36W —PPL36W V3.1

Mini. Size, High efficiency, No flicker, Constant current LED driver

Product family features

- Drive Mode: No Flicker Constant Current
- Technology: Boost + Flyback Technology
- Input Voltage: 220 to 240Vac (Max. Range: 198~264Vac)
- Output Frequency: 47-63Hz
- Output Power: 36Watt Max
- Output Voltage: 9Vdc to 42Vdc
- Output Voltage: 700mA to 850mA（2 DIP,4 current outputs）
  600mA to 850mA（Non-dial-up）
- Efficiency: Up to 90.5%
- Warranty: 3years
- No flicker constant current
- A rated lifetime of 30,000 hours @ Tc = 80 °C
- Primary side and secondary side are isolated safely, AC input DC output
- Surge: AC Power Line: line to line 1KV/2Ω 8/20uS
- Accord to RoHS Standard
- IP20, Suitable for use in dry environment
- Suitable for Class I/II luminaries
- Programmed aging at 50 °C

ErP CB CE

Areas of application

- Education lighting
- Office lighting

Technical data

Electrical Parameter

Product Modle	Max. output Power (W)	Output Voltage Range (Vdc)	output current (mA)	Current Accuracy (typ.)	Max Eff
PPL36W-42-C0850-D-A	36	9-42	850	±5%	90.5%
PPL36W-42-C0850-D-B	36	9-42	850	±5%	90.5%
PPL36W-42-C0850-A	36	9-42	850	±5%	90.5%
PPL36W-42-C0850-B	36	9-42	850	±5%	90.5%
PPL34W-42-C0800-A	34	9-42	800	±5%	89%
PPL34W-42-C0800-B	34	9-42	800	±5%	89%
PPL32W-42-C0750-A	32	9-42	750	±5%	87%
PPL32W-42-C0750-B	32	9-42	750	±5%	87%
PPL29W-42-C0700-A	29	9-42	700	±5%	86%
PPL29W-42-C0700-B	29	9-42	700	±5%	86%
PPL27W-42-C0650-A	27	9-42	650	±5%	86%
PPL27W-42-C0650-B	27	9-42	650	±5%	86%
PPL25W-42-C0600-A	25	9-42	600	±5%	86%
PPL25W-42-C0600-B	25	9-42	600	±5%	86%

Note: "-A": EMI uses Class I/Class II test - the product input has a common mode inductor, "-B": EMI uses Class II test, the product input lacks a common mode inductor
"-D": The model with DIP switch to change the current, no "-D" is a constant current product

Technical data

Programmable Output Parameters with DIP

Product Modle	Output Voltage Range	output current (mA)	DIP1	DIP2	Current Accuracy	Output Power	Max Eff
PPL36W-42-C0850-D-A PPL36W-42-C0850-D-B	9-42V	850	ON	ON	±5%	36W	90.5%
		800	ON	OFF	±5%	34W	90.5%
		750	OFF	ON	±5%	32W	90.5%
		700	OFF	OFF	±5%	29W	90.5%

Electrical Specifications

	Parameter	Min	Typ	Max	Notes / Conditions
Input	Input Voltage	198V		264V	
	Input Frequency	47Hz	50/60Hz	63Hz	
	Input AC Current			0.25A	Measured at 230Vac 50Hz Input, Full load 850mA/42V output
	No-load power			0.5W	No-load
	Inrush Current (Peak)		20A / 350uS		Measured at 50% Ipeak& 240Vac / 50Hz Input, Full load 850mA/42V output
	Leakage Current			2mA	Measured at 230Vac 50Hz Input, Full load 850mA/42V output
	THD			20%	The minimum maximum load and 230Vac input are measured
	Power Factor (PF)	0.9			The minimum maximum load and 230Vac input are measured

