

Quality Engineering Test Report

SERIES: ADS-55 55W AC-DC SINGLE OUTPUT

SAMPLE: A.ADS-5512

**+V1: 12V / 3A
+V2: 5V / 3A**

B.ADS-5524

**+V1:24V / 2A
+V2:5V/2A**

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	AC INPUT VOLTAGE RANGE	I/P:TESTING SPEC:88~264VAC O/P:FULL LOAD	A:62.9VAC~264VAC	P
2	LINE REGULATION	I/P:88V~264VAC SPEC: O/P:FULL LOAD A :+V1 :±0.5% +V2 :±0.5% B :+V1 :±1% +V2 :±0.5%	A: +V1: -0%~+0% +V2: -0%~+0.12% B: +V1: -0%~+0% +V2: -0%~+0.12%	P
3	LOAD REGULATION	I/P:230VAC SPEC: O/P:MIN. TO FULL LOAD A :+V1 : ±0.5% +V2 : ±0.5% B : +V1 : ±1% +V2 : ±0.5%	A: +V1: -0.049%~+0.049% +V2: -0%~+0.12% B: +V1: -0%~+0.04% +V2: -0%~+0.12%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:88~264VAC SPEC: O/P:MIN. TO FULL LOAD A :+V1 : ±1% +V2 :±3% B : +V1 : ±1% +V2 :±3%	A: +V1: -0.049%~+0% +V2: -0.12%~+0.14% B: +V1: -0.053%~+0.024% +V2: -0%~+0%	P
5	RIPPLE&NOISE	I/P:230VAC SPEC: O/P:FULL LOAD A :+V1 :100mV +V2 :100mV A :+V1 :100mV +V2 :100mV	A: +V1: 18mV +V2: 25mV B: +V1: 11mV +V2: 22mV	P
6	AC INPUT CURRENT	I/P:230VAC SPEC:1A O/P:FULL LOAD	A:0.641A	P
7	MAX. INRUSH CURREN	I/P:230VAC SPEC:40A O/P: FULL LOAD	A:35.984A	P
8	O/P VOLTAGE ADJ.RANGE	I/P:230VAC SPEC: CH1:±10% O/P:MIN. LOAD A: V1:10.8V~13.2V B: V1:21.6~26.4V	A: 10.632V~13.644V B: 15.28V~27.44V	P
9	SET UP TIME	I/P:230VAC SPEC:800mS O/P:FULL LOAD	A: 589mS	P
10	HOLD UP TIME	I/P:230VAC SPEC:60mS O/P:FULL LOAD	A: 109.3mS	P
11	EFFICIENCY	I/P:230VAC SPEC: A:74% O/P:FULL LOAD B:77%	A:76.1% B:80%	P
12	OVER LOAD PROTECTION	I/P:230VAC SPEC:105%~150% O/P:TESTING	A:123% B:128%	P
13	GROUND LEAKAGE CURRENT	I/P:240VAC SPEC: L-FG--<1mA N-FG--<1mA	A: L-FG:0.42mA N-FG:0.44mA	P
14	INSULATION RESISTANCE	SPEC: O/P-FG 500VDC/100M Ohms MIN. I/P-O/P 500VDC/100M Ohms MIN. I/P-FG 500VDC/100M Ohms MIN.	A: O/P-FG >100M Ohms I/P-O/P >100M Ohms I/P-FG >100M Ohms	P

