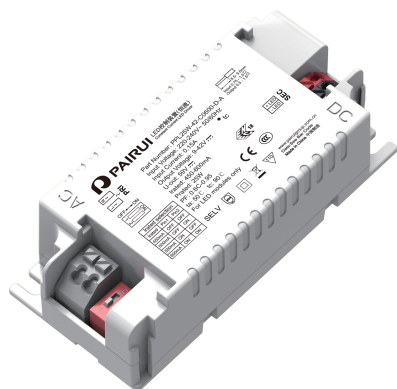


25W —PPL25W Series

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: 25Watt Max
- Output Voltage: 9Vdc to 42Vdc
- Output Voltage: 450mA to 600mA (2 DIP, 4 current outputs)
- Efficiency: Up to 88%
- Warranty: 3years
- No flicker constant current
- A rated lifetime of 30,000 hours @ Tc = 80 °C
- Safety isolation between primary and secondary
- 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 II luminaires

ErP CB CE    

Areas of application

- Education lighting
- Office lighting



Technical data

Electrical Parameter

Product Model	Max. output Power (W)	Output Voltage Range (Vdc)	output current (mA)	Current Accuracy (typ.)	Max Eff
PPL25W-42-C0600-D-A	25	9-42	600	±5%	88%
PPL25W-42-C0600-D-B	25	9-42	600	±5%	88%
PPL23W-42-C0550-A	23	9-42	550	±5%	87.8%
PPL23W-42-C0550-B	23	9-42	550	±5%	87.8%
PPL21W-42-C0500-A	21	9-42	500	±5%	87.5%
PPL21W-42-C0500-B	21	9-42	500	±5%	87.5%
PPL19W-42-C0450-A	19	9-42	450	±5%	87%
PPL19W-42-C0450-B	19	9-42	450	±5%	87%

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

Product datasheet

Technical data

Programmable Output Parameters with DIP

Product Modle	Output Voltage Range	output current (mA)	DIP1	DIP1	Current Accuracy	Output Power	Max Eff
PPL25W-42-C0600-D-A PPL25W-42-C0600-D-B	9-42V	600	ON	ON	±5%	25W	88%
		550	ON	OFF	±5%	23.1W	87.8%
		500	OFF	ON	±5%	21W	87.5%
		450	OFF	OFF	±5%	18.9W	87%

Electrical Specifications

	Parameter	Min	Typ	Max	Notes / Conditions
Input	Input Voltage	198V		264V	
	Input Frequency	47Hz	50/60Hz	63Hz	
	Input AC Current			0.15A	Measured at 230Vac 50/60Hz Input, Output Full Load
	No-load power			0.5W	No-load
	Inrush Current (Peak)		15A / 350uS		Measured at 50% Ipeak& 240Vac / 50Hz Input, Output Full Load
	Leakage Current			2mA	Measured at 230Vac Input, Output Full Load
	THD			20%	Measured at 230Vac Input, Output Full Load
	Power Factor (PF)	0.9			Measured at 230Vac Input, Output Full Load
Output	DC Output Voltage	Per Table	Per Table	Per Table	Per Tables on Page 1
	PPL25W-42-C0600-D-A PPL25W-42-C0600-D-B	-5%	600mA	+5%	Pin1-ON, Pin2-ON
			550mA		Pin1-OFF, Pin2-ON
			500mA		Pin1-ON, Pin2-OFF
			450mA		Pin1-OFF, Pin2-OFF
	PPL23W-42-C0550-A	-5%	550mA	+5%	"-D": The model with DIP switch to change the current, no "-D" is a constant current product.
	PPL23W-42-C0550-B		550mA		
	PPL21W-42-C0500-A		500mA		
	PPL21W-42-C0500-B		500mA		
	PPL19W-42-C0450-A		450mA		
	PPL19W-42-C0450-B		450mA		
	Output Power			Per Table	Per Tables on Page 1
	Flickering Index (Vpk-pk)			1% Vo	Output Full Load. 20MHz BW, Full load output in parallel with 0.1uF & 10uF CAP Flickering Index is defined as $[(Y_{max}-Y_{min})/(Y_{max}+Y_{min})] * 100\%$. Y may be V or I
	Flickering Index (Ipk-pk)			1% Lo	
	Line Regulation	-5%		+5%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load
	Load Regulation	-5%		+5%	Measured at 220, 230, 240Vac / 50Hz Input, Output Full Load
	Start-up Time		100ms	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

