

FEATURES

200W Constant Current with Dimming LSWCD200 SERIES

- Ultra High Efficiency (Up to 93%)
- Build-in Active PFC (0.99 Typical)
- All-Round protection: OVP, SCP, OTP
- Waterproof (IP67)
- UL/cUL 8750 and EN61347 approved, CE Compliant
- Constant Output Current



SPECIFICATION

Model		LSWCD200S045ST	LSWCD200S070ST	LSWCD200S105ST	LSWCD200S140ST	LSWCD200S175ST	LSWCD200S210ST	
Output	Voltage	267~444	171~286	114~190	86~143	69~114	57~95	
	Current (min-max)	450 mA	700 mA	1050 mA	1400 mA	1750 mA	2100 mA	
	No load Output Voltage ± 5 V	467	300	200	150	120	105	
	Ripple & Noise (3)	13.3 V	8.6 V	5.7 V	4.3 V	3.4 V	2.9 V	
	Line Regulation	1%						
	Load Regulation	3%						
	Turn-on Delay Time (typ-max)	1.0 ~2.0 S						
	Leakage	0.75 mA Vin=277V, 50Hz						
Input	Voltage Range	90 ~ 305 Vac						
	Frequency Range	47Hz ~63Hz						
	PFC(2)	110VAC	0.99	0.99	0.99	0.99	0.99	0.99
		220VAC	0.96	0.96	0.96	0.96	0.96	0.96
	Efficiency (Typ.) at 220Vac (2)	93.0%	93.0%	93.0%	93.0%	92.0%	91.5%	
	Inrush Current	65A cold start, Vin=230V						
AC Current (Typ.)	2.1 A / 110 VAC		1.0 A / 220 VAC					
Protections	Short Circuit Protection	Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	Over Temperature Protection (Typ.)	110 °C						
	Over Voltage (Typ.)	1.2 Vo $\pm 5\%$ floating deviation (Latch mode. The power supply shall return to normal operation only after the power is turn-on again.)						
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	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	345,000 HOURS						
	Life Time	63,000 hours						
	Dimension	Inches (L*W*H) 7.40*3.07*1.46		Millimeters (L*W*H) 188.5*78*37				
	Weight	1100G						



