

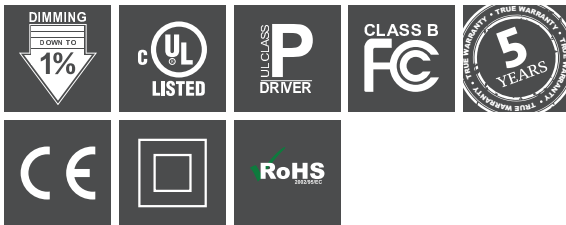


# CS XEL-045REU

## 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)



Variants available:

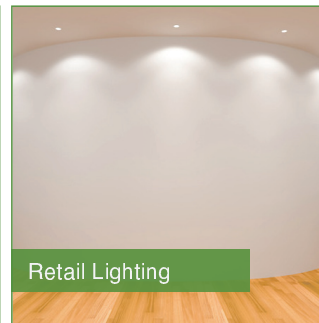
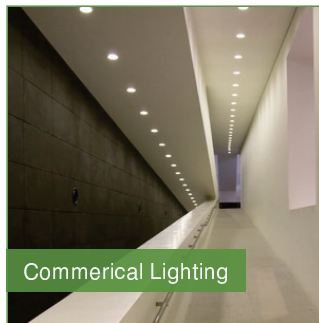
- Indoor Side Exit Wires
- Indoor 347V (Canada) Bottom Exit Wires
- Outdoor Side Exit Wires
- Outdoor Bottom Exit Wires
- Mount Bracket Accessory Available

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**
- ✔ Class P UL Driver
- ✔ Turn on/off in less than 750 milliseconds
- ✔ 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 -40°C to +55°C ambient <sup>1,9</sup>
- ✔ XenerQi Industry Leading 5 Year True Warranty™<sup>2</sup>
- ✔ Class 2 power supply
- ✔ Double-insulated power supply between input and output (class II)
- ✔ Complies to FCC CFR Title 47 Part 15

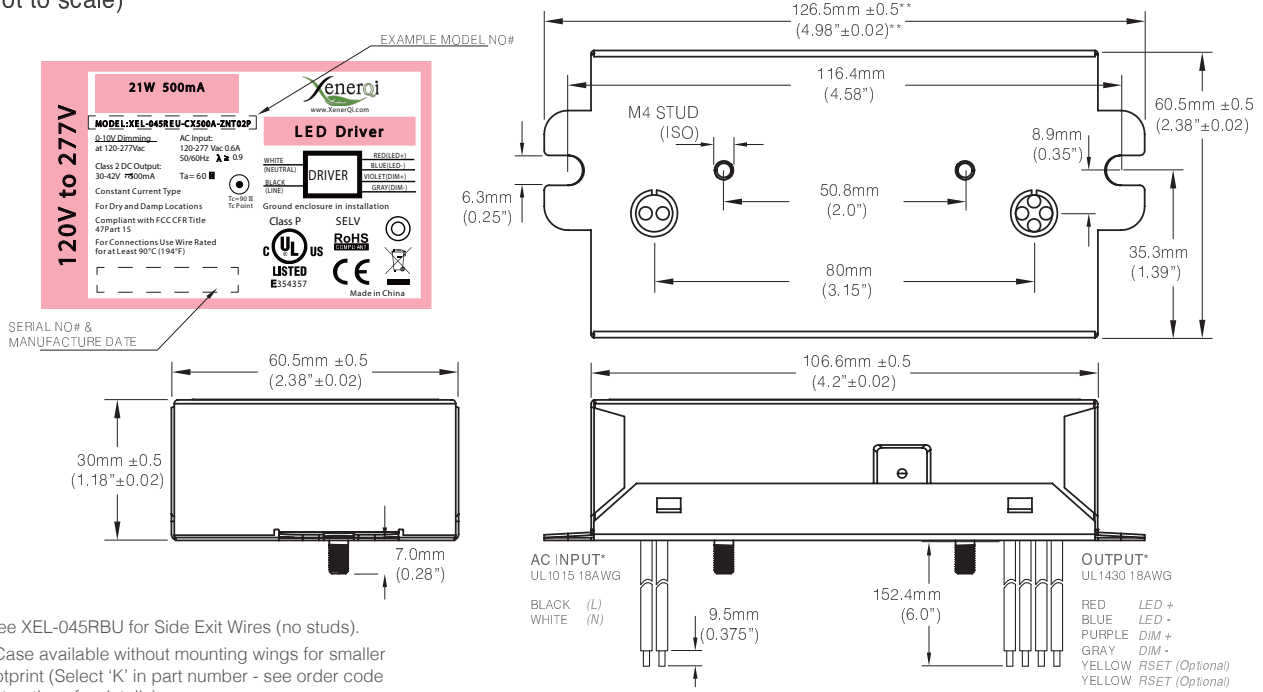
See available model table & product specific data pages for details.

## Typical Applications



# Mechanical Drawings-Dimensions

(not to scale)



## Case

Material	Steel
Unit Weight	See variant pages for details
Dimensions	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
Recommended Fixings	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

## Wire Dimensions

Wire Gauge	18AWG
Wire Length	152.4mm (±3mm) / 6" (±0.12")
Strip Length	9.5mm (±0.5mm) / 0.375" (±0.02")

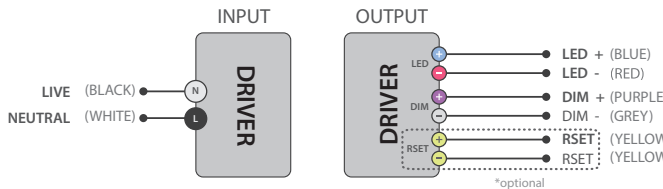
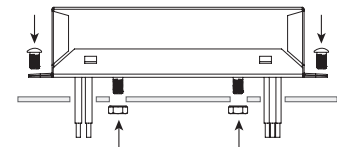
# Installation Guide

## Mounting & Wiring Diagrams

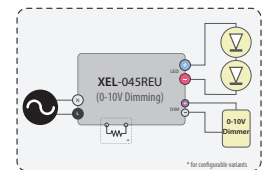


**WARNING: TO REDUCE THE RISK OF FAILURE / INJURY:**  
 DRIVER MUST BE INSTALLED IN LUMINAIRE AND GROUNDED IN ACCORDANCE WITH THE LOCAL CODES. DRIVER CASE MUST BE ELECTRICALLY GROUNDED. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/OR DAMAGE TO THE SYSTEM.

