# XEL-045REU Configurable Commercial Series



5~45W LED Driver Family 0-10V, 1% Dimming

	Family Output Power Range (W)			Efficiency (%)	UL Max Case Temp. TC (°C)		Power Factor	Dimming Method	Dimming Range (%)	
120~277Vac	5~45W	26~42Vdc	0.18~1.05A	≤ 88% (typical)	90°C	< 20%	> 0.9	0-10V (Isolated Sink/ Source)	1-100% (% of lout)	



















- Variants available:
  - -Indoor Side Exit Wires -Indoor 347V (Canada) Bottom Exit Wires
  - -Outdoor Side Exit Wires -Outdoor Bottom Exit Wires

  - -Mount Bracket Accessory Available

XEL-045RBU XEL-045REC XEL-045LBU XEL-045LEU

- ☐ Ideal for Indoor Downlight & Recessed Lighting
- **□** Universal AC input (108~305Vac)
- □ Field Adjustable & Preset Fixed Output **Current Ratings**
- □ 1% Deep Dimming (0-10V) (optional higher levels)
- **□** Enables DLC compliant fixtures
- Q Class P UL Driver
- Turn on/off in less than 750 miliseconds
- Da Built-in Commercial grade Surge protection
- Q Class A Noise Rating
- D Integrated over voltage, over current, short circuit & temperature protection
- Turn on & Full power operation between -30°C to +55°C ambient 1
- XenerQi Industry Leading 5 Year True Warranty™ 2
- Q Class 2 power supply
- Double-insulated power supply between input and output (class II)
- Q Complies to FCC CFR Title 47 Part 15

See product specific data pages for details.

# **Typical Applications**

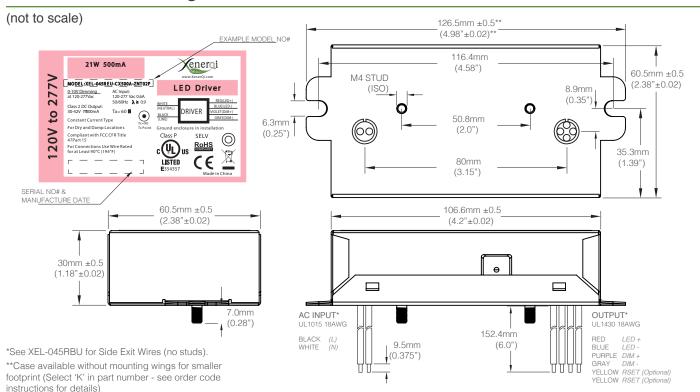








# Mechanical Drawings-Dimensions



Case Wire Dimensions

Material	Steel	Wire Gauge	18AWG
Unit Weight	See variant pages for details	Wire Length	152.4mm (±3mm) / 6" (±0.12")
Dimensions	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"	Strip Length	9.5mm (±0.5mm) / 0.375" (±0.02")

Recommended Fixings 2x M6\*8mm / 12-24\*5/15" Fastners / 2x M4 Nuts

### Installation Guide

#### Mounting & Wiring Diagrams



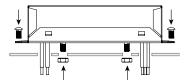
WARNING: TO REDUCE THE RISK OF FAILURE / INJURY: DRIVER MUST BE INSTALLED IN LUMINAIRE AND GROUNDED IN ACCORDANCE WITH THE LOCAL CODES. DRIVER CASE MUST BE ELECTRICALLY GROUNDED. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/ OR DAMAGE TO THE SYSTEM.

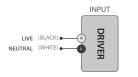
Fix using 2 M6 screws and 2 M4 nuts for recommended mounting.

Configurable variants are set up by connecting a

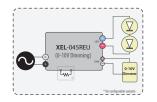
resistor between the two yellow

RSET wires.









Wires	Colors	Туре	Wires	Colors	Туре
Input	White (Neutral) Black (Line)	UL1015 AWG 18 UL1015 AWG 18	Dimming	Purple (Dim +) Grey (Dim -)	UL1015 AWG 18 UL1015 AWG 18
Output	Red (Positive) Blue (Negative)	UL1430 AWG 18 UL1430 AWG 18	RSET (Optional)	Yellow Yellow	UL1430 AWG 18 UL1430 AWG 18

