NASFF50-120277-1200N-DALI-WS

Art. 110991

Product features

- Built-in isolated adjustable power LED driver
- Current adjustment via NFC
- Supports DALI
- Output current 600 … 1,200 mA
- Max. output power 50 W
- Flicker-free, dimming range 1 … 100 % (amplitude dimming)
- Current output default value 100 %
- For luminaires with protection Class 1
- Standby power ≤ 0.5 W
- Lifetime 50,000 h



Product specifications

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Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor
600 … 1,200 mA	120 … 277 VAC	28 … 52 VDC	91 % (@ 277 VAC)	± 5 %	0.9 (output Power > 26 W)

Electrical specifications

Mains voltage supply

Rated input voltage range	120 … 277 VAC; performance range
Max. input voltage range	108 … 305 VAC; operational safety range
Rated frequency range	50/60 Hz
Performance / Operational safety	47 … 63 Hz
Max. input current	0.5 A @ 120 VAC

Protection against voltage peaks

Withstand voltage	I/p-O/p: 1.6 kVAC, < 5 mA 60 sec, I/p-Earth: 1.6 kVAC, < 5 mA 60 sec, O/p-Earth: 0.5 kVAC, < 5 mA 60 sec
Mains surge immunity	L-N 1 kV, L/N-earth 2 kV per IEC 61000-4-5, 2.5 kV ring wave

Total harmonic distortion (THD)

At rated input voltage range @ full load	≤ 20 %

Output data

Output current tolerance	± 5 % at rated input voltage performance range
No load output voltage	≤ 60 VDC
Ripple output current	5 % (ripple = peak/average total 100 Hz)
Output PstLM	≤ 1 at full load @ rated input voltage
Output SVM	≤ 0.4 at full load @ rated input voltage

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Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 60 VDC
Overpower protection	The output power is less than or equal to 55 W
Short circuit protection	Protection device will trigger upon short circuit and will only recover after a syste m restart

Dimming operation and interface

Dimming mode	DALI
Dimming method	Amplitude dimming
Dimming current range	1 … 100 % (12 … 1,200 mA)

Wiring

Input wire	UL1332, 18 AWG, 300 V, 200 °C, black L, white N, wire exposed 5.9 + 0.39 in (150 + 10 mm), tinplating length 0.39 ± 0.04 in (10 ± 1 mm).
Output wire	UL1332, 20 AWG, 300 V, 200 °C, red LED+, blue LED-, wire exposed 5.9 + 0.39 in (150 + 10 mm), tinplating length 0.39 ± 0.04 in (10 ± 1 mm).
DIM input wire	UL1332, 22 AWG, 300 V, 200 °C, purple DIM+, pink DIM-, wire exposed 5.9 + 0.39 in (150 + 10 mm), tinplating length 0.39 ± 0.04 in (10 ± 1 mm).

Degree of protection

Protection rating	IP20

Operating data

Output current range	NFC control adjusts the current: 600 … 1,200 mA
Default output current	600 mA
Output voltage range	28 … 52 VDC
Noise level	< 20 dB, at full load @ 100 cm distance

Circuit breaker / Inrush current

MCB loading quantity	Inrush current Ipeak: 36.3 A			Inrush current Twidth: 122 µs	
	MCB type	B10	C10	B16	C16
	Units	0	0	27	27

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Supplementary instructions

- The luminaire manufacturer is responsible for measuring and verifying the EMI compliance of the complete luminaire, as the level of radio interference will vary depending on the luminaire construction. Especially primary and secondary cable lengths and their routing may have a significant effect on radio interference.
- The recommended NFC communication distance: 5 … 15 mm.

