PLS Series

PLS20	**20 W**
PLS30	**30 W**
PLS50	**50 W**
PLS65	**65 W**
PLS85	**85 W**

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

Input Voltage	Max. Output Power	Efficiency	Max. Case Temperature	THD	Power Factor	Dimming Method	Dimming Range	Start-up Time
120 - 277 Vac	85 W	up to 87% typical	90°C (measured at the hot spot)	< 20%	> 0.9	Programmable 0 - 10 V	1 - 100%	300 ms typical
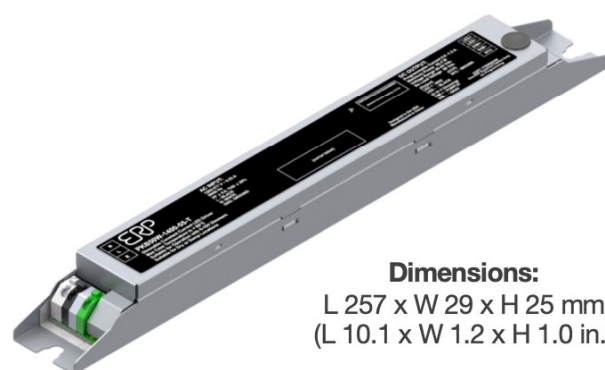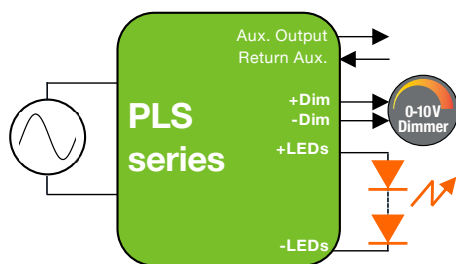
Dimensions:
L 257 x W 29 x H 25 mm
(L 10.1 x W 1.2 x H 1.0 in.)

PLS-A85W:
L 425 x W 29 x H 25 mm
(L 16.7 x W 1.2 x H 1.0 in.)

FEATURES

- UL Class P
- Class 2 output
- Programmable dim-to-off
- Optional programmable auxiliary output
- Synchronized start-up: 20 ms
- Lifetime: 50,000 hours @ Tc ≤ 75°C
- 90°C maximum case hot spot temperature
- Surge protection:
  - IEC61000-4-5: 6 kV line to line/6 kV line to earth
  - 2.5 kV ring wave: ANSI/IEEE c62.41.1-2002 & c62.41.2-2002 category A
- Complies with ENERGY STAR®, DLC (DesignLight Consortium®), and CA Title 24 technical requirements
- Meets IEEE 1789-2015 "no impact" recommended practices for flicker

PROGRAMMING

- Audio jack and cradle programming
- Current: see page 2 for current range
- Fully programmable and selectable 0-10V dimming profiles: Non-linear with dim-to-off, Logarithmic, Non-Linear without dim-to-off.
- Data log read: SKU, S/N, lot code, hours of operation, FW rev., power cycles

Neutral:
- White: 120-277 Vac

Line:
- Black: 120-277 Vac

Yellow: + Aux
Brown: - Aux
Purple: + Dim
Pink: - Dim
Red: + LEDs
Blue: - LEDs

Wiring Diagram

APPLICATIONS

- Commercial & residential lighting
- Architectural lighting
- Indoor Lighting

PLS Series Data Sheet
Rev. May 2025

PLS Series

PLS20 20 W
PLS30 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

1 - ORDERING INFORMATION

Part Number	Input Voltage (Vac)	Max Output Power (W)	Iout (mA)	Default Programmed Current (mA)	Vout Min. (Vdc)	Vout Nom. (Vdc)	Vout Max. (Vdc)*	Open Loop (No Load) Voltage (Vdc)	Notes
Up to 20W									
PLS-A20W-07-55-TZ	120 - 277	20	100 to 700	350	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and the 0-10 V dimming circuit
PLS-A20W-07-55-TPZ	120 - 277	20	100 to 700	350	10	49.5	55	60	• Terminal Blocks • Isolation between the DC output and 0-10 V dimming circuit
PLS-A20W-07-55-TXZ	120 - 277	20	100 to 700	350	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and 0-10 V dimming circuit • Auxiliary output
21 to 30W									
PLS-A30W-10-55-TZ	120 - 277	30	275 to 1050	700	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and the 0-10 V dimming circuit
PLS-A30W-10-55-TPZ	120 - 277	30	275 to 1050	700	10	49.5	55	60	• Terminal Blocks • Isolation between the DC output and 0-10 V dimming circuit
PLS-A30W-10-55-TXZ	120 - 277	30	275 to 1050	700	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and 0-10 V dimming circuit • Auxiliary output
31 to 50W									
PLS-A50W-14-55-TZ	120 - 277	50	500 to 1400	1050	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and the 0-10 V dimming circuit
PLS-A50W-14-55-TPZ	120 - 277	50	500 to 1400	1050	10	49.5	55	60	• Terminal Blocks • Isolation between the DC output and 0-10 V dimming circuit
PLS-A50W-14-55-TXZ	120 - 277	50	500 to 1400	1050	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and 0-10 V dimming circuit • Auxiliary output
51 to 65W									
PLS-A65W-18-55-TZ	120 - 277	65	600 to 1800	1200	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and the 0-10 V dimming circuit
PLS-A65W-18-55-TPZ	120 - 277	65	600 to 1800	1200	10	49.5	55	60	• Terminal Blocks • Isolation between the DC output and 0-10 V dimming circuit
PLS-A65W-18-55-TXZ	120 - 277	65	600 to 1800	1200	10	49.5	55	60	• Terminal Blocks • No isolation between the DC output and 0-10 V dimming circuit • Auxiliary output
66 to 85W									
PLS-A85W-23-55-TXZ	120 - 277	85	700 to 2300	1400	10	49.5	55	60	• Terminal Blocks • Auxiliary output

* The forward voltage (Vf) of the LED load should not exceed Vout Max. of the driver under worst case field operating conditions which are the Vf max. of the LED load under lowest temperature and highest forward current conditions. As a general design guideline, the nominal LED load Vf measured at the operating current and at room temperature should be ≤ Vout Nom. of the driver.
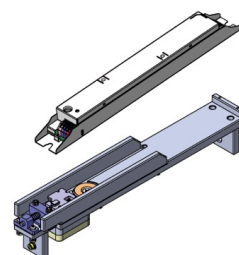
Programming Cable
Part number: PROG-JACK-USB

Programming Cradle
Part number: PROG-CRADLE

Notes:
• Please order the programming cable using part number PROG-JACK-USB.
• Optional programming cradle can be ordered using part number PROG-CRADLE

