

FEATURES

250W Constant Current with Dimming

LSWCD250 Series

- Wide AC Input 90-305VAC
- Smallest Footprint Available (6.2x3x1.5 Inches)
- High Efficiency & High Power Factor – Meets DLC & Energy Star
- Operation from -35°C-60°C Full Load
- UL/cUL 8750 (Pending) , EN61347 (Pending) & CE
- Short Circuit, Over Voltage & Over Temperature Protection
- 0-10V, PWM (Output)& Timer Dimming
- IP67 Certified
- RoHS Compliant



SPECIFICATIONS

Model #	Output Current (6)	Output Voltage (6)	PF (2)		No Load Voltage (Max.)	Ripple & Noise (4)	Efficiency (3)
			110VAC	277VAC			
LSWCD250S070ST	700mA	214-357V	0.99	0.90	380V	10.8V	90.0%
LSWCD250S105ST	1050mA	157-238V	0.99	0.90	250V	7.1V	90.0%
LSWCD250S140ST	1400mA	107-179V	0.99	0.90	193V	5.4V	91.8%
LSWCD250S175ST	1750mA	86-143V	0.99	0.90	155V	4.3V	91.8%
LSWCD250S210ST	2100mA	72-119V	0.99	0.90	130V	3.6V	91.8%
LSWCD250S245ST	2450mA	61-102V	0.99	0.90	112V	3.1V	91.8%
LSWCD250S280ST	2800mA	54-89V	0.99	0.90	99V	2.7V	91.8%
LSWCD250S315ST	3150mA	48-79V	0.99	0.90	88V	2.4V	91.8%
LSWCD250S350ST	3500mA	43-72V	0.99	0.90	81V	2.2V	91.8%
LSWCD250S420ST	4200mA	36-60V	0.99	0.90	68V	1.8V	91.8%

Output	Line Regulation	1%	
	Load Regulation	3%	
	Turn-on Delay	1.0~2.0 s (Typ)	
	Leakage	0.75 mA Vin=230V, 50Hz (Cold Start)	
Input	Voltage Range	100 ~ 277 Vac	
	Frequency Range	47Hz ~63Hz	
	Inrush Current	65A cold start, Vin=230V	
	AC Current (Typ.)	2.6A / 110 VAC	1.3 A / 220 VAC
Protections	Short Circuit	Protection type : Hiccup mode, recovers automatically after fault condition is removed	
	Over Temperature (Typ.)	110 °C internal temperature, auto recovers after power supply cools	
	Over Voltage (Typ.)	125% of max. output voltage Latch mode. The power supply shall return to normal operation after recycling AC.	
Environmental	Temperature Range	Operational	- 35°C ~ 60°C
		Storage	- 40 ~ +85°C
	Humidity	Operational	10% ~ 100% RH
		Storage	5% ~100% R.H

