



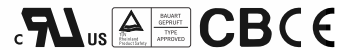
55W Single Output with Battery Charger (USP Function)

AD-55 series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Battery low protections
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 2 years warranty



SPECIFICATION

MODEL		AD-55A		AD-55B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	13.8V	13.4V	27.6V	26.5V
	RATED CURRENT	3.5A	0.23A	1.8A	0.16A
	CURRENT RANGE	0 ~ 4A	-----	0 ~ 2A	-----
	RATED POWER	51.38W		53.92W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	-----	100mVp-p	-----
	VOLTAGE ADJ. RANGE	CH1: 12 ~ 14.5V		CH1: 24 ~ 29V	
	VOLTAGE TOLERANCE Note.3	±1.0%	-----	±1.0%	-----
	LINE REGULATION	±0.5%	-----	±0.5%	-----
	LOAD REGULATION	±0.5%	-----	±0.5%	-----
	SETUP, RISE TIME	800ms, 50ms/230VAC 1600ms, 50ms/115VAC at full load			
HOLD TIME (Typ.)	80ms/230VAC 16ms/115VAC at full load				
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	71%		74%	
	AC CURRENT (Typ.)	1.6A/115VAC 1A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC			
	LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1:14.49 ~ 18.63V		CH1:28.98 ~ 37.26V	
		Protection type ; Hiccup mode, recovers automatically after fault condition is removed			
FUNCTION	DC ALARM SIGNAL(OPTIONAL)	AC fail CN1 PIN2			
		Battery low under charge voltage 82.5%±2% CN1 PIN1			
		Normal 0.8V max. Abnormal 5V±0.5V			
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃) on CH1 output			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC			
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024,Light industry level, criteria A			
	MTBF	304.3K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	159*97*38mm (L*W*H)			
	PACKING	0.5Kg; 24pcs/12.6Kg/0.75CUFT			

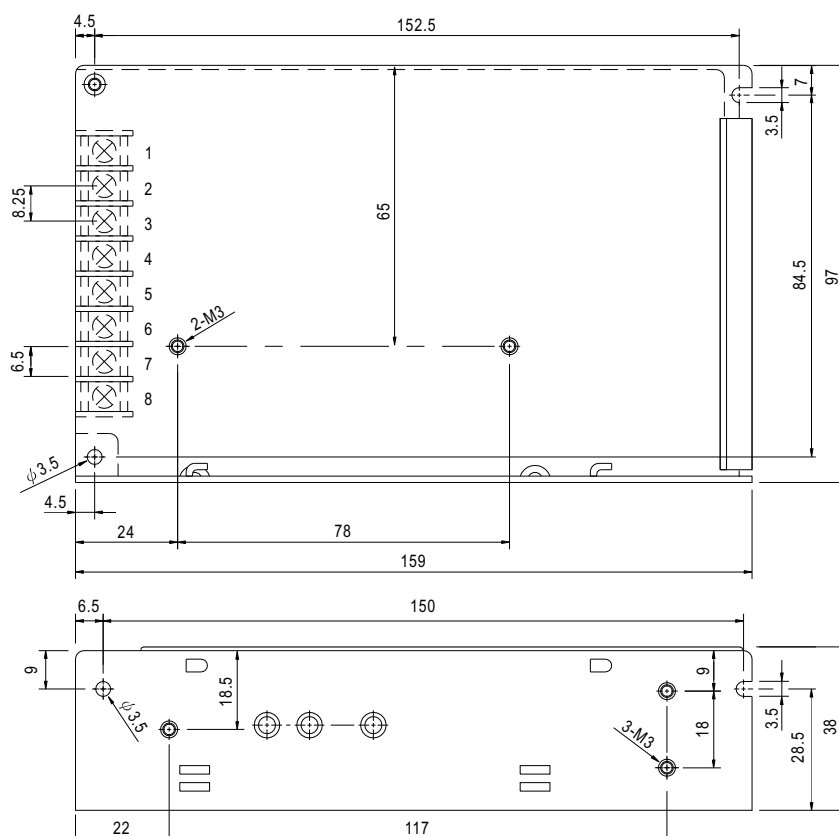
NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.



