



Product Features

- Universal input voltage: 90~305Vac;
- Constant power design, output current adjustable;
- Setting current with a built-in variable resistor;
- 2-in-1 dimming mode 0-10Vdc, PWM dimming;
- Surge protection: 4KV line-line, 6KV line-earth;
- Overall protection: Short circuit / Over temperature;
- Degrees of protection: IP65;
- Ambient temperature: -40℃~60℃;
- 5 years warranty.

Application

- Suitable for industrial lighting.

DESCRIPTION

LTP-100 series is especially designed for industrial lighting applications. This series takes constant power design, supports 0-10V and PWM dimming. The output adapts wide load range and the parameter can be adjusted through internal potentiometer. The circular integrated structure enables perfect match to industrial lighting fixtures and performs excellent heat dissipation to meet the industrial lighting demand.

MODELS

Model Number	Max Output Power (W)	Output Voltage Range (Vdc)	Output Current Adjustable Range (A)	Full Power Current Adjustable Range (A) [2]	Default Output Setting	Typical Efficiency [3]	Power Factor	
							115Vac	230Vac
LTP-100Y036 [1]	100	14~36	2.50~3.57	2.78~3.57	14~36V/2.78A	90%	0.99	0.96
LTP-100Y054	100	21~54	1.66~2.38	1.85~2.38	21~54V/1.85A	91%	0.99	0.96
LTP-100Y071	100	27~71	1.26~1.85	1.40~1.85	27~71V/1.40A	91%	0.99	0.96
LTP-100Y143	100	48~143	0.63~1.05	0.70~1.05	48~143V/0.70A	91%	0.99	0.96

Notes:

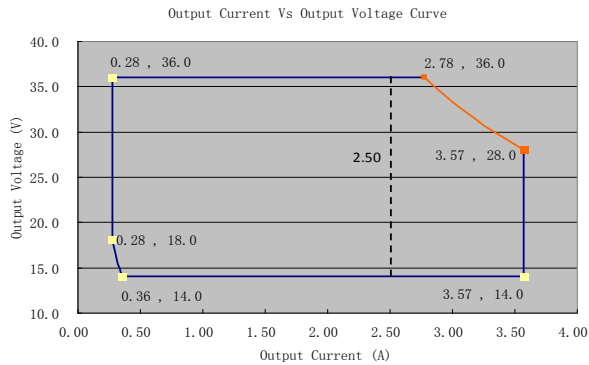
[1]. Y can be M or V, means dimmable or non-dimmable. Take LTP-100Y036 for example, LTP-100M036, with 0-10V/PWM dimming function, output current adjustable; LTP-100V036, output current adjustable;

[2]. Output current adjustable range with constant power at max output power;

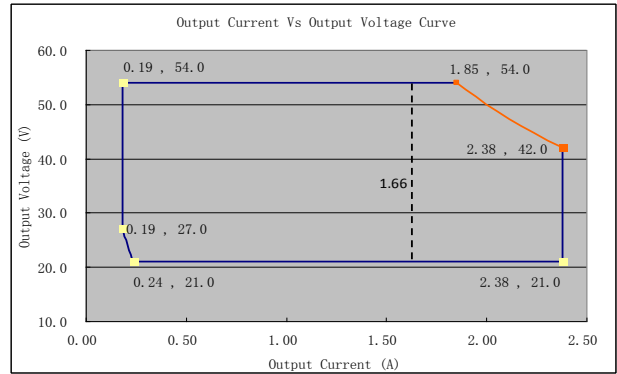
[3] All specifications are measured at 25℃ ambient temperature, if no specific note.

OPERATING AREA I-V

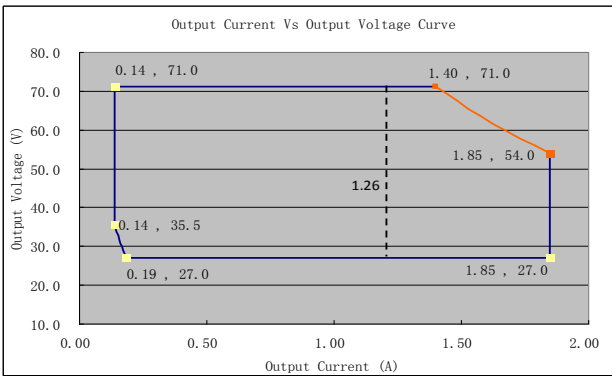
LTP-100Y036



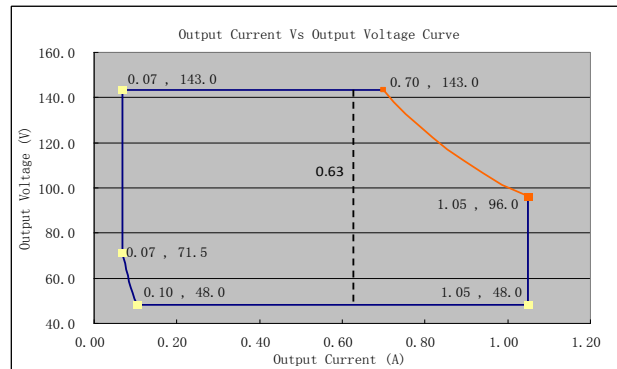
LTP-100Y054



LTP-100Y071



LTP-100Y143



INPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90Vac	100-277Vac	305Vac	
Input Frequency	47Hz	50/60	63Hz	
Leakage Current	-	-	0.75mA	277Vac/50Hz
Input AC Current	-	-	1.5A	100-277Vac & full load
Inrush Current(A)	-	-	75A	230Vac & full load
Power Factor	0.95	0.96	-	230Vac & full load
THD	-	-	20%	115-230Vac, 75%-100% load, applicable to CE version
	-	-	20%	115-277Vac, 75%-100% load, applicable to UL version

OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Output Current Tolerance	-5%Iset	-	5%Iset	Full load
Output Current Setting Range(Iset) LTP-100Y036 LTP-100Y054 LTP-100Y071 LTP-100Y143	2.50A 1.66A 1.26A 0.63A	-	3.57A 2.38A 1.85A 1.05A	
Output Current Setting Range with Constant Power LTP-100Y036 LTP-100Y054 LTP-100Y071 LTP-100Y143	2.87A 1.85A 1.40A 0.70A	-	3.57A 2.38A 1.85A 1.05A	
Total Output Current Ripple (pk-pk)			10%	230Vac & full Load , load is LED, ripple is different with difference LED load.
Startup Overshoot Current		-	10%	115~277Vac & 100% Load, load is LED
No Load Output Voltage LTP-100Y036 LTP-100Y054 LTP-100Y071 LTP-100Y143	-	-	50V 80V 90V 160V	
Line Regulation	-	-	1%	25°C±10°C ambient temperature, input voltage changes from 115Vac to 277Vac.
Load Regulation	-	-	3%	25°C±10°C ambient temperature, 230Vac input, load changes from 50% to 100%.
Turn-on Delay Time	-	-	3S	115Vac,100% load
	-	-	0.5S	230Vac,100% load

GENERAL SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Efficiency @115Vac LTP-100Y036 I _o =2.87A I _o =3.57A LTP-100Y054 I _o =1.85A I _o =2.38A LTP-100Y071 I _o =1.40 I _o =1.85 LTP-100Y143 I _o =0.70A I _o =1.05A	86% 86% 87% 87% 87% 87% 88% 88%	88% 88% 89% 89% 89% 89% 90% 90%	-	Measured at full load and 25°C ambient Temperature

Efficiency @230Vac				-	Measured at full load and 25°C ambient Temperature
LTP-100Y036					
I _o =2.87A		88%	90%		
I _o =3.57A		88%	90%		
LTP-100Y054					
I _o =1.85A		89%	91%		
I _o =2.38A		89%	91%		
LTP-100Y071					
I _o =1.40		89%	91%		
I _o =1.85		89%	91%		
LTP-100Y143					
I _o =0.70A		89%	91%		
I _o =1.05A		89%	91%		
Efficiency @277Vac				-	Measured at full load and 25°C ambient temperature
LTP-100Y036					
I _o =2.87A		88%	90%		
I _o =3.57A		88%	90%		
LTP-100Y054					
I _o =1.85A		89%	91%		
I _o =2.38A		89%	91%		
LTP-100Y071					
I _o =1.40		89%	91%		
I _o =1.85		89%	91%		
LTP-100Y143					
I _o =0.70A		89%	91%		
I _o =1.05A		89%	91%		
Dielectric Strength	Input-Output	-	3750Vac	-	10mA/60S
	Input-PE	-	1600Vac	-	
	Output- PE	-	1600Vac	-	
Grounding Resistance		-	-	0.1Ω	25A/60S
Insulation Resistance		50MΩ	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH
MTBF			200000 hours	-	230Vac,80% load (MIL-HDBK-217F)
Lifetime			50000 hours	-	230Vac&100% load, 70°C case temperature, refer to lifetime VS T _c curve for details
Operating Case Temperature for Safety T _{c_s}		-40°C	-	+85°C	
Operating Case Temperature for Warranty T _{c_w}		-40°C	-	+60°C	
Storage Temperature		-40°C	-	+85°C	Humidity: 20% to 95% RH
Dimensions (L×W×H)mm		∅ 130*H69.5mm			
Net Weight		1000±50g/PCS			
Package		L490*W370*H175mm; 12pcs/Ctn.			

DIMMING

Parameter		Min.	Typ.	Max.	Notes
0~10V Absolute Maximum Voltage on the Vdim (+) Pin		0V	-	10V	
0~10V Source Current on Vdim (+) Pin		-	-	2mA	
Dimming Output Range	LTP-100Y036 LTP-100Y054 LTP-100Y071 LTP-100Y143	10%Imax	-	100%Imax	Imax=3.57A Imax=2.38A Imax=1.85A Imax=1.05A
	LTP-100Y036 LTP-100Y054 LTP-100Y071 LTP-100Y143	0.36A 0.24A 0.19A 0.11A	-	3.57A 2.38A 1.85A 1.05A	
	Recommended Dimming Range for 0-10V				Default 0-10V/ PWM Dimming
	PWM_in High Level		9.7V	-	
	PWM_in Low Level		0V	-	
PWM_in Frequency Range		250Hz		1000Hz	
PWM_in Duty Cycle		1%	-	99%	

SAFTY STANDARDS

Safety Category	Country / Territory	Standards
CCC	China	GB19510.1, GB19510.14
CE	China	EN61347-1, EN61347-2-13
CB	CB Countries	IEC61347-1, IEC61347-2-13
BIS	India	IS 15885(PART 2/SEC 13)
UL	USA	UL 8750
CUL	Canada	CSA C22.2 No.250.13
KC	South Korea	K61347-1, K61347-2-13, K62384
PSE	Japan	J61347-1, J61347-2-13
SAA	Australia	AS/NZS IEC 61347-2-13
		AS/NZS 61347.1

