

# PRODUCT SPECIFICATION

Product Model: PXF40W-133-C0350-K-F

Version Number: V3.0

Created	Validated	Approved
Chunshui Xie	Joe Wang	Pengfei Yin

Version	Description of change	Date
V3.0	1.PF range changed. 2.Safety Compliance updated.	2023.05.31

PXF series drive is a high performance LED drive power supply with miniaturization, constant current output control and non-isolation, high power factor, low THD, low output ripple. CCT Switch Concept, The CCT versions have like 2 channel output.

**Key Features**

- Drive Mode: Flicker-Free Constant Current.
- Technology: 2-Stage PFC + Buck technology.
- Input Voltage: 220 to 240VAC (maximum: 198-264 VAC).
- Frequency: 47-63 Hz.
- Output Power: 40Watt Max.
- Output Voltage: 50Vdc to 133Vdc.
- Output Current: 200mA to 350mA.
- Efficiency: Up to 90%.
- Warranty: 5 years.

**Special Features**

- Constant Current, Current selection 4 steps, 50mA.
- A rated lifetime of 50,000 hours @ Tc = 75 °C.
- Non-isolated power.
- Safety: GB 19510.1-2009; GB 19510.14-2009; EN 61347-1: 2015, EN 61347-2-13: 2014; EN 61347-2-13/A1: 2017; EU 2019/2020.
- EMC: GB 17625.1-2012; GB/T 17743-2021; EN 55015; EN 61547; EN 61000-3-2; EN 61000-3-3; EN 61000-4-4; EN 61000-4-5.
- Surge: line to line 1KV/2Ω 8/20 us, line to earth 2KV/12Ω 8/20us.
- Metal shell. Meet the RoHS directive.
- IP20, compliant for Dry, Damp.

**Main Electrical Specification**

No.	Part Number	Output Power	Output Voltage	Output Constant Current	Current Accuracy	Max. Eff.	ErP	CE	ENEC	CCC	CB
1	PXF40W-133-C0350-K-F	40W	50-133Vdc	200-350mA	±7.5%	90%	Yes	Yes	Yes	Yes	Yes

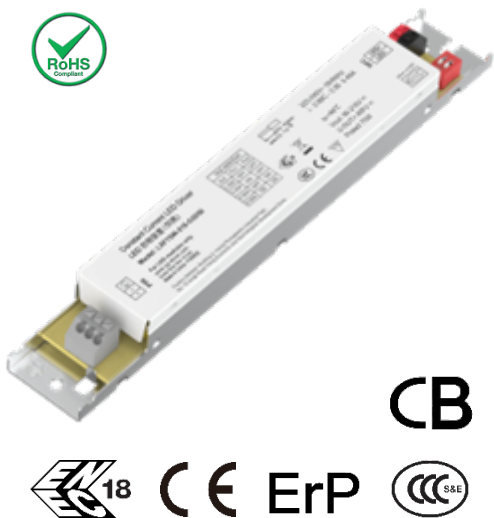
Note:

- Maximum efficiency measured at 230VAC input, Current set at 350mA full load.

**Input Specifications**

Parameter	Min.	Typ.	Max.	Notes /Conditions
Input Voltage	198Vac	---	264Vac	220, 230, 240Vac Nominal Values.

Enclosure



Size \ Unit	Inch	Millimeter
Case Length	82.68	210.0
Case Width	1.18	30.0
Case Height	0.83	21.0
Mounting Length	7.80	198.0

Input Frequency	47Hz	50/60Hz	63Hz	50/60 Hz Nominal.
Standby Power			0.5W	No-load.
Leakage Current	---	---	450μA	Measured at 230Vac / 60Hz Input, Output Full Load.
THD	---	---	20%	Measured at 230Vac Input, Output Full Load.
Power Factor ( PF )	0.68C	---	0.95	Measured at 220,230,240Vac Input.

### Parts list

Parameter	Min.	Typ.	Max.	Notes /Conditions
Input AC Current	---	---	0.26A	Measured at 230Vac / 50Hz Input, Output Full Load.
Inrush Current ( Peak )	---	23A / 240us	---	Pulse width Measured at 50% Ipeak & 240Vac / 50Hz Input, Output Full Load.

