

150W Constant Current LED Driver

LEDWC-150 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

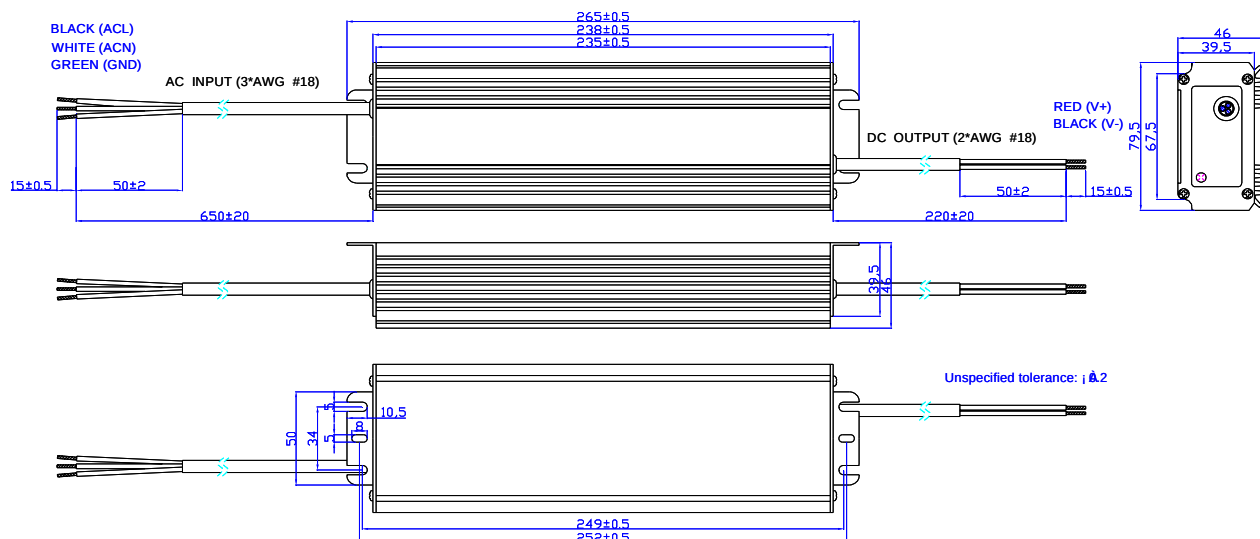


SPECIFICATION

Model		LEDWC-150S035ST	LEDWC-150S045ST	LEDWC-150S070ST	LEDWC-150S105ST	LEDWC-150S140ST	LEDWC-150S175ST	LEDWC-150S210ST
Output	Rated Current (1)	350mA	450mA	700mA	1050mA	1400mA	1750 mA	2100 mA
	Current Range (Min - Max) mA	332 - 368	427 - 473	665 - 735	997 - 1103	1330 - 1470	1662 -1838	1995 - 2205
	Rated Power	150W	150W	150W	150W	150W	150W	150W
	Ripple & Noise (max.) (2)	3% V _o Pk -Pk						
	Max. Voltage	428 Vdc	333 Vdc	214 Vdc	142 Vdc	107 Vdc	85 Vdc	71 Vdc
	Voltage Range (Min - Max)	256V - 428V	200V - 333V	128V - 214V	85V - 142V	64V - 107V	51V - 85V	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%	92.0%	91.0%	91.0%	91.0%
	Inrush Current	65A @ 230VAC Input and 25°C						
	AC Current (Typ.)	1.8 A / 100VAC 0.9A / 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.)		578V	450V	289V	192V	144V	115V	96V
		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 & 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)	311K HRS Compliance: MIL-HDBK-217F @ 25°C ambient temp.						
	Life Time (3)	87,000 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-150S245ST	LEDWC-150S280ST	LEDWC-150S315ST	LEDWC-150S350ST	LEDWC-150S420ST	LEDWC-150S490ST	LEDWC-150S595ST
Output	Rated Current (1)	2450mA	2800mA	3150mA	3500mA	4200mA	4900mA	5950mA
	Current Range (Min - Max) mA	2327 - 2573	2660 - 2940	2992 - 3308	3325 - 3675	3990 - 4410	4655 - 5145	5652 - 6248
	Rated Power	150W	150W	150W	150W	150W	150W	150W
	Ripple & Noise (max.) (2)	3% V _o Pk -Pk						
	Max. Voltage	61 Vdc	53 Vdc	47 Vdc	42 Vdc	35 Vdc	30 Vdc	25 Vdc
	Voltage Range (Min - Max)	36V - 61V	31V - 53V	28V - 47V	25V - 42V	21V - 35V	18V - 30V	15V - 25V
	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%	90%	90%	90%
	Inrush Current	65A @ 230VAC Input and 25°C						
	AC Current (Typ.)	1.8 A / 100VAC 0.9A / 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.)		82V	72V	63V	57V	47V	41V	34V
		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						
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	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)	311K HRS Compliance: MIL-HDBK-217F @ 25°C ambient temp.						
Others	Life Time (3)	87,000 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-150S035ST	LEDWC-150S045ST	LEDWC-150S070ST	LEDWC-150S105ST	LEDWC-150S140ST	LEDWC-150S175ST	LEDWC-150S210ST
Efficiency @ Full Load and 115VAC (min)	89.0%	89.0%	89.0%	89.0%	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%
Efficiency @ Full Load and 230VAC (min)	91.0%	91.0%	91.0%	91.0%	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%

Model	LEDWC-150S245ST	LEDWC-150S280ST	LEDWC-150S315ST	LEDWC-150S350ST	LEDWC-150S420ST	LEDWC-150S490ST	LEDWC-150S595ST
Efficiency @ Full Load and 115VAC (min)	88.0%	88.0%	88.0%	88.0%	87.0%	87.0%	87.0%
Efficiency @ Full Load and 115VAC (typ)	89.0%	89.0%	89.0%	89.0%	88.0%	88.0%	88.0%
Efficiency @ Full Load and 230VAC (min)	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%	89.0%
Efficiency @ Full Load and 230VAC (typ)	91.0%	91.0%	91.0%	91.0%	90.0%	90.0%	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 5950mA output model, measured at 110VAC input, 80%load and 25°C of ambient temperature.
4. For 5950mA 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. AUTEC 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 character or blank

Derating Curve