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Environmental specifications

Operating temperature	-20 … +50 °C
Storage temperature	-25 … +85 °C
Working humidity	10 … 90 %
Storage humidity	5 … 95 %
Lifetime	at Tc 75 °C: 50,000 h @ performance range (0.2 % / 1,000 h failure rate)
Maximum Tc temperature	85 °C

Safety & EMC compliance

UL	FCC	
UL8750	/	
Class P	/	
CSA C22.2 NO. 250.13	/	
Class 2	/	
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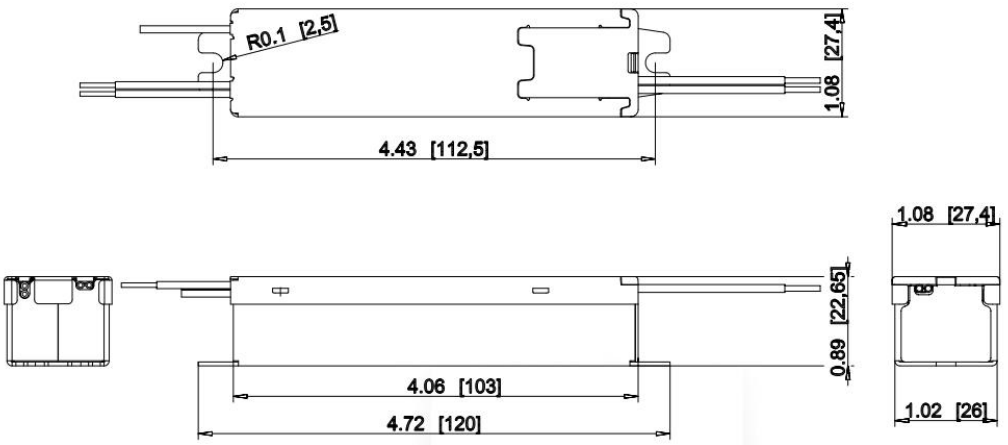
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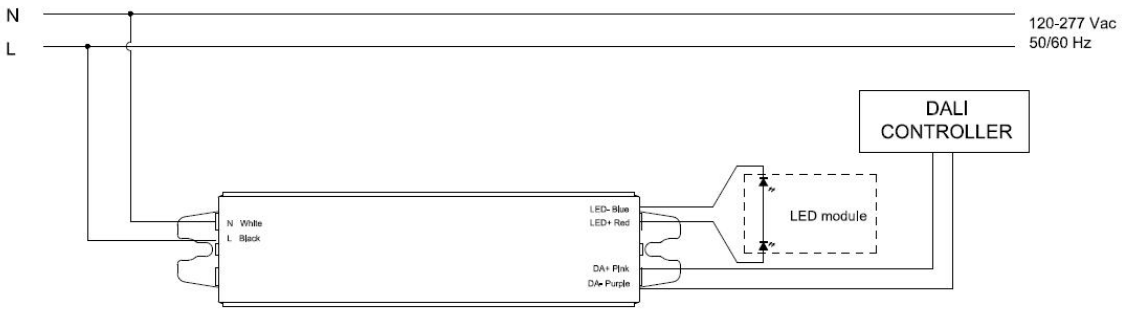
Dimensions

Housing dimensions	
Length (L)	4.72 in (120.0 mm)
Width (W)	1.08 in (27.4 mm)
Height (H)	0.89 in (22.65 mm)
For all dimensions: values in in/mm; tolerances: ± 0.5 mm	

Packaging details	
Packing units	64 pcs
Carton size	11.97 x 11.26 x 6.30 in (304 x 286 x 160 mm)
Carton weight	6.97 kg
Product weight	0.106 kg



Wiring diagram



- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5 … 10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuits.
- The product is grounded through the casing.

