

## Datenblatt / Data Sheet

**Netzteil 48V DC - 60W/ 150W / 240W**

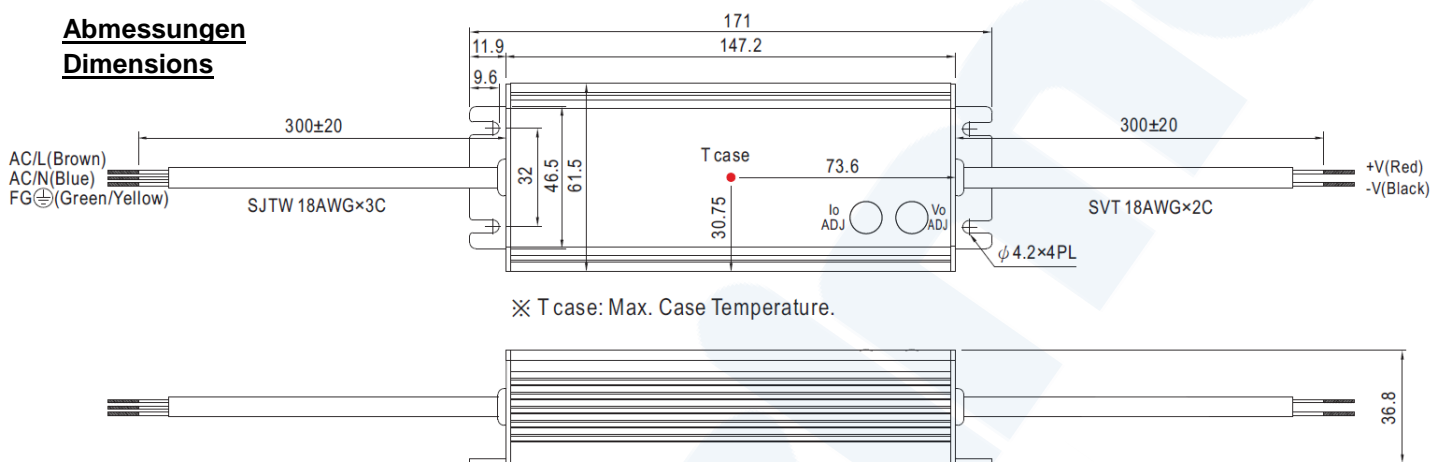
Power supply 48V DC - 60W / 150W / 240W



Bezeichnung / Description	Eigenschaften / Characteristics		
Artikelnummer / Item no.	<b>66004806</b>	<b>66004815</b>	<b>66004824</b>
Gleichspannung / DC voltage	48V		
Konstantstrombereich / Constant current region 4)	28.8-48V	24-48V	24-48V
Nennstrom / Rated current	1.3A	3.2A	5A
Nennleistung / Rated power	62.4W	153.6W	240W
Restwelligkeit / Ripple & Noise 2)	300mV p-p	200mV p-p	250mV p-p
Einstellbereich Ausgangsspannung / Voltage adj. range	44-53V	43-53V	44.8-51.2V
Einstellbereich Ausgangsstrom / Current adj. range	0.78-1.3A	1.92-3.2A	2.5-5A
Spannungstoleranz / Voltage tolerance 3)	durch internes Potentiometer einstellbar / can be adjusted by internal potentiometer		
Leistungsregelung / Line regulation	± 1.0%		
Lastregelung / Load regulation	± 0.5%		
Setup-, Anstiegszeit / Setup, rise time 8)	± 0.5%		
Pufferzeit (typ.) / Hold up time (typ.)	500ms, 80ms		
Spannungsbereich / Voltage range 5)	bei Volllast / @ full load		
Frequenzbereich / Frequency range	16ms bei Volllast / 16ms @ full load		
Leistungsfaktor / Power factor	90 ~ 305V AC / 127 ~ 431V DC		
Effizienz (typ.) / Efficiency (typ.)	47 ~ 63Hz		
Wechselstrom / AC current	115VAC: 0.98 / 230VAC: 0.95		
Einschaltstrom / Inrush current	90.5%	94%	93%
Kriechstrom / Leakage current	0.64A/115V AC 0.32A/230V AC	1.7A/115V AC 0.75A/230V AC	4A/115V AC 2A/230V AC
Überlast / Overload 4)	Kaltstart 55A/230V AC		
Kurzschluß / Short circuit	Kaltstart 65A/230V AC		
Überspannung / Overvoltage	Kaltstart 75A/230V AC		
Überhitzung / Over temperature	<0.75mA/277V AC		
Arbeitstemperatur / Working temperature	95 - 108%		
Feuchtigkeit / Working humidity	Schutzart : Ausschaltung ; Wiederherstellung nach Fehlerbehebung		
Temp. coefficient / Temperaturkoeffizient	Schutzart : Ausschaltung ; Wiederherstellung nach Fehlerbehebung		
Vibration / Vibration	54-65V		
Sicherheitsstandards / Safety standards 7)	54-63V		
Spannungsfestigkeit / Withstand voltage	55-63V		
Isolationswiderstand / Insulation resistance	Schutzart : Ausschaltung, Wiederherstellung nach Fehlerbehebung		
EMV Emission / EMC emission	Schutzart : Ausschaltung, Wiederherstellung nach Absinken d. Temp		
EMV Störfestigkeit / EMC immunity	-40°C ~ +70°C		
Mittlere Lebensdauer / MTBF	20 ~ 95% nicht kondensierend		
	-40°C ~ +80°C, 10 ~ 95% RH		
	± 0.03%/°C (0 ~ 50°C)		
	10 ~ 500Hz, 2G 12 min. 1 Zyklus, 72 Min. Dauer. entlang der X,Y,Z Achsen		
	UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, UL60950-1, TUV EN60950-1, IP65, J61347-1, UL60950-1, TUV EN60950-1, J61347-2-13 approved		
	only 66004824: UL1012, CAN/CSA C22.2 No. 107.101		
	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC		
	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH		
	Einhaltung von EN55015, EN61000-3-2 Class C (≥50% load), EN61000-3-3 Only 66004806 and 66004815: EN55022 (CISPR22) Class B		
	Einhaltung von EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4kV), criteria B (at 66004824) / criteria A (at 66004806 and 66004815)		
	338K hrs min.	192.2K hrs min.	207.9K hrs min.
	MIL-HDBK-217F (25°C)		

