

# AVAIR

## AV-800/AV-800BC SERIES SWITCHING POWER SUPPLY

### INSTRUCTION

AV-800 series is lightweight, high performance, high efficiency, durable, switching power supply and with highly visible back light, easy to read dual meters .

### Specification

Input voltage: AC 90~125 or AC 200~240 inside selectable  
Output voltage : DC 4.0V~16V variable(For AV-800 series with meter)  
Fixed 13.8V (For AV-800 series W/O meter)  
Output voltage regulation : less than 1%  
Ripple: less than 9mVp-p at rated load  
Protection:  
1 short protection: it will reduce the output voltage down to 0.1v Amps down to 0.4Amps and the warning led will light up when short condition remove it will automatic restart the power supply to normal condition.  
2 overload protection: same as above  
3 over voltage protection(if over Dc16v):same as above  
4 over temperature protection: AV-800 series has two stage over temperature protection function see attached Fig5.  
Output current: AV-825BC :Max 25 Amps continuous 22 Amps  
AV-830BC :Max 30 Amps continuous 25 Amps  
Dimension :165(D)X147(W)55(H)mm  
Weight : AV-825BC/AV-830BC 1.4KG

### Function Description

Fig 1. For AV-800BC without meter

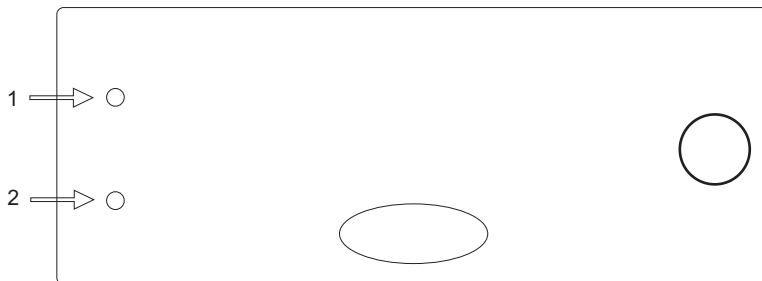


Fig 2. For AV-800BC with meter

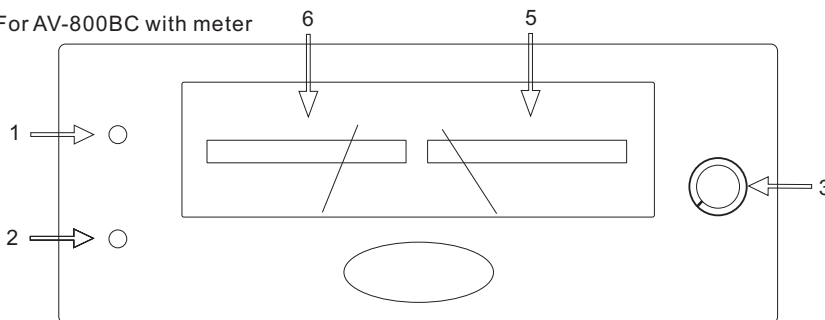
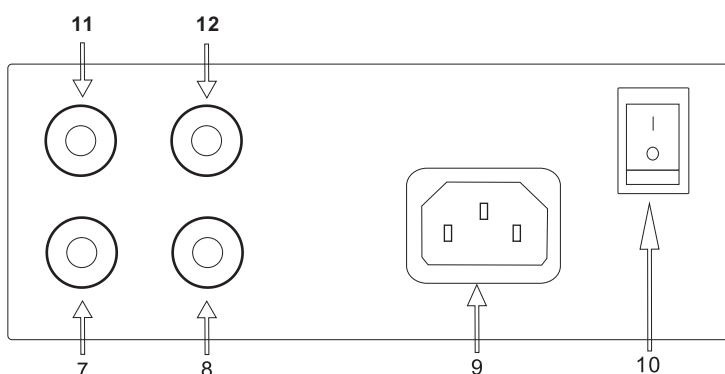


Fig 3-2



- 1 Power indicator : Light up when the unit turn on.
- 2 Warning indicator: Light up when output terminal short or over load, over voltage( preset 16Dcv), component over hot.
- 3 Voltage adjust knob: Turn clockwise increase the output voltage ,when at center position factory preset Dc 13.8v.
- 4 Noise Offset knob: Adjust the switching frequency of the power supply from 19kHz~31kHz. this function is special design for communication radio use. when you meet noise from the radio try to turn this knob clockwise or counter clockwise it can reduce the noise output of the radio. Factory preset this knob at center position
- 5 Amps indicator meter: Display the output current when connect any device.
- 6 Voltage indicator meter: Display the output voltage.
- 7 Output terminal: Negative polar of Dc output
- 8 Output terminal: Positive polar of Dc output
- 9 Ac input socket: Ac 90v~120v or Ac 200v~240v
- 10 Power switch: Turn the unit on or off
- 11 Output terminal: Negative polar of Battery
- 12 Output terminal: Positive polar of Battery

## Caution

- 1 This power supply is natively ground, always use the AC outlet with ground terminal.
- 2 Before replacing a fuse make sure you have unplug the Ac plug and never use unproperly fuse value.
- 3 Do not block the air convection slits to keep the efficient heat radiation.