Product datasheet

Technical data

Electrical Specifications

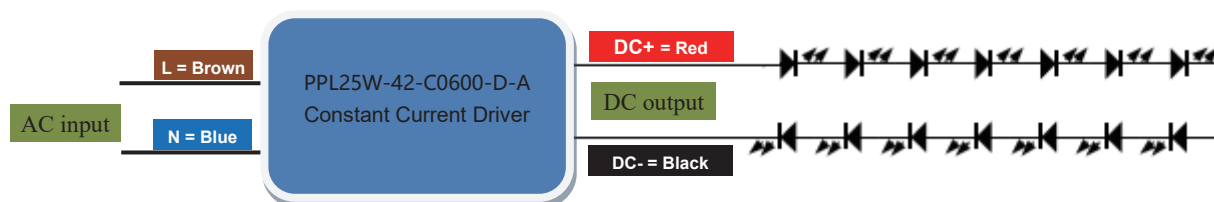
Protection	Output Short Circuit (SCP)		No Damage. Auto recovery after short is removed
	Output Over Current (OCP)	+10% I _o	Constant Current Limiting circuit
	Output Over Voltage (OVP)	120% V _o	No Damage. Auto recovery after the abnormal disappearance
General	Cooling	Convection	
	MTBF	410,000 hours	Measured at 230Vac input, 100% Load and Ta=25°C(MIL-HDBK-217F)
	Life Time	30,000 hours	Measured at 230Vac 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	+90°C Measured at location specified on case
	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

	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.
	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 °C except the labeled temperature

Product datasheet

Typical Applications



Order ID

1.P/N: PPL25W-42-C0600-D-A

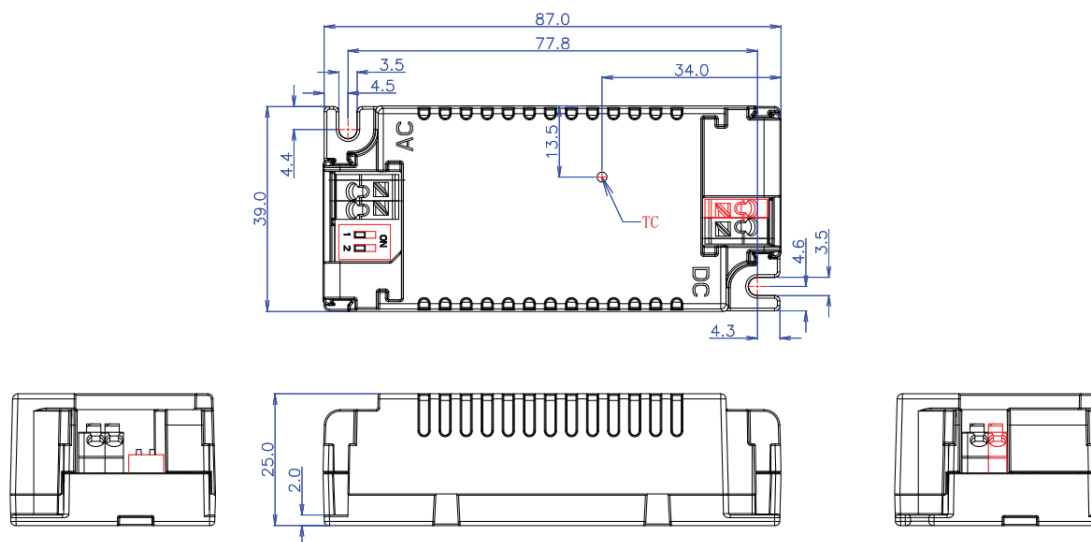
Description: 25W, Max. 42Vdc, Constant current value is 600mA, constant current mode

