

The LLD Series 5-in-1 dimmable LED power supply is engineered for professional and commercial LED lighting systems. It combines advanced performance, versatility, and durability to deliver ultra-smooth, flicker-free dimming across a variety of applications. This power supply regulates light output using TRIAC, 0–10V, 1–10V, PWM, or resistance dimming controls. It is designed for reliable operation in wet and dry environments, making it suitable for both indoor and outdoor installations.

Model: _____ Date: _____
Accessories: _____
Job Name: _____ Type: _____



ORDERING INFORMATION (Example: LLD-24V-96W)

Series	Voltage	Wattage
LLD	12V = 12VDC	30W ¹ = 30W (1 Channel)
	24V = 24VDC	40W ¹ = 40W (1 Channel)
	48V = 48VDC	60W ¹ = 60W (1 Channel)
		80W ² = 80W (1 Channel)
NOTE:		96W ² = 96W (1 Channel)
		192W ³ = 192W (2 Channels, 96W x 2)
		288W ³ = 288W (3 Channels, 96W x 3)
		300W ⁴ = 300W (5 Channels, 60W x 5)
		384W ³ = 384W (4 Channels, 96W x 4)

TECHNICAL SPECIFICATIONS

Output

	30W		40W		60W		80W	96W	192W		288W		300W	384W	
Output Voltage	12V	24V	12V	24V	12V	24V	24V	24V	24V	48V	24V	48V	12V	24V	48V
Output Current (Max.)	2.5A	1.25A	2.5A	1.25A	5A	2.5A	3.33A	4A	2 x 4A	2 x 2A	3 x 4A	3 x 2A	5 x 5A	4 x 4A	4 x 2A
Output Power Range	0-30W		0-40W		0-60W		0-80W	0-96W	0-192W		0-288W		0-300W	0-384W	
Output Ripple & Noise	≤700mV						≤400mV		≤700mV						
Dimming Interface	TRIAC / 0-10V / 1-10V / 10V PWM / RESISTANCE DIM														

Input

	30W	40W	60W	80W	96W	192W	288W	300W	384W	
Input Voltage	100-277VAC					110-277VAC		120-277VAC		
Frequency	50/60Hz									
Input Current (120VAC)	≤0.4A	≤0.5A	≤0.7A	≤0.85A	≤1.0A	≤2.5A	≤3.7A	≤3.0A	≤4.0A	
Surge Current	45A @ 230VAC									
Efficiency (Typ.)	85%									
Power Factor	0.98 @ 100VAC					0.98 @ 110VAC		0.98 @ 120VAC		
Leakage Current	<0.75mA/240VAC									

Specifications are subject to change without notice. Installation must be performed in accordance with Barron Lighting Group installation instructions.

Environment

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Working Temperature	-30°C - 50°C								
IP Rating	IP67								
Working Humidity	10-95%RH								
Storage Temp., Humidity	-35°C - 85°C, 10-95%RH			-35°C - 65°C, 10-95%RH		-35°C - 85°C, 10-95%RH		-35°C - 65°C, 10-95%RH	
Vibration	10-500Hz, period for 15min. each along X, Y, Z axis								
Tcase	+85°C								

Protection

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Over Current Protection	Shut down the output when current load $\geq 110\%$ and recover after cooling.								
Over Voltage Protection	Shut down the output when non-load voltage $\geq 14V$ (12VDC) or $\geq 28V$ (24VDC) and recover automatically					Shut down the output when non-load voltage $\geq 28V$ (24VDC) or $\geq 54V$ (48VDC) and recover automatically			
Short Circuit Protection	Hiccup Mode and recover automatically								