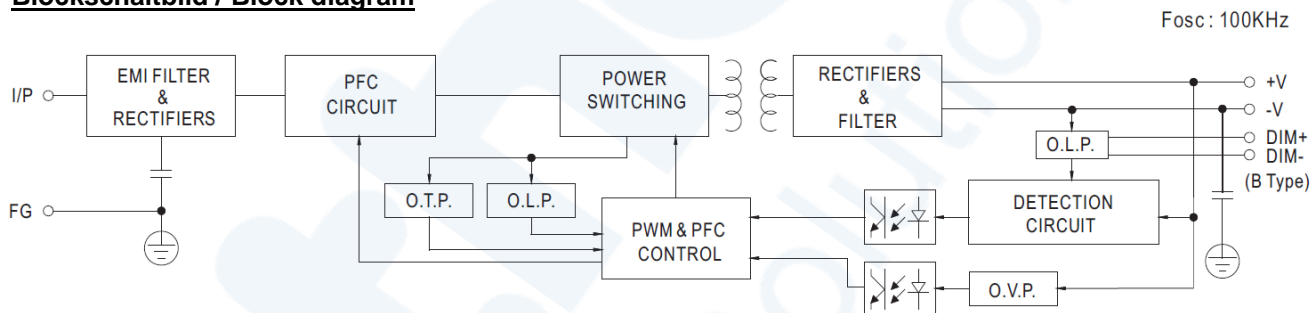
# 66004806

## Abmessungen Dimensions

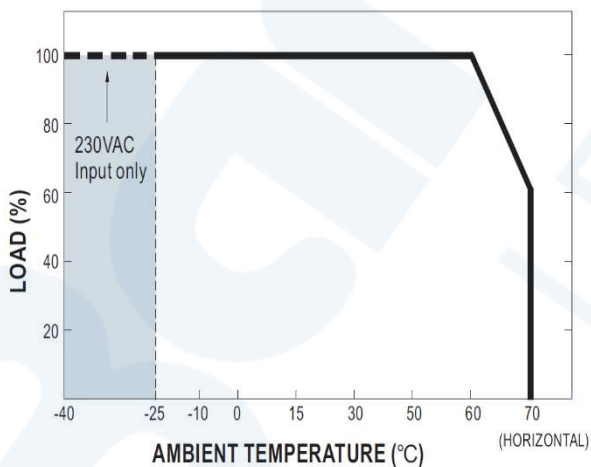


※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
 (Can access by removing the rubber stopper on the case.)

