



#### ■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.94
- Protections: Short circuit / Overload / Over voltage
- Free air cooling convection
- Fixed switching frequency at 100KHz
- 3 years warranty

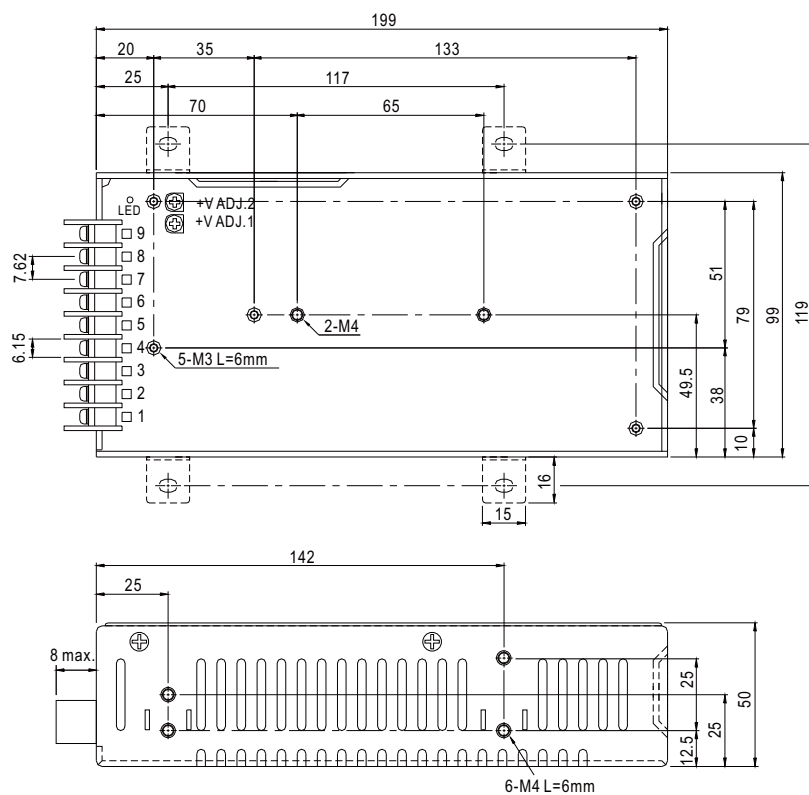


#### SPECIFICATION

| MODEL                    |   | TP-100A   |          |                             | TP-100B  |          |          | TP-100C  |          |          | TP-100D  |          |          |
|--------------------------|---|---|----------|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| OUTPUT                   | OUTPUT NUMBER   | CH1   | CH2      | CH3                         | CH1      | CH2      | CH3      | CH1      | CH2      | CH3      | CH1      | CH2      | CH3      |
|                          | DC VOLTAGE  | 5V  | 12V      | -5V                         | 5V       | 12V      | -12V     | 5V       | 15V      | -15V     | 5V       | 24V      | 12V      |
|                          | RATED CURRENT   | 10A   | 4A       | 0.6A                        | 10A      | 4A       | 0.6A     | 10A      | 3A       | 0.6A     | 10A      | 2A       | 0.6A     |
|                          | CURRENT RANGE   | 3 ~ 15A   | 0.4 ~ 5A | 0 ~ 1A                      | 3 ~ 15A  | 0.4 ~ 5A | 0 ~ 1A   | 3 ~ 15A  | 0.4 ~ 4A | 0 ~ 1A   | 3 ~ 15A  | 0.4 ~ 3A | 0 ~ 1A   |
|                          | RATED POWER (max.)  | 101W  |          |                             | 105.2W   |          |          | 104W     |          |          | 105.2W   |          |          |
|                          | RIPPLE & NOISE (max.) Note.2  | 100mVp-p  | 120mVp-p | 100mVp-p                    | 100mVp-p | 120mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 100mVp-p |
|                          | VOLTAGE ADJ. RANGE  | CH1: 4.75 ~ 5.5V  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | VOLTAGE TOLERANCE Note.3  | ± 3.0%  | ± 7.0%   | ± 6.0%                      | ± 3.0%   | ± 6.0%   | ± 6.0%   | ± 3.0%   | +10,-6%  | ± 6.0%   | ± 3.0%   | ± 8.0%   | ± 6.0%   |
|                          | LINE REGULATION   | ± 1.0%  | ± 1.0%   | ± 1.0%                      | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   | ± 1.0%   |
|                          | LOAD REGULATION   | ± 3.0%  | ± 6.0%   | ± 4.0%                      | ± 3.0%   | ± 6.0%   | ± 4.0%   | ± 3.0%   | ± 6.0%   | ± 4.0%   | ± 3.0%   | ± 6.0%   | ± 4.0%   |
| SETUP, RISE TIME         | 800ms, 60ms/230VAC      2200ms, 60ms/115VAC at full load  |   |          |                             |          |          |          |          |          |          |          |          |          |
| HOLD UP TIME (Typ.)      | 24ms/230VAC      24ms/115VAC at full load   |   |          |                             |          |          |          |          |          |          |          |          |          |
| INPUT                    | VOLTAGE RANGE Note.5  | 90 ~ 264VAC   |          | 127 ~ 370VDC                |          |          |          |          |          |          |          |          |          |
|                          | FREQUENCY RANGE   | 47 ~ 63Hz   |          |                             |          |          |          |          |          |          |          |          |          |
|                          | POWER FACTOR (Typ.)   | PF>0.94/230VAC  |          | PF>0.98/115VAC at full load |          |          |          |          |          |          |          |          |          |
|                          | EFFICIENCY (Typ.)   | 75%   |          |                             | 78%      |          |          | 77%      |          |          | 78%      |          |          |
|                          | AC CURRENT (Typ.)   | 1.5A/115VAC   |          | 0.75A/230VAC                |          |          |          |          |          |          |          |          |          |
|                          | INRUSH CURRENT (Typ.)   | COLD START ≤50A/230V  |          |                             |          |          |          |          |          |          |          |          |          |
| LEAKAGE CURRENT          | <3.5mA / 240VAC   |   |          |                             |          |          |          |          |          |          |          |          |          |
| PROTECTION               | OVERLOAD  | 105 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |          |                             |          |          |          |          |          |          |          |          |          |
|                          | OVER VOLTAGE  | CH1:5.75 ~ 6.75V on +5V<br>Protection type : Shut down o/p voltage, re-power on to recover                              |          |                             |          |          |          |          |          |          |          |          |          |
|                          | OVER TEMPERATURE(OPTION)  | Shut down o/p voltage, recovers automatically after temperature goes down   |          |                             |          |          |          |          |          |          |          |          |          |
| ENVIRONMENT              | WORKING TEMP.   | -10 ~ +60℃ (Refer to "Derating Curve")  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | STORAGE TEMP., HUMIDITY   | -20 ~ +85℃, 10 ~ 95% RH non-condensing  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | TEMP. COEFFICIENT   | ± 0.03%/℃ (0 ~ 50℃)   |          |                             |          |          |          |          |          |          |          |          |          |
|                          | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes  |          |                             |          |          |          |          |          |          |          |          |          |
| SAFETY & EMC<br>(Note 4) | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1, EAC TP TC 004 approved  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC 1min.   |          |                             |          |          |          |          |          |          |          |          |          |
|                          | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH   |          |                             |          |          |          |          |          |          |          |          |          |
|                          | EMC EMISSION  | Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020  |          |                             |          |          |          |          |          |          |          |          |          |
| EMC IMMUNITY             | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A, EAC TP TC 020  |   |          |                             |          |          |          |          |          |          |          |          |          |
| OTHERS                   | MTBF  | 170.1K hrs min.    MIL-HDBK-217F (25℃)  |          |                             |          |          |          |          |          |          |          |          |          |
|                          | DIMENSION   | 199*99*50mm (L*W*H)   |          |                             |          |          |          |          |          |          |          |          |          |
|                          | PACKING   | 0.83Kg; 20pcs/17.6Kg/1.28CUFT   |          |                             |          |          |          |          |          |          |          |          |          |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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.<br>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>5. Derating may be needed under low input voltages. Please check the derating curve for more details.<br>6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). |   |          |                             |          |          |          |          |          |          |          |          |          |

