



LOAD TEST QUESTIONNAIRE FORM

Company Name _____ Date _____

HP _____ RPM _____ Voltage _____ FLA _____

Approx. Motor Weight _____ "D" Dimension _____ Shaft Diameter _____

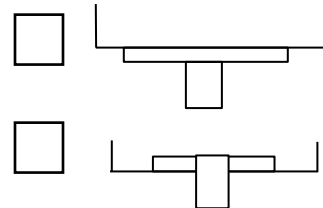
Horizontal
 Vertical**
 A/C
 D/C

Does the motor have: (check all that apply)?

- | | | |
|--|---|--|
| <input type="checkbox"/> Bearing RTD's | <input type="checkbox"/> *Lube Oil System | <input type="checkbox"/> *Water Cooled |
| <input type="checkbox"/> Winding RTD's | <input type="checkbox"/> *Vibration Probes | <input type="checkbox"/> Require Customer Witness Test |
| <input type="checkbox"/> *VFD supplied by Customer | <input type="checkbox"/> *DC Drive Supplied by Customer | |
| <input type="checkbox"/> Sleeve Bearing | <input type="checkbox"/> Ball Bearing | |

Vertical Motor

Solid Shaft Flange Diameter _____
 Hollow Shaft Shaft Length _____



Problem or condition to be evaluated: (check all that apply)

- Vibration Reliability
 Other (Explain): _____

Test options to be performed:

- Performance/Efficiency Test Method A (IEEE 112-2017)**
 - Perform cold resistance test.
 - Perform heat run test.
 - Perform test under load (6 load points: 115% to 25%).
 - Perform hot resistance test at shutdown.
 - Perform calculation of efficiency.



Performance/Efficiency Test Method B (IEEE 112-2017)

- Perform cold resistance test.
- Perform heat run test.
- Perform test under load (6 load points: 115% to 25%).
- Perform no load test.
- Perform segregation of losses.
- Perform calculation of efficiency and power factor.

Performance/Efficiency Test Method F1 (IEEE 112-2017)

- Perform cold resistance test.
- Perform heat run test.
- Perform Impedance Test
- Perform no load test.
- Perform hot resistance test at shutdown.
- Perform calculation of efficiency and power factor. (6 load points: 115% to 50%)

Routine Test (IEEE 841)

- Perform cold resistance test
- Perform no-load test measuring current, power, and nominal speed at rated voltage and frequency
- Perform no load mechanical vibration check in accordance with IEEE 841-2009
- 6.9, using either elastic or rigid mount.
- Perform no load bearing run. Bearing run to be a minimum of 1.5 hours. Bearing temperature stable when temperature has not risen more than 1 degree in two consecutive readings.)

Bradley's Revised Complete Test (API 541)

- Determination of efficiency and power factor at 100%, 75% and 50% of full load, and any other specified load point(s). Customer must specify which method (A or B) in IEEE 112 is to be used.
- Determination of locked rotor current, power factor and torque.
- Determination of full load current and slip.
- Determination of breakdown torque.
- Perform heat run at maximum continuous rated service factor for a minimum of four hours or until the bearing and stator temperatures stabilize, in accordance with IEEE 112.
 - If motor exceeds testing limitations at the facility, heat run maybe performed using dual frequency method.
- Determination of speed-torque curve.
- Perform sound test with the motor operating at no load and full voltage.
- *Each motor shall be given a routine test, as part of the complete test*
- Determination of no-load current.
- Determination of insulation resistance by megohmmeter and polarization index per IEEE 43.
- Determination of vibration readings, taken every 15 minutes during the test and every 1 minute during the last fifteen minutes of the test. The latter applies to only
- 3600 RPM motors.
- Perform bearing insulation test, if applicable.
- Perform test for bearing temperature rise.



Additional options available with the tests

*Locked Rotor Test 7.2
Per IEEE 112-2017 7.2

*Speed Torque Curves
Speed Current Curves IEEE 112-2017 7.3.2.5

*Sound Test
Per NEMA MG 1-2003 [B7] Part 9

*Vibration Per IEEE 112-2017 8.6.2

(*) Additional costs will apply

(**) Verticals motors should be able to run without a external thrust load or easily modifiable to run without external thrust load

Date or Window to be tested _____

Notes: Customer must supply Bradleys' with specifications or procedures 30 days prior to testing.
Shaft size may affect cost.
If coupling is not in stock, charges will be added.

Please provide any drawings or dimensional sheets of unit being tested if available.

Contact Name _____ Phone Number _____

Fax Number _____ Email Address _____

QUOTE \$ _____

Comments: _____



- Basic load test provide heat rise and vibration data.
- These tests do not provide efficiency or performance data. These tests are used to evaluate heat rise, vibration, and reliability.
- Efficiency and performance tests will provide data to determine lock rotor torque, speed torque, and speed current curves at additional costs. Multiple point load test will be limited to dyno load points and maximum available load.
- Winding and bearing RTD's will be recorded when installed in equipment.
- Water cooled machines require a heat exchanger be used. This requires set up of additional equipment.
- Machines with noncontact vibration probes require the use and set up of additional equipment.
- When VFD's or DC drives are supplied by the customer, labor cost will be estimated, but charged at T&M.
- When the machine being tested requires a lube oil system, additional cost will be incurred for set-up time.
- Subsequent test must be performed using initial set up
- Motors must be on site 3-5 days prior to test date depending on complexity of test setup.
- Dual voltage motors will be tested at the higher voltage unless otherwise instructed.
- There are test floor limitations that may not be realized until the test is performed.
- Any test(s) requested outside this test form, should be accompanied by a detailed test outline from the customer.