PLS Series
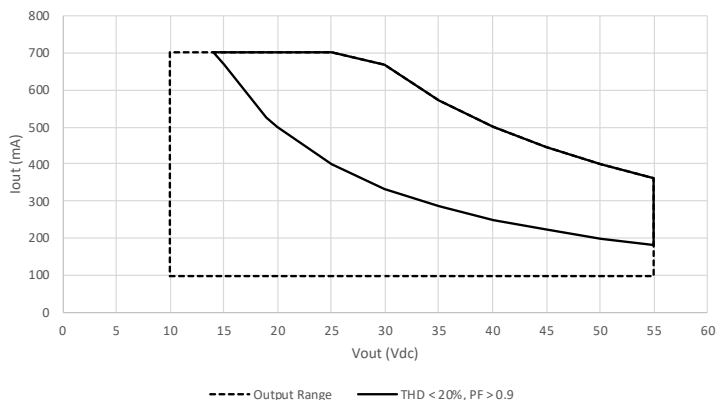
PLS20 20 W
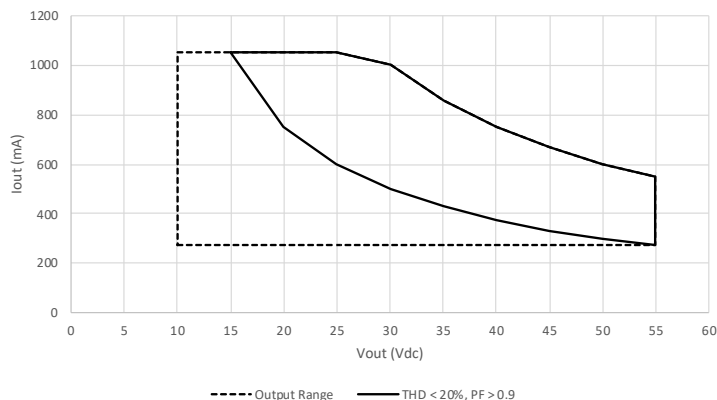**PLS30** 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming
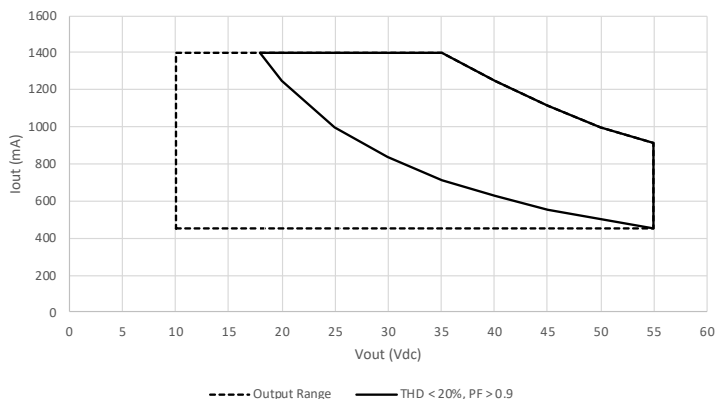
2 – OPERATING ENVELOPES
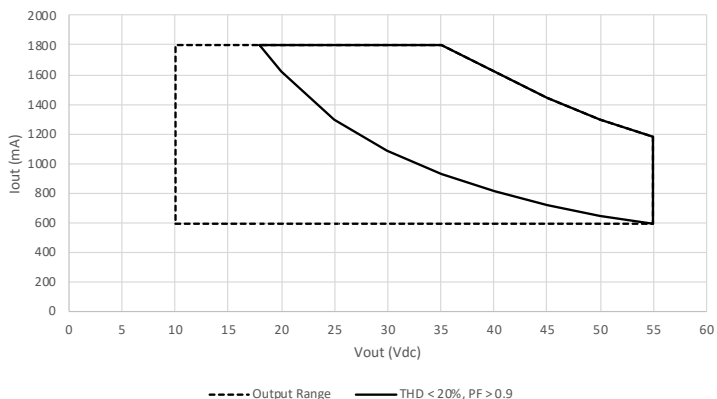
PLS-A20W-07-55 Operating Envelope
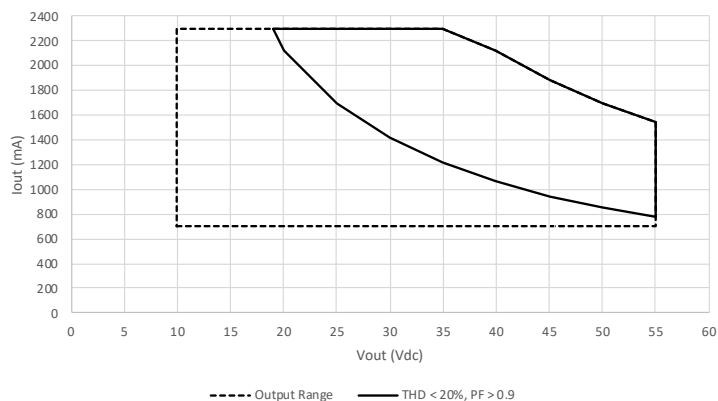
PLS-A30W-10-55 Operating Envelope

PLS-A50W-14-55 Operating Envelope

PLS-A65W-18-55 Operating Envelope

PLS-A85W-23-55 Operating Envelope

PLS20   **20 W**
PLS30   **30 W**
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PLS65   **65 W**
PLS85   **85 W**

PLS Series

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

3 - INPUT SPECIFICATION (@25°C ambient temperature)

	Units	Minimum	Typical	Maximum	Notes
Input Voltage Range (Vin)	Vac	108	120, 277	305	•The rated output current for each model is achieved at Vin≥108 Vac, and at Vin≥249 Vac. •At nominal load
Input Frequency Range	Hz	47	50/60	63	
Input Current (Iin)	A			0.7 A @ 120 Vac 0.35 A @ 277 Vac	
Power Factor (PF)		0.9	> 0.9		•At nominal input voltage (120 & 277 Vac) and no dimmer •From 100% to 50% of output power
Inrush Current	A	Meets NEMA-410 requirements			•At any point on the sine wave and 25°C
Leakage Current	mA			0.4 mA @ 120 Vac 0.75 mA @ 277 Vac	Measured per IEC60950-1
Input Harmonics		Complies with IEC61000-3-2 for Class C equipment			
Total Harmonics Distortion (THD)				20%	•At nominal input voltage (120 & 277 Vac) •From 100% to 50% of output power •Complies with DLC (Design Light Consortium) technical requirements
Efficiency	%	-	up to 87%	-	Measured with nominal input voltage, a full sinusoidal wave form and without dimmer attached.
Isolation		The AC input to the main DC output is isolated.			

PLS20	20 W
PLS30	30 W
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PLS85	85 W

PLS Series

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

■ 4 - MAIN OUTPUT SPECIFICATION (@25°C ambient temperature)

	Units	Minimum	Typical	Maximum	Notes
Output Voltage (Vout)	Vdc				•See ordering information for details
Output Current (Iout)	mA				•By steps of 1 mA •See ordering information for details •Output voltage and current combination cannot exceed max power output. See page 3 for operating window •The rated output current for each model is achieved at Vin≥108 Vac & Vin≥249 Vac.
Output Current Regulation	%	-3	±2	3	•At nominal AC line voltage (120 & 277 Vac) •Includes load and current set point variations
Output Current Overshoot	%	-	-	20	The driver does not operate outside of the regulation requirements for more than 500 ms during power on with nominal LED load and without dimmer.
Ripple Current	≤ 20% of rated output current for each model				•Measured at nominal LED voltage and nominal input voltage without dimming •Calculated in accordance with the IES Lighting Handbook, 9th edition •Meets IEEE 1789-2015 "no impact" recommended practices for flicker
Dimming Range	%	1		100	•The dimming range is dependent on each specific dimmer. It may not be able to achieve 1% dimming with some dimmers. •When testing, if light is measured, dimming range is based on light output. If no light is measured, dimming range is based on percentage of output current. •Dimming performance is optimal when the driver is operated at its nominal output voltage matching the LED nominal Vf (forward voltage). Dimming performance may vary when the driver is operated near its minimum output voltage.
Start-up Time	ms		300	500	•Without any dimmer attached, and at nominal input voltages and nominal load •Synchronized start-up of 20 ms when multiple drivers on same circuit •Measured from application of AC line voltage to continuous light output •Complies with ENERGY STAR® luminaire specification and CA Title 24
Isolation	The main DC output is certified and tested per UL8750 Class 2 or LED Class 2. "-TPZ" Models feature additional isolation between the DC output and 0-10 V dimming circuit.				

■ 5 - AUXILIARY OUTPUT SPECIFICATION "-TXZ" MODELS ONLY (@25°C ambient temperature)

	Units	Minimum	Typical	Maximum	Notes
Auxilliary Output Voltage	Vdc	9.5	12	24	•Default value is 12 V •+/-10% voltage regulation •Configurable through programming in 0.5 V increments
Auxilliary Output Current	mA			110 mA	•Maximum power output is 1.2 W •+/-10% current regulation

PLS Series

PLS20 — 20 W
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20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

■ 6 - 0-10 V DIMMING CONTROL (@25°C ambient temperature)

In the PLS series, several 0-10V dimming profiles can be selected, such as a logarithmic profile, a non-linear profile with 1% minimum dimming, a non-linear profile with 10% minimum dimming, and optional dim-to-off function. Furthermore, every point in the non-linear dimming profile can be programmed using the ERP Power LED Configuration software (ERP GUI).

By default, the non-linear profile with 1% minimum dimming and NO dim-to-off is pre-loaded in the PLS series.

