

MODELS CTU-51F, CTU-101F, CTU-201F, CTU-401F, CTU-601F

DESCRIPTION

The CTU-xxx(S)F current transducers are bidirectional, Hall-effect based, ratiometric devices with an output proportional to both the Instrument Power voltage (V_{CC}) and the magnetic field created by passing current through the window of the transducer. Quiescent output voltage (V_{OQ} , no magnetic field) is nominally one-half of V_{CC} . Output voltage will increase (above V_{OQ}) with the 'Red Dot' side of the transducer facing the most positive point in the measured circuit. An opposite polarity orientation will decrease the output voltage (below V_{OQ}).

FEATURES

- High Sensitivity
- Input/Output Isolation
- Non-contact
- Bidirectional
- No DC Insertion Loss
- Low Power Requirement
- Split-core option
- Ratiometric Output



5 YEAR WARRANTY

MODEL SELECTION

MODEL	CURRENT RANGE (dc/peak ac)	OUTPUT SENSITIVITY (nominal)	SENSOR SIZE
CTU-51F	0-±50A	30mV/A	C
CTU-101F	0-±100A	15mV/A	C
CTU-201F	0-±200A	8mV/A	D
CTU-401F	0-±400A	4mV/A	D
CTU-601F	0-±600A	3mV/A	E

For optional split-core models, add suffix "S" to model number.

ORDERING INFORMATION

Example: Split-Core Current Transducer with 0-±100A Input

CTU-101SF

SPECIFICATIONS

INPUT

Current Range See Table
 Overrange (w/o damage)..... 10X F.S.
 Frequency Bandwidth (Typical -3dB)..... dc to 3kHz

DIELECTRIC TEST

Conductor Through Window to Output Standard 5000Vdc
 Split-core (Option "S")..... 1000Vdc

INSTRUMENT POWER

Voltage (V_{CC})..... Nominal..... 5Vdc
 Range 4.5 to 5.5Vdc
 Maximum (w/o damage) 8Vdc
 Current (I_{CC}) Maximum 10mAdc

OUTPUT

Sensitivity (Typical V_{OH} @ $V_{CC}=5Vdc$) See Table
 Quiescent Voltage (V_{OQ} @ $V_{CC}=5Vdc$) 2.5Vdc, ±0.2Vdc
 Loading ≥5kΩ

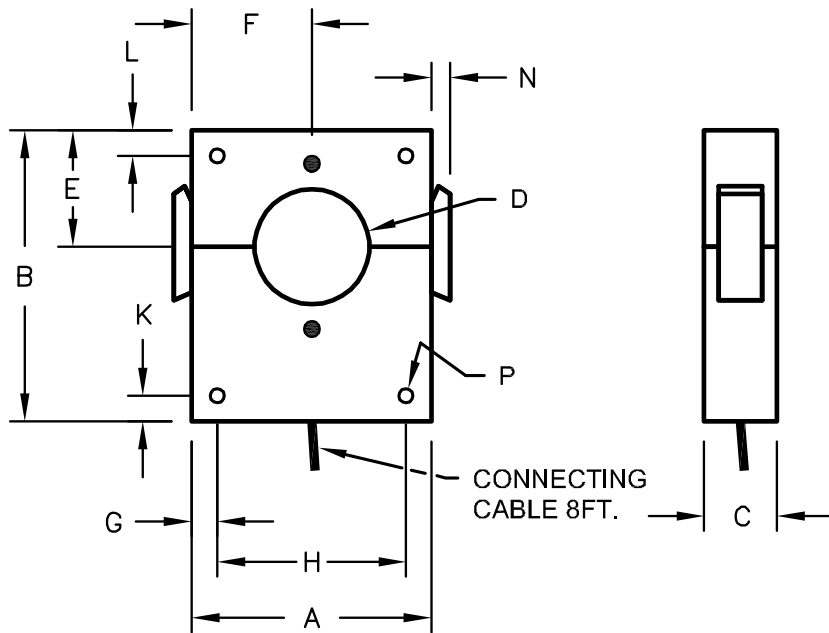
ACCURACY

Sensitivity Nominal ±30%
 Linearity ±0.5% F.S.

TEMPERATURE

Operating Range -20 to 60°C
 Effect (Typical)..... Quiescent Voltage (V_{OQ}) ±0.2mV/°C
 Sensitivity (Typical) ±0.05%/°C

CASE DIMENSIONS

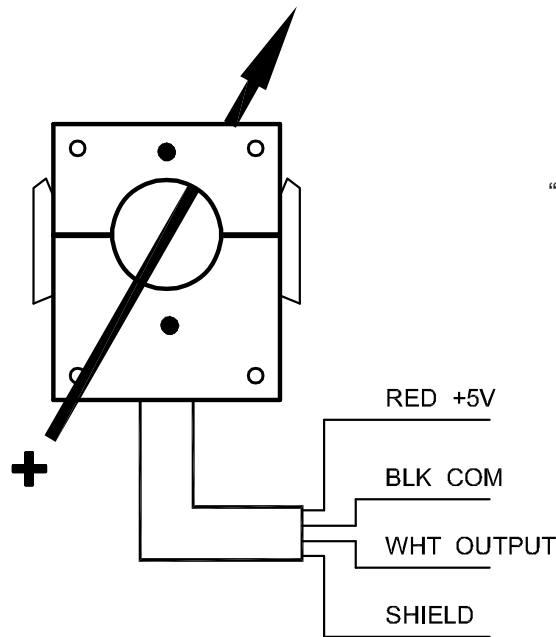


ALL DIMENSIONS IN INCHES.
Tolerance - 0.00±0.03
(unless otherwise specified)

Dwg# 0902-00619-B Rev --

SENS. SIZE	SENSOR DIMENSIONS (inches)													WT LBS.
	A	B	C	D	E	F	G	H	J	K	L	N	P	
C	2	2	3/4	3/4	7/8	1	1/4	1 1/2	N/A	1/4	N/A	1/4	5/32	≤0.28
D	3 1/8	4	3/4	1 1/8	1 1/2	1 9/16	1/2	2 1/8	N/A	1/2	N/A	1/4	11/64	≤0.75
E	4 1/8	5	1 1/4	2	2	2 1/16	7/16	3 1/4	4 1/8	7/16	7/16	5/16	17/64	≤2.00

CONNECTION DIAGRAM



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

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