SLD60

Signage / Architectural LED Drivers

US Patent Numbers: 7,154,755 & 7,738,253

Plug-and-Play
Class 2 60 Watt LED Driver

The SLD 60 is a highly reliable and installation ready, class 2, switched-mode, AC/DC LED driver, with 90-264VAC input, rated for maximum output of 60 Watts. This driver offers user adjustable output voltage/current trim-pots, and is the industry's only LED power supply, with built-in wiring compartments. This allows all wiring to be done inside the unit, without the need for external junction boxes, which saves on cost and installation time. All units are fully potted and are rated IP 65, making them suitable for a wide range of LED lighting and signage applications.

Features

- Plug-and-Play Conduit Entry Ports and Wiring Compartments eliminate need for external junction boxes.
- Universal Input 90-264 V_{AC}
- User Adjustable Output Voltage and Current
- UL/cUL/FCC/CE/EMC
- Built in Over Current, Over Voltage, and Short Circuit Protection
- Low peak/noise current
- IP 65
- Remote Dimming Options
- 3 years Warranty

Applications

- Architectural Lighting
- Effect & Contour Lighting
- Office General Illumination
- Residential Lighting
- Signage
- Strip Lighting
- Horticultural Lighting

Model Selection Key

SLD60-ABBV-FC

- With Trim Pots
- Nominal Output Voltage
- Number of Output Channel(s)
- Series Name

Model Number	Input Voltage Range (V_{AC})	Channel(s) Output	CC mode					CV Mode					Max Output Power (per Channel) (W)	Total Output Power (W)
			Rated t (per Channel) (A)	Compliance e (LED) u Voltage (V_{DC})		Current Pot C Adjustable Range (All Channels) (A)		Preset Vout (V_{DC})	Load Range (per Channel) (A)		Voltage Pot Adjustable Range (V_{DC})			
				min	max	min	max		min	max	min	max		
SLD 60-110V-FC	90-264	1	5.0	5.0	10.0	0.50	5.00	10	0	5.00	7.5	11.0	50	50
SLD 60-112V-FC	90-264	1	5.0	6.0	12.0	0.50	5.00	12	0	5.00	9.0	13.2	60	60
SLD60-11 5V-FC	90-264	1	4.0	7.5	15.0	0.40	4.00	15	0	4.00	11.3	16.5	60	60
SLD 60-118V-FC	90-264	1	3.3	9.0	18.0	0.33	3.33	18	0	3.33	13.5	19.8	60	60
SLD 60-121V-FC	90-264	1	2.9	10.5	21.0	0.29	2.86	21	0	2.86	15.8	23.1	60	60
SLD 60-124V-FC	90-264	1	2.5	12.0	24.0	0.25	2.50	24	0	2.50	18.0	26.4	60	60
SLD 60-148V-FC	90-264	1	1.3	24.0	48.0	0.13	1.25	48	0	1.25	36.0	52.8	60	60

FC = Patented, easy install enclosure with integral wiring compartments.

* UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

Voltage Range	Frequency Range	Max Inrush Current
90-264 V_{AC} (NOM: 120/240 V_{AC})	47-63 Hz	30A@230 V_{AC} input, 25°C, cold start-up

Output Specification

Max Power	60 W	Transient Response	4 mS, full load to half load, 100 V_{AC} Input
Load Regulation	+/- 1% Max	Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.
Efficiency	80% typ.	Constant Voltage (CV) Mode Load Regulation	+/- 3% Max (Voltage Setting Adjustable via on-board pot: +5%/-30%)
Noise/Ripple	1.5% of Rated Output Voltage*	Constant-Current (CC) Mode Regulation	+/- 2% Max (Current Setting Adjustable via on-board pot: +5%/-90%)
Start-up Time	2 sec. Typical	Over Voltage Protection	132% Max
Hold-up Time	16mS @ full load, 100V_{AC} input	Over Current Protection	Constant-current limiting

* All noise measurements made at the output terminals, connected to a 20MHz low pass filter.

Environmental Specifications

MTBF	Cooling	Operating Temp	Storage Temp	Relative Humidity
55,000 hours (Full load @ 25°C Ambient, Based on MIL-217F)	Convection	-30°C to 60°C (Full load)	-40°C to 85°C	5% - 95 %

Compliance / Safety

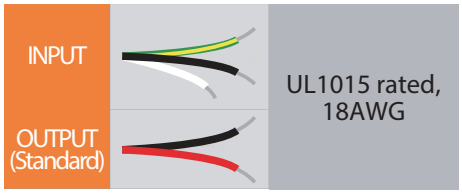
EMI/RFI:	CISPR-22 Class B FCC part 15 Class B EN 55015
Safety Standards:	UL/cUL 1012/1585 UL 1310 Class 2, UL 48 CE
Weatherability:	EN60529 IP 65

Mechanical

Material:
NEMA 3 Design with patented AC and DC Wiring compartments, fully potted PCB.

