

## INCLUDES PHASE-FIRED & ZERO-CROSSING MEASUREMENTS

### DESCRIPTION

Model W transducers are available in many models covering 0-600 Volts and 0-1000 Amperes. One-, two- and three-element transducers are available for all single-phase and three-phase power systems.

All models provide an isolated analog output signal related to the average power consumed in the load and/or relay closure (or pulse output) related to the Watthours of energy consumed in the load.

Computers or auxiliary equipment can be used to calculate demand, monitor or control processes, and to accumulate energy consumption for billing purposes.

**5 YEAR WARRANTY**



### FEATURES

- Analog output for instantaneous Watts and relay closure or pulse output for Watthour consumption.
- Maintains accuracy with chopped or distorted waveforms through use of real-time multiplier.
- Accuracy maintained when factory-calibrated with external current sensors.
- Rugged metal enclosures for harsh environments.

### APPLICATIONS

- Building energy management systems
- Manufacturing process control
- Pump motor power consumption.
- Welding and soldering process monitoring.
- Battery charger monitoring.

## SPECIFICATIONS

### INPUT

|                                     |              |
|-------------------------------------|--------------|
| Voltage .....                       | See Tables   |
| Current .....                       | See Tables   |
| Frequency Range .....               | 48-70Hz      |
| Power Factor .....                  | Any          |
| Response (Transient 90%)            |              |
| With Internal sensors .....         | <100µs       |
| With Current transformers .....     | 1ms          |
| Burden                              |              |
| Voltage and Current .....           | 1.25VA/phase |
| Output amplifier .....              | 2 Watts      |
| Current Overload (Continuous) ..... | 2X F.S.      |
| 15A, 20A, 25A .....                 | F.S.         |

### DIELECTRIC TEST

|                         |                          |
|-------------------------|--------------------------|
| Input/Output/Case ..... | 1500Vac (RMS)            |
| Surge .....             | Withstands IEEE SWC test |

### INSTRUMENT POWER

|                                 |                            |
|---------------------------------|----------------------------|
| Standard .....                  | 103-135Vac, 50-400Hz, 10VA |
| "-22" Option .....              | 230Vac, 50/60Hz, ±10%      |
| "A", "C", or "CX5" models ..... | not required               |

### OUTPUT

|                              |  |
|------------------------------|--|
| Wh Relay .....               | N/O SPST; 150Vac, 0.5A Rated                             |
| Contact Closure Period ..... | 200ms  |
| Loading                      |  |
| "A", "B" models .....        | (0-1mAdc)..... 0-10kΩ                                    |
| "C", "D" models .....        | (0-10Vdc)..... 2kΩ min.                                  |
| "E" models .....             | (4-20mAdc)..... 0-500Ω                                   |
| "CX5", "X5" models .....     | (0-5Vdc)..... 2kΩ min.                                   |
|                              | (1mA, 5V and 10V unit voltage outputs are bidirectional) |
| Response Time (to 90%) ..... | 250ms***   |
| Field Adjustable Cal. ....   | ±10%   |

### TEMPERATURE

|                       |                                  |
|-----------------------|----------------------------------|
| Operating Range ..... | -10°C to +60°C                   |
| Effect .....          | ±1.0% of Rdg., ±0.1% F.S. Output |

### ACCURACY

|                            |   |
|----------------------------|---|
| .....                      | ±0.5% F.S.  |
|                            | Includes combined effects of power factor, linearity, repeatability and current sensor. |
| Analog Output Ripple ..... | <1% F.S.  |

\*Denotes self-powered unit, limiting input voltage ranges to:  
 103-135V for 150V models  
 215-280V for 300V models  
 395-550V for 600V models

All others require 103-135Vac instrument power, 50-400Hz.

Optional 230Vac instrument power - Add suffix "-22"

\*\*\* Option Y27 - For use on zero-crossing SCR controllers.

