

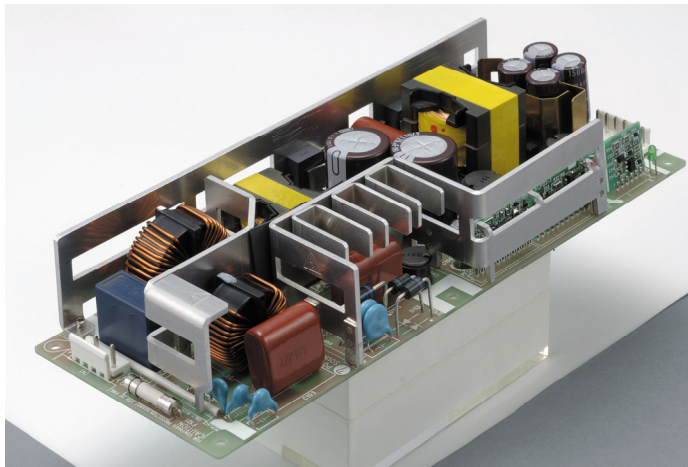


ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

**AC/DC SWITCHING POWER SUPPLY
SINGLE CHANNEL OUTPUT
300 WATTS
UNIVERSAL INPUT**

BBS SERIES



General Description

The BBS series is a powerful and compact 300W power supply. In comparison to other 300W power supplies, the BBS300 series is roughly half the size. Its fan-less cooling is a result of its high efficiency at 88.5%. It saves energy by suppressing heat while maintaining high reliability.

Features

1. Small-sized and lightweight
2. High efficiency 24V output 88.5% @100VAC input, 90% @240VAC input
3. Over current protection
4. Over voltage protection
5. Compliant with EMC directive

Application

Broad needs

Input

| | |
|-----------------------------|--|
| Input Voltage: | AC100~240V |
| Input Voltage Range: | AC90~264V (DC120~350V) (Does not operate continuously at 85~90AC input range) |
| Input current: | 1.5~3.4A |
| Frequency: | 50/60 Hz |
| Frequency Range: | 47~63Hz |
| Phase: | Single |
| Inrush Current: *1 | 20A (Typ.) at AC100VAC 40A (Typ.) 240VAC |

Options

- Wire harness set (40m)
- Connector type (terminal type standard)
- Vertical/horizontal mount
- Leakage current protection
- Remote ON/OFF
- Remote control "-R" for 24V series
- Certified:



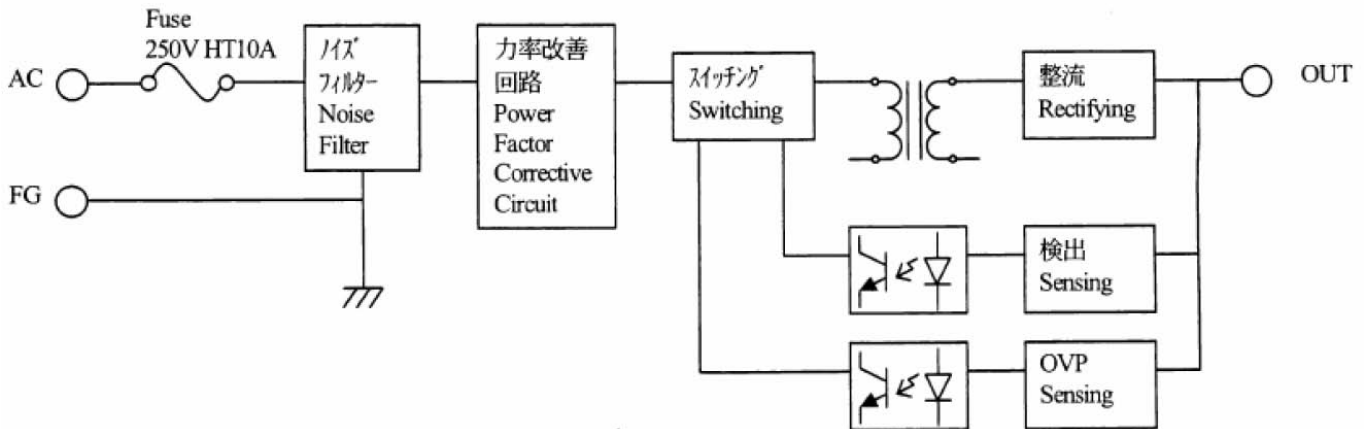


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| Output Characteristic | Unit | Models | | |
|--------------------------------------|------|---|-----------|-----------|
| | | BBS300-24 | BBS300-36 | BBS300-48 |
| Output Voltage | Vdc | 24 | 36 | 48 |
| Output Current | A | 12.5 | 8.33 | 6.25 |
| Voltage Adjust Range | V | ±5% of Rated Output Voltage (at no load within the input range) | | |
| Ripple & Noise(max) | mVpp | 340 | 360 | 480 |
| Rise time | mS | 1000 mS max | | |
| Hold up time | mS | 20 mS typical | | |
| Regulation | | | | |
| a. Line Regulation [max] | mV | 192mV Max. | Info soon | Info soon |
| b. Load Regulation | mV | 216mV Max. (85~264VAC input voltage, 0~100% Load) | Info soon | Info soon |
| c. Temperature Coefficient | °C | V1: 7.2mV/°C (-10~71°) | | |
| d. Drift(maximum) | mV | V1: 135mV Max. up ~8H after 1H | Info soon | Info soon |
| e. Dynamic Load Regulation (typ.) *2 | mV | ± 1200mV typ.@ rated input; load change between 25%~75% | Info soon | Info soon |
| f. Recovery Time *2 | mS | 30mS typ.@ rated input; load change between 25%~75% | | |
| Efficiency *1 | % | 88.5% typical | | |
| Power Factor *1 | | 0.98 at 100VAC / 0.92 at 240VAC | | |

11. BLOCK DIAGRAM





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| Environmental Specification | |
|----------------------------------|--|
| Operating Temperature*3 | -10 to +71 °C |
| Derating Curve | -3.5%/°C (from 50°C to 71°C), not available at > 71°C |
| Operating Humidity | 20~90[%RH] (non-condensing) |
| Storage Temperature | -20 to +80°C except thermal shock |
| Storage Humidity | 10~90%/RH(non-condensing) |
| Withstanding Voltage | Primary-Secondary AC3,000V for 1minute Primary-Frame Ground AC2,00V for 1minute Secondary-Frame Ground AC1,000V for 1minute *Sensory Current: P-S, P-FG, S-FG (20mA)] |
| Isolation Resistance | Primary-Secondary-Frame Ground 100MΩ(minimum) by DC500V insulation tester |
| Vibration | 5~10Hz: 10mm XYZ Axis. 10~55Hz:19.6 m/ s ² XYZ Axis. |
| Shock | 196 m/s ² on x,y,z axis |
| Cooling | Convection |
| Leakage current | 1mA max (25°C, within input voltage range) |
| Environmental Agencies | |
| Line Conducted Noise [EMI] | FCC Part 15 class A; VCCI Class A; EN55022 Class A Complied with |
| Line Harmonic Distortion/Current | IEC61000-3-2 Complied with |
| Safety | Complies with UL: UL60950-1 C-UL: CSA60950-1 SEMKO: EN60950-1 CE: EN60950-1 (LVD) |
| Function/Protection | |
| Over current Protection | Vertical Current limiting, automatic recovery However, overload and short circuit operation over 30 seconds are not guaranteed. |
| Over voltage Protection | Output shutdown at more than 115% of rated output volt (33.6V Max.), recover after 3 minutes |
| Remote Sense | Not available |
| Remote Control | Available |
| Series Operation | Not available |
| Parallel Operation | Not available |
| Input Fuse | Built in (AC250[V], 10A) |
| Mechanical | |
| Dimension [mm] | 85W × 222L × 40H |
| Weight [g] (typical) | 650g |