### Output Specifications

Parameter	Min.	Typ.	Max.	Notes /Conditions
Output Constant Current	-7.5%	Per Table	+7.5%	Per Tables on Page 1
Current selection	---	200mA	---	Pin1-OFF, Pin2-OFF.
	---	250mA	---	Pin1-ON, Pin2-OFF.
	---	300mA	---	Pin1-OFF, Pin2-ON.
	---	350mA	---	Pin1-ON, Pin2-ON.
Output LF Current Ripple (<120 Hz)	-5%	---	+5%	20MHz BW, Measured at 230Vac / 50Hz Input, Output Full Load. Ripple Index is defined as [(Ymax-Ymin)/ Ymean]/2 * 100%. Y may be V or I.
Fulfill TLA	PstLM<1, SVM<0.4			With specified LED load and full load.
Line Regulation	-3%	---	+3%	Measured at 220, 230, 240Vac / 60Hz Input, Output Full Load
Load Regulation	-4%	---	+4%	Measured at 220, 230, 240Vac / 60Hz Input
Start-up Time	---	200ms	500ms	Measured at 230Vac / 60Hz Input, Output Full Load
Output Overshoot	-2%	---	+10%	Measured at 220, 230, 240Vac Input, When power on or off

### Parts list

Part Number	PXF40W-K			
Output Current	200mA	250mA	300mA	350mA
Vf min	50Vdc	50Vdc	50Vdc	50Vdc
Vf max	133Vdc	133Vdc	133Vdc	114Vdc
Pomin	10.0W	12.5W	15.0W	17.5W
Pomax	26.6W	33.2W	39.9W	39.9W
Max U-OUT	250Vdc			

### CCT Switch Concept

Take 350mA version for example:	Channel #1 (LED- WW terminal)	Channel #2 (LED- CW terminal)
WW(warm white, eg-3000K)	350mA	Off

NW(warm white, eg-4000K)	175mA	175mA
CW(warm white, eg-6500K)	Off	350mA

### Protection Specifications

Parameter	Min.	Typ.	Max.	Notes /Conditions
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 short is removed.
Over Temp Protection(OTP)	95°C	100°C	110°C	lout Foldback at Tc>95°C, lout to off @ Tc~110°C

### General Specifications

Parameter	Typ.	Notes /Conditions
Cooling	Convection	
MTBF	350,000 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	< 24db	Class A, Not to exceed at 1 meter at any dim level.

### Environmental Specifications

Parameter	Min.	Typ.	Max.	Output Power	Notes /Conditions
Operating Temperature ( Ta )	-20 °C	---	+60°C	---	@230Vac. This is a reference range. Tc controls temperature range.
Case Temperature ( Tc )	-20 °C	---	+80°C	40W	Measured at location specified on case.
Storage Temperature ( Ts )	-40°C		+80°C	---	Non operating temperature range.
Operating Humidity	5% RH	---	85% RH	---	Relative Humidity. Non-condensing.
Vibration	5 Hz	---	55 Hz	---	2G, 10 minutes / 1 cycle, period 30 minutes, each along X, Y, Z axis.

### Safety Compliance

Safety Category	Standards / Notes
CCC	GB 19510.1-2009; GB 19510.14-2009.
CE	EN 61347-1:2015, EN 61347-2-13:2014, EN 61347-2-13/A1:2017
ErP 2.0	EU 2019/2020
Enclosure / Ground - output	1.5KVac 3S
Isolation Resistance	Input to PE/Housing: >10MΩ, 500Vdc @ 25°C, 70% RH.
FG	The metal case of the driver must be connected to earth ground (FG) in the end-use application.

### EMC Compliance

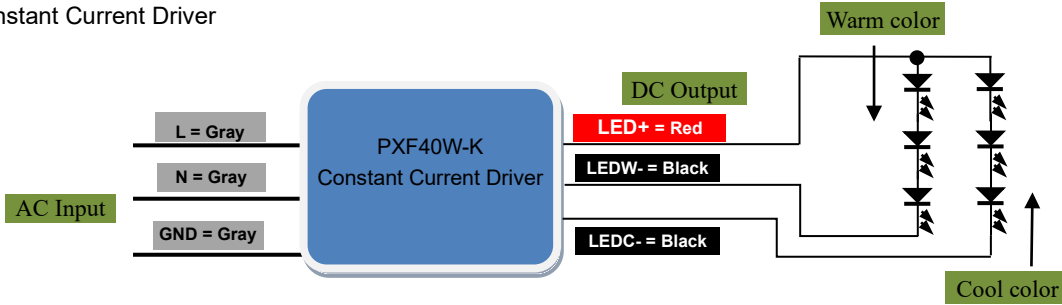
EMI Category	Standards
GB 17625.1-2012	Emc, limits, harmonic current emission values (equipment input current per phase < 16A)
GB/T 17743-2021	Radio disturbance characteristics of electrical lighting and similar equipment limits and measurement methods
EN 55015	Conducted emission Test &Radiated emission Test
EN 61547	Electromagnetic Immunity Requirements Applies To Lighting Equipment
EN 61000-3-2	Harmonic current limits

