

# GTPC-100-D series

100W PWM style output LED Triac Dimmable Constant Voltage Power Supply



## ■ Features:

- Constant voltage PWM style output
  - Constant voltage design
  - European AC input range
- Protections: Overload / Over voltage / Short circuit
  - Cooling by free air convection
    - Isolation class II
- Suitable to work with AC triac dimmers
  - CB certificate



## Ⓢ ELECTRICAL SPECIFICATION

| MODEL | GTPC-100-12-D | GTPC-100-24-D |
|-------|---------------|---------------|
|-------|---------------|---------------|

### OUTPUT

|                           |                             |          |
|---------------------------|-----------------------------|----------|
| Rated Voltage             | 12V                         | 24V      |
| Rated Current             | 8.3A                        | 4.2A     |
| Current Range             | 0 ÷ 8.3A                    | 0 ÷ 4.2A |
| Rated Power               | 100W                        |          |
| Dimming range             | 1 – 100%                    |          |
| Line Regulation           | ± 2%                        |          |
| Load Regulation           | ± 2%                        |          |
| Tolerance [3]             | ± 2%                        |          |
| Ripple & Noise (max.) [2] | 300mV <sub>p-p</sub>        |          |
| Setup [4]                 | 500ms / 230VAC at full load |          |

### INPUT

|                                    |                     |     |     |     |     |     |
|------------------------------------|---------------------|-----|-----|-----|-----|-----|
| Voltage Range                      | 220 ÷ 240VAC        |     |     |     |     |     |
| Frequency Range                    | 47 ÷ 63Hz           |     |     |     |     |     |
| Efficiency (typ.)                  | 89%                 |     |     | 91% |     |     |
| AC Current (typ.)                  | 0.60A / 230VAC      |     |     |     |     |     |
| Inrush Current (typ.)              | 65A / 230VAC; 500μs |     |     |     |     |     |
| Max. No. Of PSU on Circuit Breaker | B10                 | B16 | C10 | C16 | D10 | D16 |
|                                    | 2                   | 3   | 3   | 4   | 5   | 8   |

### PROTECTIONS

|               |                              |
|---------------|------------------------------|
| Overload      | Range: > 150%                |
|               | Type: hiccup, auto-recovery. |
| Short Circuit | Type: hiccup, auto-recovery. |
| Over Voltage  | Type: hiccup, auto-recovery. |

### WORKING ENVIRONMENT

|                     |                                  |
|---------------------|----------------------------------|
| Working Temperature | -20°C ÷ 50°C, ta: 40°C; tc: 80°C |
| Working Humidity    | 20 ÷ 90% RH non-condensing       |

# GTPC-100-D series

100W PWM style output LED Triac Dimmable Constant Voltage Power Supply



**Storage Temperature and Humidity** -20°C ÷ 70°C, 10 ÷ 95% RH non-condensing

## SAFETY and EMC REGULATIONS

|                             |   |
|-----------------------------|---|
| <b>Safety Standards</b>     | Compliance to EN 61347-1, EN 61347-2-13, EN 60598-1 |
| <b>Withstand Voltage</b>    | IN/OUT: 3.75kVAC                                    |
| <b>Isolation Resistance</b> | IN/OUT: 100MΩ/500VDC/25°C/70%                       |
| <b>EMC Emission</b>         | Compliance to EN 55015, EN 62493                    |
| <b>EMC Immunity</b>         | Compliance to EN 61547                              |
| <b>Harmonic Current</b>     | Compliance to EN 61000-3-3; EN 61000-3-2            |

## OTHERS

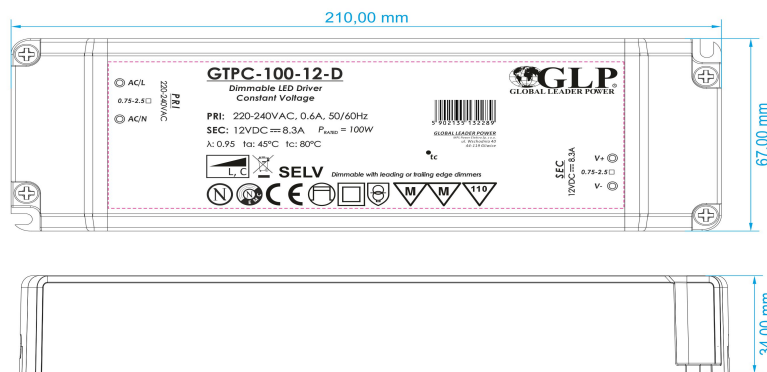
|                           |   |
|---------------------------|---|
| <b>Lifetime (typ.)</b>    | 30 000 hours  |
| <b>Dimensions</b>         | 210 x 67 x 34mm (L x W x H)   |
| <b>Weight and Packing</b> | 360g; 50pcs./ctn; ctn weight and dimensions: 18kg; 38.5 x 36.5 x 23.5cm |

**EAN Code**



1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

## © MECHANICAL SPECIFICATION



## © Suggested connection diagram with dimmer

