REV.	Description				Date
S00	ISSUE SPEC				10/28/2019
S01	102A-19B149 ITEM 12 add No.5: 所有測 ITEM 12.Note:"2. EMI/ RFI				11/25/2019
S02	102A-203137 ITEM 12 NOTE增加備註"6.	高溫 45°C 測試時	,任何 load chang	e 測試的 Min. Load 由 0A 改為 10mA."	03/20/2020
S03	102A-204227 CHANGE ITEM 12				05/04/2020
S04	102A-215113 ADD ADP-15WH AB				05/19/2021
S05	102A-21A039 ADD ADP-15 102A-21A066 ADD ADP-15				10/12/2021
S06	102A-223018 ADD ADP-15WH AS				03/08/2022
S07		ion table & No loa	d voltage & Outpu	t voltage& Surge load 5.6V TO 5.5V	08/16/2022
S08	102A-228197 CHANGE ITEM 7 Output s	pecification tab	le		08/30/2022
S09	102A-22A146 ADD ADP-15WH ASD				10/24/2022
		子工業股份	有限公司	DESCRIPTION:	
	NELTA DELTA	ELECTRO	NICS, INC.	測試規格(Test Specificat	ion)
ELEC BASI	SE DRAWINGS AND SPECIFICAT CTRONICS, INC. AND SHALL NO S FOR THE MANUFACTURE OR HOUT PERMISSION.	T BE REPRODUCED	OR USED AS THE	MODEL NO.: ADP-15WH SERIE	ΞS
Da	te Drawn	Design (EE)	Design (ME)	DOCUMENT NAME.:	REV.
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MODEL LIST:

ADP-15WH AA/AB/AAA/AAB/AAC/AS/ASA/ASB/ASC/ASD

1 測試注意事項內容,未經工程師許可,不可任意變更。

Test Notice contents shall not be changed or revised without engineer permission.

2 此測試規格用於主線測試,所有項目均需被測試,因設備或線速限制無法全數測試時, 需測試 worst case.

The production line shall perform all or worst test items/conditions.

- 3 測試注意事項:(以下為範例寫法請依據產品特性自行修正)
 - a. 功能測試時,電子負載需設定 Von 點為 0V.
 - b. 所有 ATS 測試時,須偵測 CONNECTOR 端之電壓。
 - c. 在測試及崩應時,治具上各組輸出須有加 10uF/10V &104pF 電容。
 - d. Open frame 或是 Case 未組裝前的各項測試,於測試完成後須對 BULK CAP 放電。
- 4 燒錄 IC:

無

5 小板(小板名稱)動態測試:

無.

- 6 手調測試站:
 - a. Full Load Test: 檢查滿載輸出是否符合規格
 - b. Min. Load Test: 檢查輕載輸出是否符合規格
 - c. OTP Test:

Load Condition: 2.8A

NTC31 並聯 1K 歐姆電阻,檢查輸出電壓是否 Latch off.

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	VINGS AND SPECIFICA CS, INC. AND SHALL N		MODEL NO. :		
BASIS FOR TE WITHOUT PE	HE MANUFACTURE O RMISSION.	OR SHALL OF APPARA	ADP-15WH SERIES		
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d. OVP Test:

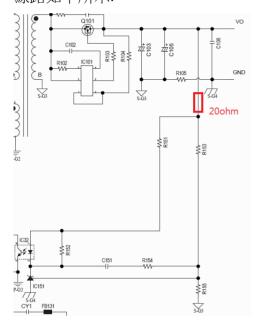
短路 R155 , Input voltage: 90Vac~276Vac , Output current: 0~2.8A , Protection mode: Latch off , $\leq 8V(spec)$

e. AC On/Off: Power supply 連續開關機 On= 5 秒, Off= 5 秒, 5 次後, 必須無損壞情形。

f. Loop gain:

Test Condition: 1500mV

將 R151/R153 與 Vo 間的 trace 斷開串入 20ohm 電阻,由該 20ohm 電阻進行 loop gain 之量測線路如下所示:



7 Function test (ATS) procedure:

Input Specification Table:

INPUT VOLTAGE	MINIMUM	MAXIMUM
Input voltage range	90Vac	276Vac
Rated input voltage	100Vac	240Vac

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Rated frequency	50Hz	60Hz
Frequency Range	47Hz	63Hz

Output Specification Table:

OUTPUT	MINIMUM	MAXIMUM	NOMINAL(RATED)
Voltage (Vdc)	5.1V	5.3V	5.3V
Loading (Amp)	0A	2.8A	2.8A