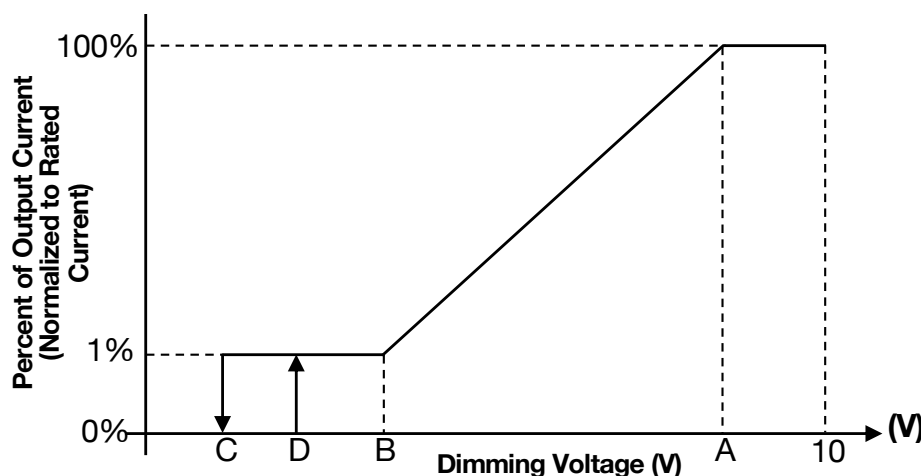|	Units	Minimum	Typical	Maximum	Notes
+Dim Signal, -Dim Signal					The PLS series operate only with 0-10 V dimmers that sink current. The method to dim the output current of the driver is done via the +Dim/-Dim Signal pins. The +Dim/-Dim signal pins can be used to adjust the output setting via a standard commercial wall dimmer, an external control voltage source (0 to 10 Vdc), or a variable resistor when using the recommended number of LEDs. The dimming input permits 1% to 100% dimming.
Dimming Profile					100% of output current between 10 V and 8 V, Linear between 8 V and 1 V, 1% of output current below 1 V.
Dimming Range	%	1		100	When testing, if light is measured, dimming range is based on light output. If no light is measured, dimming range is based on percentage of output current.
High Level Voltage - A	V		8.0	8.1	Highest voltage available with programming: 8.5 V
Low Level Voltage - B	V	0.9	1.0		Lowest voltage available with programming: 0.1V
Dim to Off - C	V	0.6	0.7	0.8	
Dim to Off Hysteresis - D	V		+0.2		
Current Supplied by the +Dim Signal Pin	mA			0.5	
Dimming Voltage Sensing Tolerance	mV			100	The tolerance of the difference between the 0-10 V signal supplied by the dimmer and sensed by the driver.
Output Current Tolerance While Being Dimmed	%		±8		In the linear region of the dimming curve (between points A and B in Figure 1).
Minimum Dimming Tolerance	%	0.6	1	2	At point B, in figure 1
Isolation					The 0-10 V circuit is isolated from the AC input and meets UL8750 supplement SF requirements. "-TPZ" Models feature additional isolation between the DC output and 0-10 V dimming circuit.

Figure 1

PLS20   **20 W**
PLS30   **30 W**
PLS50   **50 W**
PLS65   **65 W**
PLS85   **85 W**

PLS Series

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

7 - ENVIRONMENTAL CONDITIONS

	Units	Minimum	Typical	Maximum	Notes
Operating Ambient Temperature (Ta)	°C	-20		50	50°C is the non-derated temperature (Refer to section 11 'Output power protection'.)
Maximum Case Temperature (Tc)	°C			+90	Case temperature measured at the hot spot •tc (see label in section 23)
Storage Temperature	°C	-40		+85	
Humidity	%	5	-	95	Non-condensing
Cooling		Convection cooled			
Acoustic Noise	dBA			24	Measured at a distance of 1 foot, without dimmer
Mechanical Shock Protection	per EN60068-2-27				
Vibration Protection	per EN60068-2-6 & EN60068-2-64				
MTBF	> 200,000 hours when operated at nominal input and output conditions, and at Tc ≤ 75°C				
Lifetime	50,000 hours at Tc ≤ 75°C maximum case hot spot temperature (see hot spot •tc on label in section 23)				
Warranty	5 years. Users must utilize proper thermal management techniques to ensure proper thermal conductivity between the driver and heat sink. The use of double-sided tape to mount the driver voids the warranty.				

8 - EMC COMPLIANCE, SAFETY, AND ENVIRONMENTAL APPROVALS

EMC Compliance			
Conducted and Radiated EMI	•Compliant with FCC CFR Title 47 Part 15 Class A at 120 & 277 Vac		
Harmonic Current Emissions	IEC61000-3-2	For Class C equipment	
Voltage Fluctuations & Flicker	IEC61000-3-3		
Immunity Compliance	**ESD (Electrostatic Discharge)**	IEC61000-4-2	6 kV contact discharge, 8 kV air discharge, level 3
	RF Electromagnetic Field Susceptibility	IEC61000-4-3	3 V/m, 80 - 1000 MHz, 80% modulated at a distance of 3 meters
	Electrical Fast Transient	IEC61000-4-4	± 2 kV on AC power port for 1 minute, ±1 kV on signal/control lines
	Surge	IEC61000-4-5	± 6 kV line to line (differential mode) /± 6 kV line to common mode ground
			ANSI/IEEE c62.41.1-2002 & c62.41.2-2002 category A, 2.5 kV ring wave
	Conducted RF Disturbances	IEC61000-4-6	3V, 0.15-80 MHz, 80% modulated
	Voltage Dips	IEC61000-4-11	>95% dip, 0.5 period; 30% dip, 25 periods; 95% reduction, 250 periods

Safety & Environmental Approvals	
UL	UL8750 listed Class 2, supplement SF
cUL	CAN/CSA C22.2 No. 250.13-14 LED equipment for lighting applications

Safety					
	Units	Minimum	Typical	Maximum	Notes
Hi Pot (High Potential) or Dielectric voltage-withstand	Vdc	2200			•Tested at the RMS voltage equivalent of 1555 Vac

**PLS
Series**

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20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

9 - DIMMING FEATURES

Synchronized Start-up

The PLS series incorporates a synchronized start-up feature. When wired into the same dimmer, multiple PLS series drivers will dim to the same level and turn on within 20 ms of each other.

Fully Programmable Dimming Curve

In the PLS series, several 0-10V dimming profiles can be selected, such as a logarithmic profile, a non-linear profile with 1% minimum dimming, and a non-linear profile with 10% minimum dimming. Furthermore, every point in the non-linear dimming profile can be programmed using the programming software.

10 - PROTECTION FEATURES

Input Over Current Protection

The PLS series incorporates a primary AC line fuse for input over current protection to prevent damage to the LED driver and meet product safety requirements as outlined in Section 8.

Short Circuit and Over Current Protection

The PLS series is protected against short-circuit such that a short from any output to return shall not result in a fire hazard or shock hazard. The driver shall hiccup as a result of a short circuit or over current fault. Removal of the fault will return the driver to within normal operation. The driver shall recover, with no damage, from a short across the output for an indefinite period of time.

Internal Over temperature Protection

The PLS series is equipped with internal temperature sensor on the primary power train. Failure to stay within the convection power rating will result in the power supply reducing the available current (fold back) below the programmed amount. The main output current will be restored to the programmed value when the temperature of the built-in temperature sensor cools adequately.

Output Open Load Protection

When the LED load is removed, the output voltage of the PLS series is typically limited to 60 V, to meet Class 2 standard.

11 - OUTPUT POWER PROTECTION

De-Rating At Elevated Temperatures

The PLS series can be operated with cooling air temperatures above 50°C by linearly de-rating the total maximum output power (or current) by 2.5%/°C until internal over temperature protection activates.

Output Over-Power Protection

At turn-on with nominal AC input, the PLS' output power shall be clamped to 100%.

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20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

12 - 0-10 V DIMMING

The PLS series operate only with 0-10 V dimmers that sink current. They are not designed to operate with 0-10 V control systems that source current, as used in theatrical/entertainment systems. Developed in the 1980's, the 0-10 V sinking current control method is adopted by the International Electrotechnical Commission (IEC) as part of its IEC Standard 60929 Annex E.

The method to dim the output current of the driver is done via the +Dim/-Dim Signal pins. The +Dim/-Dim Signal pins respond to a 0 to 10 V signal, delivering 1% to 100% of the output current based on rated current for each model. A pull-up resistor is included internal to the driver. If the +Dim input is > 10 V or open circuited, the output current is programmed to 100% of the rated current.

0-10V dimming is isolated from AC input and DC output for -TPZ models and isolated from AC input for -TZ and TXZ models.

The maximum source current (flowing from the driver to the 0-10 V dimmer) supplied by the +Dim Signal pin is ≤ 0.5 mA. The tolerance of the output current while being dimmed shall be +/-8% typical until down to 1 V.

In the PLS series, several 0-10 V dimming profiles can be selected, such as a logarithmic profile, a non-linear profile with 1% minimum dimming, and a non-linear profile with 10% minimum dimming.
By default, the non-linear profile with 1% minimum dimming and NO dim-to-off is pre-loaded in the PLS series. In this non-linear 0-10 V dimming profile, 10 V to 8 V=100% of the output current, <1 V =1%.