Fig 5. Heat sink temperature Vis Max output Amps

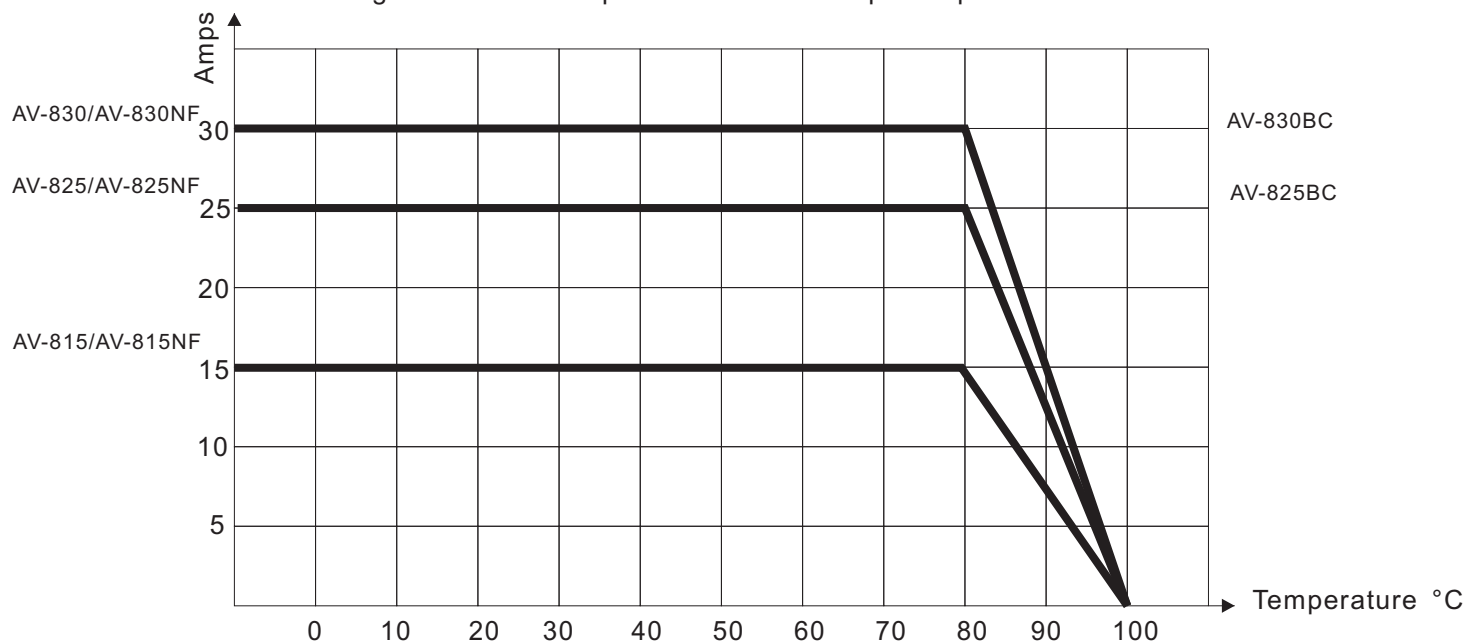
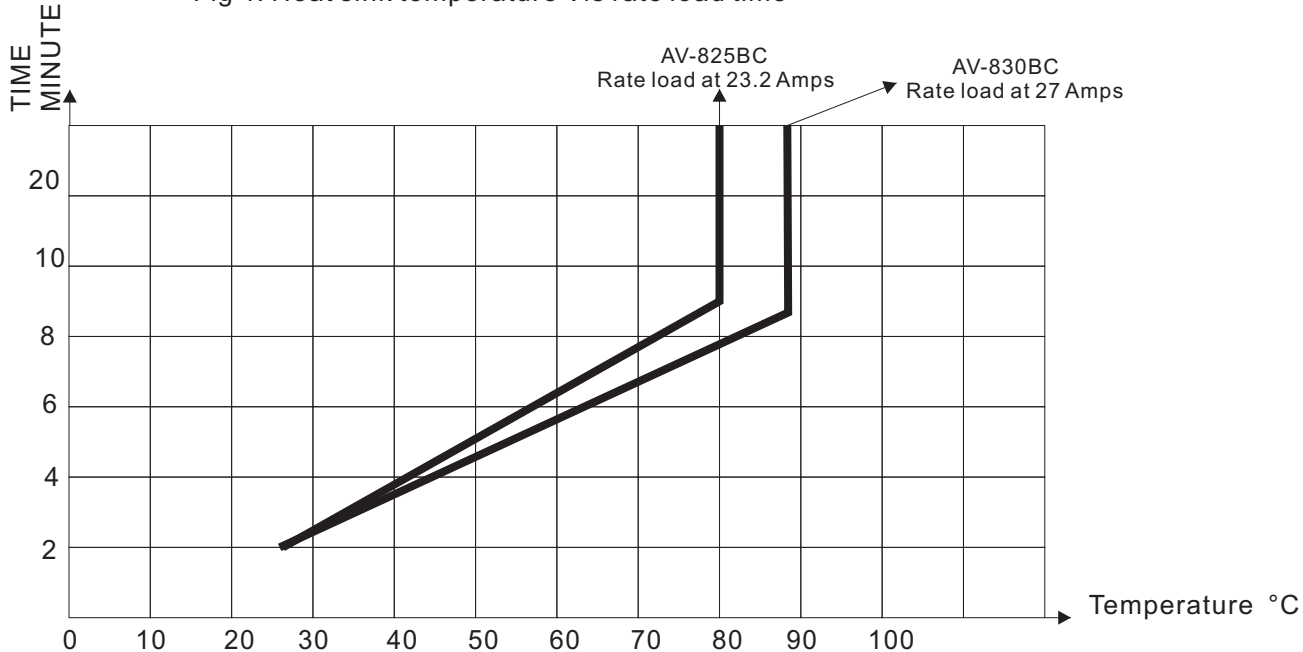