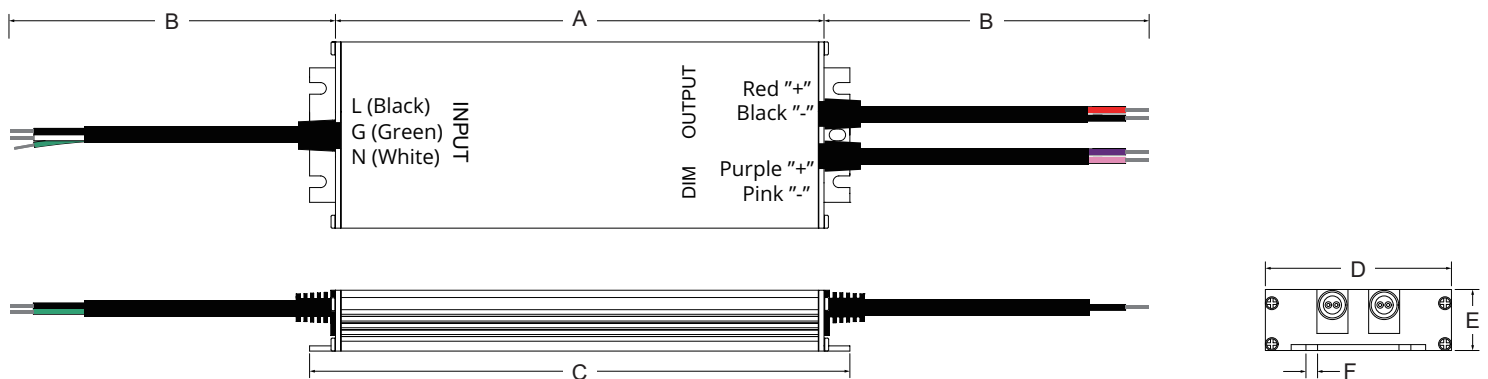
Safety & EMC

	30W	40W	60W	80W	96W	192W	288W	300W	384W
Safety Standards	UL8750, UL879, CSA C22.2 NO.250.13, CSA C22.2 NO.207-15, EN61347-1, EN61347-2-13, EN62493								
Isolation Resistance	100M Ω /500VDC/1,0m								
Grounding Resistance	$\leq 0.5\Omega$								

Others

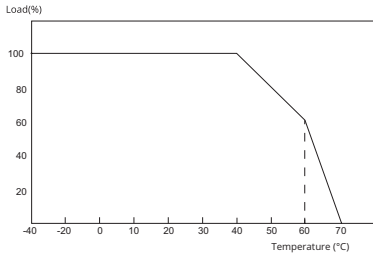
	30W	40W	60W	80W	96W	192W	288W	300W	384W
Lifetime	50,000 hours at $T_c \leq 80^\circ\text{C}$ maximum case hot spot temperature								
Weight	0.88lbs (0.4kg)			1.69lbs (0.77kg)		3.02lbs (1.37kg)		4.19lbs (1.9kg)	

DIMENSIONS



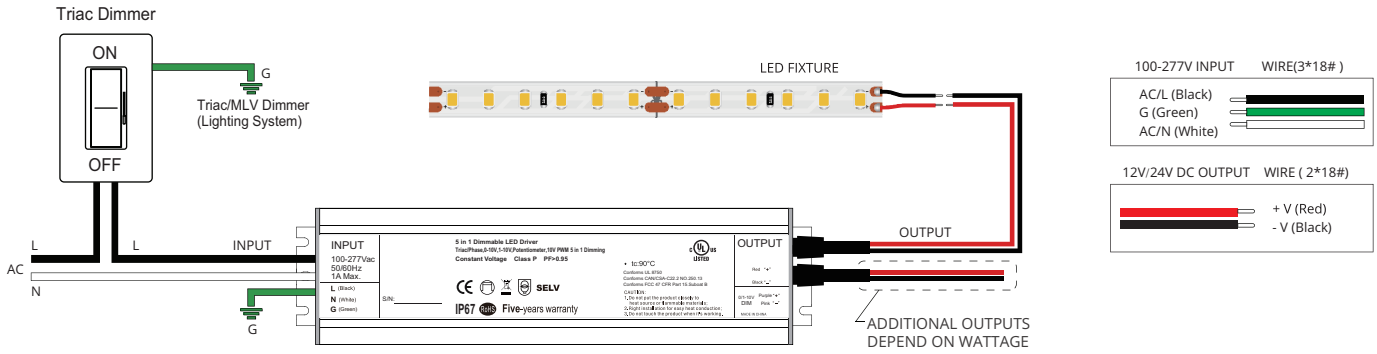
Dim.	30W	40W	60W	80W	96W	192W	288W	300W	384W
A	7.44" (189mm)		7.99" (203mm)		9.17" (233mm)		10" (255mm)		11.02" (280mm)
B	10" (255mm)								
C	8.23" (209mm)		8.77" (223mm)		10.22" (259.5mm)		11.08" (281.5mm)		11.02" (305.5mm)
D	1.77" (45mm)		2.52" (64mm)		3.07" (78mm)				
E	0.9" (23mm)		1.26" (32mm)		1.69" (43mm)		1.81" (46mm)		
F	0.18" (4.5mm)								

