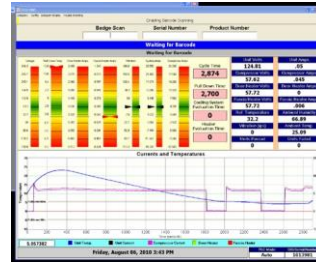# Corded Product Testing Systems

DATATEST ERT 200

This system is designed to meet the high-speed testing requirements of the corded appliance and small residential package units, specializing in refrigerator, freezer, PTAC, air handler, stove, window a/c, dehumidifier, and ice machine manufacturers. Test connections are designed to provide simple, reliable and fast hook-up to the unit. Component verification ensures proper construction prior to testing. Testing sequence can be paused while adjustments and corrections are made.

DataServ ERT HMI Screen

DataServ HiPot Test Station

Product Detail

STANDARD FEATURES:

- Rotating boom design allows system to reach multiple locations
- Customized tooling and connectors to match your product and process
- Heavy duty modular connections allowing fast change over and repairs
- High pot test initiated via safety interlocked touch switches
- Large flat screen LCD HMI (Touchscreen available)
- Comprehensive messaging and operator interaction
- Bar code scanner automatically loads test cycle
- DataServ 3.0 provides an internet accessible control interface, test configuration, production analysis/reports, and maintenance troubleshooting
- Built-in maintenance logging and PM scheduling
- NFPA 70 compliance (optional)

DATA COLLECTED:

- Electrical signature: volts, amps, watts
- Component Monitoring (volts, amps): Outdoor Fan, Indoor Blower, Inducer, Compressor
- Hypot • Ground bond • Insulation resistance • Continuity check
- Chassis ground check • Wire test • Winding test
- Transformer verification: volts, amps, watts • Crankcase heater
- Vibration • Pressures: high side, low side, differential
- Temperatures: ambient, inlet, outlet, refrigerant lines
- Temperature compensation: amps, pressures, temperature
- Humidity • Multi speed fan operation
- Gas flow • Inducer differential pressure
- Air flow • DC motor verification: volts, amps, watts
- Communicating controls operation and control (CANBUS, Modbus, and Custom)
- Key Component verification • QC check verification
- GUI interface verification • Strip heat resistance verification
- Defrost board verification • Refrigerant cycle monitoring
- Locked rotor monitoring
- Motor rotation monitoring
- Fan speed and flow verification
- Vent/damper operation and verification
- Compressor unloader verification
- Low pressure cutouts
- High pressure cutouts

Corded Product Testing Systems (continued)

DATATEST ERT 200

TESTS PERFORMED:

Cooling Mode:
- Verify proper electrical signature,
- Pressure and temperature ranges,
- Component operation,
- System performance, and Operating stages

Heating Mode (Heat Pump):
- Verify proper electrical signature,
- Pressure ranges,
- Temperature ranges,
- Component operation,
- Performance,
- Reversing valve operation, and Stages

Heating Mode (Electrical Heat):
- Verify proper electrical signature,
- Heater current draw or resistance,
- Temperature ranges,
- Component operation,
- Performance,
- Stages,
- Emergency backup call

Heating Mode (Gas Furnace):
- Verify proper electrical signature,
- Pressure ranges,
- Temperature ranges,
- Component operation,
- Performance,
- Burner stages,
- Gas flow,
- Inducer current draw,
- Inducer differential pressure,
- Flue operation,
- Ignition sequence,
- Low gas flow shut down
- Blocked flue shut down

Idle State:
- Verify proper electrical signature,
- Transformer operation

Defrost Board Operation:
- Verify fan shutdown and
- Heat strip operation

Low Voltage Start:
- Verify proper electrical signature at brown out conditions,
- Component operation

UL Safety Test:
- Hypot,
- Ground bond,
- Insulation,
- Continuity check,
- Contactor pull-in verification

Wire Test:
- Verify proper unit connections prior to testing

MACHINE FEATURES:

Test Mode
Allows operator to apply voltage to unit and manipulate thermostat controls for troubleshooting purposes or to run pilot units to collect test values.

Service Mode
Allows Maintenance to operate and monitor individual components of the tester to verify operation, troubleshoot and perform PM.

Analog Sensor Calibration
Provides a simple means of verifying sensor operation and adjusting the readings to match a control source.

Station Performance Monitoring
Track testing results over an adjustable range including pass, fail, processed, first time yield, operator idle time, etc.

Operator Security
Insure only trained operators can operate the test station, track operator efficiency, prevent unauthorized and unsafe use.

Personalized Work Instructions and Messaging
Customize and adjust the work instructions to fit the nomenclature and culture of your work environment. You have complete control over wording, font, color and size.

Network and Remote Connectivity Monitoring and Troubleshooting
On screen notifications allow the operator to know if a problem has occured to the system connections.

Wireless Bar Code Readers Standard

Touchscreen Monitors Available

DIMENSIONS:
90″H x 36″W x 36″D

UTILITY REQUIREMENTS:
120-240V, 1Ø, 20A-30A