

FEATURES

- Wide AC Input 90~305VAC
- High Efficiency & High Power Factor – Meets DLC & Energy Star
- Option to Specify Any Output Current in the Range
- 0-10V, PWM (Output) & Timer Dimming
- Operation from -35°C-70°C Full Load
- Certified to UL/cUL 8750, EN61347 & CE
- Short Circuit, Over Temperature & Over Voltage Protection
- IP67, Damp & Hazardous Location (HL) Certified
- RoHS Compliant

120W Constant Current Dimming LED Driver LSWCD120 Series



SPECIFICATIONS

Model #	Output Current Model Range (5)	Output Voltage Max. Range (5)	PF (2)		No Load Output Voltage	Ripple & Noise (3)	Efficiency (4)
			110VAC	277VAC			
LSWCD120S027-045	270-450mA	267-444V	0.99	0.9	107% of Maximum Rated Voltage	3% of Maximum Output Voltage	93.0%
LSWCD120S046-075	460-750mA	160-267V	0.99	0.9			92.0%
LSWCD120S076-125	760-1250mA	96-160V	0.99	0.9			91.0%
LSWCD120S126-208	1260-2080mA	58-96V	0.99	0.9			91.0%
LSWCD120S209-350	2090-3500mA	34-58V	0.99	0.9			90.0%
LSWCD120S355-500	3550-5000mA	24-34V	0.99	0.9			90.0%

Example: A **950mA** output would be model number LSWCD120S076-125 and part number for ordering purposes of **LSWCD120S095ST**. Both numbers would be shown on the label.

PART NUMBER BUILDER

LSWCD120SxxxST-xxx

LS= LED Driver, "S" Series

W=Wide Input Voltage 90~305Vac

C=Constant Current

D= 0-10V and PWM Dimming

T= Class I, 3 Wire Input

S=Metal Case

XXX=Output Current
Use any current from 027 (270mA) to 500 (5000mA)

S=Single Output

120=Output Power (Watts)

Output	Line Regulation	1%	
	Load Regulation	3%	
	Turn-on Delay	0.8~1.2 s (Typ)	
Input	Rated Voltage Range	100-277 Vac	
	Frequency Range	47Hz ~63Hz	
	Inrush Current	65A cold start, Vin=230V	
	AC Current (Typ.)	1.25 A / 110 VAC, 0.61 A / 220 VAC @ full load	
	THD	≤ 20% @277Vac, 70% load	
Protections	Leakage	0.75 mA Vin=277V, 50Hz	
	Short Circuit	Protection type : Hiccup mode, recovers automatically after fault condition is removed	
	Over Temperature	110°C internal temperature auto recovers after power supply cools	
	Over Voltage (Typ.)	130% of max. output voltage Latch mode. The power supply shall return to normal operation after recycling AC.	
Environmental	Temperature Range	Operational	- 35°C - 70°C, Max. case temperature 85°C
		Storage	- 40 - 85°C
	Humidity	Operational	10% - 100% RH
		Storage	5% -100% R.H

