

FEATURES

Ultra High Efficiency (Up to 93.5%)
0-10V Dimming
Wide Range Input Voltage (90-305VAC)
Active Power Factor Correction (Up to 0.99)
Waterproof (IP67)
Lightning Protection
Over Voltage, Over Temp. & Short Circuit Protection
UL8750 & EN61347 Safety Regulations
Very High MTBF & Life Time
RoHS Compliant

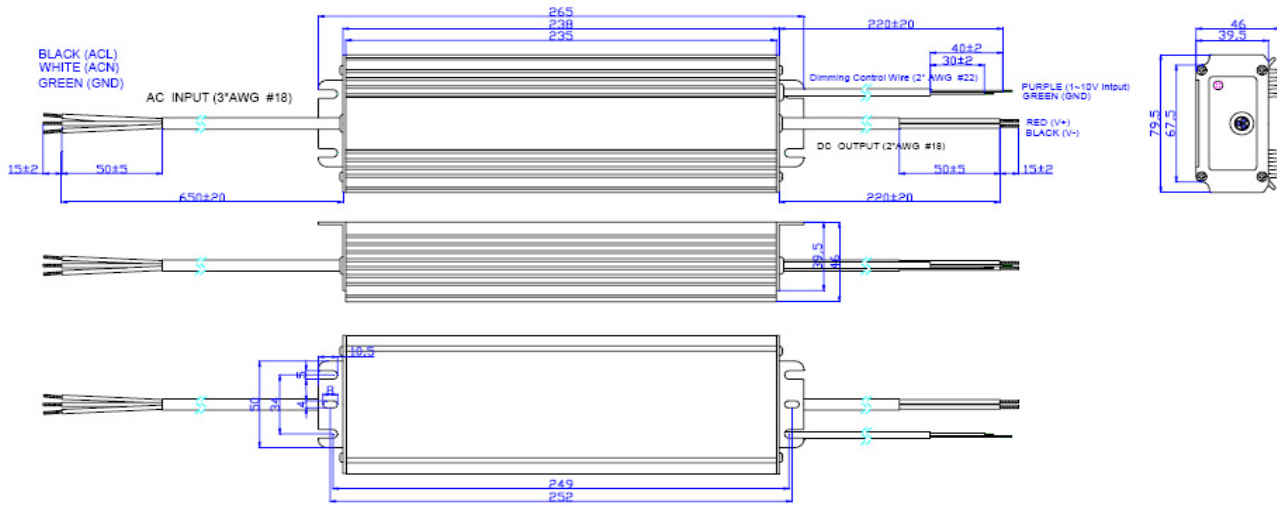
150W Constant Current Dimming LED Driver LEDWCD150 series



SPECIFICATION

Model		LEDWCD150S035ST	LEDWCD150S045ST	LEDWCD150S070ST	LEDWCD150S105ST	LEDWCD150S140ST
Output	Rated Current (1)	350mA	450mA	700mA	1050mA	1400mA
	Current (Min/Max) mA	332 - 368	427 - 473	665 - 735	997 - 1102	1330 - 1470
	Rated Power	150W	150W	150W	150W	150W
	Ripple & Noise (max.) (2)	3% V _o Pk -Pk				
	Max. Voltage (No Load/Typ)	447 Vdc	348Vdc	223 Vdc	149 Vdc	113 Vdc
	Voltage Range (Min - Max)	214 - 428VDC	166-333VDC	107-214VDC	71-142VDC	53-107VDC
	Line Regulation (Max)	1%				
	Load Regulation (Max)	3%				
	Setup, Rise Time (Typ)	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	93.5%	93.0%	93.0%	93.0%	92.5%
	Inrush Current	65A @ 230VAC Input and 25°C Cold Start				
	AC Current (Typ.)	1.8 A / 100VAC 0.9A / 220VAC				
	Protections	Short Circuit Protection	Hiccup mode, recovers automatically after fault condition is removed			
Over Temperature Protection		110°C (Internal Typ. Temp) Latch mode. AC must be recycled after temp reduction				
Over Voltage (Typ.)		578V	450V	289V	192V	144V
		Latching - AC must be recycled				
Environmental	Temperature Range	Operational	- 35°C ~ 70°C (See derating curve)			
		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				
	CE	EN 61347-1, EN61347-2-13				
	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 Cond. & Rad.	EN55015 with 6db margin min				
	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)	342K hours MIL-HDBK-217F			
Life Time (4)		88k hours for 350mA model, 58k hours 1400mA model				
Dimension (L*W*H)		238*79.5*46.0 (mm) / 9.37*3.13*1.81 (inch)				
Weight		1500 g				
Leakage Current		0.75mA (277VAC/50Hz)				