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 <sup>6</sup>	36 ~ 38 Vdc
	Rated Current Range	0.18 ~ 1.05 A (not dimmed - see specific model pages)
	Rated Power Range	5 ~ 45W
	Line Regulation <sup>3</sup>	±5%
	Load Regulation <sup>3</sup>	±5%
	Turn On/Off Time	< 750ms (at full load)
Input	Voltage Range <sup>4</sup>	120 ~ 277Vac Nominal (108 ~ 305Vac Operational)
	Frequency Range	47 ~ 63 Hz
	Power Factor	PFC > 0.9 at ≥ 75% of full power <sup>4</sup>
	THD	THD < 20% at ≥ 75% of full power <sup>4</sup>
	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 (after fault removed)
	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) <sup>5</sup>
Environment	Working Temperature	-40°C ~ 55°C ambient <sup>1, 9</sup> (T <sub>case</sub> 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 (for 30 minutes)
	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 (Less than 24dB measured at 1 meter) <sup>3,7</sup>
	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

<sup>1</sup> Ambient is estimated. Actual temperatures determined by trigger point temperature at driver 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>3</sup> Guaranteed only within nominal input range.

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

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

<sup>6</sup> Units optimized for steady state forward voltage as per "Optimized Vf Range" value in specification data, and for specific LED loads.

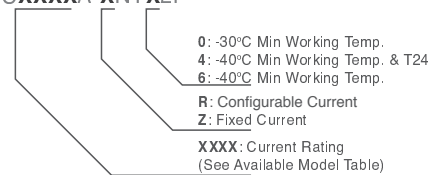
List of LED loads available upon request.

<sup>7</sup> Tested under two conditions: with & without dimmer connected.

<sup>8</sup> Value listed is family maximum or minimum best case value as appropriate & can vary depending on part number.

<sup>9</sup> See available models table (page 4) for specific minimum working temperature.

ORDER CODE:  
XEL-045REU-CXXXXA-XNTX2P



## Available Models

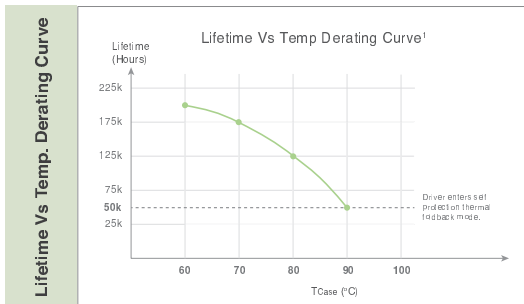
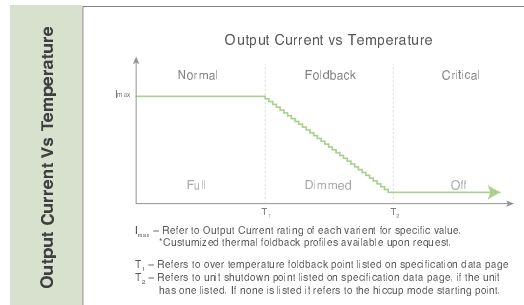
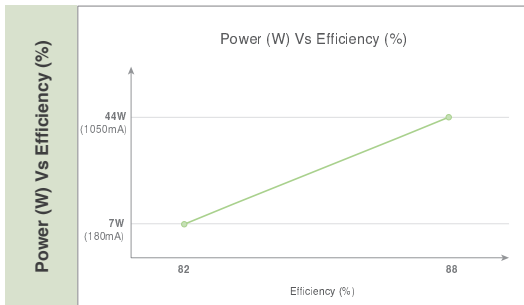
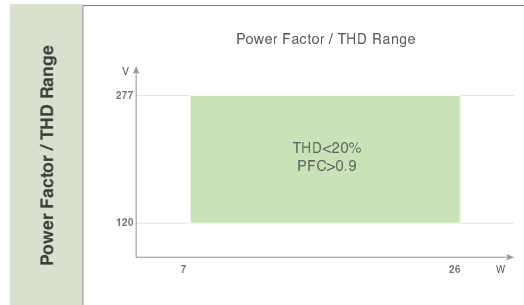
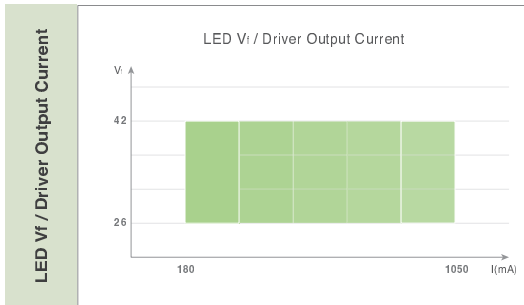
	Part Number	Output Current (mA)	Output Voltage Range (V)	Minimum Working Temp (°C)	Maximum Efficiency <sup>6</sup>	Max Output (W)
Configurable Output Current Variants	XEL-045REU-C1X05A-RNT02P	1050	26 ~ 42		88%	44.1W
	XEL-045REU-CX700A-RNT02P	700	26 ~ 42		88%	29.4W
	XEL-045REU-CX350A-RNT02P	350	26 ~ 42		84%	14.7W
Fixed Output Current Variants (-30°C Min Working Temp.)	XEL-045REU-C1X05A-ZNT02P	1050	26 ~ 42	-30°C	88%	44.1W
	XEL-045REU-CX700A-ZNT02P	700	26 ~ 42	-30°C	88%	29.4W
	XEL-045REU-CX500A-ZNT02P	500	26 ~ 42	-30°C	86%	21.0W
	XEL-045REU-CX350A-ZNT02P	350	26 ~ 42	-30°C	84%	14.7W
	XEL-045REU-CX250A-ZNT02P	250	26 ~ 42	-30°C	83%	10.5W
	XEL-045REU-CX180A-ZNT02P	180	26 ~ 42	-30°C	82%	7.6W
Title 24* / Fixed Output Current Variants (-40°C Min Working Temp.)	XEL-045REU-C1X05A-ZNT42P	1050	26 ~ 42	-40°C	88%	44.1W
	XEL-045REU-CX700A-ZNT42P	700	26 ~ 42	-40°C	88%	29.4W
	XEL-045REU-CX500A-ZNT42P	500	26 ~ 42	-40°C	86%	21.0W
	XEL-045REU-CX350A-ZNT42P	350	26 ~ 42	-40°C	84%	14.7W
	XEL-045REU-CX250A-ZNT42P	250	26 ~ 42	-40°C	83%	10.5W
	XEL-045REU-CX180A-ZNT42P	180	26 ~ 42	-40°C	82%	7.6W
Fixed Output Current Variants (-40°C Min Working Temp.)	XEL-045REU-C1X05A-ZNT62P	1050	26 ~ 42	-40°C	88%	44.1W
	XEL-045REU-CX700A-ZNT62P	700	26 ~ 42	-40°C	88%	29.4W
	XEL-045REU-CX500A-ZNT62P	500	26 ~ 42	-40°C	86%	21.0W
	XEL-045REU-CX350A-ZNT62P	350	26 ~ 42	-40°C	84%	14.7W
	XEL-045REU-CX250A-ZNT62P	250	26 ~ 42	-40°C	83%	10.5W
	XEL-045REU-CX180A-ZNT62P	180	26 ~ 42	-40°C	82%	7.6W