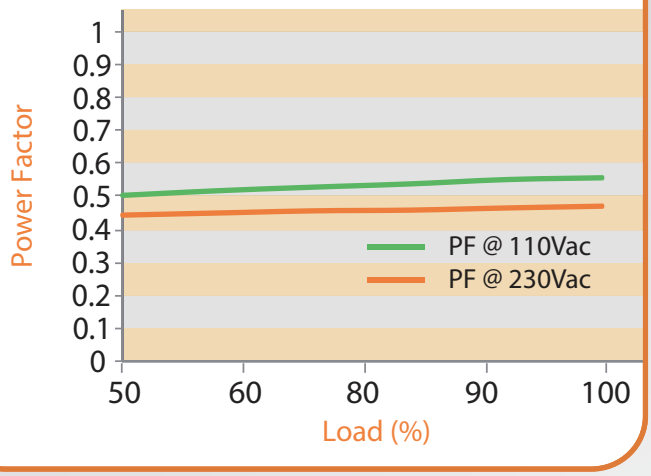
Remote Dimming Options

Dimming Types	Dimming Control
1. PWM-1kHz, 1-100% 2. Constant Current, 10-100% 3. Output Voltage, 75-100% 4. Compatible with SLD DIM	· 1-10V DC · Potentiometer · Serial Comm. (2-wire) · Wireless Remote



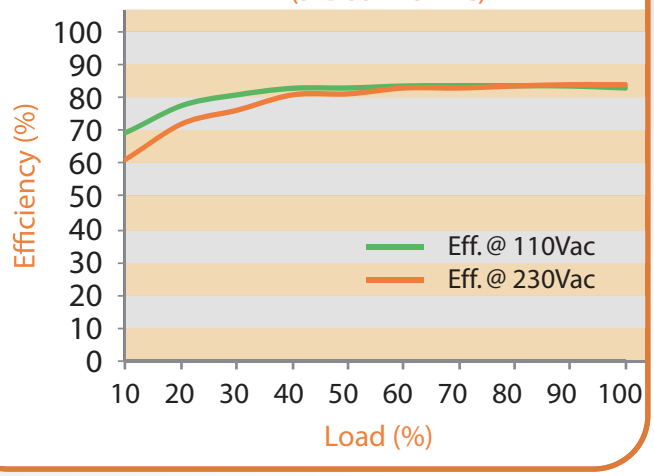
Performance Curves

Power Factor Characteristic

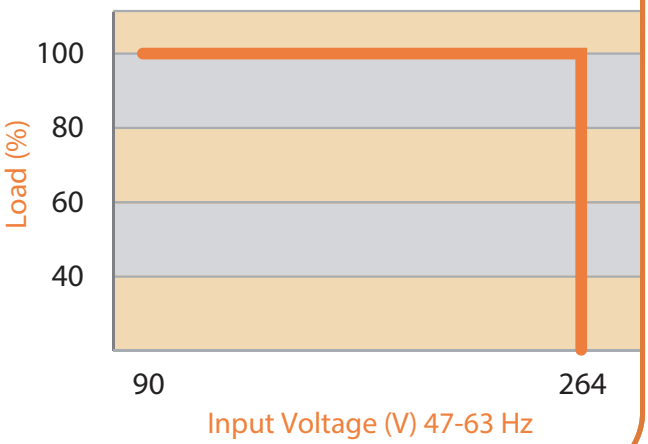


Efficiency Vs Load

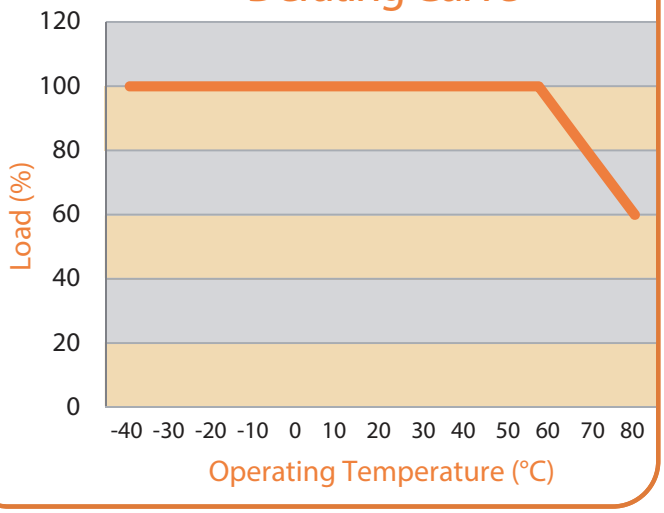
(SLD60-148V-FC)



