



### ■ Features :

- Universal AC input / Full range (up to 277VAC)
- 2 pole EURO plug
- Built-in active PFC function
- Constant current design
- Protections: Short circuit
- Cooling by free air convection
- Fully isolated plastic case
- Class II power unit, no FG
- 100% full load burn-in test
- No load power consumption < 0.15W
- Low cost, high reliability
- Suitable for indoor LED lighting and moving sign applications
- 3 years warranty

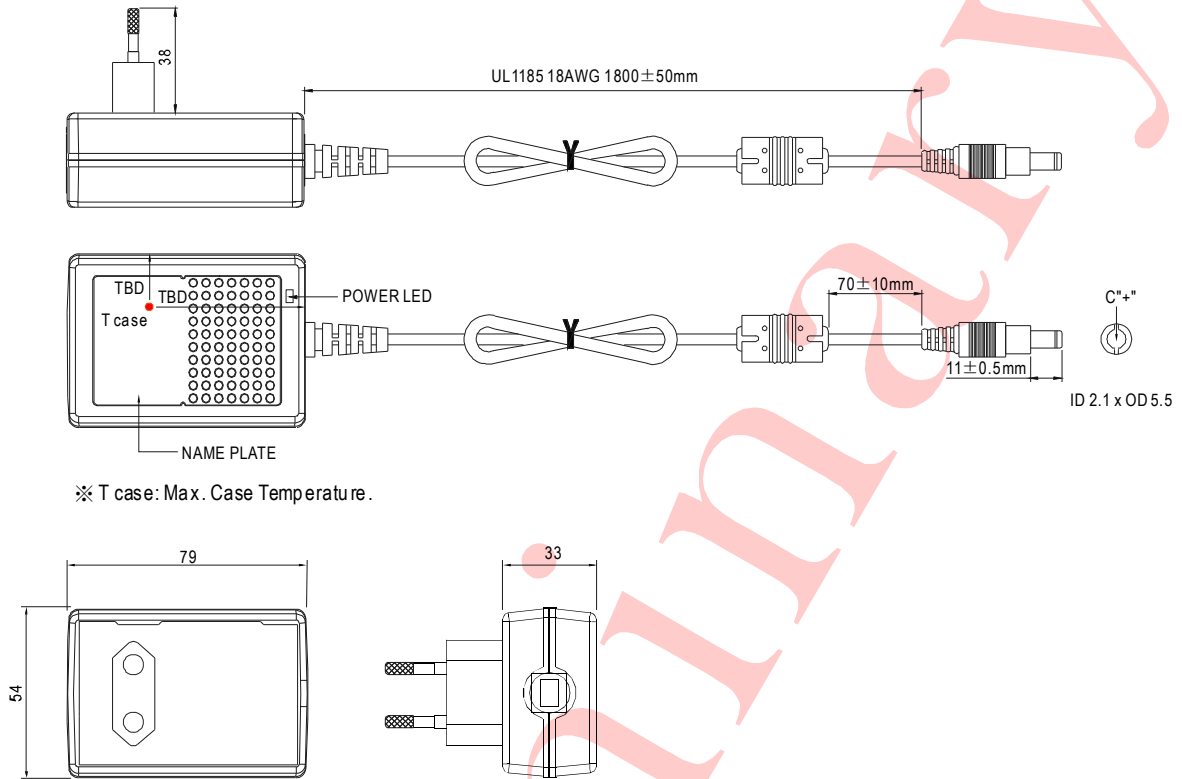


### SPECIFICATION

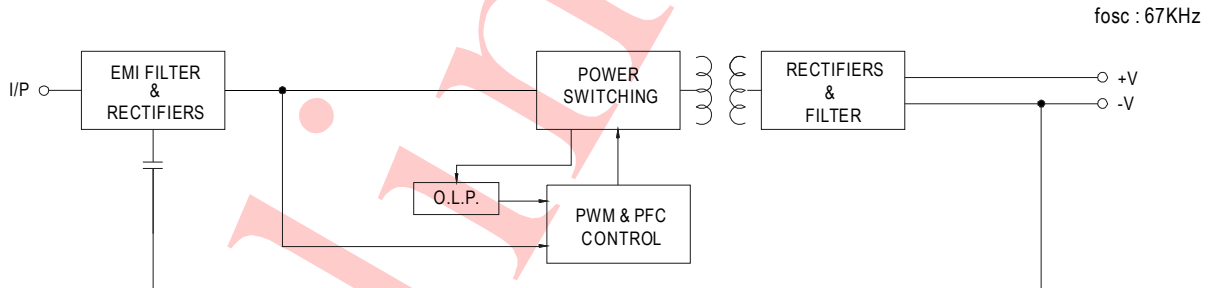
| MODEL           | GSC40E-350  | GSC40E-500  | GSC40E-700   | GSC40E-1050  | GSC40E-1400 |          |
|-----------------|---|---|--------------|--------------|-------------|----------|
| OUTPUT          | RATED CURRENT   | 350mA   | 500mA        | 700mA        | 1050mA      | 1400mA   |
|                 | OPERATING VOLTAGE RANGE <small>Note.4</small>   | 58 ~ 116V   | 40 ~ 80V     | 29 ~ 58V     | 19 ~ 38V    | 14 ~ 29V |
|                 | CURRENT ACCURACY <small>Note.3</small>  | ± 8.0%  |              |              |             |          |
|                 | RATED POWER   | 40.4W   | 40W          | 40.4W        | 39.6W       | 40.4W    |
|                 | RIPPLE & NOISE (max.) <small>Note.2</small>   | 11.6Vp-p  | 8Vp-p        | 5.8Vp-p      | 3.8Vp-p     | 2.9Vp-p  |
|                 | NO LOAD OUTPUT VOLTAGE (max.)   | 126V  | 90V          | 68V          | 50V         | 40V      |
|                 | SETUP TIME  | 500ms / 230VAC 500ms / 115VAC at full load  |              |              |             |          |
| INPUT           | VOLTAGE RANGE   | 90 ~ 277VAC 127 ~ 392VDC  |              |              |             |          |
|                 | FREQUENCY RANGE   | 47 ~ 63Hz   |              |              |             |          |
|                 | POWER FACTOR (Typ.)   | PF>0.98/115VAC, PF>0.92/230VAC, PF>0.91/277VAC at full load (Please refer to "Power Factor Characteristic" curve) |              |              |             |          |
|                 | TOTAL HARMONIC DISTORTION   | Total harmonic distortion will be lower than 20% when output loading is 75% or higher                             |              |              |             |          |
|                 | EFFICIENCY (Typ.)   | 88%   | 87%          | 86%          | 85%         | 84%      |
|                 | AC CURRENT (Typ.)   | 0.7A/115VAC   | 0.35A/230VAC | 0.25A/277VAC |             |          |
|                 | INRUSH CURRENT(max.)  | COLD START 15A(t <sub>width</sub> =75μs measured at 50% I <sub>peak</sub> ) at 230VAC                             |              |              |             |          |