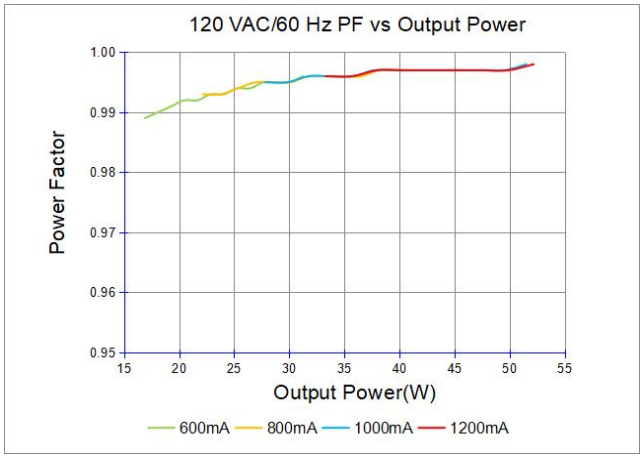
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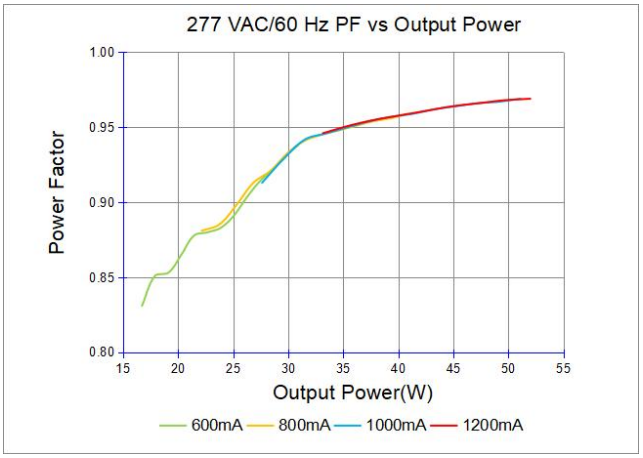
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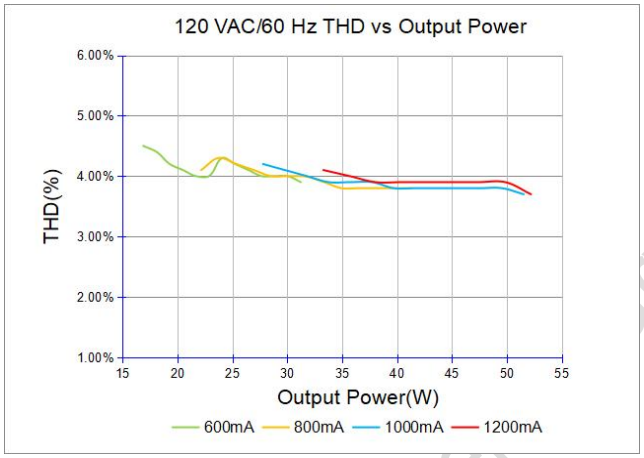
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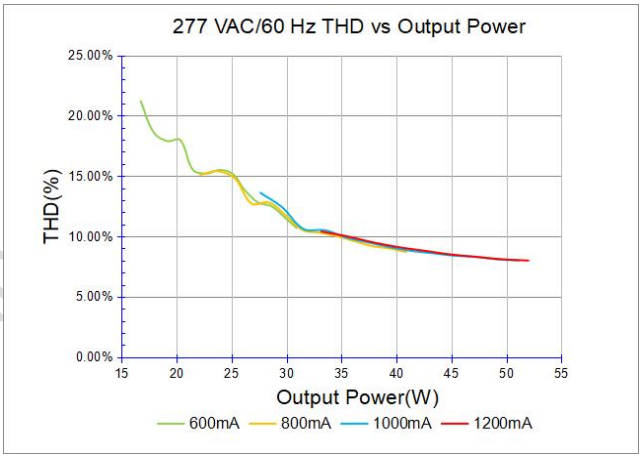
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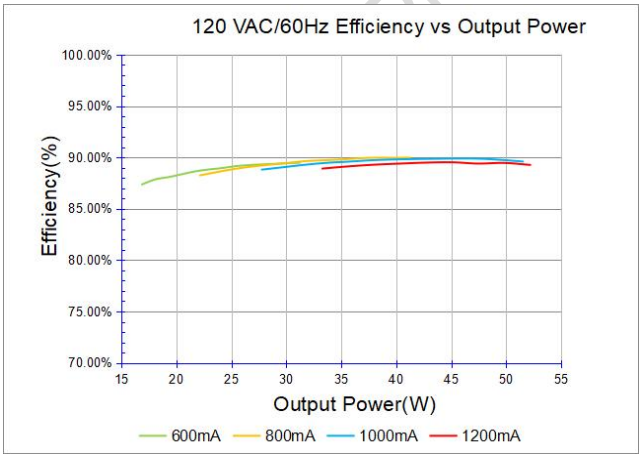
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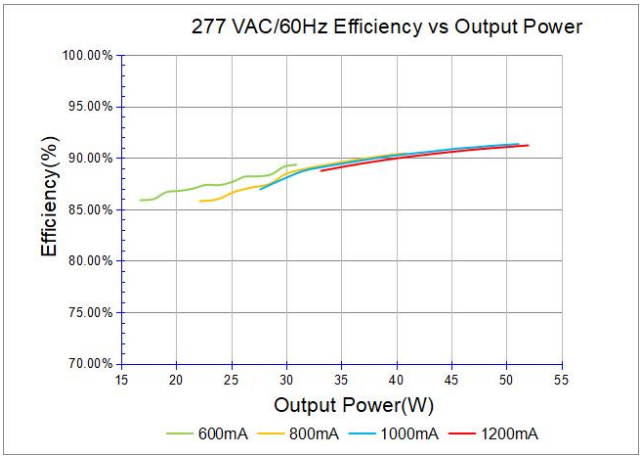