## Blockschaltbild / Block diagram

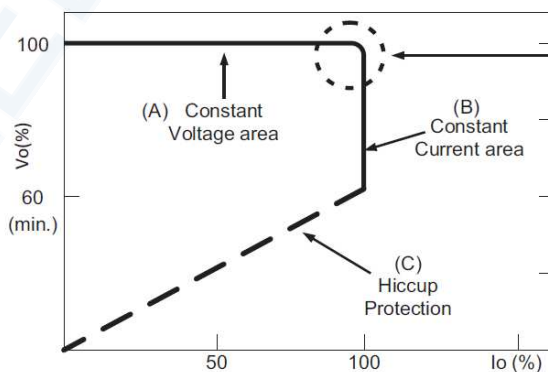


## Derating-Kurve / Derating curve



## Betriebsarten LEDs / Driving methods of LED module

There are two major kinds of LED drive method "direct drive" and "with LED driver". A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs. The LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B)).

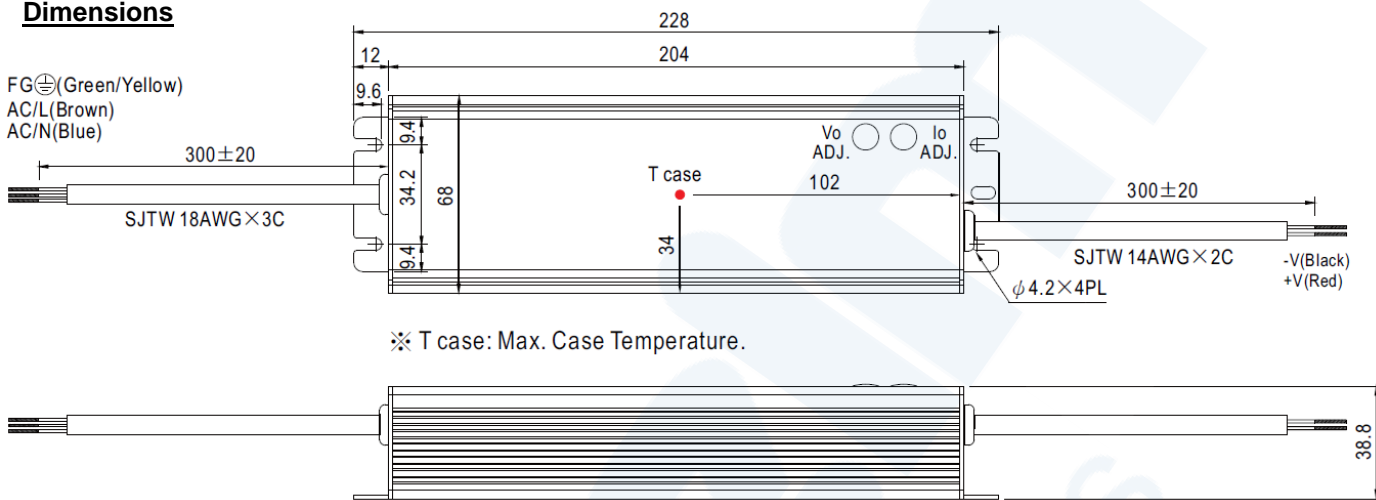


Typical LED power supply I-V curve

# 66004815

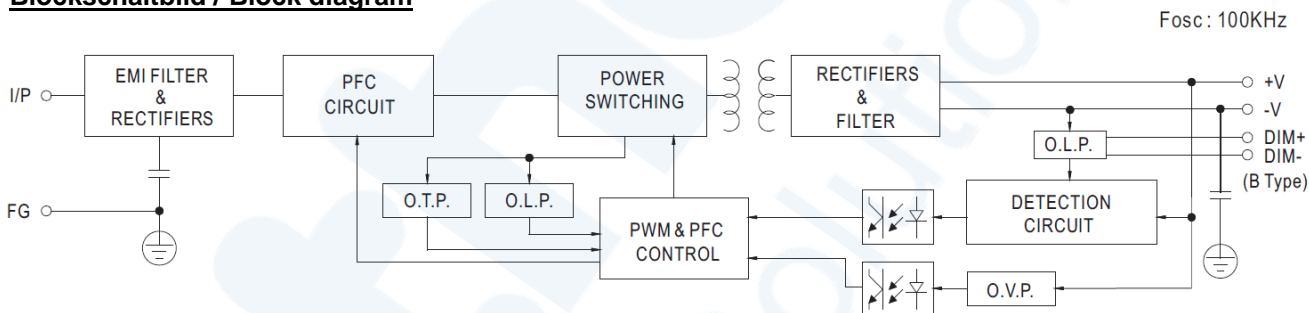
※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
 (Can access by removing the rubber stopper on the case.)