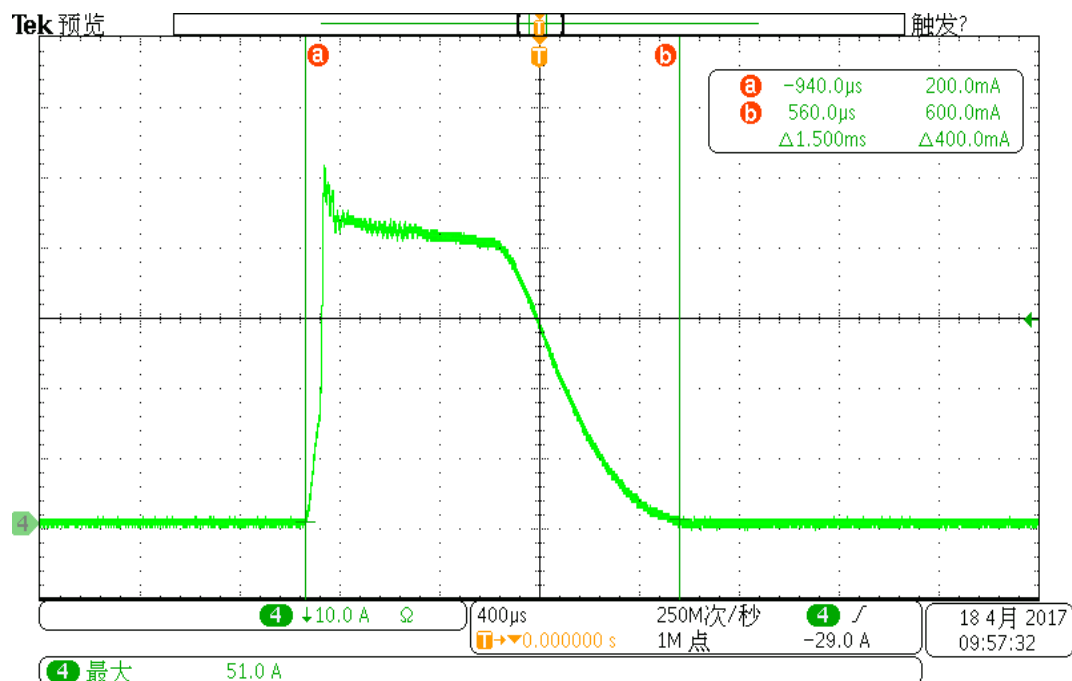
EMC COMPLIANCE

EMC Category	Country / Territory	Standards
CCC	China	GB 17743, GB 17625.1
CE	Europe	EN 55015, EN 61000-3-2, EN 61000-3-3
		EN61000-4-2,3,4,5,6,8,11
		EN 61547
KC	South Korea	K61547
		K00015
PSE	Japan	J55015
FCC	USA	FCC part 15

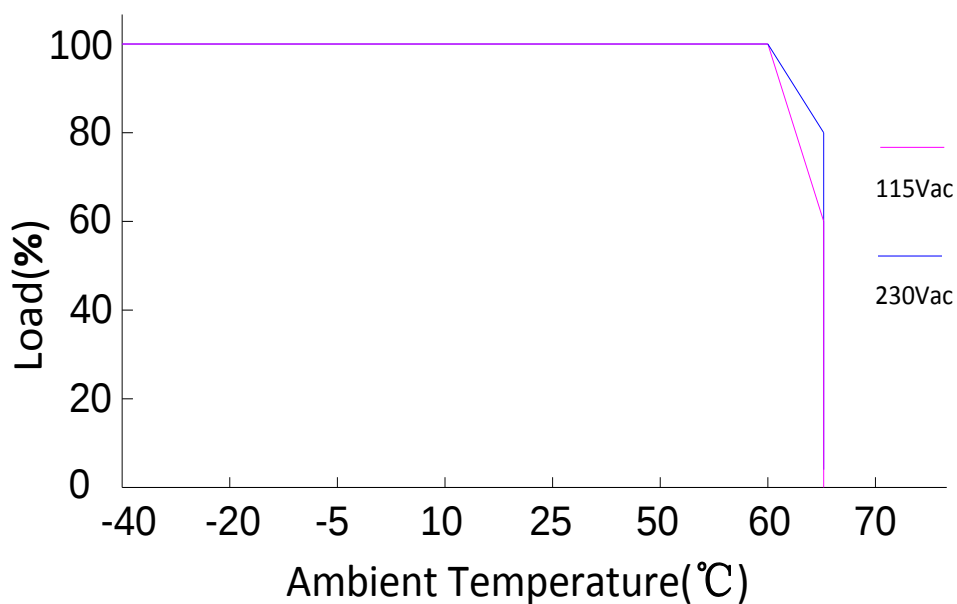
NOTE:

This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

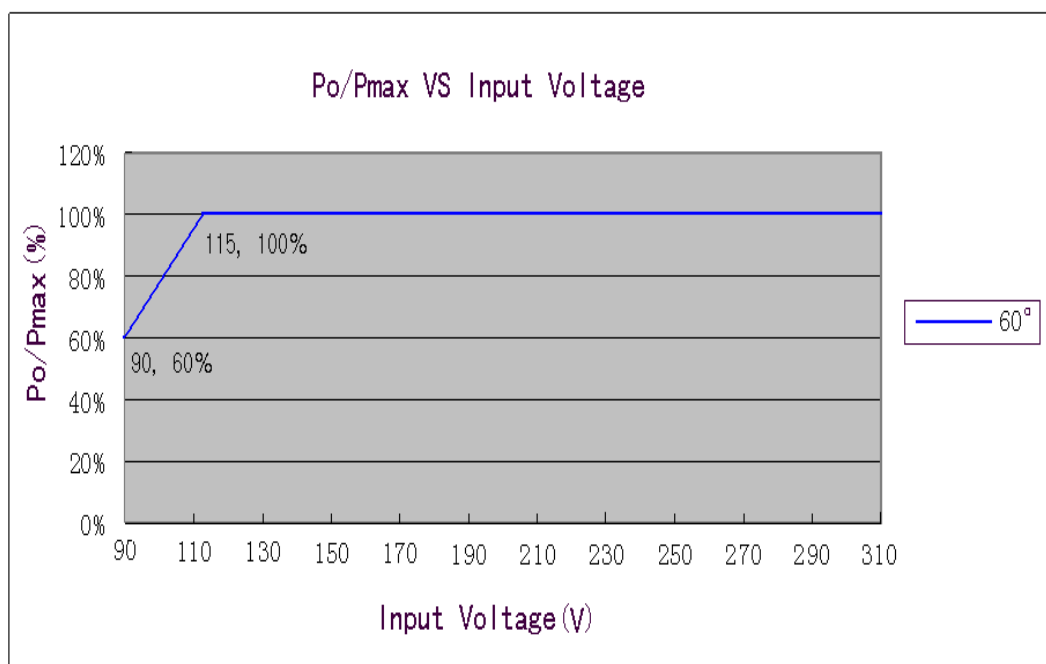
INRUSH CURRENT WAVEFORM



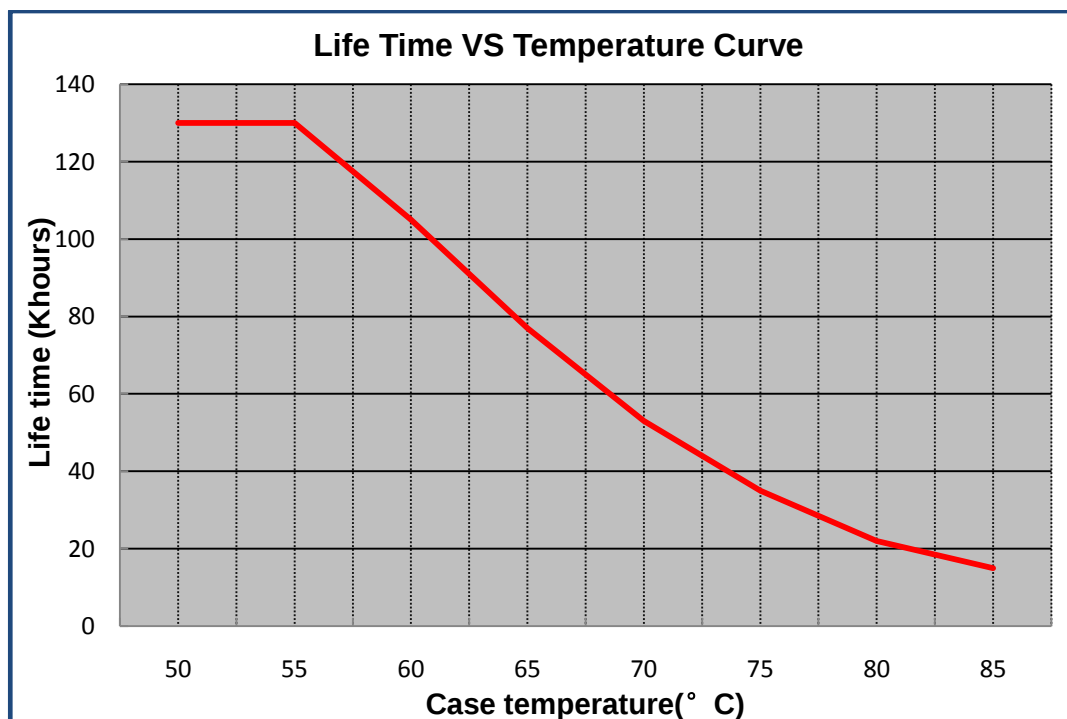
DERATING CURVE



OUTPUT POWER VS INPUT VOLTAGE



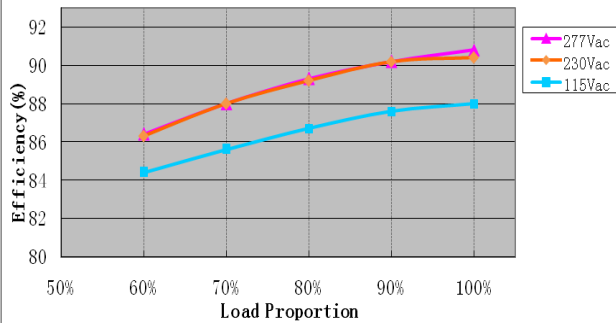
LIFETIME VS CASE TEMPERATURE



EFFICIENCY VS LOAD

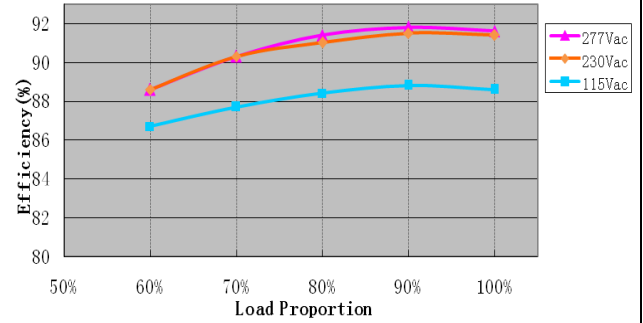
LTP-100Y036(3.57A)

Efficiency VS Load Curve



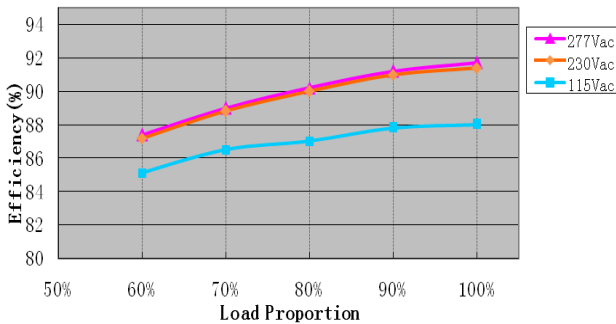
LTP-100Y036(2.78A)

