

# KVAR Test

Hodges Electrical Enterprises, Inc.  
Tallahassee, FL  
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A. The test consists of a 1/3 hp motor connected to a City of Tallahassee digital meter. No other motors or appliances are connected to the meter. The purpose of the test is to determine the time it takes to record one (1) KWH on the digital meter.

B. After that time is determined, the same 1/3 hp motor will be connected to a KVAR Energy Controller, sized for the motor. The motor will again be run to determine the length of time it takes to record one (1) KWH on the digital meter.

## Part A: without KVAR Energy Controller

Start time A: 5:30.00 pm 9/23/08

Digital Meter Reading: 47 KWH

Amps: 5.56

Watts: 196

Volts: 121.3

Stop time A: 10:01.54 pm

Digital Meter Reading: 48 KWH

**Runtime required for Part A: 4 hours 31 minutes 54 seconds**

## Part B: with KVAR Energy Controller

Start time B: 10:34.00 am 9/24/08

Digital Meter Reading: 48 KWH

Amps: 1.59

Watts: 185

Volts: 121.6

Stop time B: 4:16.38 pm

Digital Meter Reading: 49 KWH

**Runtime required for part B: 5 hours 42 minutes 38 seconds**

## Test Summary

Time required for part A: 4 hours 31 minutes 54 seconds or 271.9 min.

Time required for part B: 5 hours 42 minutes 38 seconds or 342.63 min.

Difference between A and B: 1 hour 10 minutes 44 seconds or 70.73 minutes.

The difference of test A and test B (70.73 min.) divided by test A results (271.9 min.) is **equal to 26.013% of additional time used to produce 1 KWH on the digital City of Tallahassee Centron Meter,** ( model # CL200 240 V 3w, type C1s 30TA 1.0KH, ITRON Watt Hour Meter). This meter is presently used on 240 volt single phase services in Tallahassee, Fl.