

## 350 Watt, SD Series, Fully Enclosed DC-DC Converter

**ALL PSU LTD**  
Electronic Power Solutions

- DC Inputs From 19 to 144 V
- Isolated Output
- Low Ripple, Built in Filter
- Protections, Short Circuit, Over Load, Over Voltage, Over Temperature.
- High Reliability
- 2 Year Warranty
- Conformal Coating Option
- DIN Rail Mounting Option



### Specification

|                              |  |
|------------------------------|--|
| Input Voltage Ranges.....    | 19~36, 36~72, 72~144 VDC,  |
| Output Voltage.....          | See table below, plus adjustment range   |
| Line Regulation.....         | +/-0.5% (5V O/P), +/-0.3% (12V O/P),<br>0.2% (24V O/P), 0.2% (48V O/P)             |
| Load Regulation.....         | +/-1% (max)  |
| Over Load Protection.....    | 105~135% (AC recycle to re-start)  |
| Over Voltage Protection..... | 110~167% of nominal output voltage   |
| Isolation Voltage.....       | 1.5 kVAC (input to output)   |
| Operating Temperature.....   | -20 to +60 °C (see derating curve)   |
| Safety Standards.....        | IEC60950-1, CB approved by TUV (for D type)  |
| EMC Standards.....           | EN55022 class B, EN61000-4-2,3,4,6,8<br>ENV50204, light industry level, criteria A |
| Dimensions.....              | 215(L) x 115(W) x 50(H) mm   |
| MTBF.....                    | 209.4 k hrs (MIL-HDBK-217F) @ 25 °C  |
| Weight.....                  | 1.1 kg   |

### Models and Ratings

| Model      | Input Voltage | Output Volts / Amps | Output Adjustment | Ripple & Noise | Efficiency |
|------------|---------------|---------------------|-------------------|----------------|------------|
| SD-350B-5  | 19~36 VDC     | 5.0 V / 57 A        | 4.5~5.5 V         | 100 mV         | 74%        |
| SD-350B-12 | 19~36 VDC     | 12.0 V / 27.5 A     | 11.0~16.0 V       | 120 mV         | 80%        |
| SD-350B-24 | 19~36 VDC     | 24.0 V / 14.6 A     | 23.0~30.0 V       | 150 mV         | 80%        |
| SD-350B-48 | 19~36 VDC     | 48.0 V / 7.3 A      | 43.0~53.0 V       | 200 mV         | 84%        |
| SD-350C-5  | 36~72 VDC     | 5.0 V / 60 A        | 4.5~5.5 V         | 100 mV         | 76%        |
| SD-350C-12 | 36~72 VDC     | 12.0 V / 27.5 A     | 11.0~16.0 V       | 120 mV         | 81%        |
| SD-350C-24 | 36~72 VDC     | 24.0 V / 14.6 A     | 23.0~30.0 V       | 150 mV         | 81%        |
| SD-350C-48 | 36~72 VDC     | 48.0 V / 7.3 A      | 43.0~53.0 V       | 200 mV         | 82%        |
| SD-350D-5  | 72~144 VDC    | 5.0 V / 60 A        | 4.5~5.5 V         | 100 mV         | 78%        |
| SD-350D-12 | 72~144 VDC    | 12.0 V / 29.2 A     | 11.0~16.0 V       | 120 mV         | 83%        |
| SD-350D-24 | 72~144 VDC    | 24.0 V / 14.6 A     | 23.0~30.0 V       | 150 mV         | 87%        |
| SD-350D-48 | 72~144 VDC    | 48.0 V / 7.3 A      | 43.0~53.0 V       | 200 mV         | 89%        |

