



# AC CURRENT TRANSDUCER

# MODEL MCT5

## DIN RAIL MOUNTED AC CURRENT TRANSDUCER

### FEATURES

- Ruggedized polyamide DIN mount case.
- Standard OSI five year warranty.
- Slim profile allows maximum use of available space.
- Field selectable analog outputs.
- Recessed terminals provide increased safety.

### APPLICATIONS

- Ideal for enclosures with dimensional constraints.
- Designed for industrial environments.
- OEM measurement systems.
- Designed for use with OSI current transformers.
- Easily integrated into control systems.



INPUT AC AMPS	STANDARD OUTPUTS MODEL MCT5-		
	0 - 1mA*	4 - 20mA	4 - 20mA**
0 - 1	001A	001E	001E2
0 - 5	005A	005E	005E2



\*Models are self-powered from measured ac input line with **DIP switch selectable 0 - 1mA, 0 - 5Vdc, or 0 - 10Vdc output.**

\*\*Denotes 4 - 20mA loop-powered unit, (15 - 35Vdc). 1" wide case can be mounted on rail EN50035 (DIN 1) or rail EN50022 (DIN 3).

Transducer output is derived from the average absolute value of the input and calibrated as the RMS value of a sine wave input.

CURRENT

## MODEL MCT5 SPECIFICATIONS

### INPUT

CURRENT: See table  
FREQUENCY RANGE: 48 - 65 Hz.; 60 Hz. nom.  
BURDEN: 1 Amp models: 0.05VA  
5 Amp models: 0.175VA

### CURRENT OVERLOAD:

2 times full-scale rating (continuous)  
10 times full-scale rating (10 Sec./Hr.)

DIELECTRIC TEST (Input/Output): 1500Vac

### OUTPUT

ACCURACY:  $\pm 0.25\%$  F.S. @ 60Hz

Includes effects of linearity and setpoint.

OUTPUT RIPPLE: Less than 1.0% F.S.

RESPONSE TIME (99%): 400 milliseconds

FIELD ADJUSTABLE SPAN:  $\pm 5\%$

OUTPUT LOADING (OHMS):

4 - 20mA: 0 - 500

4 - 20mA (24V loop pwr.): 0 - 600

Field selectable:

0 - 1mA: 0 - 10k

0 - 5Vdc: Greater than 5M

0 - 10Vdc: Greater than 10M

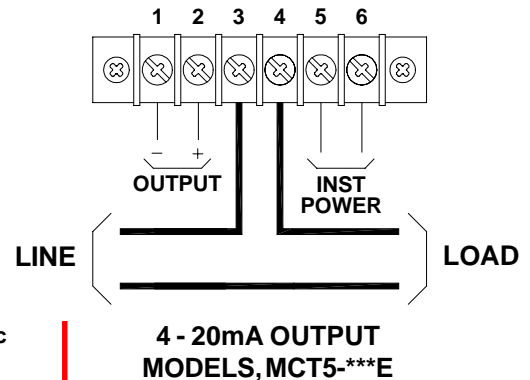
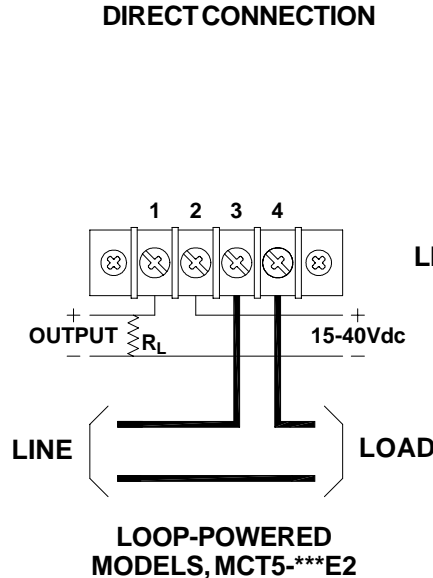
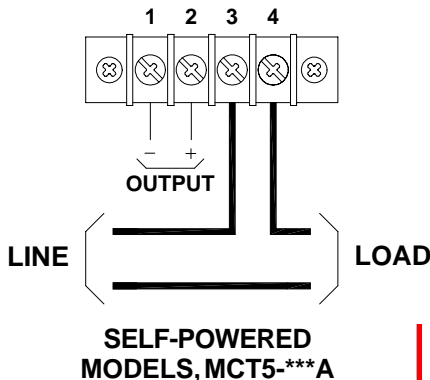
TEMPERATURE EFFECT (-20°C to +65°C):  $\pm 1.0\%$

INSTRUMENT POWER:

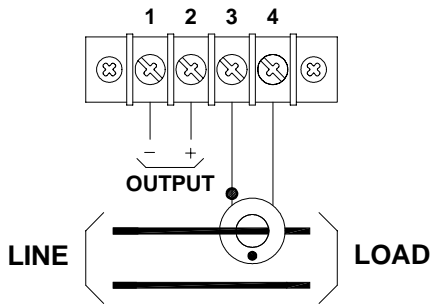
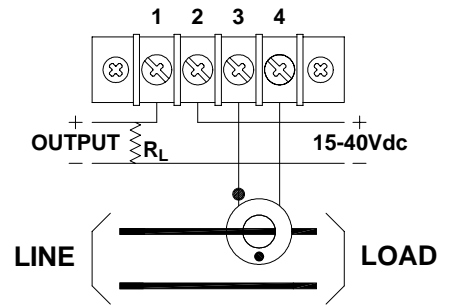
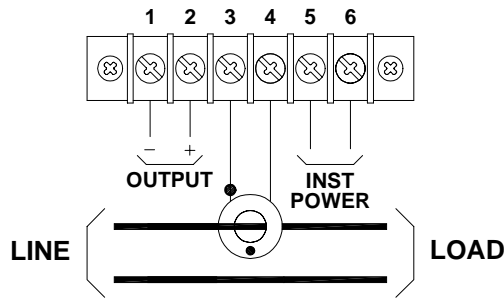
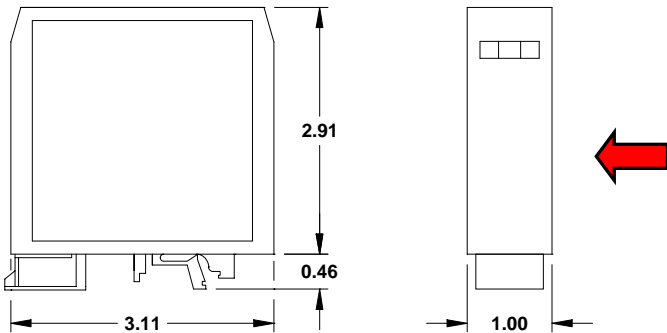
85 - 135 Vac, 50 - 400 Hz (4 - 20mA), 3.5VA

15 - 35Vdc (loop Powered)

## CONNECTION DIAGRAMS



AC

**USING CURRENT TRANSFORMERS**

**SELF-POWERED  
MODELS, MCT5-\*\*\*A**

**LOOP-POWERED  
MODELS, MCT5-\*\*\*E2**

**4 - 20mA OUTPUT  
MODELS, MCT5-\*\*\*E**
**CURRENT**
**CASE DIMENSIONS**


All dimensions in inches.  
Weight: 0.24lbs.

**OUTPUT SWITCH POSITIONS**

OUTPUT REQUIRED	SWITCH POS. 1	SWITCH POS. 2
0 - 1mA	OFF	OFF
0 - 5V	ON	ON
0 - 10V	ON	OFF

TWO POSITION SWITCH LOCATED BEHIND  
CENTER CAP ON FRONT OF UNIT

**AC**