Customized Variants available upon request.

\*ZNT42 PN# suffix parts are optimized to meet California Title 24 requirements in use with certain LED loads. To ensure Title 24 requirements are met the customer must correctly match the driver to the LED load type being used.

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 a 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.

# Operation Performance-Family



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# XEL-045REU-C1X05A-RNT02P

## Commercial Series - RSET Enabled

44W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Regulation	Maximum Efficiency	Max Output (W)
XEL-045REU-C1X05A-RNT02P	1050	26 ~ 42	±5%	88%	44.1W

### Case

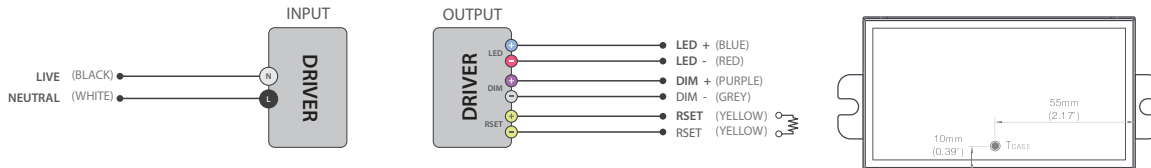
<b>Material</b>	Steel
<b>Unit Weight</b>	375g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"

### Wire Dimensions

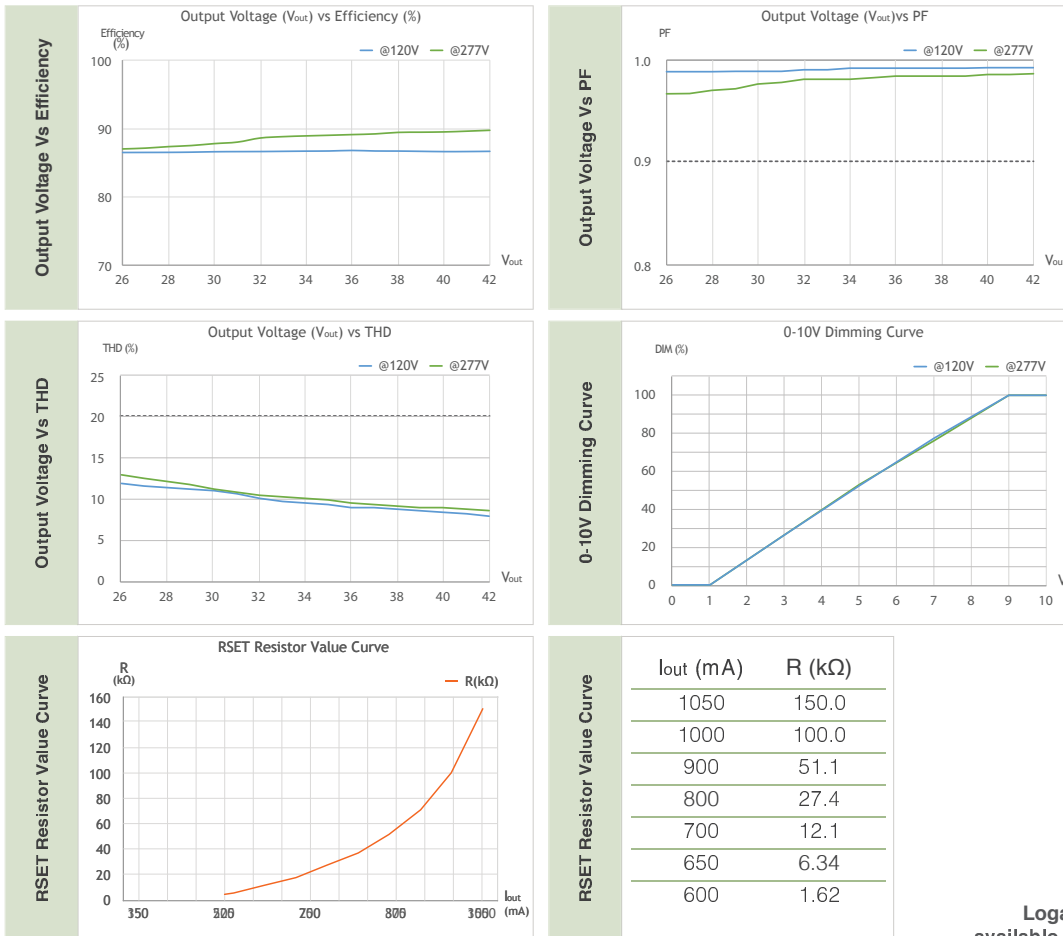
<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

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

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-C1X05A



Logarithmic curve available upon request.