Mechanical Specification

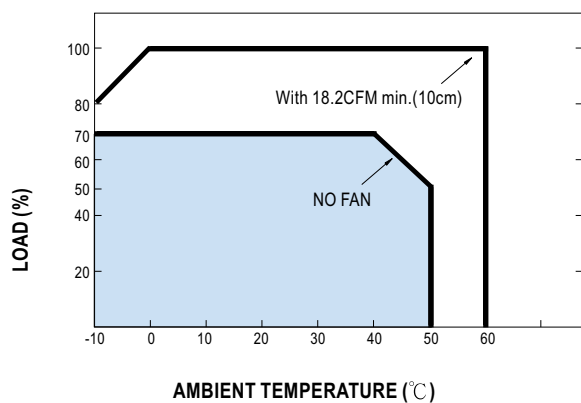
Case No. 901 Unit:mm



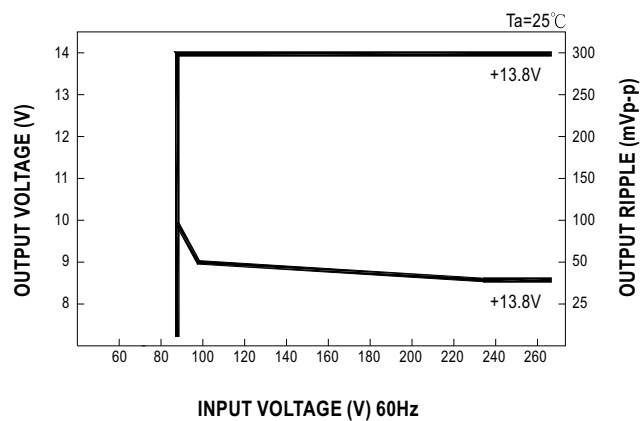
Terminal Pin. No Assignment

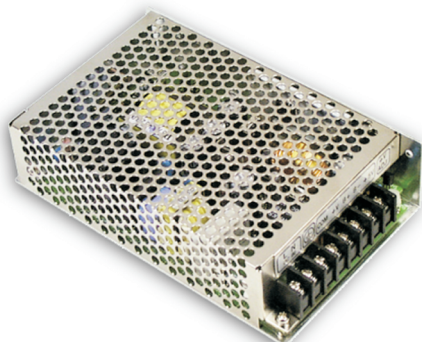
Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT COM	7	BAT. -/COM
2	AC/N	5	DC OUTPUT +V	8	NC
3	FG $\perp$	6	BAT. +		

Derating Curve



Static Characteristics (A)





■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Battery low protections
- Cooling by free air convection
- 100% full load burn-in test
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- 2 years warranty