Technical data

Electrical Specifications

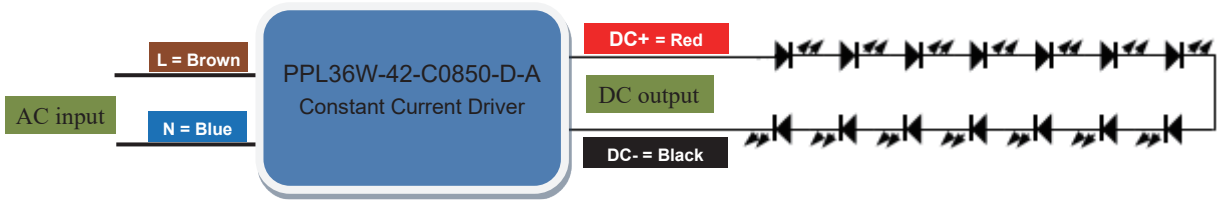
Output	DC Output Voltage	Per Table	Per Table	Per Table	Per Tables on Page 1
	PPL36W-42-C0850-D-A PPL36W-42-C0850-D-B	-5%	850mA 800mA 750mA 700mA	+5%	Pin1-ON, Pin2-ON Pin1-OFF, Pin2-ON Pin1-ON, Pin2-OFF Pin1-OFF, Pin2-OFF
	PPL36W-42-C0850-A PPL36W-42-C0850-B PPL34W-42-C0800-A PPL34W-42-C0800-B PPL32W-42-C0750-A PPL32W-42-C0750-B PPL29W-42-C0700-A PPL29W-42-C0700-B	-5%	850mA 850mA 800mA 800mA 750mA 750mA 700mA 700mA	+5%	"-D": The model with DIP switch to change the current, no "-D" is a constant current product.
	Ripple(<120Hz)		5%	10%	20MHz BW, parallel 0.1uF & 10uF capacitors at test end The ripple is defined as [(Ymax-Ymin)/Yavg] * 100%. Y or V or I
	Flickering Index		PstLM<1, SVM<0.4		
	Line Regulation	-3%		+3%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load
	Load Regulation	-4%		+4%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load
	Start-up Time		420ms	500ms	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load
	Output Overshoot	-2%		+10%	Measured at 220, 230, 240 Vac Input, When power on or off
Protection	Output Short Circuit (SCP)				No Damage. Auto recovery after short is removed
	Output Over Current (OCP)			+10% Io	Constant Current Limiting circuit
	Output Over Voltage (OVP)			120% Vo	No Damage. Auto recovery after the abnormal disappearance
General	Cooling		Convection		
	MTBF		410,000 hours		Measured at 220Vac input, 100% Load and Ta=25°C(MIL-HDBK-217F)
	Life Time		30,000 hours		Measured at 220Vac input, 100% Load and TC=80°C
	Noise		< 24dBA		Class A, no more than one meter away
Environmental	Operating Temperature (Ta)	-20°C		+50°C	@230Vac. This is a reference range. Tc controls temperature range
	Case Temperature (Tc)	-20°C		+80°C	Case temperature
	Storage Temperature (Ts)	-25°C		+85°C	Non operating temperature range
	Operating Humidity	5% RH		95% RH	Relative Humidity. Non-condensing
	Vibration	5Hz		55Hz	2G, 10 minutes / 1 cycle, period 30 minutes, each along X, Y, Z axis

Technical data

	Category		Standards / Notes
Safety Compliance	Withstand Voltage		Input to Output 3750Vac
	Case – Output		1.5KVac
	Case - Input		1.5KVac
	Isolation Resistance		Input to Output >10MΩ, 500Vdc @25°C, 70% RH
EMC Compliance	EMI	CCC	GB19510.14-2009, GB19510.1-2009
		CE	EN55015:2013+A1:2015, EN 61000-3-2:2014, EN 61000-3-3:2013. RED 2014/53/EU
	EMS	EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
		EN 61000-4-4	Electrical Fast Transient / Burst-EFT
		EN 61000-4-5	Surge Immunity Test: AC Power Line: line to line 1.0 KV/2Ω
		EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS
		EN 61547	Electromagnetic Immunity Requirements Applies to Lighting Equipment

Note: The above test data were carried out under the Ta=25℃ except the labeled temperature

Typical Applications

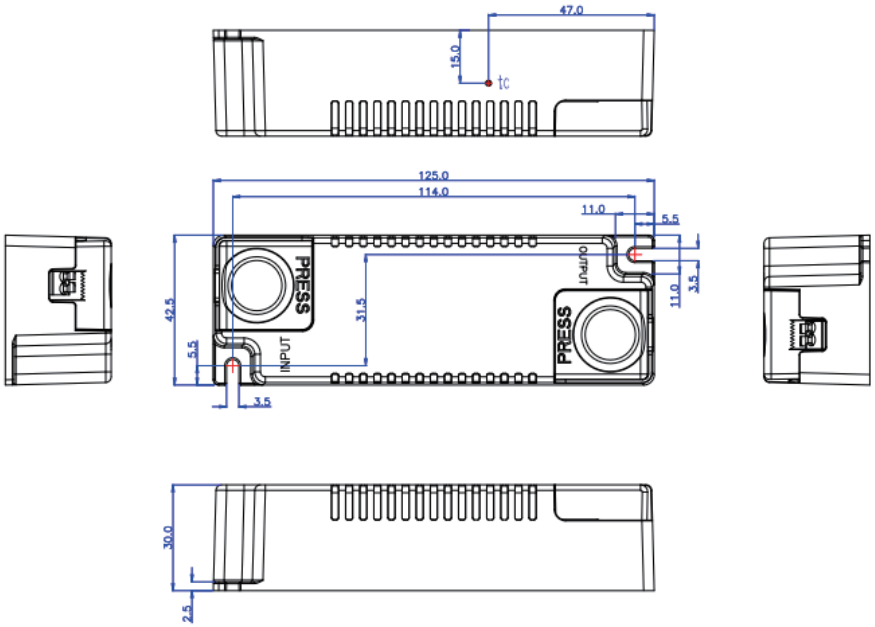


Order ID

1.P/N: PPL36W-42-C0850-D-A
Description: 36W, Max. 42Vdc, constant current value is 850mA, constant current mode
2.P/N: PPL36W-42-Cxxxx-x
Note: 36W, Max. 42Vdc, constant current value is 600-850mA, constant current mode

