CBM100S SERIES

100 WATT AC-DC POWER SUPPLY WITH PFC

E176177

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 EN55032 Class B Filter
* Active PFC Meets EN61000-3-2
* High Efficiency up to 91% 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	+12 V	8.4 A	1.0%	±1.0%	±0.5%	±1%	90%
CBM100S240	+24 V	4.2 A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S280	+28 V	3.6 A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S360	+36 V	2.8 A	1.0%	±1.0%	±0.5%	±1%	91%
CBM100S480	+48 V	2.1 A	1.0%	±1.0%	±0.5%	±1%	90.5%

Specifications

INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac
120~370Vdc
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 ..... ±0.05%/℃

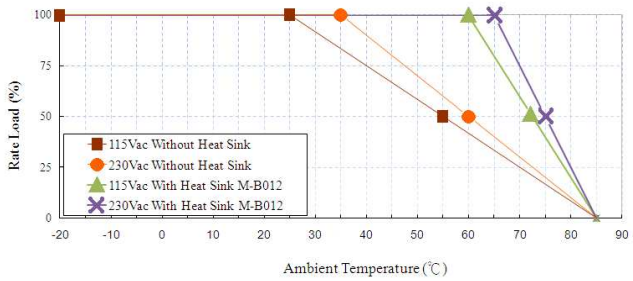
GENERAL SPECIFICATIONS:

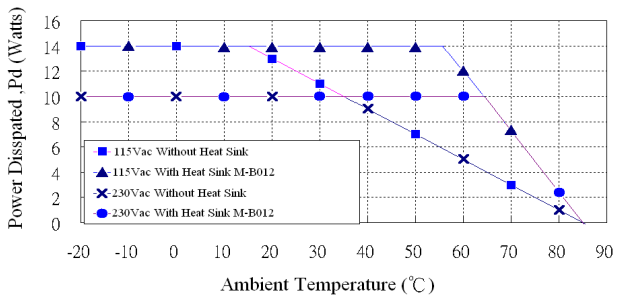
Operating Ambient Temperature ..... -20~+85℃(see derating curve)
Operating Case Temperature ..... +85℃ max.
Storage Temperature ..... -40~100℃
Humidity ..... 93% RH max. Non condensing
Switching Frequency ..... 130KHz Typical
MTBF ..... MIL-HDBK-217F, GB, 25℃/115VAC ..... 100Khrs min.
No Load Input Power Consumption.....<0.5W
Altitude 2000m
Dimensions.....4.60x2.40x0.67 inches (116.8x61.0x17.0mm)
Weight .....236g(0.52Pounds)

SAFETY AND EMC:

Emission and Immunity ..... EN55032 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

CBM100S Series Derating Curve



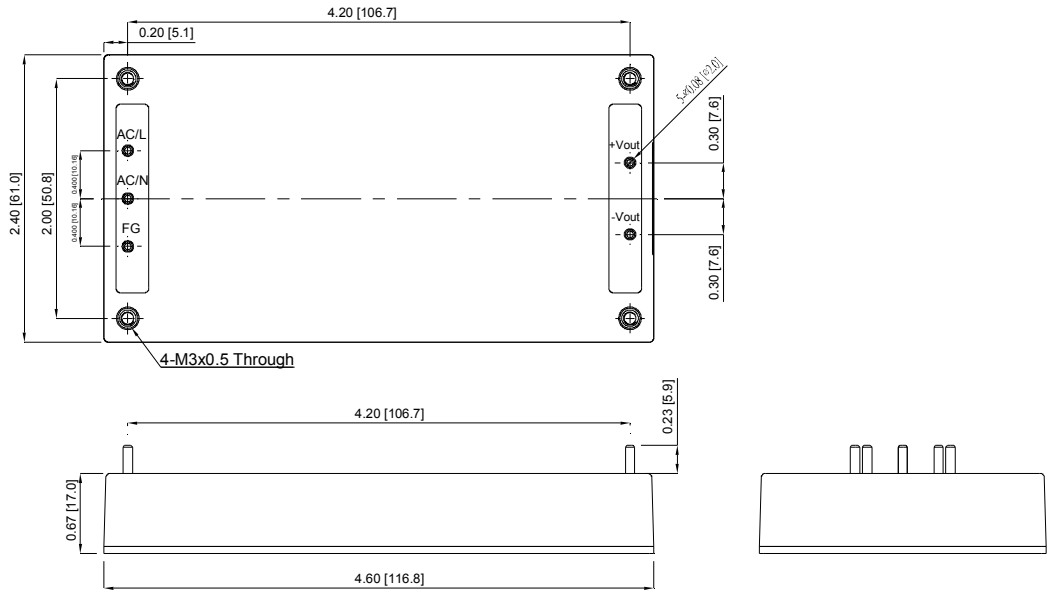


NOTE:

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%±40% rated.
5. Typical efficiency with 230Vac and full load at 25℃
6. Power dissipation (P_d): $P_d = P_i - P_o = P_o(1-\eta)/\eta$

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



Typical at 25℃, 230Vac and 75% rated load, unless otherwise Specified