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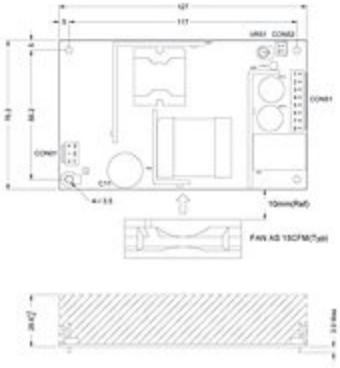
ITEM # ABU125-540, 53.2 TO 58.8 VOLT (V) ADJUSTABLE OUTPUT VOLTAGE RANGE ABU 125 SERIES SWITCH MODE POWER SUPPLY

The ABU125-540 is a single output power supply. This power supply is designed for a wide variety applications where high reliability is desired, including applications for the industrial and telecommunications markets. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class B and EN61000-3-2), and Low Voltage directive (TUV EN60950).

Single Output AC/DC Power Supply with PFC.



Input Characteristics (at 25 ºC) | Output Characteristics (at 25 ºC) | General Specifications (at 25 ºC) | Environmental Specifications (at 25 ºC) | EMC and Safety Specifications (at 25 ºC) | Specifications | Note

Input Characteristics (at 25 ºC)

Alternating Current (AC) Input Voltage	90 to 264 V
Direct Current (DC) Input Voltage	127 to 373 V
Input Frequency Range	47 to 63 Hz
Input Current at 115 VAC	1.6 A

Input Current at Typical 230 VAC	0.8 A
Maximum Inrush Current at 115 VAC for Cold Start	30 A
Maximum Inrush Current at 230 VAC for Cold Start	60 A
Power Factor at 230 VAC for Full Load	> 0.95
Power Factor at 115 VAC for Full Load	> 0.98
Leakage Current at 240 VAC	< 2.4 mA

Output Characteristics (at 25 °C)

Direct Current (DC) Output Voltage	54 V
Direct Current (DC) Voltage Tolerance	±2.0 %
Output Current (15 CFM Fan)	0 to 1.96 A
Output Current (Convection)	0 to 1.6 A
Output Power (15 CFM Fan)	106 W
Output Power (Convection)	87 W
Adjustable Output Voltage Range[1]	53.2 to 58.8 V
Ripple and Noise Voltage at Peak to Peak[2]	240 mV
Load Regulation	±1.0 %
Line Regulation	±0.5 %
Efficiency	88.0 %

Start-Up Time at 230 VAC for Full Load	1800 ms
Start-Up Time at 115 VAC for Full Load	3600 ms
Rise-Up Time at 230 VAC for Full Load	30 ms
Rise-Up Time at 115 VAC for Full Load	30 ms
Hold-Up Time at 230 VAC for Full Load	14 ms
Hold-Up Time at 115 VAC for Full Load	14 ms
Overcurrent Protection[3]	2.86 to 3.9 A
Direct Current (DC) Over Voltage Protection	64 to 75 V
Output Type	Constant Voltage

General Specifications (at 25 ℃)

Length	127 mm 5.0 in
Width	76.2 mm 3.0 in
Height	27.0 mm 1.05 in
Weight	300 g
Cooling	Natural Convection or Fan at 15 CFM
Isolation Resistance at 500 VDC (Input (I/P) - Output (O/P))	100 MO
Isolation Resistance at 500 VDC (Input (I/P) - Floating Gate (FG))	100 MO

Isolation Resistance at 500 VDC (Output (O/P) - Floating Gate (FG))	100 MO
Alternating Current (AC) Dielectric Strength (Input (I/P) - Output (O/P))	3 kV
Alternating Current (AC) Dielectric Strength (Input (I/P) - Floating Gate (FG))	1.5 kV
Alternating Current (AC) Dielectric Strength (Output (O/P) to Floating Gate (FG))	0.5 kV
Warranty	3 years
Mean Time Between Failure (MTBF) per MIL-HDBK-217F (25 ºC)	> 200 Khr

Environmental Specifications (at 25 ºC)

Operating Temperature[4]	-40 to 70 ºC
Non-Condensing Relative Operating Humidity	20 to 90 %
Storage Temperature	-40 to 85 ºC
Non-Condensing Relative Storage Humidity	10 to 95 %
Temperature Drift (0 to 50 ºC)	< 0.04 %/ºC
Vibration	10 to 500 Hz, 2G 10 min/cycle, period of 60 min, each X, Y & Z axis

EMC and Safety Specifications (at 25 ºC)

EMI Emissions	Compliance to EN55022, CISPR22 Class B (Conducted & Radiated)

Harmonic Current	Compliance to EN61000-3-2, 3
EMS Immunity	Compliance to EN61000-4-2, 3-6, 8 & 11; EN55024 heavy, light industry level, criteria A
Safety Approval	TUV EN60950-1 (Insulation Class -1) UL 60950-1
Note for EMC and Safety Specifications at 25 ºC	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. EMC and Safety Agency certs pending.

Specifications

RoHS Compliance	As of manufacturing date February 2005, all standard products meet the requirements of 2011/65/EU, known as the RoHS initiative.
Industry Standards	CB CE MIL-HDBK-217F RoHS TUV UL

Note

Note	1. All I/O connection shall Follow specified Model Label.

[1] Output voltage can be adjusted at VR51.

[2] Ripple and noise are measured at 20 MHz of bandwidth by using a 12 Inch (in) twisted-pair wire termination with a 0.1 µF and 47 µF parallel capacitors.

[3] Hiccup mode. Resets automatically once the fault condition is removed.

[4] Refer to output load derating curve.