

GLSV-150 series

150W Constant Voltage Outdoor LED Power Supply



Features:

- Constant voltage design
- Built-in active PFC function
- Universal AC input / Full range up to 305VAC
- Protections: Short Circuit / Over Voltage / Over Current / Over temperature
- Surge immunity: Differential Mode – 5kV, Common Mode - 10kV
- Cooling by free air convection
- IP67 design for indoor and outdoor applications

Application:

- Landscape lighting
- LED street lighting
- Industrial lighting



© MODEL INFORMATION

Model Number	Output Power [W]	Output Voltage [V]	Output Current [A]	Efficiency typ. [%]	Power Factor typ.
GLSV-150B012	150.00	12	12.50	90%	0.96
GLSV-150B024	150.00	24	6.25	91%	0.96
GLSV-150B036	150.12	36	4.17	91%	0.96
GLSV-150B048	150.24	48	3.13	91%	0.96

© APPROVAL MARKS and SYMBOLS

GLSV-150B012	     IP67 SELV	tc: 85°C ta: 50°C	
GLSV-150B024	     IP67 SELV	tc: 85°C ta: 50°C	
GLSV-150B036	     IP67 SELV	tc: 85°C ta: 50°C	
GLSV-150B048	     IP67 SELV	tc: 85°C ta: 50°C	

© MODEL ENCODING

GLSV	-	150	B	xxx
Series name		Rated Output Power [W]	Option name	012 - rated output voltage is 12V 024 - rated output voltage is 24V 036 - rated output voltage is 36V 048 - rated output voltage is 48V

GLSV-150 series

150W Constant Voltage Outdoor LED Power Supply



© ELECTRICAL SPECIFICATION

MODEL	GLSV-150B012	GLSV-150B024	GLSV-150B036	GLSV-150B048
OUTPUT				
OUTPUT VOLTAGE	12VDC	24VDC	36VDC	48VDC
NO LOAD VOLTAGE (MAX.)	12.6VDC	25.2VDC	37.8VDC	50.4VDC
LOAD CURRENT RANGE	0 ÷ 12.5A	0 ÷ 6.25A	0 ÷ 4.17A	0 ÷ 3.13A
RATED POWER	150.00W	150.00W	150.12W	150.24W
OUTPUT VOLTAGE PRECISION	± 5.0%			
LINE REGULATION (FROM 115VAC TO 305VAC)	± 3.0%			
LOAD REGULATION (FROM 50% TO 100% LOAD)	± 3.0%			
OUTPUT VOLTAGE RIPPLE	< 3% V _{OUT}		< 2% V _{OUT}	
TURN-ON DELAY TIME	0.5s for 100% load 230VAC / 1s for 100% load 115VAC			

INPUT				
VOLTAGE RANGE	90 ÷ 305VAC (Refer to Input Voltage vs. Load Curve)			
FREQUENCY RANGE	47 ÷ 63Hz			
EFFICIENCY AT 100% LOAD (TYP.)	90%	91%	91%	91%
	Refer to Efficiency vs. Output Load Curve			
AC CURRENT (MAX.)	2.0A			
INRUSH CURRENT (MAX.)	75A / 230VAC (Refer to Inrush Current Waveform)			
LEAKAGE CURRENT (MAX.)	0.75mA/230VAC			
POWER FACTOR (TYP.)	0.96 / 230VAC at 100% load (Refer to Power Factor vs. Load Curve)			
THD	< 15% / 230VAC at 70-100% load (Refer to THD vs. Load Curve)			

PROTECTIONS				
SHORT CIRCUIT	Type: decrease of input power, auto-recovery.			
OVER VOLTAGE	13.2 ÷ 15.6VDC	26.4 ÷ 31.2VDC	39.6 ÷ 46.8VDC	52.8 ÷ 62.4VDC
	Type: shut off output voltage, restart on to recovery.			
OVER CURRENT	100-150% rated output current		105-130% rated output current	
	Type: hiccup mode, auto-recovery.		Type: constant current, auto-recovery.	
OVER TEMPERATURE	Temperature T _c > 90°C			
	Type: shut off output voltage, re-power on to recovery.			