For mechanical & connection details, see next page

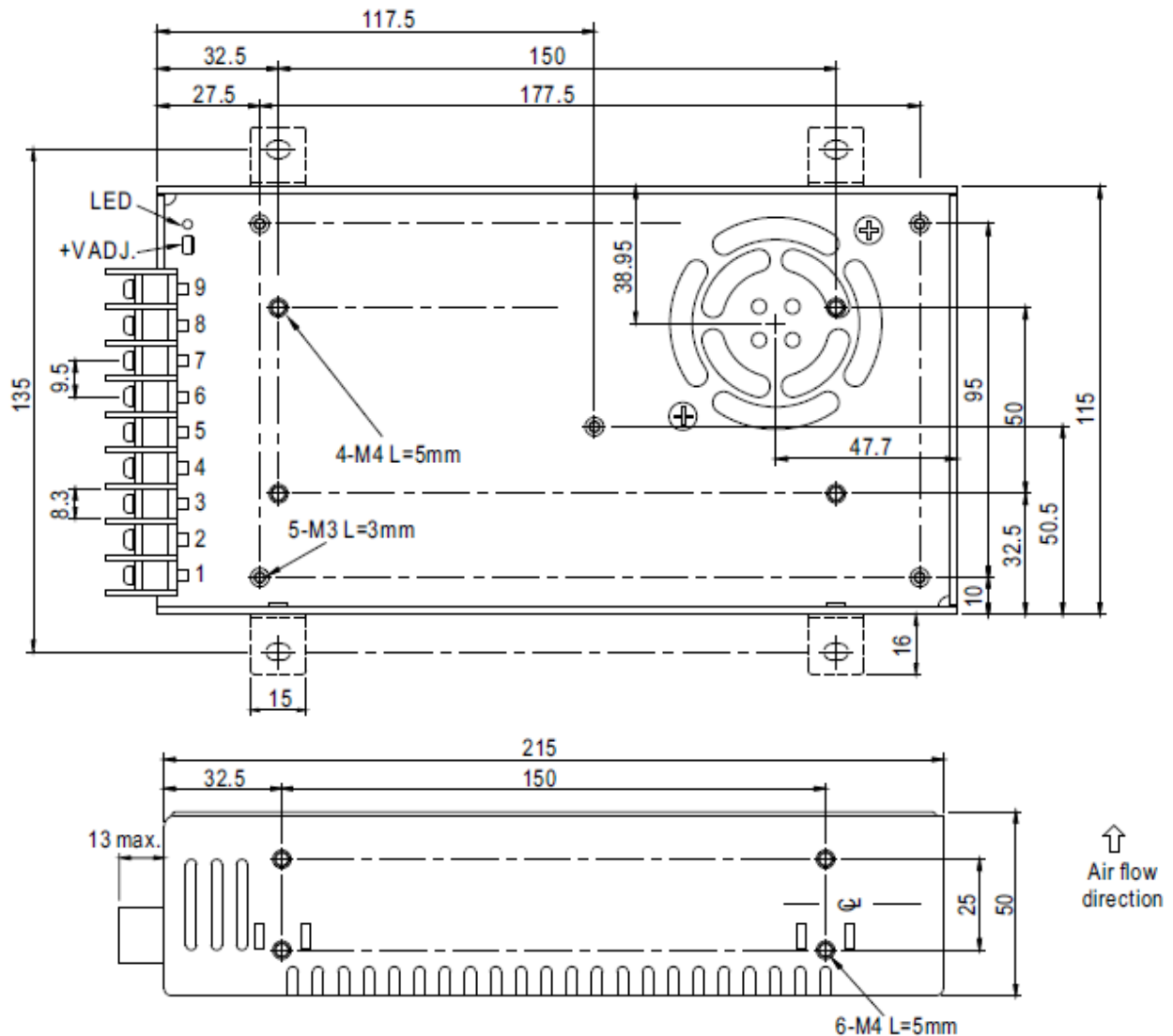
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## Mechanical Details

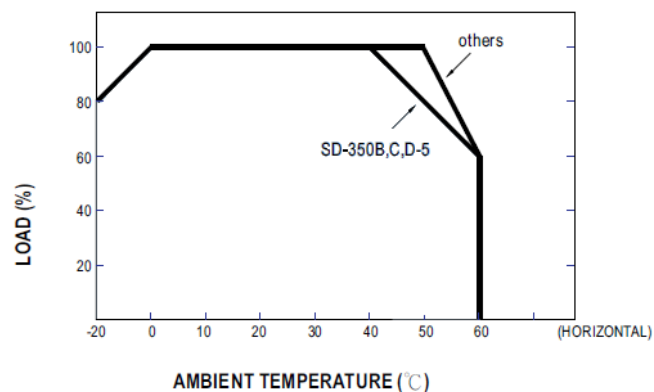
(Drawing below is shown with optional 4 x MHS-012 side mounting brackets fitted (dotted outline))



## Connection Details

| Terminal | Function    |
|----------|-------------|
| 1        | + DC In     |
| 2        | - DC In     |
| 3        | Input Earth |
| 4        | - DC Out    |
| 5        | - DC Out    |
| 6        | - DC Out    |
| 7        | + DC Out    |
| 8        | + DC Out    |
| 9        | + DC Out    |

## Temperature Derating



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

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