EN 61000-3-3	Limits on voltage fluctuations and flickering (Rated current <16A)
EN 61000-4-4	Electrical Fast Transient / Burst-EFT. No Flicker / Restart 2KV.
EN 61000-4-5	Surge Immunity Test: AC Power Line: line to line 1KV/2Ω 8/20us, line to earth 2KV/12Ω 8/20us.

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

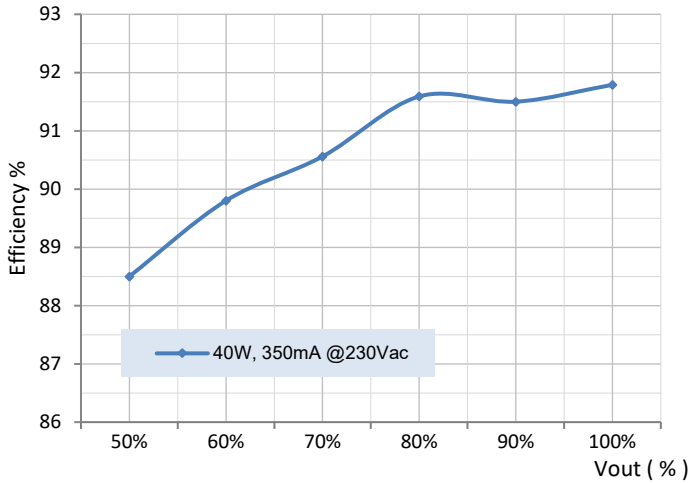
## Typical Applications

### ■ Constant Current Driver

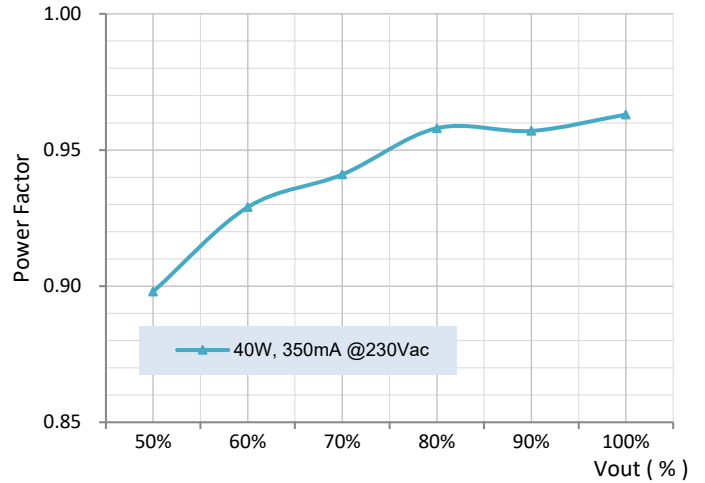


## Characteristic Curve

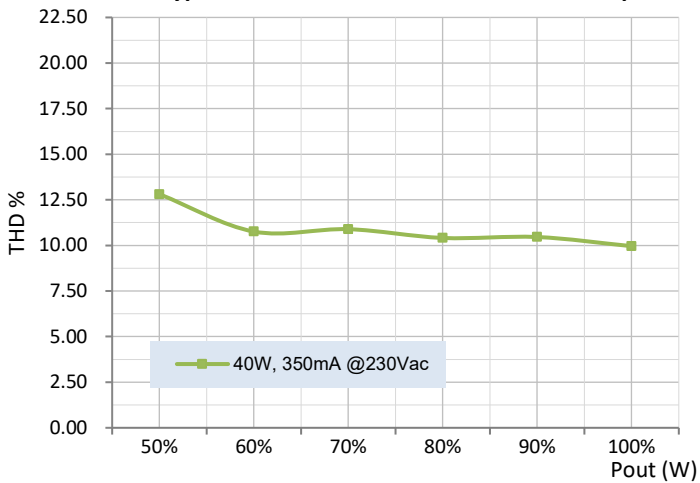
Typical Efficiency vs Vout at 25°C Ambient Temp



