

GTPC-50-12 series

50W Single Output Switching Constant Voltage Power Supply with PFC function



■ Features:

- Constant voltage design
- European AC input
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation class II



ELECTRICAL SPECIFICATION

MODEL	GTPC-50-12
OUTPUT	
DC Voltage	12V
Rated Current	4.2A
Rated Power	50.4W
Voltage Tolerance [3]	± 5%
Ripple & Noise (max.) [2]	240mV _{p-p}
Setup time	<1s / 230VAC
INPUT	
Voltage Range	180 ÷ 264VAC
Frequency Range	47 ÷ 63Hz
Efficiency (typ.)	85%
AC current (typ.)	0.4A/230VAC
Power Factor	PF > 0.9 / 230VAC at full load
No load power consumption (typ.)	< 0.5W
Inrush current (max.)	<80A / 230VAC(25°C)
PROTECTIONS	
Overload	Range: 110 ÷ 150% rated current
	Type: hiccup mode, auto-recovery.
Short circuit	Type: hiccup mode, auto-recovery.
Over Voltage	Range: 16 ÷ 19VDC
	Type: shut down output voltage. Re-power on to recovery.
Over Temperature	Range: 140°C ± 15°C
	Type: shut down output voltage. After temperature goes down re-power on to recovery.

WORKING ENVIRONMENT

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Working Temperature	-25°C ÷ 50°C
Working Humidity	20 ÷ 95% RH non-condensing
Storage Temperature and Humidity	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing

SAFETY AND EMC REGULATIONS

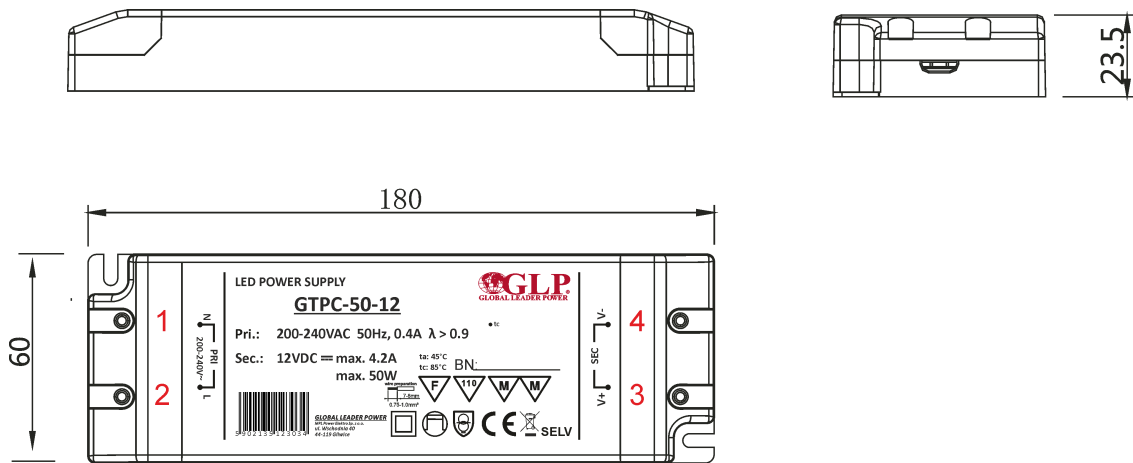
Safety Standards	Compliance to EN 61347-1, EN 61347-2-13
Withstand Voltage	I-P/O-P: 3.75kVAC
Isolation Resistance	I-P/O-P: 100MΩ/500VDC/25°C/70%
EMC Emission	Compliance to EN 55015
EMC Immunity	Compliance to EN 61547; IEC 61000-4-2, -3, -4, -5, -6, -8, -11
Harmonic Current	Compliance z EN61000-3-3; EN61000-3-2

OTHERS

Dimensions	180 x 60 x 23.5mm (L x W x H)
Weight (nett/gross)	0.23kg/0.25kg

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. Power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

MECHANICAL SPECIFICATION



PIN ASSIGNMENT			
No.	Assignment	No.	Assignment
1	Input: AC/N	3	Output: U _{OUT} -
2	Input: AC/L	4	Output: U _{OUT} +