



PSSR - CHENNAI

QUALITY PLAN (Manufacturing Quality Plan for Bought Out Item)

DOC.No.: QPI-BOI-019
REV.No.: R00
DATE : 11.05.2006

ITEM : 11 KV / 450V/SKID MOUNTED SUB STATION						INDENT NO: IPR.000254		SHEET : 01 of 05	
Sl. No	Description of Components	Characteristic	Type of check	Quantum of check	Reference doc.	Documents required			
01	Raw material - Sheet / Channel / Angle / Flat / Bar	a) Physical Property b) Chemical Property c) Make d) Size	R R V/R M	100%	Relevant IS as per Tech. Specn.	Mfg. Test Certificate			
02	Electrical items	a) Make b) Type c) Range d) Quantity e) Calibration status (as applicable)	R/V R/V V P R	100%	Tech. Specn. & Approved BOM	Test Certificate / Inspection Report			
03	Non-Electrical items - Fasteners / Terminal Blocks / Gaskets / Busbar / Insulators / Cable Glands & etc.	a) Make b) Type c) Size d) Quantity	R/V R/V M P	100%	Tech. Specn. & Approved BOM	Test Certificate / Inspection Report			
04	Paint	a) Make b) Batch no. c) Shade d) Date of Mfg.	R R R/V R/V	100%	Relevant IS as per Tech. Specn.	Mfg. Test Certificate			



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ITEM : II KV / 450V/SKID MOUNTED SUB STATION			INDENT NO: IPR.000254		SHEET : 02 of 05	
Sl. No	Description of Components	Characteristic	Type of check	Quantum of check	Reference doc.	Documents required
05	(Enclosure)	a) Sheet thickness b) Base frame - Thickness / Dimension c) Canopy argtl. d) Overall dimension e) Earthing argtl. f) Door locks argtl. g) Foundation Bolts size h) Handling argtl. - Lifting hooks i) Gaskets j) Painting - Inside / Outside k) Cable entry opening - Location / Size / Gland fixing argtl. l) Safety Protection - IP 55	M M V M V V M V V V / M	100%	Relevant IS as per Tech. Specn. / Appd. Drg.	Mfg. Test Certificate Inspection Report
06	WIRING	a) Schematic diagram inside the panel b) Layout c) Termination - Type of sealing kit d) Cable lugs - Material / Type e) Cable gland - Material / Type f) Cable - Make / Size / Grade / Colour code g) Ferrules - Material / Colour	V V V V / R V / R V / R V / R	100%	Relevant IS / Tech. Specn. / Appd. Drg.	Inspection Report
07	Assembly Layout	a) Front layout - Location / Dimension b) Internal layout - Location / Compartment / Spacing / Fixing argtl.	V / M V / M	100%	Tech. Specn. / Appd. Drg.	Inspection Report



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SHEET : 03 of 05

Sl. No	Description of Components	Characteristic	Type of check	Quantum of check	Reference doc.	Documents required
08	Final Inspection	ROUTINE TEST: a) Continuity Test b) Insulation Resistance Test c) H.V. Test FUNCTIONAL TESTS: a) P&I Scheme b) Meters c) Illumination Lamp & switches d) Indication Lamps e) AC Breaker operation f) Annunciation relays as per scheme TYPE TEST: Verification of CPRI Report	T T T P P P P P T/P T/P R	100%	Relevant IS / Tech. Specn.	Inspection Report
09	Coil / Strip : (Bare / Covered)	a) Physical Property b) Chemical Property c) Make d) Size I Electrical Tests	R R R R M	100%	Relevant IS as per Tech. Specn.	Mfg. Test Certificate
10	Transformer Assy.	A) Routine Tests 1) Insulation Resistance H.V. to Earth L.V. to Earth H.V. to L.V. Continuity of Windings	T	100%	As per IS 2026	Test Certificate



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SHEET : 05 of 05

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Sl. No	Description of Components	Characteristic	Type of check	Quantum of check	Reference doc.	Documents required
	2) Short circuit Test		R	100%	IS - 2026	Test Certificate
	3) Lightning Impulse Test		R	100%	IS - 2026	Test Certificate
	II) Mechanical : 1) Air Pressure Test		T	100%	0.35 Kg/Sq cm for 30 minutes	Test Certificate
	2) Transformer a) Dimensional Check b) Leak Test c) Painting Inside & Outside d) Silica gel Breather e) Explosion Vent f) Valve g) Dial thermometer		T / M / V	100%	Tech. Specn.	Inspection Report

LEGEND : V - Visual; P - Physical; T - Test; M - Measurement; R - Record verification

All the Functional Checks / Routine Test & Final Inspection will be witnessed by BHEL.

Prepared by
N. Gunasekaran
Dy. Manager / QTY

Approved by
Head Quality
11 05 06