

# Preliminary Electrical Specification for **LBV60W48-Z**

Constant voltage LED Driver



## Approval Marks



	Item	Value	Remark
Input	Nominal voltage	220–240V	
	Nominal frequency	50–60Hz	
	AC voltage range	198–264V	
	DC voltage range (start)	NA	
	DC voltage range (operation)	NA	
	Nominal current	310mA	Full load @230VAC
	Total Harmonic Distortion (THD)	< 12%	Full load @230VAC
	Power factor	0.95	Full load @230VAC
	Displacement factor	0.95	Full load @230VAC
	Efficiency	88%(Typ.)	Full load @230VAC
	No-load power	NA	
	Stand-by power	NA	
	Protection class	II	Suitable for class II luminaires
	Inrush current	30A / 250us	
Earth leakage current	NA		
Output	Nominal voltage	48Vdc	
	Maximum voltage	49Vdc	
	voltage accuracy	± 2.5%	Full load @230VAC
	Output LF voltage ripple	±3%	(<120Hz)
	SVM	≤ 0.4	Full load @230VAC
	PstLM	≤ 1	Full load @230VAC
	Starting time	< 0.5 S	Full load @230VAC
	Nominal current range	0-1250mA	
	Nominal power range	0-60W	
	Maximum current	1250mA	
Maximum power	60W		
Dimming	Dimming control	NA	
	Dimming technique	NA	
	PWM frequency	NA	
	Dimming range	NA	
	Lowest dimming current	NA	
	Galvanic isolation	NA	

	Item	Value	Remark
<b>Environment</b>	Ambient temperature range $t_a$	-20°C - +45°C	
	Maximum case temperature $t_c$	90°C	
	Max. case temp. in fault condition	110°C	When operating under fault conditions, the temperature of the enclosure at any location should not exceed 110 °C
	Storage temperature range	-40°C - +90°C	
	Relative humidity	10% - 95%	
	Surge transient protection	1 kV	L/N
	Environmental rating	Indoor	
	IP rating	IP20	
	Mains switching cycles	>100,000	
	Expected lifetime	> 50,000 h, $t_c$ 90 °C @ $t_a$ 45 °C > 100000 h, $t_c$ 80 °C @ $t_a$ 35 °C	0.2 % / 1,000 h failure rate 0.1 % / 1,000 h failure rate
<b>Packing</b>	Gross weight/box	7.0 kg	
	Net weight/box	6.2 kg	
	Pcs/box	25 PCS	
	Dimension/box	240(L)*190(W)*185(H)mm	

#### Protections

Short- & open circuit proof, Auto, Overload protection

#### Conformity & Standards

Safety standard:	EN 61347-1, EN 61347-2-13, EN 62493
Performance:	EN 62384
EMC standard:	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547

