

200W Constant Current LED Driver LEDWC-200 series

FEATURES

- Ultra High Efficiency (Up to 92%)
- Active Power Factor Correction (Up to 0.99)
- Waterproof (IP67)
- Lightning Protection
- Over Voltage, Over Temp. & Short Circuit Protection
- Comply with UL8750 & EN61347 Safety Regulations
- Very High MTBF & Life Time

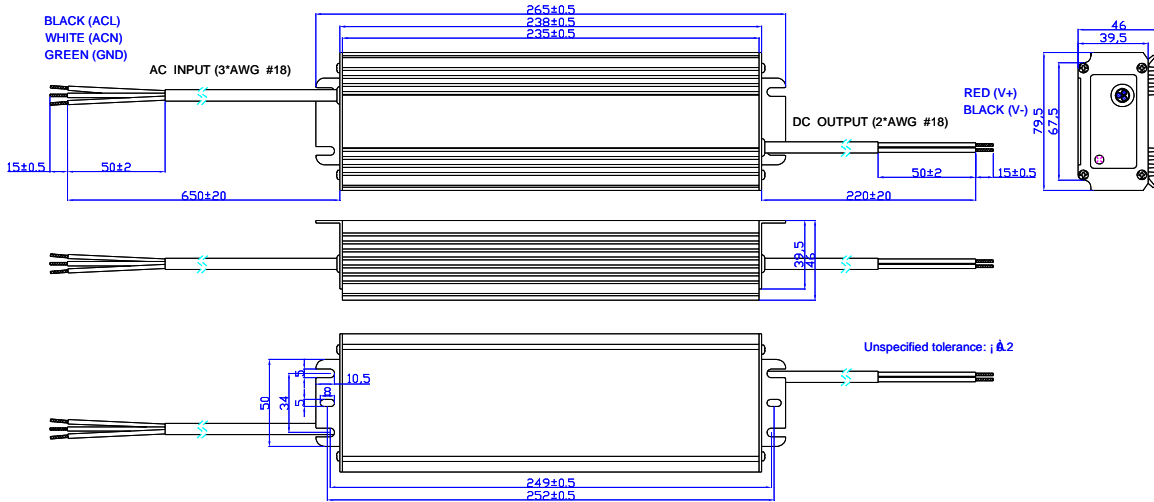


SPECIFICATION

Model		LEDWC-200S045ST	LEDWC-200S070ST	LEDWC-200S105ST	LEDWC-200S140ST	LEDWC-200S175ST	LEDWC-200S210ST	LEDWC-200S245ST	LEDWC-200S280ST	
Output	Rated Current (1)	450mA	700mA	1050mA	1400mA	1750 mA	2100 mA	2450 mA	2800 mA	
	Current Range (Min - Max) mA	427 - 473	665 - 735	997 - 1103	1330 - 1470	1662 -1838	1995 - 2205	2327 - 2573	2660 - 2940	
	Rated Power	200W	200W	200W	200W	200W	200W	200W	200W	
	Ripple & Noise (max.) (2)	3% V _o Pk -Pk								
	Max. Voltage	445 Vdc	285 Vdc	190 Vdc	142 Vdc	114 Vdc	95 Vdc	81 Vdc	71 Vdc	
	Voltage Range (Min - Max)	267V - 445V	171V - 285V	114V - 190V	85V - 142V	68V - 114V	57V - 85V	48V - 81V	42V - 71V	
	Line Regulation	1%								
	Load Regulation	3%								
	Setup, Rise Time	1.0 S								
Input	Voltage Range	90V - 305VAC								
	Frequency Range	47Hz / 63Hz								
	Power Factor Correction	0.99 @ 100VAC and 0.96 @ 220 VAC								
	Efficiency (Typ.) at 230Vac	92%	92%	92%	92%	91%	91%	91%	91%	
	Inrush Current	65A @ 230VAC Input and 25°C								
	AC Current (Typ.)	2.4 A / 100VAC				1.2A / 220VAC				
Protections	Short Circuit Protection	Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	Over Temperature Protection	110°C Latch mode. The power supply shall return to normal operation only after the power is turn-on again.								
	Over Voltage (Typ.)	601 V	385 V	257 V	192V	154V	128V	109V	96V	
Environmental	Temperature Range	Operational	- 35°C - 70°C							
		Storage	- 40 - +85°C							
	Humidity	Operational	10 - 100% RH							
		Storage	5 -100% R.H							
Safety & EMC	Safety Standards	UL8750 compliance to UL1012 UL935, CSA-C22.2 (No. 0, No 107.1, No. 250.0)								
	Withstand Voltage	I/P - O/P: 3KVAC (4242 DC) I/P - FG: 1.5KVAC (2121 DC) O/P-FG: 0.5KVAC (707 DC), 1 minute								
	EMI Conduction & Radiation	EN55015 with 6db margin								
	Harmonic Current	EN61000-3-2 , EN61000-3-3								
	EMS Immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61547								
Others	MTBF (3)	310K HRS Compliance: MIL-HDBK-217F @ 25°C ambient temp.								
	Life Time (3)	78,000 hours @ 45°C ambient temp.								
	Dimension (L*W*H)	238*79.5*46.0 (mm) -9.37*3.13*1.81 (inch)								
	Weight	1500 g								

