

# 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

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

### INDICATOR SPECIFICATIONS

	(3KHz Oscillator @ 5.0 +/- .75, Any Output Phase Angle) *					(7KHz Oscillator @ 5.0 +/- .75 VRMS Output Phase >10 Degrees) *					(7KHz Oscillator @ 5.0 +/- .75 VRMS Output Phase <10 Degrees) *				
MODEL #	ED110-03-55S	ED110-03-11S	ED110-03-P1S	ED110-03-N1S	ED110-03-42S	ED210-07-55S	ED210-07-11S	ED210-07-P1S	ED210-07-N1S	ED210-07-42S	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	100 mA + XDCR														
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 V 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					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.

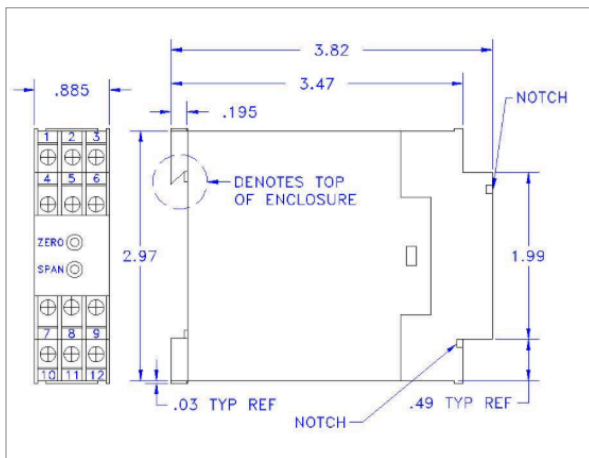
\*\*\*\* Output temperature coefficient for voltage output din rail series +/- (.01% Of output +/- .00025V/deg.F)

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

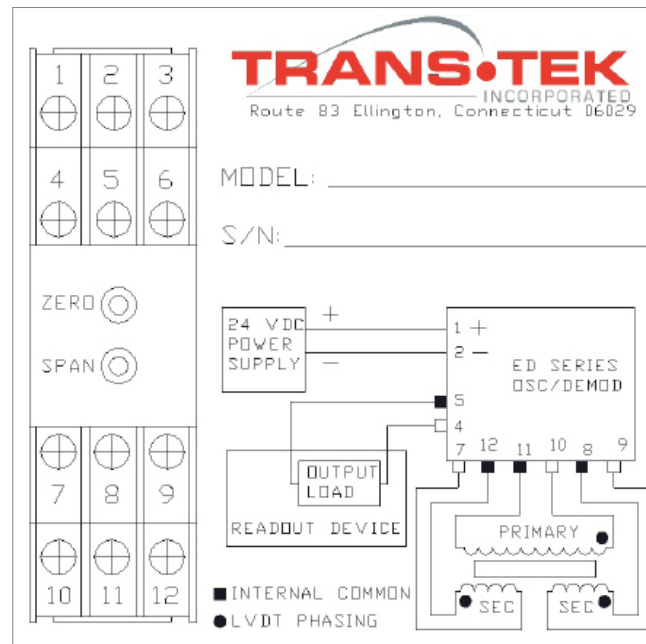
\*\*\*\*\* Output polarity, when connected as shown the output voltage will become more positive as the core moves towards the lead end.

Polarity may be reversed by interchanging connections to pins # 7 and 9

## MECHANICAL OUTLINE



## INTERCONNECTION DIAGRAM



## BLOCK DIAGRAM