# Specification Data

Output	DC Voltage Range Optimized Vf Range <sup>6</sup> Rated Current Range Rated Power Line Regulation <sup>3</sup> Load Regulation <sup>3</sup> Turn On/Off Time	26 ~ 42 Vdc (full power 30 ~ 42Vdc) 36 ~ 38 Vdc 0.18 ~ 1.05 A (not dimmed - see specific model pages) 5 ~ 45W ±5%  < 750ms (at full load)
Input	Voltage Range⁴ Frequency Range Power Factor THD Typical Inrush Current	120 ~ 277Vac Nominal (108 ~ 305Vac Operational) 47 ~ 63 Hz PFC > 0.9 at $\geq$ 75% of full power <sup>4</sup> THD < 20% at $\geq$ 75% of full power <sup>4</sup> < 4.0A (per ANSI test method. Compliant with NEMA410-2015)
Dimming	Modes 0-10V Source Current Compatibility	DC Dimming control: 0-10Vdc (1%) Sink/ Source (> 1% available on request) 260µA (Isolated) IEC Compliant. Customized dimming curves available upon request
Protection	Short Circuit Over Voltage Over Current Over Temperature	Auto-restart  Vout < 60V (Class-2)  Inherently limited over operational range  Current foldback at hotspot greater than 85°C (shut down at <100°C) <sup>5</sup>
Environment	Working Temperature Working Humidity UL Rating Storage Temperature Storage Humidity Impact Resistance Vibration Operating Life	-30°C ~ 55°C ambient¹ (Tcase rated for 90°C) 20% ~ 90% RH non-condensing Dry / Damp location use -40°C ~ 85°C ambient 10% ~ 90% RH non-condensing 1 g/s 3 ~ 50Hz 1g 50,000 Hours at Full Load & Maximum Hotspot
Safety & EMC	Safety Standards Noise Rating EMI Conduction & Radiation  EMC Susceptibility Transient Immunity	UL8750, Class 2 (UL1310), Class P rated Class A Compliant with FCC CFR Title 47 Part 15 Class A at 120/277Vac & Class B at 120V Compliant with European CE requirements EN61000-4-3, EN61000-4-2, EN61000-4-4 2kV/1kA Combination, 2.5kV Ringwave Modes: L-N, L-G, N-G

<sup>&</sup>lt;sup>1</sup> Ambient is estimated. Trigger point is based on temperature at hotspot & assumed case is mounted on flat surface. <sup>2</sup> True Warranty refers to operation at full load and max hotspot temperature. For specific warranty details refer to XenerQi published warranty document.

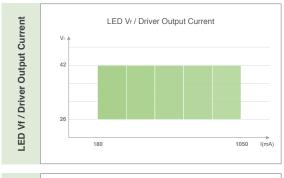
<sup>&</sup>lt;sup>3</sup> Guaranteed only within nominal input range.

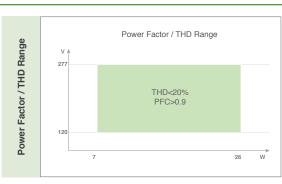
<sup>&</sup>lt;sup>4</sup> Critical parameters guaranteed over nominal input range.

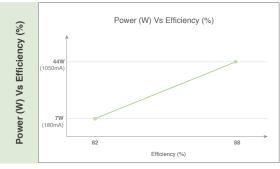
<sup>&</sup>lt;sup>5</sup> Shutdown requires power cycle to recover.

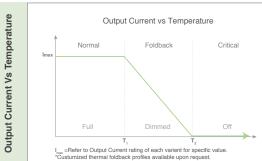
<sup>&</sup>lt;sup>6</sup> Units optimized for steady state forward voltage as per "Optimized Vf Range" value in specification data.

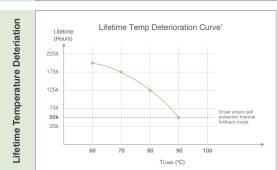
# Operation Performance-Family

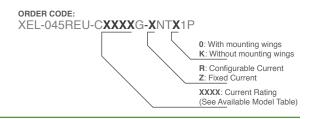












## **Available Models**

	Part Number	Output Current (mA)	Output Voltage Range (V)	Maximum Efficiency <sup>6</sup>	Max Output (W)
Configurable Ouput Current Variants	XEL-045REU-C1X05G-RNT01P	1050	26 ~ 42	88%	44.1W
<b>rfigur</b> ut Cu 'ariant	XEL-045REU-CX700G-RNT01P	700	26 ~ 42	88%	29.4W
ono dno	XEL-045REU-CX350G-RNT01P	350	26 ~ 42	84%	14.7W
	XEL-045REU-C1X05G-ZNT01P	1050	26 ~ 42	88%	44.1W
ŧ.	XEL-045REU-CX700G-ZNT01P	700	26 ~ 42	88%	29.4W
Fixed Ouput Current Variants	XEL-045REU-CX500G-ZNT01P	500	26 ~ 42	86%	21.0W
<b>Fix</b> uput C Varia	XEL-045REU-CX350G-ZNT01P	350	26 ~ 42	84%	14.7W
Ō	XEL-045REU-CX250G-ZNT01P	250	26 ~ 42	83%	10.5W
	XEL-045REU-CX180G-ZNT01P	180	26 ~ 42	82%	7.6W
	Customized Variants available upon red	uest			

The information and specifications contained in this summary sheet are believed to be accurate and reliable at the time of publication, however Xenerqi Limited assumes no responsibility for damages caused due to potential errors. Also, Xenerqi Limited assumes no responsibility for the use of this product in such as way that it infringes on patents or other rights of third parties. No license is granted by implication or otherwise under any patent rights of Xenerqi Limited. Specifications are subject to change without notice. Data values may have been rounded for marketing purposes.