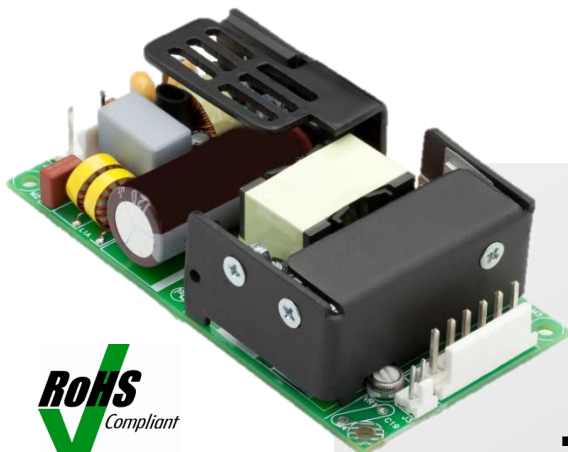


ABC60 SERIES 60W AC/DC



FEATURES

- 60 W convection cooled
- -20 to 50 deg C full load operation
- 90-264 VAC input
- 2" x 4 " x 1.2" (101.6 x 50.8 x 30.48 mm)
- No minimum load required - single output models
- Conducted EMI EN 55022-B, FCC Part 15 Level B
- ITE Safety Agency Approvals
- RoHS Compliant
- No load power < 0.3 W

APPLICATIONS

- Instrumentation
- Lighting
- Industrial Applications
- Applied Computing
- Renewable Energy
- Automation Controls
- Wireless Data
- Communication Systems
- Test and Measurement
- Robotics

TECHNICAL DATA:

Input

PARAMETER	DESCRIPTION/CONDITION	
Input voltage range.	Universal Input	90 - 264 Vac
Input frequency range	47 to 400 Hz. (3)	
Input surge current	264 Vac (cold start)	40 A max.
Safety ground leakage current	120 Vac < 500 uA	230 Vac < 1000 uA
Input current	120 Vac @ 60 W 230 Vac @ 60 W	1.5 A 0.75 A

Output

PARAMETER	DESCRIPTION/CONDITION	
Voltage Adjustment	V1	± 10%
Transient Response	Main output 50 to 100% load change, 50 Hz, 50% duty cycle, 0.1 A / u Sec, 50/60 Hz	< 10%, recovery time < 5 mSec
Over Voltage Protection	130% Typical	
Short Circuit Protection	130% Typical	
Remote Sense	V1	0.5 Vdc compensation
Efficiency	>85%	
Set Point Tolerance	V1 = ±3%, V2 & V3 = ±5%	
Rise Time	100 mSec	

Ordering Information

PRODUCT FAMILY	VOLTS (VDC)	OUTPUT CURRENT MAX (A)	MINIMUM LOAD (A) (4)	RIPPLE & NOISE	TOTAL REGULATION	OVP THRESHOLD
ABC60-1005G	5.2	10.0	0	1.25%	± 0.8%	130% Typical
ABC60-1012G	12	5.4	0	1%	± 0.8%	130% Typical
ABC60-1015G	15	4.33	0	1%	± 0.8%	130% Typical
ABC60-1024G	24	2.7	0	1%	± 0.8%	130% Typical
ABC60-1048G	48	1.35	0	1%	± 0.8%	130% Typical
ABC60-3000G	5.2	8.0	0.5	1.25%	± 0.8%	130% Typical
	12.5	3.0	0.1	1%	± 5.3%	
	-12.5	0.5	0.0	1%	± 5.3%	
ABC60-3001G	5.2	8.0	0.5	1.25%	± 0.8%	130% Typical
	23.8	1.5	0.1	1%	± 5.3%	
	-12.5	0.5	0.0	1%	± 5.3%	
ABC60-3002G	5.2	8.0	0.5	1.25%	± 0.8%	130% Typical
	14.6	2.5	0.1	1%	± 5.3%	
	-16.2	0.5	0.0	1%	± 5.3%	
ABC60-3003G	3.3	8.0	1.0	1.5%	± 0.8%	130% Typical
	5.2	3.0	0.1	1%	± 5.3%	
	-12.8	0.5	0.0	1%	± 5.3%	

Notes:

1. Maximum outputs for each output. Max power rating should not be exceeded.
2. Output noise measurement is made with a 20 MHz bandwidth using a 6" twisted pair, terminated with a 10 uF tantalum capacitor in parallel with a 0.1 uF ceramic capacitor.
3. Safety Approved: 47 to 63 Hz.
4. Minimum load specified to meet cross regulation.
5. Specifications are for nominal input voltage, 25°C and max load unless otherwise stated.
6. Class 1 models have Earthing tab J4. Class 2 models (-2 suffix) have no Earthing tab.
7. Unit will turn on at -40°C and will operate but ripple and noise will be ±3% for up to 5 minutes.
8. Specifications subject to change without notice.
9. Warranty 2 years.

