

LED Power Supply

Constant Current Driver Series

- Long lasting and high reliability,
- Extra small compact housing,
- Suitable for use with downlights,
- Spotlights, and other indoor LED applications



Safety and EMC standard

- Safety according to
- EN 61347-1, 61347-2-13, 62493
- RI suppression according to EN 55015/CDN
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547

Approval marks



Item	Value Unit Remark
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1. Input

Nominal voltage	220 – 240 VAC
Nominal frequency	50 - 60 Hz
AC voltage range	180 – 264 VAC Permitted voltage range
DC voltage range	NA V
Maximum voltage	264 V
Nominal current	220mA 230V @ 25W load
Total Harmonic Distortion (THD)	PASS
Power factor	0.9 Full load, 230 V, 50 Hz
Efficiency	88 % Full load, 230 V, 50 Hz, typical
Stand-by power	NA W
Power loss	5.5 W at 230V input @ 42W load max.
Input power	47.8W at 230V input @ 42W load max.
Protection class	II
Inrush current	< 10 A twidth = 100 µs typical (measured at 50% Ipeak)

2. Output

Nominal voltage range	36 - 60VDC
Maximum voltage	68 VDC Open circuit
Nominal current range	700 Ma
Current accuracy	+/- 5 %
Current ripple	10 % typical
Nominal power range	26 – 42W Partial Load.
Maximum power	44.1 W Ta ≤50°C,
Safety isolation	SELV-equivalent 3,75 kVrms . Output to earth - Touch current < 0.5 mA
Flicker	Flicker free
Dimming range	10%-50%-100%

HW03-700G42SDA

3. Environment

Ambient temperature range t_a	-20 ... +50 °C
Maximum case temperature t_c	85 °C Measured on t_c point indicated of the product label.
Max. Case temp. in fault condition	110 °C
Storage temperature range	-25 ... +75 °C Cool down before operating
Relative humidity	5 ... 80 % Not condensing
Surge transient protection	1 1 kV L/N LN/PE acc. IEC 61000-3-2 (ANSI C62.41 Cat.A ...)
Environmental rating	Indoor
IP rating	IP 20
Mains switching cycles	> 50'000
Expected lifetime	30'000 hrs $t_c = 85^\circ\text{C}$, B10
	50'000 hrs $t_c = 75^\circ\text{C}$, B10

4. Switch function (option#1)

1. switch on --> 100% brightness;
 2. switch off and then switch on within 3s --> 50%brightness;
 3. switch off and then switch on within 3s --> 10%brightness;
 ***switch on after 5s, the chosen brightness is fixed;
 ***no memory function, if LED switch off for more than 5s, the brightness is 100% brightness when switch on.

5. Switch function (option#2)

Dimming operation of Option 2:
 1. switch on --> 100% brightness;
 2. switch off and then switch on within 3s --> 50%brightness;
 3. switch off and then switch on within 3s --> 20%brightness;
 ***switch on after 5s, the chosen brightness is fixed;
 ***has memory function, if LED switch off for more than 5s, the brightness is fixed brightness when switch on .
 ***switch on/off 5times, reset successful.

6. Protection

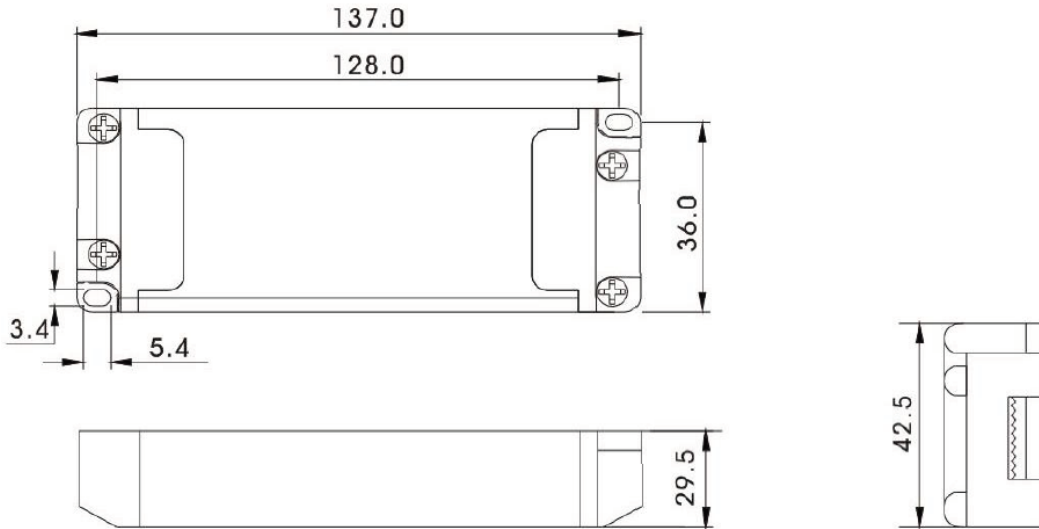
Overheating protection	yes, automatic reversible
Overload protection	yes, automatic reversible
Short-circuit protection	yes, automatic reversible
Hot plug-in protection	No, Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

7. Dimensions | Weight

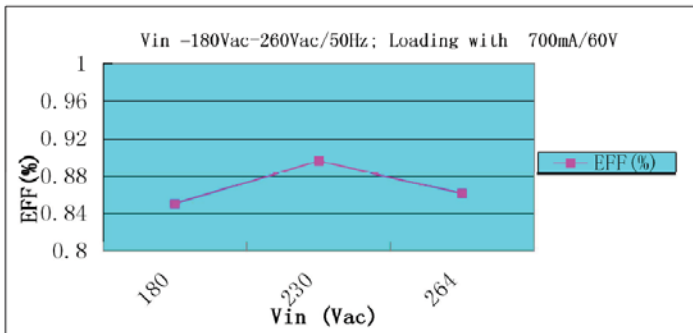
Dimensions	137 x 42.5 x 29.5
Weight	155g
Max. cable length	1.2m
Cable crosssection, input side	0.5...1.5 mm ²
Cable crosssection, output side	0.2...1.5 mm ²

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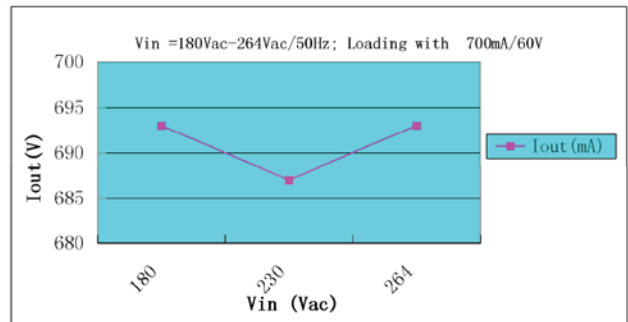
Dimensions



Variable Input Vs Efficiency



Variable Input Vs Iout Measurement



Variable Input Vs PF Measurement