WORKING ENVIRONMENT				
WORKING TEMPERATURE	-40°C ÷ 60°C (Refer to Derating Curve)			
WORKING HUMIDITY	20 ÷ 95% RH non-condensing			
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 85°C, 20 ÷ 95% RH non-condensing			
VIBRATION	10 to 500Hz sweep at constant acceleration 1G (depth 3.5mm) for 1 hour for each X, Y, Z axes			
DEGREE OF PROTECTION	[2]	IP67		

GLSV-150 series

150W Constant Voltage Outdoor LED Power Supply



SAFETY AND EMC REGULATIONS

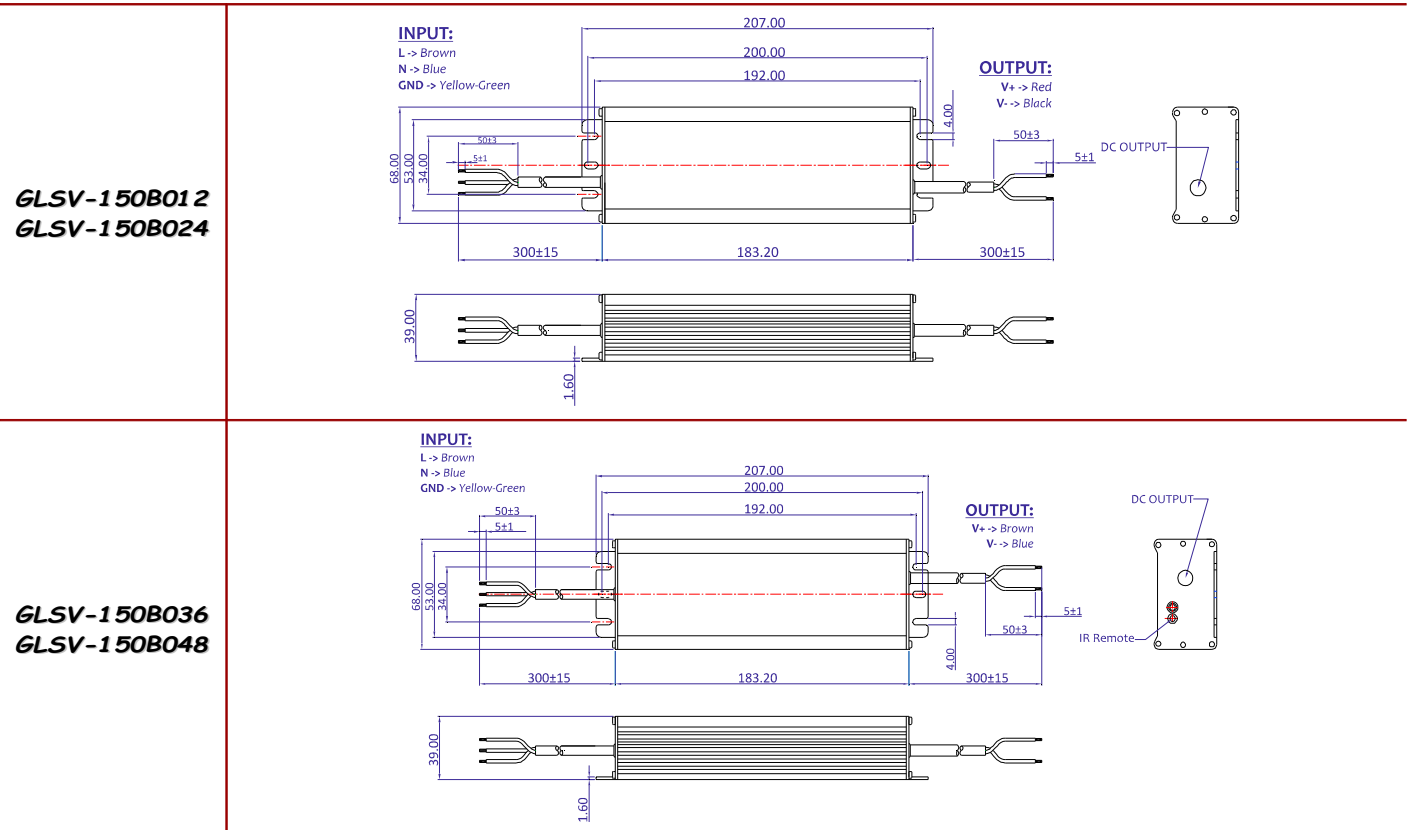
SAFETY STANDARDS	CE	EN61347-1; EN61347-2-13
EMC STANDARDS	CE	EN55015; IEC61000-3-2; IEC61000-3-3; IEC61547
WITHSTAND VOLTAGE	IN/OUT: 3.75kVAC; IN/GND: 1.6kVAC; OUT/GND: 1.6kVAC; 60s, current < 10mA	
GROUNDING RESISTANCE	< 0.1Ω (60S/25A)	
INSULATION RESISTANCE	IN/OUT, IN/GND, OUT/GND > 100MΩ (500VDC/60s)	

