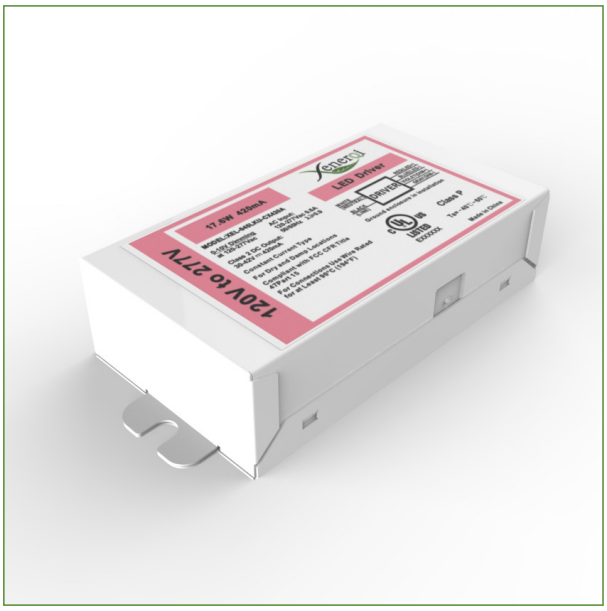
XEL-045REU
Configurable Commercial Series

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

Nominal Input Voltage (Vin)	Family Output Power Range (W)	Output Voltage Range (Vout)	Output Current Range (A)	Efficiency (%)	UL Max Case Temp. TC (°C)	THD (%)	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 Iout)



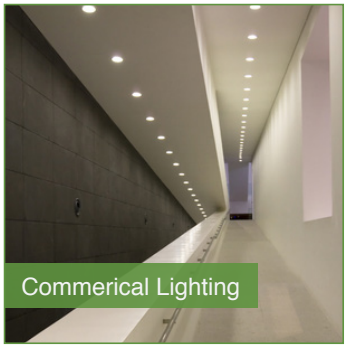
- **Ideal for Indoor Downlight & Recessed Lighting**
- **Universal AC input (108~305Vac)**
- **Field Adjustable & Preset Fixed Output Current Ratings**
- **1% Deep Dimming (0-10V) (optional higher levels)**
- **Enables DLC compliant fixtures**
- Class P UL Driver
- Turn on/off in less than 750 miliseconds
- Built-in Commercial grade Surge protection
- Class A Noise Rating
- 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]
- Class 2 power supply
- Double-insulated power supply between input and output (class II)
- Complies to FCC CFR Title 47 Part 15

See product specific data pages for details.

Variants available:

-Indoor Side Exit Wires	XEL-045RBU
-Indoor 347V (Canada) Bottom Exit Wires	XEL-045REC
-Outdoor Side Exit Wires	XEL-045LBU
-Outdoor Bottom Exit Wires	XEL-045LEU
-Mount Bracket Accessory Available	

