



■ Approve



Features

- Class II, SELV, Built-in/Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95
- Efficiency: 88%
- 5 years warranty
- IP20

Applications

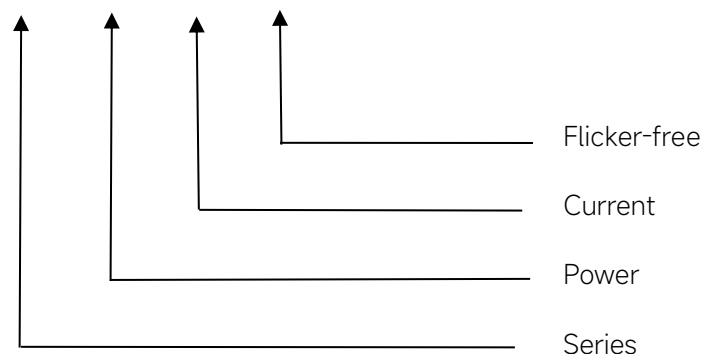
- LED panel, LED down light

◆ Description

QPEC-42-1050 LD ADV is a 42W constant current LED driver with 300 to 1050mA output current and a forward voltage range from 9 to 52Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 97 x 43 x 30 mm. It is easy to integrate in LED Panel and down light products. The sidecovers are available as accessories and allow to use the LED driver independent.

◆ Model code

QPEC-42-1050 LD ADV



◆ Specification

Output	Constant Current (mA)	300mA		800mA	850mA		1000mA	1050mA
	Voltage Range(VDC)	9-52VDC			9-42VDC			9-40VDC
	Unload voltage Max.(VDC)	60VDC						
	Current Accuracy	±7%	±5%					
	Output HF current ripple(≥1KHz)	±4%						
	Output LF current ripple(≤120Hz)	±3%						
	SVM	≤0.01						
	Pst	≤0.02						
	Flicker index	0.011						
	Efficiency(Typ.)	88%@Full load,230V						
Input	Rated input voltage(VAC)	220-240VAC						
	Range of input voltage(VAC)	198-264VAC						
	Range of input voltage(VDC)	176-264VDC						
	Frequency(Hz)	0/50/60 Hz						
	Displacement factor	≥0.9						
	Power Factor	0.95@Full load,230V						
	Input Current max	300mA						
	Start-up time	< 0.5S						
	No Load Power	≤0.5W						
	THD (Typ.)	10%@Full load,230V						
Protection	Over Load Protection	103-120% YES/Auto Resume						
	Over Voltage Protection	63VDC YES/Auto Resume						
	Short circuit Protection	YES/Auto Resume						
	Over Temperature Protection	YES/Auto Resume						
Environment	Operating Temperature	-25°C~+45°C						
	Humidity	20%-90%RH						
	Tc	80°C						
	Storage Temperature	-40°C~+80°C						
	Life time	> 50000h@Tc=80°C						
Surface	Dimension	97X43X30mm (With side caps :131X43X30mm)						
standards	EN 61347-1,EN 61347-2-13;IEC 61347-1,IEC 61347-2-13;GB 19510.1,GB 19510.14;GB/T 17743,GB 17625.1 AS/NZS 61347.1,AS 61347.2.13;EN 62384;EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3;EN 61547							
Others	Surge	L-N:1kV, Conforms to class C						
	ErP	EU 2019/2020						
	RoHS	RoHS (2011/65/EU) (EU)2015/863						

Note

- 1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.
- 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.
- 3.Temperature test: tested at high temperature(45°C)/low temperature(-25°C)/normal temperature(25°C)
- 4.Data are typical values obtained from test samples
- 5.Switch and dimmer are not recommended to connect between this product output and luminaries

◆ Parameter

Number	Output				Switch position				
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4	
1	300mA	9-52VDC	60VDC	15.6	--	--	--	--	
2	350mA			18.2	ON	--	--	--	
3	400mA			20.8	--	ON	--	--	
4	450mA			23.4	ON	ON	--	--	
5	500mA			26	--	--	ON	--	
6	550mA			28.6	ON	--	ON	--	
7	600mA			31.2	--	ON	ON	--	
8	650mA			33.8	ON	ON	ON	--	
9	700mA			36.4	--	--	--	ON	
10	750mA			39	ON	--	--	ON	
11	800mA	9-42VDC		41.6	--	ON	--	ON	
12	850mA			35.7	ON	ON	--	ON	
13	900mA			37.8	--	--	ON	ON	
14	950mA			39.9	ON	--	ON	ON	
15	1000mA	9-40VDC		42	--	ON	ON	ON	
*16	1050mA			42	ON	ON	ON	ON	