Fig 4. Heat sink temperature Vis rate load time



Example for AV-830 rate load condition: load 25 Amps continuous 6 seconds then load 30 Amps continuous 4 seconds in a circle for 24 hours.

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- 3 Do not block the air convention slits to keep the efficient heat radiation.

Fig 5. Battery charge current Vis time output Amps

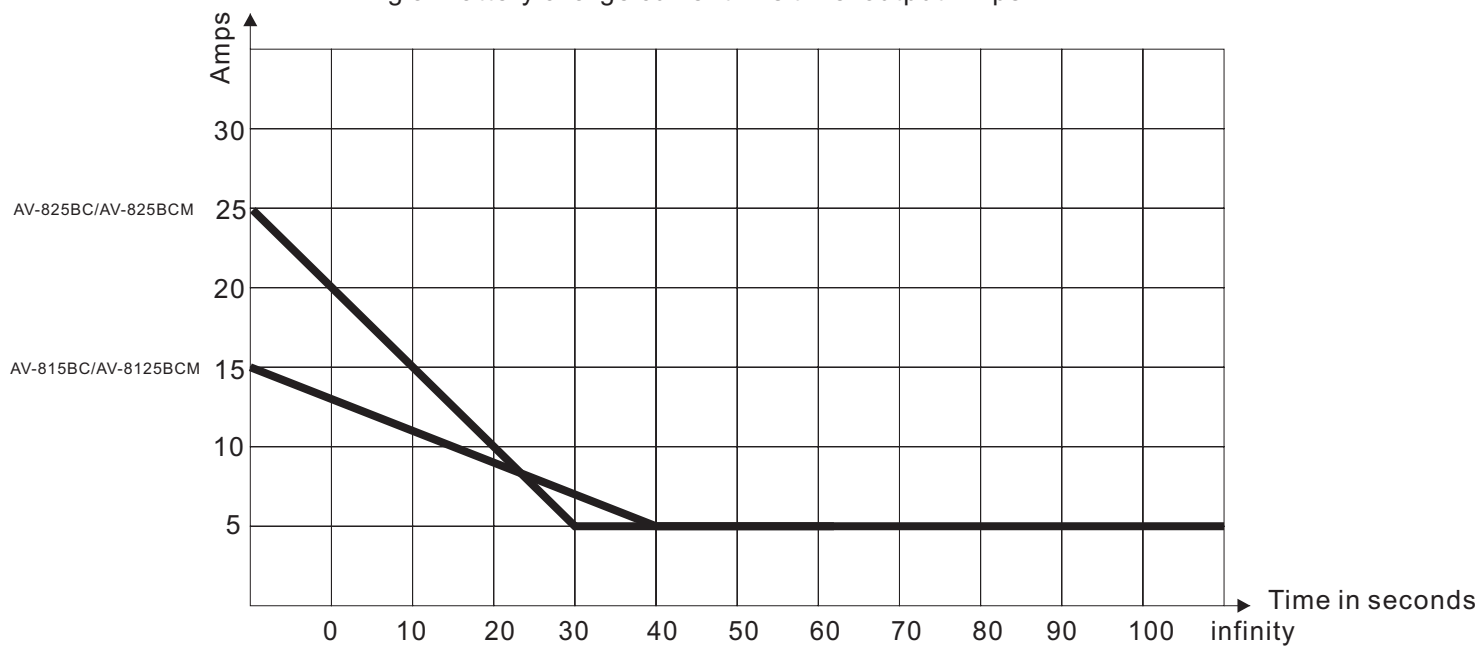


Fig 4. CHARGE CURRENT VIS BATTERY VOLTAGE

