

# OSI AC CURRENT TRANSFORMER/TRANSDUCER MODEL CTRS

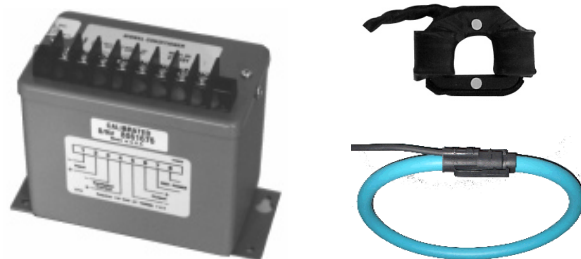
## SPLIT-CORE

### FEATURES

- Accurate measurement of the **true RMS** value of input signals.
- Split-core current sensors for easy installation.
- Current transformers contain open-circuit protection.
- Signal conditioners and current sensors are calibrated as sets to provide analog outputs of 0-5Vdc, 0-10Vdc, 0-1mA or 4-20mA.
- Current measurement ranges up to 40kA.
- Flexible Rogowski coils (air-core CTs) are used for current measurement ranges of 1kA and larger.

### APPLICATIONS

- For use in existing applications requiring installation with split-core sensors.
- Designed to withstand motor start-up currents.
- Easy installation in tight areas.



INPUT AC AMPS	STANDARD MODELS: CTRS-			
	0-1mA <sub>dc</sub>	4-20mA <sub>dc</sub>	0-10V <sub>dc</sub>	0-5V <sub>dc</sub>
0 to 5	005B	005E	005D	005X5
0 to 10	010B	010E	010D	010X5
0 to 15	015B	015E	015D	015X5
0 to 20	020B	020E	020D	020X5
0 to 25	025B	025E	025D	025X5
0 to 50	050B	050E	050D	050X5
0 to 100	101B	101E	101D	101X5
0 to 200	201B	201E	201D	201X5
0 to 300	301B	301E	301D	301X5
0 to 400	401B	401E	401D	401X5
0 to 500	501B	501E	501D	501X5
0 to 1000	102B	102E	102D	102X5
0 to 1k	102RB	102RE	102RD	102RX5
0 to 2k	202RB	202RE	202RD	202RX5
0 to 5k	502RB	502RE	502RD	502RX5
0 to 10k	103RB	103RE	103RD	103RX5
0 to 15k	153RB	153RE	153RD	153RX5
0 to 20k	203RB	203RE	203RD	203RX5
0 to 25k	253RB	253RE	253RD	253RX5
0 to 30k	303RB	303RE	303RD	303RX5
0 to 40k	403RB	403RE	403RD	403RX5

5A to 1000A models use current transformers.  
1kA to 40kA models use Rogowski coils.

### AVAILABLE OPTIONS:

230Vac instrument Power - Add suffix "-22"

Rogowski coil size:

- 7-inch diameter - Standard
- 11-inch diameter - Add suffix "-1"
- 15-inch diameter - Add suffix "-2"

Consult factory for special current ranges

### ORDERING INFORMATION

Example: 25 Aac Input with  
0-10Vdc Output.  
**CTRS-025D**

## SPECIFICATIONS

### INPUT

Current Range ..... See Table  
Over range ..... (w/o damage) ..... 2 X F.S. (cont.)  
5 X for 10s transient  
10 X for 1s transient  
Frequency Range ..... 50-60Hz

### DIELECTRIC TEST

Input/Output/Case ..... 1500Vac

### INSTRUMENT POWER

Standard ..... 115Vac, ±15%, 50/60Hz, 3.5VA  
Option "-22" ..... 230Vac, ±15%, 50/60Hz, 3.5VA

### OUTPUT

Response Time (to 90%) ..... 100ms  
Loading  
"B" models ..... 0-1mA ..... 0-10kΩ  
"D", "X5" models ..... 0-10Vdc, 0-5Vdc ..... 2kΩ min.  
"E" models ..... 4-20mA ..... 0-500Ω  
Field-adjustable Calibration Range ..... ±10%

### ACCURACY

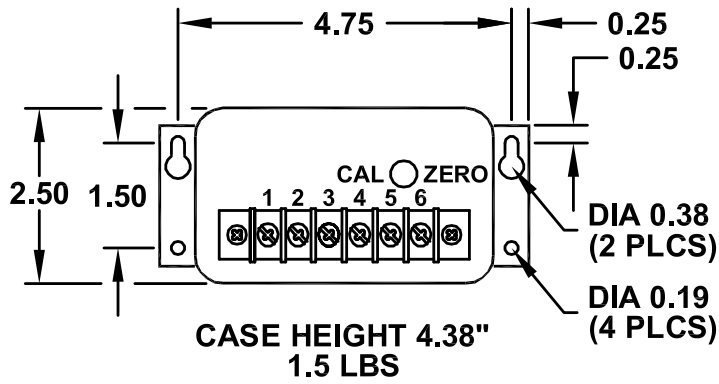
Current Transformer Models (linearity and set point).  
5A to 10A models ..... ±0.5% F.S. @ 60Hz  
15A to 1000A models ..... ±0.25% F.S. @ 60Hz  
Rogowski Coil Models (1kA to 40kA models)  
Setpoint (w/conductor centered in window) ±1.0% F.S. @ 60Hz  
Linearity ..... ±0.25% F.S. @ 60Hz  
Position Sensitivity ..... ±2.0% F.S.  
Output Ripple ..... <1.0% F.S.

