

**Features**

- 2:1 wide input range
- Protections: Short circuit/Over load/Over voltage/  
Over temperature
- 1500 I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 2 year warranty
- 200 watts



| Model <sup>1,3</sup> | Input Voltage | Output Voltage | Output Current | Ripple <sup>3</sup> & Noise | Regulation |       | Efficiency |
|----------------------|---------------|----------------|----------------|-----------------------------|------------|-------|------------|
|                      |               |                |                |                             | Load       | Line  |            |
| VSD-200B-5           | 19~36V DC     | 5V DC          | 34 A           | 100mV                       | ±1%        | ±0.5% | 79%        |
| VSD-200B-12          | 19~36V DC     | 12V DC         | 16.7 A         | 120mV                       | ±1%        | ±0.5% | 82%        |
| VSD-200B-24          | 19~36V DC     | 24V DC         | 8.4 A          | 150mV                       | ±1%        | ±0.5% | 85%        |
| VSD-200B-48          | 19~36V DC     | 48V DC         | 4.2 A          | 200mV                       | ±1%        | ±0.5% | 86%        |
| VSD-200C-5           | 36~72V DC     | 5V DC          | 34 A           | 100mV                       | ±1%        | ±0.5% | 81%        |
| VSD-200C-12          | 36~72V DC     | 12V DC         | 16.7 A         | 120mV                       | ±1%        | ±0.5% | 84%        |
| VSD-200C-24          | 36~72V DC     | 24V DC         | 8.4 A          | 150mV                       | ±1%        | ±0.5% | 86%        |
| VSD-200C-48          | 36~72V DC     | 48V DC         | 4.2 A          | 200mV                       | ±1%        | ±0.5% | 86%        |
| VSD-200D-5           | 72~144V DC    | 5V DC          | 34 A           | 100mV                       | ±1%        | ±0.5% | 82%        |
| VSD-200D-12          | 72~144V DC    | 12V DC         | 16.7 A         | 120mV                       | ±1%        | ±0.5% | 82%        |
| VSD-200D-24          | 72~144V DC    | 24V DC         | 8.4 A          | 150mV                       | ±1%        | ±0.5% | 84%        |
| VSD-200D-48          | 72~144V DC    | 48V DC         | 4.2 A          | 200mV                       | ±1%        | ±0.5% | 90%        |

**Notes:**

- 1 All parameters Not specifically mentioned are measured at normal input, rated load and 25°C of ambient temp.
- 2 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
- 3 The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

### Input Voltage

| Parameter     | Conditions/Description | Min | Nom | Max | Units |
|---------------|------------------------|-----|-----|-----|-------|
| Input voltage | B                      | 19  | 24  | 36  | DC    |
|               | C                      | 36  | 48  | 72  | DC    |
|               | D                      | 72  | 120 | 144 | DC    |

### Output

| Parameter               | Conditions/Description  | Min  | Nom      | Max  | Units |
|-------------------------|---|------|----------|------|-------|
| DC Voltage adj.         |   | 4.5  | 5        | 5.5  | VDC   |
|                         |   | 11   | 12       | 16   | VDC   |
|                         |   | 23   | 24       | 30   | VDC   |
|                         |   | 43   | 48       | 53   | VDC   |
| Over Voltage Protection |   | 5.75 |          | 6.75 | VDC   |
|                         |   | 16.8 |          | 20   | VDC   |
|                         |   | 31.5 |          | 37.5 | VDC   |
|                         |   | 53   |          | 65   | VDC   |
| DC output power         |   |      | 200      |      | Watts |
| Overload                | For all models.<br>Type-shut down o/p voltage, re-power on to recover |      | 105~135% |      |       |
| Voltage Tolerance       | Model B is $\pm 2\%$ , $\pm 1\%$ for all other models                 |      |          |      |       |
| Hold up time            |   |      | 50       |      | mS    |
| Set up                  | For all models  |      | 300      |      | mS    |