Loading Curve

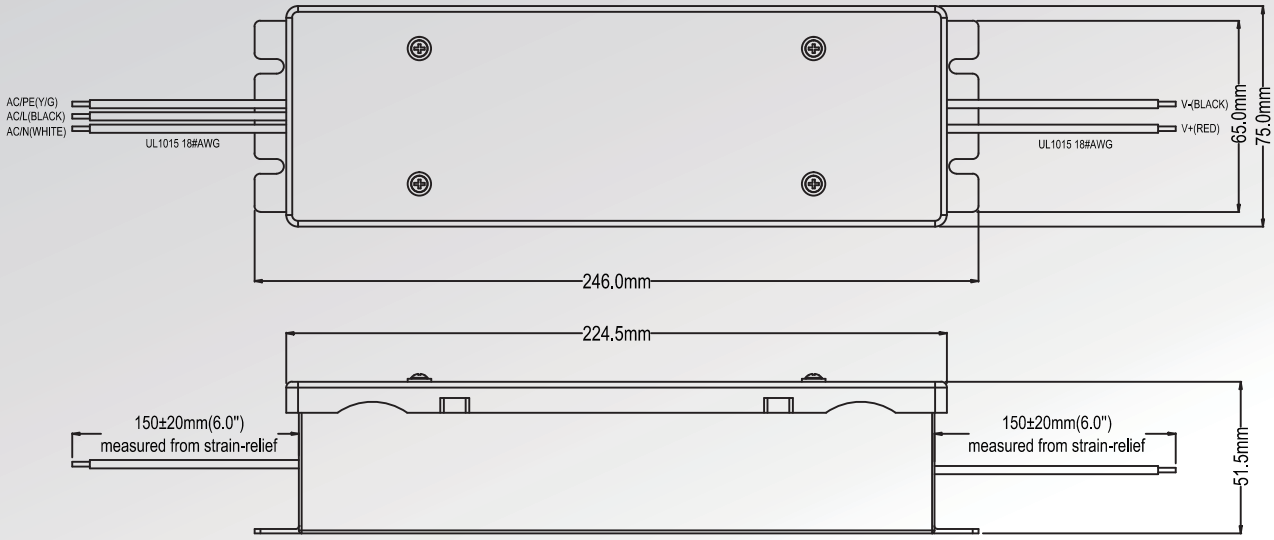


Derating Curve



Mechanical Diagrams

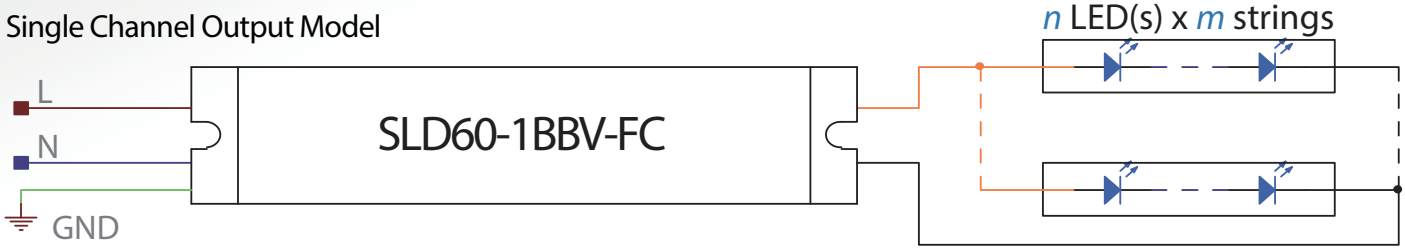
Single Channel Output Model



Packing Information
Weight: 0.922 kg/pcs, 12.3 kg/carton
12 pcs/carton; L340xW285xH210 (mm)
US Patent Numbers: 7,154,755 & 7,738,253

Configuration Arrays

Single Channel Output Model



Model	CC mode LED Voltage Range (V)	Recommended n LED(s) per String *	Current POT Adjust Range (A)	LED Current per String
SLD60-110V-FC	5 -10	2 - 3	0.5 - 5	$= \frac{I_{out}}{m\ Strings}$
SLD60-112V-FC	6 -12	2 - 3	0.5 - 5	
SLD 60-115V-FC	7.5 - 15	2 - 4	0.4 - 4	
SLD 60-118V-FC	9 - 18	3 - 5	0.33 - 3.33	
SLD 60-121V-FC	10.5 - 21	3 - 6	0.29 - 2.86	
SLD 60-124V-FC	12 - 24	4 - 7	0.25 - 2.5	
SLD 60-148V-FC	24 - 48	7 - 14	0.13 - 1.25	

* LED Vf range: 2.7-3.6V