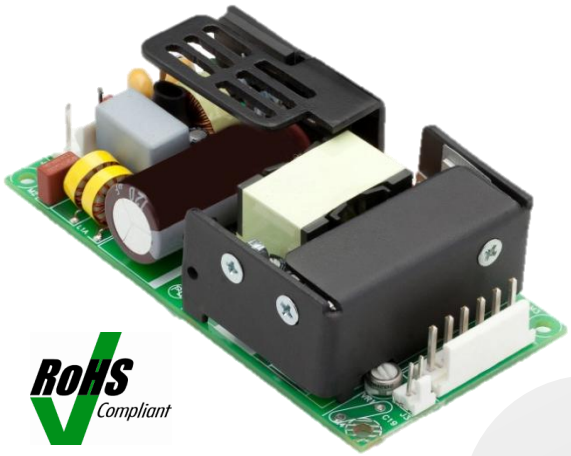
ABC40 SERIES 40W AC/DC



RoHS Compliant

FEATURES

- 40 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

- Lighting
- Industrial Processing
- Applied Computing
- Instrumentation
- Automation Control
- Robotics
- Wireless Communications
- Test and Measurement

TECHNICAL DATA:

Input

PARAMETER	DESCRIPTION/CONDITION	
Input voltage range	Universal Input	90 - 264 Vac
Input frequency range	47 to 400 Hz	Note 3
Input surge current	230 Vac (cold start)	60 A max.
Safety ground leakage current	230 Vac	1000 µA max
Input current:	120 Vac @ 40 W 230 Vac @ 40 W	0.85 A rms 0.45 A rms

Output

PARAMETER	DESCRIPTION/CONDITION	
Voltage Adjustment	V1	± 10%
Transient Response	Main output 50 to 100% load change, 50/60 Hz, 50% duty cycle, 0.1A / uSec	< 10%, recovery time < 5 mS
Over Voltage Protection	130% Typical	V1 only
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
ABC40-1005G	5.1	8.0	0	1%	± 0.8%	130% Typical
ABC40-1012G	12	3.5	0	1%	± 0.8%	130% Typical
ABC40-1015G	15	2.7	0	1%	± 0.8%	130% Typical
ABC40-1024G	24	1.7	0	1%	± 0.8%	130% Typical
ABC40-1048G	48	0.83	0	1%	± 0.8%	130% Typical
ABC40-3000G	5.2	6.0	0.5	1%	± 0.8%	130% Typical
	12.5	2.0	0.1	1%	± 5.3%	
	-12.8	0.5	0.0	1%	± 5.3%	
ABC40-3001G	5.2	6.0	0.5	1%	± 0.8%	130% Typical
	23.8	1.0	0.1	1%	± 5.3%	
	-12.8	0.5	0.0	1%	± 5.3%	
ABC40-3002G	5.2	6.0	0.5	1%	± 0.8%	130% Typical
	14.6	1.5	0.1	1%	± 5.3%	
	-14.8	0.5	0.0	1%	± 5.3%	
ABC40-3003G	3.3	6.0	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. Ripple and Noise may be 3% at initial start-up at -20 C.
8. Specifications subject to change without notice.
9. Warranty 2 years.

General Specifications

PARAMETER	DESCRIPTION/CONDITION	
Hold Up Time	6 mSec	120 / 230 Vac input
MTBF	>100 khrs	MIL-HDBK-217F
Switching Frequency	67 kHz Typical	
Isolation Voltage	Input to Output: Min 4242 Vdc	Input to Ground: Min 2120 Vdc
Weight	150 g (0.33 lbs)	

Environmental

PARAMETER	DESCRIPTION/CONDITION	
Operating Temperature	Operating	-20 to 70°C. See derating chart below.
	Storage	-40 to +85°C.
Humidity	95%	Non Condensing
Altitude	Operating 10,000 ft.	Non-operating 40,000 ft
Conducted Emissions:	EN55022, FCC part 15- B	
Harmonic current correction:	EN61000-3-2, Class A	
Radiated Emissions	EN55011-B, FCC part 15-B	To be controlled in end system
Static Discharge	EN61000-4-2 Level 3	2, 3, 4, 5 Level 3
Conducted immunity:	EN61000-4-6	