Typical Applications

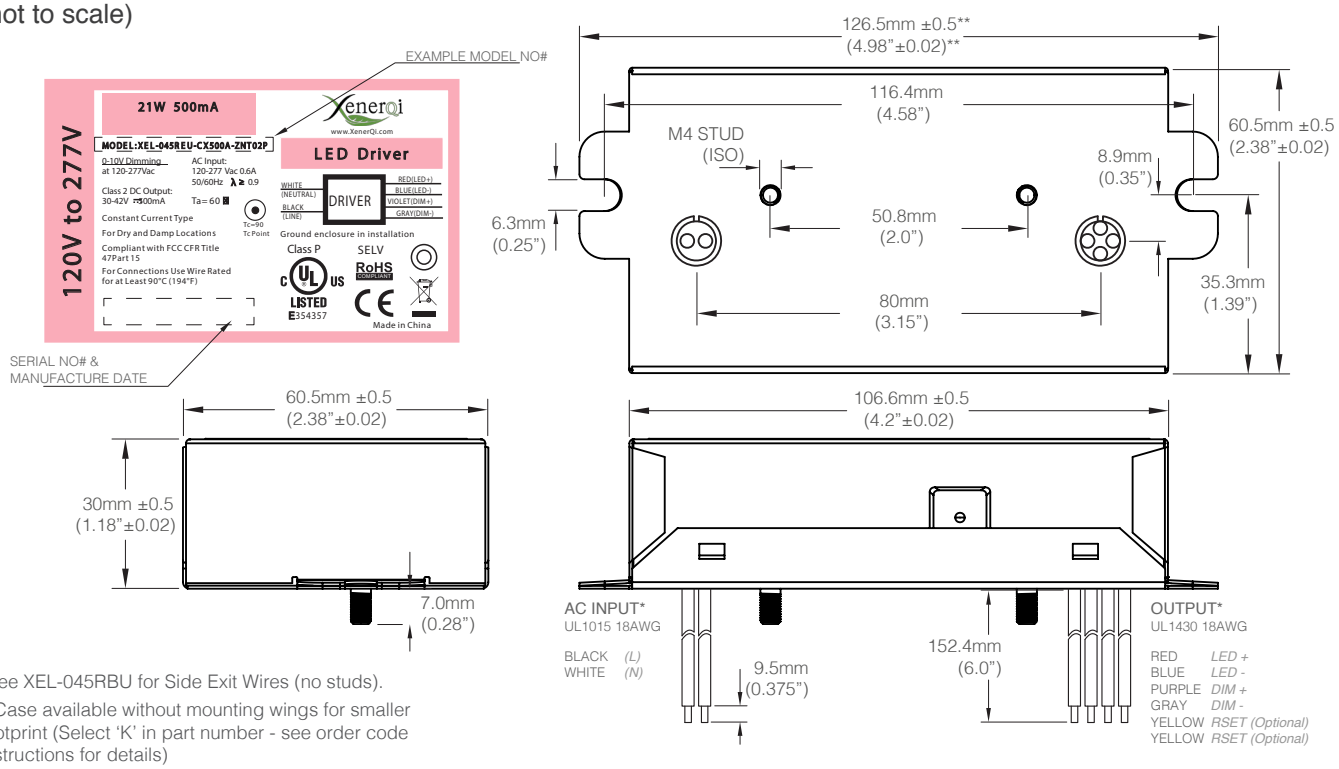


sales@xenerqi.com
www.xenerqi.com

Revision No#: 003E-18-03

Mechanical Drawings-Dimensions

(not to scale)



*See XEL-045RBU for Side Exit Wires (no studs).

**Case available without mounting wings for smaller footprint (Select 'K' in part number - see order code instructions for details)

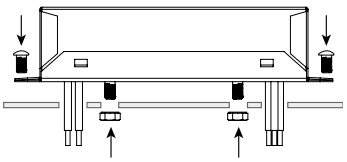
Case		Wire Dimensions	
Material	Steel	**Wire Gauge**	18AWG
Unit Weight	See variant pages for details	**Wire Length**	152.4mm (±3mm) / 6" (±0.12")
Dimensions	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"	**Strip Length**	9.5mm (±0.5mm) / 0.375" (±0.02")
Recommended Fixings	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts		

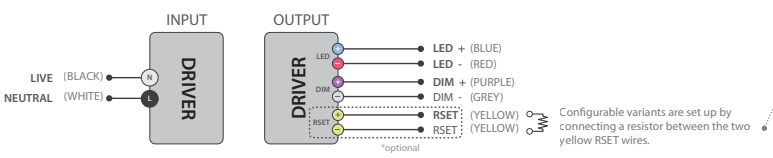
Installation Guide

Mounting & Wiring Diagrams

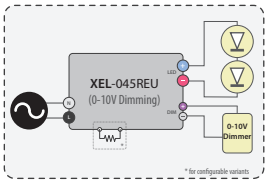
WARNING: TO REDUCE THE RISK OF FAILURE / INJURY:
DRIVER MUST BE INSTALLED IN LUMINAIRE AND GROUNDED IN ACCORDANCE WITH THE LOCAL CODES.
DRIVER CASE MUST BE ELECTRICALLY GROUNDED.
FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/ OR DAMAGE TO THE SYSTEM.

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.



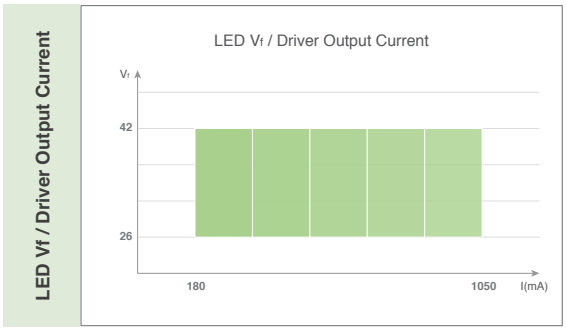
Wires	Colors	Type	Wires	Colors	Type
Input	White (Neutral)	UL1015 AWG 18	**Dimming**	Purple (Dim +)	UL1015 AWG 18
	Black (Line)	UL1015 AWG 18		Grey (Dim -)	UL1015 AWG 18
Output	Red (Positive)	UL1430 AWG 18	**RSET (Optional)**	Yellow	UL1430 AWG 18
	Blue (Negative)	UL1430 AWG 18		Yellow	UL1430 AWG 18