Dimming Voltage	Typical Value
A	8.0 V
B	1.0 V
C	0.7 V
D	1.0 V
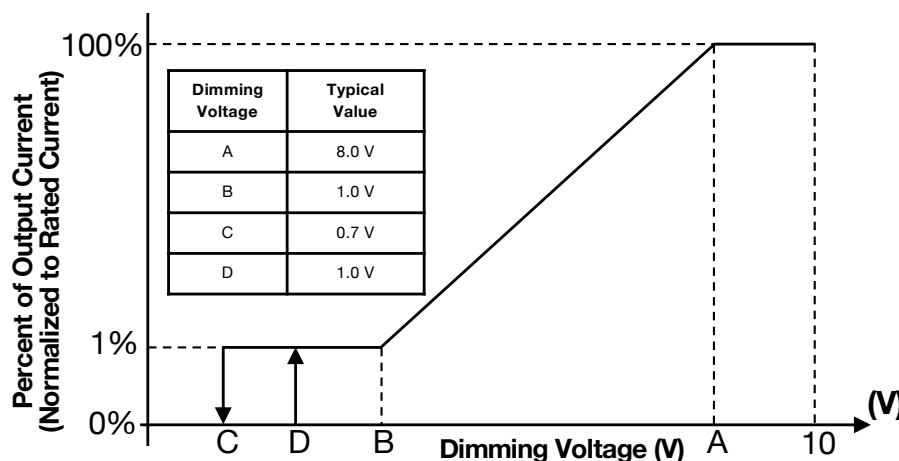
Figure 2

13 - COMPATIBLE 0-10 V DIMMERS
- Lutron, Nova series (part number NFTV)
- Lutron, Diva series (part number DVTV)
- Leviton, IllumaTech series (part number IP710-DL)

ERP
POWER + LIGHT™

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20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

14 - PROGRAMMING

The PLS series can be programmed by inserting the audio jack of the cable shown here below into the driver and by plugging the USB other end of the cable into a computer. ***The driver should not be powered on during the programming process.***

When ordering the PLS series, please make sure to order a programming cable. The part number for the programming cable is "PROG-JACK-USB". Additionally, there is an optional programming cradle intended for higher volume use that can be ordered using the part number "PROG-CRADLE".

Programming is done by using the ERP GUI, which enables the user to adjust output current and dimming profile.

Please note that, for each model, the **default output current setting is listed on page 2 of this datasheet**.

Furthermore, when connecting the driver to a computer using the programming cable, you can access the driver's internal data log and read the following information: SKU, serial number, manufacturing lot code, hours of operation, firmware revision, and power cycles.

While programming drivers in a lot, the ERP GUI can interface with a label printer, which enables the user to add configuration labels to driver labels in order to highlight programmed output current. Listed below is the equipment needed to print labels.

Equipment	Part Number	Where to buy
Printer	TSC TC210	barcodefactory.com/tsc/printers/tc210/99-059a001-54lf
Ribbon	TSC Prem. Resin, 60mm x 110mm	barcodefactory.com/tsc/35-r060110-23cf
Labels	BAR-.81x.28-1-TT	barcodefactory.com/barcodefactory/labels/bar-_81x_28-1-tt

For more information, please refer to the ERP GUI user's manual at:
erp-power.com/our-products/programming-software/

Programming Cable
Part number: PROG-JACK-USB

Programming Cradle
Part number: PROG-CRADLE

PLS20 20 W
PLS30 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

PLS Series
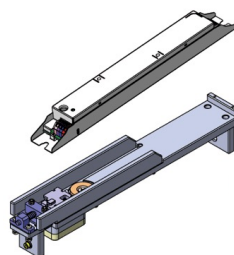
20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

15 - PREDICTED LIFETIME VERSUS CASE AND AMBIENT TEMPERATURE

Lifetime is defined by the measurement of the temperatures of all the electrolytic capacitors whose failure would affect light output under the nominal LED load and worst case AC line voltage. The graphs in figures 4 and 5 are determined by the electrolytic capacitor with the shortest lifetime, among all electrolytic capacitors. It represents a worst case scenario in which the LED driver is powered 24 hours/day, 7 days/week. The lifetime of an electrolytic capacitor is measured when any of the following changes in performance are observed:

1) Capacitance changes more than 20% of initial value
2) Dissipation Factor (tan δ): 150% or less of initial specified value
3) Equivalent Series Resistance (ESR): 150% or less of initial specified value
4) Leakage current: less of initial specified value

PLS-A50W-14-55-TPZ 120 Vac

Tamb (°C)	35.0	40.0	45.0	49.0	54.0	59.0	64.0	70.0
Tcase (°C)	61.0	66.0	71.0	75.0	80.0	85.0	90.0	96.0

Note: With baseplate dimension of 260 mm x 120 mm x 1 mm

Figure 4

PLS-A50W-14-55-TPZ 277 Vac

Tamb (°C)	35.0	41.0	46.0	51.0	56.0	61.0	66.0	70.0
Tcase (°C)	60.0	65.0	70.0	75.0	80.0	85.0	90.0	94.0

Note: With baseplate dimension of 260 mm x 120 mm x 1 mm
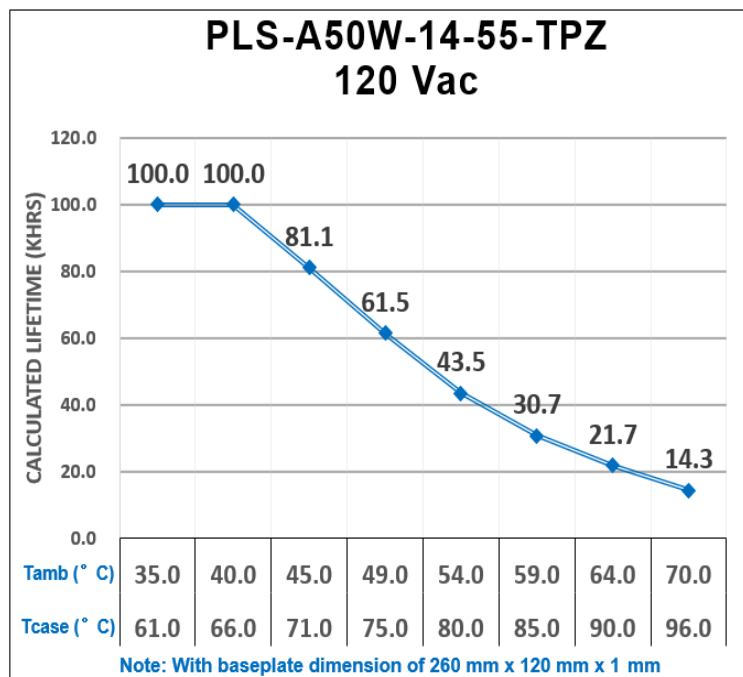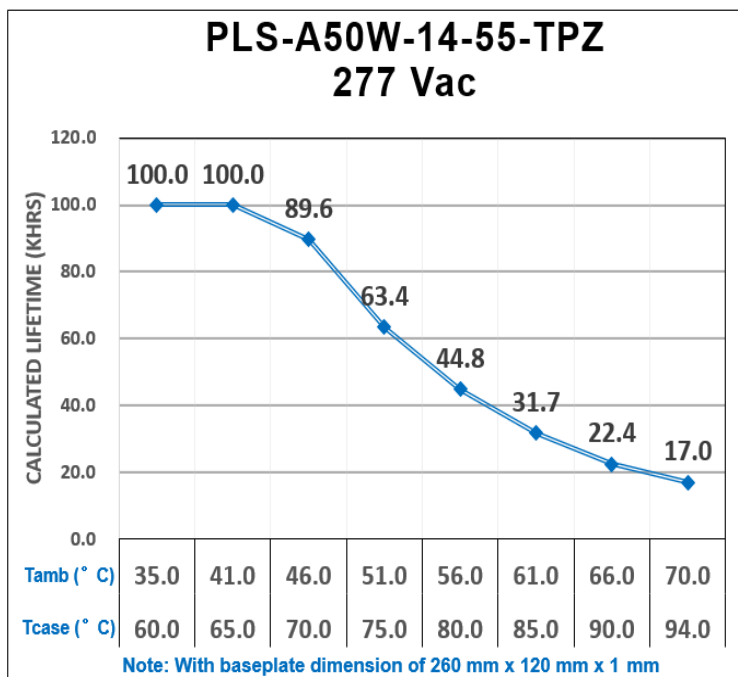
Figure 5

Notes:
• The ambient temperature $T_{ambient}$ and the differential between $T_{ambient}$ and T_{case} mentioned in the above graphs are relevant only as long as both the driver and the light fixture are exposed to the same ambient room temperature. If the LED driver is housed in an enclosure or covered by insulation material, then the ambient room temperature is no longer valid. In this situation, please refer only to the case temperature T_{case}.
• It should be noted the graph "Lifetime vs. Ambient Temperature" may have an error induced in the final application if the mounting has restricted convection flow around the case. For applications where this is evident, the actual case temperature measured at the Tc point in the application should be used for reliability calculations.
• Users must utilize proper thermal management techniques to ensure proper thermal conductivity between the driver and heat sink. The use of double-sided tape to mount the driver voids the warranty.

