

CBM100S

S E R I E S

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

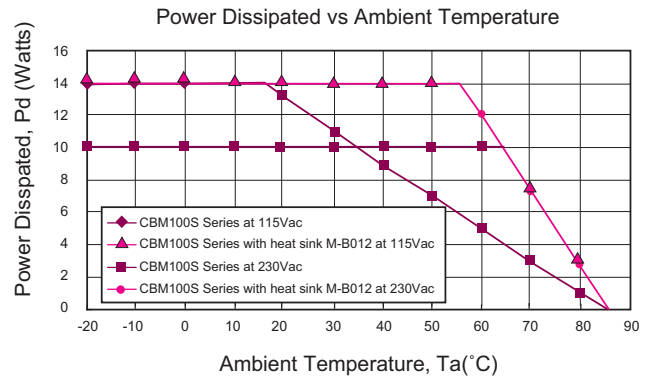
GENERAL SPECIFICATIONS:

Operating Ambient Temperature see derating curve
 Storage Temperature -40~100°C
 Humidity 93% RH max. Non condensing
 Switching Frequency 130KHz Typical
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 100 hrs min.
 No Load Input Power Consumption..... <0.5W
 Altitude 2000M
 Dimensions..... 4.598x2.402x0.669 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

CBM100S Series Derating Curve NOTE6



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 and 25°C.Ta.
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 (Pd): $Pd = Pi - Po = Po(1 - \eta) / \eta$

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

