TEST REPORT FOR INVERTER
MMA/TIG POWER SOURCE

MODEL :

MODEL	**TICK** (✓)
CHAMP 400 X	

SLIP NO. : SR.NO.:

1.0 SR.NO. OF PWM CONTROLLER CUM IGBT DRIVER PCB:

2.0 MECHANICAL & VISUAL CHECK : OK / NOT OK

3.0 VISUAL INSPECTION:

ENSURE FOLLOWING MECHANICAL ASPECTS	RESULT
1) TIGHTNESS OF ALL HARDWARES OF MAIN TX. & IGBT ASSEMBLY	OK / NOT OK
2) CRIMPING OF ALL LUGS	OK / NOT OK
3) TIGHTNESS OF ALL HARDWARES	OK / NOT OK

4.0 CONTINUITY TEST :

A. ISOLATION BETWEEN IGBT HS & DIODE HS : OK/NOT OK

B. ISOLATION BETWEEN FABRICATED BODY & DIODE HS : OK/NOT OK

C. ISOLATION BETWEEN FABRICATED BODY & IGBT HS : OK/NOT OK

5.0 DIELECTRIC (H.V.) TEST:

ENSURE FOLLOWING ASPECTS	RESULT
1) INPUT SUPPLY SHORT CIRCUIT(R,Y,B) & EARTH	OK / NOT OK
2) OUTPUT TERMINAL SHORT CIRCUIT & EARTH	OK / NOT OK
3) INPUT SUPPLY SHORT CIRCUIT(R, Y, B) & OUTPUT TERMINAL SHORT CIRCUIT	OK / NOT OK

Insulation Resistance Between	**AC Dielectric Test Voltage applied for 5 sec**	**Current mA**	**Remarks**
Input and Earth	1.875 KV		OK/ NOT OK
Output And Earth	1.875 KV		OK/ NOT OK
Input And Output	3.750 KV		OK/ NOT OK

6.0 WIRING CHECK AS PER DRG. NO. CK79/1174 : OK / NOT OK

7.0 FAN FLOW CHECK (BACK TO FRONT) : OK / NOT OK

8.0 NO LOAD TEST: INPUT SUPPLY 415 VOLTS, 3 PHASE, 50 Hz

NO LOAD CURRENT AMPS.	IR	IY	IB	ACCEPTANCE CRITERIA	RESULT
				<= 1A	OK / NOT OK
OPEN CIRCUIT VOLTAGE (VOLTS)		OBSERVED VALUE		ACCEPTANCE CRITERIA	RESULT
				70V (+/-5V)	OK / NOT OK

9.0 MAINS LED (GREEN) GLOWING : OK / NOT OK

10.0 LOAD TEST: INPUT SUPPLY 415 VOLTS, 3 PHASE, 50 Hz.

Sr. No.	PARAMETER	ACCEPTANCE VALUE	ACTUAL RESULT	REMARKS
1.	CONTROL TX. VOLTAGES	18-0-18 +/-0.2VAC 0-9.5 +/-0.2VAC 0-9.5 +/-0.2VAC		OK / NOT OK
2.	MIN. OUTPUT CURRENT	10A @ 10V		ADJUST BY P3 POT
3.	MAX. OUTPUT CURRENT	400A @ 36V		OK / NOT OK
4.	SUPPLY VOLTAGE IMMUNITY @ 370VAC & 470VAC (IN MMA MODE)	EQUAL TO SET CURRENT +/- 5A		CHECK AT 200A SET CURRENT

IMPORTANT: SEAL PRESETS P2, P3 POT BY SILASTIC AT THE EDGE ONLY. DO NOT COVER THE WHOLE PRESET.

11.0 VRD UNIT TEST (In MMA Mode) : OK / NOT OK
(Keep machine in no load condition.
Keep VRD switch at ON position.
check that OCV will become 8-10V after 2sec
Then do the welding and observe
that OCV will available after arc striking)

12.0 VRD UNIT TEST (In TIG Mode) : OK / NOT OK
(Keep machine in no load condition.
Keep VRD switch at ON position.
OCV will be available.
VRD mode is not applicable.)

MODEL	LOAD AMPS. / VOLTS	IR AMPS	IY AMPS	IB AMPS	I (Avg.) ACCEPT. CRITERIA	RESULT
CHAMP 400 X	400 / 36				<= 26	OK / NOT OK
	310 / 32				<= 19	OK / NOT OK

13.0	SINGLE PHASING PROTECTION TEST (Remove I/P Supply Phases one by one & check Err 001)	: OK / NOT OK
14.0	LOW VOLTAGE PROTECTION TEST (350Vac±10V) (Check Err 001)	: OK / NOT OK
15.0	OVERVOLTAGE PROTECTION TEST (485Vac±10V) (Check Err 002)	: OK / NOT OK
16.0	THERMAL PROTECTION TEST (Remove CN2 from Line Filter PCB & check the Err 003)	: OK / NOT OK
17.0	CONNECTION ERROR TEST (Remove CN9 of Display PCB & Check the Err 011)	: OK / NOT OK
18.0	ANTISTICK TEST (In MMA Mode) (Load the machine at 100A, drop the o/p voltage below 10V & check that output current goes to min. current.)	: OK / NOT OK
19.0	ANTISTICK TEST (In TIG Mode) (Load the machine at 100A, short the output & check that output current remains equal to set current.)	: OK / NOT OK
20.0	HOT START TEST (In MMA Mode)	: OK / NOT OK
21.0	REMOTE CONTROL OPERATION TEST (Connect remote & check current variation by remote pot)	: OK / NOT OK
22.0	MMA WELDING TEST	: OK / NOT OK
23.0	TIG WELDING TEST	: OK / NOT OK
24.0	HEAT RUN TEST	: OK / NOT OK
	Load the machine for 100% @ 310A / 32.4 V (MMA Mode) For 45 min	

TESTED BY: DATE: