CTRC SERIES

ProteCT™ Type 333 mVAC Output



CTRC AC Current Transducer monitor circuits up to 2000 A and produce a safe, low voltage output proportional to the RMS current value. This output is designed as an input to a power monitor or transducer, replicating the AC wave shape with phase angle resolution better than 2 degrees. The flexible coil design allows the sensor to be installed over multiple conductors or bus assemblies easily. The cable requires very little space to fit between adjacent phase conductors. The design eliminates the magnetically permeable core of standard current transformers while providing excellent isolation, sensing only the magnetic field of the phase inside the loop.

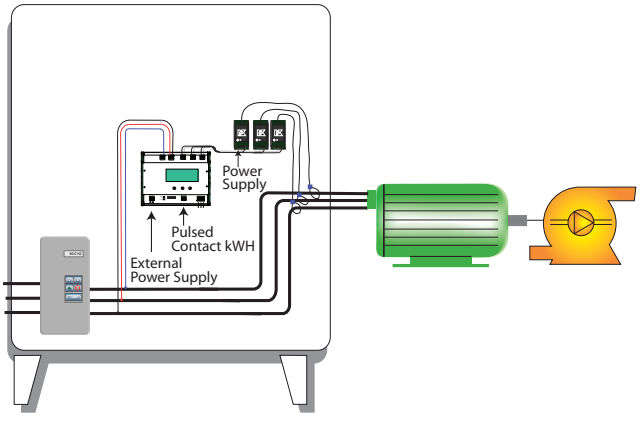
Current Transducer Applications

Power Monitoring
- Accurate representation of current without the weight or hazards created by 5 A secondary current transformers.

Individual Machines
- Measure power use for cost allocation.
- Detect voltage sags and spikes.

Monitor Entire Building Power Usage
- Locate unneeded power consumption.

Monitoring Power Usage of a Motor Driven Pump



Current Transducer Features

333 mVAC Output
- Specifically designed for connection to power monitors and transducers.
- Safe, with no need for shorting blocks.

24 VAC or VDC Powered
- Supply and Output are optically isolated.

Factory Calibrated
- Reduces field calibration errors.
- Coils matched with signal conditioning.

DIN Rail Mounted Case*
- Compact size requiring very little panel space.
- Simple snap fit to standard rails.

UL/cUL and CE Approved
- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 147.

For additional Application Examples,

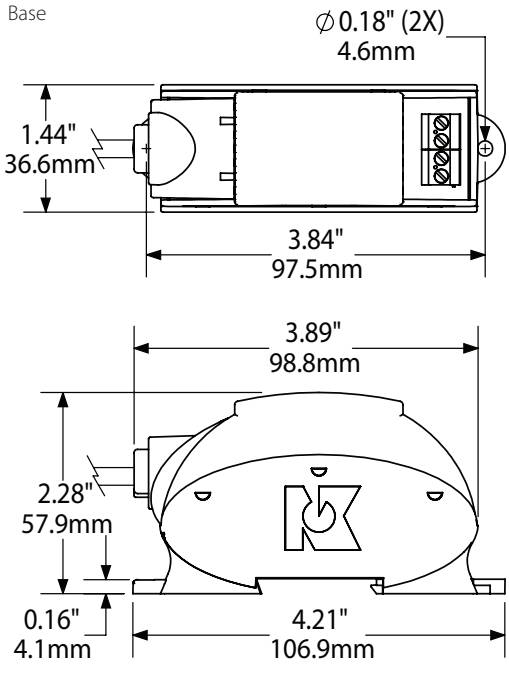
Current Transformers

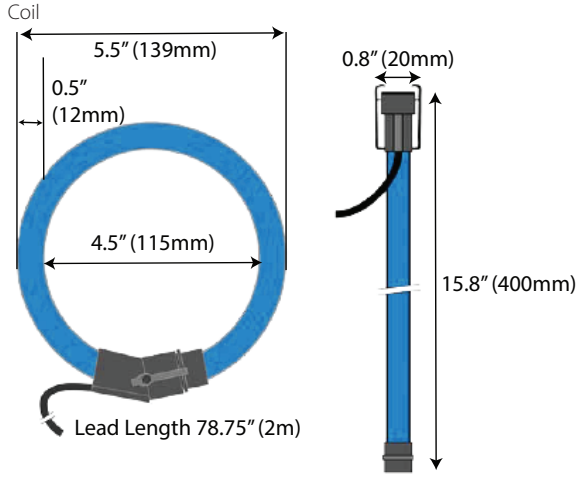
OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 3 for details.

NK Technologies

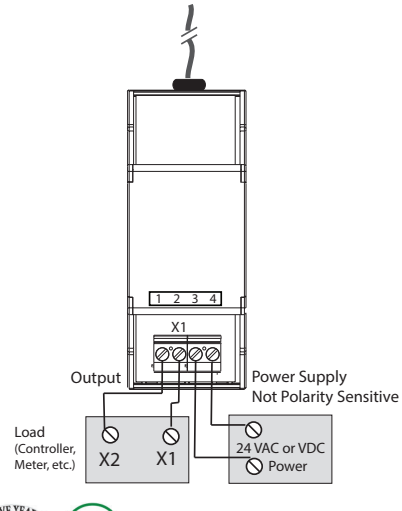
FIVE YEAR 5 WARRANTY
RoHS Compliant

AC Current Transducer Dimensions





Current Transducer Connections



Current Transducer Specifications

Power Supply	24 VAC/VDC (12–36 V)
Power Consumption	<2 VA
Output Signal	333 mVAC
Response Time	2 ms
Input Range	• 0–300 • 0–500 • 0–1000 • 0–1500 • 0–2000
Accuracy	±1% FS
Output Loading	100 KΩ minimum for accuracy
Isolation Voltage	Tested to 3.5 KV
Frequency Range	40–400 Hz
Sensing Aperture	4.5" (115 mm) ID
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	UL/cUL, CE

Current Transducer Ordering Information

Sample Model Number: CTRC-333-500-24U-D
Flexible loop current sensor, 0–500 A AC produces 0–333 mVAC, DIN rail mounting case.

	(1)				(2)				(3)			(4)
CTRC –	3	3	3	–				–	2	4	U	– D

(1) Output Type

333	333 mVAC

(2) Full Scale Range

300	300 A AC
500	500 A AC
1000	1000 A AC
1500	1500 A AC
2000	2000 A AC

(3) Power Supply

24U	24 VAC or VDC

(4) Case Style

D	DIN rail mounting