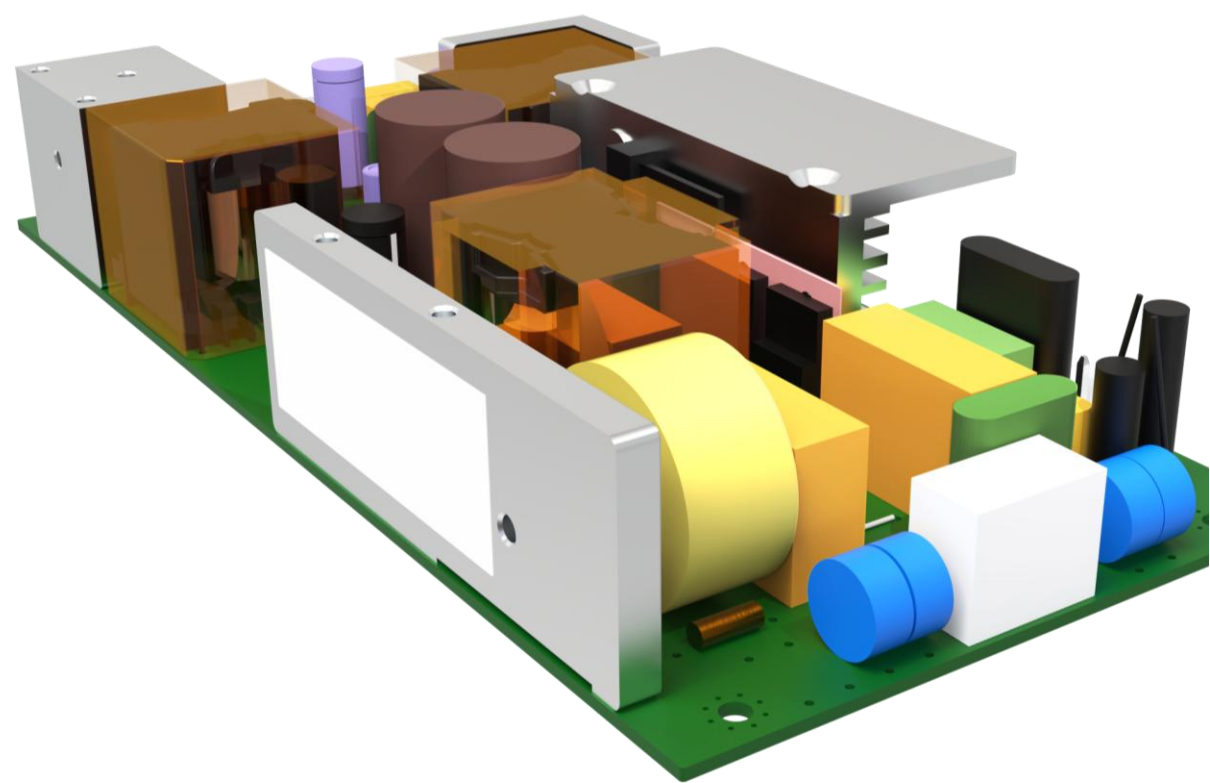


BF460-234A-R

460W Open-Frame PSU



Quality Management & Industry Standards



This specification describes the performance of a 460W AC-DC switching power supply model with 55V(380W) and 12V(80W) DC output. The PSU can afford maximum load with 55V(380W) and 12V(90W) at following conditions which mark the “Max Load” but only the rated load is specified on PSU label.

Technical Summary

Parameter	Value
Input Voltage	100-240Vac
Output Voltage	12Vdc / 55Vdc
Max Power	460W
Efficiency	80 Plus Silver
Dimensions	L190 x W90 x H34 mm
Weight	592±30 g

Features

- Class I Design
- Class B EMI
- High Efficiency Performance
- OVP, OCP, SCP, OTP Protections
- Operating Altitude: 5,000M

Applications



Certifications & Compliance

UL / CUL /CB 62368-1 3rd +CB 62368-1 2nd
TUV (62368-1 3rd,2nd) / FCC / CE / BSMI / CCC



BF460-234A-R Serial
460W AC-DC switching power supply model

TECHNICAL DATA

Input

AC input voltage range	90-264V
AC input voltage rating	100-240V
AC input frequency	50~60Hz
AC input current	6.9A@90Vac / 3.22A@180Vac
Leakage current	3.25mA
Inrush current	< 30A at 115Vac and 60Hz / < 60A at 230Vac and 50Hz at 40°C cold start.

Output

DC Output voltage	12Vdc / 55Vdc
DC Output Voltage Regulation	12Vdc +/-5% / 55Vdc +/-3%
Noise Ripple	12Vdc 240mVp-p / 55Vdc 500mVp-p <i>Note:</i> 1) The ripple voltage measurement is done with an oscilloscope that the bandwidth is set from 0Hz to 20M Hz. 2) The 55Vdc output and 12Vdc are paralleled with a 10uF E-capacitor (minimum100mΩ ESR) and a 0.47uF ceramic capacitor.
Load Regulation	12Vdc +/-5% / 55Vdc +/-3%

Overall Performance

Output Power	460W
Efficiency	80 Plus Gold <i>Note:</i> After warming up 0.5hr by rated load; measured at the end of PCB board.
Overshoot	12Vdc <5% / 55Vdc <5%
Undershoot	12Vdc <2% / 55Vdc <2%
Hold Up Time	12Vdc 20ms Min. / 55Vdc 10ms Min.
Turn on Time	2.5 Sec Max.