Conditions:

*1 Rated input and Rated output

*2 at Output current quick change 25% to 75%

*3 At 100% load (convection cooling)



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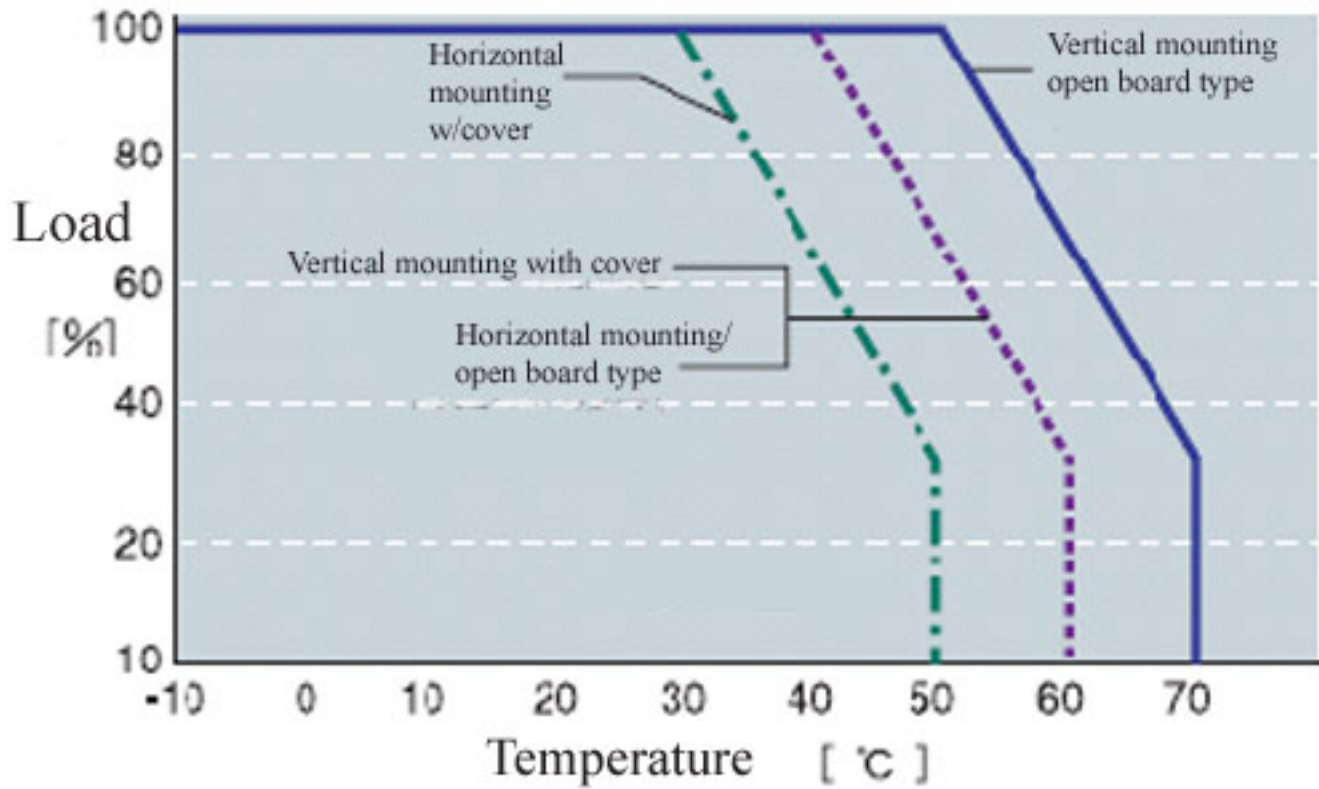
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HIGH QUALITY SWITCHING POWER SUPPLIES

Derating curve





■ BBS300-24 (300W)

Output current and efficiency

