

Quality Engineering Test Report

SERIES: SCN-800 800W PARALLEL SWITCHING POWER SUPPLY

SAMPLE: A.SCN-800-12 +12V / 66A
B.SCN-800-15 +15V / 54A
C.SCN-800-24 +24V / 33A
D.SCN-800-48 +48V / 16.6A

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	AC INPUT VOLTAGE RANGE	I/P:TESTING SPEC: 230VAC O/P:FULL LOAD	A:155~264VAC	P
2	LINE REGULATION	I/P:180~260VAC SPEC: $\pm 0.5\%$ O/P:FULL LOAD	A: -0%~ +0% B: -0%~ +0% C: -0%~ +0% D: -0%~ +0%	P
3	LOAD REGULATION	I/P:230VAC SPEC: $\pm 1\%$ O/P:MIN.TO FULL LOAD	A: -0%~ +0% B: -0%~ +0.1% C: -0%~ +0% D: -0%~ +0%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:180~260VAC SPEC: $\pm 1\%$ O/P:MIN.TO FULL LOAD	A: -0%~ +0% B: -0%~ +0.1% C: -0%~ +0% D: -0%~ +0%	P
5	RIPPLE&NOISE	I/P:230VAC SPEC: 1% O/P:FULL LOAD	A:100mV B:100mV C:90mV D:110mV	P
6	AC INPUT CURRENT	I/P:230VAC SPEC: 7.3A O/P:FULL LOAD	A:6.67A	P
7	MAX. INRUSH CURRENT	I/P:230VAC SPEC: NONE O/P:FULL LOAD	A:24.0A	P
8	O/P VOLTAGE ADJUST RANGE	I/P:230VAC SPEC: $\pm 5\%$ TYP O/P:MIN. LOAD	A:-9.1%~+9.9% B:-9.1%~+9.1% C:-10%~+9.1% D:-11%~+8.9%	P
9	SET UP TIME	I/P:230VAC SPEC: NONE O/P:FULL LOAD	A:226mS	P
10	HOLD UP TIME	I/P:230VAC SPEC: NONE O/P:FULL LOAD	A:22mS	P
11	EFFICIENCY	I/P:230VAC SPEC: A:80% B:81% C:85% O/P:FULL LOAD C:87%	A:81.6% B:84.2% C:86.0% D:87.9%	P
12	OVER LOAD PROTECTION	I/P:230VAC SPEC: CURRENT O/P:SHORT LIMITING	A:113% B:112% C:136% D:107% O/P SHORT, AFTER 8 sec. POWER SHUT DOWN	P
13	SPECIAL FUNCTION	REMOTE SENSING REMOTE CONTROL GND-INH SHORT POWER ON GND-INH OPEN POWER OFF OUTPUT VOLTAGE VC1---+1.2~5VDC ADJUST GND---GND PARALLEL	TEST OK	P
14	GROUND LEAKAGE CURRENT	I/P:240VAC SPEC: L--FG--<3.5mA N--FG--<3.5mA	A:L--FG: 0.22mA N--FG: 0.21mA	P
15	INSULATION RESISTANCE	SPEC: I/P -- O/P 500VDC / 7M Ohms MIN.	A:I/P -- O/P>100M Ohms	P

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16	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P-- O/P: 1250VAC/ 1 min. (10mA CUT-OFF) I/P -- FG: 1250VAC/ 1 min. (10mA CUT-OFF)	A:NO BREAK I/P--O/P :2.05mA I/P--FG :2.27mA	P																											
17	BURNIN TEST	I/P: 230VAC O/P:FULL LOAD TA:25°C BURN-IN DURATION: 4hrs	A:NO BREAK B:NO BREAK C:NO BREAK D:NO BREAK	P																											
18	TEMPERATURE RISE TEST T rise OF PARTS	A:I/P :230VAC AFTER 2 hrs BURN-IN O/P :FULL LOAD TA:25°C <table border="1"> <thead> <tr> <th>POSITION</th> <th>P/N</th> <th>TEMP</th> <th>T rise</th> </tr> </thead> <tbody> <tr> <td>D1</td> <td>BRIDGE DIODE</td> <td>81.9°C</td> <td>56.9°C</td> </tr> <tr> <td>Q1</td> <td>MAIN TRANSISTER</td> <td>97.1°C</td> <td>72.1°C</td> </tr> <tr> <td>T4</td> <td>MAIN TRANSFORMER</td> <td>77.5°C</td> <td>52.5°C</td> </tr> <tr> <td>D10</td> <td>O/P DIODE</td> <td>93.5°C</td> <td>68.5°C</td> </tr> <tr> <td>C19</td> <td>O/P FILTER CAPACITOR</td> <td>36.1°C</td> <td>11.1°C</td> </tr> <tr> <td>L3</td> <td>O/P CHOKE</td> <td>75.5°C</td> <td>50.5°C</td> </tr> </tbody> </table>	POSITION	P/N	TEMP	T rise	D1	BRIDGE DIODE	81.9°C	56.9°C	Q1	MAIN TRANSISTER	97.1°C	72.1°C	T4	MAIN TRANSFORMER	77.5°C	52.5°C	D10	O/P DIODE	93.5°C	68.5°C	C19	O/P FILTER CAPACITOR	36.1°C	11.1°C	L3	O/P CHOKE	75.5°C	50.5°C	P
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19	LIFE CYCLE	A: SUPPOSE C19 IS THE MOST CRITICAL COMPONENT (C19 : RUBYCON 12000uF/25V,MXR 105°C ,2000hrs) I/P:230VAC O/P:FULL LOAD TA:25°C C19:36.1°C Life: 237206hrs		P																											
20	CONSTRUCTION INSPECTION (FOR QC INSPECTION REFERENCE ONLY)	A: 1. PACKING :BOX 2. MARKING :MODEL LABEL 3. TOPOLOGY :HALF BRIDGE CIRCUIT 4. MECHANICAL :I/P 3 PIN TERMINAL,O/P 2 PIN TERMINAL, SPECIAL FUNCTION CONTROL : 8 PIN CONNECTOR																													
21	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	A: FUSE : BUSS ABC15 15A/250V FAST ACTION CERAMIC BRIDGE DIODE : D25XB60 LINE FILTER : EE-3010 TRANSFORMER : ETD-49 POWER SWITCHER : IXYS,IXFK48N50 x 2 OUTPUT DIODE : C30P10Qx4 TO3P INPUT CAPACITOR : RUBYCON 680uF/250V MXR 105°Cx4 OUTPUT CAPACITOR : RUBYCON 12000uF/25V,MXR 105°C x4 P.C.B : CEM-1, 2 OZ FAN : SUNON 12V/6cm KD1206PTB1																													
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL																											
1999.7.20	SCN-800-12 SCN-800-24 SCN-800-48	PASS	T.K.CHENG	MAX LIN																											
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