Mechanical Specification

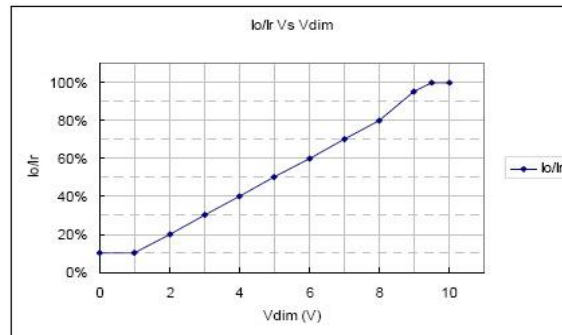
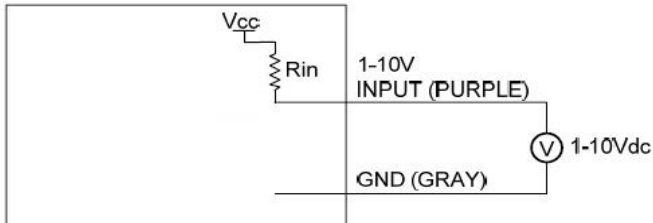


Efficiency

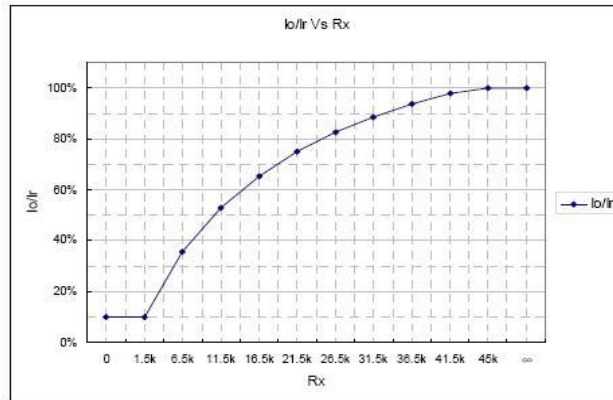
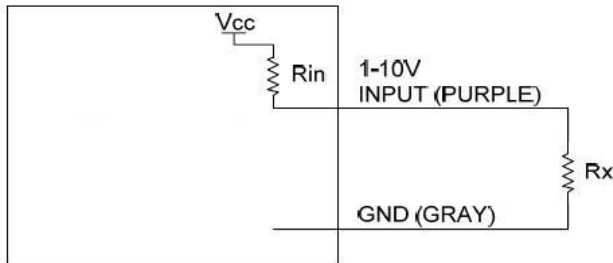
Model	LEDWCD150S035ST	LEDWCD150S045ST	LEDWCD150S070ST	LEDWCD150S105ST	LEDWCD150S140ST
Eff. @ Full Load and 115VAC (min)	90.5%	90.0%	90.0%	90.0%	89.5%
Eff. @ Full Load and 115VAC (typ)	91.5%	91.0%	91.0%	91.0%	90.5%
Eff. @ Full Load and 230VAC (min)	92.5%	92.0%	92.0%	92.0%	91.5%
Eff. @ Full Load and 230VAC (typ)	93.5%	93.0%	93.0%	93.0%	92.5%

Suggested Dimming Options

DC Voltage



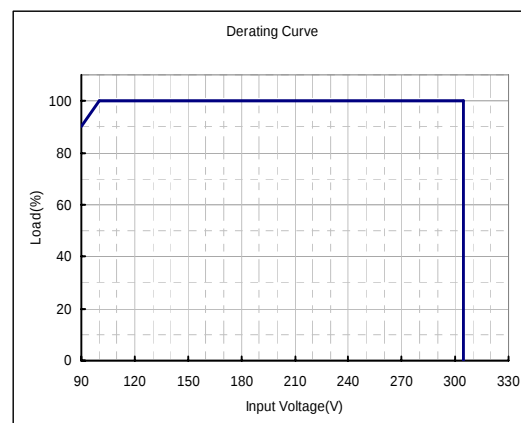
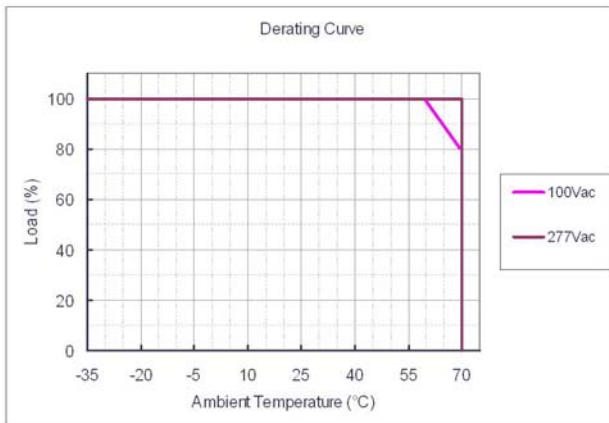
Adjustable Resistor



1. I_o is actual output current and I_r is rated current without dimming control.
2. If the output voltage is maintained above 50% of the maximum output voltage, the dimming control may be operated over the entire 1-10V range with output current varying from 100% down to approx 10%.
3. The internal resistor R_{in} is 20K, and V_{cc} is about 15V.

Dimming Circuit Parameter	Min.	Max.
Absolute maximum voltage on the 1~10V input pin	-2 V	12 V
Source current on 1~10V input pin	0 mA	1 mA

Derating Curves



NOTES:

1. Measured at full load, 220VAC input and 25 °C 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. Measured at 110VAC input, 80% load and 25 °C ambient temperature.MIL-HDBK-217F
4. Measured at 220VAC input, 80%load and 45 °C ambient temperature.
5. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25 °C ambient temperature.
6. Specifications are subject to change without notice. AUTECH cannot be held liable for errors or omissions or the consequences thereof.