GLTP-100 circular series

100W Constant Current LED Driver with PFC function

Feature & Application

- Constant Power design with **adjustable output current** level by potentiometer
- Built-in active PFC function
- Universal AC input / Full range up to 305Vac
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Thermal protection
- Surge immunity: Dif. Mode: 4kV, Comm. Mode:6kV
- High efficiency
- Dimming 2in1: 0...10V, PWM (model GLTP-100M)
- IP65 design for indoor and outdoor appliances
- 5 Years warranty
- Industrial LED lighting

MODEL INFORMATION

Model Number	Output Power (W)	Output Current (A) (adjustable range)		Output Voltage (V) range		Default output spec.		Efficiency (%)	No Load Output Voltage Max (V)	Protection against Electric Shock
		min	max	min	max	Voltage (V)	Current (A)			
GLTP-100V036 GLTP-100M036	100	2.78	3.57	14	36	36	2,78	91	50	SELV
GLTP-100V054 GLTP-100M054	100	1.85	2.38	21	54	54	1.85	92	70	SELV
GLTP-100V071 GLTP-100M071	100	1,40	1.83	27	71	71	1,4	92	80	Isolating
GLTP-100M143 GLTP-100V143	100	0,7	1,05	48	143	143	0,7	92	160	Isolating

MODEL INFORMATION GLTP-100XY

GLTP	-100	X	Y
Circular LED Driver	Output power (W)	V – no dimming M – dimming 2 in 1 (1..10V & PWM)	**036** - max output voltage is 36V **054** – max output voltage is 54V **071** – max output voltage is 71V **143** – max output voltage is 143V

GLTP-100 circular series

100W Constant Current LED Driver with PFC function

ELECTRICAL SPECIFICATION

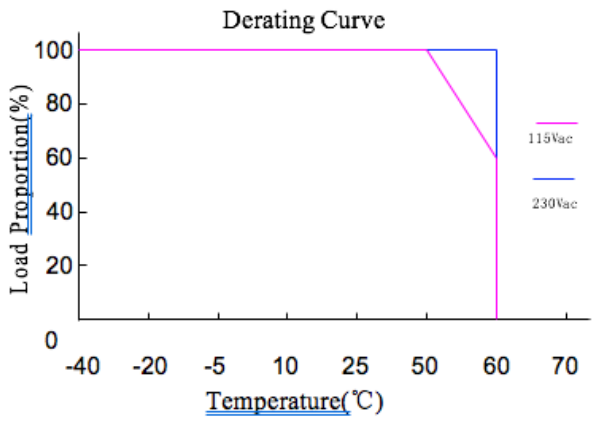
MODEL	GLTP-100V036 GLTP-100M036	GLTP-100V054 GLTP-100M054	GLTP-100V071 GLTP-100M071	GLTP-100V143 GLTP-100M143
OUTPUT				
Voltage Range	14V…36V	21V…54V	27V…71V	48V..143V
Current Adjustable Range	2,78A…3,57A	1,85A…2,38A	1,4A…1,83A	0,7A…1,05A
Rated Power	100W			
Line Regulation	< 1%			
Load Regulation	< 3%			
Tolerance [1]	± 5%			
Ripple & Noise Vp-p	<1%Uout			
Setup time	<500ms			
INPUT				
Voltage Range	90 ÷ 305VAC/140…250Vdc			
Frequency Range	47 ÷ 63Hz			
Efficiency (typ.)	91%	92%	92%	92%
AC current (max.)	2.0A			
Power Factor (typ.)	0.98@115VAC 100% load; 0.96@ 230Vac Load: 85% ÷ 100%			
Inrush current	60A @ 230Vac			
Leakage current (max.)	0.75mA / 230VAC			
PROTECTIONS				
Short Circuit	Recovers automatically after fault condition is removed , input power under short condition is <15W			
Over Temperature	When the temp of power supply is over 85°C output current is limited up to 20%			