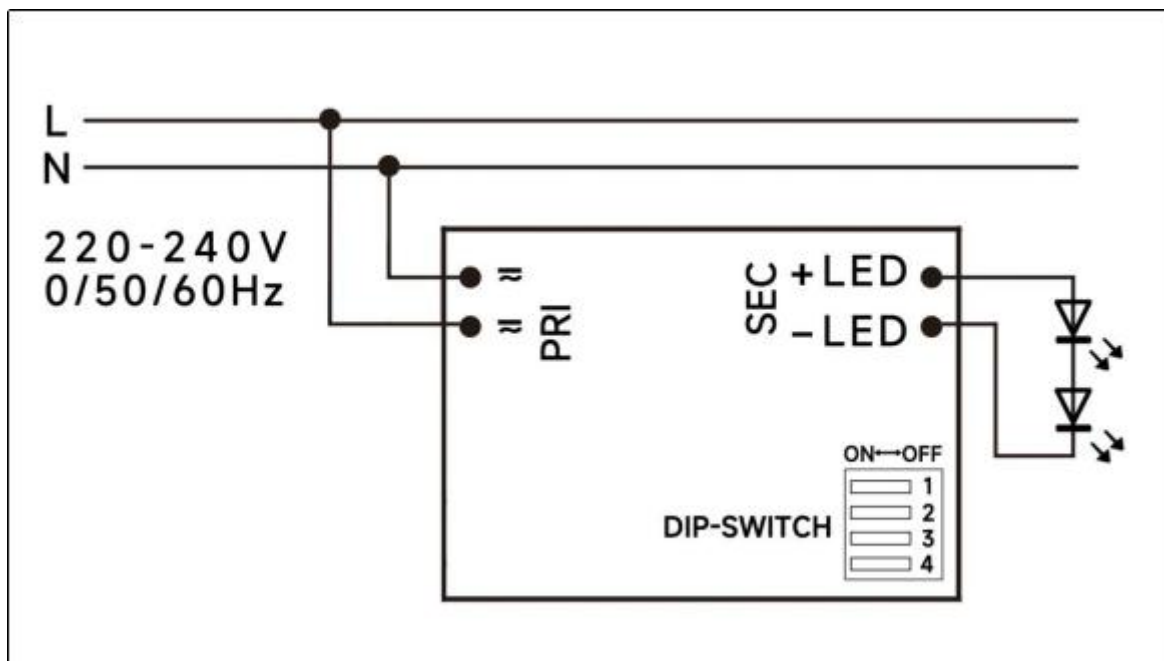
* Factory default

◆ Circuit Breaker

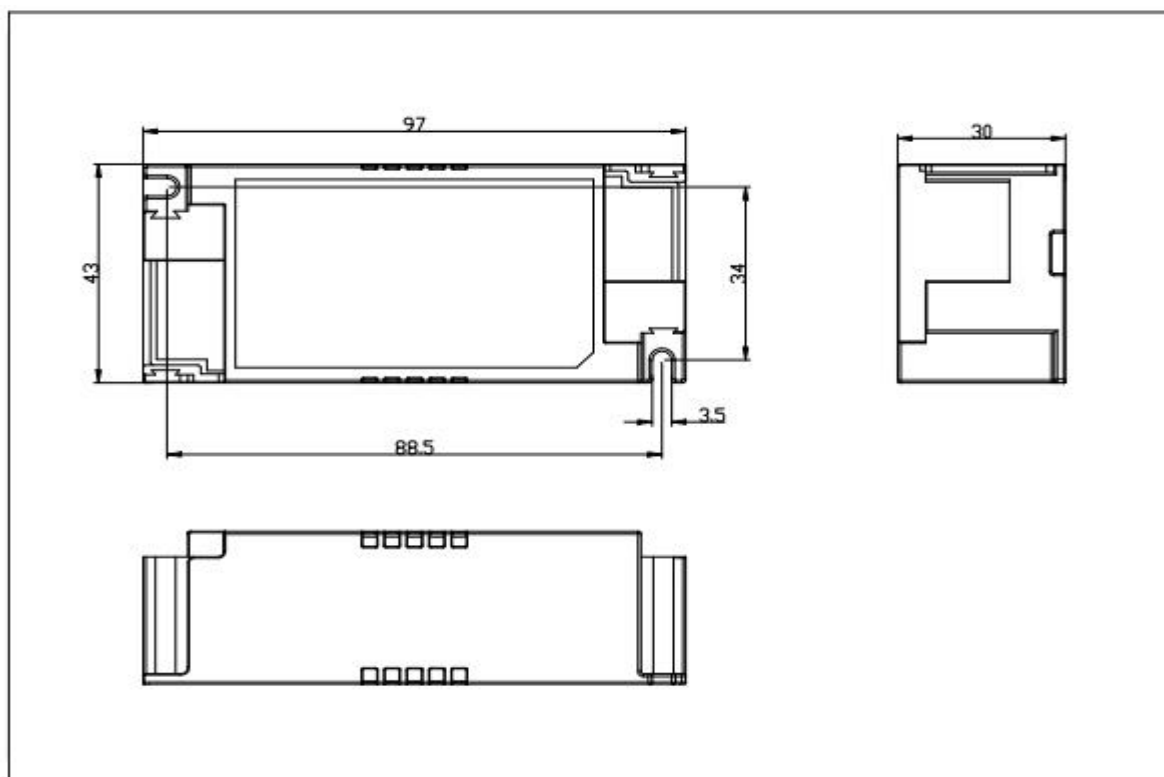
Ipeak	Twidth	B10	B16	B20	C10	C16	C20
5.88A	47.2μs	22pcs	36pcs	45pcs	22pcs	36pcs	45pcs