PLS Series

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PLS30 — 30 W
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PLS85 — 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming
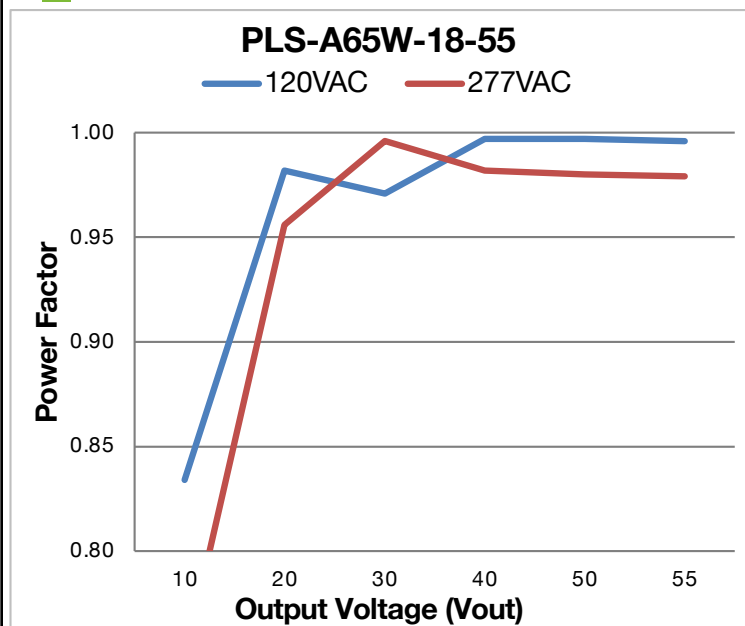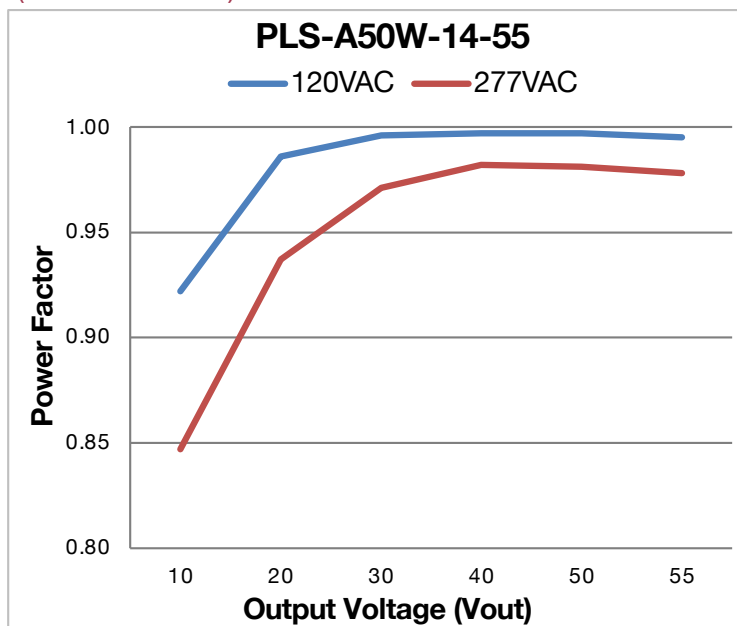
16 – EFFICIENCY VERSUS OUTPUT VOLTAGE (100% OF IOUT)
