



CBM100S SERIES

100 WATT AC-DC POWER SUPPLY WITH PFC



Features

- * Universal Input Range 90~264Vac
- * Full Load with Baseplate Cooled and no fan required
- * Wide Operating Temperature Range
- * 17mm Ultra Low Profile Package
- * Safety Meets EN60950-1
- * Built-in EN55022 Class B Filter
- * Active PFC Meets EN61000-3-2
- * High Efficiency Up to 90% Typical
- * No Load Input Power Consumption <0.5W
- * Over Temperature Protection
- * Over Voltage Protection
- * Over Current Protection



MODEL	VOLTAGE OUTPUT	OUTPUT CURRENT	RIPPLE & NOISE NOTE1	VOLTAGE ACCURACY NOTE2	LINE REG. NOTE3	LOAD REG. NOTE4	%EFF. (Typ.) NOTE5
CBM100S120	+12V	8.4A	1.0%	±1.0%	±0.5%	±1%	90%
CBM100S240	+24V	4.2A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S280	+28V	3.6A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S360	+36V	2.8A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S480	+48V	2.1A	1.0%	±1.0%	±0.5%	±1%	91.5%

Specifications

INPUT SPECIFICATIONS:

AC Input Voltage 90~264Vac
 Frequency 47 to 63Hz
 Inrush Current 100A max. @240Vac
 Leakage Current @ 264Vac 3.5mA max.

OUTPUT SPECIFICATIONS:

Isolation Input to output = 4242VDC
 Total Rated Output Power 100W
 Hold-up Time 12ms typ.
 Over Voltage Protection Recycle AC input to restart
 Short Circuit Protection Hiccup mode(Auto Recovery)
 Over Current Protection Auto Recovery
 Over Temperature Protection Auto Recovery
 Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$

GENERAL SPECIFICATIONS:

Operating Ambient Temperature see derating
 Storage Temperature -40~100 $^{\circ}\text{C}$
 Humidity 93% RH max. Non condensing
 Switching Frequency 130KHz Typical
 MTBF MIL-HDBK-217F, GB, 25 $^{\circ}\text{C}/115\text{VAC}$ 100Khrs min.
 No Load Input Power Consumption.....<0.5W
 Altitude2000M
 Dimensions.....4.60x2.40x0.67 Inches (116.80x61.00x17.00mm)
 Weight 236g(0.52Pounds)

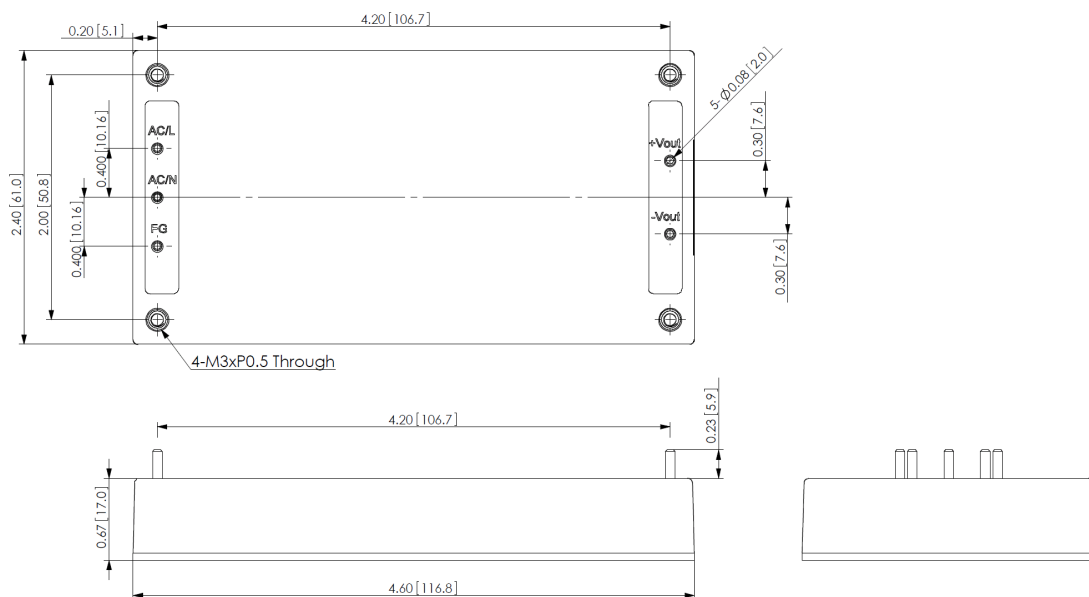
SAFETY AND EMC:

Emission and Immunity EN55022 Class B, FCC Part 15 Class B
 EN61000-6-3, EN61000-3-2, EN61000-3-3
 EN55024, EN61000-6-1, EN61204-3
 Safety IEC60950-1, EN60950-1, UL60950-1

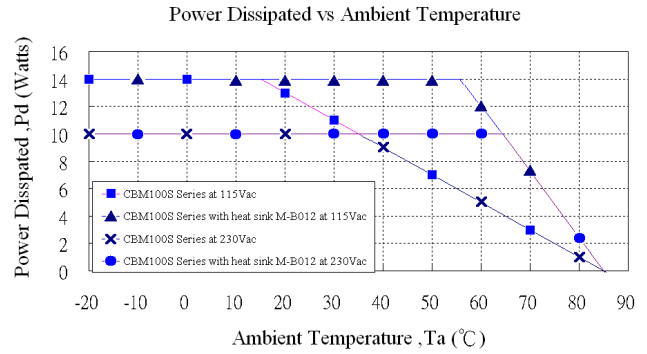
Mechanical Specification

All Dimensions In Inches[mm]

Tolerance: Inches:x.xx = ± 0.02 , x.xxx= ± 0.010
 Millimeters:x.x = ± 0.5 , x.xx ± 0.25



CBM100S Series Derating Curve



NOTE:

1. CBM100S Series: Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
2. Voltage accuracy is set at 60% rated load.
3. Line regulation is measured from High Line to Low Line with rated load.
4. Load regulation is measured at 60% $\pm$ 40% rated.
5. Typical efficiency with 230Vac and full load at 25 $^{\circ}\text{C}$
6. Power dissipation (P_d): $P_d = P_i - P_o = P_o(1-\eta)/\eta$