## **SPECIFICATIONS**

## CA819-01-01C

ITEMS		DRL100-24-1	
1 Nominal Output Voltage	V	24	
2 Maximum Output Current	Α	4.2	
3 Maximum Output Power	W	100.8	
4 No Load Input Power related to Erp	W	<0.5	
5 Efficiency (Typ) (115/230VAC) (*1)	%	88/90	
6 Active Average Efficiency related to Erp	%	87	
7 Input Voltage Range (*2)	_	85 - 264VAC (47-63Hz) or 120 - 373 VDC (Withstand 300VAC Surge for 5 seconds)	
Input Current (Typ) (115/230VAC) (*1)		2.0/1.1	
Inrush Current (Typ) (230VAC) (*3)		60 A cold start	
10 PFHC	_	Compliant to IEC 61000-3-2, Class A	
11 Power Factor (Typ) (115/230VAC) (*1)	-	0.50/0.47	
12 Output Voltage Range	V	24.0~28.0 (Adjustable)	
13 Ripple and Noise (* 1,4)	-	1% max	
14 Line Regulation (*4, 5)	_	1% max	
15 Load Regulation (*4, 6)	-	1% max	
16 Transient Response Deviation(25~75% load change)	mV	<1200	
17 Transient Response Recovery Time	ms	1, to within 2% of settled value, 25 - 75% load change	
18 Temperature Coefficient	_	Less than ±0.02%/°C	
19 Over Current Protection (*7)	_	105% ~	
20 Over Voltage Protection (*8)	V	29.0 ~ 35.0	
21 Hold-Up Time (Typ) (*1)	ms	15 typ. @ 115VAC input voltage, full load, Ta = 25°C	
Leakage Current (*9)		•	
22 Leakage Current (*9) 23 Indication	_	DC OK LED(green)	
24 Parallel Operation	_	•	
25 Series Operation	_	Possible	
26 Operating Temperature (* 10)		-20 to +71°C(-25°C startup) 115VAC~240VAC: Full load at +51°C;(derate linearly to 60% load at +71°C)	
	_	-20 to +71°C(-25°C startup) 100VAC~115VAC: Full load at +40°C; (derate linearly to 40% load at +71°C)	
27 Operating Humidity	%	20 - 90 non condensing	
28 Operating Altitude		3000m, derating 5°C/1000m above 2000m	
29 Storage Temperature		- 40 ~ +85°C	
30 Storage Humidity		$5 \sim 95 \%$ (No condensing)	
31 Cooling		Convection	
32 Withstand Voltage		Input - Output: 3.0kV AC (20mA)	
33 Isolation Resistance		Input - Output: More than 100MΩ (500VDC) at 25°C and 70% RH	
		Operating, IEC 60068-2-6, Sine Wave, 10-500Hz, 19.6m/s <sup>2</sup> (2G peak);	
34 Vibration		10 min per cycle,60min for all X,Y,Z directions	
	+	Operating, IEC 60068-2-27, Half Sine Wave, 39.2m/s <sup>2</sup> (4G) for a duration of 22ms,	
35 Shock (In package)		3 shocks for each 3 directions,9 times in total	
36 Pollution	_	Degree 2, material group 3	
37 Ingress Protection	_	IP20	
38 Isolation Class / Class of Protection	_	Class II (L, N only)	
39 Safety		Approved by UL60950-1, CSA22.2 No.60950-1-07(2nd edition), EN60950-1, UL508	
40 Line Dip (200~240VAC)	_	SEMI F47	
40 Ellie Dip (200~240 VAC)  41 EMI		CE: EN55022-B, CISPR22-B; RE: EN55022-A, CISPR22-A	
41 EMI		EN 61000-4-2 (Level 3) -3 (Level 3) -4 (Level 4), -5 (Level 3),	
42 Immunity	-	-6 (Level 3) -8 (Level 4), -11 (Class 3)	
43 Weight (Typ)	_	-0 (Level 3), -0 (Level 4), -11 (Class 3)  280g	
		72 x 91 x 55.6	
44 Dimension (W x H x D) (*11)	шш	12 X 91 X 33.0	

\* Read instruction manual carefully , before using the power supply unit.

= NOTES=

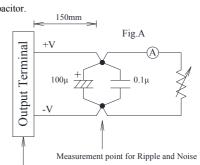
- \* 1 : At Maximum Output Power, nominal input voltage, Ta = 25°C.
- \* 2 : For cases where conformance to various safety specs ( UL, CSA, EN ) are required, to be described as 100 240VAC, 50 / 60Hz on name plate. DC input not approved by safety.
- \* 3: Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- \* 4 : Please refer to Fig A for measurement of line & load regulation, ripple and noise voltage.

Ripple & noise are measured at 20MHz by using a twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.

- \* 5: 85 264VAC, constant load.
- \* 6: No load Full load ( Maximum power ), constant input voltage.
- \* 7: Output hiccup with automatic recovery.

Avoid to operate at overload or dead short for more than 30 seconds.

- \*8: OVP circuit will shutdown output, manual reset (Re-power on).
- \*9: Measured by each measuring method of UL and EN(at 60Hz), Ta=25°C.
- \* 10 : Refer to Output Derating Curve(CA819-01-02) for details of output derating versus ambient temperature.
  - Load (%) is percent of Maximum Output Power and Maximum Output Current ( Item 2 and 3). Do not exceed derating of Maximum Output Power and Maximum Output Current.
  - 100% load start up at -25°C is possible, however, it may not fulfil all the specifications.
- \* 11 : Refer to outline drawing CA819-02-01\_.



Measurement point for Vo Line/Load Regulation

## **OUTPUT DERATING**

## CA819-01-02A

		Load (%)		
Safety input range		115~240VAC	100~115VAC	
Input Vo	oltage Range	103~265VAC	85~103VAC	
Ta(°C) 40 52	-20	100%	100%	
	40	100%	100%	
	51	100%	80%	
	71	60%	40%	