OTHERS

Input Wire	CCC+VDE 3 x 1.0mm ² , length = 300 ± 10mm
Output Wire	16AWG 2C, length = 300 ± 10mm for GLSV-150B012 and GLSV-150B024 CCC+VDE 2 x 1.0mm ² , length = 300 ± 10mm for GLSV-150B036 and GLSV-150B048
MTBF (MIL-HDBK-217F)	200 000h at 230VAC / 80% load and ta < 25°C
Life Time (min.)	50 000h at 230VAC / 100% load and tc < 60°C (Refer to Life Time vs. T _c Curve)
Dimensions (Length * Width x Height)	207.0 * 68.0 * 39.0 mm
Weight	900 ± 50g

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Suitable for indoor or outdoor use. Please avoid direct exposure to sunlight and immersion in water for over 30 minutes.
3. 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 and LVD Directives.

© MECHANICAL SPECIFICATION



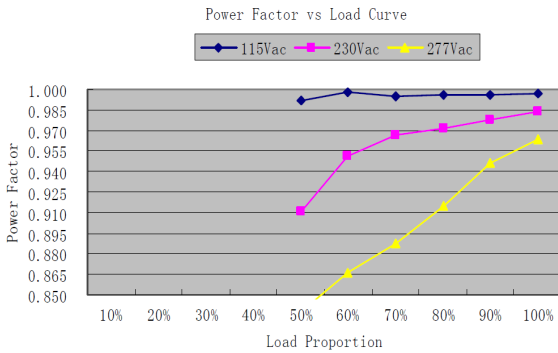
GLSV-150 series

150W Constant Voltage Outdoor LED Power Supply

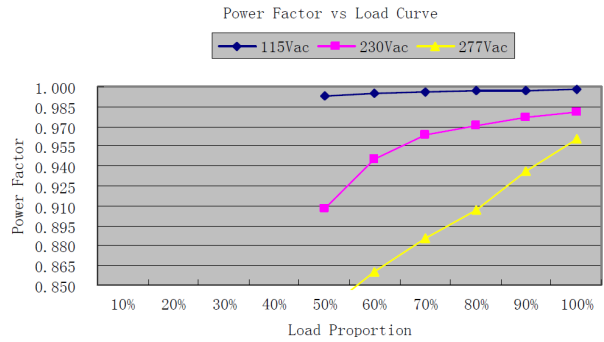


© Power Factor vs. Load Curve

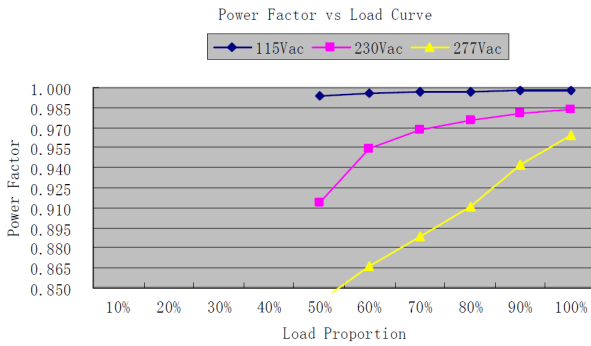
GLSV-150B012



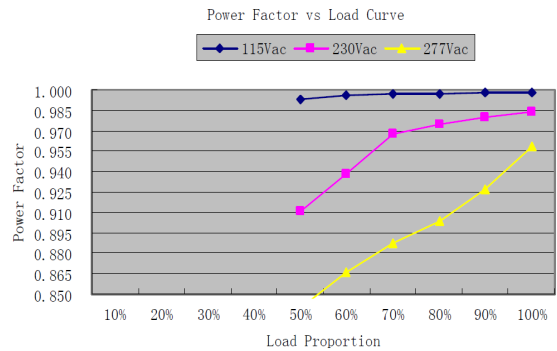
GLSV-150B024



GLSV-150B036

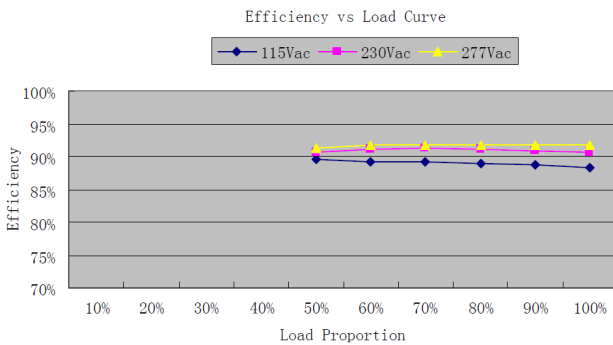


GLSV-150B048

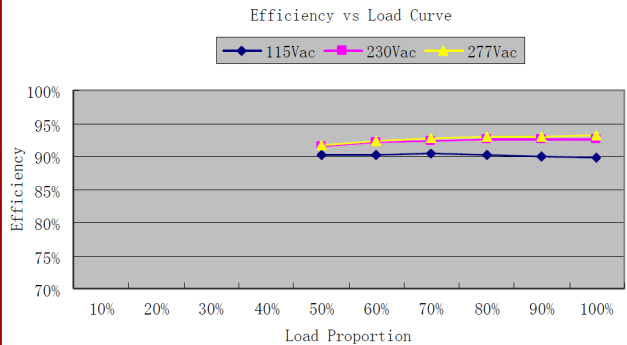


© Efficiency vs. Load Curve

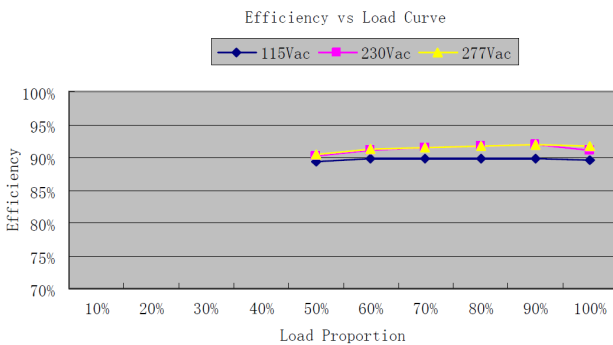
GLSV-150B012