Test Item	Vin	Load	Spec	Remark
Inrush current	276V	2.8A	No damage	
Ripple & Noise	90V/276V	2.8A	≤ 100mVp-p	10uF &104pF
No load output voltage	90V/276V	0A	5.4V ~ 5.5V	
Output voltage	90V/276V	1.4A , 2.8A	5.1~5.5V	-
Surge Load	90V/276V	2.8A 10 seconds to 3.8A for 1second	5.0V>Output Voltage > 5.5V.	(低溫測試需待1分鐘 後測試)
No load input current	90V/100V 240V/276V	0A	≤ 10mA≤ 20mA	-
	90Vac		≤ 400mA	
Rated load input	100Vac	2.8A (Rated load)	≤ 350mA	
current	240Vac		≤ 200mA	-
	276Vac		≤ 190mA	
No load power consumption	115 & 230Vac	0A	\leq 75mW	
Rated load power consumption	90Vac~276Vac	2.8A (Rated load)	≤ 20W	-
Short circuit	90Vac~276Va		Protection mode: Auto	
protection	90 vac~270 va		reset	-
Over current	001/22 2761/22		3.9A < OCP < 7.8A	Load Start: 2.8A
protection	90Vac~276Vac		Auto reset	Load Step: 0.2A Step Time: 200mS

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	INGS AND SPECIFIC.		MODEL NO. :		
	HÉ MANUFACTURE C		ADP-15WH SERIES		
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Frame Name:DF-PSLA4V-2R01.DOC

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	1			<u> </u>
Average efficiency	115 & 230Vac	2.8A	≥78%	Cold start
Average efficiency	115 & 230Vac	2.8A	≥79.3%	Burn in 30 min
Rated load efficiency	90 &276Vac	2.8A	≥75%	Cold start
Cap load	90 &276Vac	2.8A	Normal start	輸出並聯 470uF/50V
Output short protect	90 &276Vac	2.8A	Input power less than 10W	
Dynamic load	90 & 276Vac	(1) From rated load 0% to 50% (2) From rated load 50% to 100% at 0.5A/us slew rate, 10Hz and 1kHz frequency and 50% duty.	5.0~6.0V	

8. Safety

8.1 Hi-POT test:

Between input Plug and DC plug, 3.64KV/1min (verification), 3.64KV/1second (products line), (上昇時間: DC=1Sec, AC=0.1Sec)。Hi-Limit current(cut off current)=5mA。Lo-Limit current=0.01mA。ARCING SENSE 需設為 Level 6(10mA).

8.2 Insulation Resistance (IR) test:

PRIMARY to SECONDARY use 500Vdc test; Insulation resistance limit: >100M ohm.

8.3 Leakage Current:

The measured reading is less than **100uA** at 240 Vac, 60Hz.

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9. Burn-in 測試作業規範

Ambient is 40° C, 5.1V/2.8A.

10. I2C 測試作業規範

N.A.

11. FRU Data Barcode Read/Write 測試作業規範

N.A.

12. Note:

1.系統如下圖,因無觸控功能,CMN 測試不作驗證; 因無網路功能, ISN 測試不作驗證

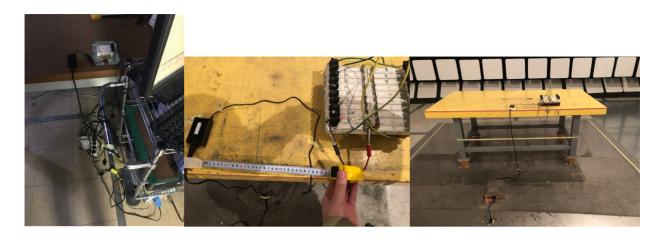


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Frame Name:DF-PSLA4V-2R01.DOC

SHEET <u>6</u> OF <u>7</u>

2. EMI/ RFI Test Set up: 測試 RFI 時, PSU 需與 dummy load 相差 30cm, AC Cable 需垂直於地面, DC Cable 延伸至 dummy load 後自然擺垂於桌緣.



3. 因系統沒接地,EMI RFI 只測沒接地條件

4. ESD:每打一次 ESD,就需對治具放電一次.

5. 所有測試需使用客戶指定 AC cable: 美規 AC 2C LS-7H 1.5M



6. 高溫 45°C 測試時, 任何 load change 測試的 Min. Load 由 0A 改為 10mA.

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