**Custom count rates, open-collector Wh output, and TTL outputs available - Consult factory.**

### Watthour Outputs

|                   |                                     |
|-------------------|-------------------------------------|
| Standard .....    | N/O SPST relay contact              |
| "-T" Option ..... | TTL output for Watthours 5Vdc pulse |

400Hz Models:

To order for use on 400Hz applications, substitute "W4" in part number.

**SINGLE-PHASE 50/60 HERTZ  
MODELS WITH INTERNAL CURRENT SENSOR (ONE-ELEMENT)**

| INPUTS  |         | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|---------|---------|-----------------|---------------------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS   | AMPS    |                 |                           | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150 | 0 - 1   | 100             | 100                       | 103A                      | 103B    | 103C     | 103D    | 103CX5  | 103X5  | 103E   |
|         | 0 - 2.5 | 250             | 250                       | 106A                      | 106B    | 106C     | 106D    | 106CX5  | 106X5  | 106E   |
|         | 0 - 5   | 500             | 5000                      | 001A                      | 001B    | 001C     | 001D    | 001CX5  | 001X5  | 001E   |
|         | 0 - 10  | 1000            | 1000                      | 010A                      | 010B    | 010C     | 010D    | 010CX5  | 010X5  | 010E   |
|         | 0 - 15  | 1500            | 1500                      | 019A                      | 019B    | 019C     | 019D    | 019CX5  | 019X5  | 019E   |
|         | 0 - 20  | 2000            | 2000                      | 117A                      | 117B    | 117C     | 117D    | 117CX5  | 117X5  | 117E   |
|         | 0 - 25  | 2500            | 2500                      | 118A                      | 118B    | 118C     | 118D    | 118CX5  | 118X5  | 118E   |
| 0 - 300 | 0 - 1   | 200             | 200                       | 104A                      | 104B    | 104C     | 104D    | 104CX5  | 104X5  | 104E   |
|         | 0 - 2.5 | 500             | 500                       | 107A                      | 107B    | 107C     | 107D    | 107CX5  | 107X5  | 107E   |
|         | 0 - 5   | 1000            | 1000                      | 002A                      | 002B    | 002C     | 002D    | 002CX5  | 002X5  | 002E   |
|         | 0 - 10  | 2000            | 2000                      | 011A                      | 011B    | 011C     | 011D    | 011CX5  | 011X5  | 011E   |
|         | 0 - 15  | 3000            | 3000                      | 020A                      | 020B    | 020C     | 020D    | 020CX5  | 020X5  | 020E   |
|         | 0 - 20  | 4000            | 4000                      | 110A                      | 110B    | 110C     | 110D    | 110CX5  | 110X5  | 110E   |
|         | 0 - 25  | 5000            | 5000                      | 119A                      | 119B    | 119C     | 119D    | 119CX5  | 119X5  | 119E   |
| 0 - 600 | 0 - 1   | 500             | 500                       | 105A                      | 105B    | 105C     | 105D    | 105CX5  | 105X5  | 105E   |
|         | 0 - 2.5 | 1000            | 1000                      | 108A                      | 108B    | 108C     | 108D    | 108CX5  | 108X5  | 108E   |
|         | 0 - 5   | 2000            | 2000                      | 003A                      | 003B    | 003C     | 003D    | 003CX5  | 003X5  | 003E   |
|         | 0 - 10  | 4000            | 4000                      | 012A                      | 012B    | 012C     | 012D    | 012CX5  | 012X5  | 012E   |
|         | 0 - 15  | 6000            | 6000                      | 021A                      | 021B    | 021C     | 021D    | 021CX5  | 021X5  | 021E   |
|         | 0 - 20  | 8000            | 8000                      | 111A                      | 111B    | 111C     | 111D    | 111CX5  | 111X5  | 111E   |

