Acro Engineering Incorporation

AE2055CF Series

55Watts, Dual Output

Dimensions: 160(L)x95(W)x38(H) mm

Features

- High power density
- Convection cooled
- RoHS compliance
- 3 year warranty
- Great reliability
- Multiple mounting solution
- Over voltage protection
- Overload protection
- Short circuit protection

Safety Standards

CE — EN 60950 (Marking)

c UL us LISTED — UL 508 (Approval)

EMC Standards

EN55011	Class B
EN55022	Class B
EN61000-4-2	Level 3
EN61000-4-3	Level 3
EN61000-4-4	Level 3
EN61000-4-5	Level 3
EN61000-4-6	Level 3
EN61000-4-8	Level 3
EN61000-4-11	Level 3

Model List

Model	O/P Voltage Adjustment	Loading Min.	Loading Rated	Loading Peak	Ripple Noise	Line Reg.	Load Reg.	Eff.	Over Voltage Protection
AE2055C1F	+13.8VDC±10%	0A	2.5A	3.5A	100mVp-p	±1%	±1%	72%	15~17VDC
	+5.0VDC -----		3.0A	4.0A	100mVp-p	±3%	±3%		----------
	+13.2VDC -----		0.23A	0.23A	250mVp-p	-----	-----		----------
AE2055C2F	+27.6VDC±10%	0A	1.25A	1.5A	200mVp-p	±1%	±1%	72%	30~34VDC
	+5.0VDC -----		3.0A	4.0A	100mVp-p	±3%	±3%		----------
	+27.0VDC -----		0.16A	0.16A	250mVp-p	-----	-----		----------

Model Encoding

A E 2 0 5 5 C 1 F

- A E — Enclosed
- 2 — Dual Output
- 0 5 5 — Output Wattage : 55 — 55W
- C — Full Range Input : 100~240VAC
- 1 — Output Voltage : 1 — 13.8VDC / 5VDC
- 2 — 27.6VDC / 5VDC
- F

Specification

General		
Switching Frequency		67k Hz
Isolation Voltage	Input-Output	3000 VAC/4242 VDC
	Input-FG	1500 VAC/2121 VDC
	Output-FG	500 VAC/710 VDC

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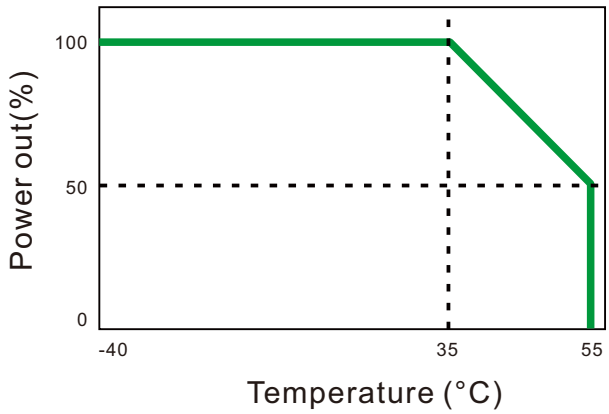
Specification

General		
Isolation Resistance		100MΩ when Input-Output @500VDC
Operating Temperature		-40°C~35°C ambient
Derating		2.5% per degree from 35°C to 55°C
Storage Temperature		-40°C to +85°C
Relative Humidity		5%~95% RH, Non-condensing.
Temperature Coefficient		±0.04% of output voltage per °C
MTBF		60,000hrs Min. Per MIL-HDBK-217F, 25°C GB
Altitude During Operation		2000m
Vibration		Random vibration, 10~500Hz, 3 axise
Input		
Input Voltage		100~240VAC/120~370VDC
Input Frequency		47~63 Hz
Inrush Current (cold start)		22A/115VAC 44A/230VAC
Rated Input Current		1.5A Max., Vi=100~240VAC
Leakage Current		Input-output 0.25mA, Input-FG 3.5mA
Output		
Output Voltage accuracy		±1%
Minimum Load		0%
Line Regulation		See model list, measuring from low line to high line at rated load.
Load Regulation		See model list, measuring from 20% to 100% of rated load at 230VAC input.
Voltage Trim Range		±10%
Rated Continuous Loading		See model list
Hold Up Time		35mS Min., Full load@230VAC.
Turn On Time		350ms
Rise Time		10ms
Fall Time		25mS
Transient Response	Recovery Time	2mS, Load change 50% to 100%
	Voltage Deviation	5%, Load change 50% to 100%
Efficiency		See model list, measuring at rated load and 230VAC input.
Ripple and Noise		See model list, measuring by using a 0.1μF/630V metalize capacitor and a 47μF electrolytic capacitor parallel on the test point, at rated load and 230VAC input.

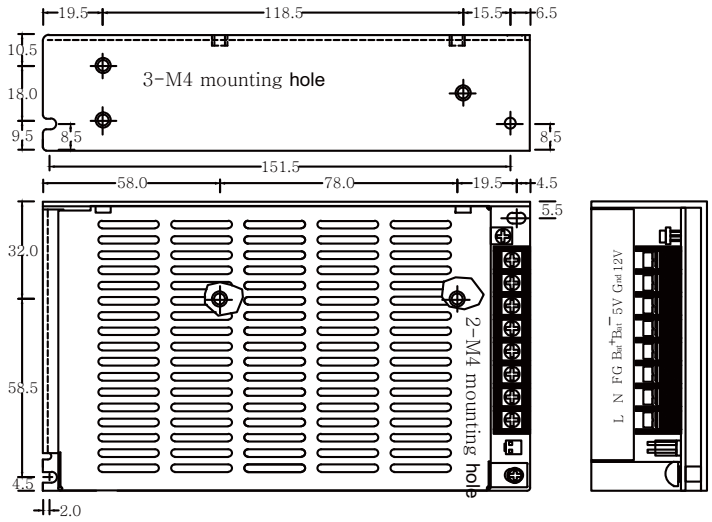
Specification

Protection	
Input Fuse	2A/250V
Internal Surge Load Protection	Varistor, IEC 61000-4-5
Degree of Protection	IP20
Short Circuit Protection	Autorecovery
Over Voltage Protection	Autorecovery
Rated Over Load Protection	110~150 %
Overload protection	Power limited
Battery low voltage protection	For protect battery over-discharge and system stable, AE2055CF Series will cut off battery source
Additional Functions	
Back-up	External battery supply back-up power source for keeping DC output stable while AC failed
AC input indicator	connector for external LED, output current is limited at 10mA

Derating Curve



Mechanical Details



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