

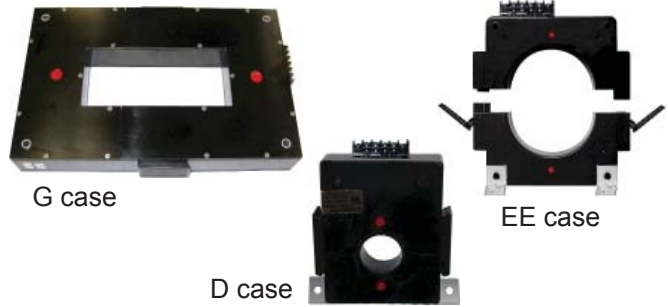
# OSI HALL-EFFECT DC CURRENT TRANSDUCER MODEL CTLC-

## DESCRIPTION

The CTLC series current transducers are Hall-effect current sensors with signal conditioning and an output amplifier in a single compact package. All models are supplied in a split-core configuration for ease of installation.

Hall-effect current measurement is a non-contact technique that measures the magnetizing effects of current flowing in a conductor.

Advantages of this technique include high electrical isolation between the measured conductor and transducer output, high over-range capability and fast response to input changes.



## FEATURES

**5 YEAR WARRANTY**



- Accuracy =  $\pm 0.5\%$  F.S.
- Sensor, signal conditioning and amplifier in one package
- Output is proportional in direction and magnitude to current flow through the window. (4-20mA output is unidirectional)
- Split-core configuration
- Replaces shunts. No insertion loss.

### ORDERING INFORMATION

**Example:** Split-core current transducer with 0-400Adc Input, 4-20mAdc Output, D size, 24Vdc instrument power and extended temperature range

**CTLC-401LST**

Power supply available by using the PS-4753-5 or -6.

## MODEL SELECTION

DC Current Input	MODEL CTLC-			Size
	4-20mAdc Output	$\pm 5$ Vdc Output	$\pm 10$ Vdc Output	
0-100A	101LS	101LSX5	101LDS	D
0-200A	201LS	201LSX5	201LDS	D
0-300A	301LS	301LSX5	301LDS	D
0-400A	401LS	401LSX5	401LDS	D
0-400A	401EELS	401EESX5	401EESD	EE
0-500A	501EELS	501EESX5	501EESD	EE
0-600A	601EELS	601EESX5	601EESD	EE
0-800A	801EELS	801EESX5	801EESD	EE
0-1000A	102EELS	102EESX5	102EESD	EE
0-1200A	122EELS	122EESX5	122EESD	EE
0-1500A	152EELS	152EESX5	152EESD	EE
0-2000A	202LS	202SX5	202SD	G
0-2500A	252LS	252SX5	252SD	G
0-3000A	302LS	302SX5	302SD	G

## SPECIFICATIONS

### INPUT

Current ..... See Table  
Over-current without damage ..... 10 X rating

### OUTPUT

Load ..... 4-20mA models..... 0-500 $\Omega$   
5 and 10V models.....  $\geq 2k\Omega$   
Response Time (to 90%)..... 500 $\mu$ s, typical

### INSTRUMENT POWER

Voltage ..... 24Vdc,  $\pm 10\%$   
Current ..... 25mA + output current

### DIELECTRIC TEST

Bare Conductor thru Window to Output ..... 3750Vac

**ACCURACY and LINEARITY** .....  $\pm 0.5\%$  F.S.

### TEMPERATURE and ENVIRONMENTAL

Operating Range ..... 0 to +40 $^{\circ}$ C  
Extended Range (add suffix "T") ..... -40 $^{\circ}$  to +60 $^{\circ}$ C  
Temperature Effect .....  $\pm 0.025\%$ / $^{\circ}$ C  
Humidity ..... 0-95%, non-condensing

### PHYSICAL

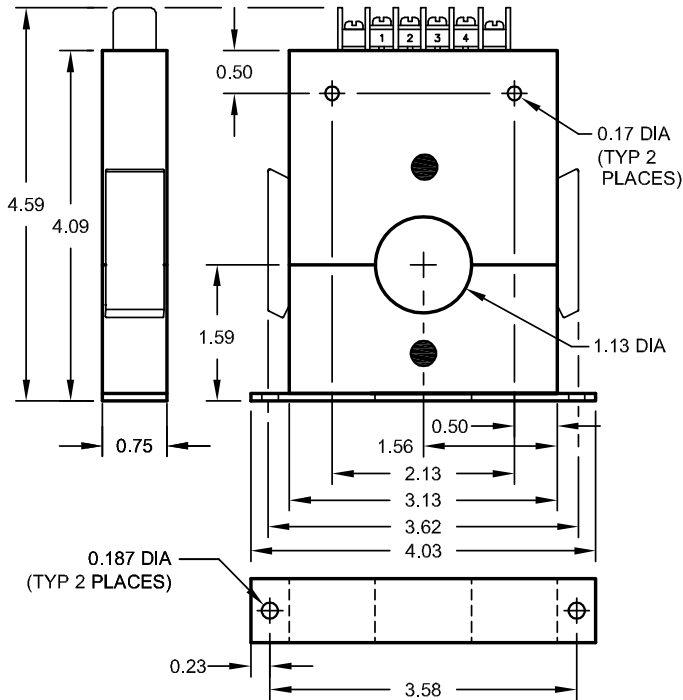
Weight ... D size 0.75lb., EE size 4.5lb., G size 12.3lb.  
Connections ..... 6-32 screw terminals

