

Product: LT. Switchboard	Bench control instructions, procedure for inspection & testing	
Process	Operations	Final Check and Testing

General Measuring Equipments Used:



Visual Inspection



Measuring Tape



Torque Wrench



Vernier calliper



Powder Coating Measuring Meter



screw gauge

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PPE Used



Safety Boots



Hand Gloves



Safety Goggles

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Testing Tools



On line Tester



Continuity Tester



Wire Stripper



Connector SET



Multi Meter



Megger

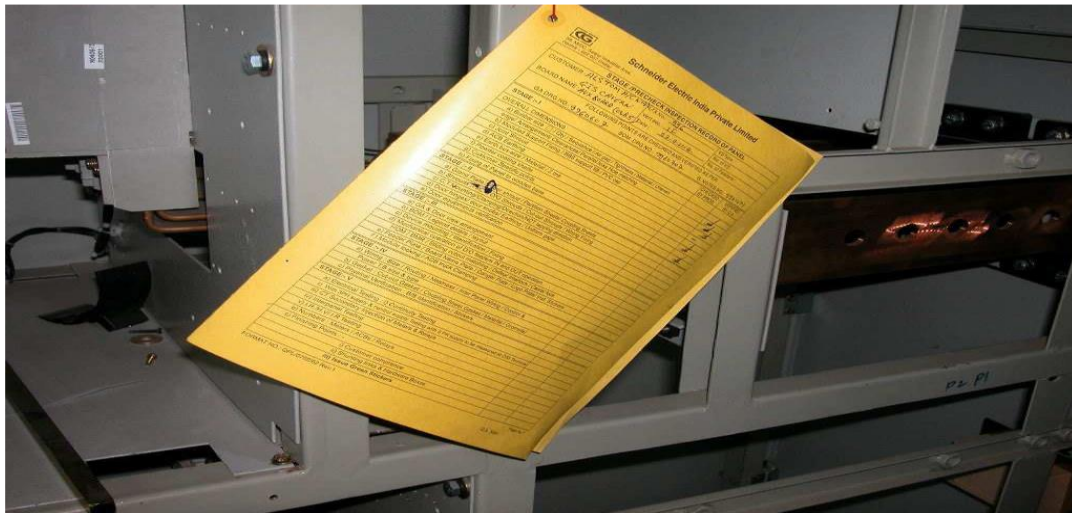
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Pre check list completion:

Verify all the parameters mentioned in- process pre-check list for completion & Endorsement.



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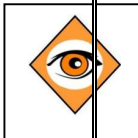
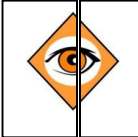
GA & Enclosure view :

Recheck GA, Door, Shipping Section & BOM of complete Enclosure as per drawing / specification.



Assembly overview

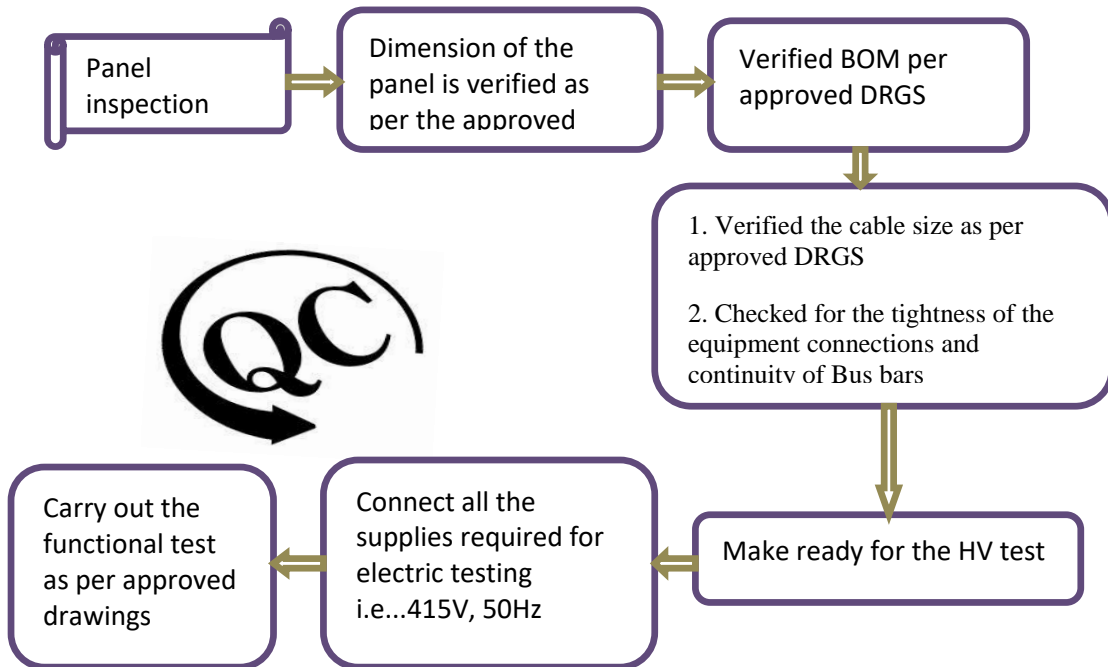
- **Components checked as per BOM/other specifications.**
- **Bus bar arrangements and mountings as per standards/ other specifications.**
- **Bus bar Fasteners tightness checked with the help of Torque wrench.**
- **Bus bar continuity checking.**
- **Control and power wires tightness checking.**
- **Ferrule numbers cross checked as per specifications.**



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• Labels/Name plates verified as per specifications.



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Electrical testing:

Before giving the supply to panel ensure the barricades are provided around the panel & authorized persons are in testing area



High voltage & insulation resistance:
Before HV testing ensures that the hv kit is kept on rubber mat.make use of (rubber) hand gloves during h v testing.