### TEMPERATURE & PHYSICAL

Temperature Effect...(-20°C to 60°C) ..... ±1.0% Rdg.  
Weight ..... 1.5 lbs

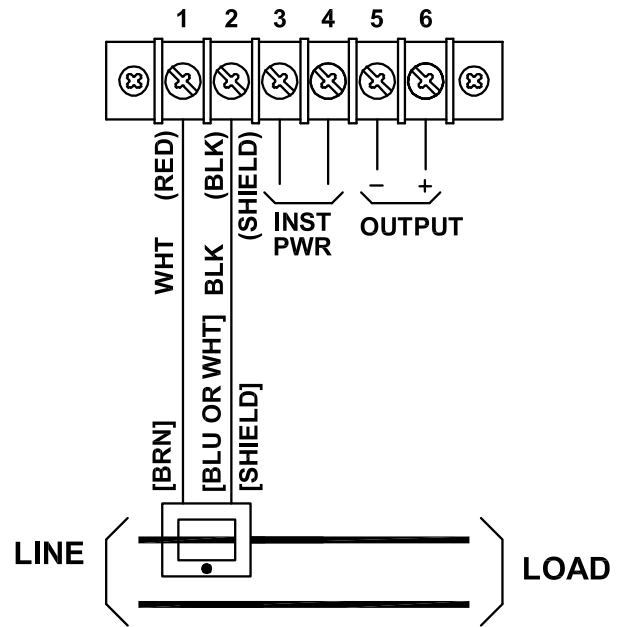
# OSI AC CURRENT TRANSFORMER/TRANSDUCER MODEL CTRS

## CASE DIMENSIONS



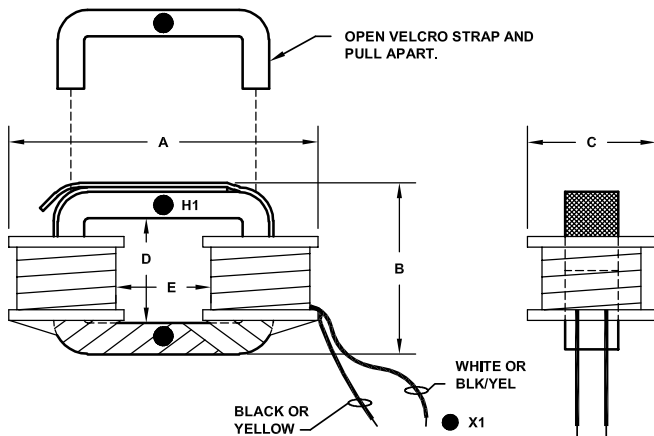
All dimensions in inches

## CONNECTION DIAGRAM

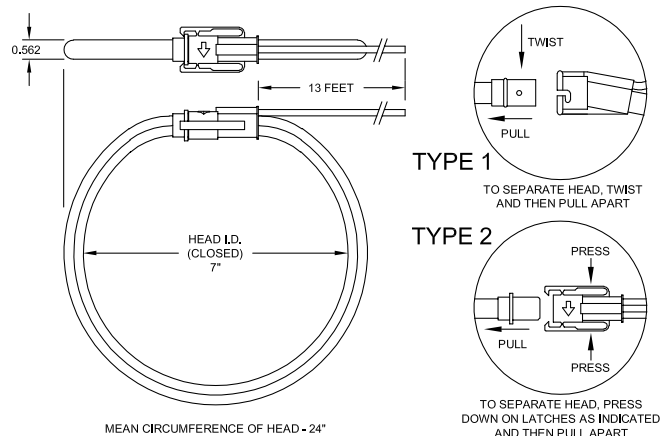


## SENSOR DIMENSIONS

### 5A to 1000A



### 1kA to 40kA



INPUT AC AMPS	SENSOR SIZE	DIMENSIONS in inches					WT. LBS.
		A	B	C	D	E	
5-100	A	2.80	2.00	1.12	0.90	0.85	0.4
200-500	B	3.85	3.80	1.30	2.40	1.25	0.8
1000	C	5.50	4.60	1.30	3.15	2.90	1.5

### DIMENSIONS

#### Sensor ID

- Standard ..... 7 inches ..... 24 inches in length
- Option "-1" ..... 11 inches ..... 36 inches in length
- Option "-2" ..... 15 inches ..... 48 inches in length

Lead Lengths ..... 72", 16 gauge, White (X1) & Black