**SINGLE-PHASE 50/60 HERTZ  
MODELS SUPPLIED WITH EXTERNAL SENSOR (ONE-ELEMENT)**

| INPUTS  |          | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | SEN<br>SIZE | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|---------|----------|-----------------|---------------------------|-------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS   | AMPS     |                 |                           |             | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150 | 0 - 100  | 10k             | 10000                     | W           | 058A                      | 058B    | 058C     | 058D    | 058CX5  | 058X5  | 058E   |
|         | 0 - 200  | 20k             | 2000                      | W           | 067A                      | 067B    | 067C     | 067D    | 067CX5  | 067X5  | 067E   |
|         | 0 - 400  | 40k             | 4000                      | X           | 076A                      | 076B    | 076C     | 076D    | 076CX5  | 076X5  | 076E   |
|         | 0 - 600  | 60k             | 6000                      | X           | 085A                      | 085B    | 085C     | 085D    | 085CX5  | 085X5  | 085E   |
|         | 0 - 1000 | 100k            | 1000                      | Y           | 094A                      | 094B    | 094C     | 094D    | 094CX5  | 094X5  | 094E   |
| 0 - 300 | 0 - 100  | 20k             | 2000                      | W           | 059A                      | 059B    | 059C     | 059D    | 059CX5  | 059X5  | 059E   |
|         | 0 - 200  | 40k             | 4000                      | W           | 068A                      | 068B    | 068C     | 068D    | 068CX5  | 068X5  | 068E   |
|         | 0 - 400  | 80k             | 8000                      | X           | 077A                      | 077B    | 077C     | 077D    | 077CX5  | 077X5  | 077E   |
|         | 0 - 600  | 120k            | 1200                      | X           | 086A                      | 086B    | 086C     | 086D    | 086CX5  | 086X5  | 086E   |
|         | 0 - 1000 | 200k            | 2000                      | Y           | 095A                      | 095B    | 095C     | 095D    | 095CX5  | 095X5  | 095E   |
| 0 - 600 | 0 - 100  | 40k             | 4000                      | W           | 060A                      | 060B    | 060C     | 060D    | 060CX5  | 060X5  | 060E   |
|         | 0 - 200  | 80k             | 8000                      | W           | 069A                      | 069B    | 069C     | 069D    | 069CX5  | 069X5  | 069E   |
|         | 0 - 400  | 120k            | 1600                      | X           | 078A                      | 078B    | 078C     | 078D    | 078CX5  | 078X5  | 078E   |
|         | 0 - 600  | 240k            | 2400                      | X           | 087A                      | 087B    | 087C     | 087D    | 087CX5  | 087X5  | 087E   |
|         | 0 - 1000 | 400k            | 4000                      | Y           | 096A                      | 096B    | 096C     | 096D    | 096CX5  | 096X5  | 096E   |

