

38W —PXD38W V3.0

Small & Efficient Series & constant current LED driver



Product family features

- Drive Mode: Flicker-Free Constant Current
- Technology: Boost + Flyback Technology
- Input Voltage: 220 to 240Vac (maximum: 198~264Vac)
220 to 240 Vdc (maximum: 176 to 280Vdc)
- Output Frequency: 47-63Hz
- Output Power: 37.8Watt Max
- Output Voltage: 27Vdc to 54Vdc
- Output Voltage: 400mA to 700mA
- Efficiency: Up to 87%
- Warranty: 5years
- Constant current without stroboscopic
- A rated lifetime of 50,000 hours @ Tc = 75 °C
- Primary side and secondary side are isolated safely, AC input DC output
- Surge: line to line 1KV/2Ω 8/20 us, line to earth 2KV/12Ω 8/20us
- Accord to RoHS Standard
- IP20, Compliant for Dry, Damp
- Meet Class I and Class II lighting fixtures
- Programmed controlled aging at Ta = 50 °C



Technical data

Electrical Parameter

Product Modle	Max. output Power (W)	Output Voltage (Vdc)	Maximum Output Constant Current (mA)	Current Accuracy (typ.)	Max Eff
PXD38W-54-C0700-F	37.8	27-54	700	±7.5%	87%

Product datasheet

Technical data

Electrical Specifications

	Parameter	Min	Typ	Max	Notes / Conditions	
Input	Input Voltage	198V 176V		264V 280V	220, 230, 240Vac Nominal Values	
	Input Frequency	47Hz	50/60Hz	63Hz	50/60Hz Nominal	
	Input AC Current			0.33A	Measured at 230Vac / 50Hz Input, Output Full Load	
	No-load power consumption			0.5W	Unloaded time	
	Startup surge current (Peak)		30A / 350uS		50% I _{peak} & 240Vac / 50Hz Input, Output Full Load	
	Leakage Current			450uA	Measured at 230Vac / 60Hz Input, Output Full Load	
	THD			20%	Measured at 230Vac Input, Output Full Load	
	Power Factor (PF)	0.65C		0.95	Measured at 230Vac Input, Output Full Load	
Output	Output Constant Current	Per Table	Per Table	Per Table	Per Tables on Page 1	
	Current Selection	-7.5%	700mA			Pin1-ON, Pin2-ON
			600mA		+7.5%	Pin1-OFF, Pin2-ON
			500mA			Pin1-ON, Pin2-OFF
			400mA			Pin1-OFF, Pin2-OFF
	Output Power			Per Table	Per Tables on Page 1	
	Ripple wave (<120Hz)		5%	10%	20MHz BW, Test end parallel 0.1uF & 10uF capacitance Ripple Index is defined as [(Y _{max} -Y _{min})/Y _{mean}] / 2* 100%. Y be V or I	
	Fulfill TLA		P _{stLM} <1, SVM<0.4			
	Line Regulation	-5%		+5%	Measured at 230Vac / 50Hz Input time measurement	
	Load Regulation	-5%		+5%	Measured at 230Vac / 50Hz Input time measurement	
Start-up Time		100ms	500ms	Measured at 230Vac / 50Hz Input time measurement		
Output Overshoot	-2%		+10%	Measured at 230Vac / 50Hz Input, When power on or off		
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 short is removed	
General	Cooling		Convection			
	MTBF		410,000 hours		Measured at 230Vac input, 100% Load and Ta=25°C(MIL-HDBK-217F)	
	Life Time		50,000 hours		Measured at 230Vac input, 100% Load and TC=75°C	
	Product Noise		< 24dBA		Class A, not to exceed at 1 meter at any dim level	
Environmental	Operating Temperature (Ta)	-20°C		+50°C	@230Vac. This is a reference range. Tc controls temperature range	
	Case Temperature (Tc)	-20°C		+75°C	Measured at location specified on case	
	Storage Temperature (Ts)	-25°C		+85°C	Non operating temperature range	
	Operating Humidity	5% RH		85% RH	Relative Humidity. Non-condensing	
	Vibration	5Hz		55Hz	2G, 10 minutes / 1 cycle, period 30 minutes, each along X, Y, Z axis	