General Specifications

PARAMETER	DESCRIPTION/CONDITION	
Hold Up Time	6 mSec	120 Vac input
MTBF	>100 khrs	MIL-HDBK-217F
Switching Frequency	67 kHz typical	
Isolation Voltage	Input to Output: Min 4242 Vdc	Input to Ground 2120 Vdc
Weight	150 g (0.33 lbs)	

Environmental

PARAMETER	DESCRIPTION/CONDITION	
Operating Temperature	-20 to 50° C Full Load.	Full Load
	50 to 70° C	Derate linearly to 50% at 70° C
Storage Temperature	-40 to 70° C	
Relative Humidity	95%	Non-Condensing
Altitude	Operating 10,000 ft.	Non-Operation 40,000 ft.
Conducted emissions:	EN55022, FCC part 15 Level B	
Radiated Emissions	EN55022, FCC part 15 Level B	To be controlled in end system
Electromagnetic Susceptibility	EN61000-4	2, 3, 4, 5 Level 3
Harmonic Current	EN61000-3-2, Class A	

Safety

PARAMETER	DESCRIPTION/CONDITION
EN / UL / CSA	EN60950-1+A12:2011, IEC60950-1 2 nd +A1 2009, CSA-22.2 No 60950-01-07+ A1, UL60950-1-2011

Figure 1 Output Power Vs. Temperature

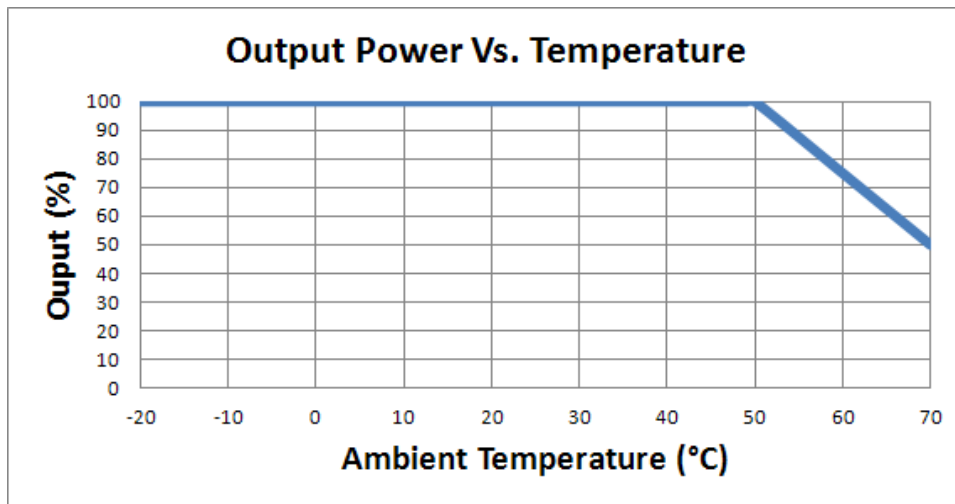
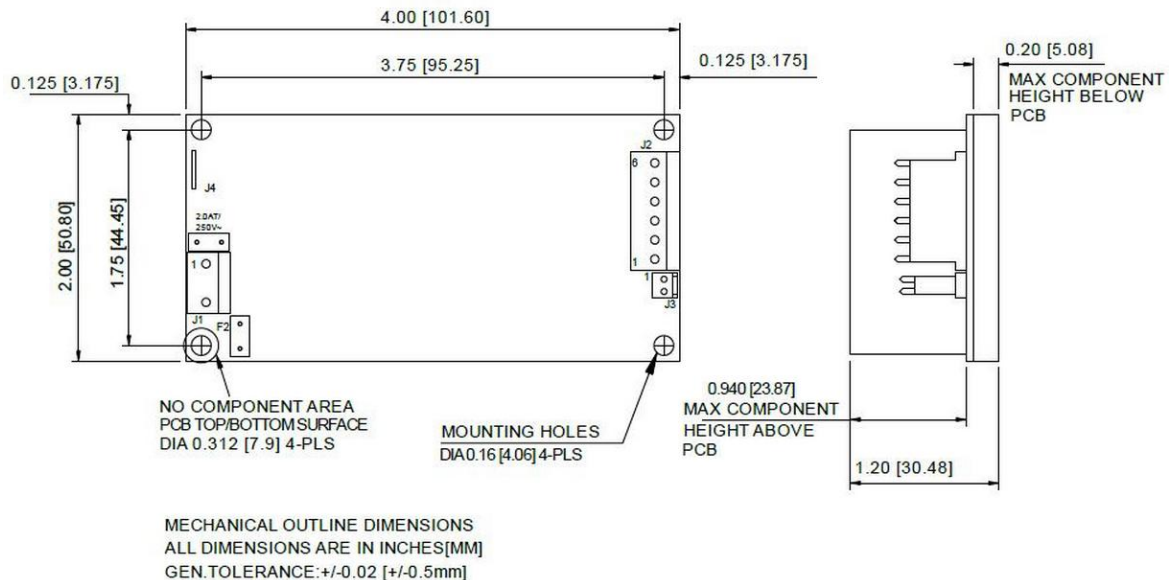


Figure 2 Dimension Drawing (Top and Side View)



Mechanical

INPUT = J1	EARTHING TAB = J4	DC OUTPUT = J2		REMOTE SENSE = J3
Pin 1: AC Neutral Pin 2: AC Line	Molex: 19705-4301	Pin 1 = V1 Pin 2 = V1 Pin 3 = RTN	Pin 4 = RTN Pin 5 = V3 Pin 6 = V2	Pin 1 = +V1 Sense Pin 2 = -V1 Sense
Mating Connector: Molex: 09-50-3031 Pins: 08-50-0106	Mating Connector: Molex: 190030001	Mating Connector: Tyco: 647402-6; Pins: 3-647409-1		Mating Connector: Molex: 22-01-2021

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