Efficiency VS Load Curve



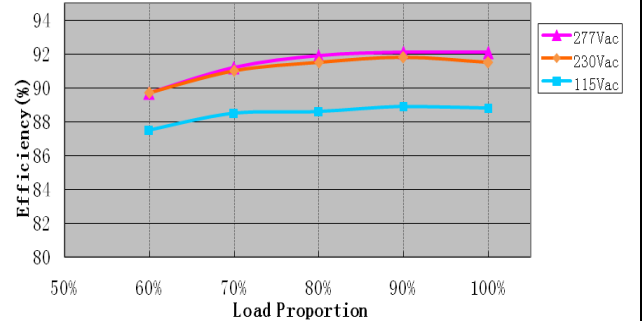
LTP-100Y054(2.38A)

Efficiency VS Load Curve



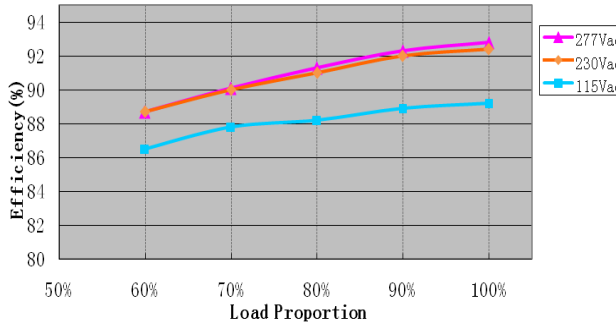
LTP-100Y054(1.85A)

Efficiency VS Load Curve



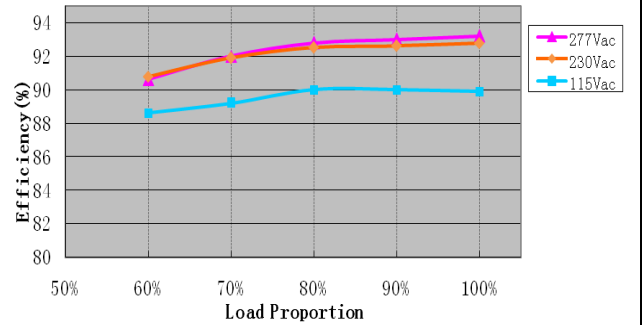
LTP-100Y071(1.85A)

Efficiency VS Load Curve



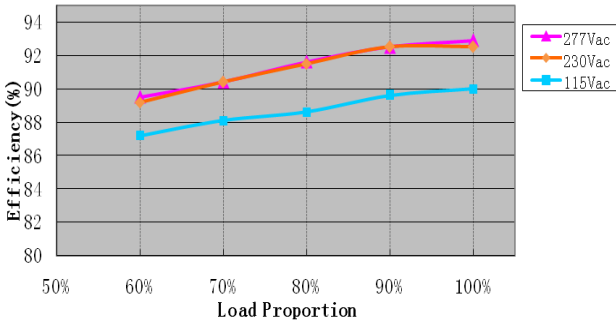
LTP-100Y071(1.4A)

Efficiency VS Load Curve



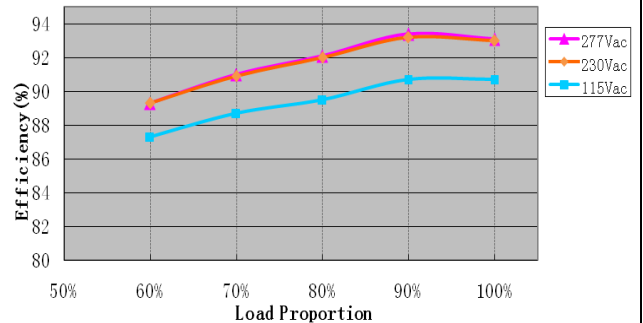
LTP-100Y143(1.05A)

Efficiency VS Load Curve

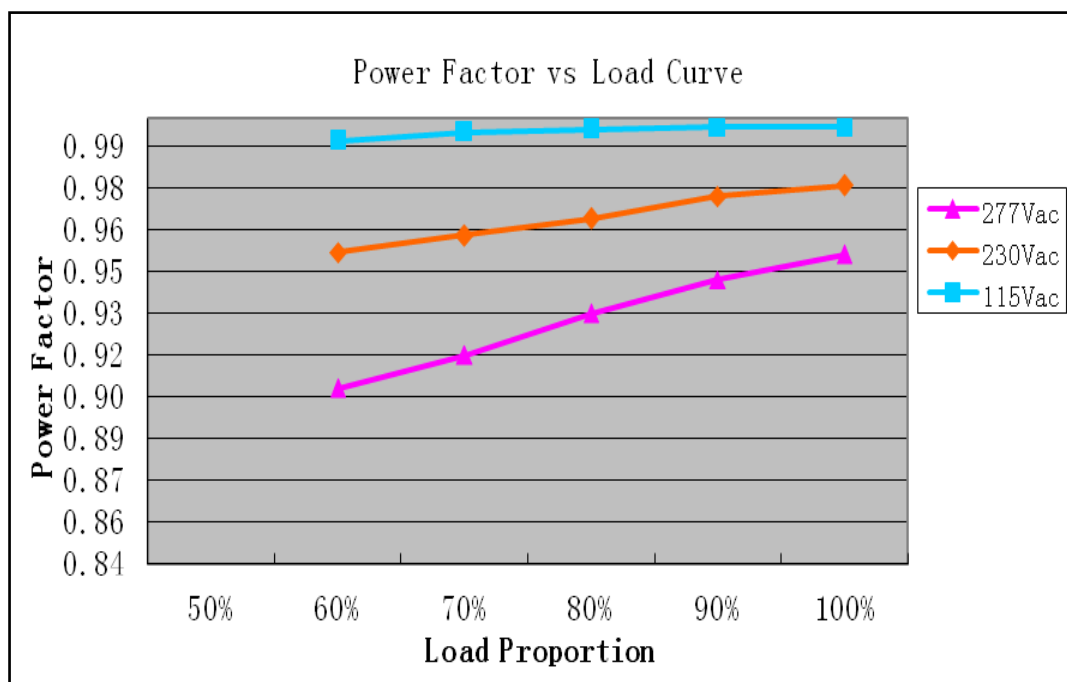


LTP-100Y143(0.7A)

