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**400W Enclosed type single output power supply > NEL-400**



■ Features :

- AC input 180~264VAC
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Leakage current<1mA
- Forced air cooling by built-in DC fan
- Low profile:30mm
- Withstand 300vac surge input for 5 second
- LED indicator for power on
- Conformal coating
- Low cost,high reliability
- 100% full load burn-in test
- 2 years warranty



**SPECIFICATION**

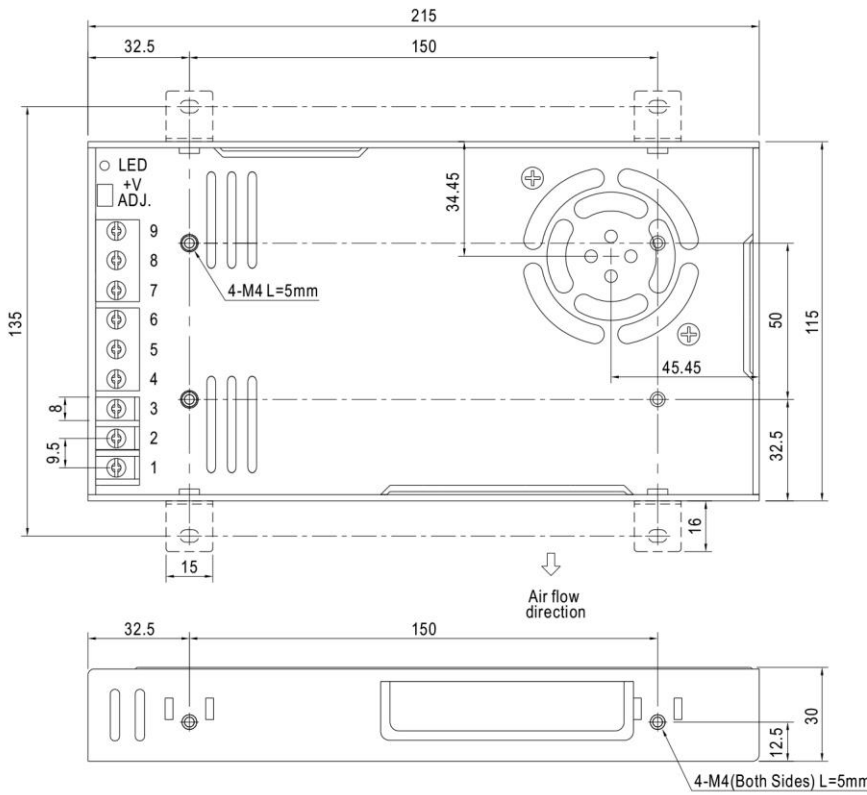
| MODEL               |   | NEL-400-2.8   | NEL-400-4.2 | NEL-400-5  |
|---------------------|---|---|-------------|------------|
| OUTPUT              | DC VOLTAGE  | 2.8V  | 4.2V        | 5V         |
|                     | RATED CURRENT   | 80A   | 80A         | 80A        |
|                     | CURRENT RANGE   | 0 ~ 80A   | 0 ~ 80A     | 0 ~ 80A    |
|                     | RATED POWER   | 224W  | 336W        | 400W       |
|                     | RIPPLE & NOISE (max.) Note.2  | 150mVp-p  | 150mVp-p    | 150mVp-p   |
|                     | VOLTAGE ADJ. RANGE  | 2.5 ~ 3V  | 3.6 ~ 4.4V  | 4.5 ~ 5.5V |
|                     | VOLTAGE TOLERANCE Note.3  | +3%,-4.5%   | +3%,-4.5%   | ±3.0%      |
|                     | LINE REGULATION   | ±0.5%   | ±0.5%       | ±0.5%      |
|                     | LOAD REGULATION   | ±2.5%   | ±2.5%       | ±2.0%      |
|                     | SETUP, RISE TIME  | 2500ms, 50ms/230VAC   |             |            |
| HOLD UP TIME (Typ.) | 20ms/230VAC   |   |             |            |
| INPUT               | VOLTAGE RANGE   | 180 ~ 264VAC 254 ~ 370VDC   |             |            |
|                     | FREQUENCY RANGE   | 47 ~ 63Hz   |             |            |
|                     | EFFICIENCY (Typ.)   | 79%   | 83%         | 84%        |
|                     | AC CURRENT (Typ.)   | 3A/230VAC   | 4A/230VAC   | 5A/230VAC  |
|                     | INRUSH CURRENT (Typ.)   | 100A/230VAC   |             |            |
|                     | LEAKAGE CURRENT   | <1mA / 240VAC   |             |            |
| PROTECTION          | OVER LOAD   | 105 ~ 140% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |             |            |
|                     | OVER VOLTAGE  | 3.22 ~ 3.78V  | 4.6 ~ 5.4V  | 5.6 ~ 7V   |
|                     | OVER TEMPERATURE  | Shut down O/P voltage, recovers automatically after temperature goes down   |             |            |
| ENVIRONMENT         | WORKING TEMP.   | -20 ~ +60°C (Refer to output load derating curve)   |             |            |
|                     | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |             |            |
|                     | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% RH  |             |            |
|                     | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)  |             |            |
|                     | VIBRATION   | 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes  |             |            |
| SAFETY & EMC        | SAFETY STANDARDS  | UL 62368-1,EAC TP TC 004 approved   |             |            |
|                     | 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  |             |            |
|                     | EMC EMISSION  | Compliance to EAC TP TC 020   |             |            |
|                     | EMC IMMUNITY  | Compliance to EAC TP TC 020   |             |            |
| OTHERS              | MTBF  | 235K hrs min. MIL-HDBK-217F (25°C)  |             |            |
|                     | DIMENSION   | 215*115*30mm (L*W*H)  |             |            |
|                     | PACKING   | 0.85Kg;15pcs/13.8Kg/0.78CUFT  |             |            |
| NOTE                | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation. |   |             |            |