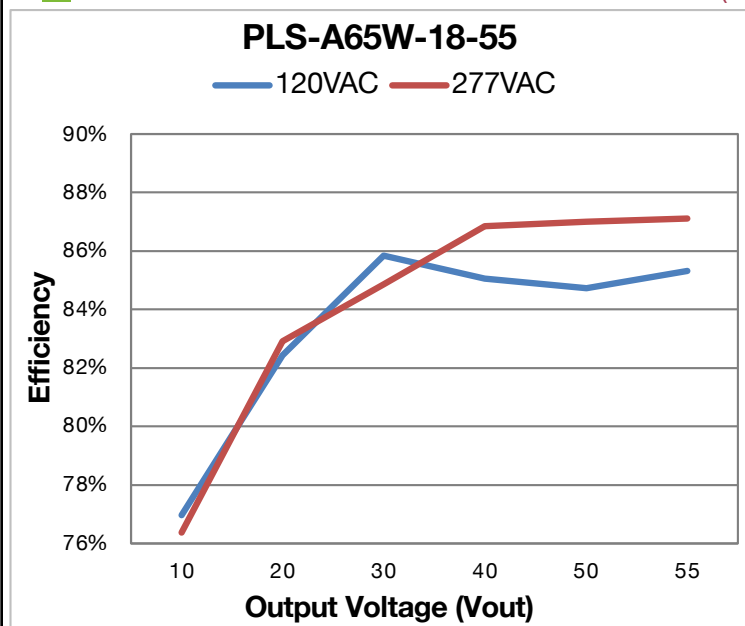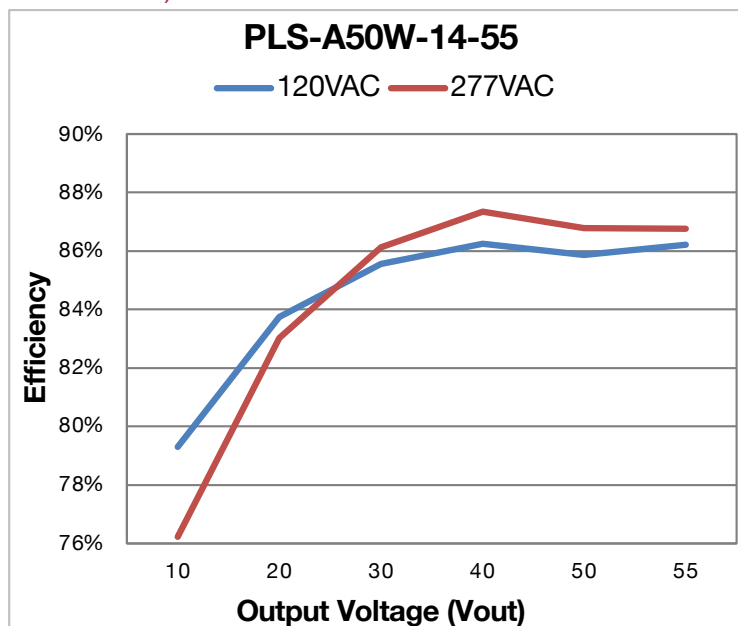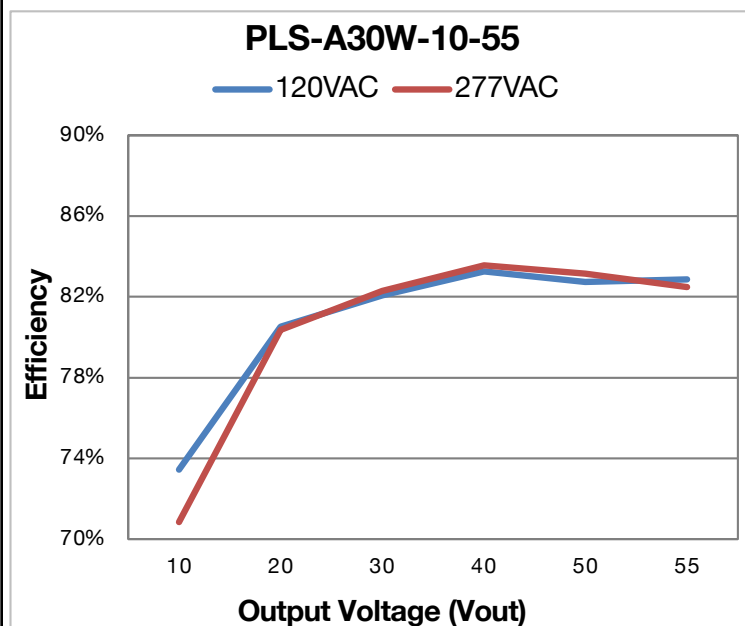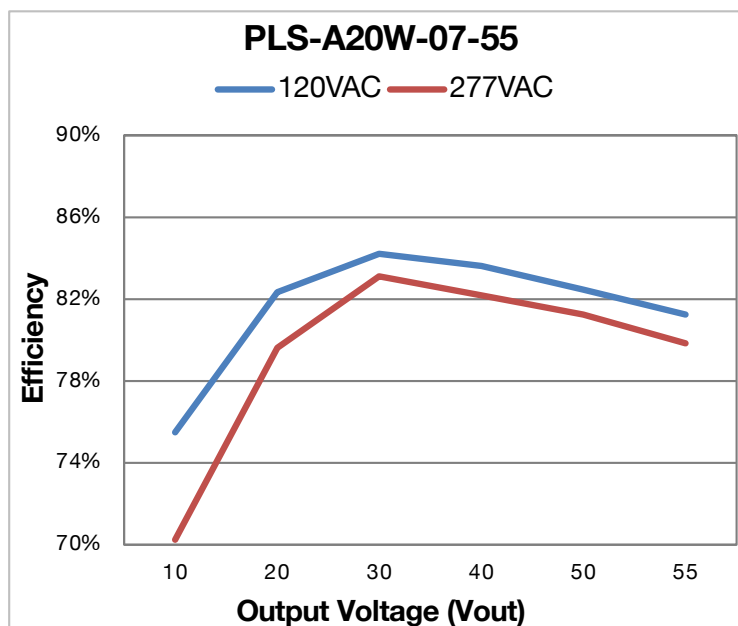
PLS-A65W-18-55
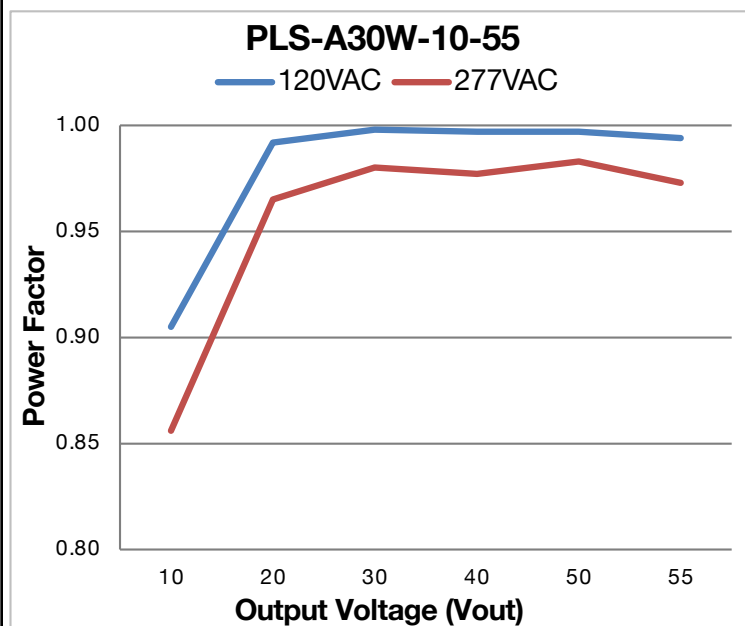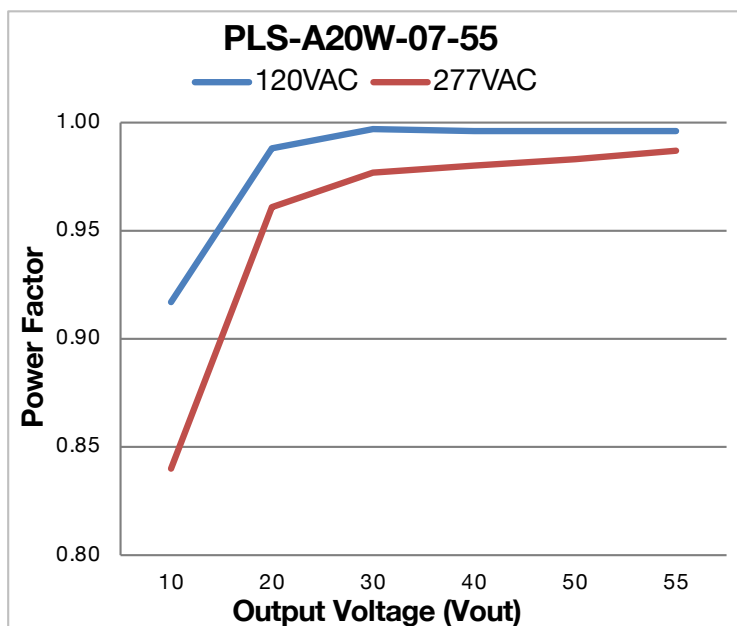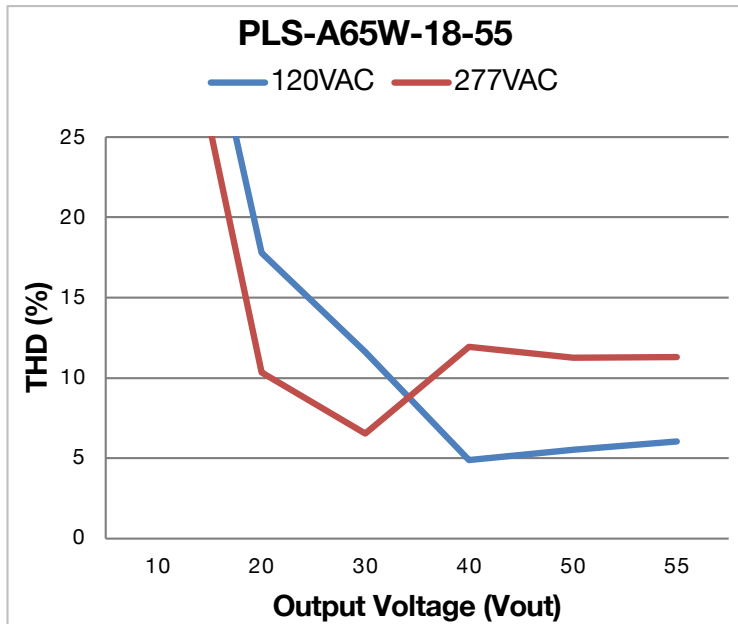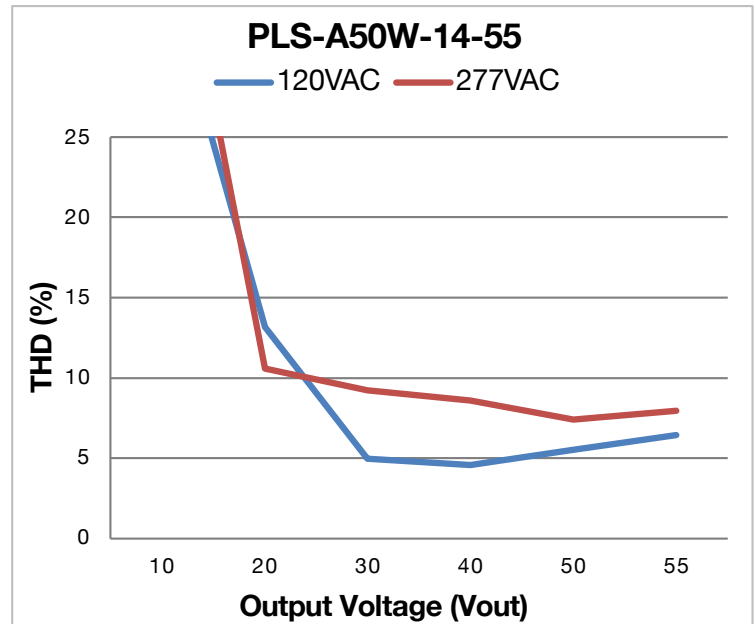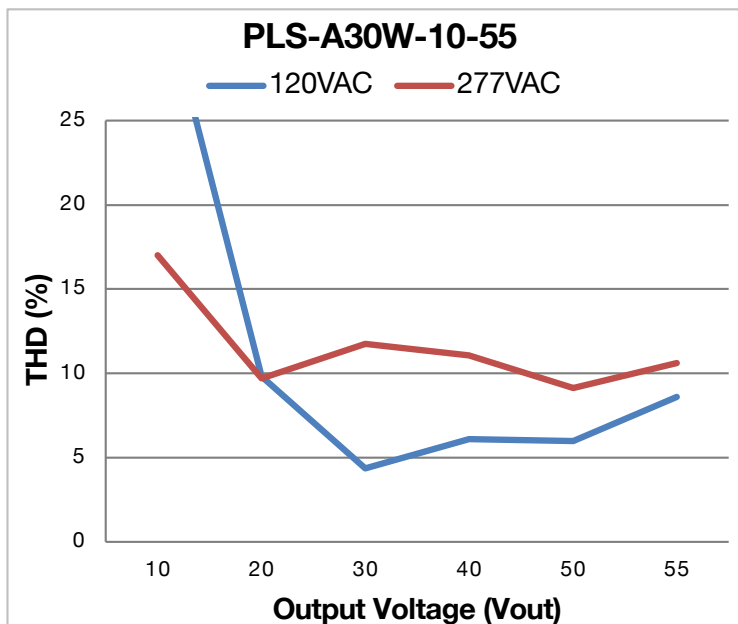