2. P/N: PPL25W-42-Cxxxx-x

Note: 25W, Max. 42Vdc, Constant current value is 450-600mA, constant current mode

Appearance information

Product Size



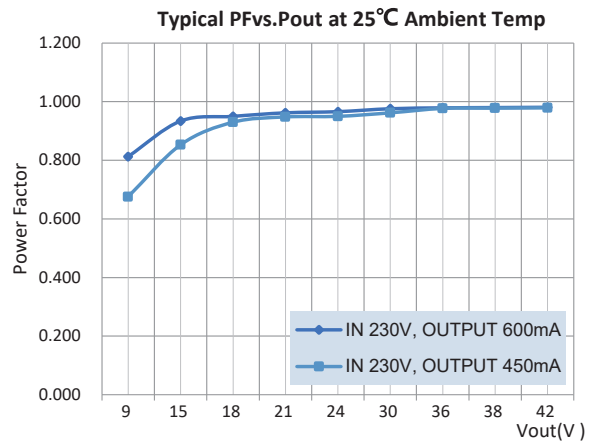
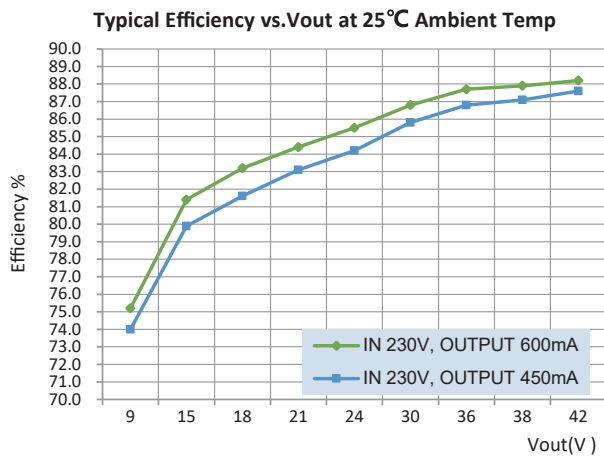
Note:

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

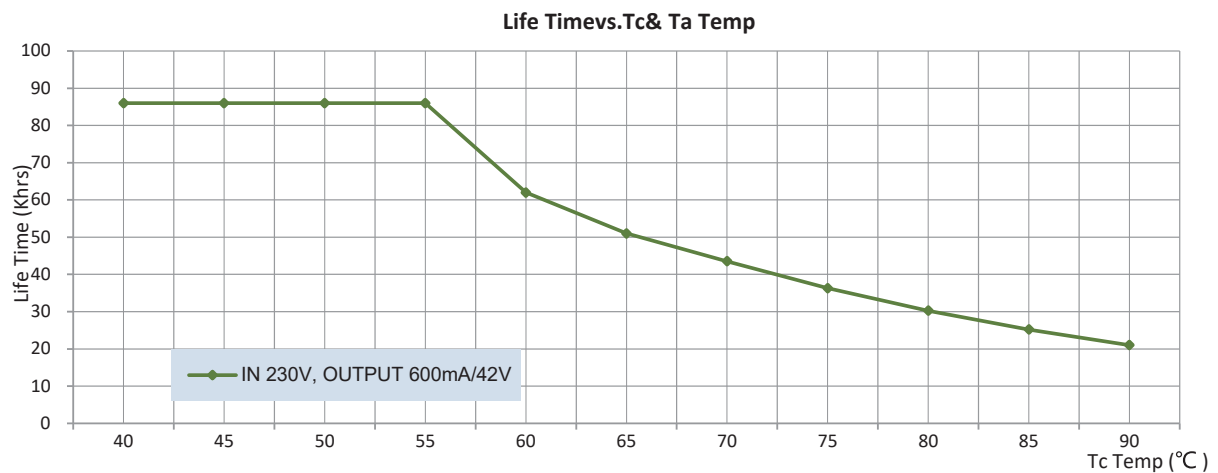
Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

Product datasheet

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