◆ Wiring diagram



◆ 2D diagram





◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ² (With A side caps: 0.75...2.5 mm ²)
	Input wire gauge	16...20 AWG (With A side caps: 14...20 AWG)
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge	16...20 AWG
	Output wire strip length	7...9mm

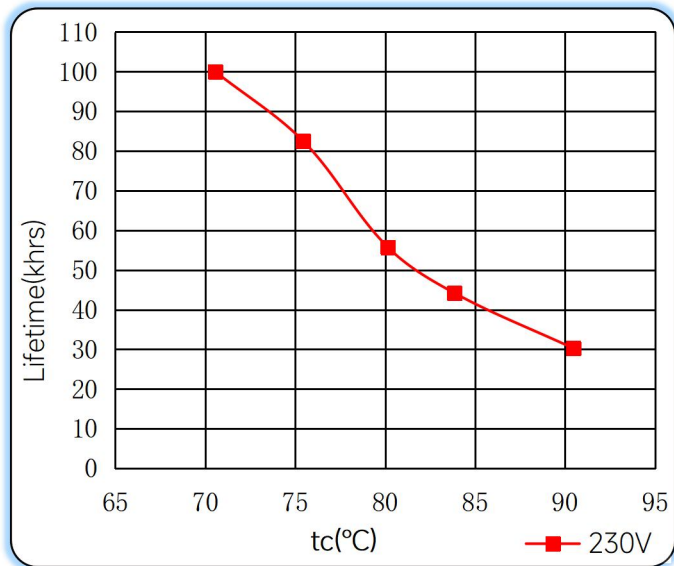
Common ways of wire clamping:

1. Tighten the screws to secure the side cover or clips, to clamp the cables
2. Through the main shell and side cover side teeth to clamp the cables