**THREE-PHASE, THREE-WIRE 50/60 HERTZ  
MODELS WITH INTERNAL CURRENT SENSOR (TWO-ELEMENT)**

| INPUTS  |         | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|---------|---------|-----------------|---------------------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS   | AMPS    |                 |                           | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150 | 0 - 1   | 200             | 200                       | 120A                      | 120B    | 120C     | 120D    | 120CX5  | 120X5  | 120E   |
|         | 0 - 2.5 | 500             | 500                       | 129A                      | 129B    | 129C     | 129D    | 129CX5  | 129X5  | 129E   |
|         | 0 - 5   | 1k              | 1000                      | 004A                      | 004B    | 004C     | 004D    | 004CX5  | 004X5  | 004E   |
|         | 0 - 10  | 2k              | 2000                      | 013A                      | 013B    | 013C     | 013D    | 013CX5  | 013X5  | 013E   |
|         | 0 - 15  | 3k              | 3000                      | 022A                      | 022B    | 022C     | 022D    | 022CX5  | 022X5  | 022E   |
|         | 0 - 20  | 4k              | 4000                      | 112A                      | 112B    | 112C     | 112D    | 112CX5  | 112X5  | 112E   |
|         | 0 - 25  | 5k              | 5000                      | 123A                      | 123B    | 123C     | 123D    | 123CX5  | 123X5  | 123E   |
| 0 - 300 | 0 - 1   | 400             | 400                       | 121A                      | 121B    | 121C     | 121D    | 121CX5  | 121X5  | 121E   |
|         | 0 - 2.5 | 1k              | 1000                      | 130A                      | 130B    | 130C     | 130D    | 130CX5  | 130X5  | 130E   |
|         | 0 - 5   | 2k              | 2000                      | 005A                      | 005B    | 005C     | 005D    | 005CX5  | 005X5  | 005E   |
|         | 0 - 10  | 4k              | 4000                      | 014A                      | 014B    | 014C     | 014D    | 014CX5  | 014X5  | 014E   |
|         | 0 - 15  | 6k              | 6000                      | 023A                      | 023B    | 023C     | 023D    | 023CX5  | 023X5  | 023E   |
|         | 0 - 20  | 8k              | 8000                      | 113A                      | 113B    | 113C     | 113D    | 113CX5  | 113X5  | 113E   |
|         | 0 - 25  | 10k             | 10000                     | 124A                      | 124B    | 124C     | 124D    | 124CX5  | 124X5  | 124E   |
| 0 - 600 | 0 - 1   | 800             | 800                       | 122A                      | 122B    | 122C     | 122D    | 122CX5  | 122X5  | 122E   |
|         | 0 - 2.5 | 2k              | 2000                      | 131A                      | 131B    | 131C     | 131D    | 131CX5  | 131X5  | 131E   |
|         | 0 - 5   | 4k              | 4000                      | 006A                      | 006B    | 006C     | 006D    | 006CX5  | 006X5  | 006E   |
|         | 0 - 10  | 8k              | 8000                      | 015A                      | 015B    | 015C     | 015D    | 015CX5  | 015X5  | 015E   |
|         | 0 - 20  | 16k             | 1600                      | 114A                      | 114B    | 114C     | 114D    | 114CX5  | 114X5  | 114E   |

### THREE-PHASE, THREE-WIRE 50/60 HERTZ MODELS SUPPLIED WITH EXTERNAL SENSOR (TWO-ELEMENT)

| INPUTS  |          | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | SEN<br>SIZE | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|---------|----------|-----------------|---------------------------|-------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS   | AMPS     |                 |                           |             | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150 | 0 - 100  | 20k             | 2000                      | W           | 061A                      | 061B    | 061C     | 061D    | 061CX5  | 061X5  | 061E   |
|         | 0 - 200  | 40k             | 4000                      | W           | 070A                      | 070B    | 070C     | 070D    | 070CX5  | 070X5  | 070E   |
|         | 0 - 400  | 80k             | 8000                      | X           | 079A                      | 079B    | 079C     | 079D    | 079CX5  | 079X5  | 079E   |
|         | 0 - 600  | 120k            | 12000                     | X           | 088A                      | 088B    | 088C     | 088D    | 088CX5  | 088X5  | 088E   |
|         | 0 - 1000 | 200k            | 2000                      | Y           | 097A                      | 097B    | 097C     | 097D    | 097CX5  | 097X5  | 097E   |
| 0 - 300 | 0 - 100  | 40k             | 4000                      | W           | 062A                      | 062B    | 062C     | 062D    | 062CX5  | 062X5  | 062E   |
|         | 0 - 200  | 80k             | 8000                      | W           | 071A                      | 071B    | 071C     | 071D    | 071CX5  | 071X5  | 071E   |
|         | 0 - 400  | 160k            | 1600                      | X           | 080A                      | 080B    | 080C     | 080D    | 080CX5  | 080X5  | 080E   |
|         | 0 - 600  | 240k            | 2400                      | X           | 089A                      | 089B    | 089C     | 089D    | 089CX5  | 089X5  | 089E   |
|         | 0 - 1000 | 400k            | 4000                      | Y           | 098A                      | 098B    | 098C     | 098D    | 098CX5  | 098X5  | 098E   |
| 0 - 600 | 0 - 100  | 80k             | 8000                      | W           | 063A                      | 063B    | 063C     | 063D    | 063CX5  | 063X5  | 063E   |
|         | 0 - 200  | 160k            | 1600                      | W           | 072A                      | 072B    | 072C     | 072D    | 072CX5  | 072X5  | 072E   |
|         | 0 - 400  | 320k            | 3200                      | X           | 081A                      | 081B    | 081C     | 081D    | 081CX5  | 081X5  | 081E   |
|         | 0 - 600  | 480k            | 4800                      | X           | 090A                      | 090B    | 090C     | 090D    | 090CX5  | 090X5  | 090E   |
|         | 0 - 1000 | 800k            | 8000                      | Y           | 099A                      | 099B    | 099C     | 099D    | 099CX5  | 099X5  | 099E   |

