

150 Watt, HRP(G)-150 Series, Enclosed Power Supply

ALL PSU LTD
Electronic Power Solutions

- Universal AC Input With Active PFC
- Cooling By Free Air Convection
- Ultra High Reliability, 5 Year Warranty
- Short Circuit, Over Voltage, Over Load Protection
- Full Approvals : UL/CUL/TUV/CB/CE
- Remote On/Off Control (G Option)
- Built in Remote Sense Function
- No Load Power Consumption <0.5 W (G Option)
- Withstand 300VAC Surge Input for 5 Seconds



Specification

| | |
|----------------------------------|--|
| Input Voltage..... | 85~264 VAC, 47~63 Hz (120-370 VDC) |
| Power Factor..... | 0.95 @ 230 VAC, 0.99 @ 115 VAC |
| Inrush Current..... | (typ.) 35A / 115VAC, 70A / 230VAC |
| Output Voltage..... | See table below (plus +/-15% typ pot adjustment range) |
| Over Load Protection..... | 105~135% O/P Constant current limiting, auto recovery |
| Over Voltage Protection..... | 115~145% |
| Over Temperature Protection..... | Shuts Down, Automatic recover when cooled |
| Set Up, Rise, Hold Up Time..... | (typ.) 3000ms, 50ms, 16ms @ Full Load 230 VAC |
| Withstand Voltage..... | I/P-O/P: 3 kVAC, I/P-F/G: 1.5kVAC, O/P-F/G: 0.5kVAC |
| Operating Temperature | -40 to +70 °C, see derating curve |
| Safety Standards..... | UL60950-1 TUV EN60950-1 |
| EMC..... | EN55022, (CISPR22) Class B, EN61000-4-2,3,4,5,6,8,11 EN61000-3-2,3 ENV50204, EN55024, EN61000-6-2, Heavy Industrial Level Criteria A |
| MTBF..... | 213.4K hrs, MIL-HDBK-217F @ 25°C |
| Mechanical | 159 x 97 x 38 mm |
| Connections Input & Output..... | Screw Terminals |

Models and Ratings

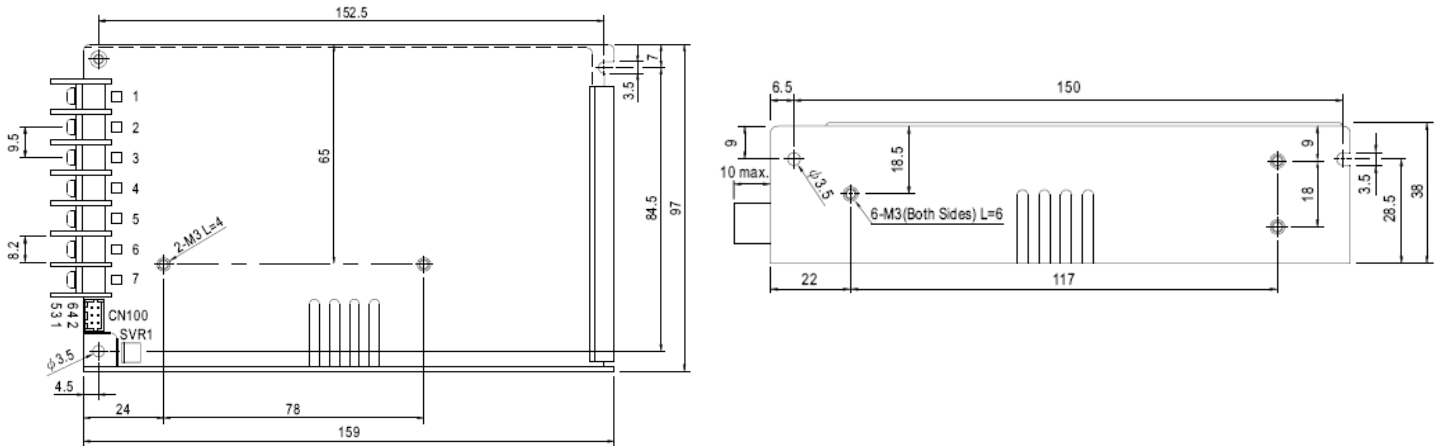
| Model | Output Voltage | Output Range | Max Output Current | Efficiency |
|----------------|----------------|----------------|--------------------|------------|
| HRP(G)-150-3.3 | 3.3 V | 2.8 to 3.8 V | 30.0 A | 78.5 % |
| HRP(G)-150-5 | 5 V | 4.3 to 5.8 V | 26.0 A | 84 % |
| HRP(G)-150-7.5 | 7.5 V | 6.8 to 9 V | 20.0 A | 86 % |
| HRP(G)-150-12 | 12 V | 10.2 to 13.8 V | 13.0 A | 87 % |
| HRP(G)-150-15 | 15 V | 13.5 to 18 V | 10.0 A | 87 % |
| HRP(G)-150-24 | 24 V | 21.6 to 28.8 V | 6.5 A | 87 % |
| HRP(G)-150-36 | 36 V | 28.8 to 39.6 V | 4.3 A | 88 % |
| HRP(G)-150-48 | 48 V | 40.8 to 55.2 V | 3.3 A | 88 % |