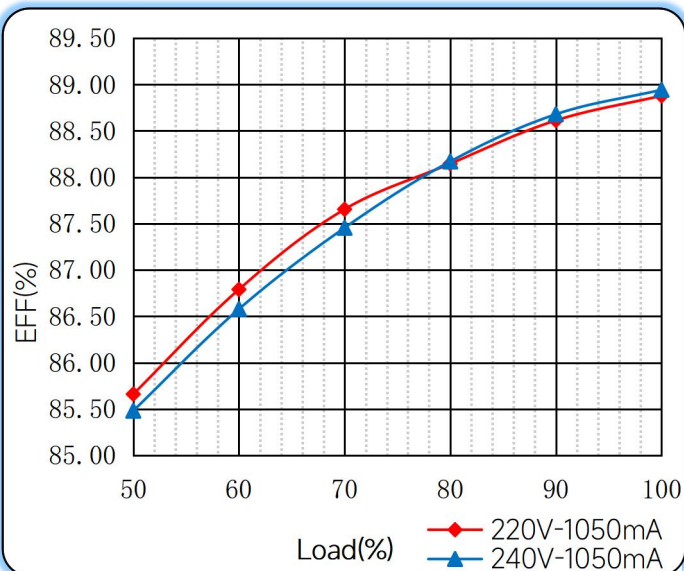


◆ Curve for QPEC-42-1050 LD ADV, $I_o=1050\text{mA}$

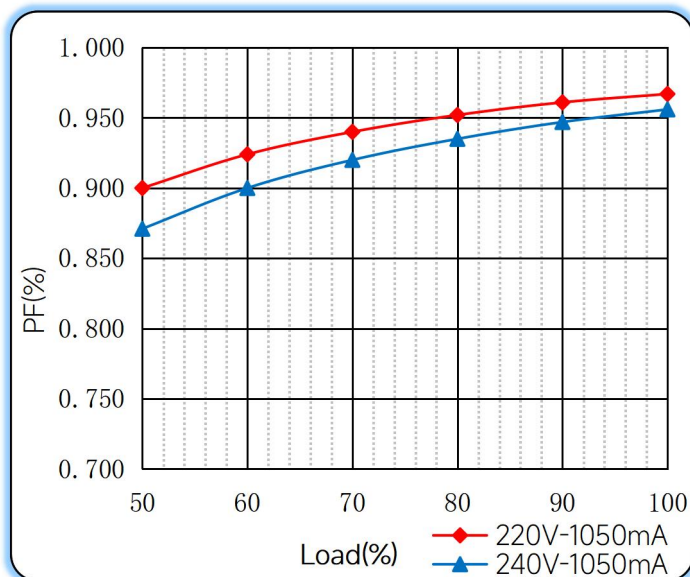
Lifetime vs. Temperature Curve



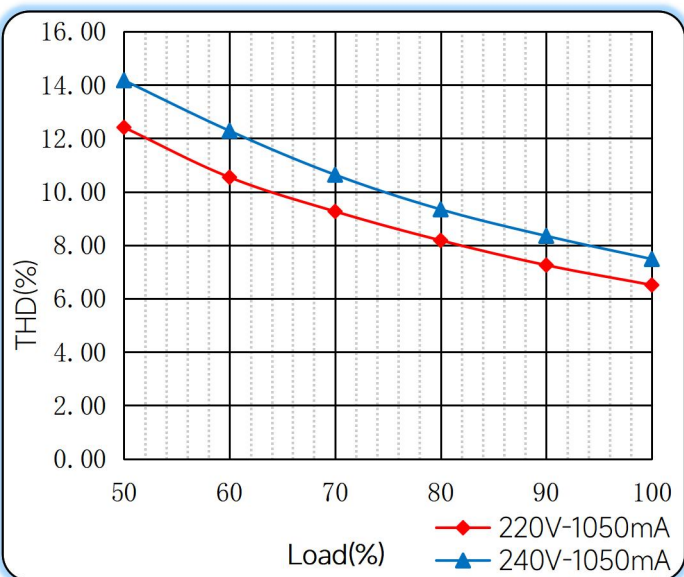
Efficiency vs. Load



Power Factor Characteristics

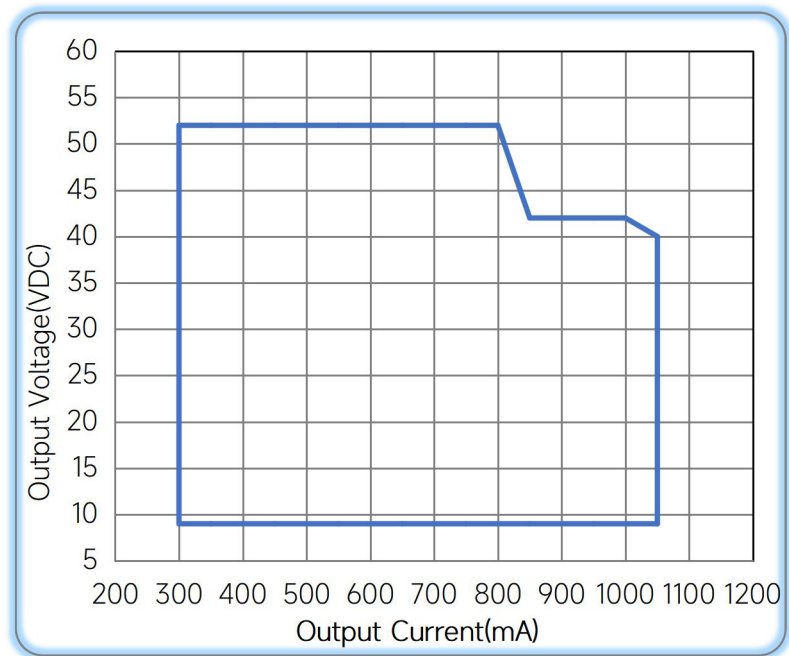


THD vs. Load





◆ Operating window



— Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/10/13
Unload voltage Max.(VDC)	63V	60	B	2022/11/24
Current Accuracy	300mA@±5%	300mA@±7%	C	2023/09/14