**OHIO SEMITRONICS, INC.** 4242 REYNOLDS DRIVE \* HILLIARD, OHIO \* 43026-1264  
PHONE: (614) 777-1005 \* FAX: (614) 777-4511  
WWW.OHIOSEMITRONICS.COM \* 1-800-537-6732

# OSI CASE DIMENSIONS AND CONNECTIONS MODEL CTLC-

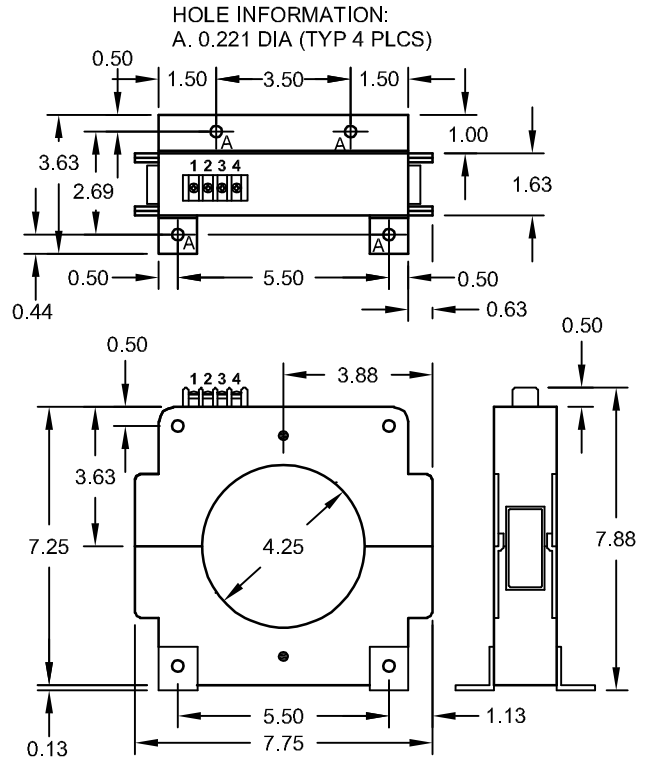
ALL DIMENSIONS ARE IN INCHES. TOLERANCE IS  $\pm 0.030$ " UNLESS OTHERWISE NOTED.

## CASE DIMENSIONS D



Dwg.# 0902-00948-B Rev A

## CASE DIMENSIONS EE

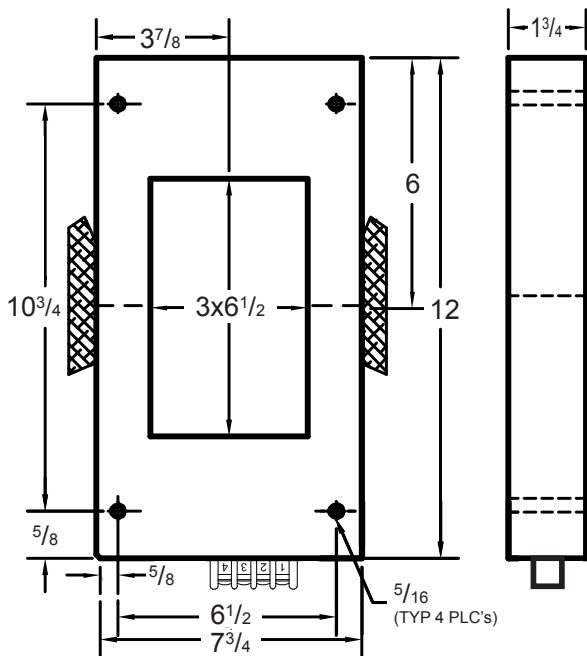


Dwg.# 0902-00955-B Rev D

### MOUNTING INSTRUCTIONS

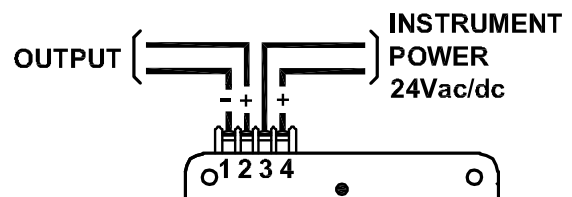
Unit must be installed in a vertical position as shown. The conductors through the window and the wires attached to the terminal strips must not apply any stress to the latches in any direction.

## CASE DIMENSIONS G



Dwg.# 0902-00438-B Rev A (mod.) & Dwg.# 0902-00600-B Rev A (mod.)

## CONNECTIONS



TERMINAL IDENTIFICATION	
Terminal 1 (-)	Output
Terminal 2 (+)	
Terminal 3 (-)	Instrument Power
Terminal 4 (+)	

"Red dot" side of CTL must face positive supply.  
 Power supply available by using the PS-4753-5 or -6.