

Dimmable trailing/leading edge LED power supply

DDS839

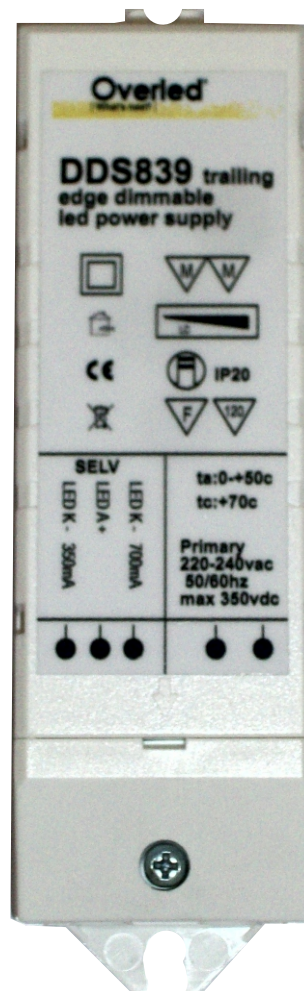
MADE IN ITALY

DDS839 è un alimentatore con corrente costante in uscita, alimentato a 230Vac o 310Vdc per una massima potenza di uscita di 13W, dimmerabile in taglio di fase sia con sistemi a Triac che sistemi a IGBT. Un'altra caratteristica interessante è che è in grado di alimentare led di SHARP natural Toning, regolandone l'intensità di corrente, facendo cambiare i gradi Kelvin del led da 2000 a 3000k, seguendo l'angolo di fase.

Questo driver con uscita in corrente costante è dotato di filtri che lo rendono immune alle armoniche in rete, non facendolo flickerare in caso queste siano presenti durante la dimmerazione a taglio di fase, pertanto adatto a lavorare in ambienti Navali, o dove siano presenti disturbi elettrici.

Questo alimentatore per led è indicato per essere inserito ad incasso, e collegato alla rete elettrica con cavi di sezione fino ad un massimo di 2.5mm, sia per l'alimentazione a 230Vac-310VDC che per l'uscita di alimentazione dei led.

La tensione minima di uscita quindi V_f led può essere $> 3V$, permettendo di collegare un solo led da 1W, mantenendo tutte le caratteristiche tecniche. Presente anche una protezione termica che riduce la potenza in caso si superino

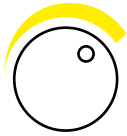


DDS839 constant current LED Driver, the power input 230Vac or 310Vdc, maximum output power of 13W@36Vdc, two output are available 350 or 700mA, only output can be used at the same time, this driver is also designed to be dimmed in leading or trailing edge, and can drive SHARP natural toning LED from 2000k up to 3000k alogen like, thanks to it's current modulation from 5 mA up to 700 or 350mA, the maximum switching frequency is 450Hz. This driver have a filter on main supply that avoid flicker during dimmer operation, this make the driver suitable in cruise ship application or any other with electrical noise. This driver is desingned for rcessed application, and can be wired with cable gauge of 2.5 mm for power input and for LED output.

The minimum LED Voltage forward is 3V, this allow to use 1W only led on the output, without changing it's electrical characteristics.

Thermal protection is embedded on the board, and start to reduce the power from the 85 degree C of TC.

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Electrical Specification

	Min.	Typ.	Max.
Power supply:	180Vac-160vdc	230Vac	260Vac-310vdc
Current supply from mains nominal load out	0.070A	0.075A	0.078A
Power output	12W	12.9W	13.5W
Power Factor PFC	0.88	0.90	0.95
Frequency	48hz	50-60hz	63hz
Power Factor PFC	0.88	0.90	0.95
IN RUSH current 1Amp	120uS	100uS	150uS
Vf led at 350mA	3V	36V	38V
Vf led at 700mA	3V	17V	18V
Open circuit voltage output	54V	55V	56V
Switching frequency output	440Hz	450Hz	455Hz

