

HX-800W Power Supply 48VDC



The BLD-800 series power supply is a dual stage high efficiency power supply designed specifically for LED Rope Lighting. Featuring 800Watt continuous power in an IP67 Industrial rated package with a 100k hour long life and 5-year warranty provide high confidence to luminaire users. All around protections including digital OTP, SCP and OCP with auto-recovery. Designed for 24hour non-stop operation for LED Rope Lights.

Features

- Constant Voltage mode LED power supply
- Supply Voltage: 100-305vac
- Great Surge Immunity 10kV
- Low Inrush Current
- 100,000Hour Life @ $T_c=75^\circ\text{C}$
- 5 Year Warranty @ $T_c \leq 75^\circ\text{C}$
- UL Class P, ENEC/CB/CCC SELV Output
- Safety according to UL8750, EN 61347-1, 61347-2-13, 62384



HX-BLD-800-V048-NNZ		
Input	Input Voltage	100~305Vac, 380Vac for 2 hours
	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	3.3Amax@277Vac & Full-Load 4.1Amax@220Vac & Full-Load
	Inrush Current	See Inrush Current Section in the datasheet
	Leakage Current	0.75mIU max @277Vac 60Hz, UL8750 0.7mA max @240Vac 50/60Hz, IEC60598-1
	Input Under Voltage	Shut down and auto-restart
	Surge Protection	Line to line 10kV, line to ground 10kV, According to IEC 61000-4-5

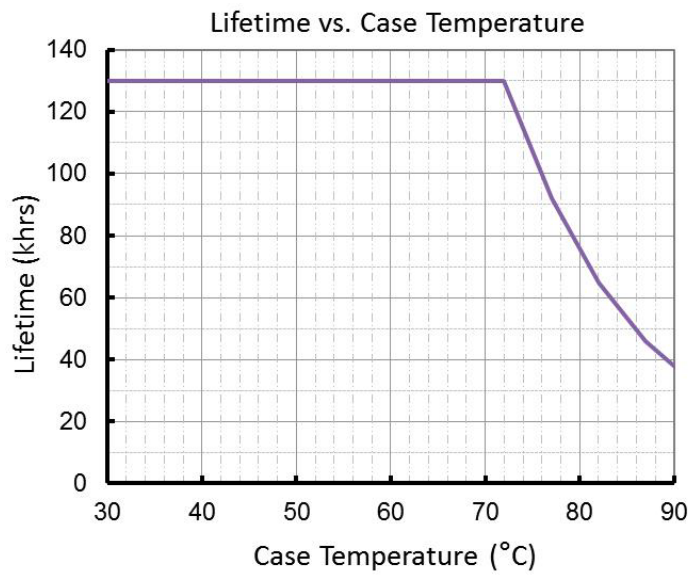
Output	Voltage	48VDC
	Current	16.6A (176-305Vac) 12.5A (100-176Vac)
	Power	800W (176-305Vac) 600W (100-176Vac)
	Voltage Ripple	Vp-p:5%Vo max
	Voltage Accuracy	±5%Vo
	Setup Time	1.2s max.
Protection	Output Overshoot	10% Vo max
	Output Over Current	110% Io max
	Short Circuit	Auto recovery. The output recovers when short is removed.
	Over Temperature	Reduce output when $T_c \geq 105 \pm 10^\circ\text{C}$; Auto Recovery When $T_c \leq 70 \pm 10^\circ\text{C}$
Environment	Operating Temperature	-40°C/40F ~ +90°C/194F ; 10%RH ~ 100%RH
	Storage Temperature	-40°C/40F ~ +85°C/185F ; 5%RH ~ 100%RH

Physical Attributes	Dimensions	<ul style="list-style-type: none"> 9 5/16" × 4 15/16" × 1 15/16" (body) 10 5/16" × 4 15/16" × 1 15/16" (endcaps included)
		<ul style="list-style-type: none"> 237.0 x 125.0 x 49.0 mm (body) 262.0 x 125.0 x 49.0 mm (endcaps included)
	Net Weight	2.6kg / 5.7lb