### THREE-PHASE, FOUR-WIRE 50/60 HERTZ MODELS WITH INTERNAL CURRENT SENSOR (THREE-ELEMENT)

| INPUTS         |         | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|----------------|---------|-----------------|---------------------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS          | AMPS    |                 |                           | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150<br>L-N | 0 - 1   | 300             | 300                       | 125A                      | 125B    | 125C     | 125D    | 125CX5  | 125X5  | 125E   |
|                | 0 - 2.5 | 750             | 750                       | 132A                      | 132B    | 132C     | 132D    | 132CX5  | 132X5  | 132E   |
|                | 0 - 5   | 1.5k            | 1500                      | 007A                      | 007B    | 007C     | 007D    | 007CX5  | 007X5  | 007E   |
|                | 0 - 5   | 1.5k            | 1500                      | 7.5A                      | 7.5B    | 7.5C     | 7.5D    | 7.5CX5  | 7.5X5  | 7.5E   |
|                | 0 - 10  | 3k              | 3000                      | 016A                      | 016B    | 016C     | 016D    | 016CX5  | 016X5  | 016E   |
|                | 0 - 15  | 4.5k            | 4500                      | 025A                      | 025B    | 025C     | 025D    | 025CX5  | 025X5  | 025E   |
|                | 0 - 20  | 6k              | 6000                      | 115A                      | 115B    | 115C     | 115D    | 115CX5  | 115X5  | 115E   |
|                | 0 - 25  | 7.5k            | 7500                      | 127A                      | 127B    | 127C     | 127D    | 127CX5  | 127X5  | 127E   |
| 0 - 300<br>L-N | 0 - 1   | 600             | 600                       | 126A                      | 126B    | 126C     | 126D    | 126CX5  | 126X5  | 126E   |
|                | 0 - 2.5 | 1500            | 1500                      | 133A                      | 133B    | 133C     | 133D    | 133CX5  | 133X5  | 133E   |
|                | 0 - 5   | 3k              | 3000                      | 008A                      | 008B    | 008C     | 008D    | 008CX5  | 008X5  | 008E   |
|                | 0 - 5   | 3k              | 3000                      | 8.5A                      | 8.5B    | 8.5C     | 8.5D    | 8.5CX5  | 8.5X5  | 8.5E   |
|                | 0 - 10  | 6k              | 6000                      | 017A                      | 017B    | 017C     | 017D    | 017CX5  | 017X5  | 017E   |
|                | 0 - 15  | 9k              | 9000                      | 026A                      | 026B    | 026C     | 026D    | 026CX5  | 026X5  | 026E   |
|                | 0 - 20  | 12k             | 12000                     | 116A                      | 116B    | 116C     | 116D    | 116CX5  | 116X5  | 116E   |
|                | 0 - 25  | 15k             | 1500                      | 128A                      | 128B    | 128C     | 128D    | 128CX5  | 128X5  | 128E   |