WORKING ENVIRONMENT	
Working Temperature	40°C ÷ +60°C , max T_{CASE} = +85°C
Working Humidity	20 ÷ 95% RH non-condensing
Storage Temperature and Humidity	-40°C ÷ 85°C, 10 ÷ 95% RH non-condensing
SAFETY AND EMC REGULATIONS	
Safety Standards	EU: Compliance to EN61347-1, EN61347-2-13; America: UL8750 Canada: CSA C22.2 No.1017.1-01
Withstand Voltage	IN/OUT: 3.75kVAC; IN/GND(CASE): 2.0kVAC; OUT/GND(CASE): 0.5kVAC
Isolation Resistance	IN/OUT:50MΩ/500VDC/25°C/70%
Grounding Resistance	<0,1Ω @25°C/25A/60s

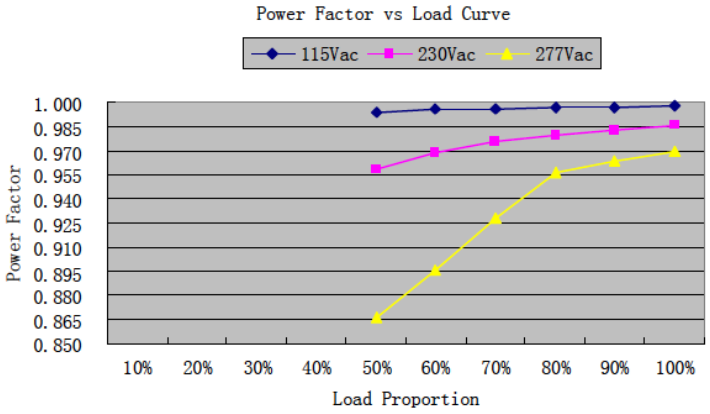
EMC Emission	Compliance to EN 55015
EMC Immunity	Compliance to EN 61547; IEC 61000-4-2, -3, -4, -5, -6, -8, -11
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2 clacc C
OTHERS	
MTBF	> 200 000 hours according to MIL-HDBK-217F (U_{IN} = 110VAC; load: 80%, T_A = 25°C)
Lifetime	50 000 hours (U_{IN} = 230VAC; load: 80%, T < 45°C)
Dimensions	Φ 130/66.5mm (DxH)
Weight	1.0kg/pcs
Vibration	10..500Hz 1.0G 1Hr each oft he perpendicular X,Y,Z axes

1. Tolerance conteins factory set up tolerance, line regulation and load regulation.
2. 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 & LVD Directive.