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SPECIFICATION

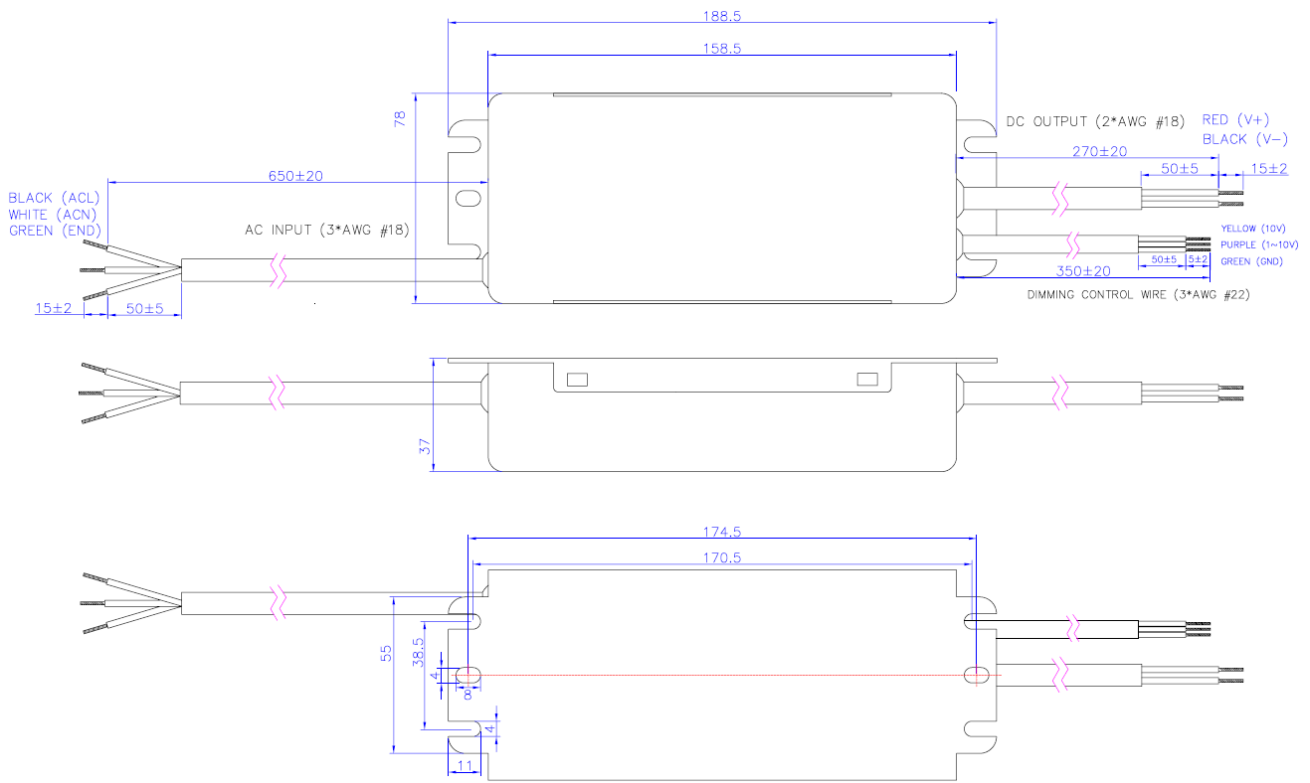
Model		LSWCD200S245ST	LSWCD200S280ST	LSWCD200S315ST	LSWCD200S350ST	LSWCD200S420ST	
Output	Voltage	49~82	43~71	38~63	34~57	29~48	
	Current Range	2450 mA	2800 mA	3150 mA	3500 mA	4200 mA	
	No load Output Voltage ± 5 V	90	78	70	63	52	
	Ripple & Noise (3)	2.4 V	2.1 V	1.9 V	1.7 V	1.4 V	
	Line Regulation	1%					
	Load Regulation	3%					
	Turn-on Delay	1.0 ~2.0 S					
	Leakage	0.75 mA $V_{in}=277V$, 50Hz					
Input	Voltage Range	90 ~ 305 Vac					
	Frequency Range	47Hz ~ 63Hz					
	PFC (2)	110	0.99	0.99	0.99	0.99	0.99
		220	0.96	0.96	0.96	0.96	0.99
	Efficiency (Typ.) at 220Vac (2)	91.5%					
	Inrush Current	65A cold start, $V_{in}=230V$					
AC Current (Typ.)	2.1 A / 110 VAC		1.0 A / 220 VAC				
Protections	Short Circuit Protection	Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	Over Temperature Protection (Typ.)	110 °C					
	Over Voltage (Typ.)	1.25% $V_o \pm 5\%$ floating deviation (Latch mode. The power supply shall return to normal operation only after the power is turn-on again.)					
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	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	345,000 hours					
	Life Time	63,000 HOURS					
	Dimension (L*W*H)	Inches (L*W*H) 7.40*3.07*1.46		Millimeters (L*W*H) 188.5*78*37			
	Weight	1100G					



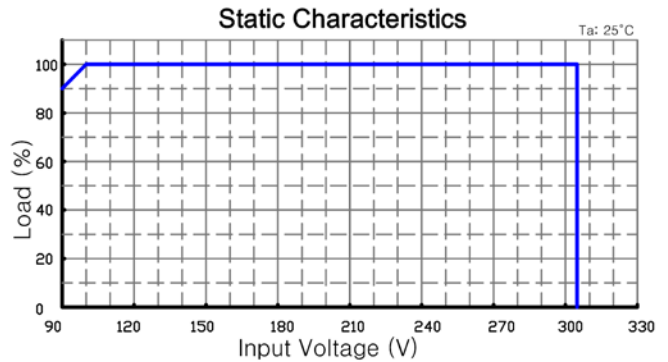
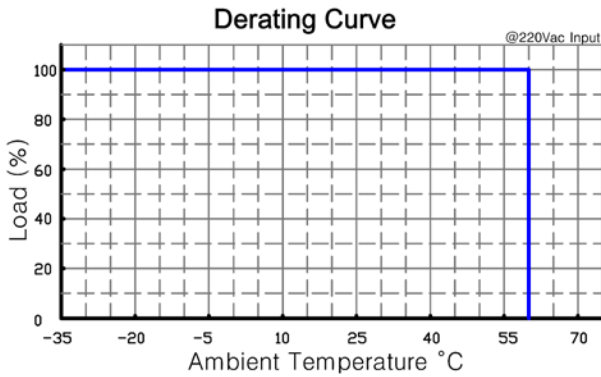
NOTE:

1. All specifications are typical at 25°C unless otherwise stated.
2. The “Efficiency” & “PF” values are measured at full load, after the unit is thermally stabilized, otherwise they will be lower about 1%.
3. The “Ripple & Noise” values are measured by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.