### THREE-PHASE, FOUR-WIRE 50/60 HERTZ MODELS SUPPLIED WITH EXTERNAL SENSOR (THREE-ELEMENT)

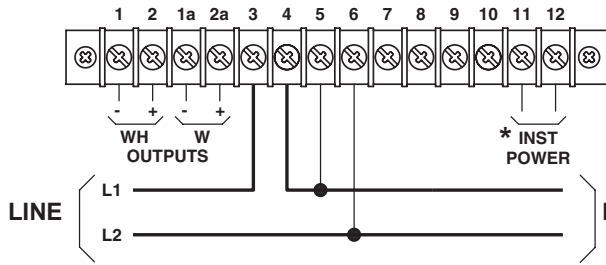
| INPUTS         |          | F.S.<br>(WATTS) | F.S.<br>COUNTS<br>PER HR. | SEN<br>SIZE | STANDARD OUTPUTS MODEL W- |         |          |         |         |        |        |
|----------------|----------|-----------------|---------------------------|-------------|---------------------------|---------|----------|---------|---------|--------|--------|
| VOLTS          | AMPS     |                 |                           |             | 0-1mAdc*                  | 0-1mAdc | 0-10Vdc* | 0-10Vdc | 0-5Vdc* | 0-5Vdc | 4-20mA |
| 0 - 150<br>L-N | 0 - 100  | 30k             | 3000                      | W           | 064A                      | 064B    | 064C     | 064D    | 064CX5  | 064X5  | 064E   |
|                | 0 - 200  | 60k             | 6000                      | W           | 073A                      | 073B    | 073C     | 073D    | 073CX5  | 073X5  | 073E   |
|                | 0 - 400  | 120k            | 1200                      | X           | 082A                      | 082B    | 082C     | 082D    | 082CX5  | 082X5  | 082E   |
|                | 0 - 600  | 180k            | 1800                      | X           | 091A                      | 091B    | 091C     | 091D    | 091CX5  | 091X5  | 091E   |
|                | 0 - 1000 | 300k            | 3000                      | Y           | 100A                      | 100B    | 100C     | 100D    | 100CX5  | 100X5  | 100E   |
| 0 - 300<br>L-N | 0 - 100  | 60k             | 6000                      | W           | 065A                      | 065B    | 065C     | 065D    | 065CX5  | 065X5  | 065E   |
|                | 0 - 200  | 120k            | 12000                     | W           | 074A                      | 074B    | 074C     | 074D    | 074CX5  | 074X5  | 074E   |
|                | 0 - 400  | 240k            | 2400                      | X           | 083A                      | 083B    | 083C     | 083D    | 083CX5  | 083X5  | 083E   |
|                | 0 - 600  | 360k            | 3600                      | X           | 092A                      | 092B    | 092C     | 092D    | 092CX5  | 092X5  | 092E   |
|                | 0 - 1000 | 600k            | 6000                      | Y           | 101A                      | 101B    | 101C     | 101D    | 101CX5  | 101X5  | 101E   |

#### ORDERING INFORMATION

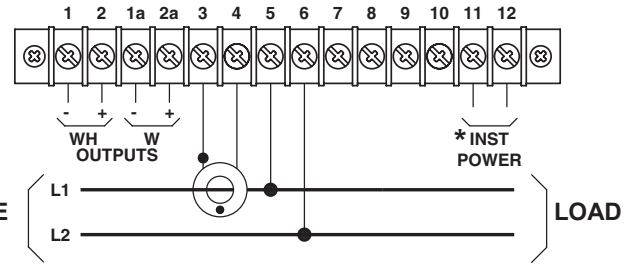
Example: Self-Powered, Three-Phase, Four-Wire, 120V, 5A  
Input with 0-5Vdc Output Proportional to 0-1500 Watts, TTL Pulse  
Output for Watthours, each Pulse Proportional to 1.0 Watthour

