

600W, 220-480Vac Input, Constant Voltage Power Supply

■ Features

- Absolute Supply Voltage: 200-528Vac or 250-740Vdc
- Great Surge Immunity 10kV
- 95% Efficiency
- Low Inrush Current Option
- 100,000Hour Life @ Tc=75°C
- 8 Year Warranty @ Tc<=75°C
- UL Class P, ENEC/CB/CCC SELV Output
- Safety according to EN 61347-1, 61347-2-3, 61347-2-13, 623847



■ Model List (See appendix for more details about the operation range)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min	Output Current Max	Certification
TLD-600-V024-XYZ	180-528Vac	600 W	24V	0	25A	UL/FCC/CB/ENEC
TLD-600-V036-XYZ	180-528Vac	600 W	36V	0	16.7A	UL/FCC/CB/ENEC
TLD-600-V044-XYZ	180-528Vac	600 W	44V	0	13.6A	UL/FCC/CB/ENEC
TLD-600-V048-XYZ	180-528Vac	600 W	48V	0	8.3A	UL/FCC/CB/ENEC

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■ Technical Data

Input Voltage	200-528Vac or 250-740Vdc
Input Frequency	47~63Hz
Power Factor	>0.9@60-100%load, refer to PF vs. Load curve
THD	<15%@60-100%load, refer to THD vs. Load curve
Input Current	2.4Amax@277Vac & Full-Load, 1.4Amax@480Vac & Full-Load
Inrush Current	15A peak, 3.2ms duration, <0.25A2s@277Vac, Cold Start 20A peak, 3.3ms duration, <0.5A2s@480Vac, Cold Start
Leakage Current	1mA max @277Vac 60Hz, UL8750, 0.75mA max @220Vac 50Hz, IEC61347-1
Input Under Voltage	Shut down and auto-restart
Input Over Voltage	*Optional: Shutdown @320Vac
Surge Protection	Line to line 6kV, line to ground 10kV, IEC 61000-4-5
Current Accuracy	±5%lo
Ripple Current	Ip-p:5%Io max
Setup Time	1.2s max
Overshoot	10% Io max & LED Load
Output Over Voltage	110% Vomax, typ.
Short Circuit	Auto recovery. The output recovers when short is removed.
Over Temperature	Lower the output current when $T_c \geq 105 \pm 10^\circ\text{C}$; Auto Recovery When $T_c \leq 70 \pm 10^\circ\text{C}$
Auxiliary Power (Vaux)	12V+/-5%, 300mA max
Operating Temperature	Case Temperature $T_c = -40^\circ\text{C} \sim +90^\circ\text{C}$; 10%RH~100%RH
Storage Temperature	$-40^\circ\text{C} \sim +85^\circ\text{C}$; 5%RH~100%RH
MTBF	$\geq 280,000$ hours, 75°C case temperature (MIL-HDBK-217F)
Lifetime	$\geq 100,000$ hours, 75°C case temperature, refer to life vs. T_c curve
Case Temperature	90°C max, marked in the T_c point of label
Dimensions	9.33x4.92x1.93 by inch (body), 10.3x4.92x1.93 by inch (endcaps included) 237 x 125 x 49 by mm (body), 262 x 125 x 49 by mm (endcaps included)
Net Weight	2200g
Packing	8pcs/Carton/20.5kg, 490x370x250mm

Notes: Unless specified, all the test results are measured in 25°C room temperature.