DERATING CURVE

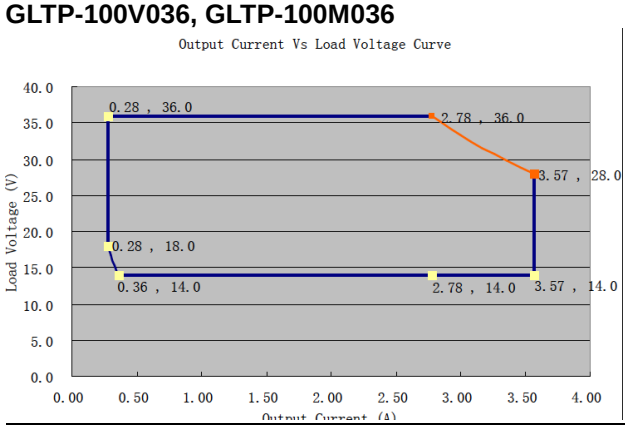


POWER FACTOR vs. LOAD POWER CURVE

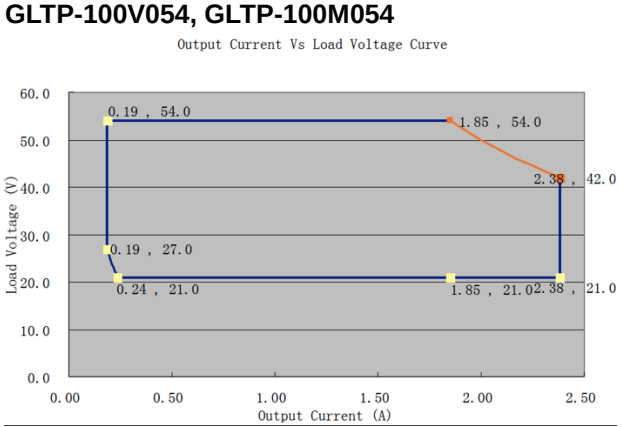


OUTPUT CURRENT vs LOAD VOLTAGE CURVE

GLTP-100V036, GLTP-100M036

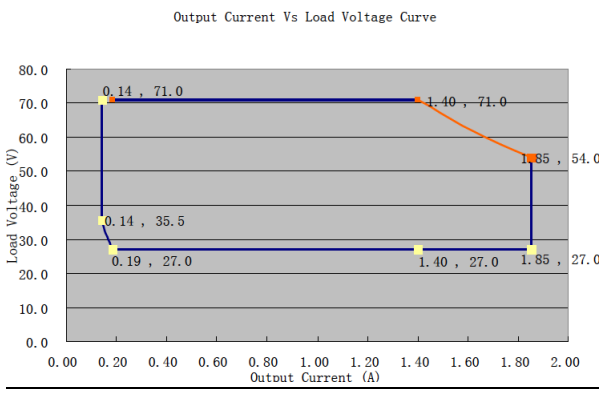


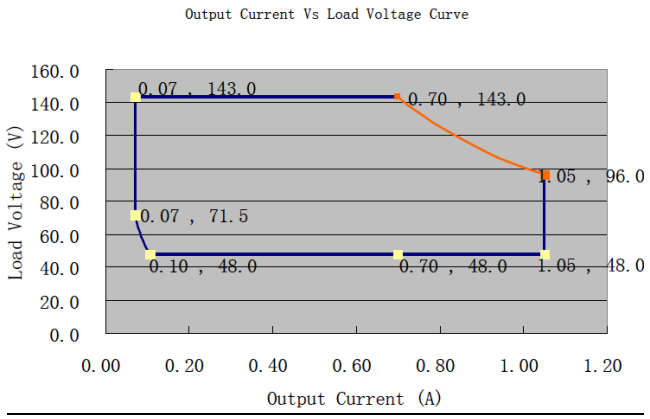
GLTP-100V054, GLTP-100M054



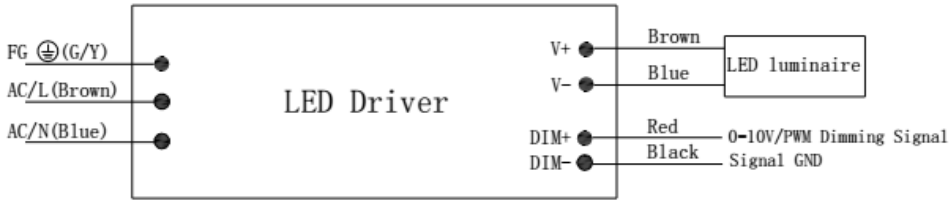