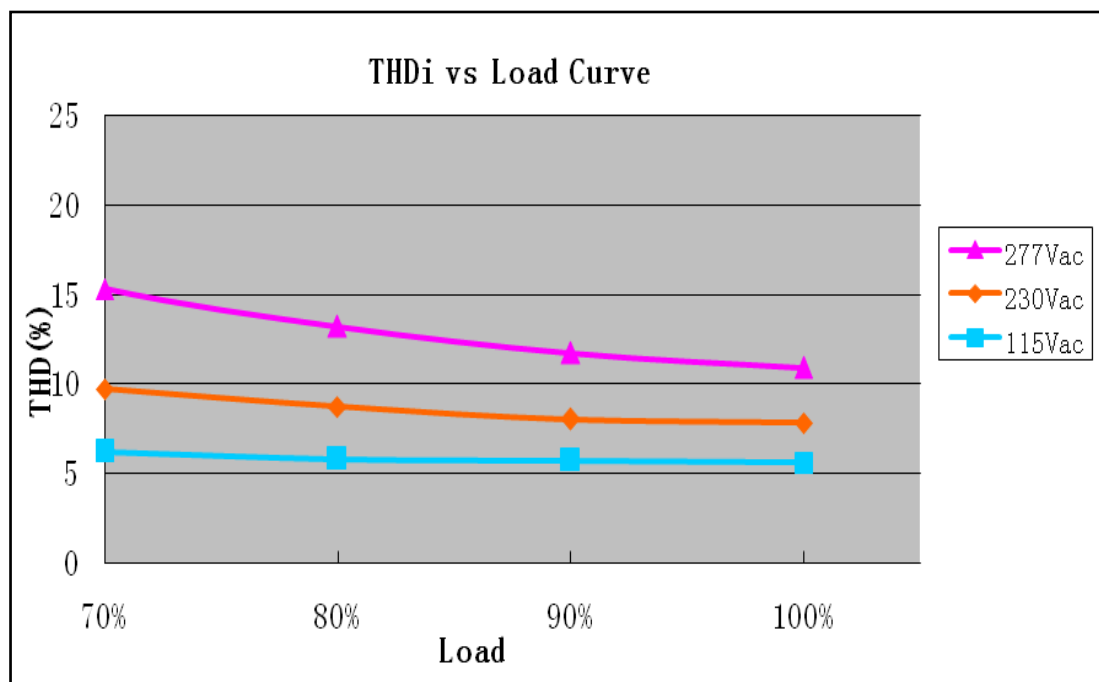
Efficiency VS Load Curve



POWER FACTOR VS LOAD



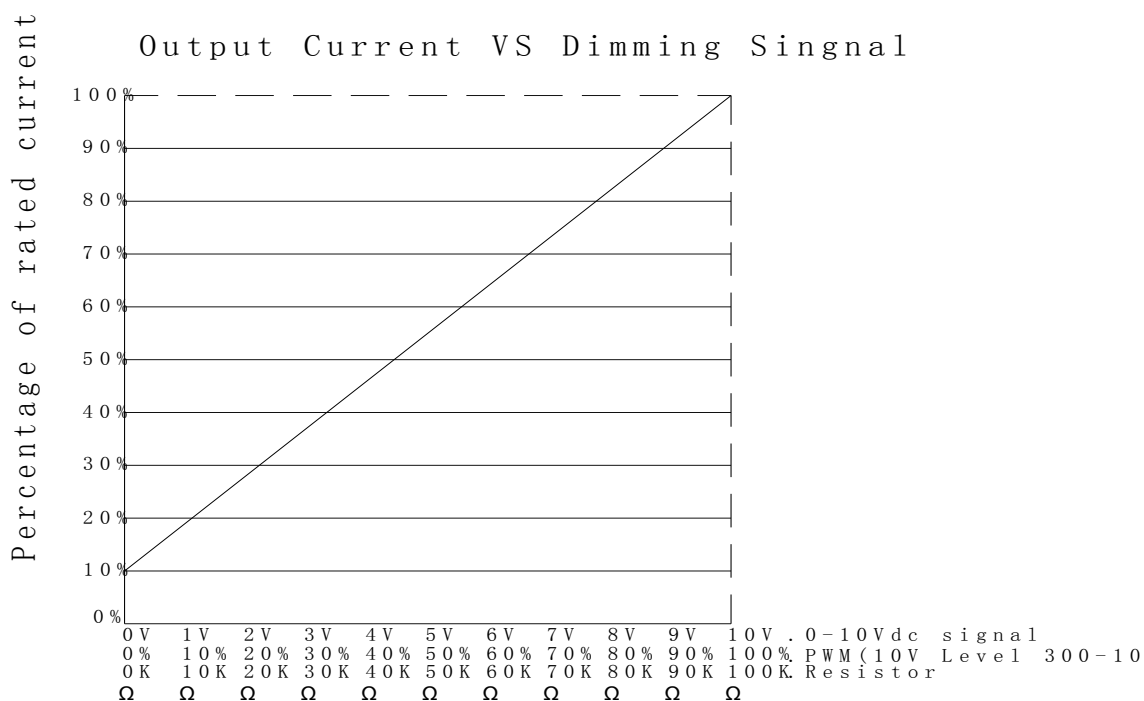
TOTAL HARMONIC DISTORTION



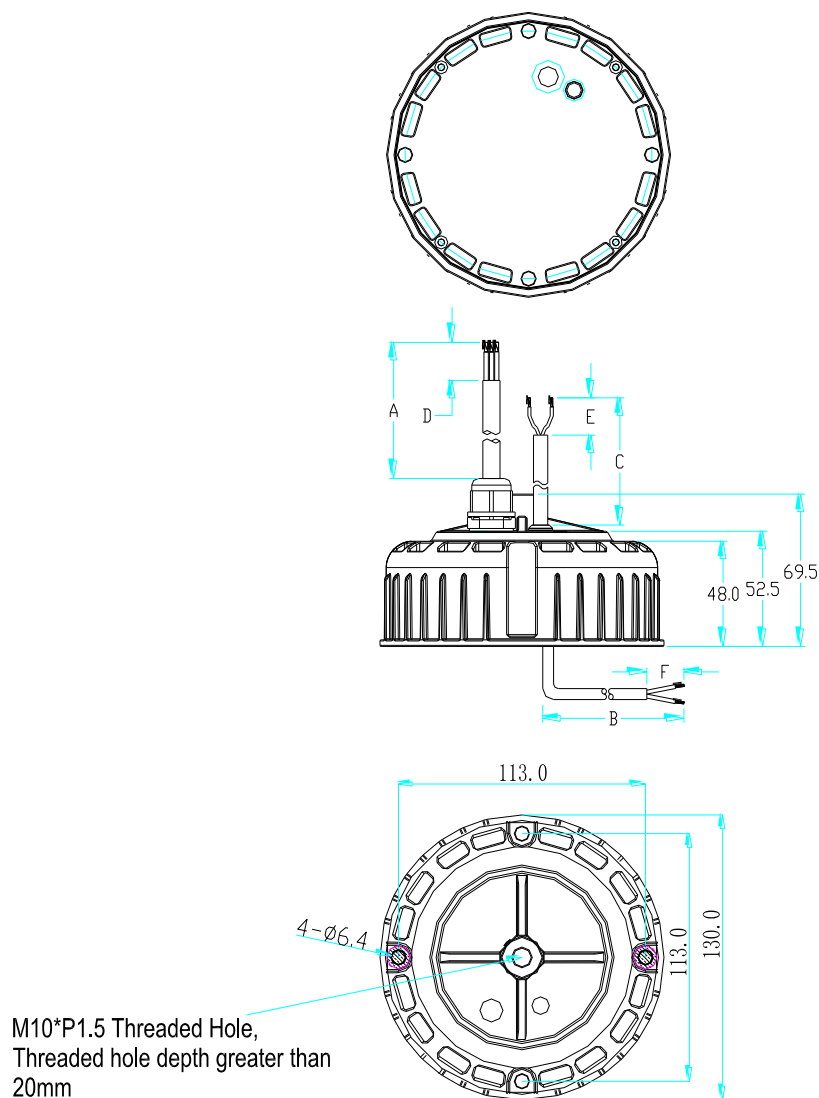
PROTECTIONS

Parameter	Notes
Over Temperature Protection	Decreases output current, returning to normal after over temperature is removed. The max derating could be 20% (typ.).
Short Circuit Protection	Constant current mode and auto recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.
Over Voltage Protection	Run into protection model when output voltage exceeds limit, and return to normal when the fault

