



- Universal Input to 305 VAC
- High Efficiency (Up to 84%)
- Active Power Factor Correction (typ 0.94)
- Constant Output Current
- Waterproof (IP66)
- All-Round Protection: OVP, SCP, OLP
- Complies with UL8750 & EN61347 Safety Regulations
- Optional Dimmer Control Feature



Model Number	Output Voltage Range	Output Amps Range	Efficiency @ 220Vin	Over Voltage Protection
*ELP25-1212(D or P)	4-12Volts(DC)	1.976-2.184 Amps	80%	13~18 Volts(DC)
*ELP25-1214(D or P)	5-14Volts(DC)	1.663-1.838 Amps	80%	16~20 Volts(DC)
*ELP25-1218(D or P)	6-18Volts(DC)	1.33-1.47 Amps	82%	21~24 Volts(DC)
*ELP25-1224(D or P)	8-24Volts(DC)	0.998-1.103 Amps	82%	26~30 Volts(DC)
*ELP25-1236(D or P)	12-36Volts(DC)	0.665-0.735 Amps	83%	42~46 Volts(DC)
*ELP25-1240(D or P)	13-40Volts(DC)	0.589-0.651 Amps	83%	44~48 Volts(DC)
*ELP25-1256(D or P)	19-56Volts(DC)	0.428-0.473 Amps	84%	59~62 Volts(DC)
*ELP25-1272(D or P)	24-72Volts(DC)	0.333-0.368 Amps	84%	82~90 Volts(DC)

* Note:

The Asterisk * denotes a choice of receiving this product WITH a Dimmer Control Feature (D) or WITHOUT the Dimmer Control Feature (P). Simply add the letter "D" or "P" to the end of the model number (i.e. "ELP25-1212D" or "ELP25-1212P") when ordering to receive the desired version.

25W LED Driver with PFC

ELP25 series

INPUT SPECIFICATIONS

Input Voltage Range	90-305VAC
Frequency Range	47-63 Hz
Input Current	0.32 Amps max @ 100VAC
	0.15 Amps max @ 220VAC
Inrush Current	20A @ 230VAC, 25°C Cold Start

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	2.0%
Load Regulation	5.0%
Ripple/Noise	25% pk-pk / 20MHz bandwidth
	0.1uF ceramic capacitor
	10uF electrolytic capacitor
Turn-on Delay Time	1.7S @ 110VAC
Output Overshoot / Undershoot	10% When power on or off
Over Voltage Protection	See Selection Chart
	Hiccup mode. Auto-Recover
Short Circuit Protection	No damage shall occur when any output operating in a short circuit condition. The power supply shall self-recover when the fault condition is removed
Over Load Protection	125% of Po
	Hiccup mode. Auto-Recover

GENERAL SPECIFICATIONS

Safety (Note 1)	
USA & Canada	UL8750 Compliance to UL1310
	Class 2, UL1012, UL935,
	CAN/CSA-C22.2 No. 0, CSA-C22.2
	No. 107.1, CSA-C22.2 No. 250.0
CE Europe	EN61347-1, EN61347-2-13
EMI	EN55015
Efficiency	See Selection Chart
EMS	Compliance to
	EN61000-4-2,3,4,6,8,11;
	EN61000-3-2,3
	EN61547
No load Power Dissipation	≤5.0W

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20°C to +70°C 10~100% RH
	(See Derate Curve)
Storage Temperature	-40°C to +85°C, 5~100% RH
MTBF	484KHrs min, min @ 80% Load,
	MIL-HDBK-217F (25°C) /110VAC
Life Time	79K Hrs; 110VAC, 45°C, 80% Load

PHYSICAL SPECIFICATIONS

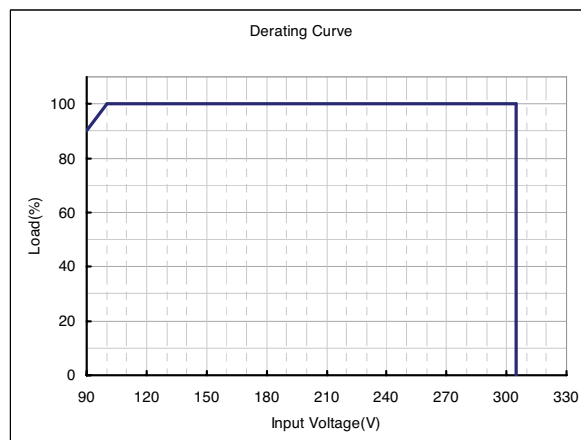
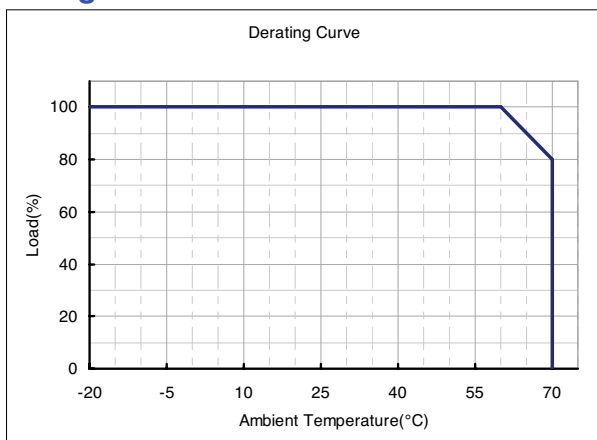
Size	
Millimeters	78 x 80 x 25
Inches	3.07" x 3.15" x 0.98"
Weight	7.05 oz (200g)