Figure 6

PLS-A50W-14-55

Figure 7

PLS-A30W-10-55

Figure 8

PLS-A20W-07-55

Figure 9

**PLS
Series**

PLS20 20 W
PLS30 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

17 – POWER FACTOR VERSUS OUTPUT VOLTAGE (100% OF IOUT)

PLS-A65W-18-55

Figure 10

PLS-A50W-14-55

Figure 11

PLS-A30W-10-55

Figure 12

PLS-A20W-07-55

Figure 13

PLS Series

PLS20 20 W
PLS30 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

■ 18 – THD VERSUS OUTPUT VOLTAGE (100% OF IOUT)

PLS-A65W-18-55

120VAC — 277VAC

Figure 14

PLS-A50W-14-55

120VAC — 277VAC

Figure 15

PLS-A30W-10-55

120VAC — 277VAC

Figure 16

PLS-A20W-07-55

120VAC — 277VAC

Figure 17

PLS Series

PLS20	**20 W**
PLS30	**30 W**
PLS50	**50 W**
PLS65	**65 W**
PLS85	**85 W**
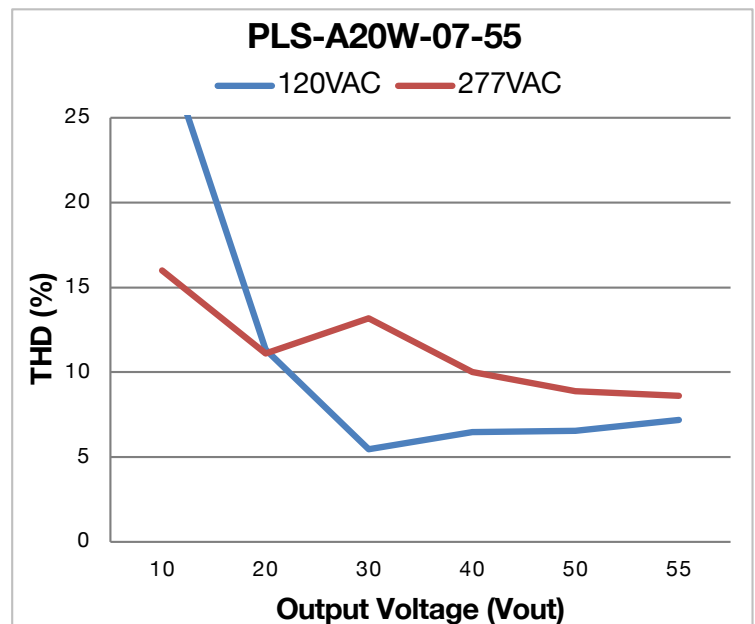
20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

19 - MECHANICAL DETAILS "-TZ" MODELS (PLS-A20W, PLS-A30W, PLS-A50W, PLS-A65W)

- **Dimensions:** L 257 x W 29 x H 25 mm (L 10.1 x W 1.2 x H 1.0 in.)
- **Volume:** 190 cm^3 (11.6 in^3)
- **Weight:** 240 g (8.5 oz)
- **Packaging:** Aluminum case
- **I/O Connections:** Terminal Blocks
- **Ingress Protection:** IP20 rated
- **Mounting Instructions**: The PLS driver case must be secured on a flat surface through the two mounting tabs, shown here below in the case outline drawings. The use of double-sided tape voids the warranty.

INPUT
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
4-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-04P-1Y-247)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM
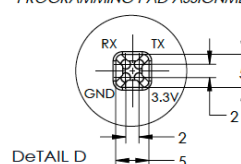
NEUTRAL: WHITE
LINE: BLACK
VOID: GRAY
GND: GREEN

OUTPUT / DIMMING
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
6-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-06P-YY-630)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM

PURPLE: + DIM
PINK: - DIM
GRAY: VOID
GRAY: VOID
BLUE: - LEDS
RED: + LEDS
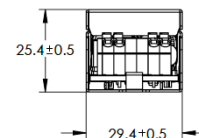
PROGRAMMING JACK
PRODUCT LABEL
TC POINT
13 REF
105 REF
2x- Ø 7.2
2x- Ø 5
245 ±0.5
252 ±0.5
28.2
198.1
(30.7)
257 ±0.5
25.4 ±0.5
29.4 ±0.5
11
D 35.3
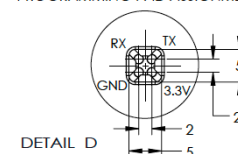
PROGRAMMING PAD ASSIGNMENT
RX TX
GND 3.3V
5 2 5
2
DETAIL D

All dimensions are in mm

Figure 18

PLS Series

PLS20 20 W
PLS30 30 W
PLS50 50 W
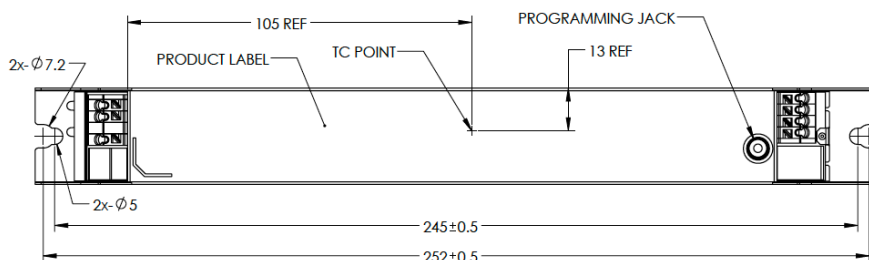**PLS65** 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

20 - MECHANICAL DETAILS "-TXZ" MODELS (PLS-A20W, PLS-A30W, PLS-A50W, PLS-A65W)

- **Dimensions:** L 257 x W 29 x H 25 mm (L 10.1 x W 1.2 x H 1.0 in.)
- **Volume:** 190 cm^3 (11.6 in^3)
- **Weight:** 240 g (8.5 oz)
- **Packaging:** Aluminum case
- **I/O Connections:** Terminal Blocks
- **Ingress Protection:** IP20 rated
- **Mounting Instructions:** The PLS driver case must be secured on a flat surface through the two mounting tabs, shown here below in the case outline drawings. The use of double-sided tape voids the warranty.
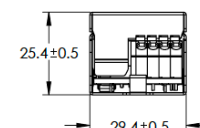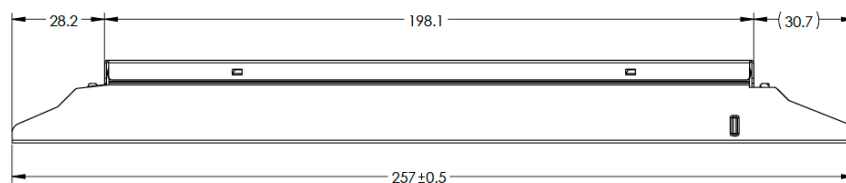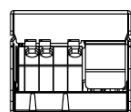
INPUT
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
4-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-04P-1Y-247)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM

NEUTRAL: WHITE
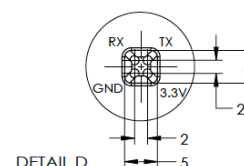LINE: BLACK
VOID: GRAY
GND: GREEN

OUTPUT / AUX/ DIMMING
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
6-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-06P-YY-629)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM

PURPLE: + DIM
PINK: - DIM
BROWN: - AUX
YELLOW: + AUX
BLUE: - LEDS
RED: + LEDS
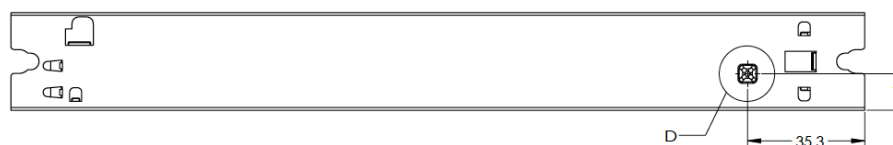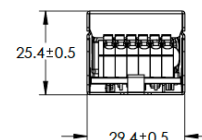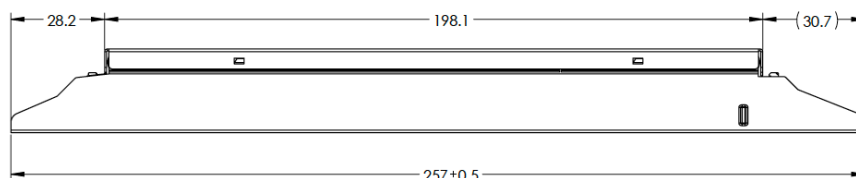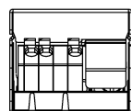
All dimensions are in mm

Figure 18

PLS Series

PLS20	20 W
PLS30	30 W
PLS50	50 W
PLS65	65 W
PLS85	85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

21 - MECHANICAL DETAILS "-TPZ" MODELS (PLS-A20W, PLS-A30W, PLS-A50W, PLS-A65W)

- **Dimensions:** L 257 x W 29 x H 25 mm (L 10.1 x W 1.2 x H 1.0 in.)
- **Volume:** 190 cm³ (11.6 in³)
- **Weight:** 240 g (8.5 oz)
- **Packaging:** Aluminum case
- **I/O Connections:** Terminal Blocks
- **Ingress Protection:** IP20 rated
- **Mounting Instructions:** The PLS driver case must be secured on a flat surface through the two mounting tabs, shown here below in the case outline drawings. The use of double-sided tape voids the warranty.

INPUT
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
4-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-04P-1Y-247)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM

NEUTRAL: WHITE
LINE: BLACK
VOID: GRAY
GND: GREEN

OUTPUT / DIMMING
PCB TERMINAL BLOCK, PUSH-IN TERMINATION
4-POLES, 3.5mm PITCH
(MFG: CHHE, CS200-00-350-04P-YY-318)
USE WITH 16-24 AWG, SOLID WIRE
STRIP LENGHT: 6~8MM

RED: + LEDS
BLUE: - LEDS
PURPLE: + DIM
PINK: - DIM

PROGRAMMING JACK
PRODUCT LABEL
TC POINT
105 REF
13 REF
2x-Ø7.2
2x-Ø5
245±0.5
252±0.5

28.2
198.1
(30.7)
25.4±0.5
29.4±0.5
257±0.5

PROGRAMMING PAD ASSIGNMENT
RX TX
GND 3.3V
5
2
2
5
DETAIL D

D
35.3
11

All dimensions are in mm

Figure 18

PLS20   **20 W**
PLS30   **30 W**
PLS Series
PLS50   **50 W**
PLS65   **65 W**
PLS85   **85 W**

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

22 - MECHANICAL DETAILS PLS-A85W MODELS

- **Dimensions:**   L 425 x W 29 x H 25 mm (L 16.7 x W 1.2 x H 1.0 in.)
- **Volume:**   308 cm³ (20.0 in³)
- **Weight:**   410 g (14.5 oz)
- **Packaging:**   Aluminum case
- **I/O Connections:**   Terminal Blocks
- **Ingress Protection:**   IP20 rated
- **Mounting Instructions**:   The PLS driver case must be secured on a flat surface through the two mounting tabs, shown here below in the case outline drawings. The use of double-sided tape voids the warranty.

All dimensions are in mm

Figure 18

**PLS
Series**
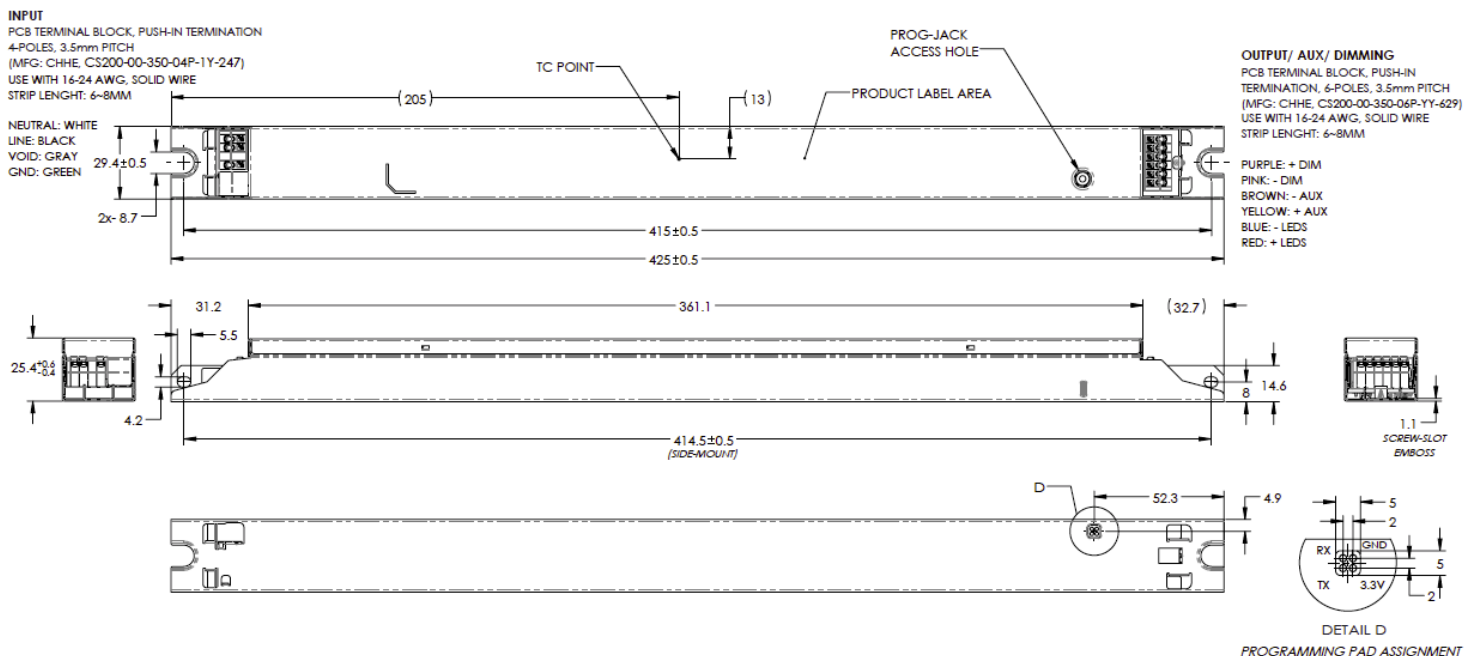
PLS20 20 W
PLS30 30 W
PLS50 50 W
PLS65 65 W
PLS85 85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

23 - LABELING

The PLS-A65W-18-55-TZ is used in figure 19 as an example to illustrate a typical label.
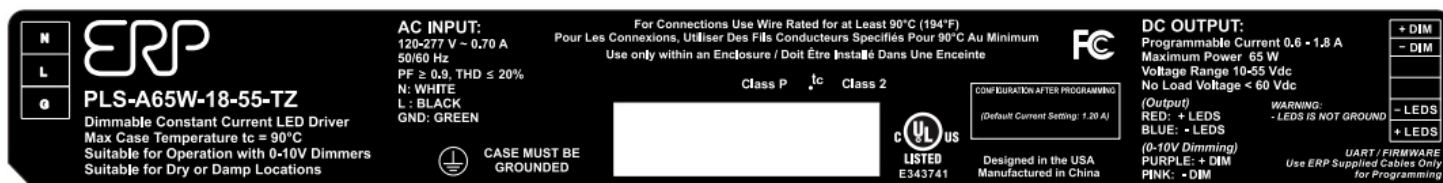
Figure 19

USA Headquarters
Tel: +1-805-517-1300
Fax: +1-805-517-1411
2625 Townsgate Road, Suite 106
Westlake Village, CA 91361, USA

CHINA Operations
Tel: +86-756-6266298
Fax: +86-756-6266299
No. 8 Pingdong Road 2
Zhuhai, Guangdong, China 519060

PLS Series

PLS20	20 W
PLS30	30 W
PLS50	50 W
PLS65	65 W
PLS85	85 W

20 to 85 W Programmable Constant Current Class 2 LED Driver with 0-10 V Dimming

Revision History

Date	Comments
06MAR2025	• Initial Release
18MAR2025	• Updated MCOs
20MAY2025	• Added PLS-A85W • Various Grammar Corrections