## ■ Mechanical Specification

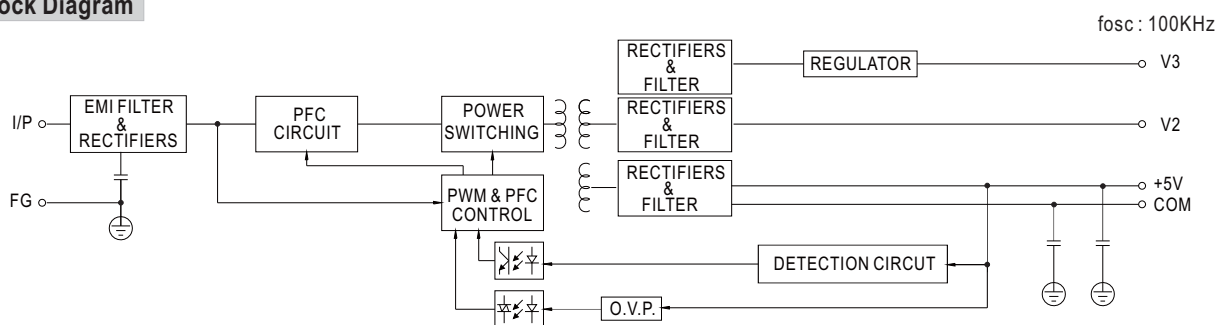
Case No. 916A Unit:mm



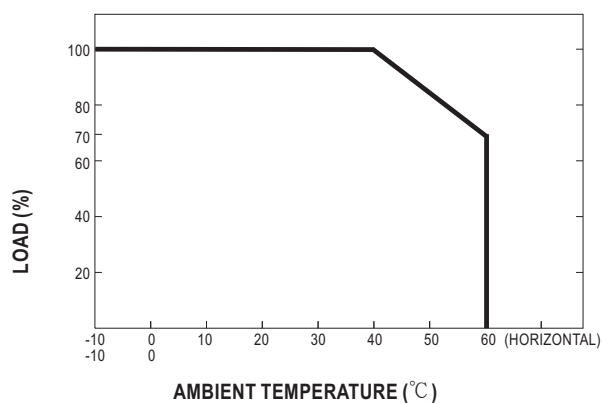
Terminal Pin No. Assignment :

| Pin No. | Assignment   | Pin No. | Assignment    |
|---------|--------------|---------|---------------|
| 1       | AC/L         | 5       | DC OUTPUT V2  |
| 2       | AC/N         | 6,7     | DC OUTPUT V1  |
| 3       | FG $\perp$   | 8,9     | DC OUTPUT COM |
| 4       | DC OUTPUT V3 |         |               |

### ■ Block Diagram



### Derating Curve



### ■ Output Derating VS Input Voltage