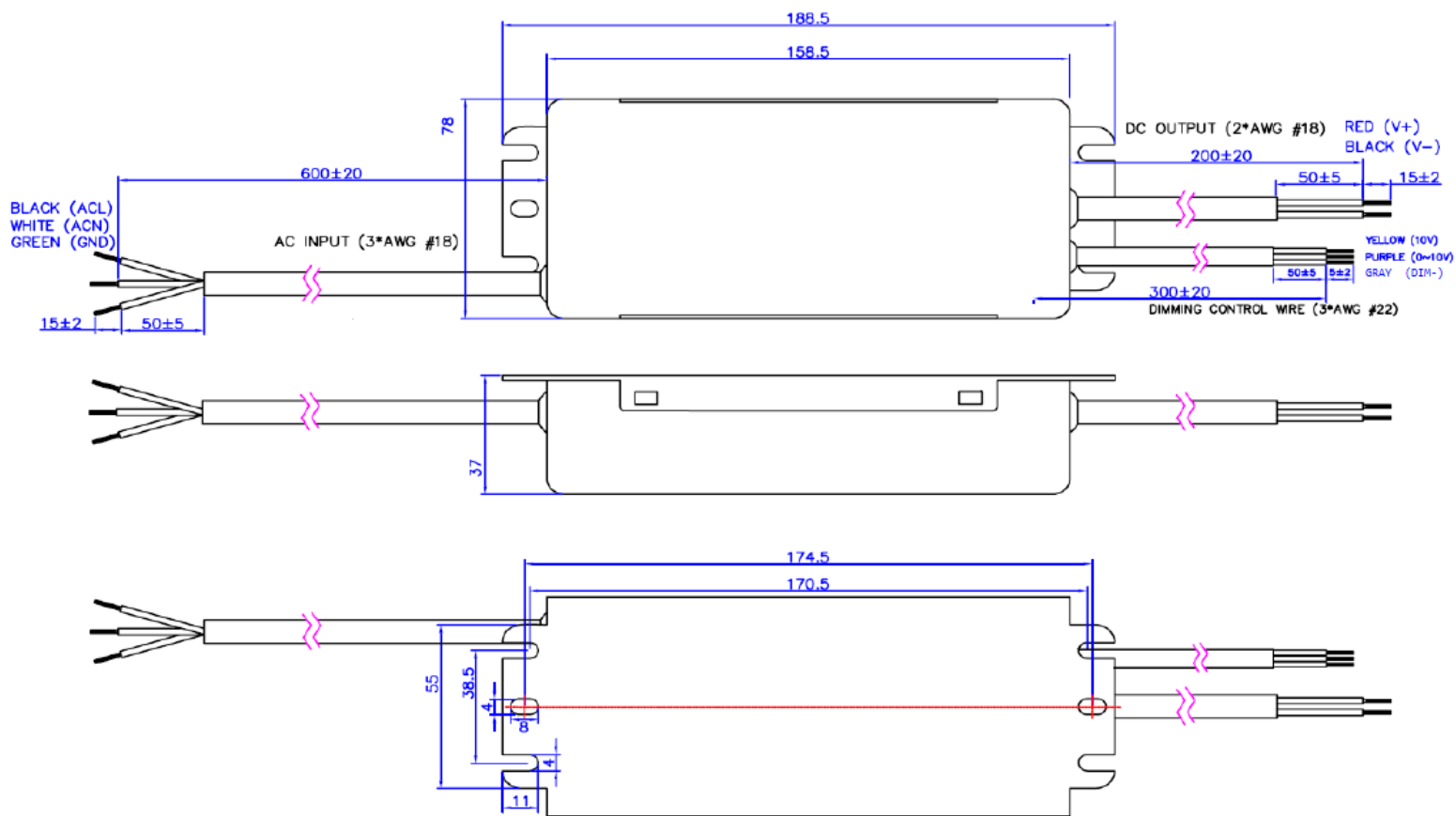
Safety & EMC	Safety Standards	UL8750, UL935, UL1012, CSA-C22.2 NO. 107.1 EN61347-1 EN61347-2-13	
	EMI Conduction & Radiation	EN55015	
	EMS Immunity	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN61547	
Others	MTBF	275,000 Hours	
	Life Time	82,000 Hours	
	Dimensions	(L*W*H) 7.40*3.07*1.46 inches / (L*W*H) 188.5*78*37mm	
	Weight	900G	

NOTES:

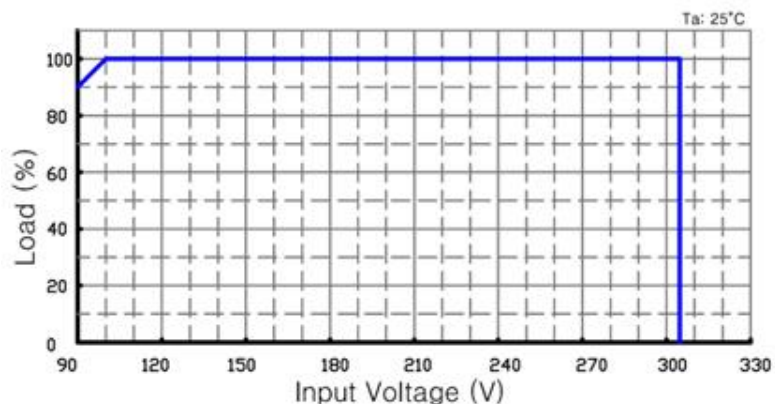
1. All specifications are typical at 25°C unless otherwise stated.
2. The values are measured at 70% load, after the unit is thermally stabilized.
3. The "Ripple & Noise" values are measured by 20MHz bandwidth oscilloscope and the output parallel a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.
4. @220Vac.
5. ±5V
6. Measured at 220VAC



