

FEATURES

High Efficiency (Up to 89%)
Active Power Factor Correction (Typical 0.92)
Lightning Protection
Waterproof (IP67)
Optional Dimming Control
Over Voltage, Short Circuit and Overload Protection
UL8750 & EN61347 Compliance
CE Compliant
UL 1310 Class 2 Output (Some Models)
2 or 3 Wire Input
RoHS Compliant

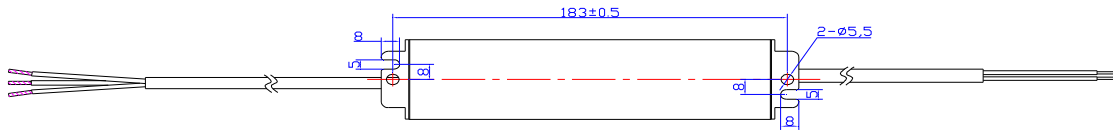
50W Constant Current LED Driver LEDWC-050 series



SPECIFICATION

Model		LEDWCx050S420 Sx (6)	LEDWCx050S333 Sx (6)	LEDWCx050S 280Sx (6)	LEDWCx050S 210STx (6)	LEDWCx050S 175Sx (6)	LEDWCx050S 140Sx (6)	LEDWCx050S 110Sx (7)	LEDWCx050S 070Sx	LEDWCx050S 045Sx	LEDWCx050S 035Sx
Output	Rated Current	4200 mA	3300 mA	2800 mA	2100 mA	1750 mA	1400 mA	1100 mA	700 mA	450 mA	350 mA
	Current Range (Min Max) mA	3990 - 4410	3164 - 3497	2660 - 2940	1995 - 2205	1663 - 1838	1330 - 1470	998 - 1155	665 - 735	428 - 473	333 - 368
	Rated Power	50W	50W	50W	50W	50W	50W	50W	50W	50W	50W
	Ripple & Noise (max.) (2)	5V	5V	5V	5V	5V	5V	5V	7V	11V	14V
	Max. Voltage	12 Vdc	15 Vdc	18 Vdc	24 Vdc	29 Vdc	36 Vdc	48 Vdc	72 Vdc	110 Vdc	142 Vdc
	Voltage Range (Min - Max)	4V -12V	5V - 15V	6V - 18V	8V - 24V	9V - 29V	12V - 36V	16V - 48V	24V - 72V	36V - 110V	47V - 142V
	No Load Output Voltage	17 V	20 V	24 V	30 V	35 V	41 V	53 V	77 V	120 V	154 V
	Line Regulation	2%									
	Load Regulation	5%									
	Setup, Rise Time (Typ.)	2.5S (110 VAC) and 1.5S (220 VAC)									
Input	Voltage Range	90V ~ 305VAC									
	Frequency Range	47Hz / 63Hz									
	Power Factor Correction	98% @ 110 VAC 92% @ 220 VAC									
	Efficiency (Typ.) (1)	83%	84%	84%	86%	87%	87%	87%	87%	88%	89%
	Inrush Current	60A @ 230VAC Input and 25°C									
	Leakage current	Max. 0.5 mA At 277Vac 50Hz input									
	AC Current (Typ.)	0.7 A / 100VAC 0.35A / 220VAC									
Protections	Short Circuit Protection	Hiccup mode, recovers automatically after fault condition is removed with no damage to power supply									
	Over Load Protection	1.25 Vmax. Hiccup mode, recovers automatically after fault condition is removed									
	Over Voltage (Typ.)	17V	20V	24V	30V	35V	42V	54V	78V	118V	156V
		Hiccup mode, recovers automatically after fault condition is removed									
Environmental	Temperature Range	Operational	- 35°C ~ 55°C								
		Storage	- 40 ~ +85°C								
	Humidity	Operational	10 ~ 100% RH								
		Storage	5 ~100% R.H								
Safety & EMC	Safety Standards	UL8750, UL935, UL1012, UL1310 Class 2, CSA-C22.2 No. 107.1, CSA C22.2 NO. 223-M91 Class 2									
	CE	EN 61347-1, EN61347-2-13									
	EMI Conducted & Radiated	EN55015 with 6db margin - FCC Part 15 Class B, ANSI C63.4: 2009									
	Harmonic Current	EN61000-3-2, EN61000-3-3									
	EMS Immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN 61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61547									
Others	MTBF (3)	487,000 Hours									
	Life Time (4)	66,000 Hours									
	Dimension (L*W*H)	172*34.5*42.5 (mm) - 6.77*1.36*1.67 (inch)									
	Weight	480 g - 1.06Lb									

LEDWC-050SXXXST



Technical drawing of a shaft-hub assembly. The shaft has a diameter of $\varnothing 5,5$ and a length of $173 \pm 0,5$. The hub has a bore diameter of $\varnothing 5,5$ and a length of 8 . The shaft is secured with a pin of diameter $\varnothing 2$. The drawing includes various tolerances and fits, such as $H7/k6$ for the bore, $H7/k6$ for the pin, and $H7/k6$ for the shaft. The drawing also includes a note: "Unspecified tolerance: $\pm 0,2$ ".