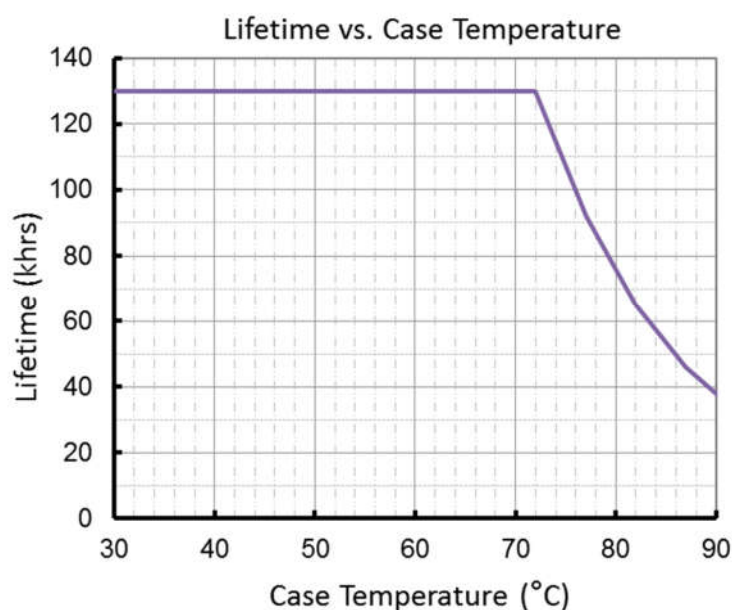
* marked items are optional and contact with sales people to get the functions.

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■ Safety/EMC Compliance

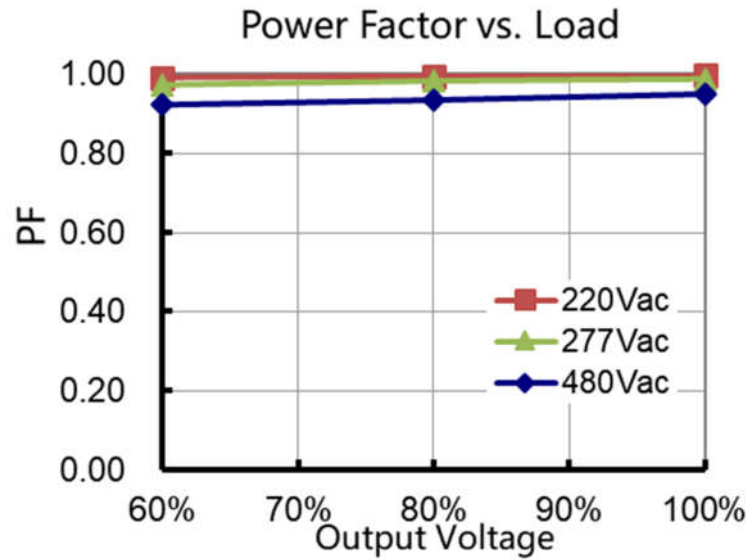
Safety Standard	Description
UL8750	Light emitting diode(LED) equipment for use in lighting products
UL1012	Power units other than class 2
IEC 61347-1	Lamp control gear Part 1: general and safety requirements
IEC 61347-2-13	Lamp control gear Part 2-13: particular requirement for d.c. or a.c. supplied electronic control gear for LED modules
EMI Standards	Description
IEC 55015	Conducted emission test & radiated emission test
IEC 61000-3-2	Harmonic current emissions; Class C
IEC 61000-3-3	Voltage fluctuations & flicker
FCC Part 15	ANSI C63.4:2009 Class B
EMS Standards	Description
IEC 61000-4-2	Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge
IEC 61000-4-3	Radio frequency electromagnetic field susceptibility test (RS)
IEC 61000-4-4	Electrical fast transient (EFT)
IEC 61000-4-5	Surge immunity test
IEC 61000-4-6	Conducted radio frequency disturbances test (CS)
IEC 61000-4-8	Power frequency magnetic field test
IEC 61000-4-11	Voltage dips
IEC 61547	Electromagnetic immunity requirements applies to lighting equipment

