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Barthelme
LED Solutions

Datenblatt / Data Sheet

Netzteil 24V DC - 150W

Power supply 24V DC - 150W

Bezeichnung / Description		Eigenschaften / Characteristics	
Artikelnummer / Item no.			**66000219**
Gleichspannung / DC voltage		Ausgang Output	24V
Konstantstrombereich / Constant current region	4)		12-24V
Nennstrom / Rated current			6.3A
Nennleistung / Rated power			151.2W
Restwelligkeit / Ripple & Noise	2)		150mV p-p
Einstellbereich Ausgangsspannung / Voltage adj. range	6)		22-27V
Einstellbereich Ausgangsstrom / Current adj. range			3.8-6.3A
			durch internes Potentiometer einstellbar / *can be adjusted by internal potentiometer*
Spannungstoleranz / Voltage tolerance	3)		± 1.0%
Leistungsregelung / Line regulation			± 0.5%
Lastregelung / Load regulation			± 0.5%
Setup-, Anstiegszeit / Setup, rise time	8)		500ms, 50ms
			bei Volllast / *@ full load*
Pufferzeit (typ.) / Hold up time (typ.)			16ms bei Volllast / *16ms @ full load*
Spannungsbereich / Voltage range	5)	Eingang Input	90 ~ 305V AC / 127 ~ 431V DC
Frequenzbereich / Frequency range			47 ~ 63Hz
Leistungsfaktor / Power factor			115VAC: 0.98 / 230VAC: 0.95
Effizienz (typ.) / Efficiency (typ.)			93%
Wechselstrom / AC current			1.7A/115V AC - 0.75A/230V AC
Einschaltstrom / Inrush current			Kaltstart 65A/230V AC
Kriechstrom / Leakage current			<0.75mA/277V AC
Überlast / Overload		Schutz Protection	95 - 108% Schutzart : Ausschaltung ; Wiederherstellung nach Fehlerbehebung
Kurzschluß / Short circuit			Schutzart : Ausschaltung ; Wiederherstellung nach Fehlerbehebung
Überspannung / Overvoltage			28-34V
			Schutzart : Ausschaltung, Wiederherstellung nach Fehlerbehebung
Überhitzung / Over temperature			Schutzart : Ausschaltung, Wiederherstellung nach Absinken d. Temp
Arbeitstemperatur / Working temperature		Umfeld Environment	-40°C ~ +70°C
Feuchtigkeit / Working humidity			20 ~ 95% nicht kondensierend
Lagertemperatur und -feuchtigkeit **Storage temperature , humidity**			-40°C ~ +80°C, 10 ~ 95% RH
Temp. coefficient / Temperaturkoeffizient			± 0.03%/°C (0 ~ 50°C)
Vibration / Vibration			10 ~ 500Hz, 5G 12 min. 1 Zyklus, 72 Min. Dauer. entlang der X,Y,Z Achsen
Sicherheitsstandards / Safety standards	7)	Schutz Safety	UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1
Spannungsfestigkeit / Withstand voltage			I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC
Isolationswiderstand / Insulation resistance			I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH
EMV Emission / EMC emission			Einhaltung von EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≧60% load) ; EN61000-3-3
EMV Störfestigkeit / EMC immunity			Einhaltung von EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Mittlere Lebensdauer / MTBF			192.2K hrs min. MIL-HDBK-217F (25°C)

