FEATURES

LSWCD030 Series — **30W Constant Current Dimming LED Driver**

- High efficiency (Up to 91%) & Active PFC (typical 0.99)
- UL 8750, EN61347 & CE **(700mA & 1050mA Models, Others Pending)
- Wide Input Voltage 90-305VAC
- Class 2 Output
- IP66 & Damp Location Certified
- 0-10 With Aux. Output, PWM (Output) and Timer Dimming Options
- Short Circuit & Over Voltage Protection
- RoHS Compliant

SPECIFICATIONS

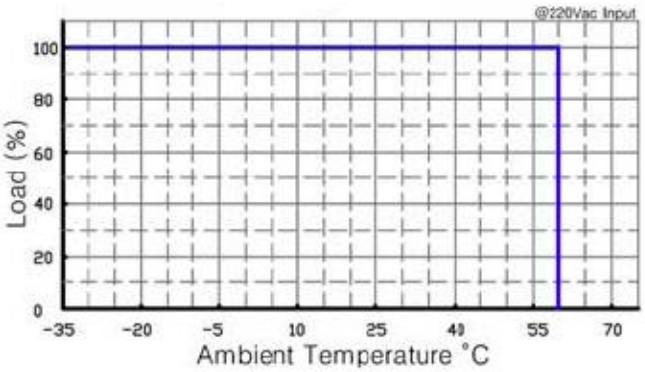
Model #	Output Voltage Range (2)	Output Current(2)	Ripple & Noise (3)	Efficiency @ 220V (4)	PF (5)	
					110Vac	277Vac
LSWCD030S035PS**	26~43V	350mA	2.6V	86.0%	0.99	0.9
LSWCD030S045PS**	26~43V	450mA	2.6V	86.0%	0.99	0.9
LSWCD030S070PS	26~43V	700mA	2.6V	86.0%	0.99	0.9
LSWCD030S105PS	17-29V	1050mA	1.5V	84.0%	0.99	0.9

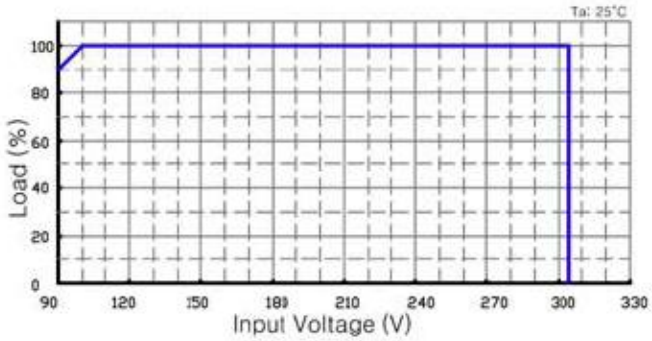
Output	Turn-on Delay		1-2 sec.
	Line Regulation		5%
	Load Regulation		5%
Input	Voltage Range		90~264Vac
	Frequency Range		47~63Hz
	Inrush Current		24A Cold start, Vin=230V
	AC Current		110V 0.32A Full load, Vin=110V / 220V 0.16 A Full load, Vin=220V
	THD		<20% @70% load and 277Vac input
	Leakage Current		0.35mA Vin=264V, 50Hz
Protections	Short Circuit		No damage shall occur when any output operating in a short circuit condition. The power supply shall self-recover when the fault condition is removed.
	Over Voltage		1.4 Vo ±5% The power shall return to normal operation only after recycling AC.
Environmental	Temperature	Operational	-35°C~60°C
		Storage	-40°C~+85°C
	Humidity	Operational	10%~100% RH
		Storage	5%~100%RH
Safety &EMC	Safety		UL8750 Compliance to UL1310 Class2, UL1012 UL935 CAN/CSA-22.2 No.0, CSA-C22.2 No.107.1, CSA-C22.2 No.250.0 EN61347-1, EN61347-2-13 **(500mA and 700mA)
	EMI		EN55015
	EMS		EN61000-3-2,EN61000-3-3,EN61000-4-2,EN61000-4-3, EN61000-4-4,EN61000-4-6, EN61000-4-8, EN61000-4-11,EN61547
Others	MTBF		450,000 hours
	Life Time		80,000 hours
	Dimensions		(L*W*H) 4.45*1.63*1.18 Inches 113*41.5*30 mm
	Weight		210g

