

Manufactures Declaration

Factory testing of MCD 200

Document no 501G1256

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

MCD 201/202 7.5kW – 110kW

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

<u>Assembly Stage</u>	<u>Test No.</u>	<u>Description</u>	<u>Remarks</u>
Bare PCB	0	El-test by board manufacturer.	Track continuity and separation verified on every PCB
Printed Circuit board	1	Surface Mount Assembly	Visual inspection of placement and soldering of all SMT components on every PCB after reflow soldering.
	2	Trough Hole Assembly	Visual inspection of placement and soldering of through hole components on every PCB after wave soldering.
	3	Functionality test	Computerised testing of all electronic circuits and functions on every assembled PCB.
Assembly	4	Assembly Inspection	Correct SCRs and relays are verified by visual inspection
Inspection and Test Assembly	5	Final Assembly Inspection	Every chassis assembly is inspected before fitting PCBs, then covers and labels are fitted
	6	Motor Load Test at reduced voltage.	Every completed start is connected to a motor through our inline Test Facility at 85% of lowest specified mains voltage and 85% of lowest specified control voltage to verify. – <ul style="list-style-type: none"> • Correct software version loaded. • Correct PCBs installed. • Motor soft starts, runs, and soft stops correctly. • Indicator lights function correctly. • Bypass relay operates
	7	Motor Load Test at over voltage.	A sample from each batch of starters is connected to a motor at 110% of highest specified mains voltage and 110% of highest specified control voltage to verify: - <ul style="list-style-type: none"> • Motor soft starts, runs, and soft stops correctly.
	8	Dielectric Test	A sample from each batch of starters is tested at 2.2 kVAC for 5 seconds between each line and earth, and each line and other line terminals.
Final Inspection	9	Unit matches Customer requirements	Visual inspection prior to packing to verify that the starter has the options ordered by the Customer.



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 Quality Systems Manager

Date Compiled

Date Manager Technical Sales