



## Excellent reliability

**Philips LED Power Drivers**, specially designed for general LED lighting- and signage applications.



Philips LED Power Drivers have a universal mains input (100-240V) and generate a 24VDC voltage. The LED Power Drivers have an operating life matching that of LEDs. The range consists of a slim 20W version with a plastic housing and 60 and 100W versions with a metal housing. All three types have been tested according IP66.

Philips LED Power Drivers perfectly operate the Philips LED based systems including:

- Philips Affinium LED string: a wire connected string of LEDs for safer, more energy efficient signs and architectural effects.
- The LED Module System: lighting blocks that can be joined in a flexible “domino” like arrays to produce creative luminaires and displays.
- Philips Affinium LED posterbox modules. These modules can be built into rectangular signs or displays creating uniform lighting. The result is perfectly visible images.
- Philips Affinium LED freezer lighting. This energy efficient system is designed for replacement of traditional tubular fluorescent lamps inside glass-door freezer cabinets. It has an excellent total cost of ownership and gives a much better visual impression of merchandise on display and the entire freezer section.

### Excellent reliability

LED Power Drivers last up to 50,000 hours, to take advantage of the long life of LEDs. They come with the Philips electronic ballast guarantee.

### Low-temperature performance (-30°C)

So you can be confident in any outdoor application (tested according IP66).

### Hazard-free & universal mains (100-240V)

All major safety requirements (as defined in CE, UL, CSA and VDE) are met. Furthermore all three types come in universal mains, so you can install them in practically any location.

### Improved safety

Philips LED Power Drivers generate a limited output voltage and also provide isolation for safe operation (SELV).

### Typical applications include:

- Channel letter/contour lighting
- Architectural lighting
- Retail/theme lighting
- Orientation lighting
- Entertainment lighting
- Emergency and security lighting

# PHILIPS

sense and simplicity

## Specification

### Input

Parameter	Symbol	20W driver	60W driver	100W driver	Unit
Input voltage range	$V_{in}$	100-240V	100-240V	100-240V	V
Frequency	f	47/63	47/63	47/63	Hz
Power consumption range	$P_{in}$	25 max.	75 max.	120 max.	W
Power factor	$P_f$	0.9 min	0.9 min	0.9 min	-
Total harmonic distortion	THD	20%	20%	20%	%
Efficiency	-	80% typical	80% typical	80% typical	%

### Output

Parameter	Symbol	20W driver	60W driver	100W driver	Unit
Output voltage range	$V_{in}$	23 - 25.6	23 - 25.6	23 - 25.6	V
Output current	$I_a$	0.85	2.5	4.1	A
Output voltage ripple	-	1.0	1.0	1.0	%
Short circuit protection	-	yes	yes	yes	-

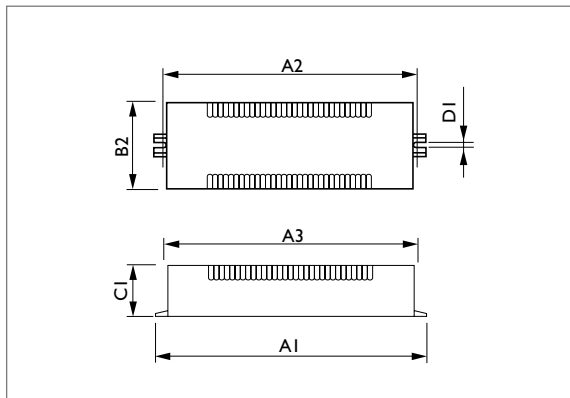
### Environmental ratings

Parameter	Symbol	Minimum	Maximum	Unit
Storage ambient temperature	$T_{st}$	-40	+85	°C
Operating ambient temperature	$T_{op}$	-30	+60	°C
Case temperature	$T_c$	-	+90	°C
Lifetime (at $T_a=40^{\circ}\text{C}$ and $T_c=70^{\circ}\text{C}$ )	L	-	50K	hrs.
Failure rate at max. lifetime	$L_{50k}$	-	5	%

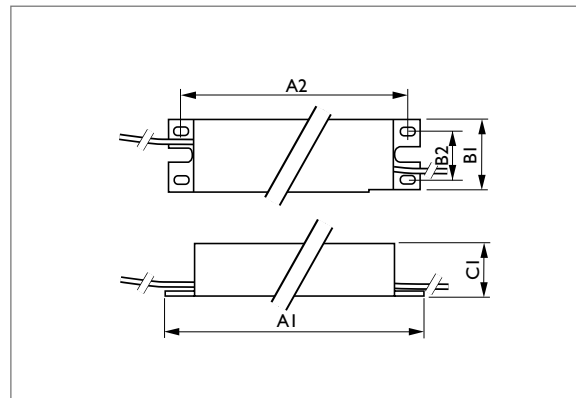
### Note:

1. Case temperature should be measured at test point ( $T_c$ ) as marked on driver label
2. The housing provides protection against the ingress of dust and heavy seas or water jets, tested according the IP66 classification for luminaries by the IEC

## Dimensional drawings



LED Power Driver 20W

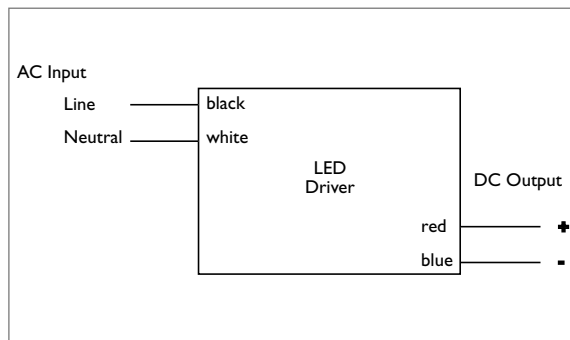


LED Power Driver 60W & 100W

Driver type	A1	A2	B1	B2	C1	D1
20W	140.0	130.0	37.0	18.5	25.0	4.4
60W	241.3	228.6	43.1	26.6	30.0	4.4
100W	241.3	228.6	43.1	26.6	30.0	4.4

### Notes:

1. All dimensions are in mm
2. Drawings are not to scale
3. Two mounting slots for M4 or #6 screws
4. Lead wires: 300mm length, 0.8 mm<sup>2</sup> solid-core copper



Driver wiring diagram for 20W, 60W & 100W

### Ordering data

LED Power Driver (IP66)	Box packaging (qty)	EOC code
100-240V 20W-24V	10	911940 30
100-240V 60W-24V	10	911469 30
100-240V 100W-24V	10	911964 30



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