

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

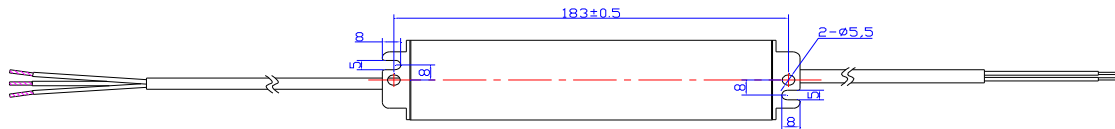
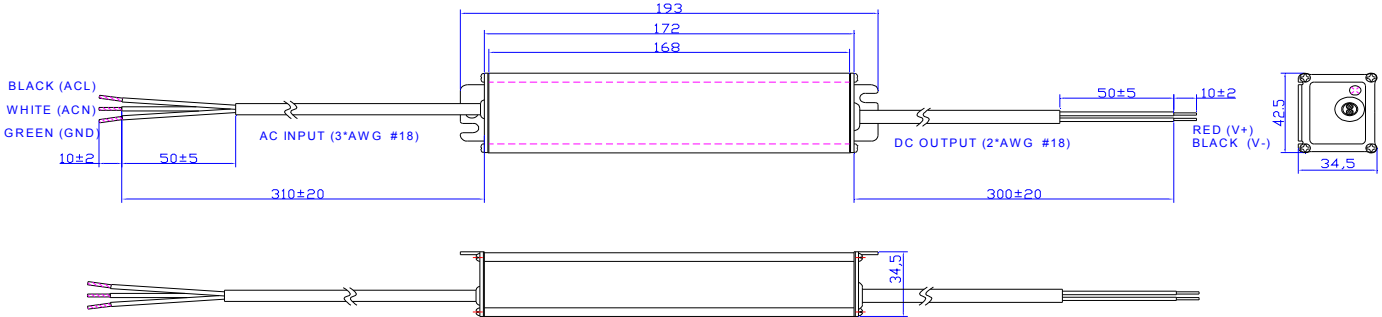


SPECIFICATION

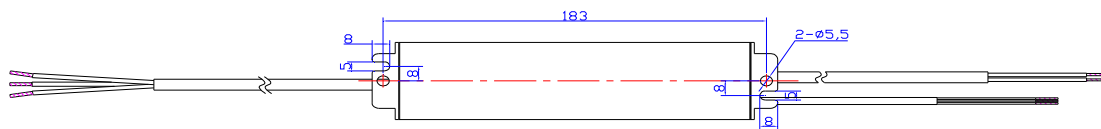
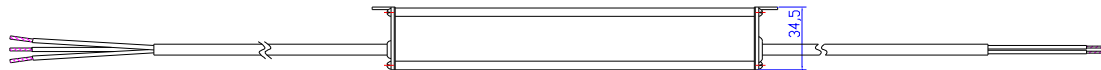
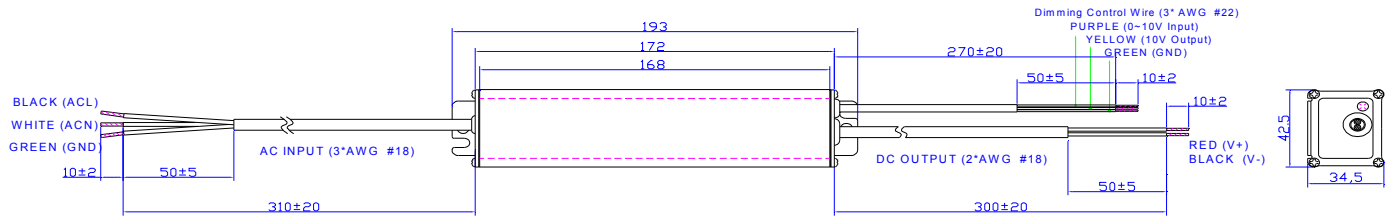
Model		LEDWCx050S420 Sx (6)	LEDWCx050S333 Sx (6)	LEDWCx050S 280Sx (6)	LEDWCx050S 210STx (6)	LEDWCx050S 175Sx (6)	LEDWCx050S 140Sx (6)	LEDWCx050S 110Sx (7)	LEDWCx050S 070Sx	LEDWCx050S 045Sx	LEDWCx050S 035Sx	
Output	Rated Current	4200 mA	3300 mA	2800 mA	2100 mA	1750 mA	1400 mA	1100 mA	700 mA	450 mA	350 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	5V	7V	11V	
	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%	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	
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										

Mechanical Specifications

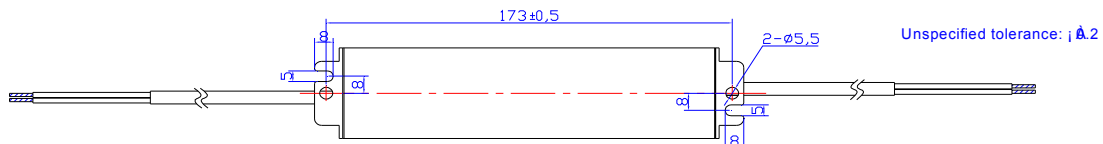
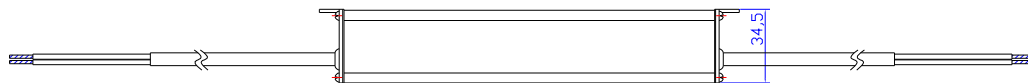
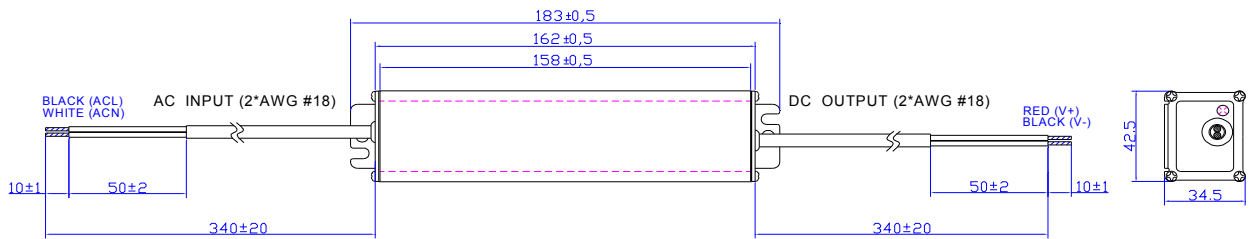
LEDWC-050SXXXST