### Protection Circuit

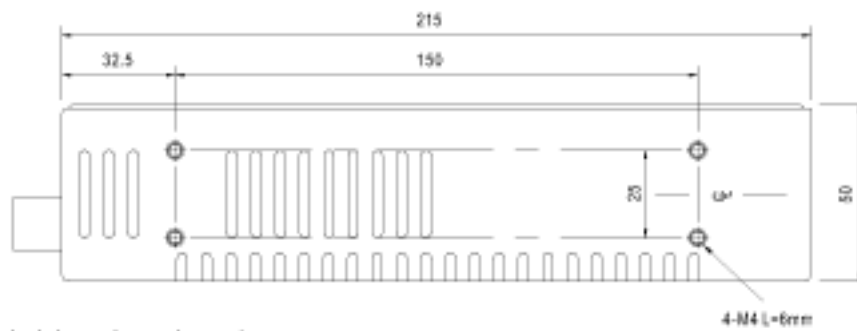
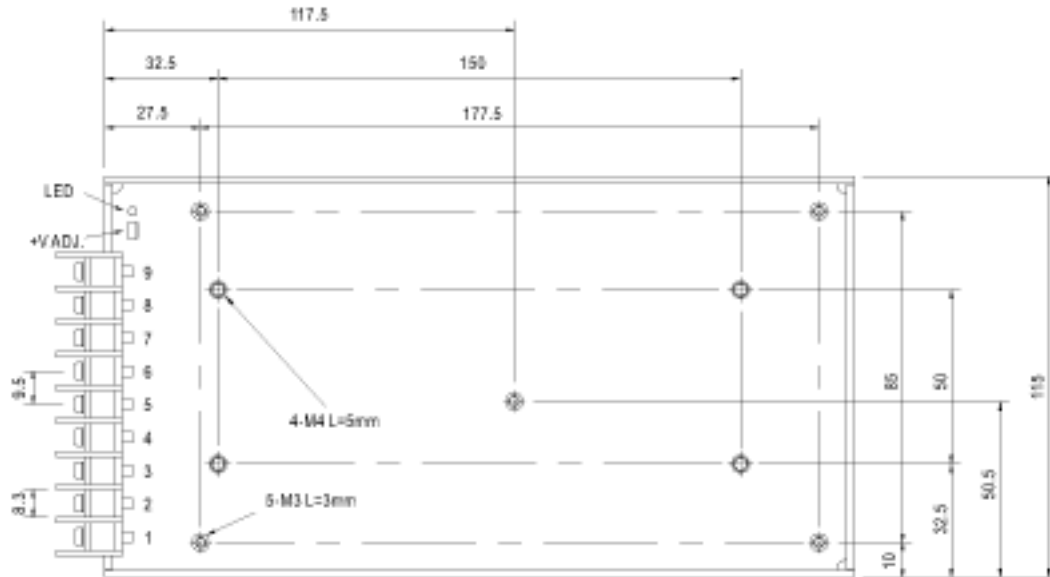
| Parameter     | Conditions/Description   |   |    |   |
|---------------|--|---|----|---|
| Input Fuse    | Built-in ac fuse. A blown fuse usually indicates permanent damage to the power supply serviceable by factory only. |   |    |   |
| Short circuit | Short circuit can be continuous. Recovers automatically upon removal of short.                                     |   |    |   |
| Over temp.    | Power supply shuts down when temperature is in excess of   | B | 95 | C |
|               |  | C | 95 | C |
|               |  | D | 75 | C |

## General and Safety

| Parameter               | Conditions/Description  | Min                 | Nom | Max | Units |
|-------------------------|---|---------------------|-----|-----|-------|
| Operating temp.         | (refer to output derating curve)                                    | -20                 |     | 60  | °C    |
| Storage temp.           |   | -40                 |     | 85  | °C    |
| Operating humid.        | Non-condensing  | 20%                 |     | 90% | RH    |
| Storage humid.          | Non-condensing  | 10%                 |     | 95% | RH    |
| Temperature coefficient |   | ±0.3% / °C (0~50°C) |     |     |       |
| EMI                     | EN55022(CISPR22) CLASS B  |                     |     |     |       |
| Safety (EMC)            | En61000-4-2, 3, 4, 6, 8, ENV50204 heavy industry level, criteria A. |                     |     |     |       |
| Vibration               | 2G 10min/i cycle, 60 min on X, Y and Z Axis                         | 10                  |     | 500 | Hz    |
| Withstand Voltage       | I/P-O/P   | 1500                |     |     | VDC   |
|                         | I/P-FG  | 1500                |     |     | VDC   |
|                         | O/P-FG  | 500                 |     |     | VDC   |
| Isolation Resistance    | I/P-O/P, I/P-FG, O/P-FG   | 100mΩ min. / 500VDC |     |     |       |
| Cooling                 | Convection  |                     |     |     |       |

## Mechanical

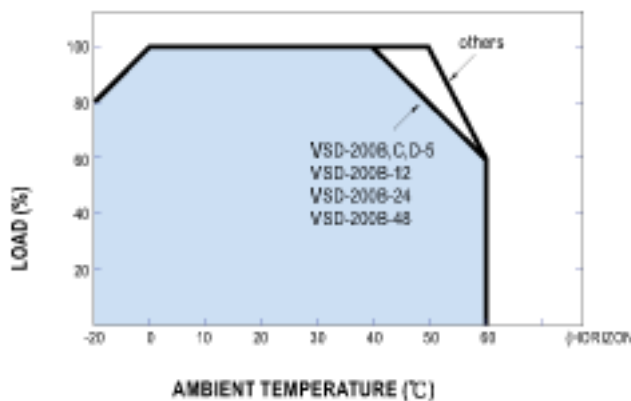
| Parameter | Conditions/Description     | Min | Nom | Max  | Units  |
|-----------|----------------------------|-----|-----|------|--------|
| Weight    |                            |     |     | 1100 | grams  |
| Enclosure | 215(L) x 115(W) x 50(H) mm |     |     |      | inches |



Terminal pin number assignment :

| Pin No. | Assignment  | Pin No. | Assignment   |
|---------|-------------|---------|--------------|
| 1       | DC INPUT V+ | 4,5,6   | DC OUTPUT V- |
| 2       | DC INPUT V- | 7,8,9   | DC OUTPUT V+ |
| 3       | FG ↓        |         |              |

### Output Derating



### Static Characteristics

