

FLX - BOX96 24V / 48V

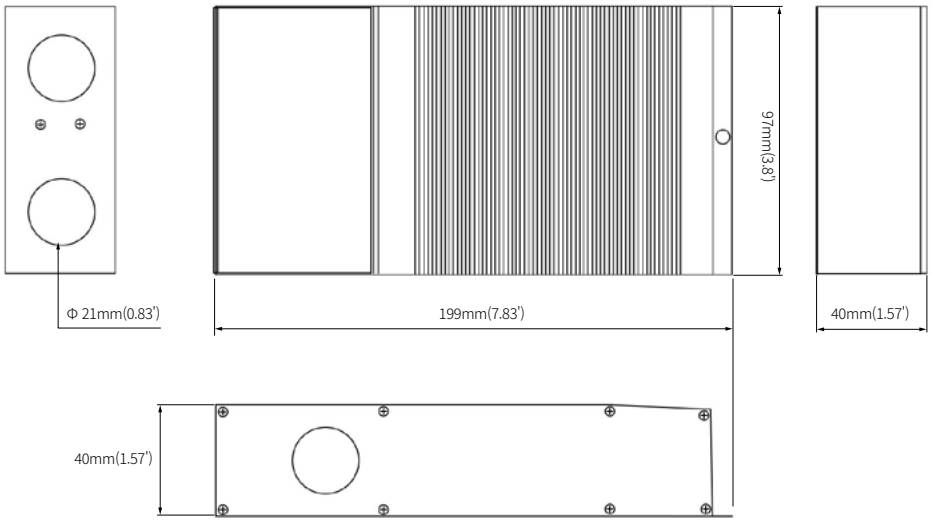
PRODUCT FEATURES

- Universal AC input voltage 100-277VAC
- Efficiency up to 90%
- High power factor, PF≥0.95
- Single channel & constant voltage mode
- switch to PWM or Voltage Reduction output selectable
- Protection : OCP, OVP, SCP, OTP
- Limited Power Source
- UL/cUL Class 2, Class P, Type HL Listed
- 5 in 1 dimming : (0-10V,1-10V,TRIAC,10V PWM,resistance)
- Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers with seamless dimming performance
- Flicker free
- Typical lifetime > 50000 hours
- 5 years warranty
- NEMA 3R Rated Enclosure for Indoor and Outdoor Use

MODELS

Model Number	Output Voltage	Rated Output Current	Input Voltage Range	Input Current	Max. Output Power	Typical Efficiency
FLX-BOX96-24V	24 VDC	4.0 A	100~277 V	≤1.2 A	96 W	91.56 %
FLX-BOX96-48V	48 VDC	2.0 A	100~277 V	≤1.2 A	96 W	92.56 %