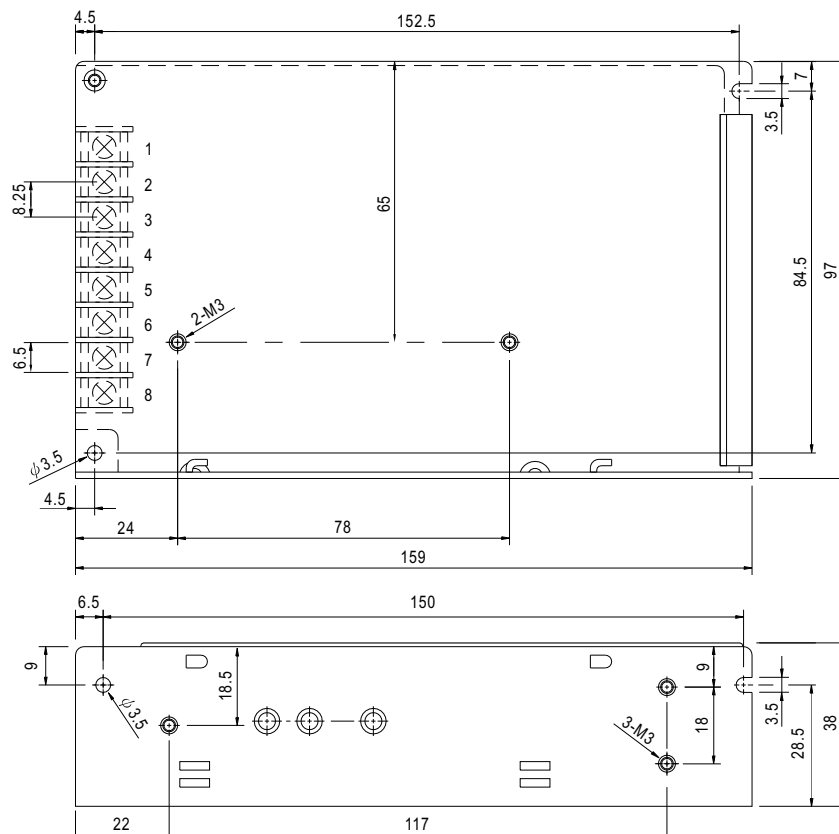


SPECIFICATION

MODEL		ADD-55A			ADD-55B		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	13.8V	5V	13.4V	27.6V	5V	26.5V
	RATED CURRENT	2.5A	3A	0.23A	1.3A	3A	0.16A
	CURRENT RANGE	0 ~ 3.5A	0 ~ 4A	-----	0 ~ 2A	0 ~ 4A	-----
	RATED POWER	52.58W			55.12W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	-----	150mVp-p	150mVp-p	-----
	VOLTAGE ADJ. RANGE	CH1: 12 ~ 14.5V			CH1: 24 ~ 29V		
	VOLTAGE TOLERANCE Note.3	±1.0%	±3.0%	-----	±1.0%	±3.0%	-----
	LINE REGULATION	±1.0%	±0.5%	-----	±1.0%	±0.5%	-----
	LOAD REGULATION	±1.0%	±0.5%	-----	±1.0%	±0.5%	-----
	SETUP, RISE TIME	800ms, 50ms/230VAC 1600ms, 50ms/115VAC at full load					
	HOLD TIME (Typ.)	80ms/230VAC 16ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	71%				74%	
	AC CURRENT (Typ.)	1.6A/115VAC 1A/230VAC					
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	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	CH1:14.49 ~ 18.63V Protection type : Hiccup mode, recovers automatically after fault condition is removed				CH1:28.98 ~ 37.26V	
FUNCTION	DC ALARM SIGNAL(OPTIONAL)	AC fail CN1 PIN2 Battery low under charge voltage 82.5%±2% CN1 PIN1 Normal 0.8V max. Abnormal 5V±0.5V					
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH					
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	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A					
OTHERS	MTBF	241.3K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	159*97*38mm (L*W*H)					
	PACKING	0.57Kg; 24pcs/13.7Kg/0.75CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.						

■ Mechanical Specification

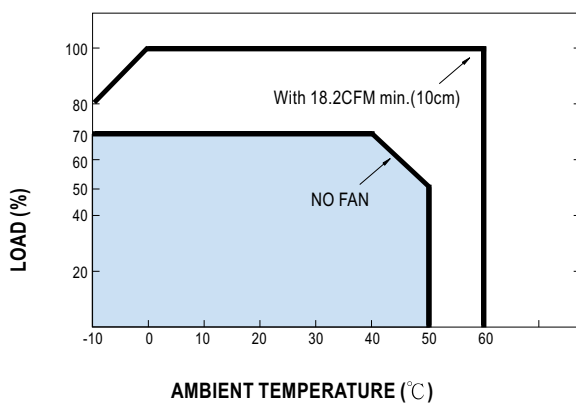
Case No. 901 Unit:mm



Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT COM	7	BAT. -/COM
2	AC/N	5	DC OUTPUT +V	8	DC/DC OUTPUT +5V
3	FG $\perp$	6	BAT. +		

Derating Curve



■ Static Characteristics (A)

