

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

Certificate Number: 5474-06
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California Type Evaluation Program
Certificate of Approval
for Weighing and Measuring Devices

For:

Watt-Hour Meter
Electronic Socket
Models: A3TL and R1S
Voltage Rating: 120/208/240 VAC
Class: 200 (200 Amps Max.)
TA: 30 Amps

Submitted by:

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Standard Features and Options

- Unit of measure: Kilowatt-hour (Kwh)
- Form 2S or 12S electronic socket meters
- Digital liquid crystal display (LCD)
- Accuracy class ANSI 0.5

Type	Form	Class	Voltage	Wires	TA	Kh	Elements
R1S	2S	200	240	3	30	1.0	1
R1S	12S	200	120	3	30	1.0	2
A3TL	2S	200	240	3	30	7.2	1
A3TL	12S	200	120	3	30	14.4	2

Note: The R1S meter has remote read/transmitter radio frequency capability (RF) (remote not tested).

Note: The A3TL meter also acts as a local data collector that accepts read/transmitted radio frequency (RF) local area network (LAN) and communicates via a public wide area network (WAN) (alpha collector RF not tested). (See Fig. 1 on page 2 for communication line.)

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: February 28, 2006



Mike Cleary, Director

Elster Electricity
Electronic Watt-Hour Socket Meter
Models: A3TL and R1S

Application: For use in legally sub-metered service systems.

Identification: The watt-hour meter identification label is applied to the face of the meter under the sealable cover.

Sealing: A wire security seal may be used in addition to the manufacturer’s seal.

Operation: A blinking square indicator on the LCD (see Fig. 2) pulses at a rate equal to the energy consumption. The blinking square indicator represents a watt-hour disk emulator and is used for testing the meter. This indicator will blink with each full on to off and off to on pulse. Each full pulse is equivalent to the Kh of the specific model as outlined on page 1.

Forward current flow is indicated by a right pointing arrow (see Fig.3) and reverse current flow is indicated by a left pointing arrow.

Test Conditions: The Models R1S and A3TL meters forms 2S and 12S were submitted for evaluation. The meters were initially tested at the Division of Measurement Standards (DMS) lab. The meters were then sealed and installed on a test bench at DMS with various loads. After a permanence period of approximately 20 days, the meters were retested. The meters were subjected to a combined total of over 180 tests from 3 amps to 50 amps at both unity and 0.5 power factors.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2006 Edition

Tested By: John Roach (CA)

