



**Series K1000 Single Phase Kilowatt Hour Meter
Model 14100 / 2**

Product Specifications

Electronic Module Specifications:

- Voltage Requirements: 90-140 VAC to Neutral for each element
- Frequency: 50-60 Hz
- Power Consumption 3 watts
- Phase: Single phase, 2 phase, or 3 phase
- Rated Load: 200 amps each element
- Relay Output: 5 VDC @ 300 mA maximum
- Physical size: 5" x 2.78" x 0.91"
- Weight: 4.0 oz or 4.3 oz (Plus models)

Temperature range:

- Operating -20 F - 160 F (-28.8 C to 71.1 C)
- Storage -40 F - 160 F (-40 C to 71.1 C)
- Start up -20 F - 160 F (-28.8 C to 71.1 C)
- Humidity: Non-condensing

Restrictions:

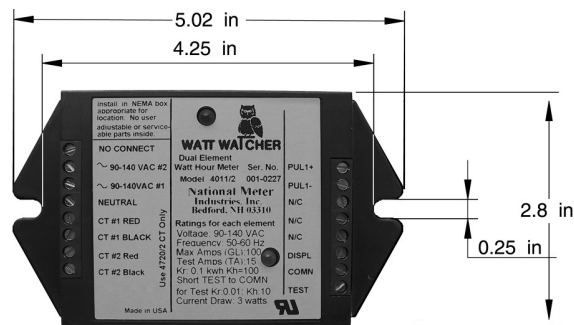
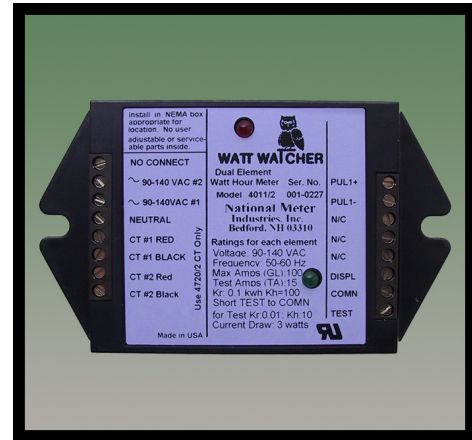
Must be mounted in NEMA enclosure appropriate for the location. Must be mounted in dry location.

Current Transformer Specifications for Model 4720/2 Current Transformers

- Physical Size: 1.85" outside diameter
- 0.85" inside diameter
- Weight: 1.8 oz
- Leads: 24" long, 300 VAC insulation

Specifications for the Model 4921 and 4922 Mechanical Displays

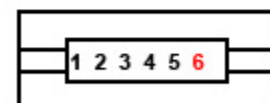
- Physical Size 1.19" x 0.78" x 1.55" largest dimensions
- 1.06" x 0.56" size for mounting hole
- Weight: .375 oz
- Mounting Plate: 0.156" max thickness for mounting plate
- 0.062" min thickness for mounting plate



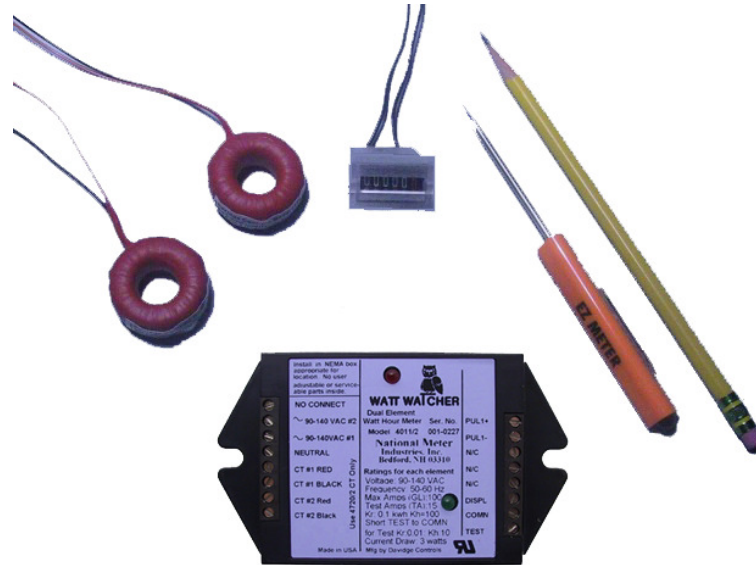
MODEL # NMI 4011



SOLID CORE CTs
1.7" OD X 1.0" ID X .5" THICK



SIX DIGIT MECHANICAL
COUNTER WITH 10THs
1.25" W X .75" H X 1.312" D



KWH Metering Transducer Model 4011/2 Installation:

The Model 4011/2 Watt Watcher transducer comes with two solid core CTs and a counter. The meter needs to be installed into an enclosure; NEMA rated for the environment.

There are two “U” indentations on either side of the transducer for the mounting hardware. Connect 120/208 or 120/240VAC, 3 wire to the terminals as indicated on the label. The potential wires connect to terminals marked 90-140 volts #1 and #2. The neutral wire connects to the Neutral terminal.

Next, install the solid core CTs by inserting the wire of the circuit to be monitored through the hole in the CT. The white dot on the CT faces the line side. Make sure that CT#1 is on the same circuit wire that feeds Line #1 on the transducer. Repeat the same for CT #2. The black wire off the CT connects to the terminal labeled Black and red wire to the terminal labeled Red.

The counter would be the next item to be connected. The two counter wires are connected to the “Displ” and ‘Comm” terminals located on the opposite side of the transducer. There is no polarity referencing the counter connections. The wires can be extended by splicing on # 18 gauge wire.

The last item is connecting to the pulse relay on the meter, if needed. These terminals are used if a battery operated LCD counter or pulse collector is connected. There is no voltage on these terminals; they are referred to as “Dry Contacts”. The low voltage pulse wires connect to the terminals mark “Pul#1” and “Pul#2”.

Meter Operation:

After the meter is installed the rest is simple. The red LED indicates that the meter is energized. The green LED below will flash briefly whenever the counter display advances. The standard meter will count in tenths of a kilowatt-hour and the label will read Kr 0.1: Kh 10. The display will indicate a running count of energy consumed. There are optional reset counters and other counts of 1 to 0.0001 kilowatt hours available with different model meters. Please review “Trouble Shooting” if a problem exists.

KWh Metering Transducer (Trouble Shooting)

You will need a voltmeter and a small screwdriver to start with. Some of the most common problems when the red LED doesn’t glow or the transducer doesn’t count are that the potential wire is connected to neutral terminal (by mistake) or the voltage wires are on CT terminals. In either case the meter is burnt out!

If the meter is wired properly, check the voltage supply going into the meter. The in-line fuse or circuit breaker protecting the transducer could be blown. If you see the green LED flash and counter doesn’t advance check the counter wires to make sure they are in their proper terminals.