



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:

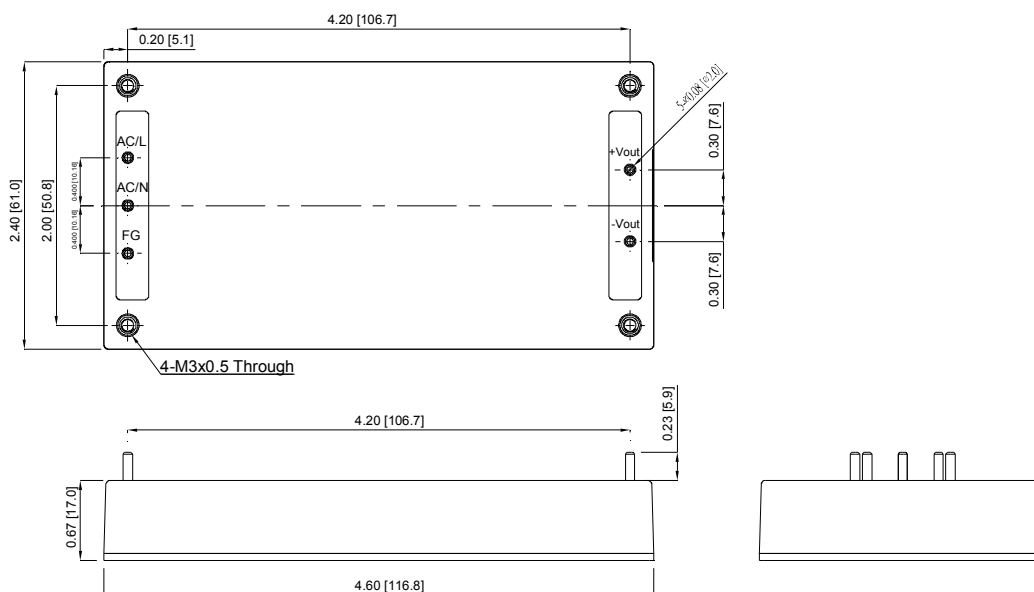
Operating Ambient Temperature -20~+85°C (see derating curve)
 Operating Case Temperature +85°C max.
 Storage Temperature -40~100°C
 Humidity 93% RH max. Non condensing
 Switching Frequency 130KHz Typical
 MTBF MIL-HDBK-217F, GB, 25°C/115VAC 100Khrs min.
 No Load Input Power Consumption.....<0.5W
 Altitude2000m
 Dimensions.....4.60x2.40x0.67 inches (116.8x61.0x17.0mm)
 Weight236g(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

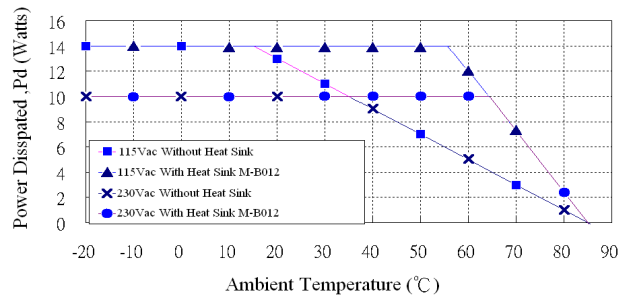
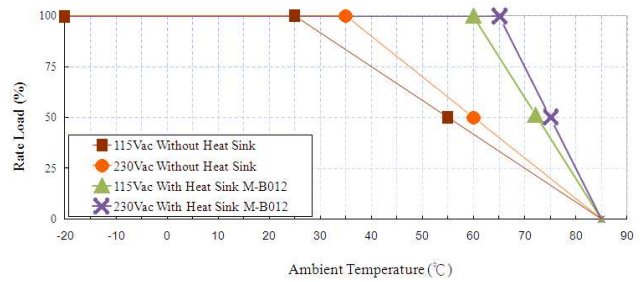
Mechanical Specification

All Dimensions In Inches[mm]
 Tolerance Inches:x.xx = ± 0.02 , x.xxx± 0.010
 Millimeters:x.x = ± 0.5, x.xx±0.25



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

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 (Pd): $P_d = P_i - P_o = P_o(1-\eta)$