Selv double insulation - Efficiency 80%

Short Circuit, open circuit ,hot Swap protection self reducing power if Tcase > 85%

environmental

operating temperature: -10° to +50°C

Storage temperature: Tst -20° to +85°

Case temperature: Tc +70

Humidity 40-70% if required PCB coating available

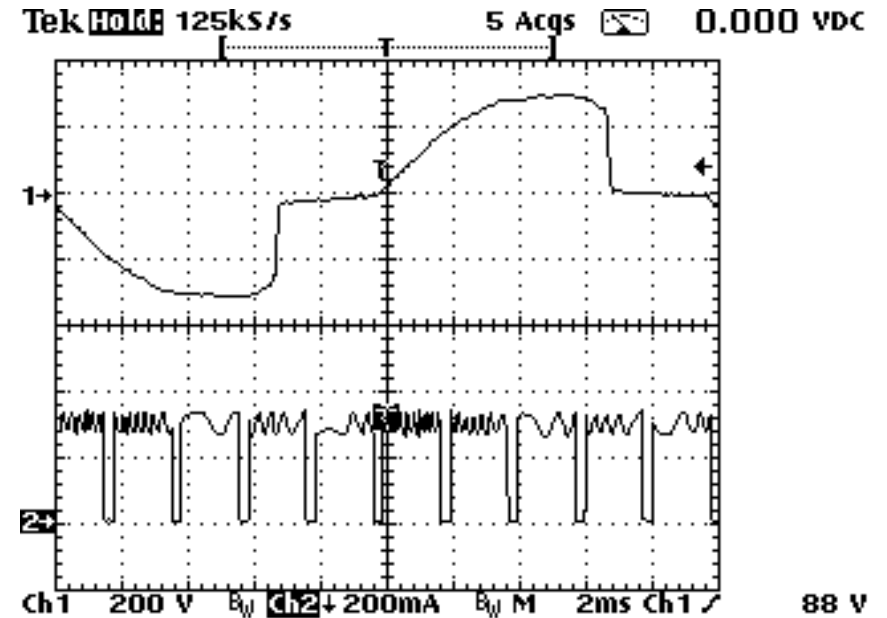
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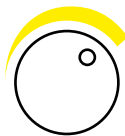


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Dimming 70% Ch1 input AC Ch2 output



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Electronic PFC full load operation

350mA load

700mA load

Tek **HOLD** 25ks/s

15 Acqs

Math

W = 9.47 W PF = 0.93
VA = 10.2 VA DPF = 0.95
VAR = 3.799 VAR $\theta = -19^\circ$

	Average	Minimum	Maximum
W	9.631 W	9.47 W	9.861 W
VA	10.36 VA	10.2 VA	10.58 VA
VAR	3.811 VAR	3.793 VAR	3.846 VAR
V	218.2 V	218.1 V	218.2 V
A	47.47 mA	46.75 mA	48.52 mA

Ch1 100 V B_{W} Ch2 20 mA B_{W} M 10ms Ch1 /
Math 20 W

32 V

Tek **HOLD** 25ks/s

15 Acqs

Math

W = 15.51 W PF = 0.93
VA = 16.63 VA DPF = 0.96
VAR = 6.004 VAR $\theta = -15^\circ$

	Average	Minimum	Maximum
W	15.52 W	15.46 W	15.57 W
VA	16.64 VA	16.6 VA	16.68 VA
VAR	6.008 VAR	5.983 VAR	6.046 VAR
V	216.8 V	216.6 V	216.9 V
A	76.75 mA	76.64 mA	76.97 mA