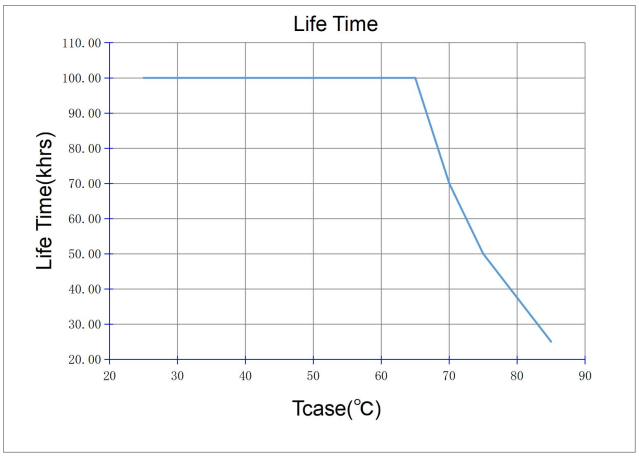


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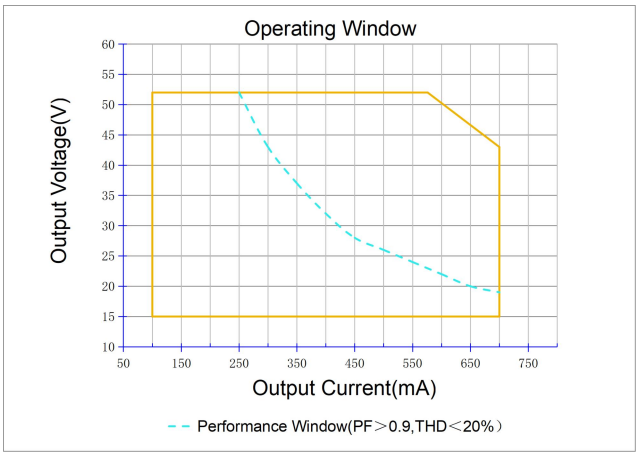
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at Tc 75 °C (0.2 % / 1,000 h failure rate)



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 50 W + 5 %

Example of AOC settings

V LED (VDC)	AOC max	Pout (W)
42	1,200 mA	50.4
50	1,000 mA	50
52	961 mA	50

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