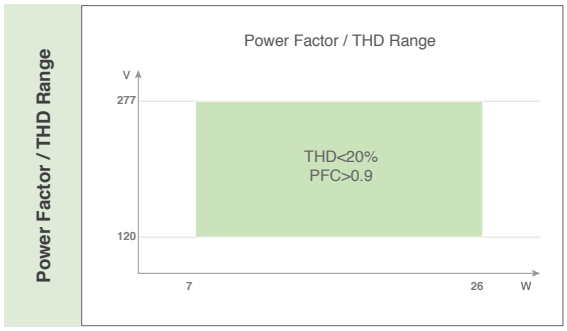
Specification Data

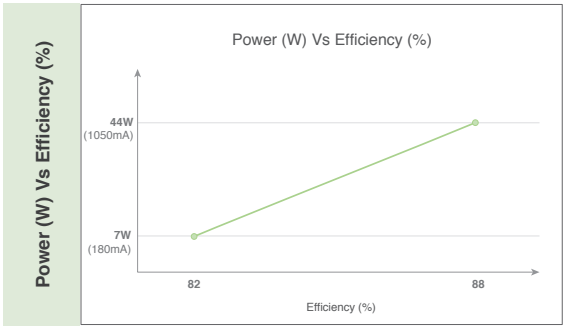
Output	DC Voltage Range	26 ~ 42 Vdc (full power 30 ~ 42Vdc)
	Optimized Vf Range[6]	36 ~ 38 Vdc
	Rated Current Range	0.18 ~ 1.05 A (not dimmed - see specific model pages)
	Rated Power	5 ~ 45W
	Line Regulation[3]	±5%
	Load Regulation[3]	±5%
	Turn On/Off Time	< 750ms (at full load)
Input	Voltage Range[4]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

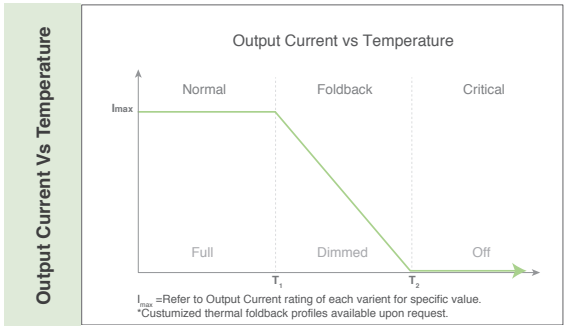
[1] Ambient is estimated. Trigger point is based on temperature at hotspot & assumed case is mounted on flat surface.
[2] True Warranty refers to operation at full load and max hotspot temperature. For specific warranty details refer to XenerQi published warranty document.
[3] Guaranteed only within nominal input range.
[4] Critical parameters guaranteed over nominal input range.
[5] Shutdown requires power cycle to recover.
[6] Units optimized for steady state forward voltage as per "Optimized Vf Range" value in specification data.

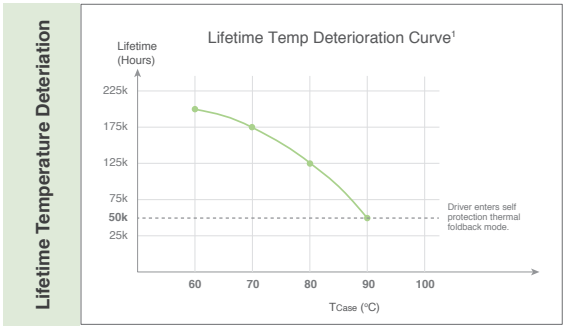
Operation Performance-Family











ORDER CODE:
XEL-045REU-C**XXXX**G-**X**NT**X**1P

0: With mounting wings
K: Without mounting wings

R: Configurable Current
Z: Fixed Current

XXXX: Current Rating
(See Available Model Table)

Available Models

	Part Number	Output Current (mA)	Output Voltage Range (V)	Maximum Efficiency [6]	Max Output (W)
Configurable Ouput Current Variants	XEL-045REU-C1X05G-RNT01P	1050	26 ~ 42	88%	44.1W
	XEL-045REU-CX700G-RNT01P	700	26 ~ 42	88%	29.4W
	XEL-045REU-CX350G-RNT01P	350	26 ~ 42	84%	14.7W
Fixed Ouput Current Variants	XEL-045REU-C1X05G-ZNT01P	1050	26 ~ 42	88%	44.1W
	XEL-045REU-CX700G-ZNT01P	700	26 ~ 42	88%	29.4W
	XEL-045REU-CX500G-ZNT01P	500	26 ~ 42	86%	21.0W
	XEL-045REU-CX350G-ZNT01P	350	26 ~ 42	84%	14.7W
	XEL-045REU-CX250G-ZNT01P	250	26 ~ 42	83%	10.5W
	XEL-045REU-CX180G-ZNT01P	180	26 ~ 42	82%	7.6W
	Customized Variants available upon request.				