DIMENSION



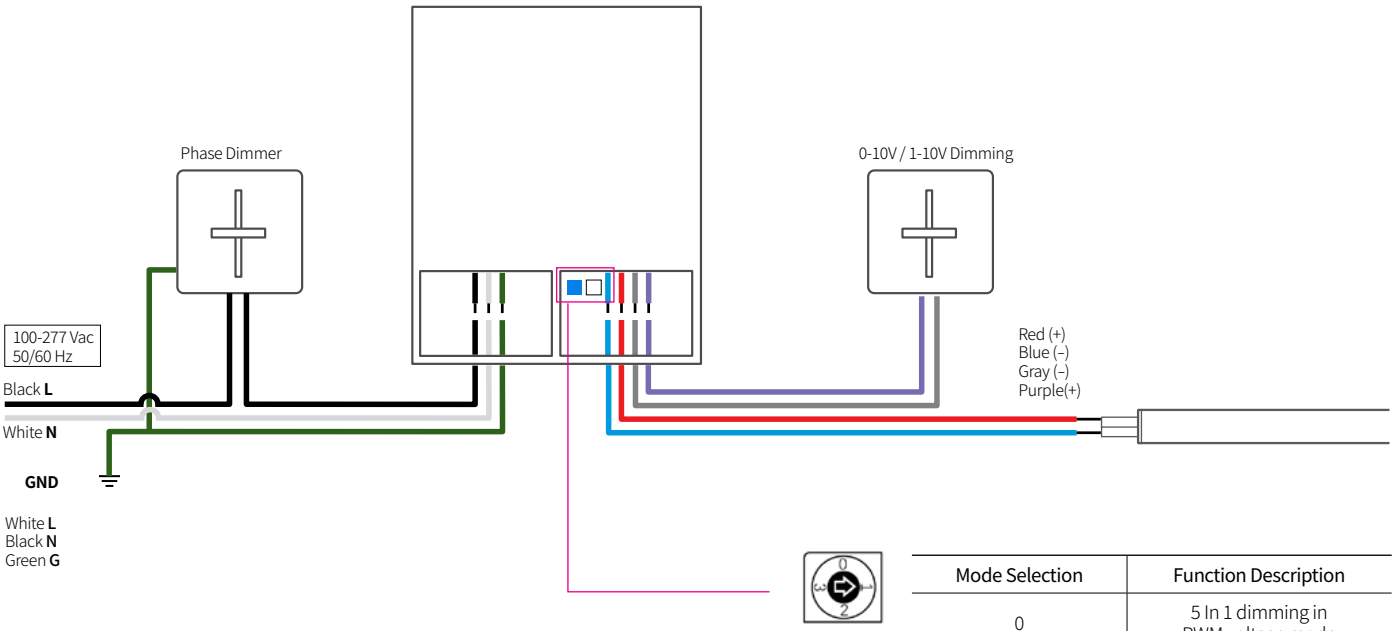
Note.	
AC Input Cord	UL SJTW #18AWG 3*0.82mm^2, ΦD:7.8mm; Green: Ground, Black: L, White: N
DC Output Cord	UL SJTW #18AWG 2*0.82mm^2, ΦD:7.8mm; Red: V+, Blue: V-, Yellow:V-
Signal Cord	UL SJTW #18AWG 2*0.82mm^2; Gray Dim-, Purple Dim+

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SPECIFICATION

Model			FLX-BOX96-24V	FLX-BOX96-48V
Output	Output Voltage		24 V	48 V
	Rated current		4.0 A	2.0 A
	Rated power		96 W	96 W
	Ripple & Noise (max.) Only for dc voltage mode		250 mvp-p	250 mvp-p
	Voltage accuracy		± 2.0 %	± 2.0 %
	Linear adjustment rate		± 0.5 %	± 0.5 %
	Load adjustment rate		± 0.5 %	± 0.5 %
	Start, rise time		1000ms, 100ms/230VAC, 1100ms, 100ms/115VAC	
	Hold time		10ms/115VAC, 230VAC	
Input	Voltage range		100 ~ 277 VAC	
	Frequency range		47 ~ 63 Hz	
	Power factor		PF ≧ 0 98 / 115 VAC, PF ≧ 0 95/230 VAC , PF ≧ 0.9 / 277 VAC, Full load	
	Total harmonic distortion		THD < 20% (@ load ≧50 %/115 VC, 230 VAC ; @ load ≧ 75 % / 277 VAC)	
	Efficiency	Vin: 115VAC	≧ 90.78 %	≧ 91.78 %
		Vin: 230VAC	≧ 91.56 %	≧ 92.56 %
	AC current		1.2 A	
	Inrush current		Cold start 75A(width=350us measured at 50% I peak)/230Vac	
	Leakage current		< 1mA	
	No load/ standby power consumption		< 5.5 W	
Protection	Over current		95 ~ 110 %	
			95 ~ 110% Constant current limit, load abnormal condition can be removed after automatic recovery	
	Short circuit		Burp mode, load abnormal conditions can be removed after automatic recovery	
	Insulation voltage		26 ~ 32 V	52 ~ 63V
			Turn off the output voltage, restart and resume	
	Over temperature		Turn off the output voltage, restart and resume	
Environment	Working Temp		T case = -40 ~ +50 °C (power variation refer to Ambient Temperature Curve on page 5)	
	Max.Case Temp		T case = +90 °C	
	Working Humidity		20 ~ 95 % RH, non-condensing	
	Storage Temp.,H umidity		-40 ~ +90 °C, 10 ~ 95 % RH	
	Temp.Coefficient		±0.03 %/°C (0 ~60 °C)	
	Vibration		10~500Hz, 5G 12min./1 cycle, period for 72 min. each along X,Y,Z axes	
Safety & EMC	Safety standards:UL8750+UL1310			
	Withstand voltage:I/P-O/P:1.88KVac			
	Isolation resistance:I/P-O/P:100MΩ/500VDC/25°C/70%RH			
	EMC EMISSION:Confirms to FCC			

