

Manufactures Declaration

Factory testing of MCD 500

Document no 501G1257

The test sequence on the next page is used for the factory testing of all types of

MCD 500 7.5kW – 850kW

This Advanced (intelligent) soft starter is designed and type tested to international standards IEC 60947-4-2 and UL508. Components are conservatively specified and procured from reputable manufacturers to ensure long-term reliability. UL or UR (Underwriters Laboratories listed or tested and recognised) components are used for safety critical areas.

During manufacture each starter is inspected and tested to ensure compliance with specifications. The Inspection and Test Process is documented in an ISO9001:2008 compliant Quality System.

Inspection and Test Outline

| Test. | Test no. | Description | Remarks |
|---------------------------------------|----------|------------------------------------|---|
| HMI, Control, Backplane and Model PCB | 1 | Surface Mount Components. | Automated optical inspection (AOI) of placement and soldering of all SMT components on every PCB after flow solder. |
| | 2 | Through Hole Component | Visual inspection of placement and soldering for through hole components on every PCB after wave solder. |
| | 3 | Functionality Test | Computerised testing of all electronic circuits and functions on every assembled PCB. |
| HMI Assembly | 4 | Functionality Test | Visual inspection and functional test as a sub assembly on every Human Machine Interface (HMI). |
| Assembly of Chassis | 5 | Assembly Inspection and Test | All chassis and mechanical assemblies are inspected at each stage of assembly. |
| Final Inspection and Test. | 6 | Motor Load Test | <p>Test technicians use purpose designed test equipment with appropriate motor loads after a full visual inspection.</p> <p>The completed starter is connected to our Test Facility to verify: -</p> <p>Correct software versions installed.</p> <p>Correct PCBs installed</p> <p>Motor Start, Run, and Stop.</p> <p>Tripping (simulation of thermistor trip).</p> <p>Calibration of display</p> <p>Fan operation (on force cooled models)</p> <p>Quality records are complete.</p> |
| | 7 | Dielectric Test | Batch test of 2.4 kVAC for 1 second between line and earth, Quality test.. |
| Final Inspection | 8 | Unit matches Customer Requirements | Visual inspection prior to packing to verify that the starter and accessories provided match the options ordered by the Customer. |



Lars Erik Donau
Quality Systems Manager

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| Date | Compiled | Date | Manager Technical Sales |
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