

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

Certificate Number: 5580-08

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California Type Evaluation Program
Certificate of Approval
for Weighing and Measuring Devices

For:

Mechanical Watthour Meters

Electronic Pulse Automatic Meter Reading Indicator
For Mechanical Dial Type Meter Style Registers

Model: RD WXYZ

Submitted by:

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Standard Features and Options

Model Number Matrix Designation:

RD	Space	WXYZ	Blank or - V
RegistRead	No	3539 = RegistRead shaft fits on pointer shafts that are 0.036" in diameter	If blank = Horizontal orientation of housing once installed
Base Model	character	4348 = RegistRead shaft fits pointer shafts that are 0.048" in diameter	V = Vertical orientation of housing once installed

- Meter pulses per increment displayed: One
- Unit of measure: 1 Kwh

Note: Not to be used as the primary indicator. The device is to be used in conjunction with an Automatic Meter Reading (AMR) system. Once installed, two shielded wires from the device will be protruding through the watt-hour meter to the pulse recording AMR system. The pulse output was not tested.

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: December 23, 2008

Edmund E. Williams, Director

RIOTronics Corp.
Mechanical Watthour Meters
Model: RD WXYZ

Application: For use as part of an (AMR) system in conjunction with type approved mechanical dial register style Watthour meters.

Identification: An identification label is located next to the device on the dial face area of the meter that it is installed on. (See Fig. 1.)

Sealing: When the mechanical Watthour meter glass cover is sealed, the indicator is not accessible without destroying the security seal.

Operation: The device is a dry contact switch which is bonded with epoxy to the lowest 1 Kwh reading dial of the meter register. The device utilizes a rotating magnet and a switching block, all enclosed in a metal case with a 10-point dial face. The device emits 10 pulses per revolution of the 1 Kwh dial.

Test Conditions: All 4 types of the RegistRead AMR indicators were submitted and installed on a total of 4 electronic mechanical watt-hour meters General Electric model V-612S (2) and Sangamo model S12S (2). Each meter with the RegistRead AMR indicator was initially tested at the Division of Measurement Standards (DMS) lab to insure the device did not affect the accuracy of the meters. The meters were then installed on a test bench at DMS with various loads. After a permanence period of approximately 22 days the meters were retested. The meters were subjected to accuracy tests from 1.5 amps to 30 amps. Starting load and creep tests were also conducted.

Results of the evaluation indicate the device complies with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2008 Edition

Tested By: John Roach