**W-007CX5-T**

**SINGLE-PHASE CONNECTIONS**

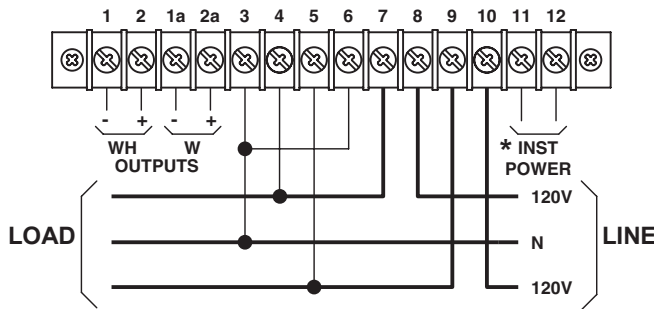


**USING INTERNAL SENSOR**

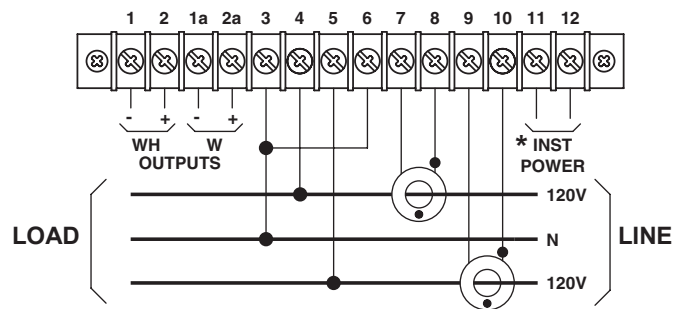


**USING EXTERNAL SENSORS**

**SINGLE-PHASE, THREE-WIRE CONNECTIONS**

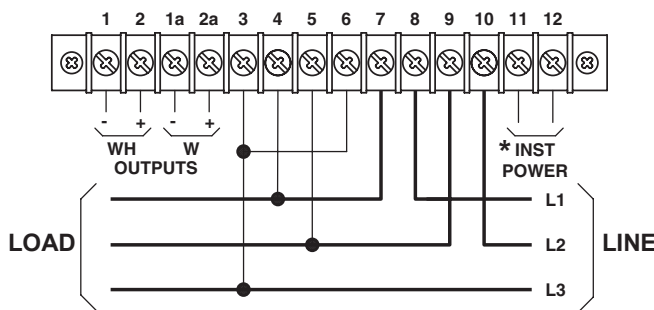


**EDISON SYSTEM USING INTERNAL SENSOR**

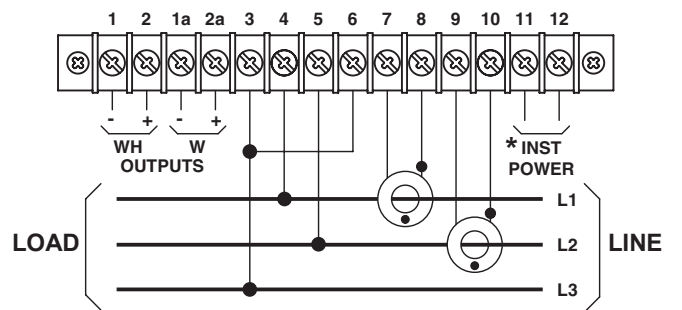


**EDISON SYSTEM USING EXTERNAL SENSORS**

**THREE-PHASE, THREE-WIRE CONNECTIONS**



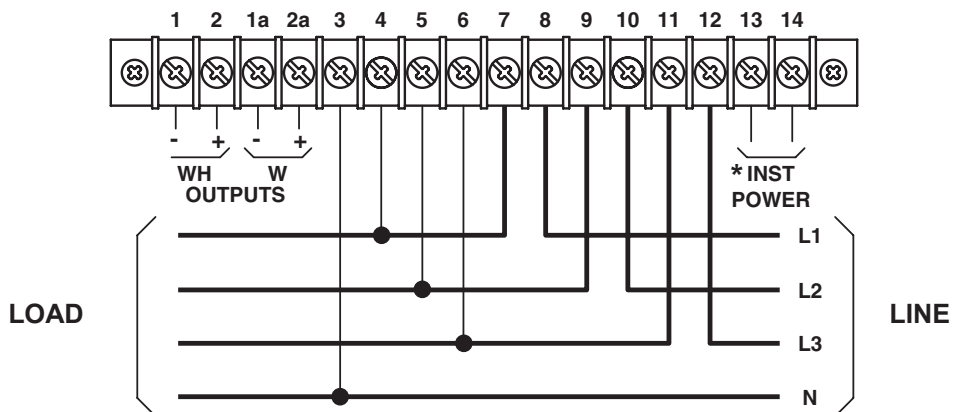
**USING INTERNAL SENSOR**



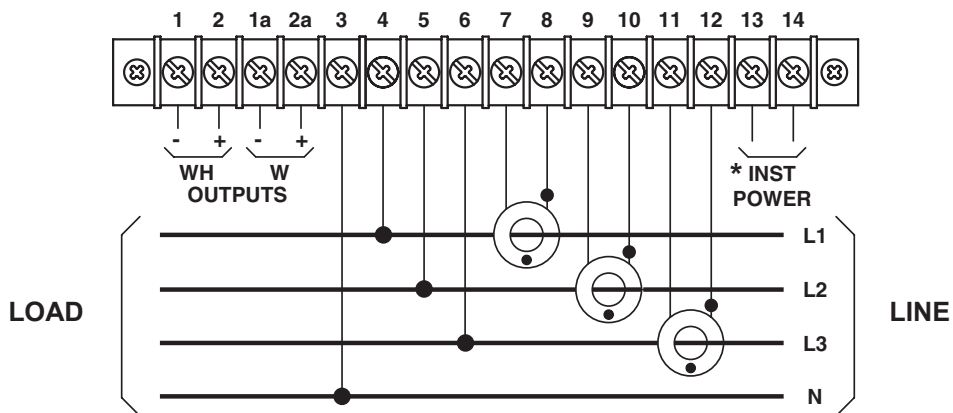
**USING EXTERNAL SENSORS**

\* 115Vac on models with B, D, E or X5 suffix.  
 \* 230Vac on models with -22 suffix.  
 \* Not required on models with A, C or CX5 suffix.

**THREE-PHASE, FOUR-WIRE CONNECTIONS**



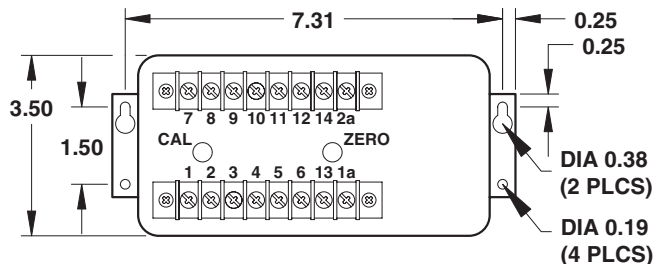
**USING INTERNAL SENSOR**



**USING EXTERNAL SENSORS**

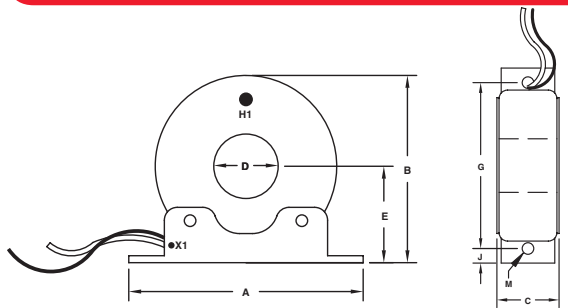
- \* 115Vac on models with B, D, E or X5 suffix.
- \* 230Vac on models with -22 suffix.
- \* Not required on models with A, C or CX5 suffix.

**CASE DIMENSIONS**



**CASE HEIGHT 5.50"**  
**1PH 2W 3.0 LBS**  
**3PH 3W 3.7 LBS**  
**3PH 4W 4.5 LBS**

**SENSOR DIMENSIONS**



| SENS. SIZE | SENSOR DIMENSIONS |     |      |      |      |      |      |               | WT. LBS. |
|------------|-------------------|-----|------|------|------|------|------|---------------|----------|
|            | A                 | B   | C    | D    | E    | G    | J    | M             |          |
| W          | 4.50              | 3.7 | 1.25 | 1.25 | 1.94 | 3.88 | 0.34 | 0.27x<br>0.44 | 1.43     |
| X          | 6.50              | 4.7 | 1.25 | 2.50 | 2.46 | 5.75 | 0.39 | 0.28          | 1.61     |
| Y          | 6.50              | 4.7 | 1.25 | 3.00 | 2.46 | 5.75 | 0.39 | 0.28          | 1.10     |

All dimensions in inches

Lead Length.....24 inches  
 White Lead is X1