# XEL-045REU-CX700A-RNT02P

## Commercial Series - RSET Enabled

29W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Regulation	Maximum Efficiency	Max Output (W)
XEL-045REU-CX700A-RNT02P	700	26 ~ 42	±5%	88%	29.4W

### Case

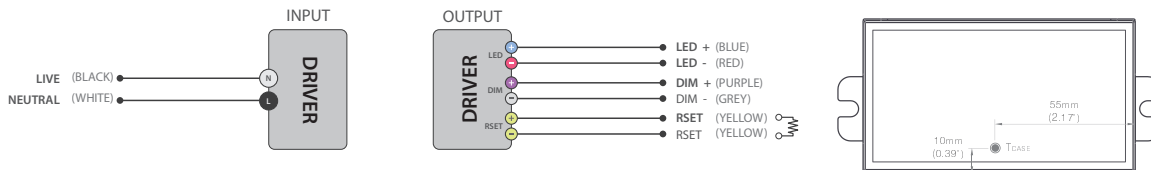
<b>Material</b>	Steel
<b>Unit Weight</b>	360g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"

### Wire Dimensions

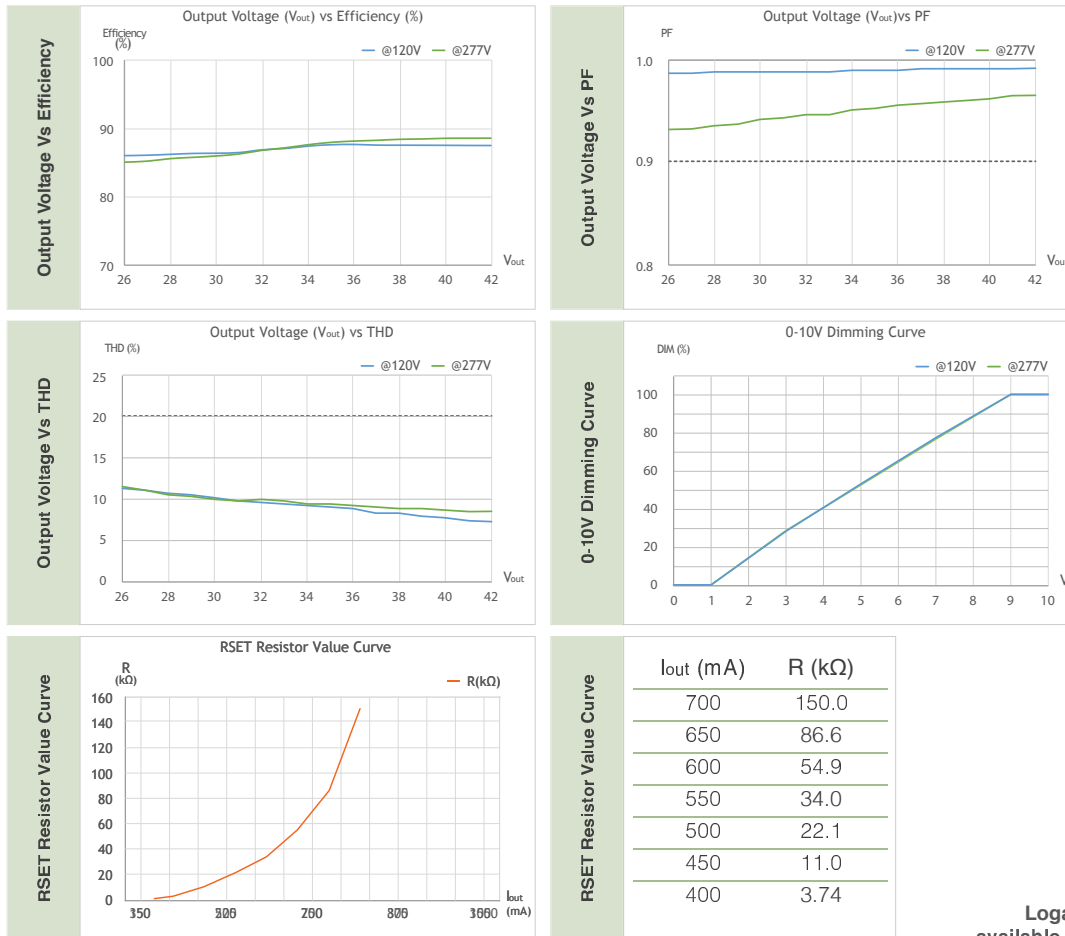
<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

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

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX700A



Logarithmic curve available upon request.