0-10V/PWM DIMMING



MECHANICAL OUTLINE

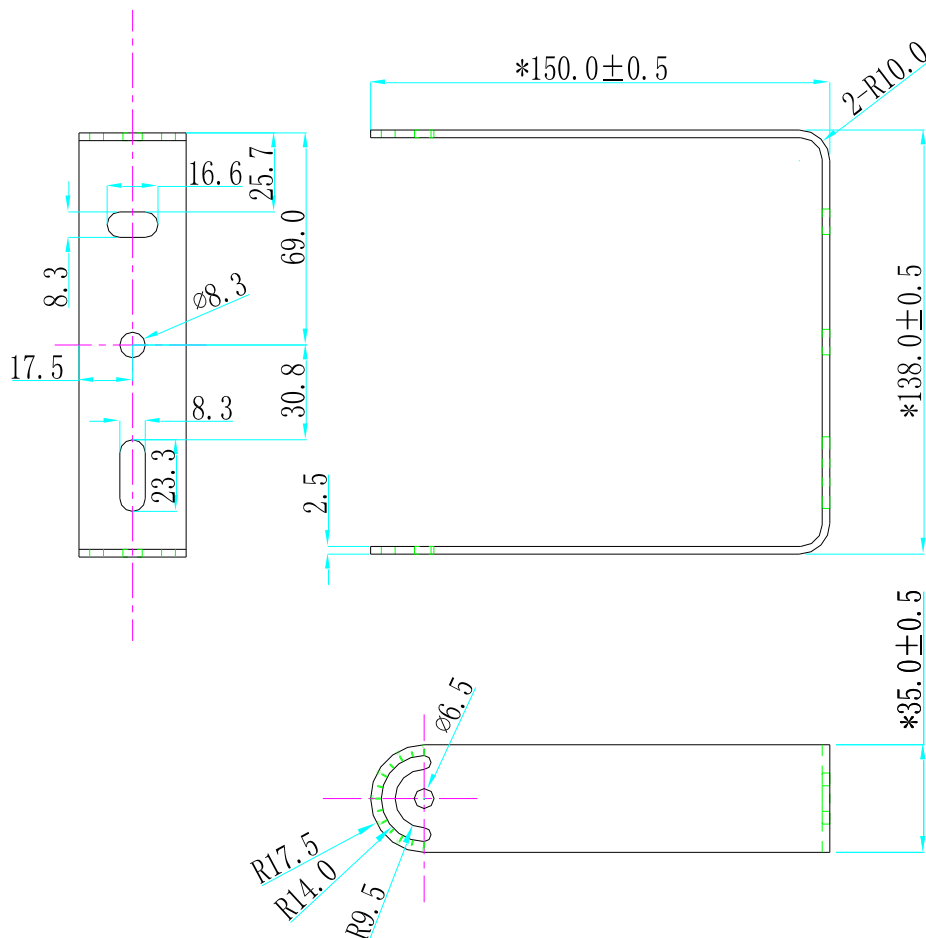


Note: LTP-100V types with no dimming

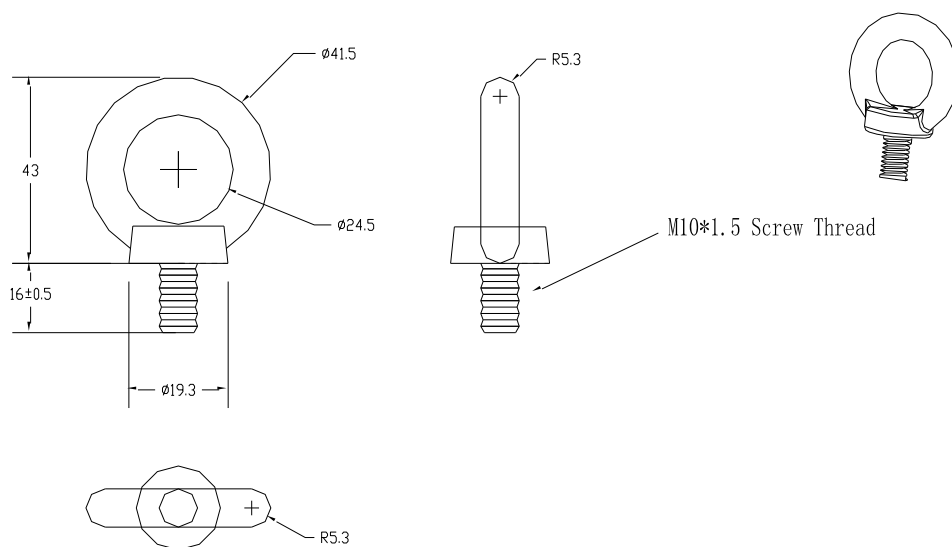
Wire	Specification	Note
AC Input A	CCC+VDE 3*1.0mm ² L=300±20mm	for CE
	18AWG L=300±20mm	for UL
DC Output B	CCC+VDE 2*1.0 mm ² L=300±20mm	for CE
	18AWG L=300±20mm	for UL
Dimming C	CCC+VDE 2*0.5 mm ² L=300±20mm	for CE
	18AWG L=300±20mm	for UL
AC Input shuck off scarfskin D	L=50±10mm	
DC Output shuck off scarfskin F	L=50±5mm	
Dimming shuck off scarfskin E	L=55±5mm	

Optional Accessories:

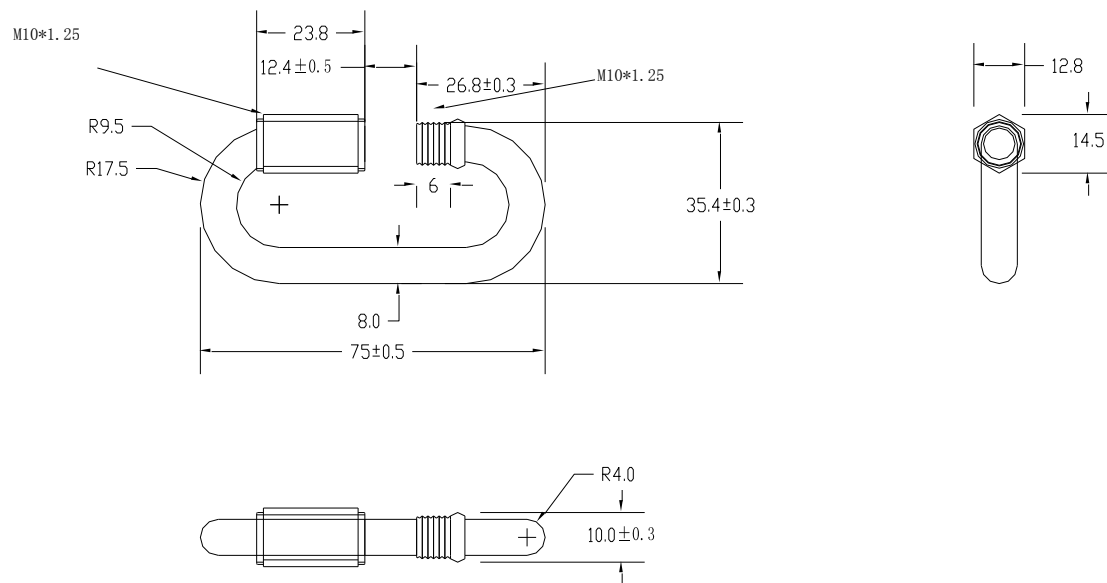
Holder:



Ring:



Hook:



REVISION HISTORY

Version	Description of Change		Date	Notes
	Before	Now		
A.4	—	Datasheets Release	2018-03-30	