## Abmessungen Dimensions

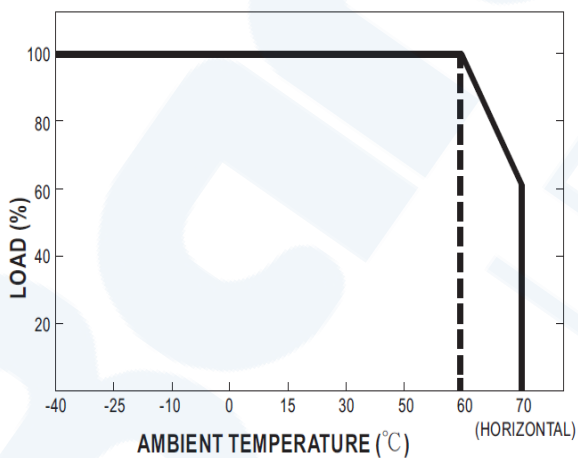


※ T case: Max. Case Temperature.

## Blockschaltbild / Block diagram

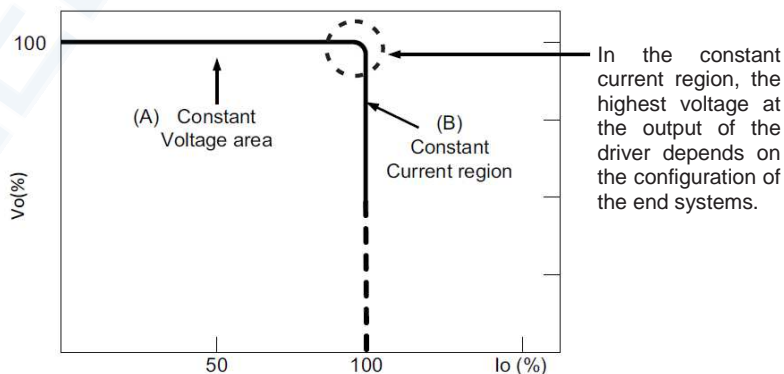


## Derating-Kurve / Derating curve



## Betriebsarten LEDs / Driving methods of LED module

There are two major kinds of LED drive method "direct drive" and "with LED driver". A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs. The LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



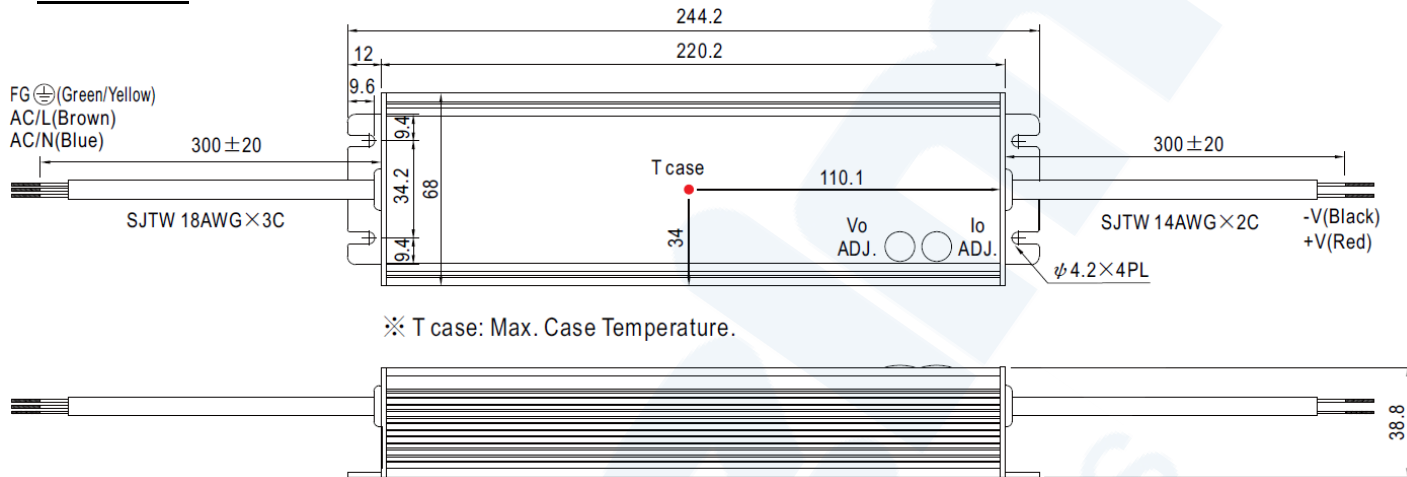
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Typical LED power supply I-V curve

