HALL-EFFECT DC CURRENT TRANSDUCER MODEL CTH -

DESCRIPTION
The CTH 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
- Accuracy = ±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 4-12-20 output is bi-directional)
- Split-core configuration
- Replaces shunts. No insertion loss.

MODEL SELECTION

ORDERING INFORMATION
Example: Input 0-1000A
Output 0-10V
CTH/1000A/10/SC/24Vdc Type G

ORDERING INFORMATION
Example: Input 200A
Output 4-20mA
CTH/200A/4-20/SC/24Vdc Type D

ORDERING INFORMATION
Example: Input 800A
Output 0-5V
CTH/800A/5/SC/24Vdc Type EE

ORDERING INFORMATION
Example: Input ±500A
Bi-Directional Output 4-12-20mA
CTH/500A/4-12-20/SC/24Vdc Type G

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

SPECIFICATIONS

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

OUTPUT
Load .......................................................... 0-500Ω
5 and 10V models .............................. ≥2kΩ
Response Time (to 90%) ................. 500μs, typical

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

ACCURACY and LINEARITY .................. ±0.5% F.S.

TEMPERATURE and ENVIRONMENTAL
Operating Range .................. 0 to +40°C
Extended Range (add suffix “T”) ....... -40° to +60°C
Temperature Effect .................. ±0.025%/°C
Humidity .................................. 0-95%, non-condensing

PHYSICAL
Weight .................................. D size ≤0.75lb, EE size ≤4.5lb.
Connections .................................. 6-32 screw terminals
HALL-EFFECT DC CURRENT TRANSUDER

**CASE DIMENSIONS D**

**CASE DIMENSIONS EE**

**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**

**CONNECTIONS**

OUTPUT

INSTRUMENT

POWER

24Vac/dc

**TERMINAL IDENTIFICATION**

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

"Red dot" side of CTL must face positive supply.

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