#### Cable information

##### PRI

Cable cross-section	0.75-1.5□/AWG 18-16
Stripping	9mm

##### SEC

Cable cross-section	0.75-1.5□/AWG 18-16
Stripping	9mm

#### Terminal information

**PRI**-Push button

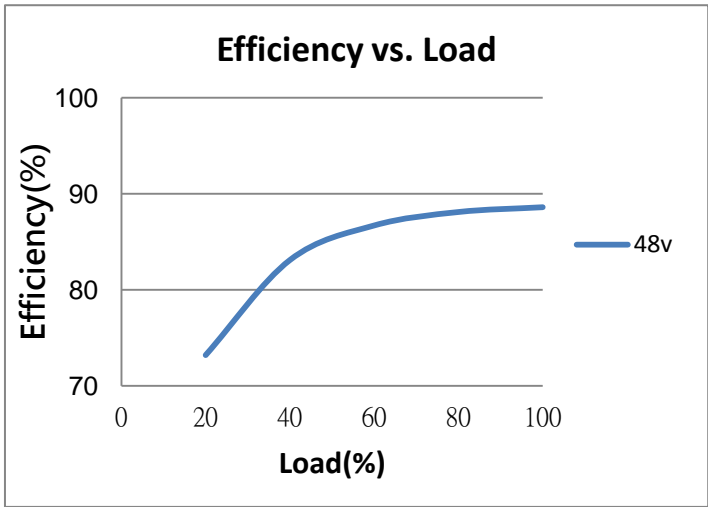
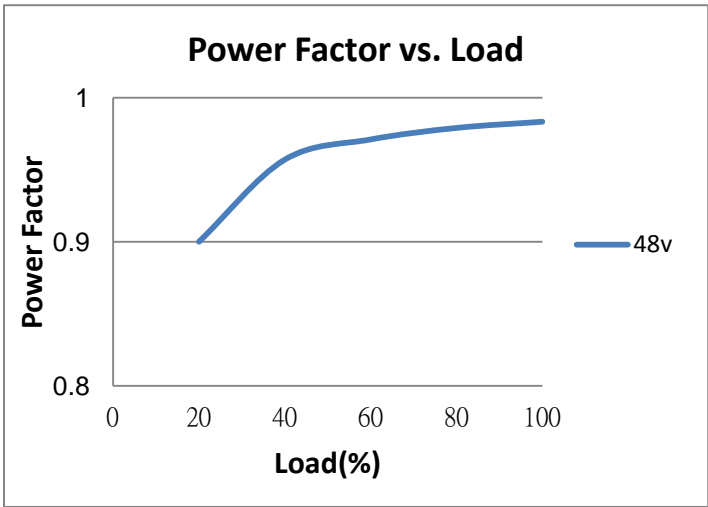
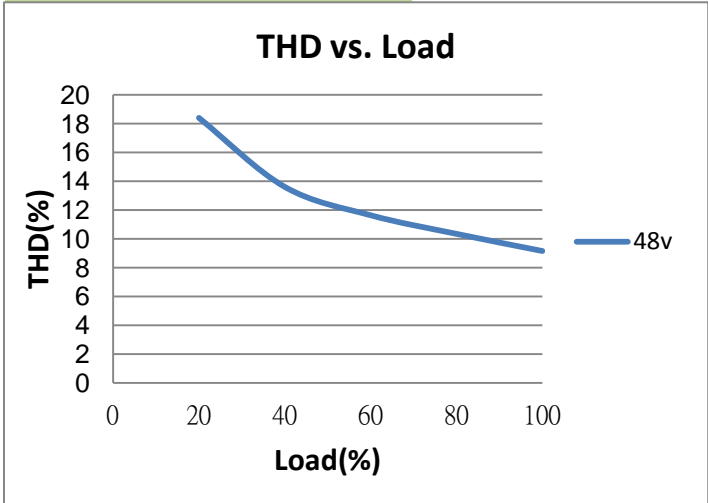
**SEC**-Push button

\* If not mentioned, all the test conditions are based on full load at 230VAC input (for 220-240 VAC input).

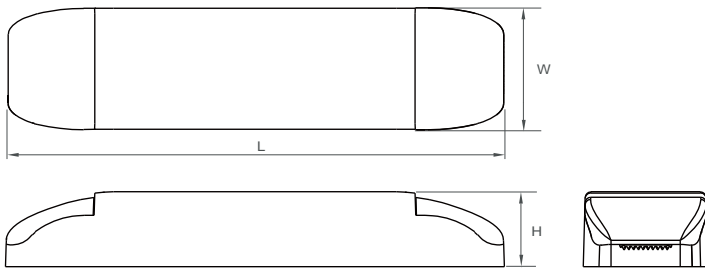
\*Subject to change without notice, HEP guarantees all products perform functionally well\*

\*Output side don't support on products of PWM dimming control.

Electrical Values



**Physical  
Parameter**



L : 180 mm    H : 27 mm  
 W : 45 mm  
 Slot On One Side Allowing Alignment : M $\pm$ 3 mm  
 Tolerance :  $\pm$ 1 mm , R :  $\pm$ 0.5 mm  
 Housing Material : Polycarbonate  
 Soldering : Lead - Free, Comply With RoHS  
 Label : Surface Print

**Wiring Diagram**