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15	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P- O/P: 3000VAC/ 1 min.(10mA CUT-OFF) I/P - FG: 1500VAC/ 1 min.(10mA CUT-OFF) O/P - FG: 500VAC/ 1 min.(10mA CUT-OFF)	A: I/P-O/P 4.56mA I/P-FG 3.77mA O/P-FG 3.51mA	P																																			
16	BURN-IN TEST	I/P: 230VAC O/P:100% LOAD with 17.8CFM FAN TA:25.9°C BURN-IN DURATION :2 hrs	A: NON BREAK	P																																			
17	ENVIRONMENT TEST	1.LOW TEMPERATURE TEST I/P:230 VAC O/P:100% LOAD AMBIENT TEMPERATURE:-10.3°C	A : AFTER 3 hrs POWER ON OK	P																																			
		2.HIGH AMBIENT TEMPERATURE FULL LOAD TEST I/P:230VAC O/P:FULL LOAD AMBIENT TEMPERATURE:59.3°C with 17.8CFM FAN	A : AFTER 12 hrs NON BREAK																																				
		3.HIGH HUMIDITY HIGH VOLTAGE ON/OFF TEST I/P:264VAC O/P:FULL LOAD AMBIENT TEMPERATURE : 25°C AMBIENT HUMIDITY : 95%	A : AFTER 18 hrs POWER ON/OFF NON BREAK																																				
18	TEMPERATURE RISE TEST T rise OF PARTS	A: I/P :230VAC O/P :100%LOAD AFTER 2 hr BURN-IN TA:25.9°C with 17.8CFM FAN	<table border="1"> <thead> <tr> <th></th> <th>POSITION</th> <th>P/N</th> <th>TEMP</th> <th>T rise</th> </tr> </thead> <tbody> <tr> <td></td> <td>BD1</td> <td>BRIDGE DIODE</td> <td>31.9°C</td> <td>9.9°C</td> </tr> <tr> <td></td> <td>Q1</td> <td>MAIN TRANSISTOR</td> <td>36.3°C</td> <td>14.3°C</td> </tr> <tr> <td></td> <td>T1</td> <td>MAIN TRANSFORMER</td> <td>40.6°C</td> <td>18.6°C</td> </tr> <tr> <td></td> <td>D20</td> <td>O/P DIODE</td> <td>47.0°C</td> <td>25°C</td> </tr> <tr> <td></td> <td>C17</td> <td>O/P FILTER CAPACITOR</td> <td>42.3°C</td> <td>20.3°C</td> </tr> <tr> <td></td> <td>C5</td> <td>I/P FILTER CAPACITOR</td> <td>32.4°C</td> <td>10.4°C</td> </tr> </tbody> </table>		POSITION	P/N	TEMP	T rise		BD1	BRIDGE DIODE	31.9°C	9.9°C		Q1	MAIN TRANSISTOR	36.3°C	14.3°C		T1	MAIN TRANSFORMER	40.6°C	18.6°C		D20	O/P DIODE	47.0°C	25°C		C17	O/P FILTER CAPACITOR	42.3°C	20.3°C		C5	I/P FILTER CAPACITOR	32.4°C	10.4°C	P
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19	LIFE CYCLE	A: SUPPOSE C17 IS THE MOST CRITICAL COMPONENT with 17.8CFM FAN I/P:230VAC O/P:100% LOAD Ta:25°C Tc:41.4°C Life:471483hrs I/P:230VAC O/P:100% LOAD Ta:60°C Tc:72.5°C Life:54587hrs		P																																			
20	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	A: FUSE : F 3A/250V CHARGER 15AL/250V BRIDGE DIODE : D3SB60 LINE FILTER : TF-484-R2 EE-25 TRANSFORMER : TF-688 EER-28L POWER SWITCHER : 2SK1507 OUTPUT DIODE : BYQ-28X-200 OUTPUT CAPACITOR : RUBYCON 330uF/35V YXG 105°C INPUT CAPACITOR : 150uF/400V 85°C P.C.B : ADD-55-R1																																					
DATE	SAMPLE	TEST RESULT		TEST	APPROVAL																																		
20001007	RD SAMPLE	PASS		VINCENT	Max Lin																																		
20001116	A011B25 ADS-5512 ADS-5524	PASS		VINCENT	Max Lin																																		
20010822	A108A03 ADS-5512	PASS		VINCENT	Max Lin																																		