Appearance information

Product Size

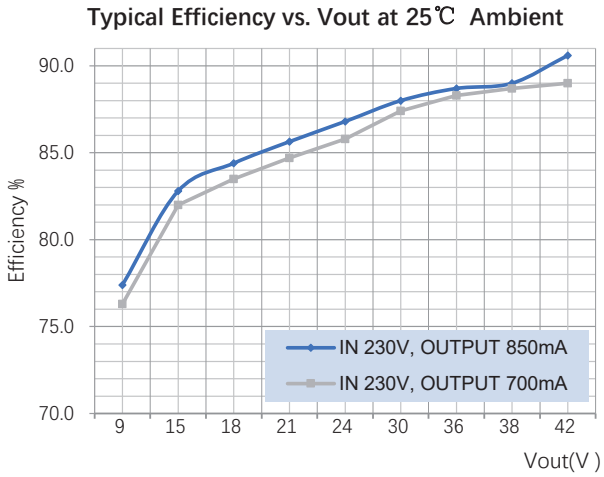


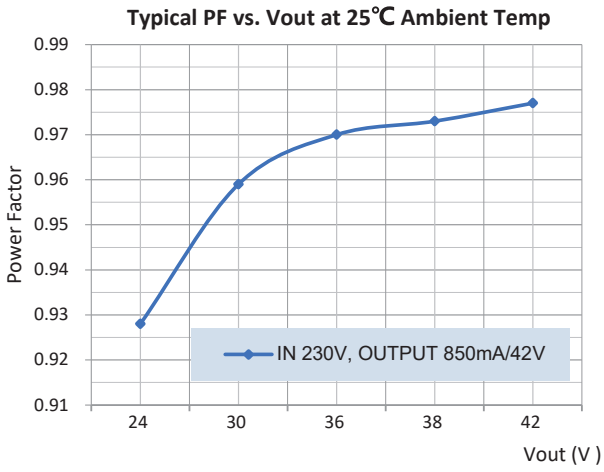
Note:

The independent LED drive conforms to the EMC standard. But it is not guaranteed to be qualified, when the drive is mounted in the LED fixture

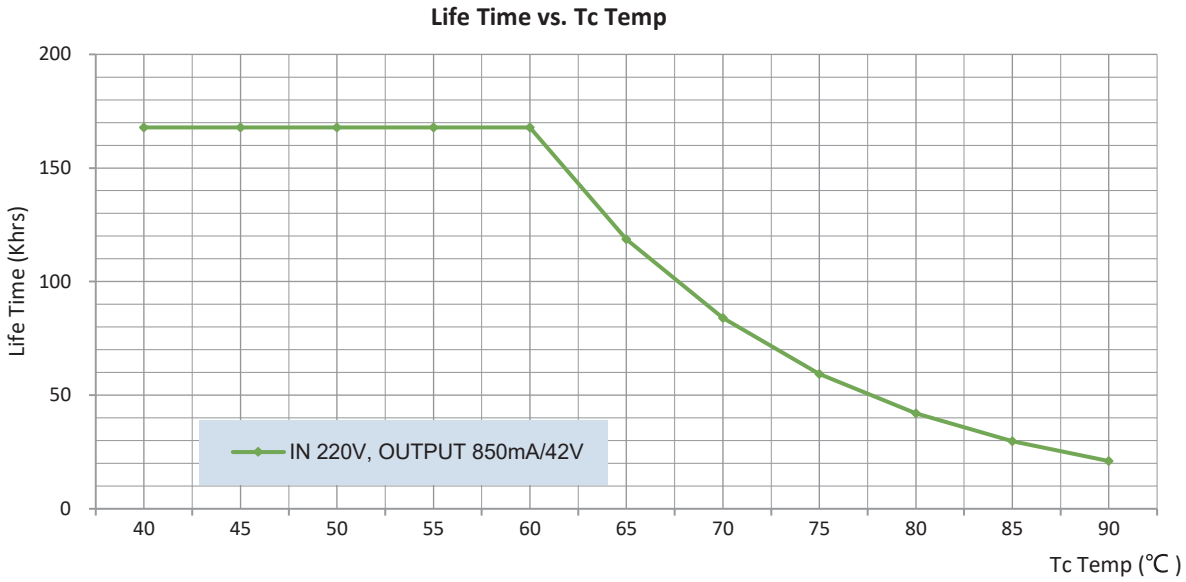
Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

Characteristic Curve





Lifetime Curve



Installation

AC input wires cross section: 0.75-1.52
DC output wires cross section: 0.5-1.52
This product for indoor use only, it can be installed and fixed in the luminaires, connected with the wire. The max length of output line should be less than 2m.
Note: Since the DC output line is permanently connected and shorter than 3 m, therefore the disturbance voltage of local wired port shall not be required