Protection

Short Circuit Protection	Auto Recover
Output Voltage Protection	Latch off
Output Current Protection	Auto Recover
Over Temperature Protection	Auto Recover

Environmental Requirements

Shock Test (Non-Operating)	Half sine wave shock – 140G, 2ms duration, half sine wave shock in each direction of three mutually perpendicular axes. There shall be one shock input in each direction of three mutually perpendicular axes for a total of six shock inputs. Square wave shock – 40G, 166 in/sec velocity change, square wave shock in each direction of three mutually perpendicular axes. There shall be one shock input in each direction of three mutually perpendicular axes for a total of six shock inputs.
Vibration (Operating)	Sinusoidal Vibration - 0.25 G zero-to-peak, 10 to 500 Hz, 0.25 oct/min in each of three mutually perpendicular axes. The test duration shall be one sweep from 10 to 500 to 10 Hz in each of three mutually perpendicular axes. Random Vibration - 0.002 G2/Hz, 10 to 500 Hz, nominal 1.0 Grms in each of three mutually perpendicular axes. The test duration shall be one hour/axis for total test duration of 3 hours.

Safety and EMC

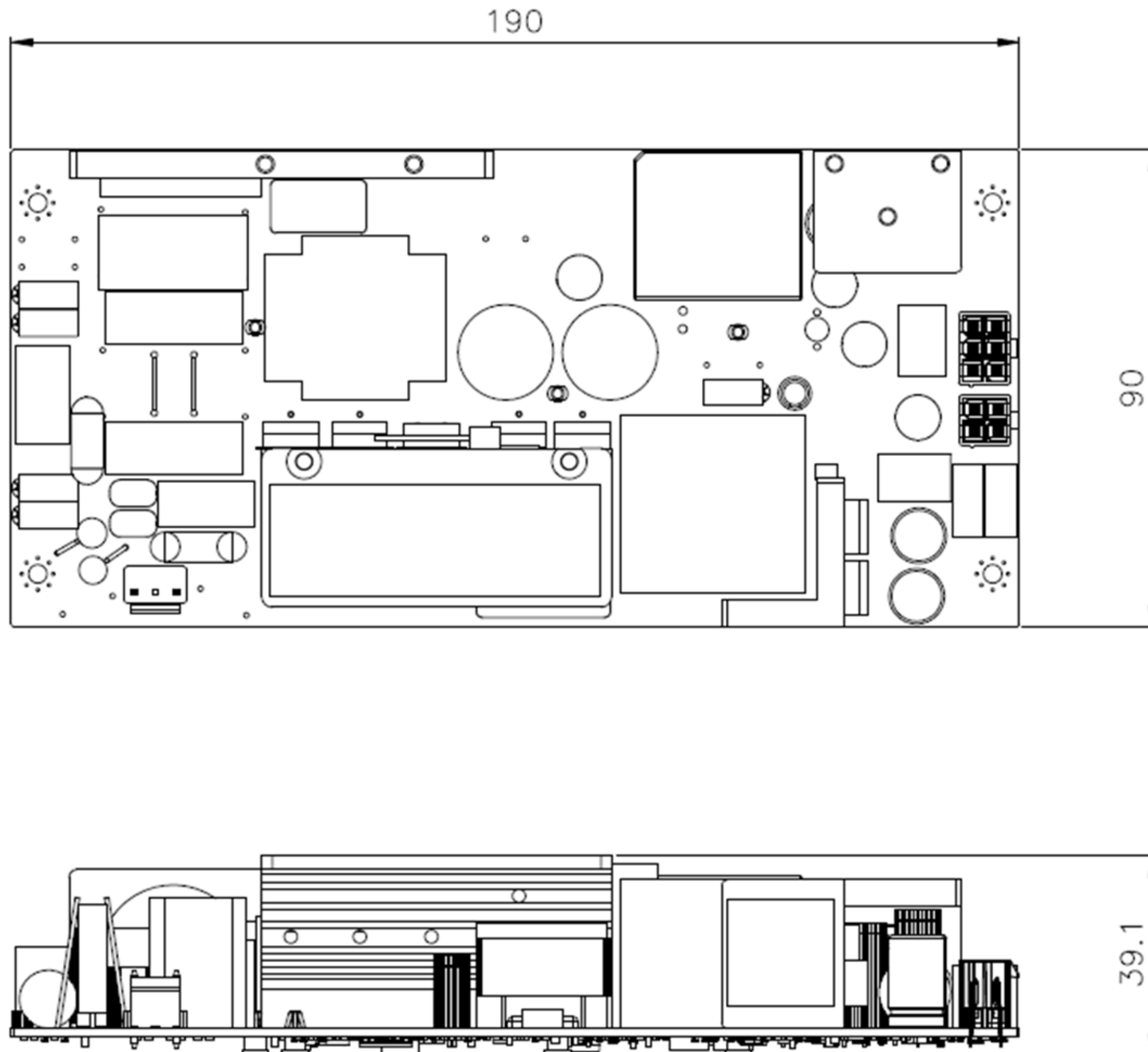
EMI	Class B
Harmonic	Class A
Immunity (EMS)	CS Class A EFT Class A Surge Class A DIP EN 61000-4-11 ESD Class A PFMF IEC 61000-4-8

BF460-234A-R Serial
460W AC-DC switching power supply model



TECHNICAL DATA

Mechanical Outline Drawing



PHIHONG 50 YEARS OF HISTORY IN THE POWER SUPPLIES INDUSTRY

Since its founding in 1972, Phihong has emerged as a prominent power supply company, serving as a key supplier of solutions for consumer, mobile/portable, enterprise, telecom, datacom, and industrial applications.