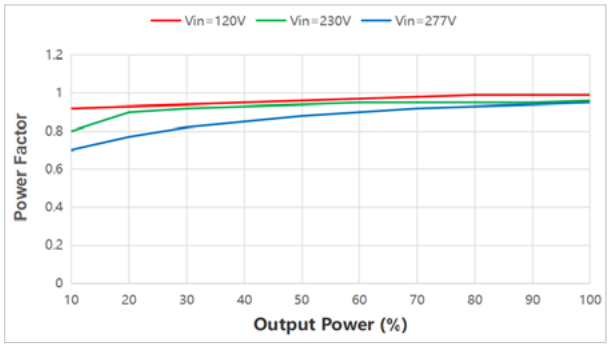
WIRING DIAGRAM



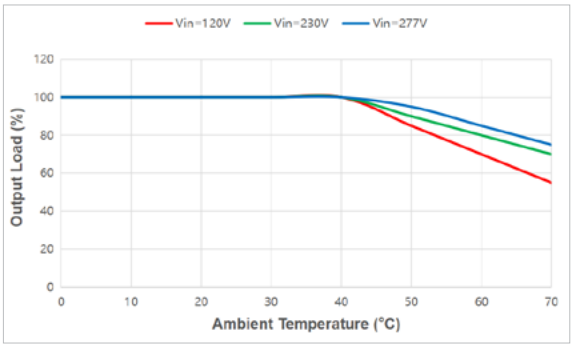
Mode Selection	Function Description
0	5 In 1 dimming in PWM voltage mode
1	5 In 1 dimming in DC voltage mode
2	N/A
3	N/A

DIMMING CURVE

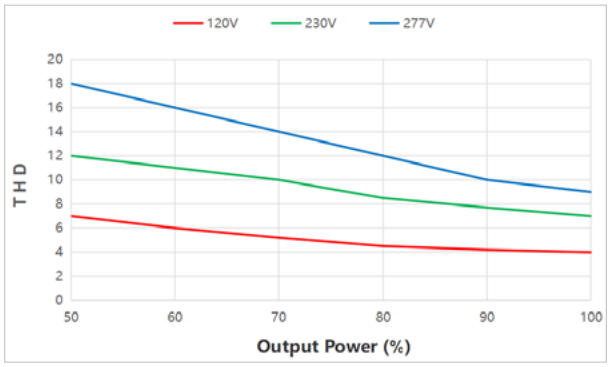
Power Factor-Output Power Curve



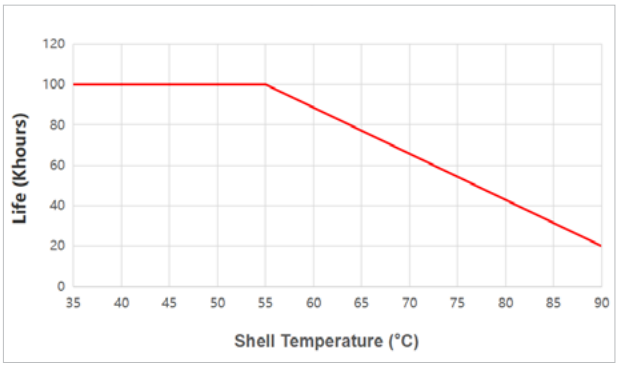
Output Load-Ambient Temperature Curve



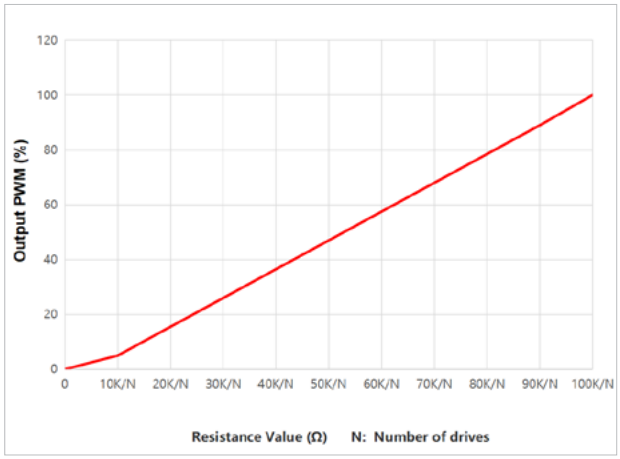
THD-Output Power Curve



Lift - Shell Temperature Curve



Resistance Dimming Curve



0-10V Dimming Curve