NOTE:

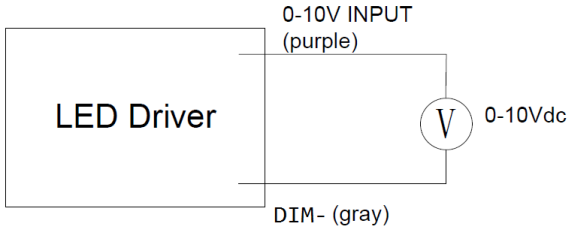
1. All specifications are typical at 25°C unless otherwise stated.
2. +/-5%
3. The "Ripple & Noise" values are measured by 20MHz bandwidth oscilloscope and the output paralleled a 0.1μF ceramic capacitors and a 10μF electrolytic capacitor.
4. Typ. at full load
5 Minimum at 70% load, after unit is thermally stabilized.

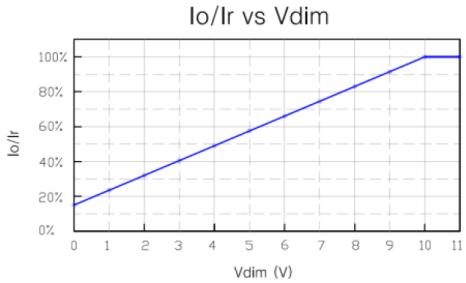
Derating Curves



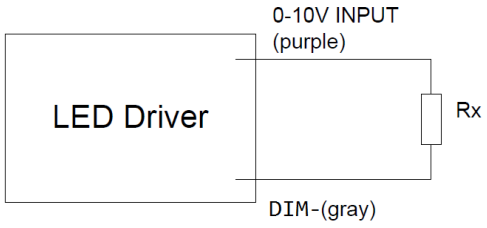


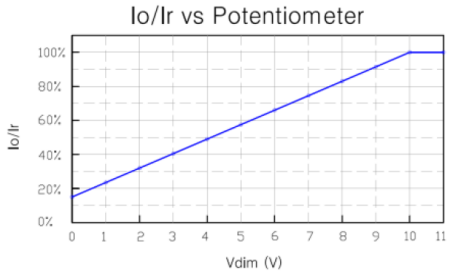
Dimming





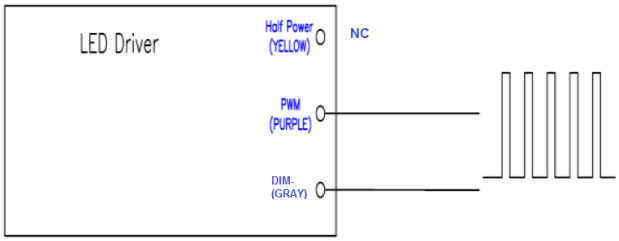
Mode 1：0-10Vdc Input on Dimming Control

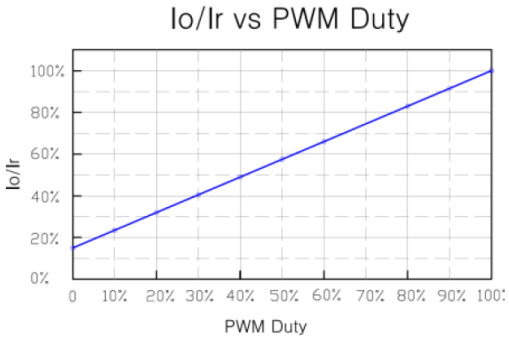




Mode 2：Potentiometer on Dimming Control

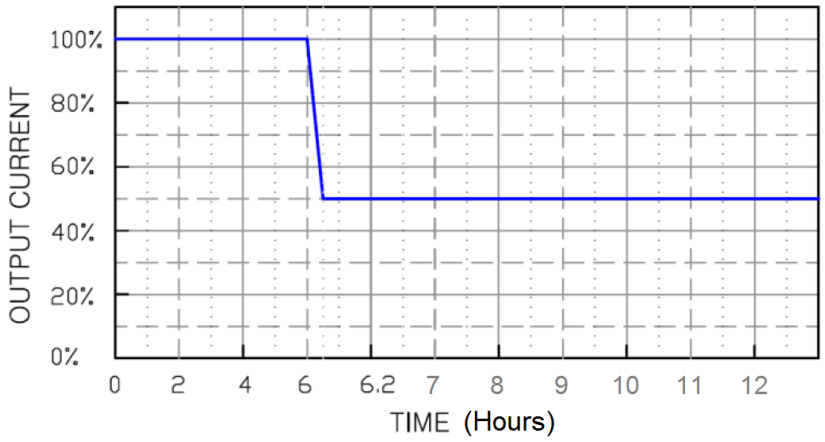
Parameter	Values	Conditions
Absolute Max. Voltage	0 ~ 12 V	Normal 10~11V
0-10V Input Source Current	0 ~ 10 mA	