Efficiency

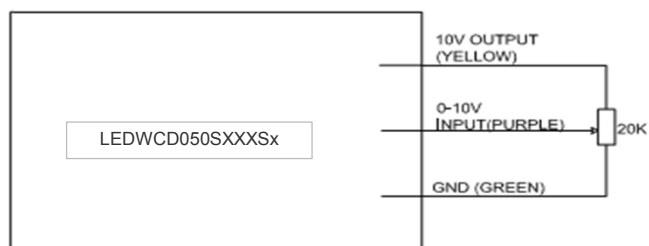
Model	LEDWCx050S420Sx	LEDWCx050S333Sx	LEDWCx050S280Sx	LEDWCx050S210STx	LEDWCx050S175Sx	LEDWCx050S140Sx	LEDWCx050S110Sx	LEDWCx050S070Sx	LEDWCx050S045Sx	LEDWCx050S035Sx
Efficiency @ Full Load and 115VAC (min)	79.0%	80.0%	81.0%	83.0%	84.0%	85.0%	85.0%	85.0%	86.0%	87.0%
Efficiency @ Full Load and 115VAC (typ)	80.0%	81.0%	82.0%	84.0%	85.0%	86.0%	86.0%	86.0%	87.0%	88.0%
Efficiency @ Full Load and 230VAC (min)	82.0%	83.0%	83.0%	85.0%	86.0%	86.0%	86.0%	86.0%	87.0%	88.0%
Efficiency @ Full Load and 230VAC (typ)	83.0%	84.0%	84.0%	86.0%	87.0%	87.0%	87.0%	87.0%	88.0%	89.0%

NOTES:

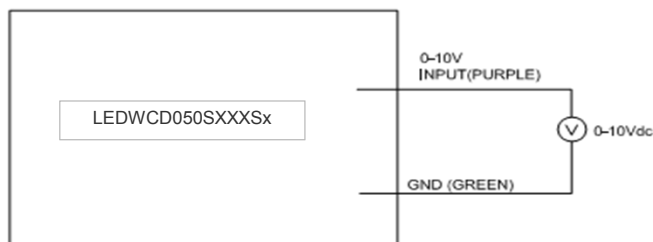
1. Measured at full load, 220VAC input.
2. Ripple & noise are measured at 20MHz bandwidth and the output paralleled with a 0.1uf ceramic capacitor and 10uf electrolytic capacitor.
3. Using 4200mA output model, at 110VAC input, 80% load and 25°C ambient temperature. MIL-HDBK-217F
4. Using 4200mA output model, at 110VAC input, 80% load and 45°C ambient temperature.
5. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25°C of ambient temperature.
6. Class 2 output (USR & CNR).
7. Class 2 output (USR)
8. Specifications are subject to change without notice. AUTECH can't be held liable for errors or omissions or the consequences thereof.

Dimming Control

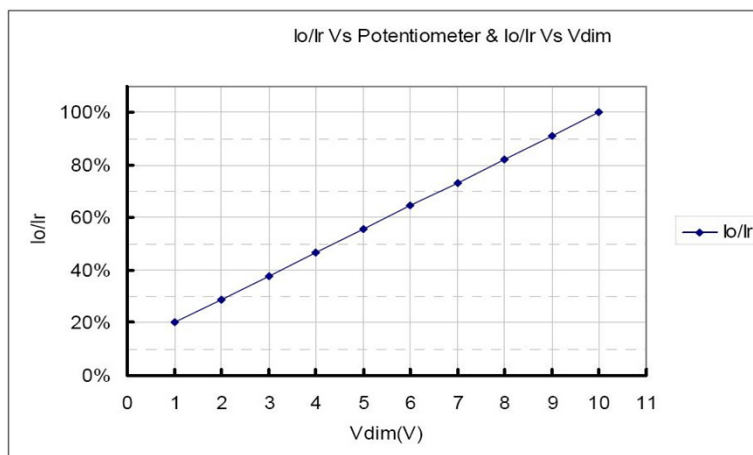
Parameter	Min.	Typ.	Max.
10V output voltage	9.8V	10V	10.2V
10V output source current	-10 mA	-	2 mA
Input pin	-2V	-	15V
Source current on 0~10V input pin	0 mA	-	1 mA



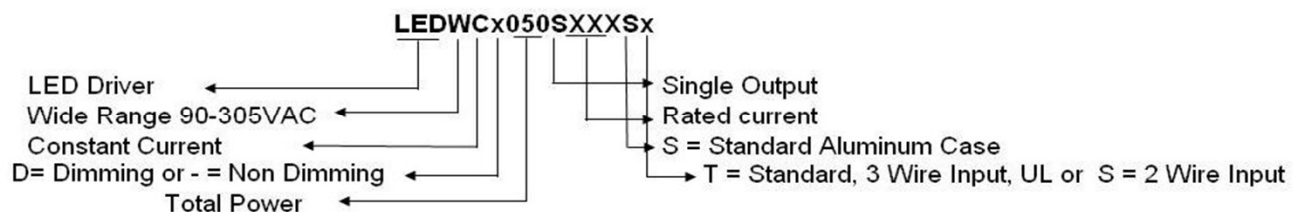
Implementation 1: Potentiometer control



Implementation 2: DC input



Part Number Builder



Derating Curves