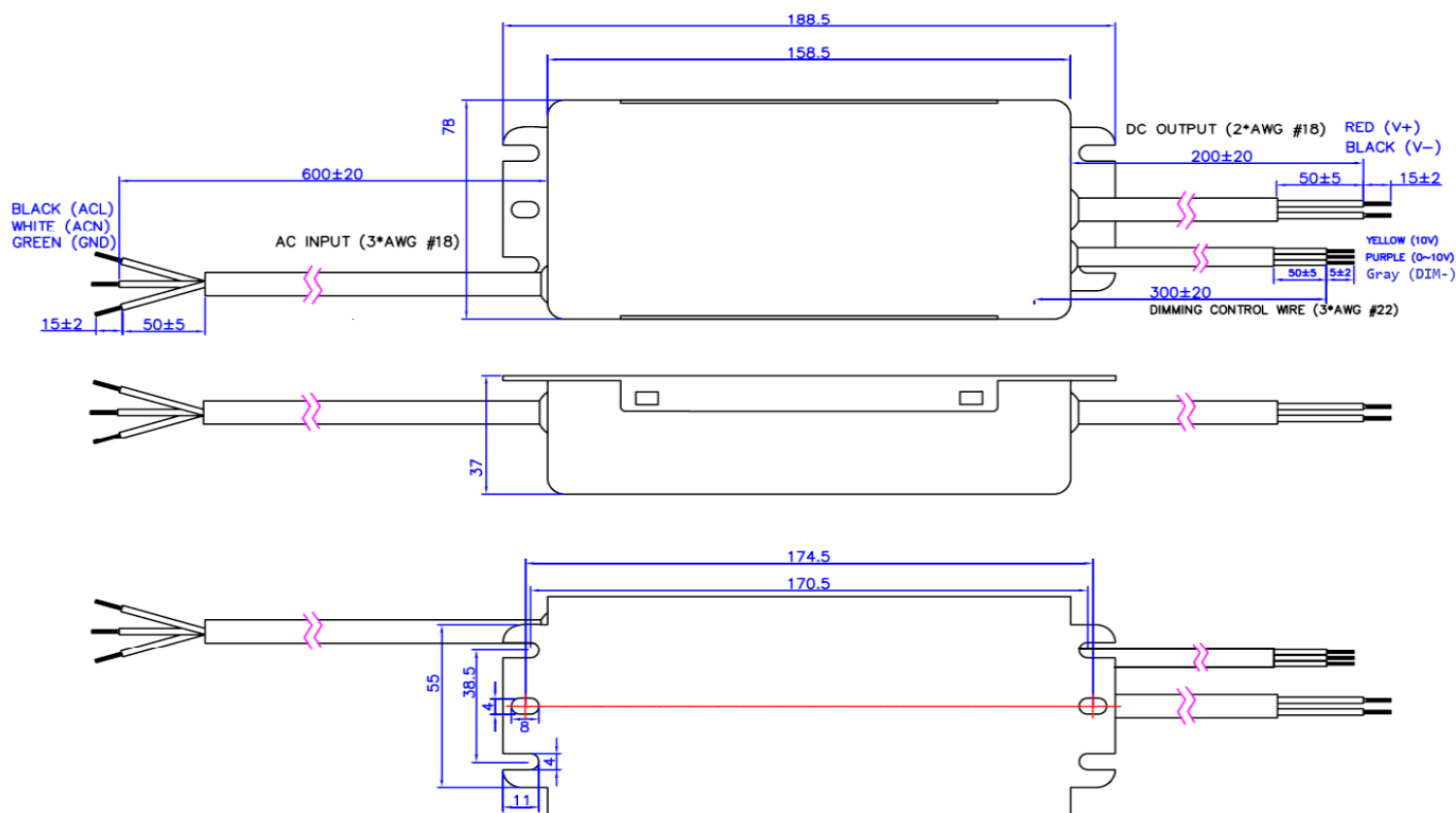


Safety & EMC	Safety Standards	UL/cUL 8750, EN61347-1 EN61347-2-13
	EMI Conducted & Radiated	EN55015 Class B
	EMS Immunity	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN61547
Others	MTBF	335,000 Hours
	Life Time	62,000 Hours
	Dimensions	(L*W*H) 7.40*3.07*1.46 inches / (L*W*H) 188.5*78*37mm
	Weight	900g

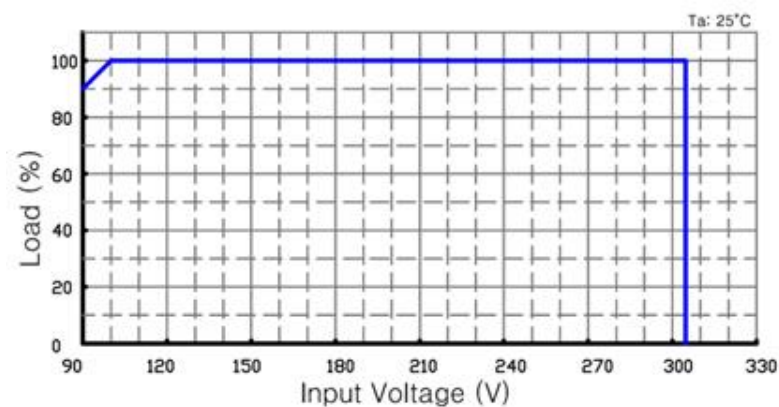
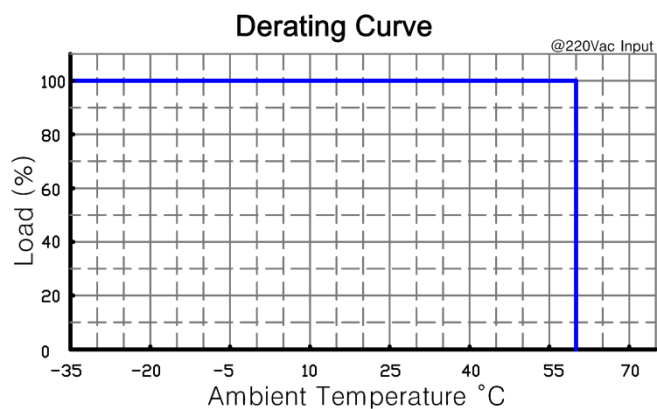
NOTE:

1. All specifications are typical at 25°C unless otherwise stated.
2. The "PF" values are minimum measured at 70% load, after the unit is thermally stabilized
3. The "Efficiency" values are measured at 100% load, after the unit is thermally stabilized
4. The "Ripple & Noise" values are measured by 20MHz bandwidth oscilloscope and the output parallel a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.
5. ±5%

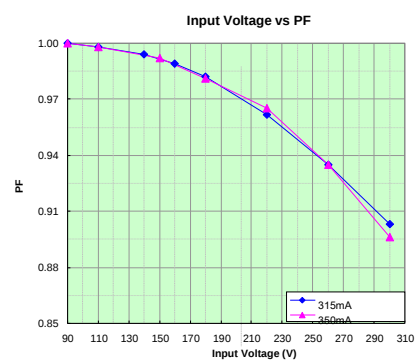
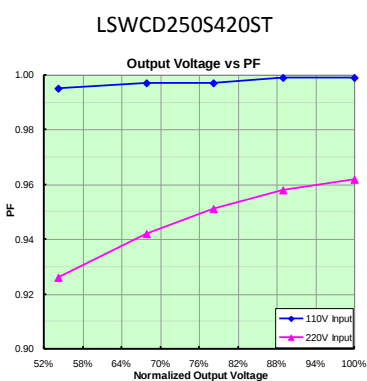
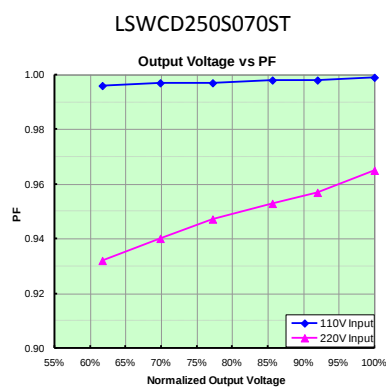
Mechanical Specifications



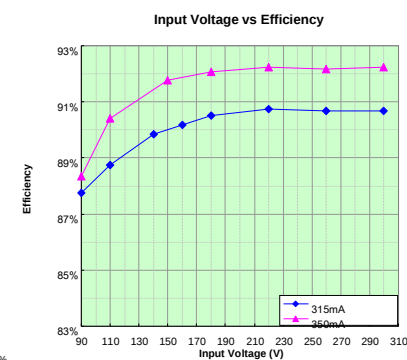
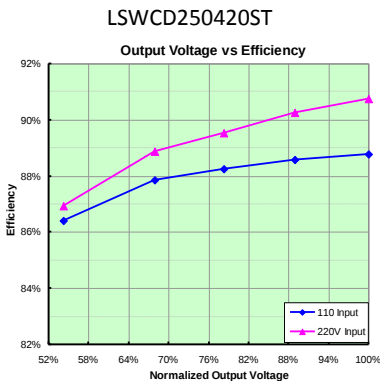
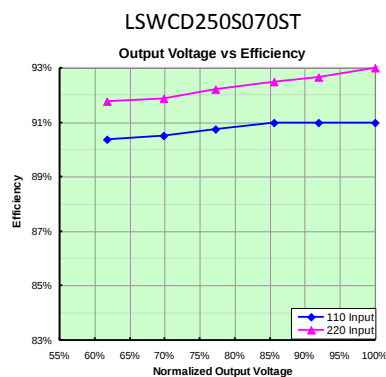
Derating Curves



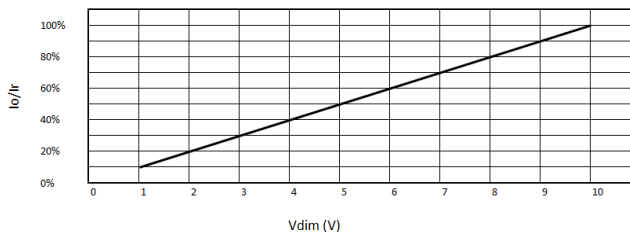
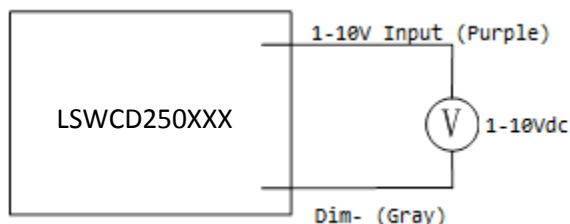
Power Factor Curves