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%	Maintain a 10% Duty Cycle for Proper Operation

Mode 3 : PWM Dimming



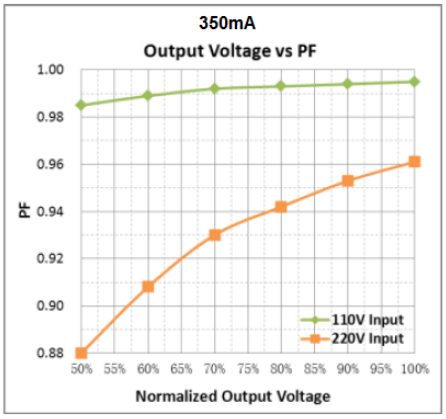
Mode 4 : Timer Dimming

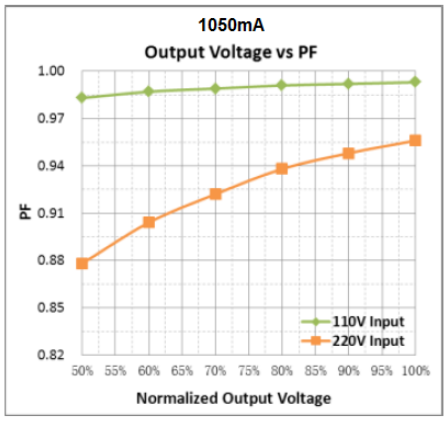
Curve is the standard timing, customer spec can be custom set at the factory.

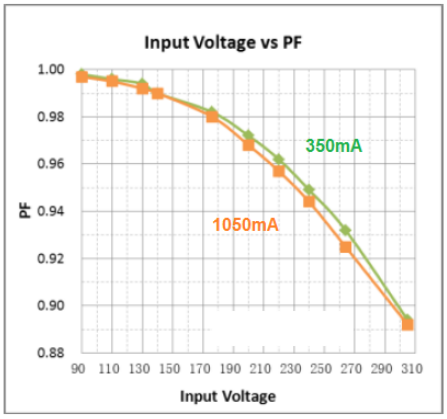
DIMMING NOTES:

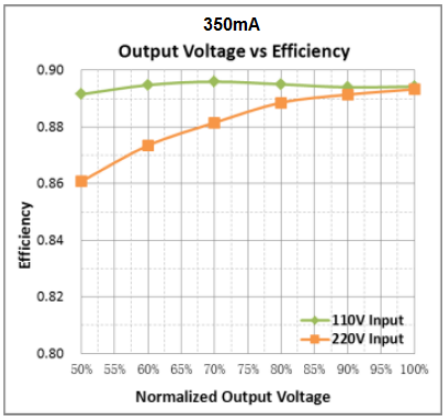
1.If the dimming function is not used, short 10V output pin (yellow) and 1-10V input pin (purple).
2. Io is actual output current and Ir is rated current without dimming control.
3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, approx.. 50% of the max. output voltage.
4. The dimming signal is allowed to be less than 1V, when it for 0-1V, the output current will maintain about 10%Ir, however, the connected LEDs may flicker. Keeping reference voltage greater than 1V in application is strongly recommended.