| LEAKAGE CURRENT | <0.5mA / 240VAC   |   |              |              |             |          |
| PROTECTION      | SHORT CIRCUIT   | Hiccup mode, recovers automatically after fault condition is removed.   |              |              |             |          |
| ENVIRONMENT     | WORKING TEMP.   | -30 ~ +50°C (Refer to "Derating Curve")   |              |              |             |          |
|                 | WORKING HUMIDITY  | 20 ~ 95% RH non-condensing  |              |              |             |          |
|                 | STORAGE TEMP., HUMIDITY   | -40 ~ +80°C, 10 ~ 95% RH  |              |              |             |          |
|                 | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)  |              |              |             |          |
|                 | VIBRATION   | 10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes   |              |              |             |          |
| SAFETY & EMC    | SAFETY STANDARDS  | TUV EN613471, EN61347-2-13 Listed, EN62384 approved   |              |              |             |          |
|                 | WITHSTAND VOLTAGE   | I/P-O/P: 3.75KVAC   |              |              |             |          |
|                 | ISOLATION RESISTANCE  | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH   |              |              |             |          |
|                 | EMC EMISSION  | Compliance to EN55015, EN61000-3-2 Class C (≥50% load); EN61000-3-3   |              |              |             |          |
|                 | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61547, light industry level, criteria A                        |              |              |             |          |
| OTHERS          | MTBF  | K hrs min. MIL-HDBK-217F (25°C)   |              |              |             |          |
|                 | DIMENSION   | 79*54*33mm (L*W*H)  |              |              |             |          |
|                 | PACKING   | Kg  |              |              |             |          |
| CONNECTOR       | PLUG  | 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock   |              |              |             |          |
|                 | CABLE   | See page 2  |              |              |             |          |
| NOTE            | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Please see "AC input voltage drop vs. output current characteristics" table.</li> <li>4. Constant current operation region is within 50% ~ 100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> <li>5. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</li> </ol> |   |              |              |             |          |