# XEL-045REU-CX350A-RNT02P

## Commercial Series - RSET Enabled

15W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Regulation	Maximum Efficiency	Max Output (W)
XEL-045REU-CX350A-RNT02P	350	26 ~ 42	±5%	84%	14.7W

### Case

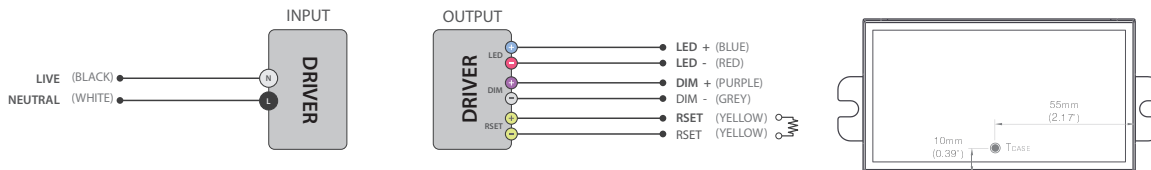
<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"

### Wire Dimensions

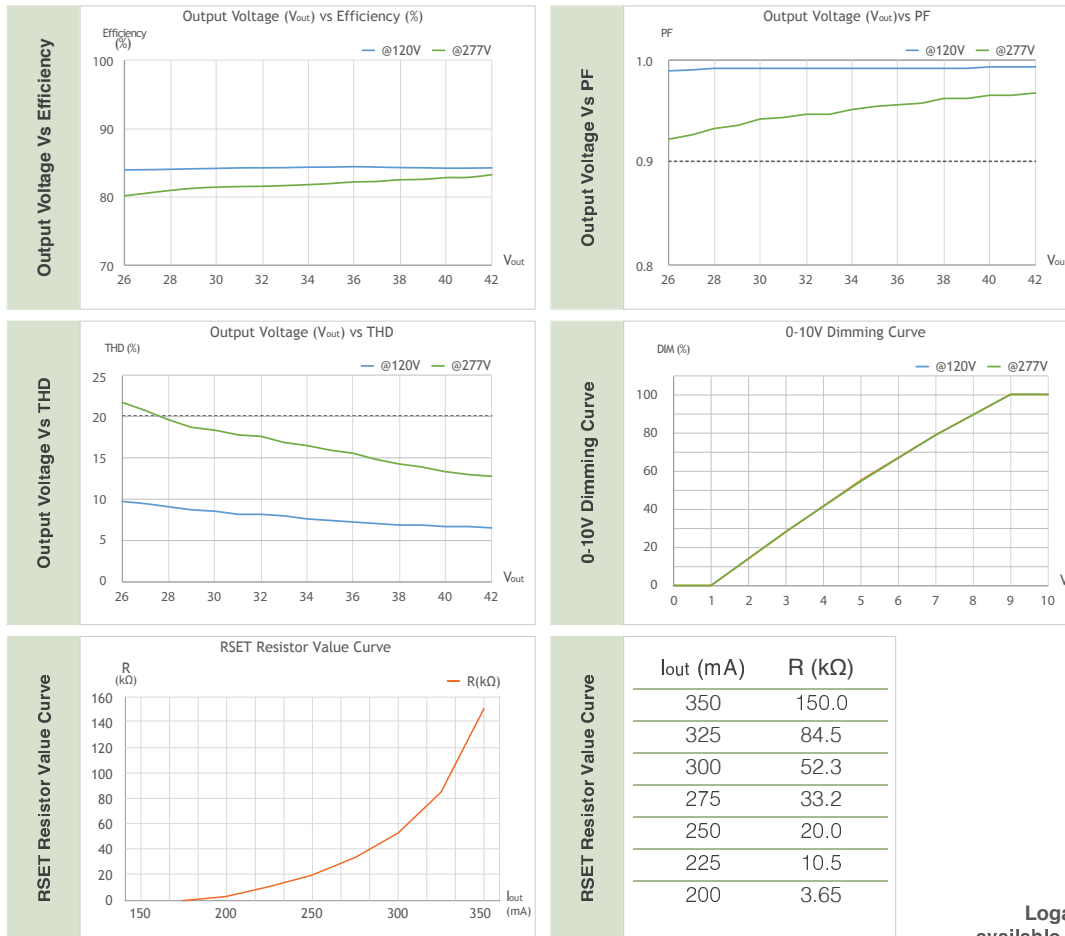
<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

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

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX350A



Logarithmic curve available upon request.

# XEL-045REU-C1X05A-ZNT02P

## Commercial Series

44W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-C1X05A-ZNT02P	1050	26 ~ 42	±5%	88%	44.1W

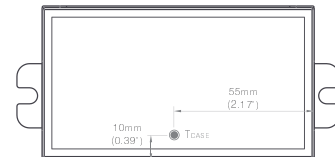
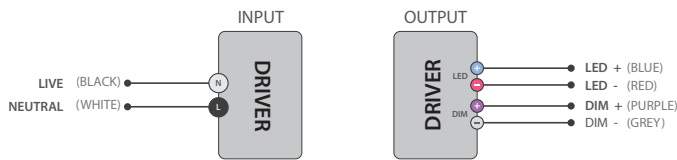
### Case

<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
<b>Recommended Fixings</b>	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