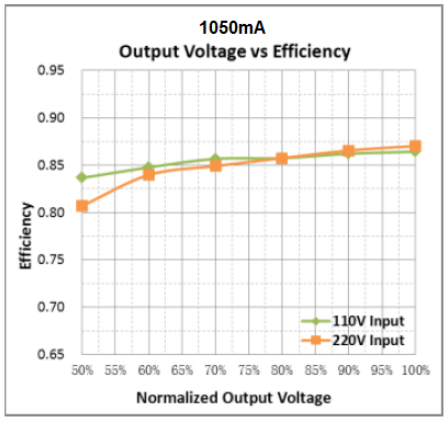
Performance Curves

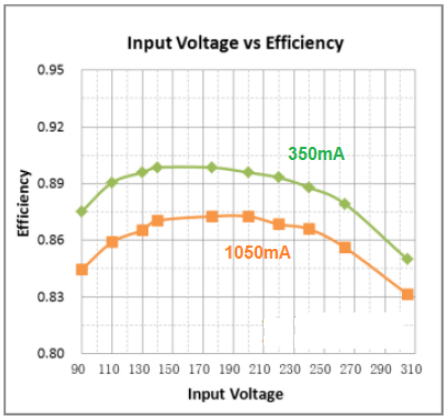




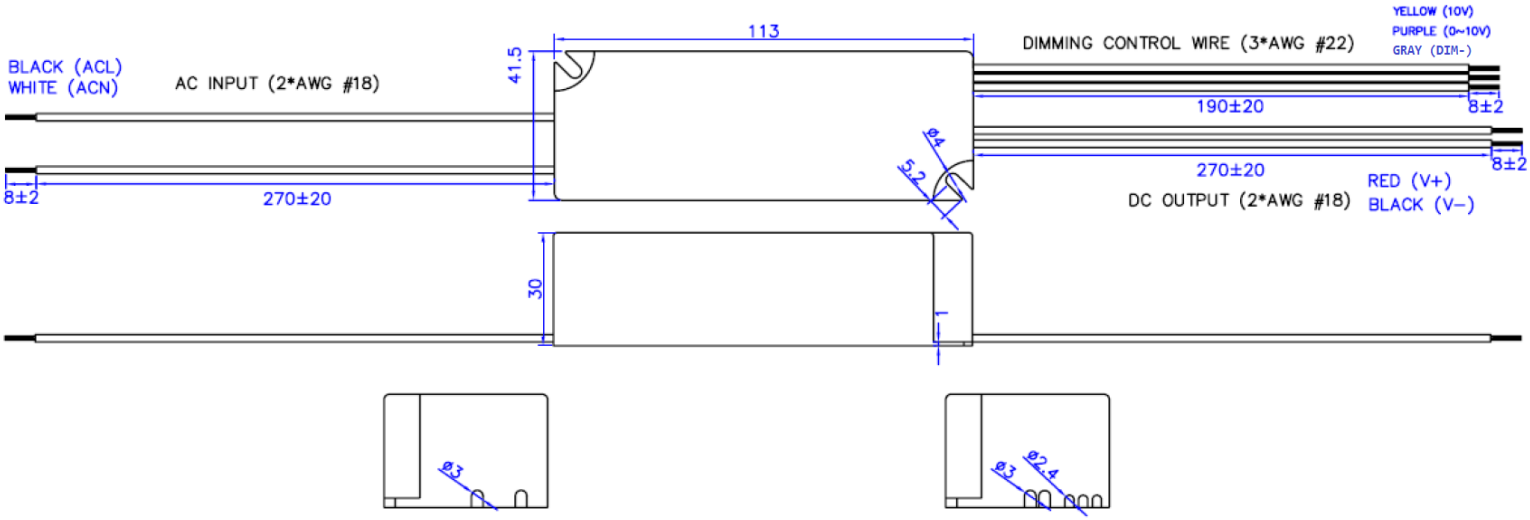








Mechanical Specifications



PART NUMBER SCHEME

LSWCD030S070PS

- L= LED driver "S" Series
- W=Wide Input 90~305Vac
- C=Constant Current
- D= Dimming
- S= Class II, 2 Wire Input
- P = Plastic Case
- 035= Rated Current
- S=Single Output
- 030=Output power (Watts)

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