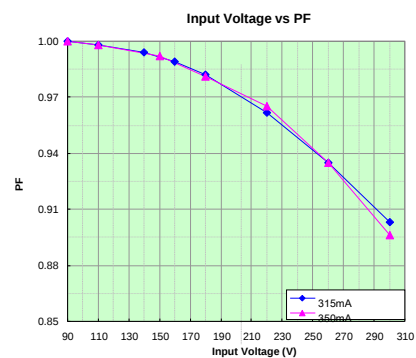
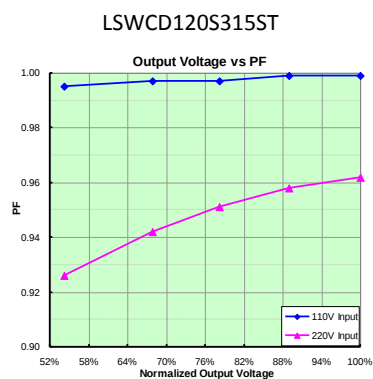
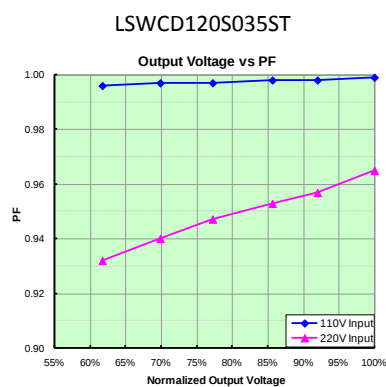
Mechanical Specifications



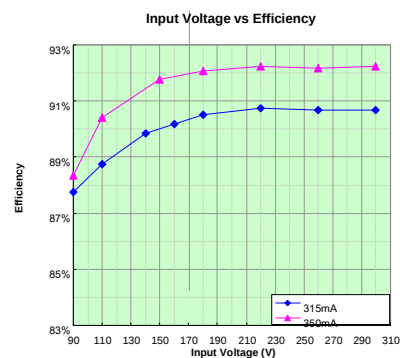
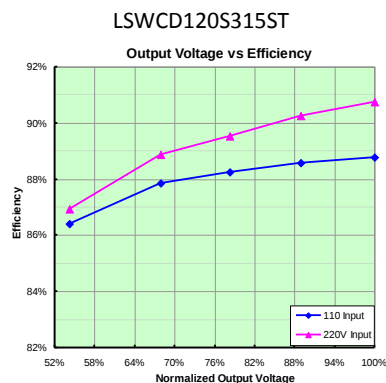
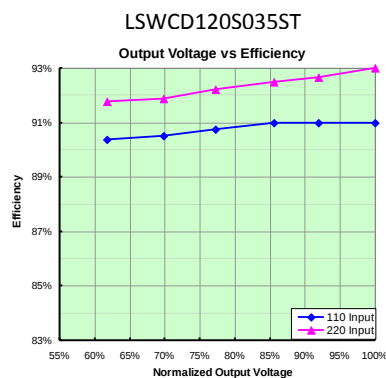
Derating Curves



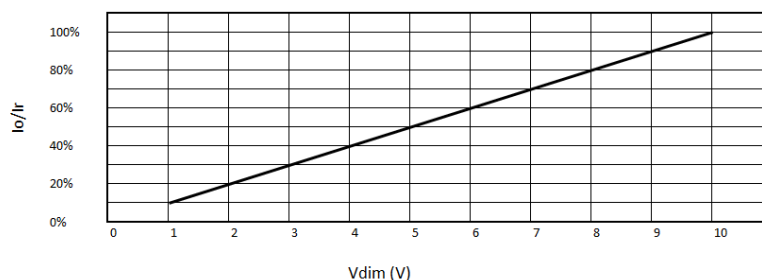
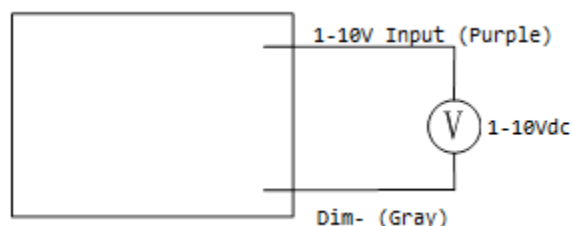
Power Factor Curves