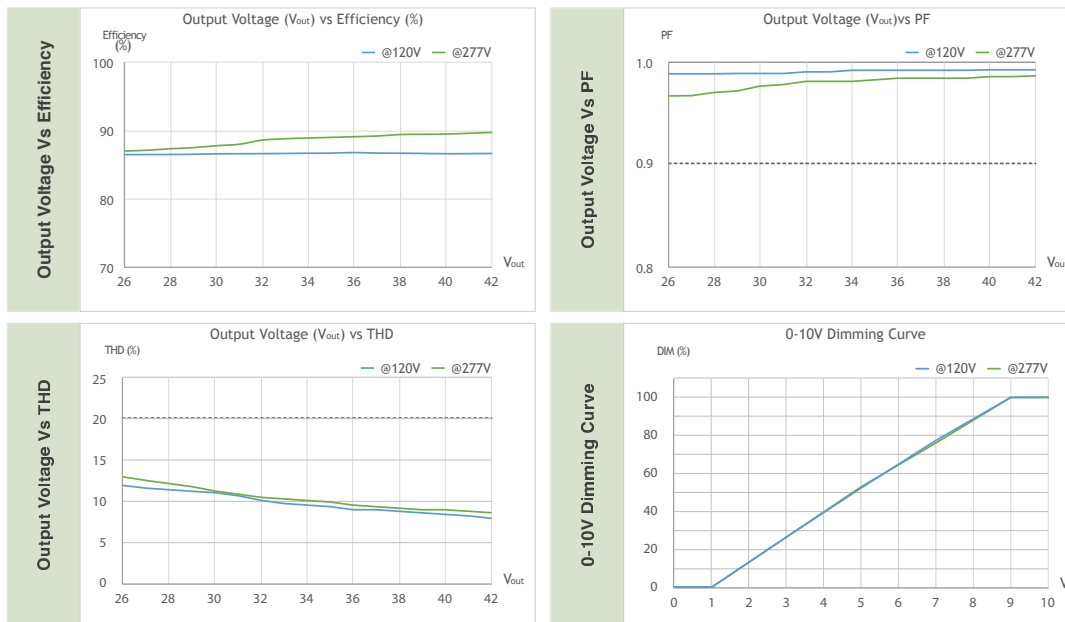
### Wire Dimensions

<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-C1X05A



Logarithmic curve available upon request.

# XEL-045REU-CX700A-ZNT02P

## Commercial Series

29W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-CX700A-ZNT02P	700	26 ~ 42	±5%	88%	29.4W

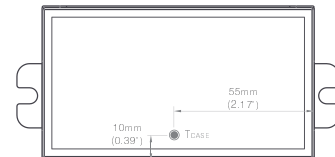
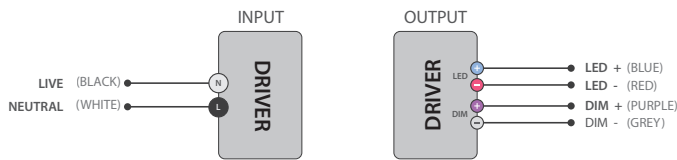
### Case

<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
<b>Recommended Fixings</b>	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

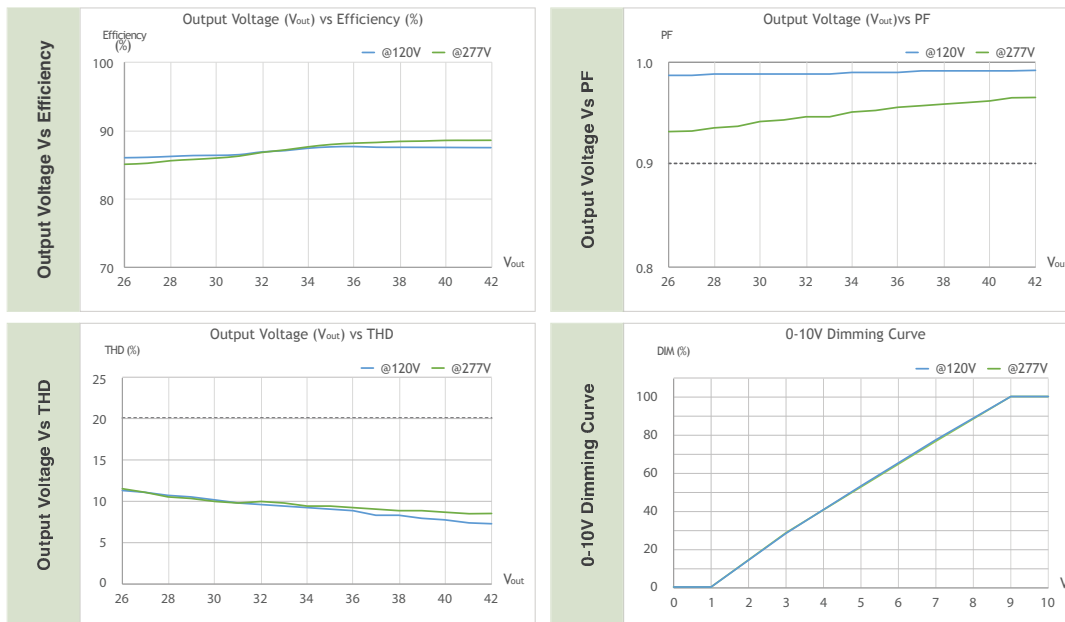
### Wire Dimensions

<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX700A



Logarithmic curve available upon request.

# XEL-045REU-CX500A-ZNT02P

## Commercial Series

21W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-CX500A-ZNT02P	500	26 ~ 42	±5%	86%	21.0W

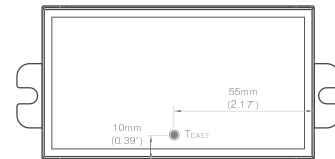
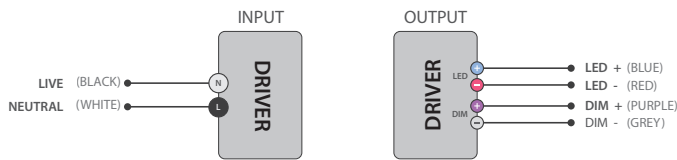
### Case

<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
<b>Recommended Fixings</b>	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

