

# CURRENT TRANSDUCERS

## AC CURRENT TRANSDUCER/TRANSFORMER

MODEL CTDZ

### DESCRIPTION

- The CTDZ units provide a self-powered 0-1mA output or a loop-powered 4-20mA output proportional to window current ranges up to 2000 amperes at 50 to 400 hertz.
- The DC output is derived from the average absolute value of the input and calibrated as the RMS value of a sine wave input.
- Standard units provide 0.5 percent accuracy.

### FEATURES

- Large window opening.
- Easy to install.
- Accurate and reliable from 50-400Hz.

### APPLICATIONS

- Designed for applications requiring accurate current measurements.



### ORDERING INFORMATION

EXAMPLE: 1000 AMP AC INPUT WITH  
4-20MA LOOP-POWERED OUTPUT.  
**CTDZ-1000E2Z03**

\*0-1mA models are self-powered from measured line.  
\*\*4-20mA loop-powered models, (15-40Vdc),  
require an external power supply.

INPUT AC CURRENT	STANDARD OUTPUTS MODEL NUMBER CTDZ-	
	0-1mA*	OUTPUT 4-20mA**
0 to 200	200AZ03	200E2Z03
0 to 300	300AZ03	300E2Z03
0 to 400	400AZ03	400E2Z03
0 to 500	500AZ03	500E2Z03
0 to 600	600AZ03	600E2Z03
0 to 800	800AZ03	800E2Z03
0 to 1000	1000AZ03	1000E2Z03
0 to 1200	1200AZ03	1200E2Z03
0 to 1500	1500AZ03	1500E2Z03
0 to 2000	2000AZ03	2000E2Z03

### MODEL CTDZ SPECIFICATIONS

#### INPUT

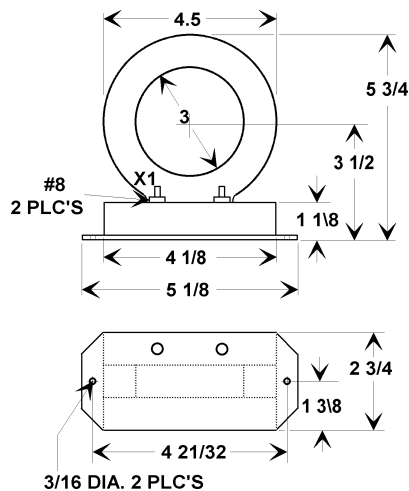
Current ..... See Tables  
 Frequency Range ..... 50 to 400 Hz.  
 Burden ..... 0.5VA F.S.  
 Current Overload  
 ..... 5 times rating for 10 seconds per hour.  
 Dielectric Test...(Input/Output/Case) ..... 1800VAC  
 Instrument Power  
 0-1mA ..... Self-powered  
 \*\*4-20mA ..... Nominal 24Vdc  
 Loop-powered, range ..... 15 to 40Vdc

#### OUTPUT

Output Ripple .....  $< \pm 0.5\%$  F.S.  
 Response ..... 300 milliSeconds (90%)  
 Output Loading (OHMS)  
 0-1mA ..... 0-10K  
 4-20mA ..... 0-500 at 24Vdc

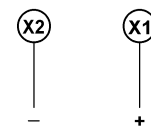
**ACCURACY** .....  $\pm 0.5\%$  F.S.  
 Includes linearity, nominal frequency (60Hz) and set point.  
 Temperature Effect....(-20°C to 60°C) .....  $\pm 1.0\%$  Rdg.

### CASE DIMENSIONS

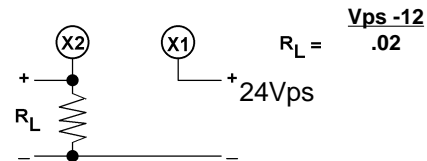


### CONNECTION DIAGRAMS

0-1mA Models



4-20mA Models



**FLEX-CORE®**  
 Div. Morlan & Associates, Inc.  
 6625 McVey Blvd. Columbus, Ohio 43235

WWW.FLEX-CORE.COM  
 flexcore@msn.com

PHONE (614) 889-6152  
 TECH. ASSISTANCE (614) 876-8308  
 FAX # (614) 876-8538

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