■ Mechanical Specification

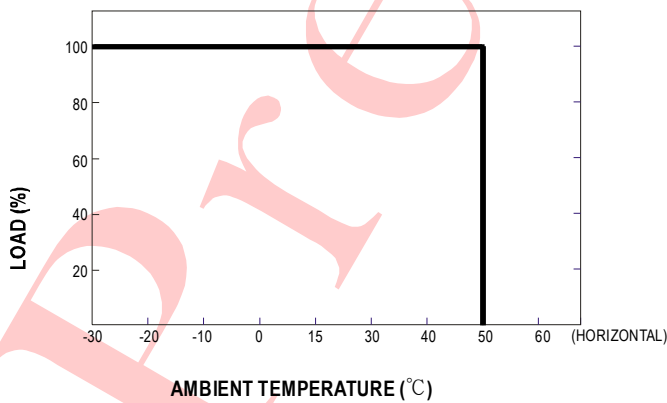
Unit:mm



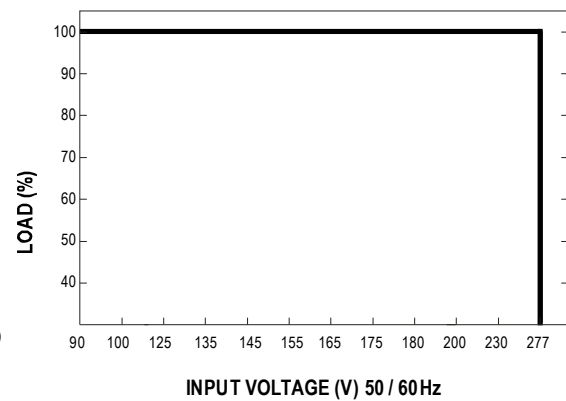
■ Block Diagram



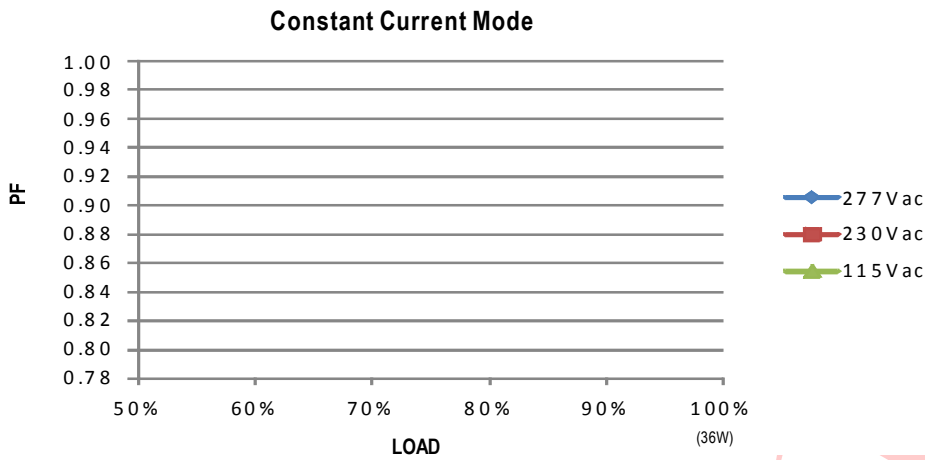
■ Derating Curve



■ Static Characteristics

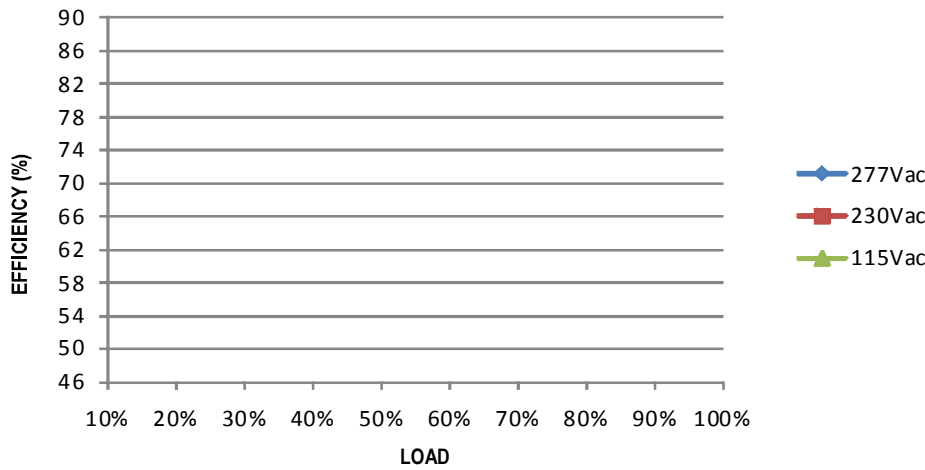


**Power Factor Characteristic**



**EFFICIENCY vs LOAD (GSC36E-350)**

GSC36E series possess superior working efficiency that up to 88% can be reached in field applications.



**AC input voltage drop vs. Output current characteristics**

|               |      |      |     |     |
|---------------|------|------|-----|-----|
| AC input drop | 10%  | 8%   | 5%  | 3%  |
| Io drop       | <18% | <13% | <8% | <6% |

Note : Output current will return to the rated value within 40ms