Model		LEDWC-200S315ST	LEDWC-200S350ST	LEDWC-200S420ST	LEDWC-200S490ST	LEDWC-200S560ST	LEDWC-200S630ST	LEDWC-200S833ST
Output	Rated Current (1)	3150 mA	3500 mA	4200 mA	4900 mA	5600 mA	6300 mA	8830 mA
	Current Range (Min - Max) mA	2992 - 3308	3325 - 3675	3990 - 4410	4655 - 5145	5320 - 5880	5985 - 6615	7915 - 8745
	Rated Power	200W	200W	200W	200W	200W	200W	200W
	Ripple & Noise (max.) (2)	3% V _o Pk -Pk						
	Max. Voltage	63 Vdc	57 Vdc	47 Vdc	40 Vdc	35 Vdc	32 Vdc	24 Vdc
	Voltage Range (Min - Max)	38V - 63V	34V - 57V	28V - 47V	24V - 40V	21V - 35V	19V - 32V	14V - 24V
	Line Regulation	1%						
	Load Regulation	3%						
	Setup, Rise Time	1.0 S						
	Voltage Range	90V ~ 305VAC						
Input	Frequency Range	47Hz / 63Hz						
	Power Factor Correction	0.99 @ 100VAC and 0.96 @ 220 VAC						
	Efficiency (Typ.) at 230Vac	91%	91%	91%	91%	91%	91%	90%
	Inrush Current	65A @ 230VAC Input and 25°C						
	AC Current (Typ.)	2.4 A / 100VAC			1.2A / 220VAC			
Short Circuit Protection	Protection type : Hiccup mode, recovers automatically after fault condition is removed							
Protections	Over Temperature Protection	110°C Latch mode. The power supply shall return to normal operation only after the power is turn-on again.						
	Over Voltage (Typ.)	85V	77V	63V	54V	47V	43V	32V
		Protection type : latch-off mode, Power supply must turn off and on again						
Environmental	Temperature Range	Operational	- 35°C ~ 70°C					
		Storage	- 40 ~ +85°C					
	Humidity	Operational	10 ~ 100% RH					
		Storage	5 ~100% R.H					
Safety Standards	UL8750 compliance to UL1012 UL935, CSA-C22.2 (No. 0, No 107.1, No. 250.0)							
Safety & EMC	Withstand Voltage	I/P - O/P: 3KVAC (4242 DC) I/P - FG: 1.5KVAC (2121 DC) O/P-FG: 0.5KVAC (707 DC), 1 minute						
	EMI Conduction & Radiation	EN55015 with 6db margin						
	Harmonic Current	EN61000-3-2 , EN61000-3-3						
	EMS Immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61547						
	MTBF (3)	310K HRS Compliance: MIL-HDBK-217F @ 25°C ambient temp.						
Others	Life Time (3)	78,000 hours @ 45°C ambient temp.						
	Dimension (L*W*H)	238*79.5*46.0 (mm) -9.37*3.13*1.81 (inch)						
	Weight	1500 g						

Mechanical Specification



Model	LEDWC-200S045ST	LEDWC-200S070ST	LEDWC-200S105ST	LEDWC-200S140ST	LEDWC-200S175ST	LEDWC-200S210ST	LEDWC-200S245ST	LEDWC-200S280ST
Efficiency @ Full Load and 115VAC (min)	89.0%	89.0%	89.0%	89.0%	88.0%	88.0%	88.0%	88.0%
Efficiency @ Full Load and 115VAC (typ)	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%	89.0%	89.0%
Efficiency @ Full Load and 230VAC (min)	91.0%	91.0%	91.0%	91.0%	90.0%	90.0%	90.0%	90.0%
Efficiency @ Full Load and 230VAC (typ)	92.0%	92.0%	92.0%	92.0%	91.0%	91.0%	91.0%	91.0%

Model	LEDWC-200S315ST	LEDWC-200S350ST	LEDWC-200S420ST	LEDWC-200S490ST	LEDWC-200S560ST	LEDWC-200S630ST	LEDWC-200S833ST
Efficiency @ Full Load and 115VAC (min)	88.0%	88.0%	88.0%	88.0%	88.0%	88.0%	87.0%
Efficiency @ Full Load and 115VAC (typ)	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%	88.0%
Efficiency @ Full Load and 230VAC (min)	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	89.0%
Efficiency @ Full Load and 230VAC (typ)	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	90.0%

NOTES:

1. Measured at full load, 220VAC input and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth oscilloscope and the output paralleled a 0.1uf ceramic capacitor & 10 uf electrolytic capacitor.
3. For 2450mA output model, measured at 110VAC input, 80%load and 25°C of ambient temperature.
4. For 2450mA output model, measured at 220VAC input, 80%load and 45°C of ambient temperature.
5. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25°C of ambient temperature.
6. Specifications are subject to change without notice. AUTECH cannot be held liable for errors or omissions or the consequences thereof.
7. A suffix -XXXX may be added to denote variation or modifications to the base product, where X can be any alphanumeric

Derating Curve

