

## Product specification sheet

### BDD350-xx 350W



- Wide input range (90-264VAC, 127-370VDC)
- Protection type: short circuit/over load/over voltage/over temperature
- Natural air cooling, operating temperature range -30°C to +70°C
- 3000VAC isolation voltage
- Active PFC function
- 100% high temperature burn-in and function test
- 3-year quality guarantee

### MODEL LIST

| Model     | Input Voltage | Rated Power (W) | Output Voltage (V) | Voltage Adjustable Range (V) | Output Current (A) | Ripple & Noise (mVp-p) | Efficiency (%) |
|-----------|---------------|-----------------|--------------------|------------------------------|--------------------|------------------------|----------------|
| BDD300-5  | 90-264Vac     | 300             | 5                  | 4.5-5.5                      | 60                 | 150                    | 84.5           |
| BDD300-12 | 90-264Vac     | 348             | 12                 | 10.2-13.8                    | 29                 | 150                    | 88.5           |
| BDD300-15 | 90-264Vac     | 349.5           | 15                 | 13.5-18                      | 23.3               | 150                    | 88.5           |
| BDD300-24 | 90-264Vac     | 350.4           | 24                 | 21.6-28.8                    | 14.6               | 150                    | 90             |
| BDD300-27 | 90-264Vac     | 350.1           | 27                 | 25.8-29.6                    | 12.9               | 150                    | 90             |
| BDD300-36 | 90-264Vac     | 349.2           | 36                 | 32.4-39.6                    | 9.7                | 200                    | 90             |
| BDD300-48 | 90-264Vac     | 350.4           | 48                 | 43.2-52.8                    | 7.3                | 200                    | 91             |

### PARAMETER TABLE

|                       | Project                | Requirement                                |
|-----------------------|------------------------|--------------------------------------------|
| Input Characteristics | Input Voltage Range    | 90-264VAC 127-370VDC                       |
|                       | Frequency              | 47-63Hz                                    |
|                       | Power Factor (Typ.)    | PF>0.95/230VAC PF>0.98/115VAC at full load |
|                       | Current (Typ.)         | 4A/115VAC 2A/230VAC                        |
|                       | Inrush Current (Typ.)  | Cold boot 20A/115VAC 40A/230VAC            |
|                       | Leakage Current (Typ.) | <1mA/240VAC                                |

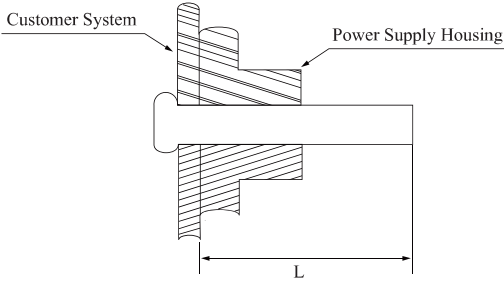
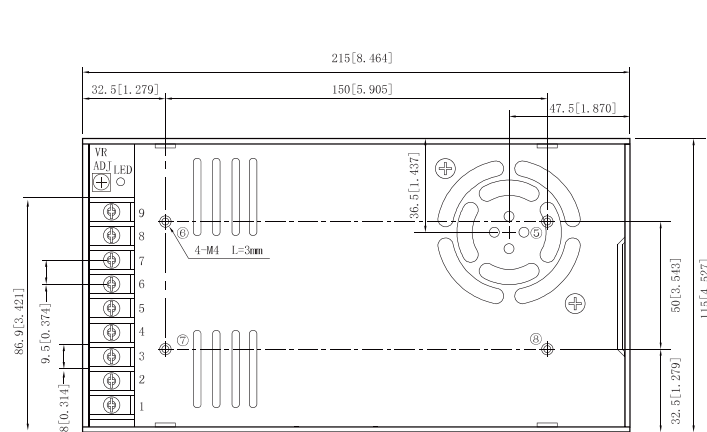
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PARAMETER TABLE