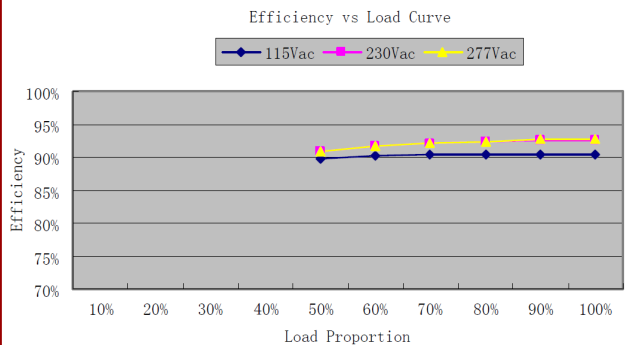
GLSV-150B024



GLSV-150B036



GLSV-150B048



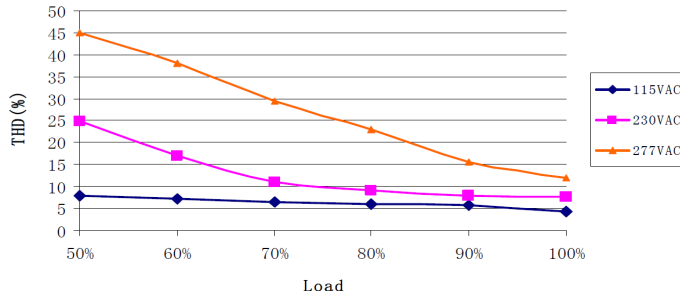
GLSV-150 series

150W Constant Voltage Outdoor LED Power Supply

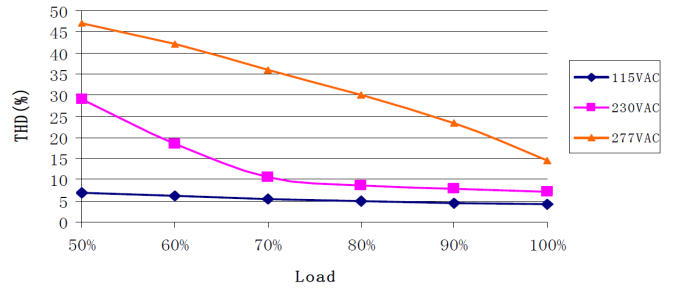


© THD vs. Load Curve

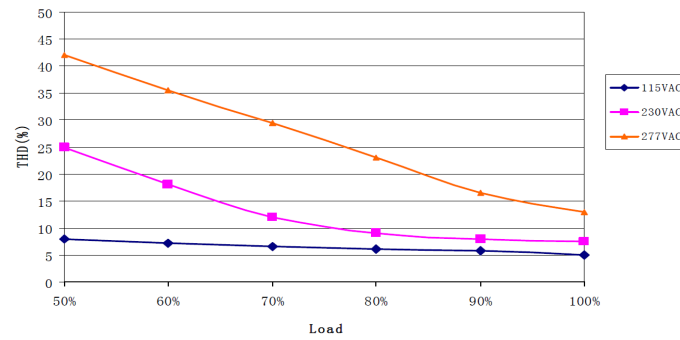
GLSV-150B012



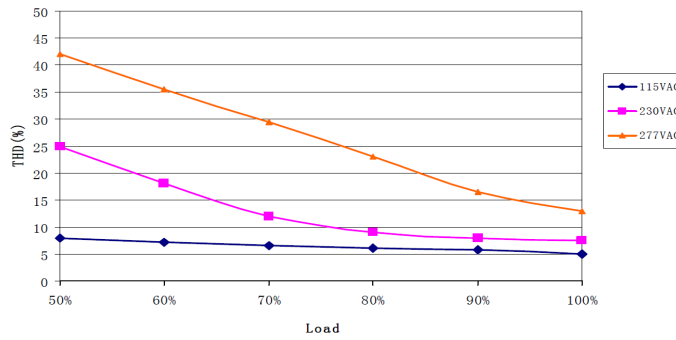
GLSV-150B024



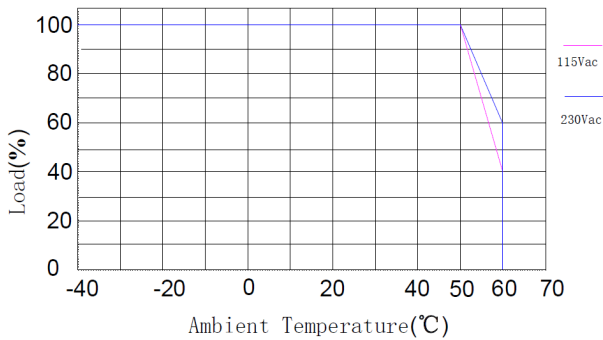
GLSV-150B036



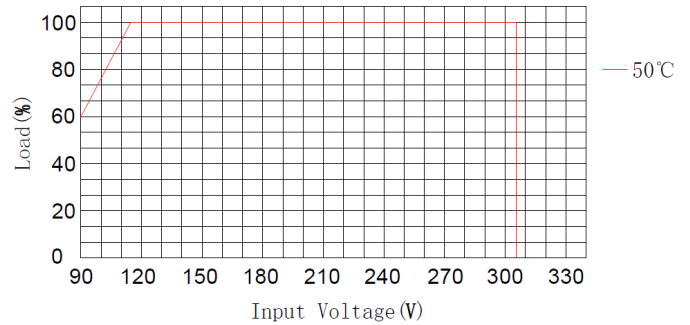
GLSV-150B048



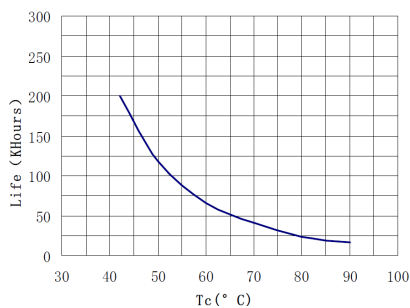
© Derating Curve



© Input Voltage vs. Load Curve



© Life time vs. T_c curve



© Inrush Current Waveform

