

## PXD40W-114-C0350

Constant current LED driver(Isolated)



### 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: 40Watt Max
- Output Voltage: 65Vdc to 114Vdc
- Output Voltage: 200mA to 350mA
- Efficiency: Up to 91%
- 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,  
The ambient temperature of 60°C can also work
- The 380V voltage input can work for half an hour

### Technical data

#### Electrical Parameter

| Product Modle    | Max. output Power (W) | Output Voltage (Vdc) | Maximum Output Constant Current (mA) | Current Accuracy (typ.) | Max Eff |
|------------------|-----------------------|----------------------|--------------------------------------|-------------------------|---------|
| PXD40W-114-C0350 | 39.9                  | 65-114               | 200/250/300/350                      | ±7.5%                   | 91%     |

# Product datasheet

## Technical data

### Electrical Specifications

|               | Parameter                    | Min          | Typ              | Max          | Notes / Conditions                                                                                                        |
|---------------|------------------------------|--------------|------------------|--------------|---------------------------------------------------------------------------------------------------------------------------|
| Input         | Input Voltage                | 198V<br>176V |                  | 264V<br>280V | 220, 230, 240Vac Nominal Values                                                                                           |
|               | Input Frequency              | 47Hz         | 50/60Hz          | 63Hz         | 50/60Hz Nominal                                                                                                           |
|               | Input AC Current             |              |                  | 0.21A        | Measured at 230Vac / 50Hz Input, Output Full Load                                                                         |
|               | No-load power consumption    |              |                  | 0.51W        | Unloaded time                                                                                                             |
|               | Startup surge current (Peak) |              | 30A / 350uS      |              | 50% Ipeak& 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)            | 0.865        |                  | 0.969        | 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%        | 350mA            | +7.5%        | Pin1-ON, Pin2-ON                                                                                                          |
|               |                              |              | 300mA            |              | Pin1-OFF, Pin2-ON                                                                                                         |
|               |                              |              | 250mA            |              | Pin1-ON, Pin2-OFF                                                                                                         |
|               |                              |              | 200mA            |              | 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 [(Ymax-Ymin)/Ymean] /2* 100%. Y be V or I |
|               | Fulfill TLA                  |              | PstLM<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                                                                          |
| Protection    | 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                                                                     |
|               | Output Short Circuit (SCP)   |              |                  |              | No Damage. Auto recovery after short is removed                                                                           |
| General       | Output Over Current (OCP)    |              |                  | +10% Io      | Constant Current Limiting circuit                                                                                         |
|               | Output Over Voltage (OVP)    |              |                  | 120% Vo      | No Damage. Auto recovery after short is removed                                                                           |
|               | Cooling                      |              | Convection       |              |                                                                                                                           |
| Environmental | 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                                                                        |
|               | Operating Temperature ( Ta ) | -20°C        |                  | +50°C        | @230Vac. This is a reference range. Tc controls temperature range,The ambient temperature of 60°C can also work           |
| Environmental | 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                                                      |

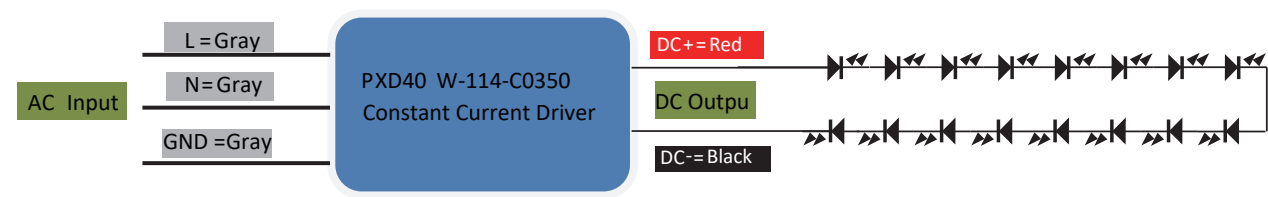
Technical data

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<br>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



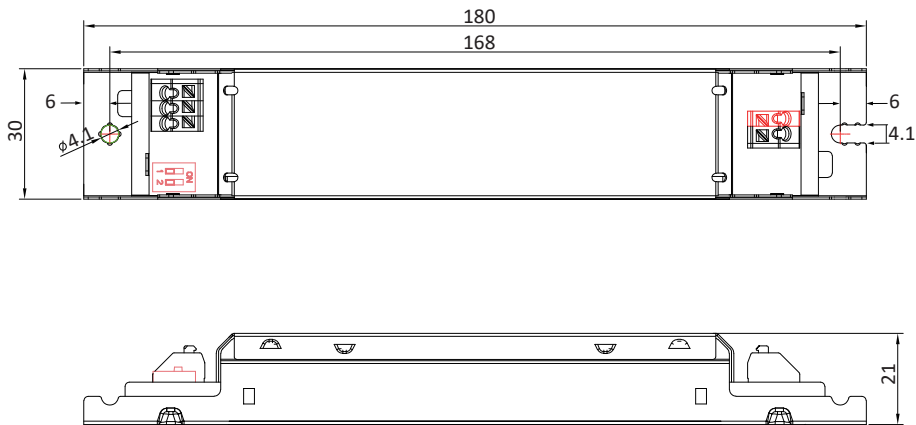
Order ID

P/N: PXD40W-114-C0350  
Description: 40W, Maximum 114Vdc, constant current 350mA output