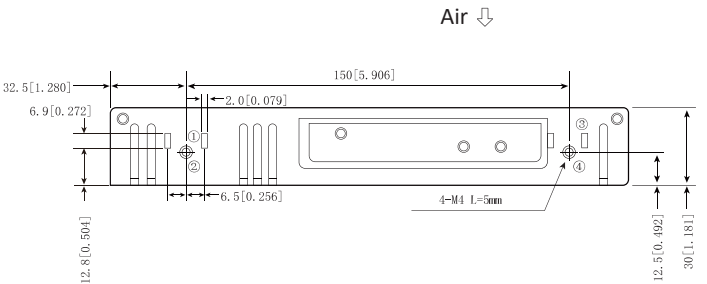
|                        | Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Requirement                                                                                              |            |            |            |            |            |     |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|-----|
| output Characteristics | Voltage Tolerance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5V±3% 12V±1.5% Other±1%                                                                                  |            |            |            |            |            |     |
|                        | Line Regulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ±0.5%                                                                                                    |            |            |            |            |            |     |
|                        | Load Regulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5V±2% 12V,15V±1% Other±0.5%                                                                              |            |            |            |            |            |     |
|                        | Setup, Rise Time (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1500ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load                                                     |            |            |            |            |            |     |
|                        | Hold Up Time (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8ms/230VAC 8ms/115VAC at full load                                                                       |            |            |            |            |            |     |
| Protection             | Over Load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ≥110% load, recovers automatically after fault condition is removed                                      |            |            |            |            |            |     |
|                        | Short Circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Hiccup mode, recovers automatically after fault condition is removed                                     |            |            |            |            |            |     |
|                        | Over Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Hiccup mode, recovers automatically after fault condition is removed                                     |            |            |            |            |            |     |
|                        | Over Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Hiccup mode                                                                                              |            |            |            |            |            |     |
|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Voltage                                                                                                  | 5V         | 12V        | 15V        | 24V        | 36V        | 48V |
| Range                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5.75-6.75V                                                                                               | 13.8-16.2V | 18.8-21.8V | 28.8-33.6V | 41.4-48.6V | 55.2-64.8V |     |
| Function               | Fan Control (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RTH2 ≥50 ℃ ±10 ℃ , fan on; RTH2 ≤40 ℃ ±10 ℃ fan off<br>(5V fan keeps working, 12-48V fan on/off control) |            |            |            |            |            |     |
| Working Environment    | Working Temp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -30 ℃ to +70 ℃ (Refer to "Derating curve")                                                               |            |            |            |            |            |     |
|                        | Working Humidity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 20-90%RH                                                                                                 |            |            |            |            |            |     |
|                        | Storage Temp., Humidity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | -40 ℃ to +85 ℃                                                                                           |            |            |            |            |            |     |
|                        | Temp. Coefficient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.03%/ (0-50 ℃ )                                                                                         |            |            |            |            |            |     |
|                        | Vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes                                               |            |            |            |            |            |     |
| SS & EMC               | Safety Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EN62368, UL62368                                                                                         |            |            |            |            |            |     |
|                        | Isolation Voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | I/P-O/P: 3000VAC I/P-FG(CASE): 2000VAC O/P-FG(CASE): 500VAC                                              |            |            |            |            |            |     |
|                        | Isolation Resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25 ℃ 70% RH                                                   |            |            |            |            |            |     |
|                        | EMC Emission & Immunity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | EN55011, EN55032 (CISPR32) CLASS B                                                                       |            |            |            |            |            |     |
|                        | ESD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | IEC/EN 61000-4-2 level 4 Contact 4kV/Air 8kV                                                             |            |            |            |            |            |     |
|                        | RF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IEC/EN 61000-4-3 level 3                                                                                 |            |            |            |            |            |     |
|                        | EFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | IEC/EN 61000-4-4 level 3                                                                                 |            |            |            |            |            |     |
|                        | Surge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | IEC/EN 61000-4-5 level 3 L-N 1kV L/N-FG 2kV                                                              |            |            |            |            |            |     |
| Other                  | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 300K hrs min. MIL-HDBK-217F (25 ℃ )                                                                      |            |            |            |            |            |     |
|                        | Dimension                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 215*115*30mm (L*W*H)                                                                                     |            |            |            |            |            |     |
| Remarks                | 1.The above data, unless otherwise specified, were measured at TA=25 ℃ , humidity < 75%, input nominal voltage and output rated load.<br>2.Ripple and noise measurement method: Use the parallel line test method. Meanwhile, a 0.1uF high-frequency ceramic capacitor and a 47uF electrolytic capacitor should be connected in parallel at the terminal, and the measurement should be carried out under a bandwidth of 20Mhz.<br>3.The power supply is regarded as a component within the system and needs to be confirmed in combination with the terminal equipment for electromagnetic compatibility. |                                                                                                          |            |            |            |            |            |     |

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EXTERNAL DIMENSIONS



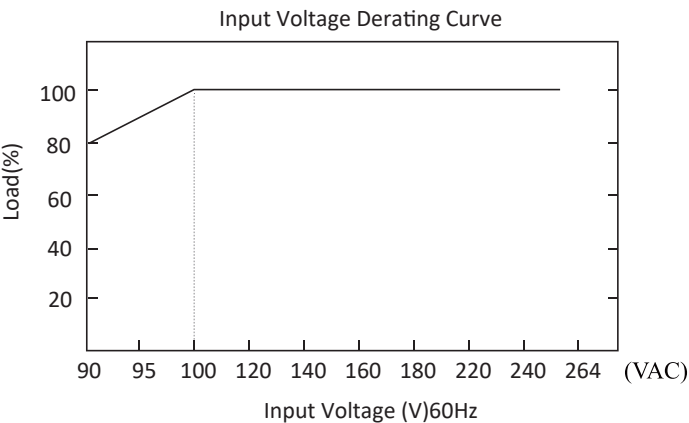
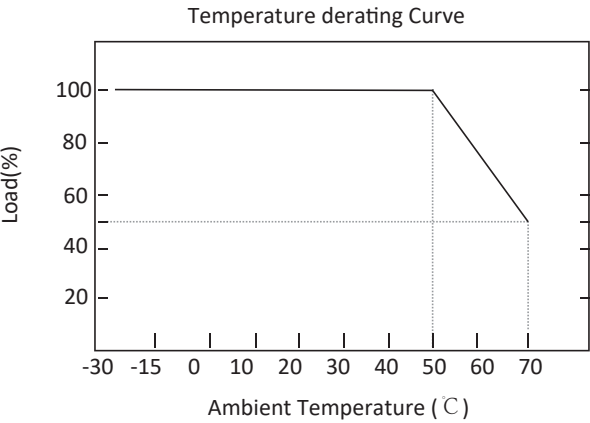
| Installation Sition | Screw Size | L(max) | Torque Force(max) |
|---------------------|------------|--------|-------------------|
| ①-④                 | M4         | 5mm    | 0.9N·m            |
| ⑤-⑧                 |            | 3mm    |                   |



| Pin | Function   |
|-----|------------|
| 1   | AC(L)      |
| 2   | AC(N)      |
| 3   | FG         |
| 4-6 | DC OUTPUT- |
| 7-9 | DC OUTPUT+ |

NOTE: Unit size: mm[inch]  
Unmarked tolerances:  $\pm 0.5\text{mm}$

DERATING CURVE



PRODUCT SPECIFICATION SHEET

PRODUCT SCHEMATIC