Ch1 100 V B_{W} Ch2 50 mA B_{W} M 10ms Ch1 /
Math 50 W

32 V

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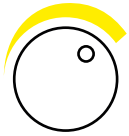
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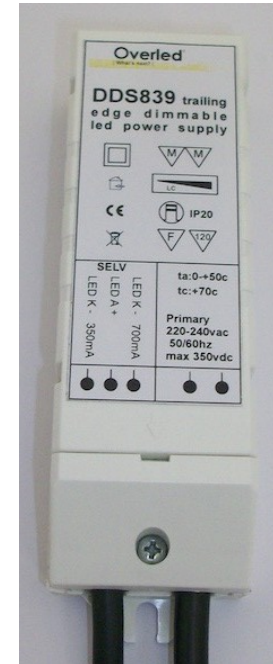
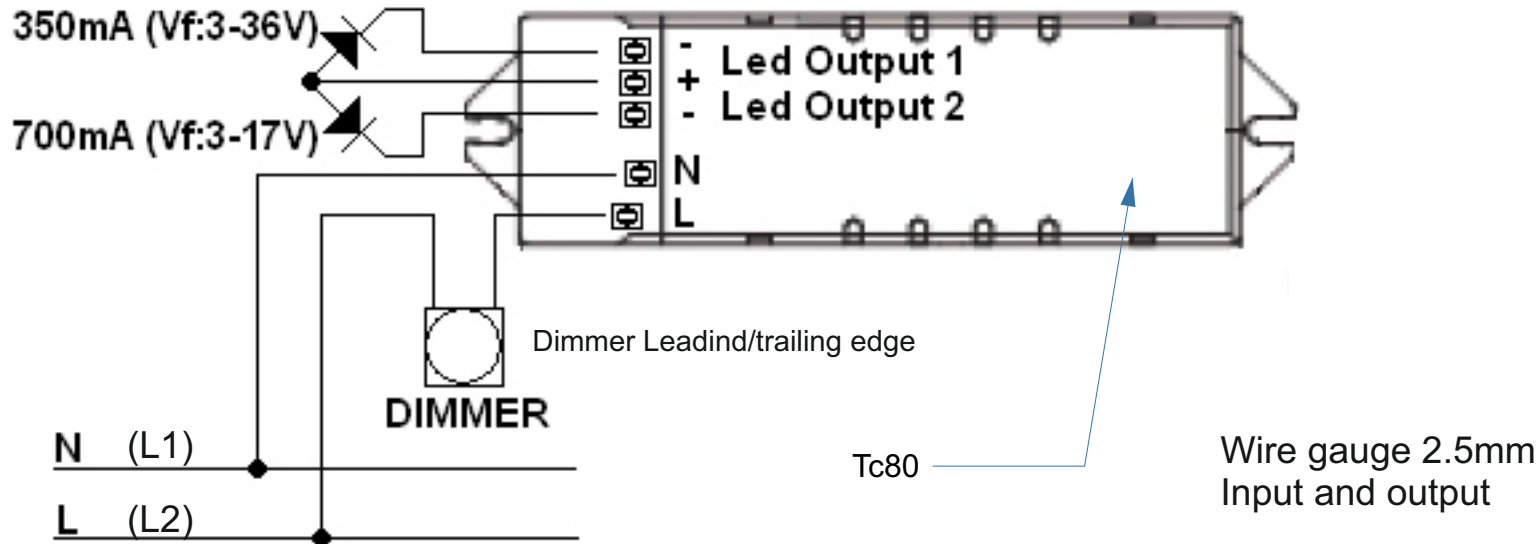
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Wiring

Led out USE only one of two output
Led uscita collegare solo un ramo



Natural Toning compatible

ZENIGATA
CHIP ON BOARD

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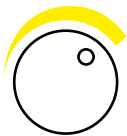


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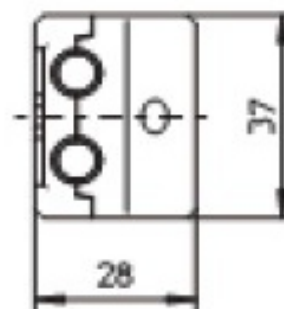
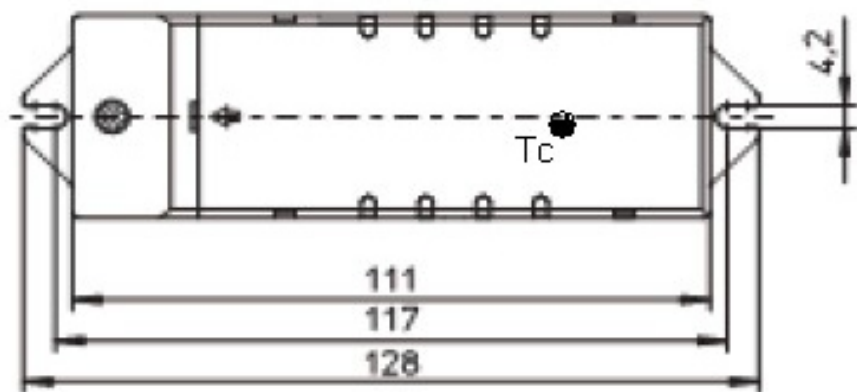


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DIMENSION



Weight 70gr.

Ordering Code:

DDS839 350/700mA

DDS839-300 300/700mA

DDS839-500 500/700mA

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