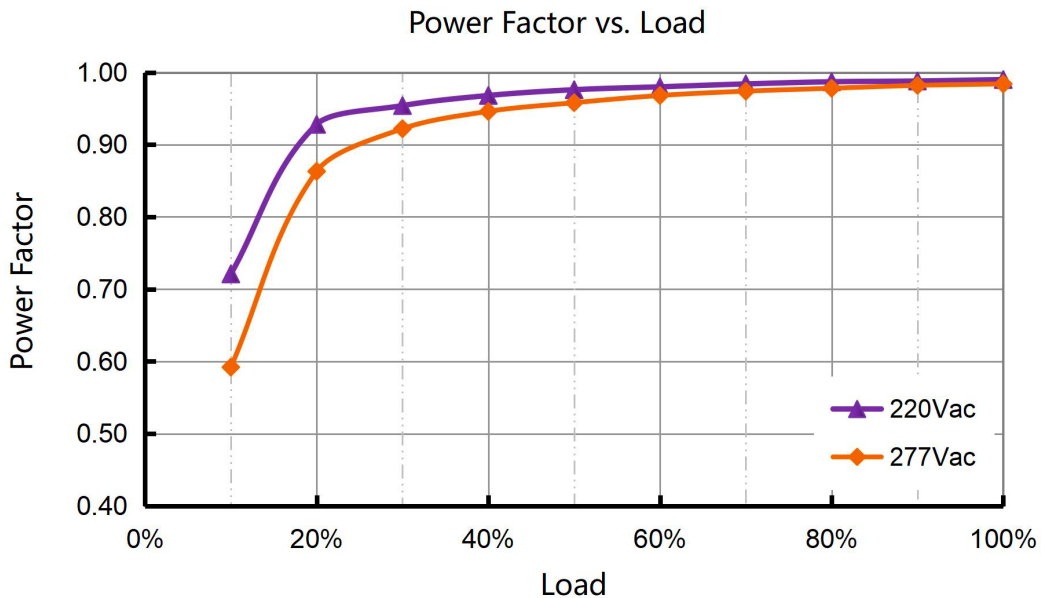
Safety	IP67	Dust and water resistant
	UL8750	Light emitting diode(LED) equipment for use in lighting products
	UL1012	Power units other than class 2
	IEC 61347-1	Lamp control gear Part 1: general and safety requirements
	IEC 61347-2-13	Lamp control gear Part 2-13: particular requirement for DC or AC supplied electronic control gear for LED modules
	IEC 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements
EMC	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
	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