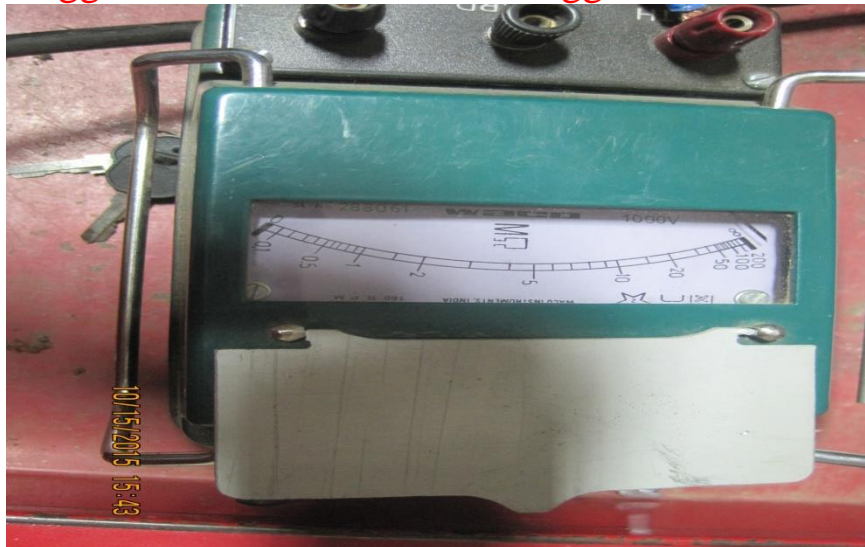
- Ensure all switches/ breakers in “on” position.

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- Remove control fuses in case of any electronic device / coils/etc.

- **Conduct Megger test with 500/1000v Megger**



1. Between earth & N,R,Y,B
2. Between neutral & R, Y, B
3. Between phases.

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- **conduct 20 kv high voltage test**



High voltage test between

1. Earth & N,R,Y,B
2. Between neutral &R, Y, B Between phases.

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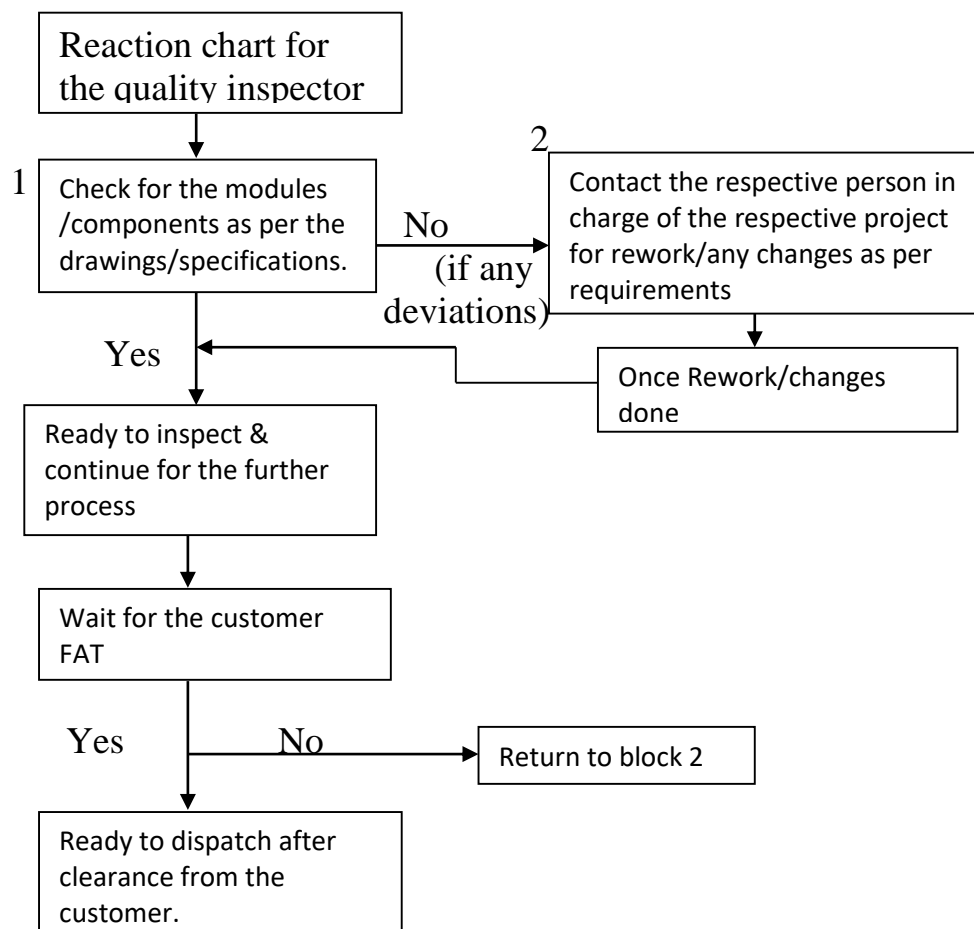
If the above high voltage test withstood, then below Electric testing to be done.

- Connect supply cables to control & main busbar, inject required voltage and check the following as per approved DRGS
 1. ACB / MCCB// SFU/Contactor/ Switch gear items.
 2. Current/ Voltage protection relay operations.
 3. Lamps/ Heaters/electrical/electronic module operations as per scheme.
 4. Check spare contacts as per scheme by continuity tester
- Inject required current into CT Primary/Secondary and check meter & protection relay operation (contact c/o)
- After completion of individual shipping section connect all shipping sections (control & main bus bars) & check the scheme logic. ACB /relay/ etc interlocking & operations)
- **Communication accessories shall be charged for ensuring healthiness.**

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FLOWCHART OF QC



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