



E176177



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 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%/°C

GENERAL SPECIFICATIONS:

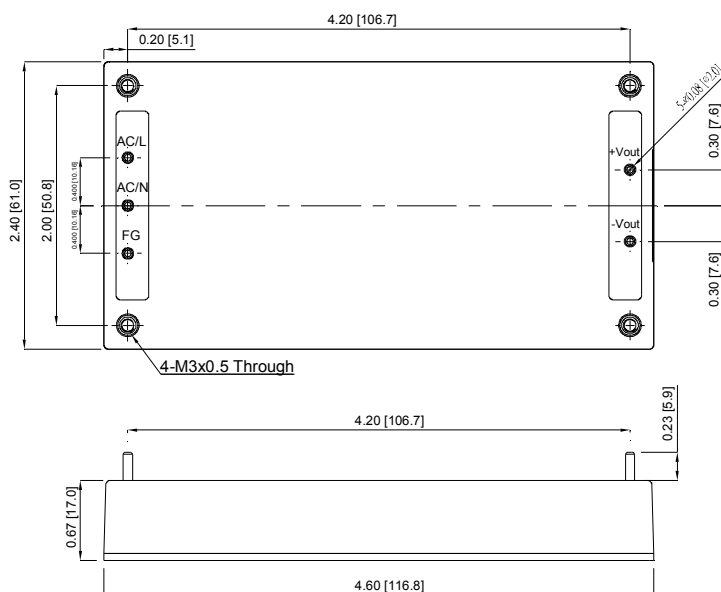
Operating Ambient Temperature	-20~+85°C (see derating curve)
Operating Case Temperature	+85°C max.
Storage Temperature	-40~100°C
Humidity	93% RH max. Non condensing
Switching Frequency	130KHz Typical
MTBF	MIL-HDBK-217F, GB, 25°C/115VAC 100Khrs min.
No Load Input Power Consumption.....	<0.5W
Altitude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

SAFETY AND EMC:

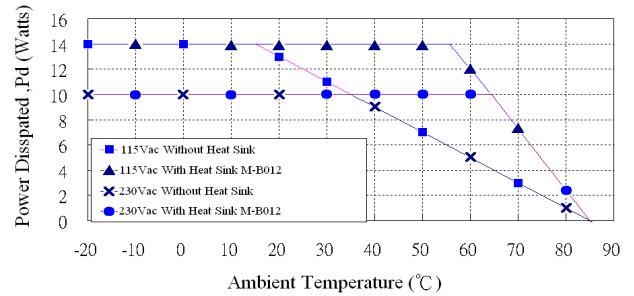
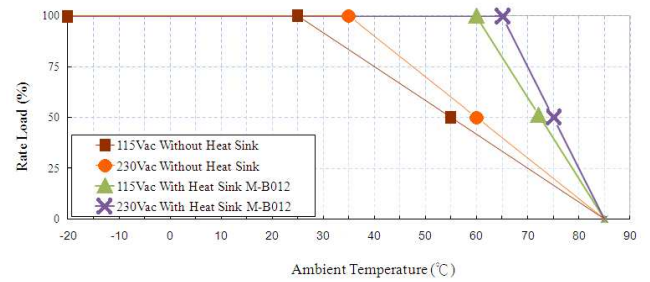
Emission and Immunity	EN55032 Class B, FCC Part 15 Class B EN61000-6-3, EN61000-3-2, EN61000-3-3 EN55024, EN61000-6-1, EN61204-3
Safety	IEC60950-1, EN60950-1, UL60950-1

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