

# AVAIR

## AV-800/AV-800NF 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  
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-815/AV-815NF :Max 15 Amps continuous 13 Amps

AV-825/AV-825NF :Max 25 Amps continuous 22 Amps

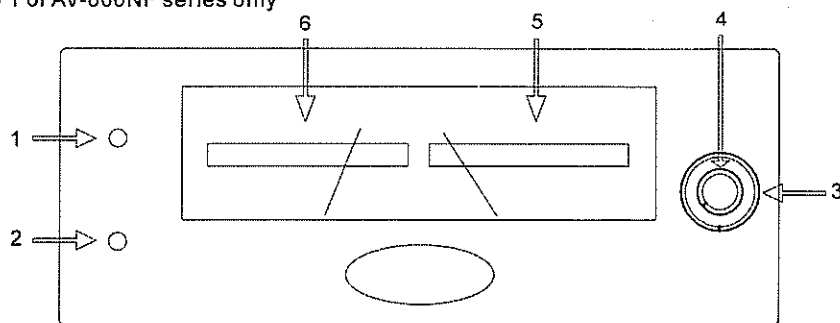
**AV-830/AV-830NF :Max 30 Amps continuous 25 Amps**

Dimension : 165(D)X147(W)55(H)mm

Weight : AV-815 1.0Kg AV-825 1.2Kg AV-830 1.3Kg

### Function Description

Fig 1. For AV-800NF series only



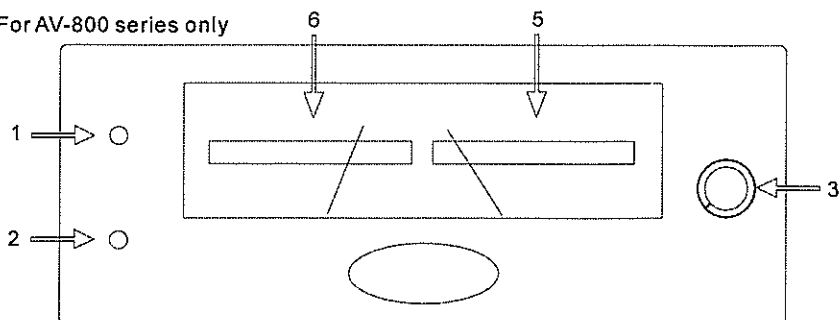
1 Power indicator : Light up when the unit turn on.

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

Fig 2. For AV-800 series only



5 Amps indicator meter: Display the output current when connect any device.

6 Voltage indicator meter: Display the output voltage

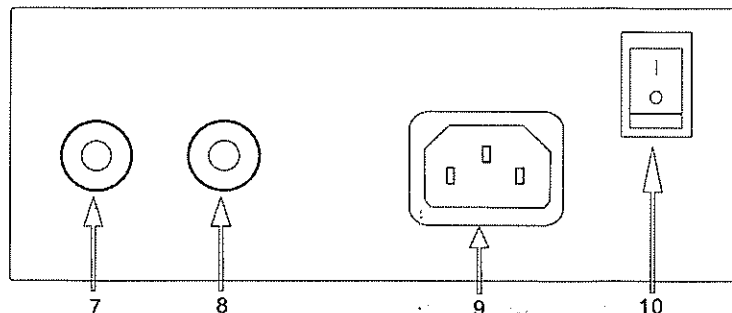
7 Output terminal: Negative polar of Dc output

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

Fig 3.



## 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 improperly fuse value.
- 3 Do not block the air convention slits to keep the efficient heat radiation.