# Product datasheet

## Appearance information

### Product Size

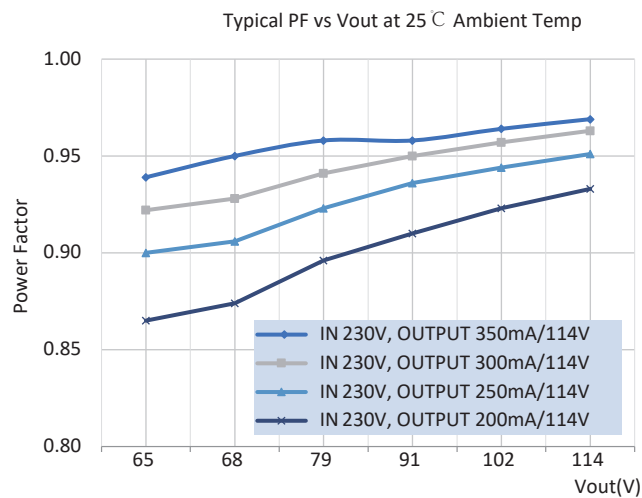
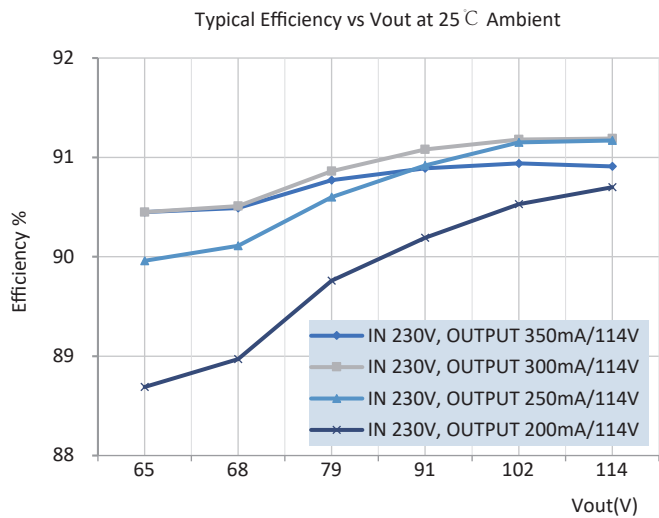


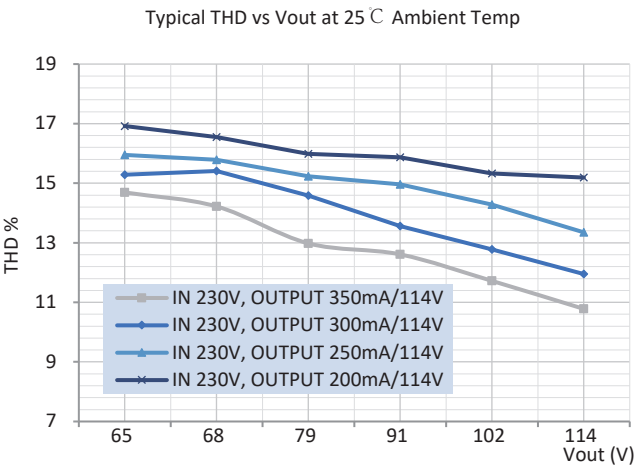
### Note:

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

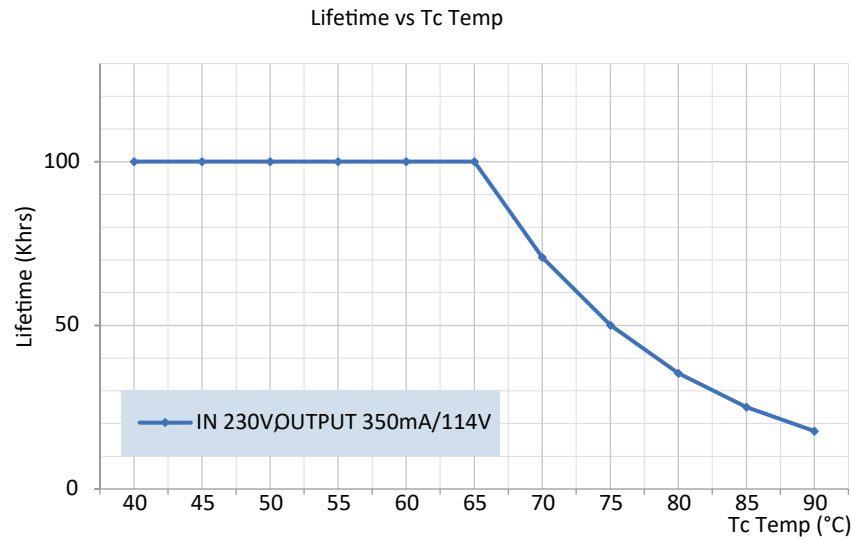
Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

## Characteristic Curve





Lifetime Curve



| PXD40W |      |      |      |
|--------|------|------|------|
| Ta     | 40°C | 50°C | 60°C |
| Tc     | 64°C | 74°C | 84°C |

Installation

AC input wires cross section: 0.75-1.5mm<sup>2</sup>  
DC output wires cross section: 0.50-1.5mm<sup>2</sup>  
Note: The max length of DC output line is less than 2 m