE	± 5 VDC	± 10 VDC	0 TO +10 VDC	0 TO -10 VDC	4 TO 20 mA	± 5 VDC	± 10 VDC	0 TO +10 VDC	0 TO -10 VDC	4 TO 20 mA	± 5 VDC	± 10 VDC	0 TO +10 VDC	0 TO -10 VDC	4 TO 20 mA	
OUTPUT LOAD LIMITS OHMS					5 Ω TO 400 Ω						5 Ω TO 400 Ω					

* Oscillator output voltage adjusted via span adjustment potentiometer.

* Oscillator output current operates into a 100 ohm load with less than 0.25% Distortion.

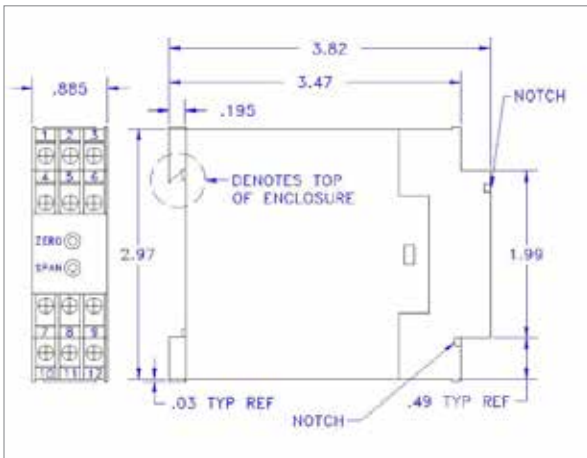
** Output voltage and or current determined when using transducer whose sensitivity is 0.500 V/v +/- 10% at both ends of stroke Adjusted via the span control potentiometer.

*** Output temperature coefficient for voltage output din rail series +/- (.01% Of output +/- .00025V/deg.F)

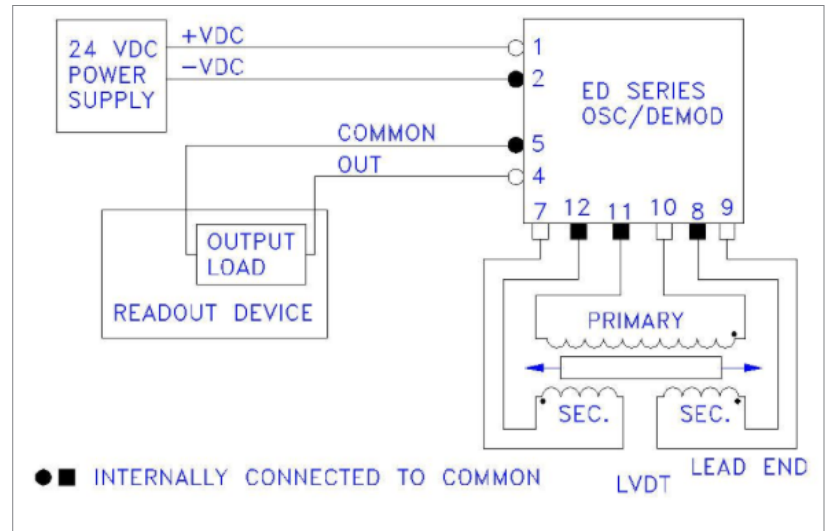
*** Output temperature coefficient for current output din rail series +/- (.008% Of lvd stroke + .00122Ma)

**** Output polarity, when connected as shown the output voltage will become more positive as the core moves towards the lead end. Polarity may be reversed by interchanging connections to pins # 7 and 9

MECHANICAL OUTLINE



INTERCONNECTION DIAGRAM



BLOCK DIAGRAM