NOTE

- 1) 12-36 Volt outputs are Class 2 U.S. and Canada
The 40 Volt output is Class 2 U.S. ONLY
ALL others are NOT Class 2

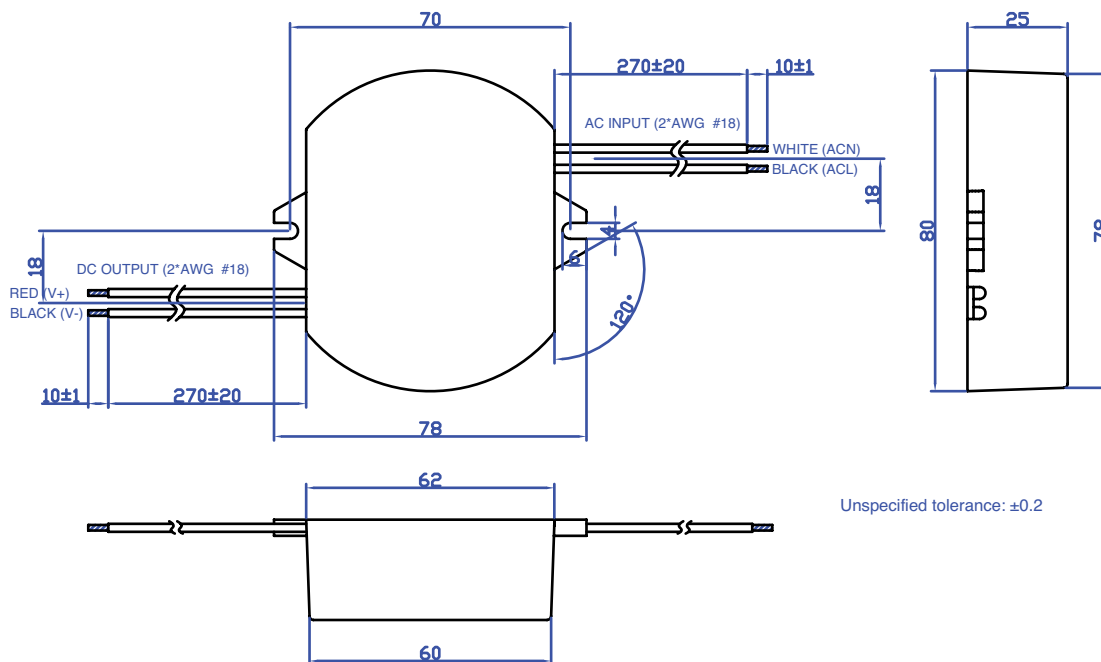
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

