

# CURRENT TRANSDUCERS

## AC CURRENT TRANSDUCER

MODEL MCT5

### DIN RAIL MOUNTED AC CURRENT TRANSDUCER

#### FEATURES

- Ruggedized Polyamide DIN mount case.
- Slim profile allows maximum use of available space.
- Field selectable analog outputs. "A" Models only.
- Recessed terminals provide increased safety.

INPUT	STANDARD OUTPUTS MODEL MCT5-		
AC AMPS	0-1mA <sub>dc</sub> *	4-20mA <sub>dc</sub>	4-20mA <sub>dc</sub> **
0 to 1	001A	001E	001E2
0 to 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, (15-40Vdc).

All other units require 85-135Vac instrument power.

1" wide case can be mounted on Rail EN50035 (DIN 1) or Rail EN50022 (DIN2).

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

#### APPLICATIONS

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



LISTED E500652



#### ORDERING INFORMATION

Example: 0-5A Input with  
4-20mA Output.  
**MCT5-005E**

#### SPECIFICATIONS

##### INPUT

Current..... See Table  
Frequency Range..... 48 to 65Hz, 60Hz Nom.  
Burden ..... 1 Amp models..... 0.05VA  
5 Amp models..... 0.175VA

Current Overload  
2 X Full Scale Rating..... (continuous)  
10 X Full Scale Rating..... (10Sec./Hr.)  
Dielectric Test...(Input/Output)..... 1500Vac

##### OUTPUT

Output Ripple..... <1.0% F.S.  
Response Time..... (99%)..... 400ms  
Field Adjustable Span..... ± 5%  
Termination..... Wire Size 22 to 12 AWG

##### OUTPUT LOADING (Ω)

4-20mA..... 0-500  
4-20mA(24V Loop Power)..... 0-600  
Field Selectable  
0-1mA..... 0-10K  
0-5Vdc..... >5M  
0-10Vdc..... >10M

##### ACCURACY (@ 60Hz)

..... **±0.25% F.S.**  
Includes effects of linearity and set point.

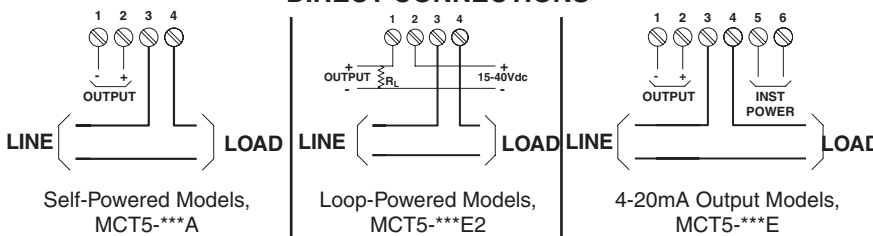
Temperature Effect ..... (-20°C to +65°C)..... ± 1.0%  
E Output ..... (-20°C to +40°C)..... ± 1.0%

##### Instrument Power

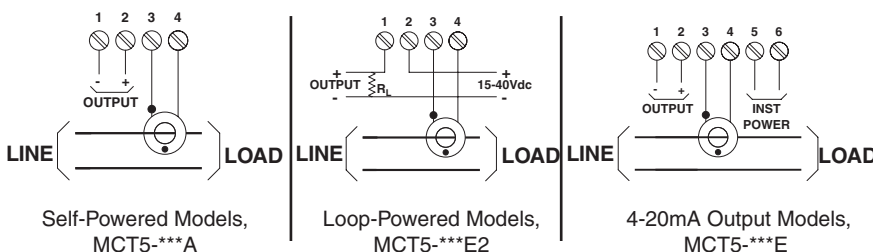
4-20mA..... 85-135Vac, 50/60Hz, 3.0VA  
Loop Powered ..... 15-40Vdc  
Weight ..... 0.4 Lb.

#### CONNECTION DIAGRAMS

##### DIRECT CONNECTIONS

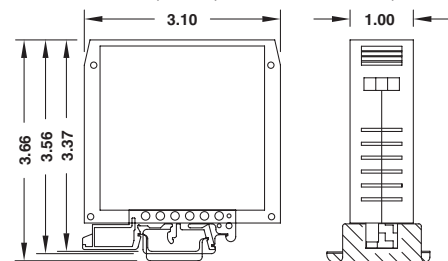


##### USING CURRENT TRANSFORMERS



#### CASE DIMENSIONS

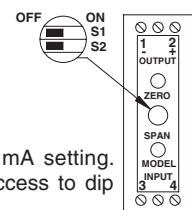
UNIT CAN BE MOUNTED ON:  
RAIL EN50035 (DIN 1) RAIL EN50022 (DIN 2)



All Dimensions In Inches

#### OUTPUT SELECTIONS MCT5-\*\*\*A

Output	Switch Pos. 1	Switch Pos. 2
0-1mA	OFF	OFF
0-5V	ON	ON
0-10V	ON	OFF



Units are shipped with 0-1mA setting. Remove snap button for access to dip switches.

**FLEX-CORE®**

Div. Morlan & Associates, Inc.

4970 Scioto Darby Rd. Hilliard, Ohio 43026

WWW.FLEX-CORE.COM

sales@flex-core.com

PHONE (614) 889-6152

TECH. ASSISTANCE (614) 876-8308

FAX # (614) 876-8538