Safety

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

Figure 1 Output Power Vs. Temperature

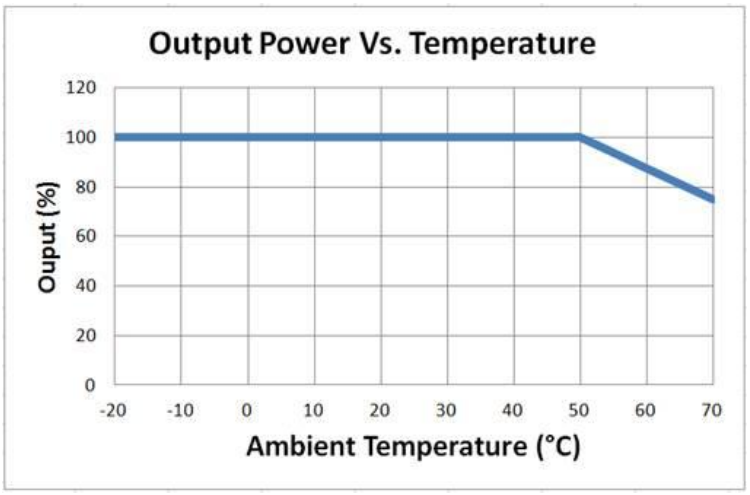
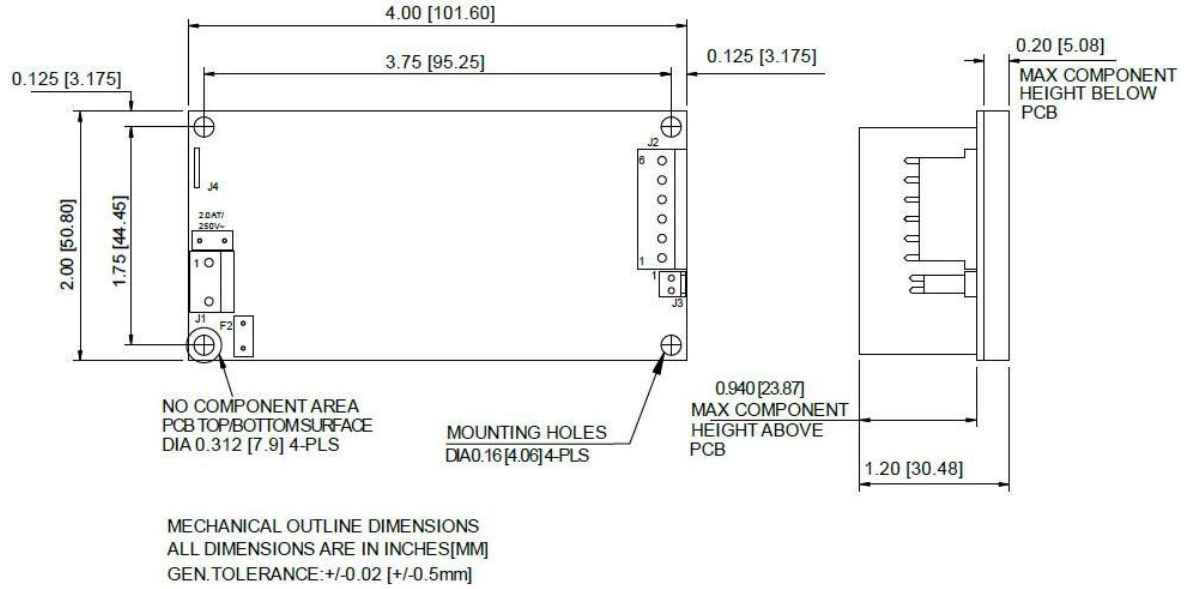


Figure 2 Dimension Drawing (Top and Side View)



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		Mating Connector: Molex: 22-01-2021

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