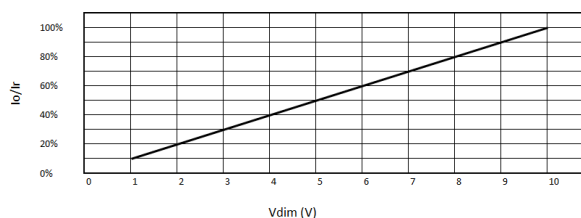
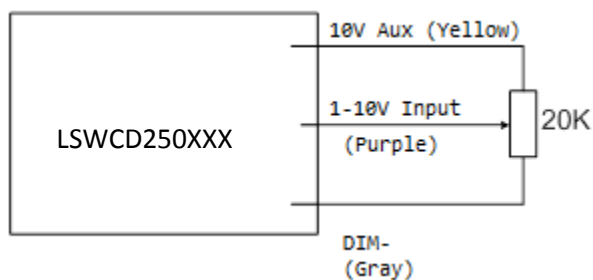
Efficiency vs Load



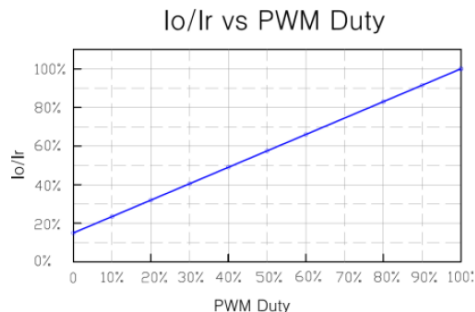
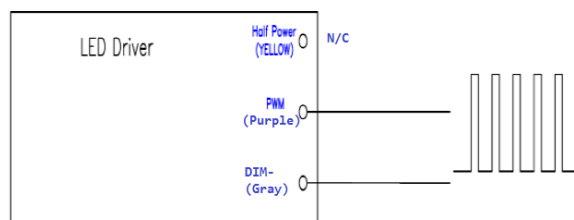
Dimming Function



Mode 1 : 1-10Vdc Input on Dimming Control



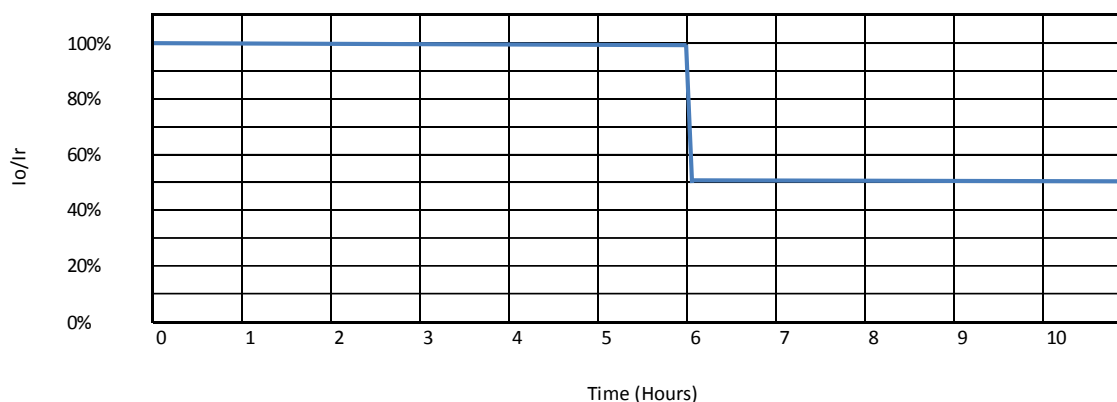
Mode 2 : Potentiometer on Dimming Control



Mode 3 : PWM Signal on Dimming Wires

Parameter	Values	Conditions
Input Voltage	0~10 V	Purple wire.
Input Current	10 mA	
PWM Frequency	0.5 ~ 3 kHz	
PWM Pulse Width	10%~100%	





Mode 4 : Timer Dimming (Does not require dimming wires)

Standard power/time combination above, can be factory set to customer specification. Recycle AC to restart timer.

- NOTE:**
1. If the dimming function is not used, short 10V aux pin (yellow) and 1-10V input pin (purple)
 2. I_o is actual output current and I_r is rated current without dimming control.
 3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, proximately 50% of the max. output voltage for any given mode.
 4. The dimming signal is allowed to be less than 1V, when it is 0-1V, the output current can maintain about 10% I_r , however, the connected LEDs may flicker. Keeping dimming voltage greater than 1V in application is strongly recommended.
 5. Pulse width less than 10% will cause the driver working improperly.

PART NUMBER SCHEME

LSWCD250SxxxST

LS= LED Driver, "S" Series

W=Wide Input Voltage 90~305Vac

C=Constant Current

D= 0-10V Dimming

T= Timer Dimming

P= PWM (Output) Diming

T= Class I, 3 Wire Input

S= Metal Case

XXX=Output Current

S=Single Output

250=Output Power (Watts)

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AUTECH IS NOT RESPONSIBLE FOR ISSUES ARISING FROM ERRORS OR OMMISIONS