Derating Curves

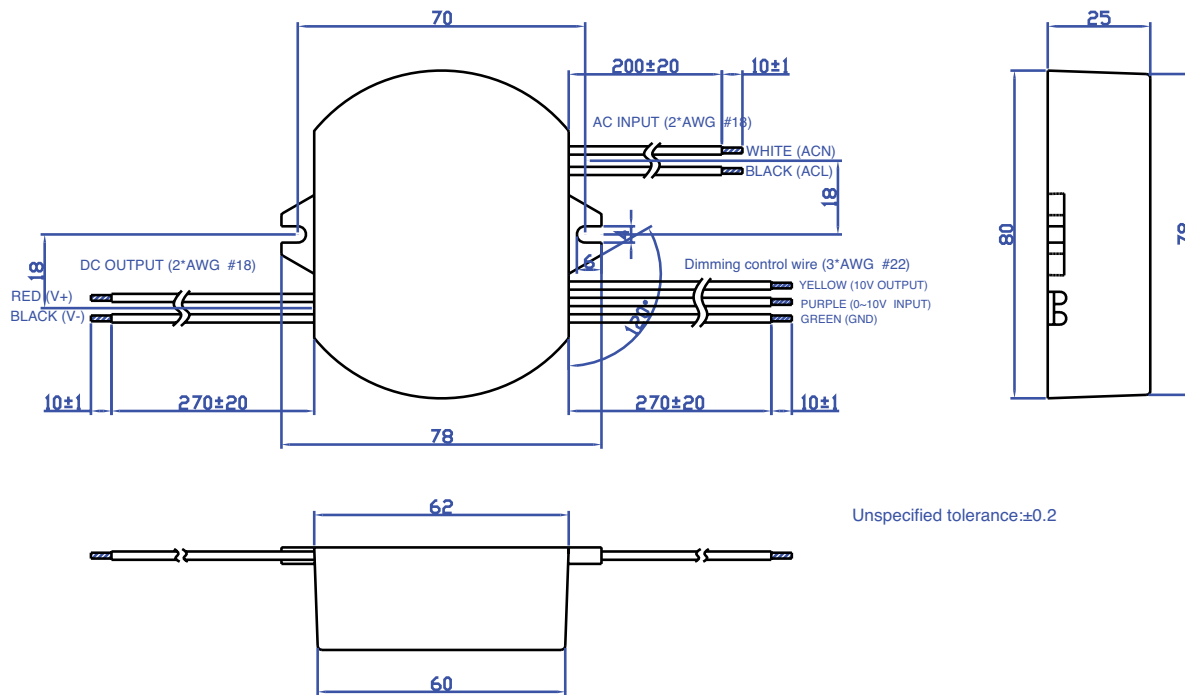


Mechanical Outline

ELP25-xxxxP



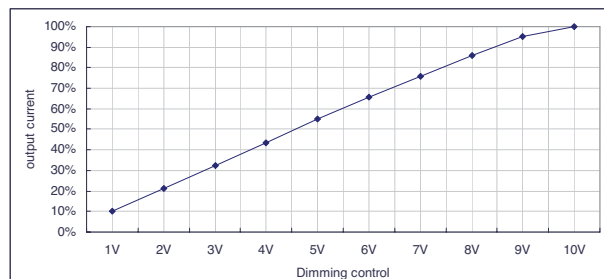
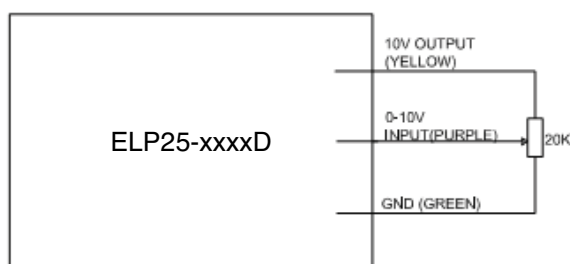
ELP25-xxxxD



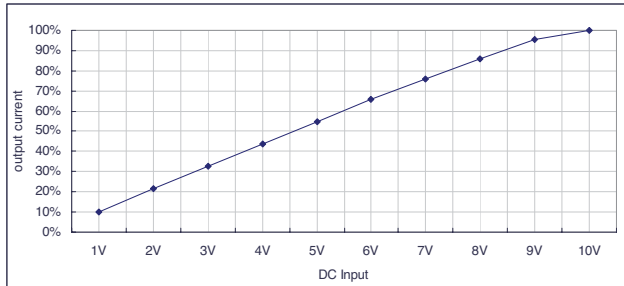
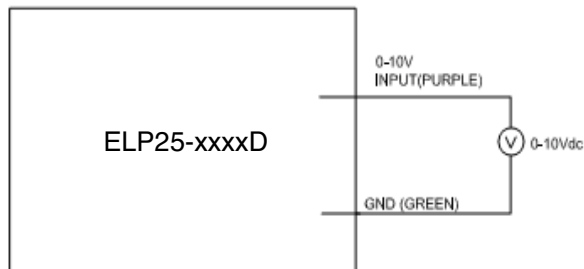
Dimming Control (On secondary side)

Parameter	Min.	Typ.	Max.	Notes
10V output voltage	9.8 V	10 V	10.2 V	
10V output source current	-10 mA	-	2 mA	
Absolute maximum voltage on the 0~10V input pin	-2 V	-	15 V	
Source current on 0~10V input pin	0 mA	-	1 mA	

The dimmer control may be operated from either a potentiometer or from an input signal of 0 – 10 Vdc. Two recommended implementations are provided below.



Implementation 1: Potentiometer Control

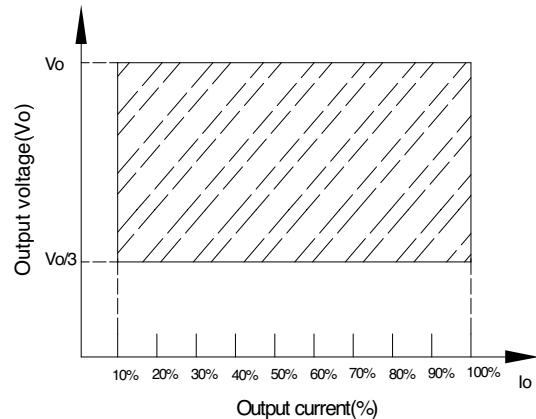


Implementation 2: DC input

Notes:

1. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. 33% of the max. output voltage for any given model).

2. If the input voltage is within 90-175Vac, the output current can be varied from 100% down to 10%. (Refer to right figure)



3. If the input voltage is within 175-305Vac, the output current can be varied from 100% down to 20%. (Refer to right figure)