GLTP-100V071, GLTP-100M071

GLTP-100V143, GLTP-100M143

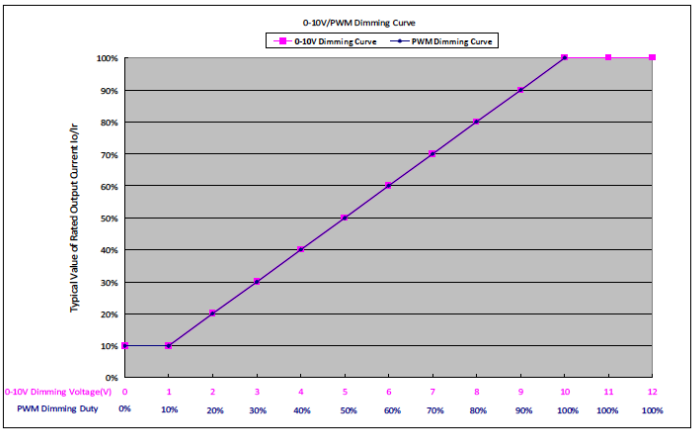




DEFINE OF INTERFACE

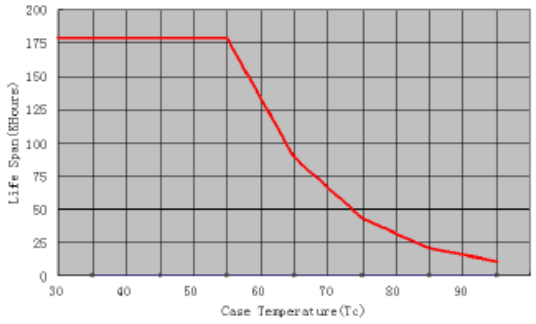


DIMMING CURVE

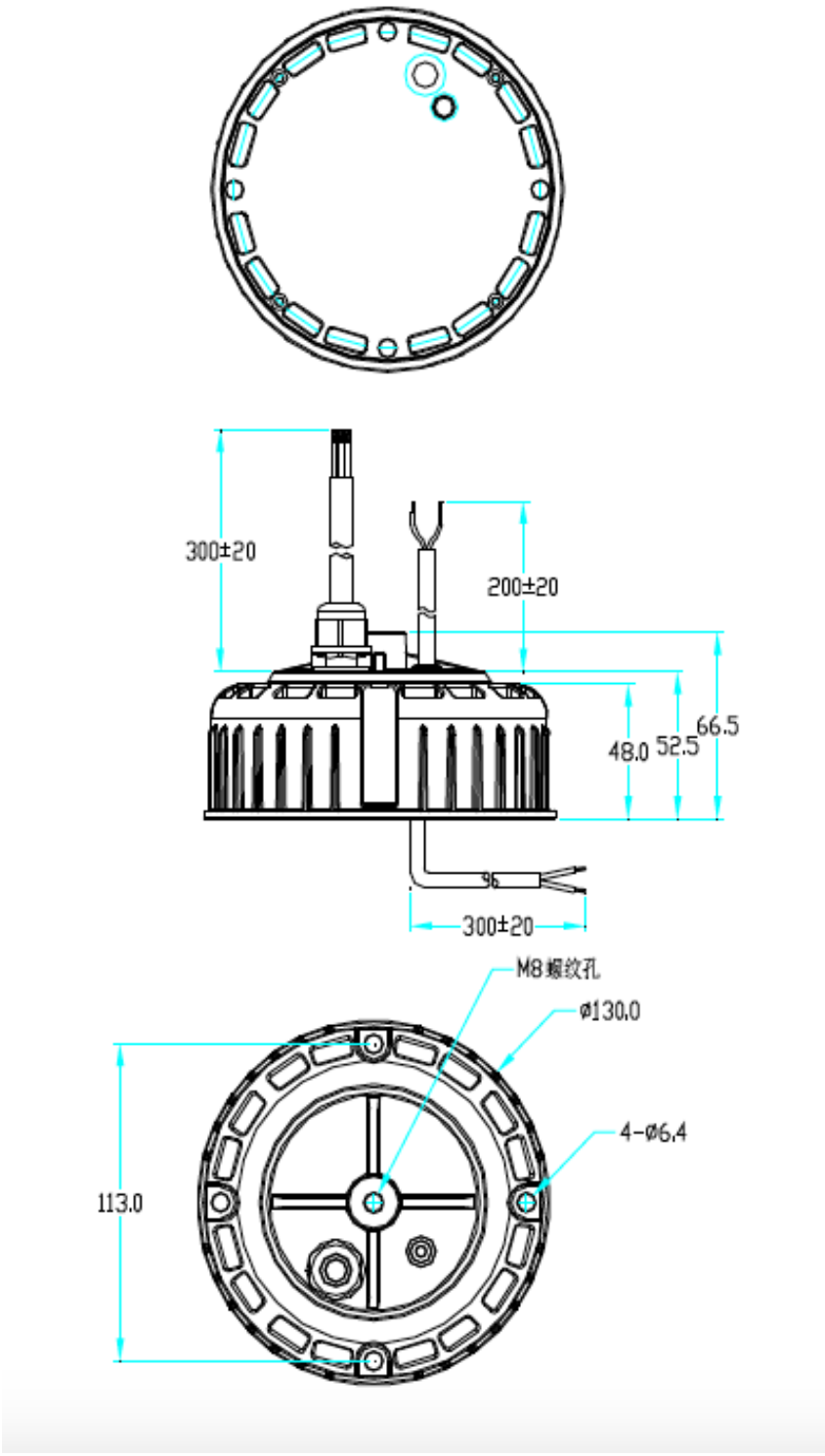


LIFE TIME QUALIFICATION

The life time is at least 50kHrs @ temperature under 70C



MECHANICAL SPECIFICATION



OPTIONAL MOUNTING ACCESORIES