LEDWCD050SXXXST



LEDWC-050SXXXSS



Efficiency

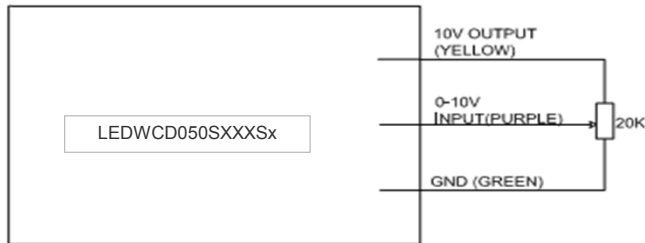
Model	LEDWCx050S420 Sx	LEDWCx050S333 Sx	LEDWCx050S 280Sx	LEDWCx050S 210STx	LEDWCx050S 175Sx	LEDWCx050S 140Sx	LEDWCx050S 110Sx	LEDWCx050S 070Sx	LEDWCx050S 045Sx	LEDWCx050S 035Sx
Efficiency @ Full Load and 115VAC (min)	79.0%	80.0%	81.0%	83.0%	84.0%	85.0%	85.0%	85.0%	86.0%	87.0%
Efficiency @ Full Load and 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:

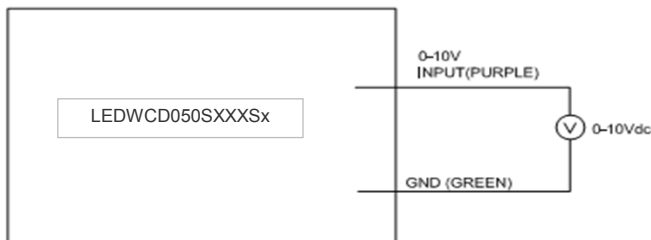
1. Measured at full load, 220VAC input.
2. Ripple & noise are measured at 20MHz bandwidth and the output paralleled with a 0.1uf ceramic capacitor and 10uf electrolytic capacitor.
3. Using 420mA output model, at 110VAC input, 80% load and 25°C ambient temperature. MIL-HDBK-217F
4. Using 420mA output 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

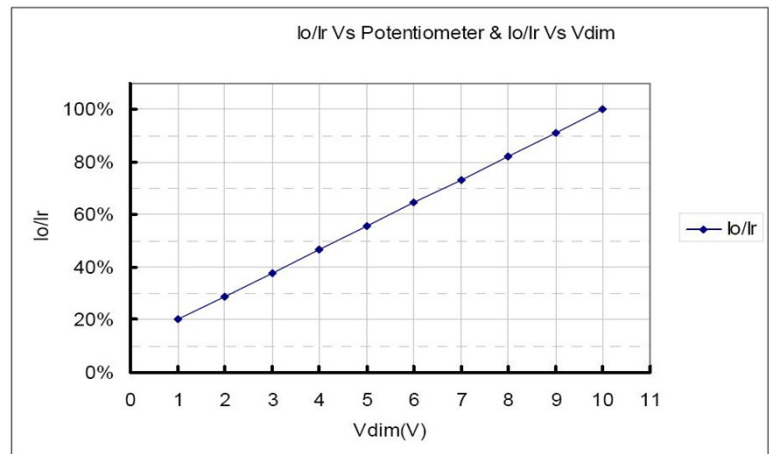
Parameter	Min.	Typ.	Max.
10V output voltage	9.8V	10V	10.2V
10V output source current	-10 mA	-	2 mA
input pin	-2V	-	15V
Source current on 0-10V input pin	0 mA	-	1 mA



Implementation 1: Potentiometer control

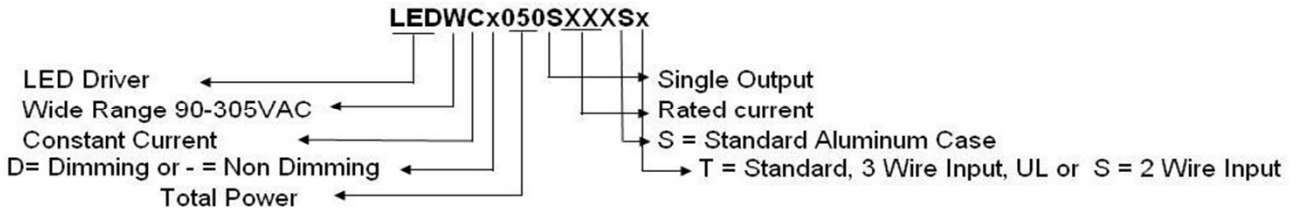


Implementation 2: DC input





Part Number Builder



Derating Curves