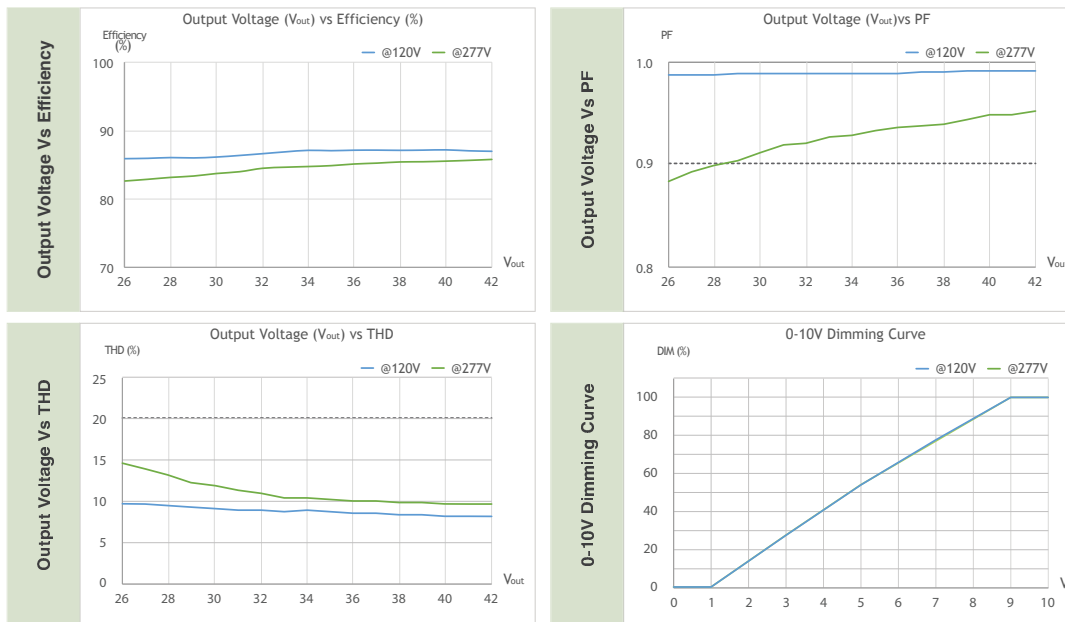
### Wire Dimensions

<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX500A



Logarithmic curve available upon request.

# XEL-045REU-CX350A-ZNT02P

## Commercial Series

15W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-CX350A-ZNT02P	350	26 ~ 42	±5%	84%	14.7W

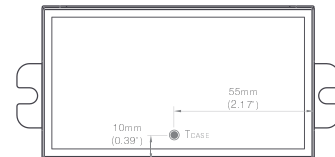
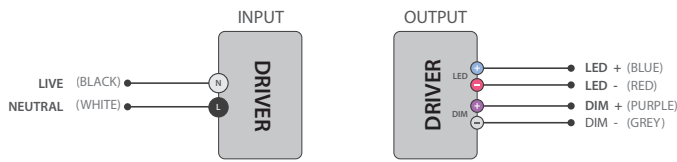
### Case

<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
<b>Recommended Fixings</b>	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

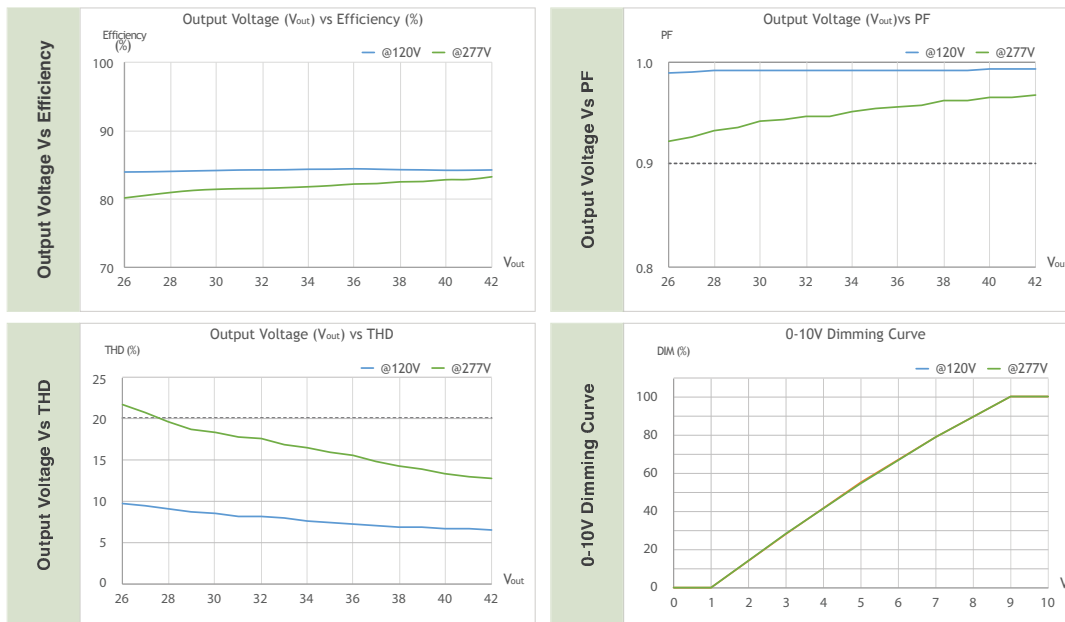
### Wire Dimensions

<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX350A



Logarithmic curve available upon request.

# XEL-045REU-CX250A-ZNT02P

## Commercial Series

10W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-CX250A-ZNT02P	250	26 ~ 42	±5%	83%	10.5W

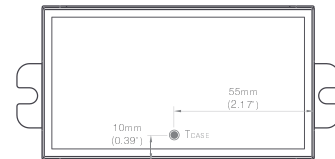
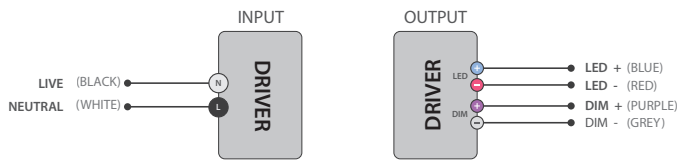
### Case

<b>Material</b>	Steel
<b>Unit Weight</b>	234g
<b>Dimensions</b>	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"
<b>Recommended Fixings</b>	2x M6*8mm / 12-24*5/15" Fastners / 2x M4 Nuts