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**Mechanical Specification**

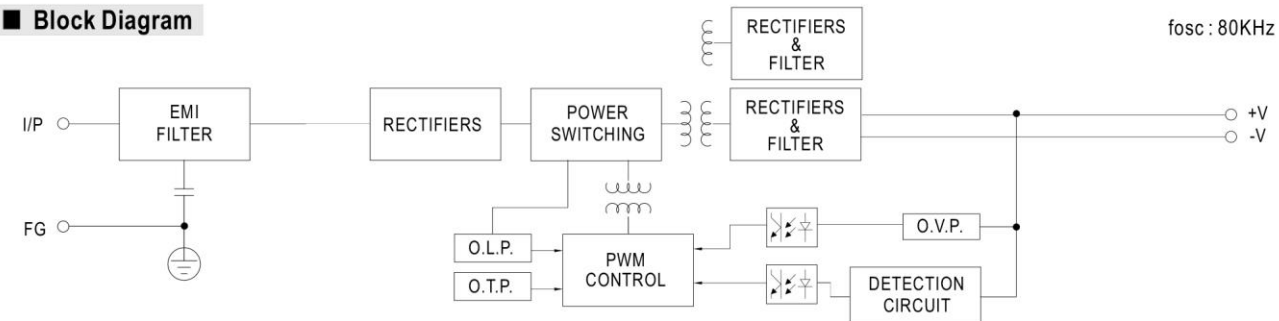
Case No. 207D Unit:mm



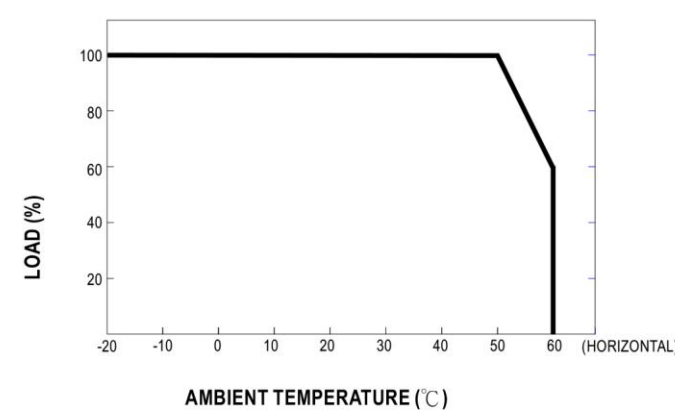
Terminal Pin No. assignment :

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

**Block Diagram**



**Derating Curve**



**Static Characteristics**