# 66004824

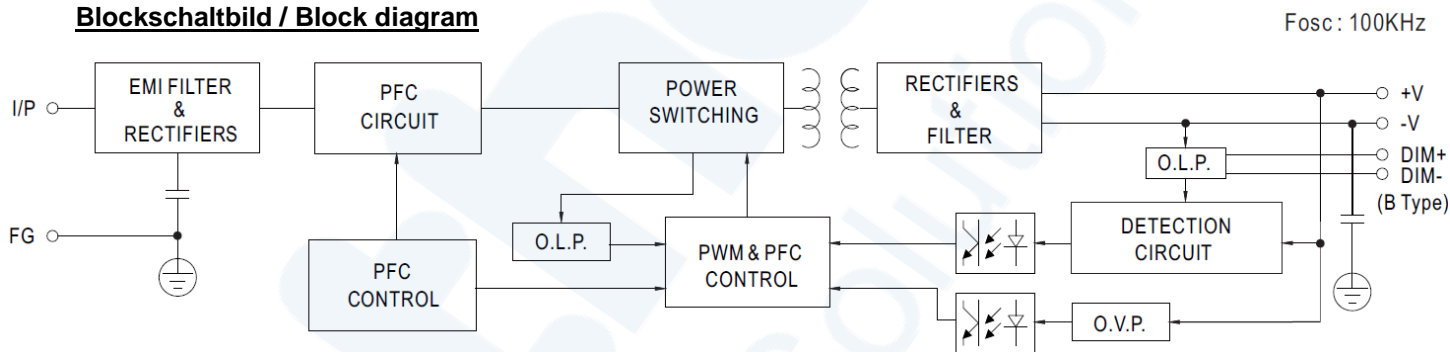
※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
 (Can access by removing the rubber stopper on the case.)

## Abmessungen Dimensions

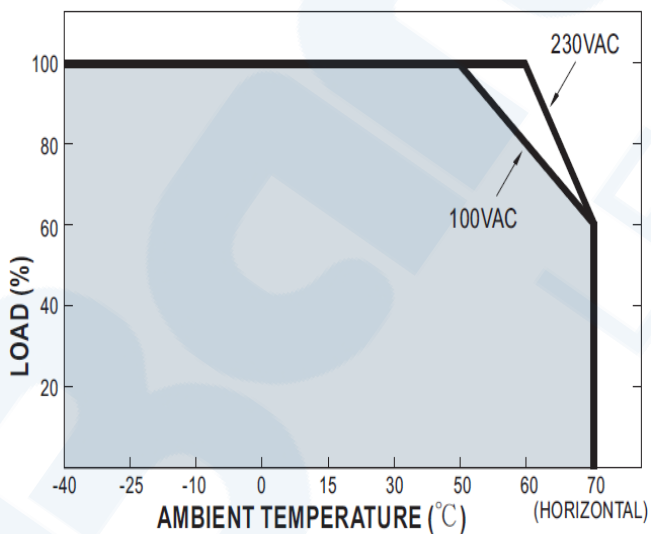


※ T case: Max. Case Temperature.

## Blockschaltbild / Block diagram

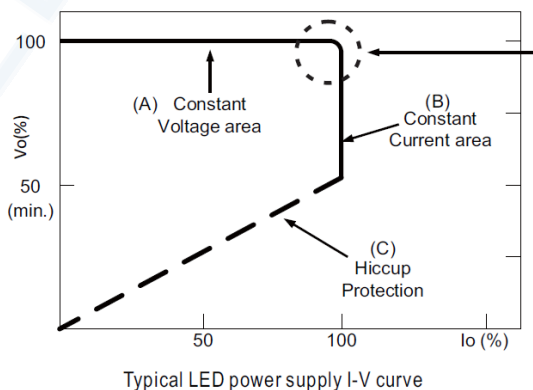


## Derating-Kurve / Derating curve



## Betriebsarten LEDs / Driving methods of LED module

There are two major kinds of LED drive method "direct drive" and "with LED driver". A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs. The LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

---

### Anmerkungen / Notes

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Please refer to "DRIVING METHODS OF LED MODULE".
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
7. Safety and EMC design refer to EN60598-1, subject CNS15233, GB7000.1, FCC part18.
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.