Note : (G) versions include 5 Volt stand-by and <0.5 Watt No Load Input Current.

Please see next page for mechanical drawings.

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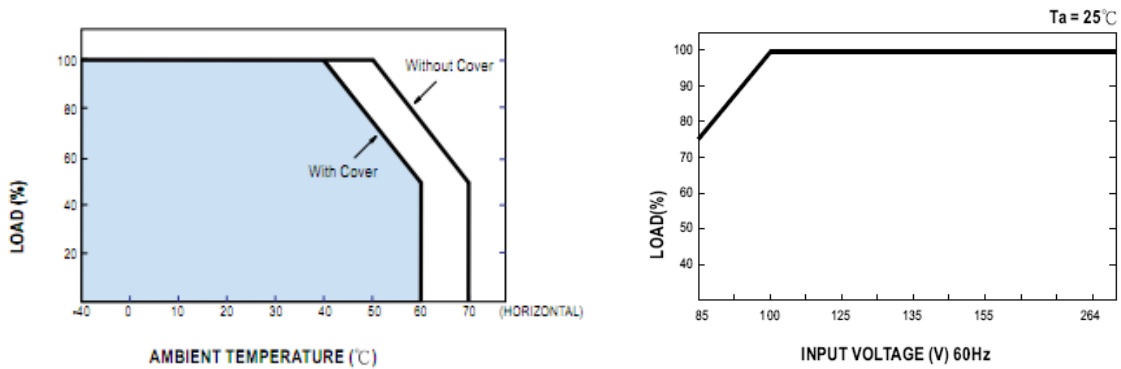
Mechanical Drawings.



| AC Input & DC Output Connections | | | |
|----------------------------------|-------------|----------|--------------|
| Terminal | Function | Terminal | Function |
| 1 | AC Live | 4, 5 | DC Output -V |
| 2 | AC Neutral | 6, 7 | DC Output +V |
| 3 | Input Earth | | |

| Connector Pin No Assignment (CN100) :HRS DF11-6DP-2DS Or Equivalent (G Option includes all functions, standard unit has no connections on pins 3 to 6) | | | |
|---|-----------------|-------------------------------|--------------------------------|
| Pin No | Assignment | Mating Housing | Terminal |
| 1 | - Sense | HRS DF11-6DS Or Equivalent | HRS DF11-**SC Or Equivalent |
| 2 | + Sense | | |
| 3 | AUX Ground | | |
| 4 | AUX (5 Volts) | | |
| 5 | Remote on/off - | | |
| 6 | Remote on/off + | | |