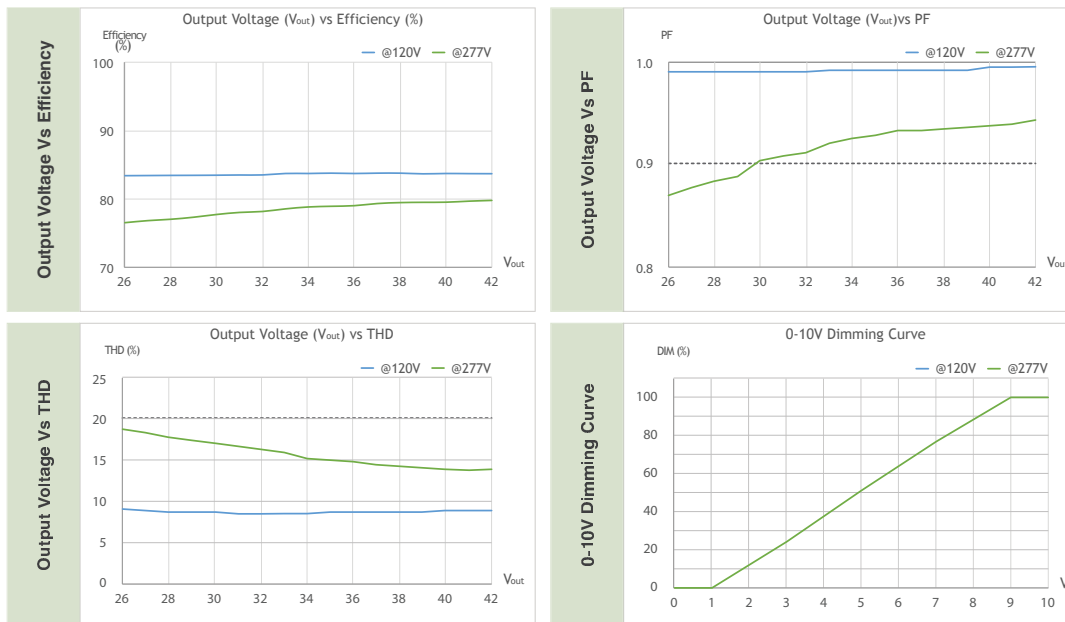
### Wire Dimensions

<b>Wire Gauge</b>	18AWG
<b>Wire Length</b>	152.4mm (±3mm) / 6" (±0.12")
<b>Strip Length</b>	9.5mm (±0.5mm) / 0.375" (±0.02")

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX250A



Logarithmic curve available upon request.

# XEL-045REU-CX180A-ZNT02P

## Commercial Series

8W LED Driver  
0-10V, 1% Dimming



Part Number	Output Current (mA)	Output Voltage Range (V)	Line/Load Registration	Maximum Efficiency	Max Output (W)
XEL-045REU-CX180A-ZNT02P	180	26 ~ 42	±5%	82%	7.6W

### Case

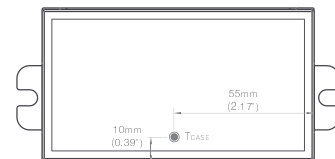
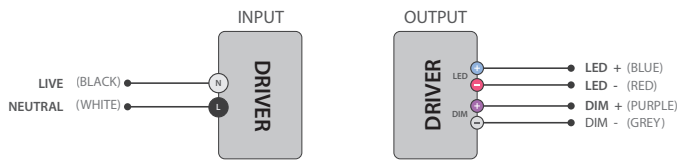
Material	Steel
Unit Weight	234g
Dimensions	126.5mm x 60.5mm x 30mm / 5.0" x 2.4" x 1.2"

### Wire Dimensions

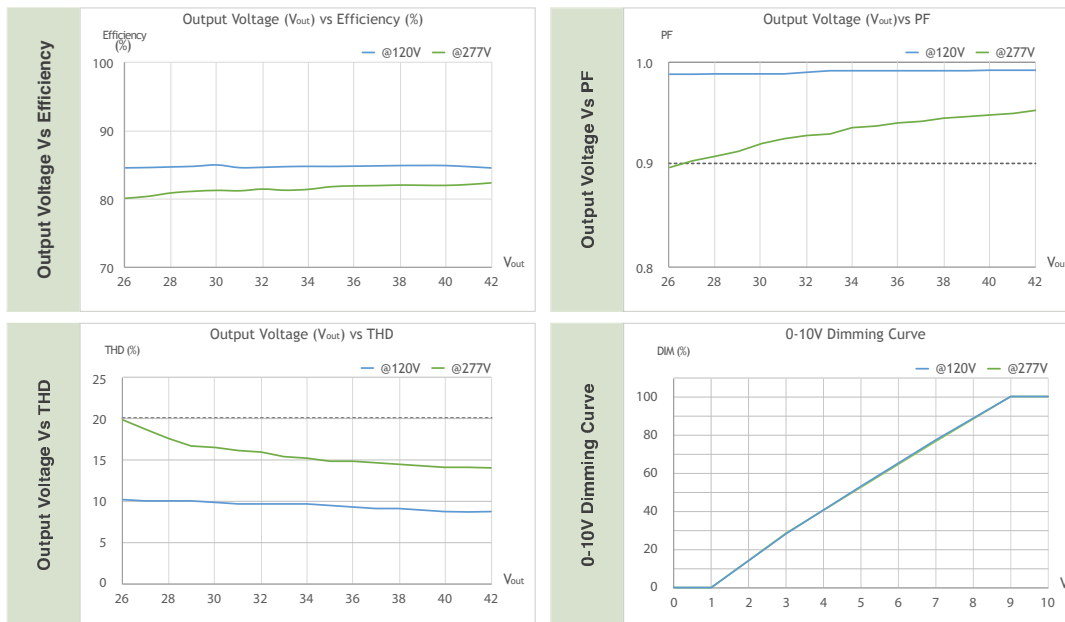
Wire Gauge	18AWG
Wire Length	152.4mm (±3mm) / 6" (±0.12")
Strip Length	9.5mm (±0.5mm) / 0.375" (±0.02")

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

\*Unit weight is approximate and can vary by up to ±10%



## Operation Performance-CX180A



Logarithmic curve available upon request.