



### ■ Features

- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Built-in cooling Fan ON-OFF control
- 1U low profile
- Withstand 5G vibration test
- LED indicator for power on
- No load power consumption < 0.75W
- 100% full load burn-in test
- High operating temperature up to 70°C
- Operating altitude up to 5000 meters (Note.8)
- High efficiency, long life and high reliability

### ■ Applications

- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus

### ■ Description:

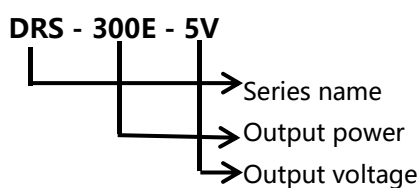
DRS-300E is a 300W single-output enclosed type power supply with 30mm of low profile design. Adopting the input of 230VAC, provide an output voltage of 5V.

In addition to the high efficiency up to 90%, the design of mesh case enhances the heat dissipation of DRS-300E that whole series operates from -25°C to 70°C under air convection without a fan.

Delivering and extremely low no load power consumption (less than 0.75W), it allows the end system to easily meet the worldwide energy requirement.

DRS-300E serves as a high price-to-performance power supply solution for various industrial applications.

### ■ Model Encoding:



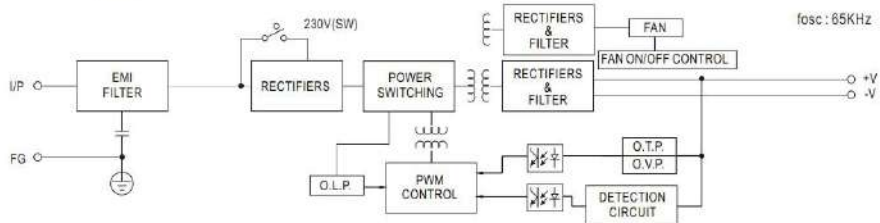


## SPECIFICATION

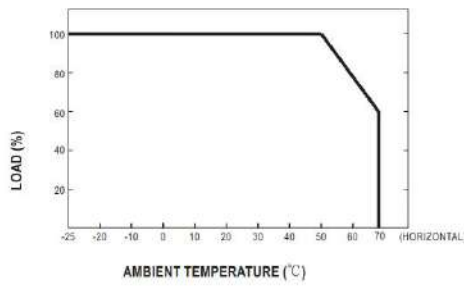
| MODEL               |                              | DRS-300-S   |  |  |  |  |  |
|---------------------|------------------------------|---|--|--|--|--|--|
| OUTPUT              | DC VOLTAGE                   | 5V  |  |  |  |  |  |
|                     | RATED CURRENT                | 60A   |  |  |  |  |  |
|                     | CURRENT RANGE                | 0 ~ 60A   |  |  |  |  |  |
|                     | RATED POWER                  | 300W  |  |  |  |  |  |
|                     | RIPPLE & NOISE (max.) Note.2 | 150mVp-p  |  |  |  |  |  |
|                     | VOLTAGE ADJ. RANGE           | 4.5 ~ 5.5V  |  |  |  |  |  |
|                     | VOLTAGE TOLERANCE Note.3     | ± 3.0%  |  |  |  |  |  |
|                     | LINE REGULATION Note.4       | ± 0.5%  |  |  |  |  |  |
|                     | LOAD REGULATION Note.5       | ± 2.0%  |  |  |  |  |  |
|                     | SETUP, RISE TIME             | 1500ms, 50ms/230VAC   |  |  |  |  |  |
| HOLD UP TIME (Typ.) | 16ms/230VAC                  |   |  |  |  |  |  |
| INPUT               | VOLTAGE RANGE                | 180 ~ 264VAC  |  |  |  |  |  |
|                     | FREQUENCY RANGE              | 60Hz  |  |  |  |  |  |
|                     | EFFICIENCY (Typ.)            | 88%   |  |  |  |  |  |
|                     | AC CURRENT (Typ.)            | 2.2A/230VAC   |  |  |  |  |  |
|                     | INRUSH CURRENT (Typ.)        | COLD STAR 60A/230VAC  |  |  |  |  |  |
|                     | LEAKAGE CURRENT              | <2mA / 240VAC   |  |  |  |  |  |
| PROTECTION          | OVER LOAD                    | 110 ~ 140% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |  |  |  |  |  |
|                     | OVER VOLTAGE                 | 5.75 ~ 6.75V<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                  |  |  |  |  |  |
|                     | OVER TEMPERATURE             | Hiccup mode, recovers automatically after fault condition is removed  |  |  |  |  |  |
| ENVIRONMENT         | WORKING TEMP.                | -25 ~ +70 °C (Refer to "Derating Curve")  |  |  |  |  |  |
|                     | WORKING HUMIDITY             | 20 ~ 90% RH non-condensing  |  |  |  |  |  |
|                     | STORAGE TEMP., HUMIDITY      | -40 ~ +85 °C, 10 ~ 95% RH   |  |  |  |  |  |
|                     | TEMP. COEFFICIENT            | ± 0.03%/°C (0 ~ 50°C)   |  |  |  |  |  |
|                     | VIBRATION                    | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes  |  |  |  |  |  |
| SAFETY              | WITHSTAND VOLTAGE            | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC   |  |  |  |  |  |
|                     | ISOLATION RESISTANCE         | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |  |  |  |  |  |
| OTHERS              | MTBF                         | 347.5K hrs min. MIL-HDBK-217F (25°C)  |  |  |  |  |  |
|                     | DIMENSION                    | 215*115*30mm (L*W*H)  |  |  |  |  |  |
|                     | PACKING                      | 0.76Kg, 30pcs/22.8Kg/0.78CUFT   |  |  |  |  |  |



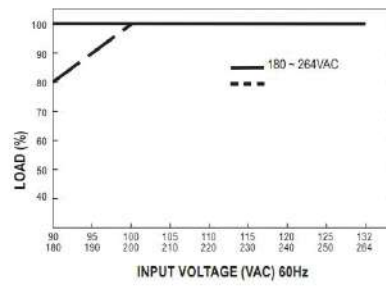
■ Block Diagram



■ Derating Curve



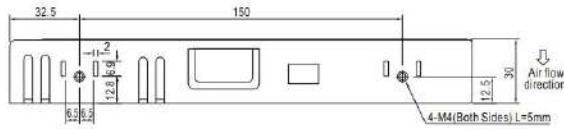
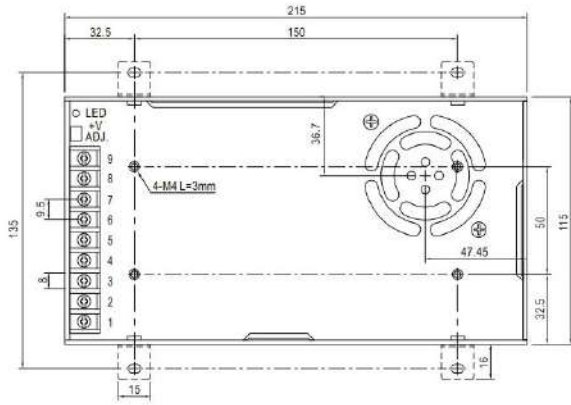
■ Static Characteristics





■ Mechanical Specification

Case No.207A Unit:mm



Terminal Pin No. Assignment:

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4-6     | DC OUTPUT -V |
| 2       | AC/N       | 7-9     | DC OUTPUT +V |
| 3       | FG ±       |         |              |