

**State of California**  
 Department of Food and Agriculture  
 Division of Measurement Standards

Certificate Number: 5674(a)-14  
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***California Type Evaluation Program***  
***Certificate of Approval***  
***for Weighing and Measuring Devices***

**For:**  
 Watt-Hour Meter  
 Electronic Surface Mount  
 Models: AWXYZ/abcde  
*Generic Name: EZ Meter*  
 Voltage Rating: 120/208/240 VAC  
 Class: 200 (200 Amps Max.)  
 TA: 30 Amps  
 Kt: 10 Wh or (0.01 kWh)

**Submitted by:**  
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**Standard Features and Options**

**Meter Model Designation:**

A	W	X	Y	Z	/abcde
A = 120V to neutral. Other models not type approved	1 = 1 CTs 2 = 2 CTs 3 = 3 CTs 4 = 4 CTs 4 = dual 120/240V meters	1 = One display driver for counter 2 = Two display drivers for counter	3 = Class 200	0 = No AMR 1 = Pulse 2, 3 = RS485 4, 5 = RS232	Blank = 0 (4720/4 CT, 1 kWh) a = either of the two approved CT's b= 0 for 1.0 kwh resolution, 1 for 0.1 kWh c, d, & e = AMR options

**Current Transformers (CTs) Model Designation:**

- a=0 Model: 4720/4 = 400:1 CT Ratio and accuracy class 0.3. Black in color, Class 200 meters
- a=3 Model: JD6W = 2500:1 CT Ratio and accuracy class 0.3. Black and yellow in color, Class 200 meters

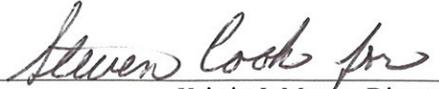
**Note:** CTs are not direction sensitive.

**External Indicating Elements:**

Electromechanical (12 VDC or 6 VDC indicating element)  
 The value of the indicated registration is approved for 1 kWh or 0.1 kWh (100 Wh)  
**Note:** The 1 kWh indicators will be one color and the 100 Wh indicators will have a different color on the least significant digit.

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: September 12, 2014

  
 Kristin J. Macey, Director

**Davidge Controls**  
Electronic Watt-Hour Surface Mount Meter / AWXYZ (EZ Meter)

**Application:** For use in legally sub-metered service systems. These watt-hour meters are not self-contained. The meter must be mounted in an appropriate location to ensure a dry environment for the electronic module.

**Identification:** The watt-hour meter identification label is applied to the face of the meter. The current transformer (CT) label is applied to the face of the CT.

**Sealing:** An adhesive tamper evident security seal may be applied across the parting line between the meter case and the back plate cover or can be applied over the screw that retains the back plate on the meter module; however, there are no adjustable components inside. Calibration is performed at the factory with firmware.

Once the meter is installed, the wiring terminals (VAC power, CTs and external indicators) can be sealed by securing a plastic bar across the terminal screws with a wire security seal or one may seal the entire NEMA enclosure (if used) that contains the meter with an appropriate certification seal.

**Operation:** The red LED indicates power (120 volts to neutral) is on for element 1. The same LED flashes briefly (50 ms) for every 10 wh (.01 kWh) measured. The meters should be tested one element at a time as the red LED flashes as each element reaches 10 Wh. The CTs are not direction sensitive. The green display LED flashes briefly (50 ms) every time the external indicator increments (every 1 or 0.1 kWh registration). If the device is a dual meter, there will be two green LEDs and two external kWh indicators. Meters with RS232 or RS485 communication have a third red/green LED that flashes when communicating. The meters have a second green LED that is unused on single output meters. If 0.5 power factor is tested instead of unity 1.0, a jumper will need to be installed (see the picture below) because the red LED also functions as a low power factor warning and flashes about once per second when power factor is below approximately 0.8. See the product manual to disable the warning.



Disable low power factor warning by installing jumper across pins of I2C connector as shown above.

**Davidge Controls**  
Electronic Watt-Hour Surface Mount Meter / AWXYZ (EZ Meter)

**Test Conditions:** This certificate supersedes Certificate of Approval 5674-11 and is issued to add the new CT model JD6W and to add an indicated registration of 100 Wh. A meter with the new model JD6W CT was submitted for evaluation and testing at the Division of Measurement Standards laboratory. The meters were subjected to a combined total of 12 additional tests ranging from 3 amps to 50 amps at both unity and 0.5 power factors. In addition, pictures of the sealing provisions and some label marking improvements were added for better understanding of registration, Kt, and indicated registration values.

**Certificate of Approval Number 5674-11:** Three meters with Model 4720/4 CTs, were submitted for evaluation. The meters were initially tested at the Division of Measurement Standards laboratory. After a permanence period of approximately 10 weeks, the meters were retested. The meters were subjected to a combined total of over 100 tests from 3 amps to 50 amps at both unity and 0.5 power factors.

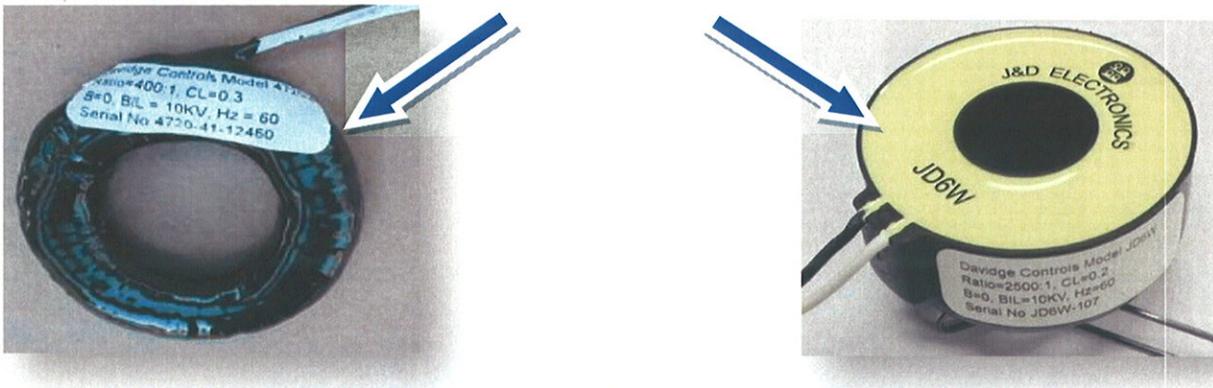
**Evaluated By:** J. Roach (CA) 2011 and 2014

**Type Evaluation Criteria Used:** Title 4, California Code of Regulations, 2014 Edition

**Conclusion:** The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

**Example(s) of Device:**

Approved CT Identification



Typical Indicator

Left counter indicates at 3.3 kWh and right counter indicates at 126 kWh

**Davidge Controls**  
Electronic Watt-Hour Surface Mount Meter / AWXYZ (EZ Meter)



Meter with plastic bar across the terminal screws for a wire security seal provision



Meter inside a typical sealable NEMA enclosure