Fig 5. Heat sink temperature Vis Max output Amps

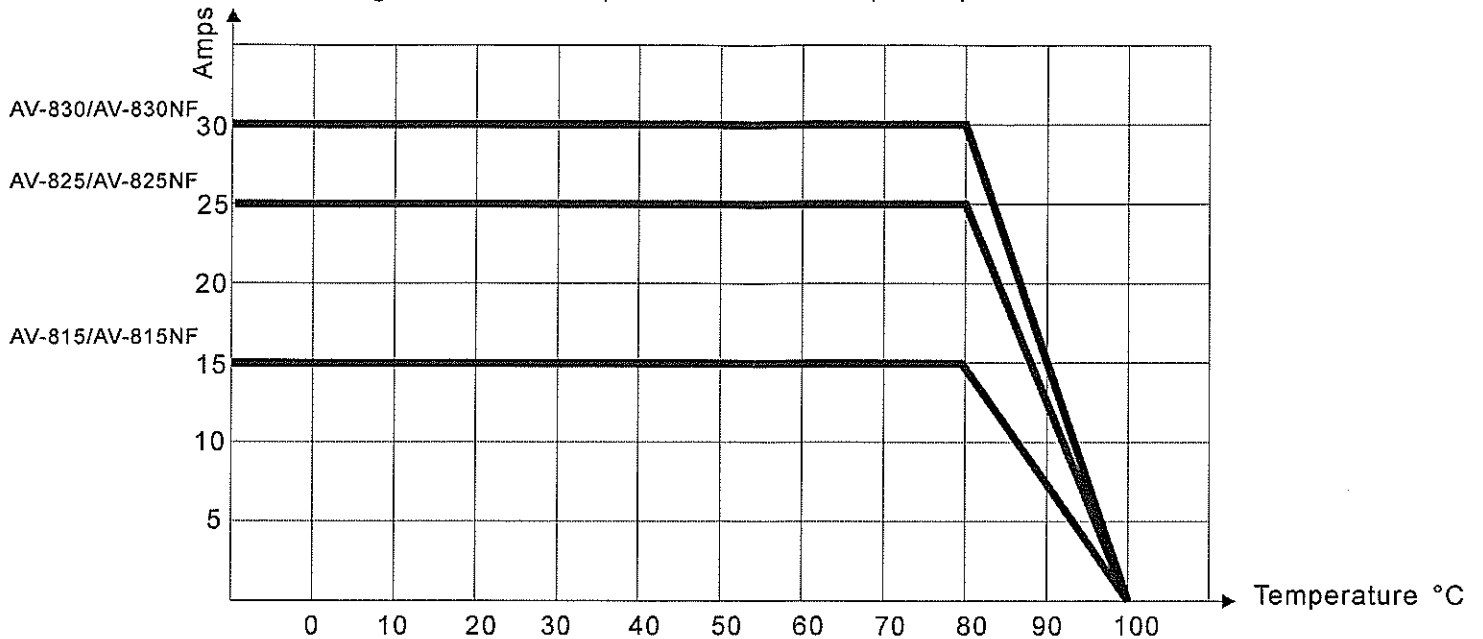
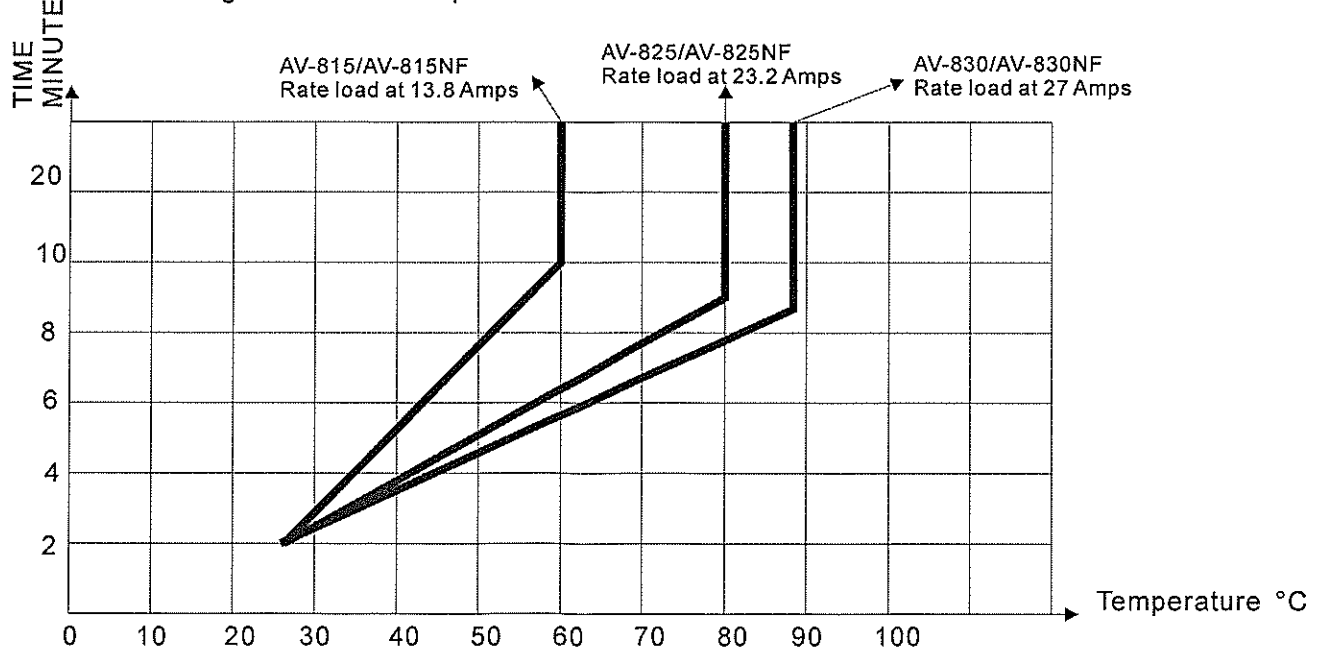


Fig 4. Heat sink temperature Vis rate load time



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.

AVAIR ELECTRONICS CO.