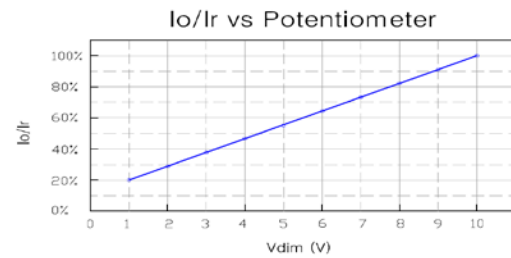
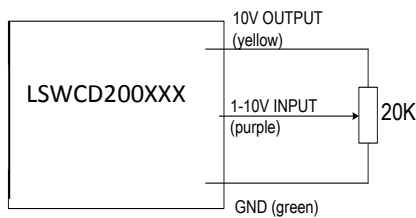
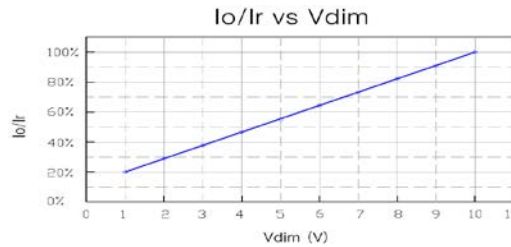
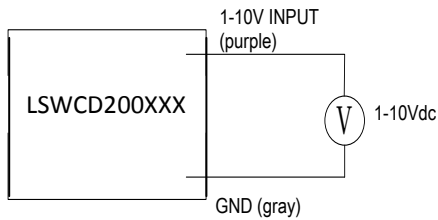
Mechanical Specification



Derating character



Dimming Function

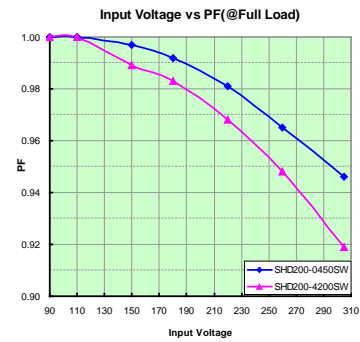
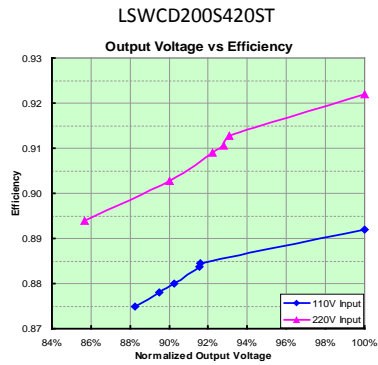
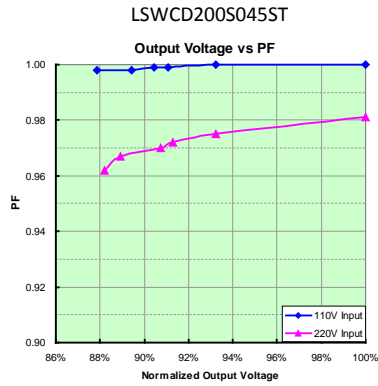


Mode 2 : External Resistor on Dimming Control

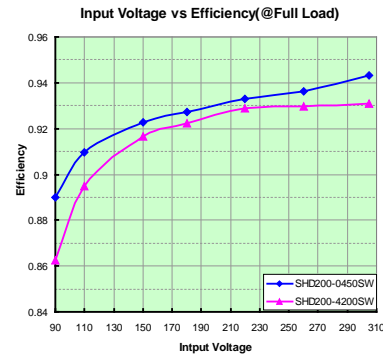
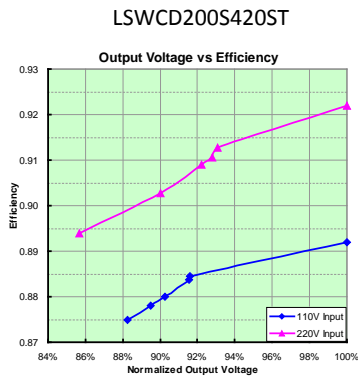
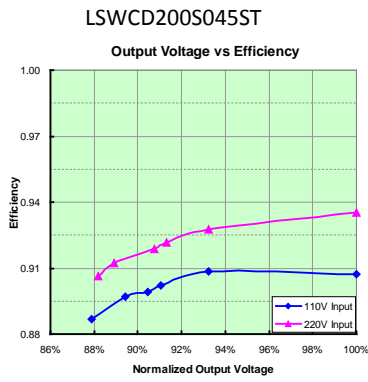
- NOTE:**
- 1.If the dimming function is not used, short 10V output pin (yellow) and 1-10V input pin (purple).
 2. I_o is actual output current and I_r is rated current without dimming control.
 3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, proximately 50% of the max. output voltage for any given mode.
 4. The dimming signal is allowed to be less than 1V, when it for 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. Do not connect the GND of dimming to the output. Otherwise, the LED driver cannot work



Power Factor Characters



Efficiency vs Load



PART NUMBER SCHEME

LSWCD200S420ST