DERATING CURVE

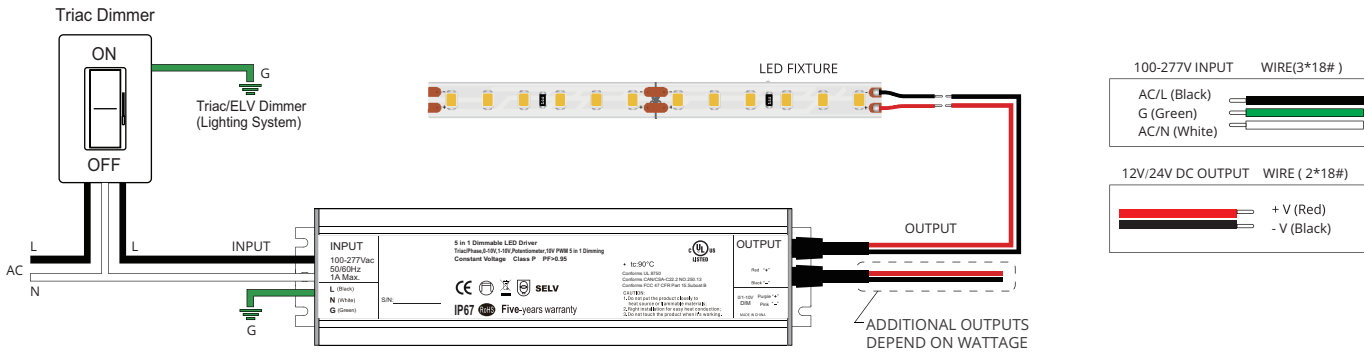


WIRING DIAGRAMS

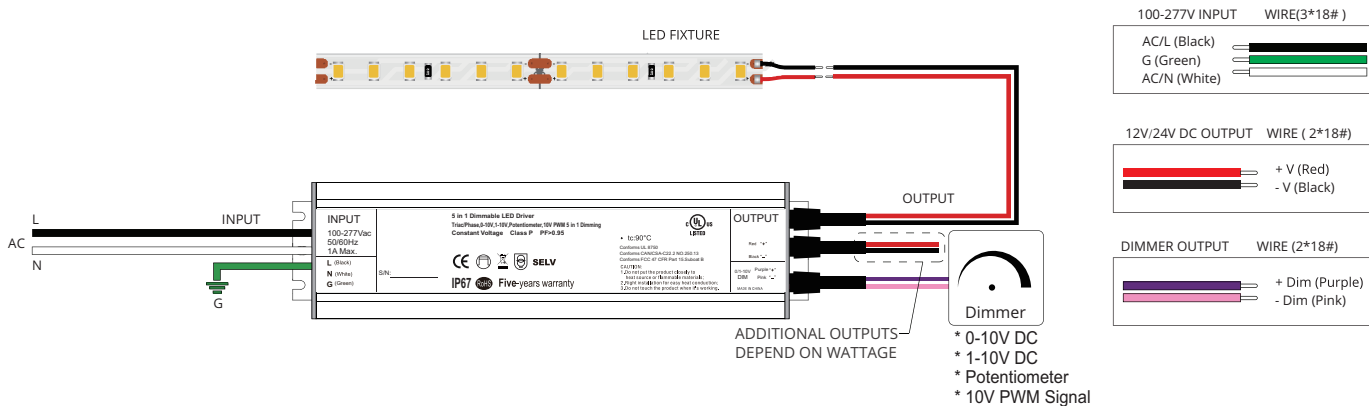
TRIAC Dimming (MLV Load Type)



TRIAC Dimming (ELV Load Type)



0/1-10V Dimming



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