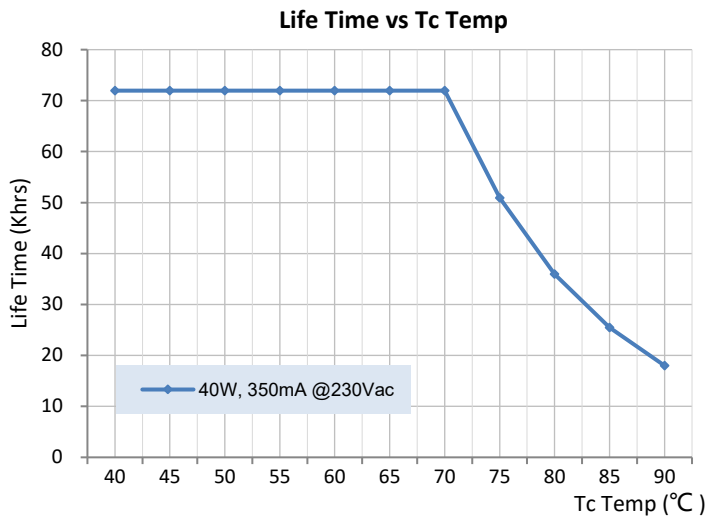
Typical PF vs Vout at 25°C Ambient Temp



Typical THD vs Pout at 25°C Ambient Temp



## Lifetime Curve



## Installation

- AC input wires cross section: 0.75~1.5mm<sup>2</sup>.
- DC output wires cross section: 0.75~1.5mm<sup>2</sup>.

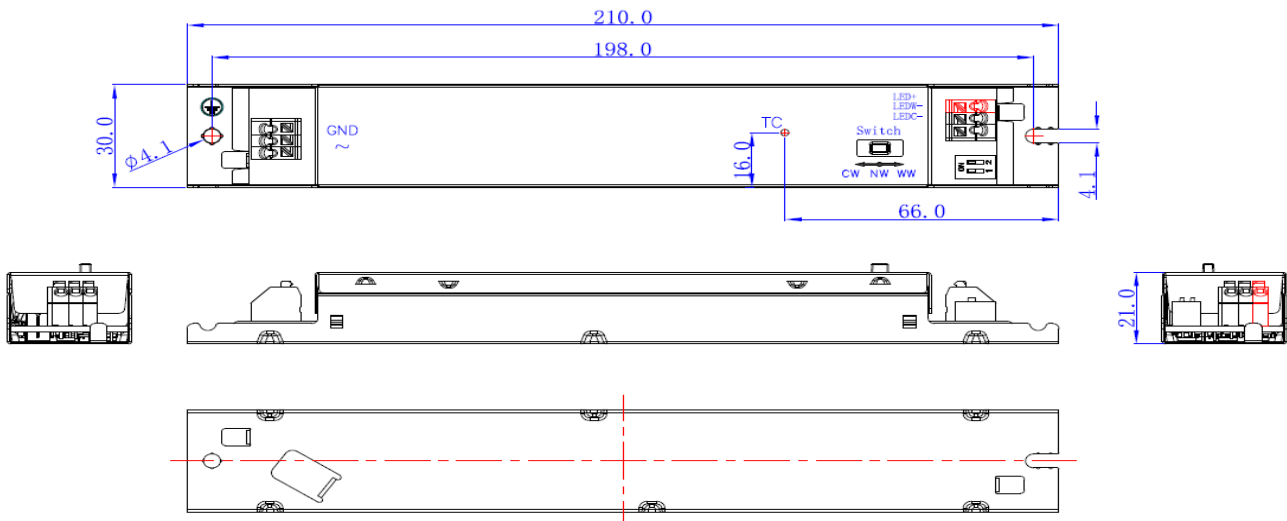
This product for indoor use only, it can be installed and fixed in the luminaires, connected with the wire. The length of output line should be less than 2m.

## Order ID

P/N: PXF40W-114-C0350-K (Pin1-ON, Pin2-ON.)

Description: 40W, 114Vdc voltage max, constant current 350mA, constant current mode.

## 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.