■ Lifetime vs. Case Temperature

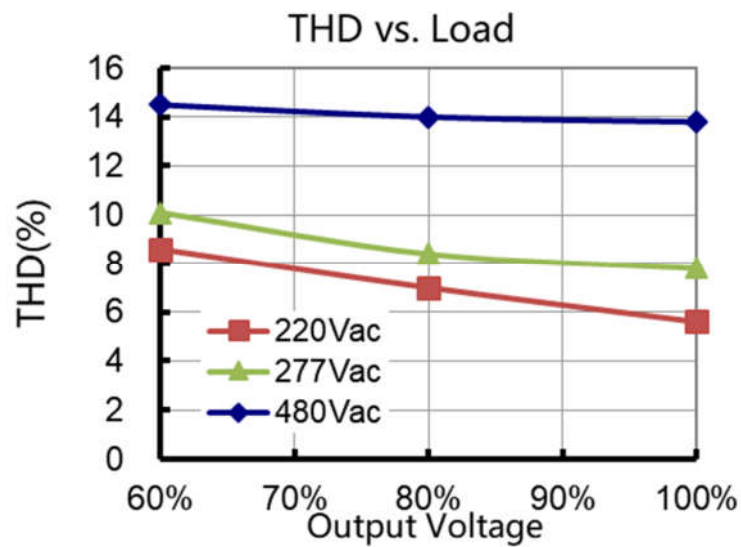


(End of Life: Maximum Failure Rate=10%)

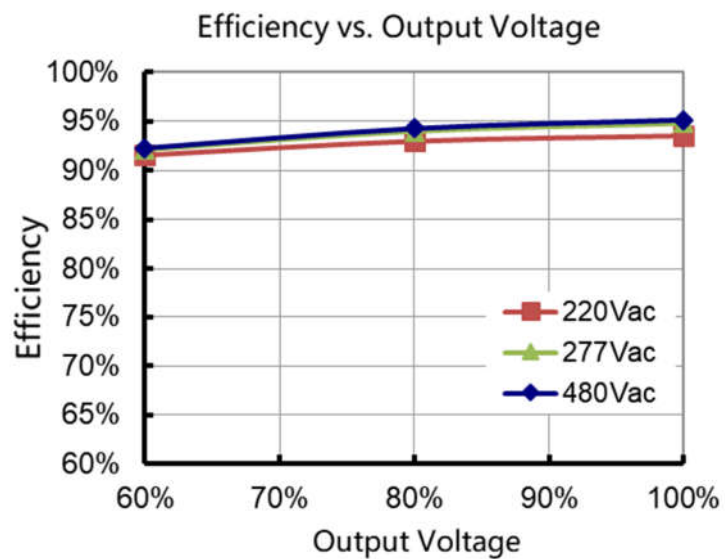
■ Power Factor vs. Load



■ THD vs. Load



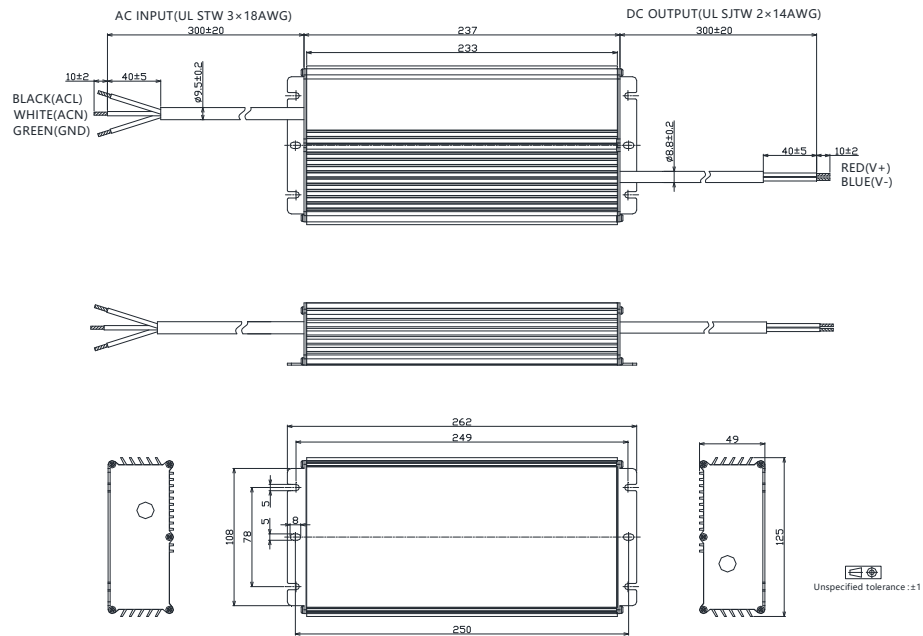
■ Efficiency vs. Load



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■ Mechanical Design

- TLD-600-Cxxx-NNU



- TLD-600-Cxxx-NNS