Product datasheet

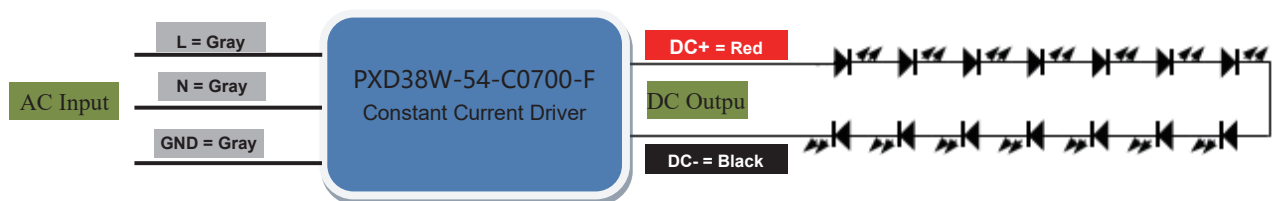
Technical data

Electrical Specifications

	Category	Standards / Notes	
Safety Compliance	Withstand voltage value	Input-output 3750Vac	
	Enclosure - Output	1.5KVac	
	Enclosure - input	1.5KVac	
	Insulation resistance	Input-output >10MΩ, 500Vdc @ 25°C, 70% RH	
	Ground connection (PE)	In end-use applications, the metal housing of the driver must be connected to ground (PE)	
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 8/20 us line to earth (PE) 2.0 KV/12Ω 8/20 us
		EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS
		EN 61547	Electromagnetic Immunity Requirements Applies to Lighting Equipment

Note: The above test data are in the condition of 25 °C ambient temperature, except for the marked temperature

Typical Applications



Order ID

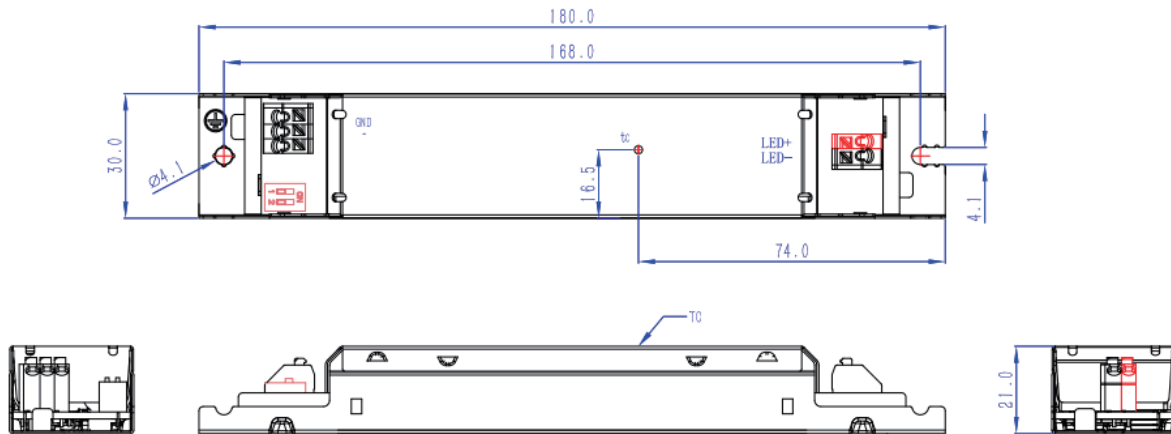
P/N: PXD38W-54-C0700-F

Description: 37.8W, Maximum 54Vdc, constant current 700mA output

Product datasheet

Appearance information

Product Size

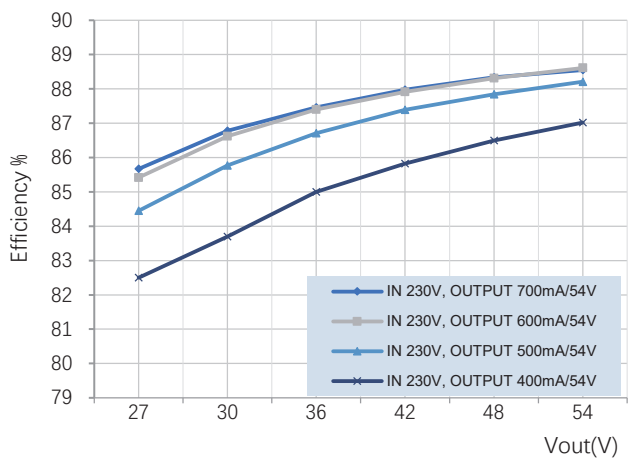


Note:

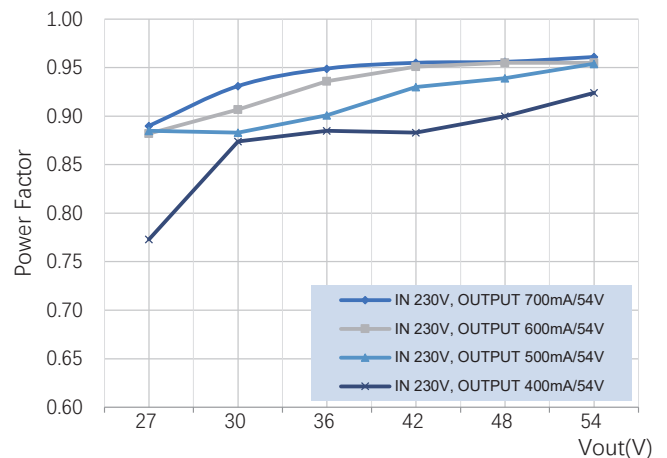
The independent LED drive conforms to the EMC standard. But it is not guaranteed to be qualified when the drive is mounted in the LED fixture
 Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

Characteristic Curve

Typical Efficiency vs Vout at 25°C Ambient

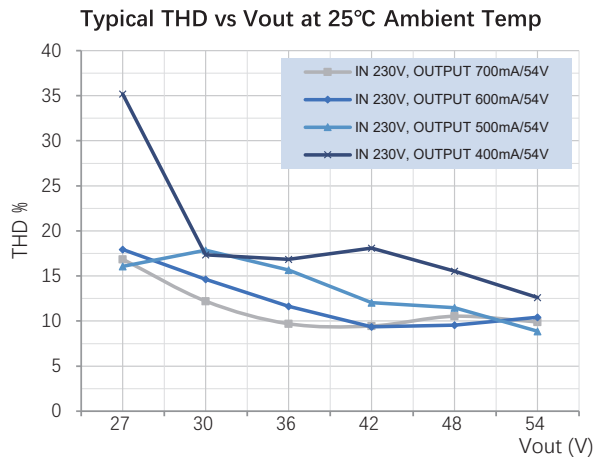


Typical PF vs Vout at 25°C Ambient Temp

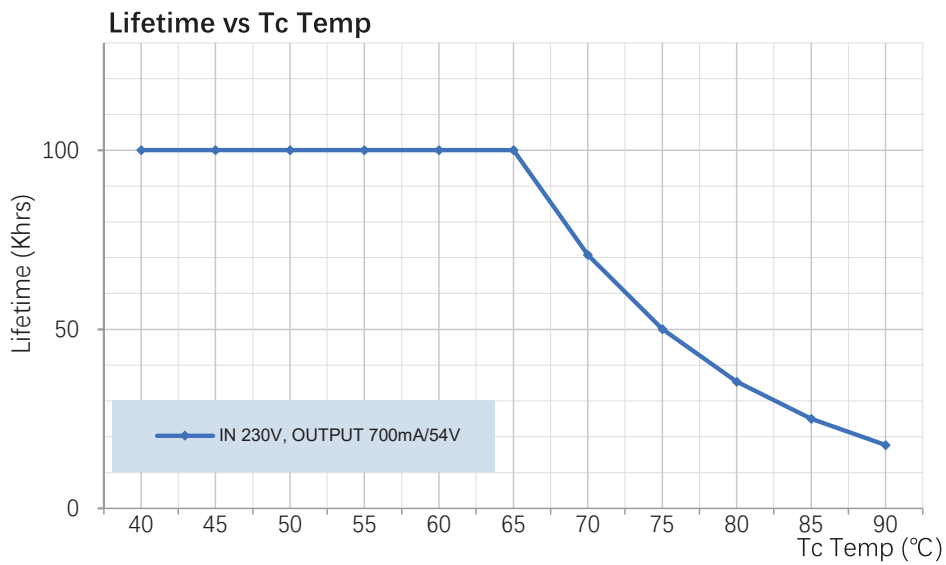


Product datasheet

Characteristic Curve



Lifetime Curve



Installation

AC input wires cross section: 0.75-1.52
DC output wires cross section: 0.50-1.52
Note: The max length of DC output line is less than 2 m