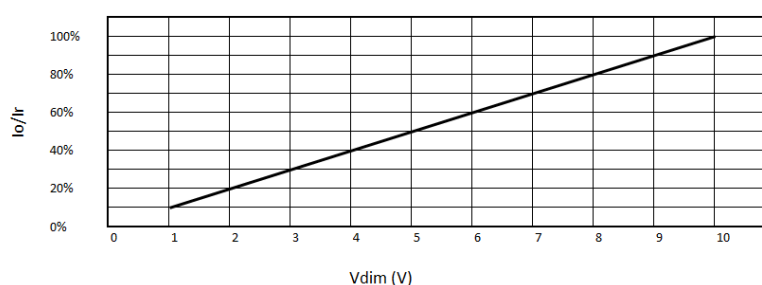
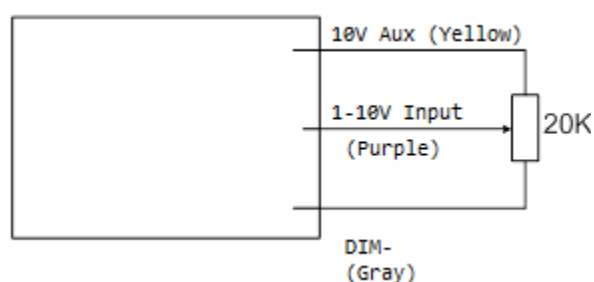
Efficiency vs Load



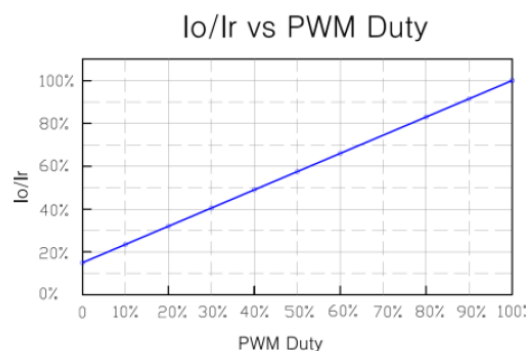
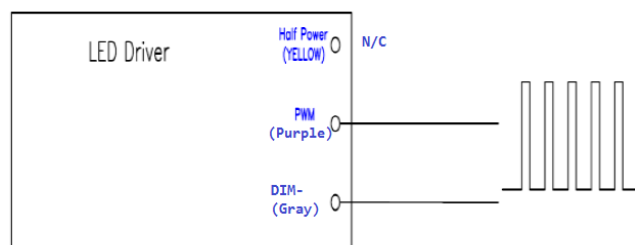
Dimming Function



Mode 1 : 1-10Vdc Input on Dimming Control



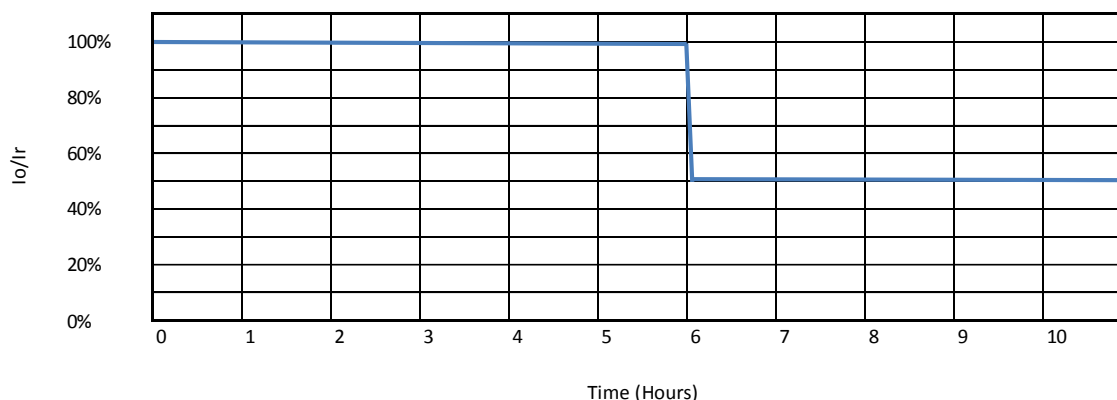
Mode 2 : Potentiometer on Dimming Control



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 3 : PWM Signal on Dimming Wires





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, proximally 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.

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