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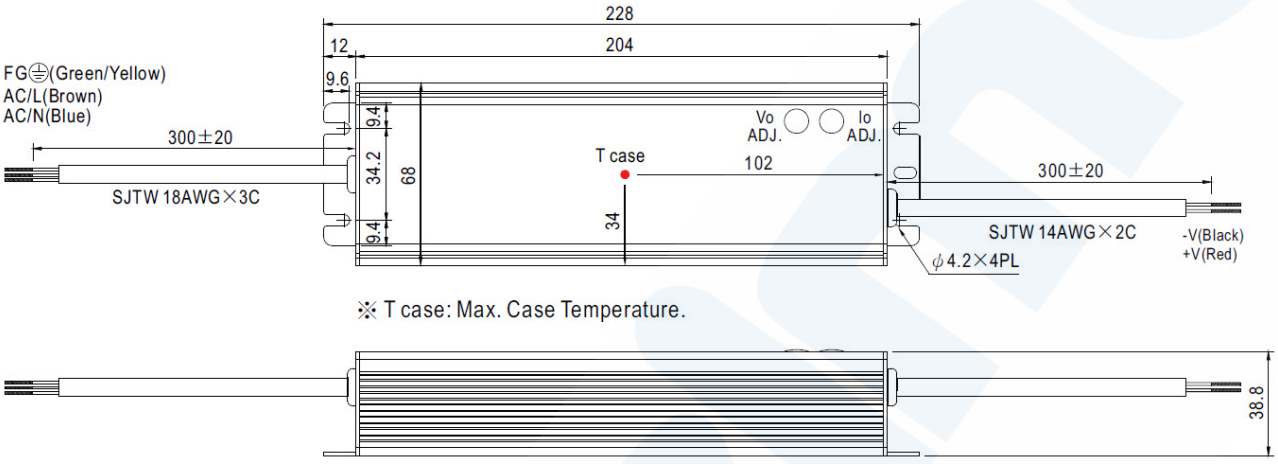
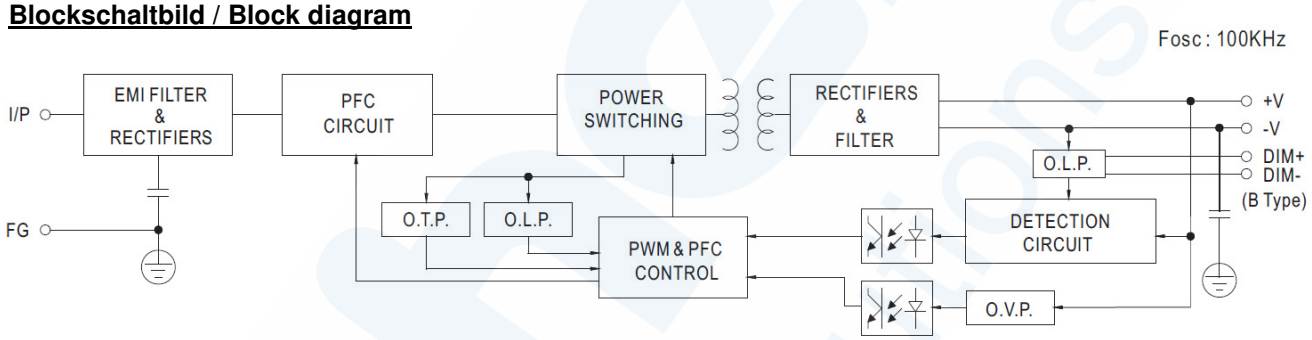
Abmessungen
Dimensions

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

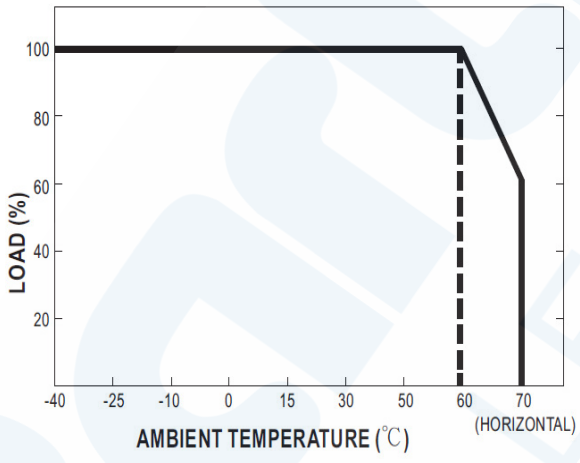


※ T case: Max. Case Temperature.

Blockschaltbild / Block diagram

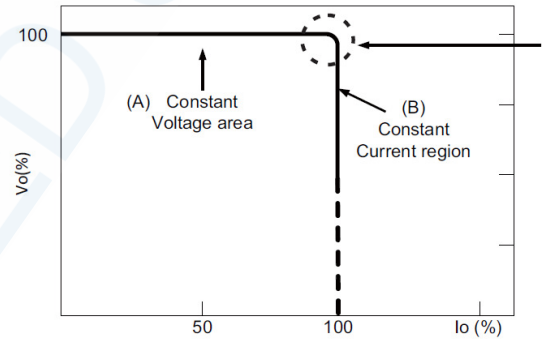


Derating-Kurve / Derating curve



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).



Typical LED power supply I-V curve

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℃ 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.