Derating, (Input AC Supply & Temperature)



Function Description of CN100

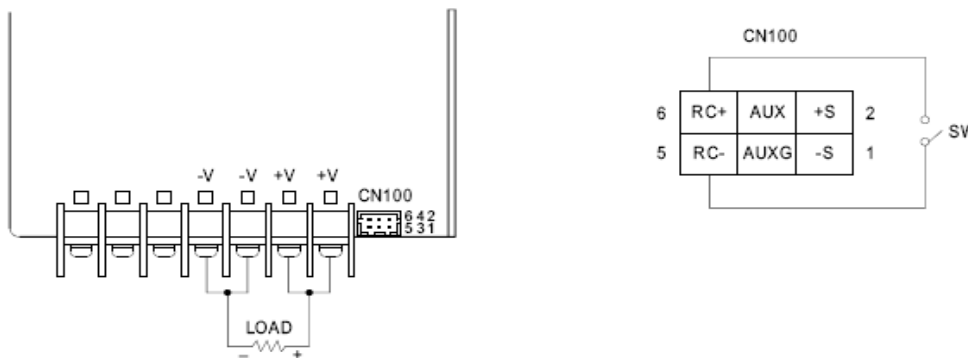
| Connector Pin No Assignment (CN100) :HRS DF11-6DP-2DS Or Equivalent, Functions on pins 3-6 only present on G Option units. | | |
|--|------------|--|
| Pin No | Assignment | Description |
| 1 | - S | Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimise noise pick-up effect. The maximum line drop compensation is 0.5V |
| 2 | + S | Positive Sensing. The +S signal should be connected to the positive terminal of the load. The -S and +S leads should be twisted in pair to minimise noise pick-up effect. The maximum line drop compensation is 0.5V |
| 3 | AUXG | Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V) |
| 4 | AUX | Auxiliary voltage output ground, 4.6-5.25V, referenced to pin 3(AUXG). The maximum load current is 0.3A. This output has the built-in oring diodes and is not controlled by the "remote ON/OFF control". |
| 5 | RC- | Remote control ground |
| 6 | RC+ | Turns the output on and off by electrical or dry contact between pin 5 (RC-). Short : Power OFF, Open: Power ON |

Function Manual

1.Remote Control

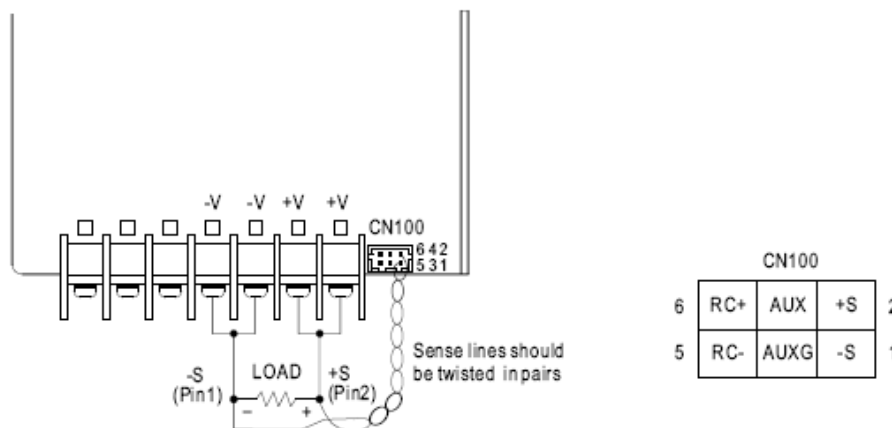
The PSU can be turned ON/OFF by using the "Remote ON/OFF Function"

| Between RC-(pin5) and RC+(pin6) | Output Status |
|---------------------------------|---------------|
| SW ON (Short) | OFF |
| SW OFF (Open) | ON |



2.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V



Specifications may change without notice. E&OE. ALL PSU Terms & Conditions apply.