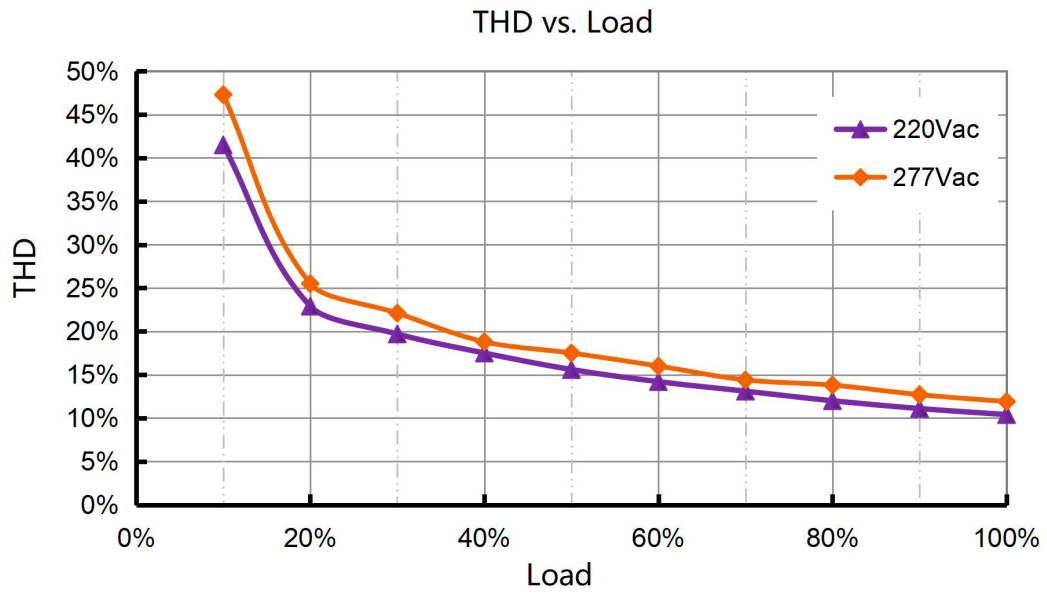
Lifetime vs. Case Temperature



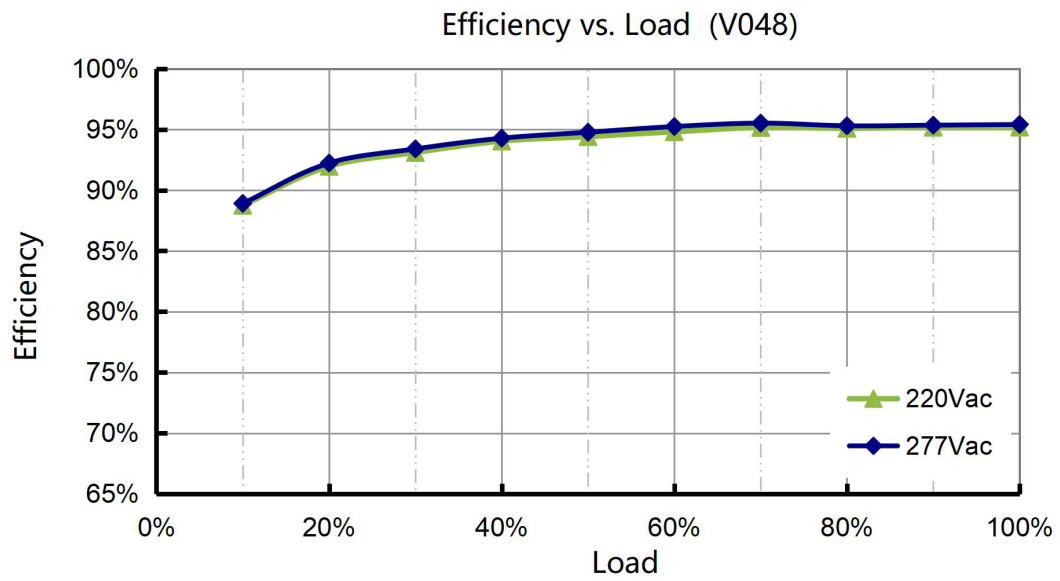
Power Factor vs. Load



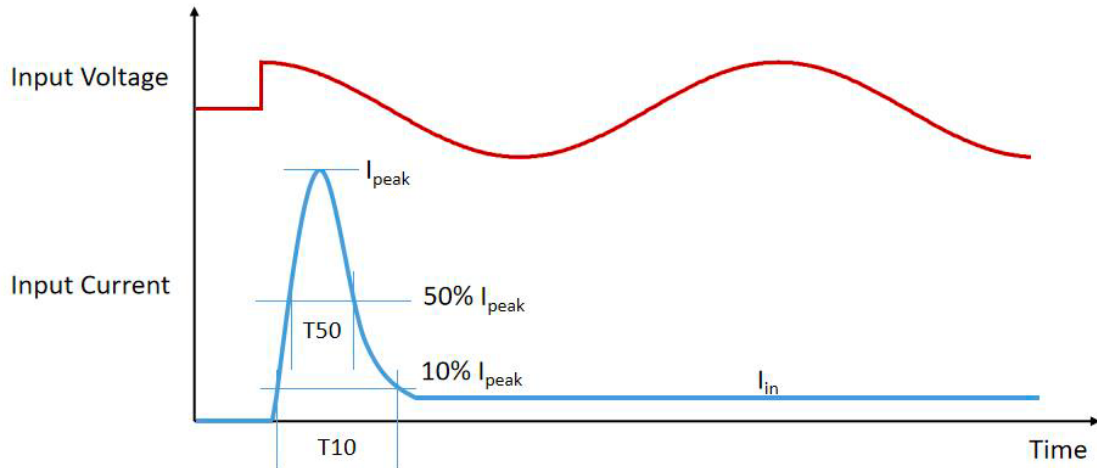
THD vs. Load



Efficiency vs. Load



Inrush Current



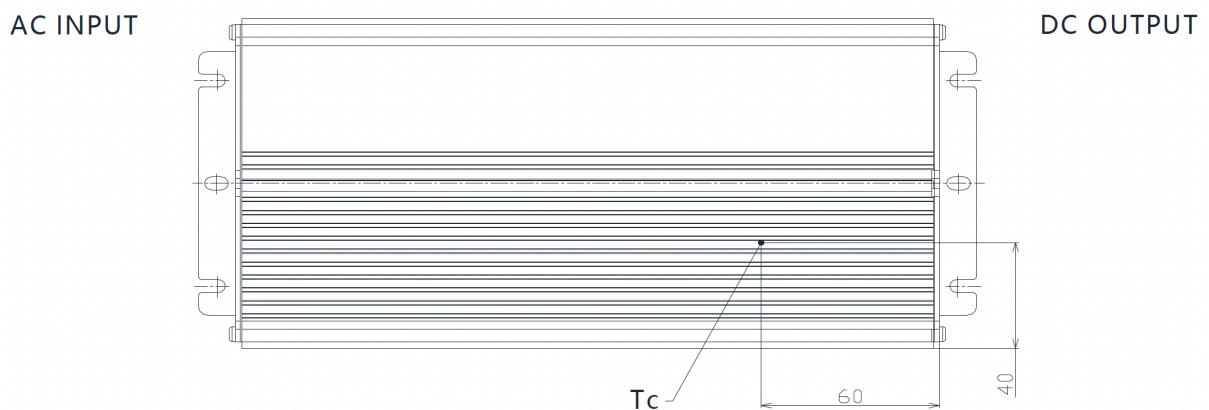
Input Voltage	I _{peak}	10% -10% T10 Duration	50% -50% T50 Duration
120Vac	3A	67mS	16ms
220Vac	5A	70mS	17ms
277Vac	8A	70mS	17ms

MCB Suggestion

Type	B10	B16	B25	B32	C10	C16	C25	C32	D10	D16	D25	D32
Driver Quantity	1	2	3	4	1	2	4	5	2	3	5	6

TC Point

Described on each unit.



Dimensions

