CUPOWER

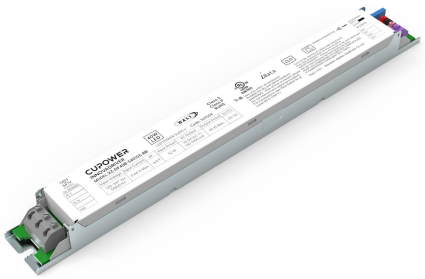
XZ-DF40B-540105-BB

Art. 169504

Class P Class 2

Product features

- Built-in isolated adjustable power LED driver
- Supports DALI-2
- Supports i-Data function (DALI part 251, 252, 253)
- Current adjustment via NFC
- Flicker-free LED driver
- Output current 150…1050 mA
- Max output power 40 W
- Constant lumen output (CLO)
- Class 2 output
- 5 years warranty



Product specifications

169504 XZ-DF40B-540105-AB

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor
150…1050 mA	120…347 Vac	10…54 Vac	89% (@ 54 V 740 mA)	± 5%	> 0.9 @ full load

Electrical specifications

Mains voltage supply

Rated input voltage range	120…347 Vac; performance range
Max. input voltage range	108...382 Vac; operational safety range
Rated frequency range	50/60 Hz
Performance / Operational safety	47...63 Hz
Max. input current	0.44 A @ 120 Vac

Protection against voltage peaks

Withstand voltage	I/P-FG: 1.8 kVac, < 5 mA 60 s; I/P-DA: 1.8 kVac, < 5 mA 60 s O/P-FG: 0.6 kVac, < 5 mA 60 s; O/P-DA: 0.6 kVac, < 5 mA 60 s DA-FG: 0.6 kVac, < 5 mA 60 s; I/P-O/P: 1.8 kVac, < 5 mA 60 s
Mains surge immunity	L-N 1 kV per IEC 61000-4-5
Control interface surge immunity	DA - DA, CS - N 1 kV per IEC 61000-4-5

Total harmonic distortion (THD)

At rated input voltage range @ full load	≤ 10%

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

Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

Version: 20260718

www.cupower.com

Errors excepted. We reserve the right to make alterations in the interest of improving our products.

Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 60 V
Overpower protection	The output power is less than or equal to 44 W
Short circuit protection	Hiccup mode. Protection device will trigger when short circuit and will auto recover after the fault mode is removed.

Dimming operation and interface

Standby power consumption	≤ 0.50 W
Dimming mode	DALI-2
Dimming method	Amplitude dimming
Dimming current range	1%...100% (10.5...1050 mA)

Connection terminals

Connection terminal type	45° push in terminal
Wire cross section mains input	16-20 AWG stranded and solid-core
Wire cross section control input	16-20 AWG stranded and solid-core
Wire cross section output	16-20 AWG stranded and solid-core
Wire stripping length	8…9 mm

Degree of protection

Protection rating	IP20

Operating data

Output current range	NFC control adjusts the current: 150…1050 mA
Default output current	600 mA
Output voltage range	10…54 Vdc
Noise level	< 20 dBA, at full load @ 100 cm distance

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.
- For the push DIM function, please follow our instructions, which can be downloaded from www.cupower.com.
- The recommended NFC communication distance： 5...20 mm.

Environmental specifications

Operating temperature	-20… +50 °C
Storage temperature	-25… +85 °C
Working humidity	10%…90%
Store humidity	5%…95%
Lifetime	at Tc 80 °C: 50,000 h @ 120 Vac
Maximum Tc temperature	80 °C

Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

Version: 20260718

www.cupower.com

Errors excepted. We reserve the right to make alterations in the interest of improving our products.

Safety & EMC compliance

UL
UL8750
CLASS P
CSA C22.2 NO.250.13
UL1310-CLASS 2

CCC

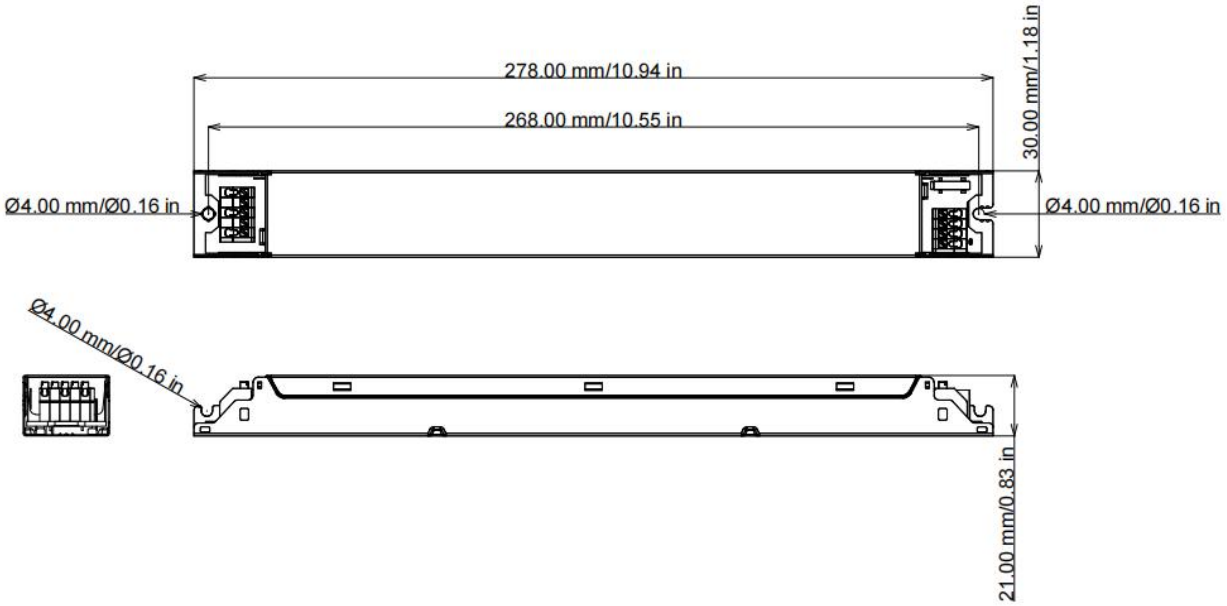
SAA

Dimensions

Housing dimensions	
Length (L)	278.0 mm
Width (W)	30.0 mm
Height (H)	21.0 mm

For all dimensions: values in in/mm; tolerances: ± 0.5 mm

Packaging details	
Packing units	20 pcs
Carton size	299 x 128 x 128 mm
Carton weight	4.35 kg
Product weight	0.205 kg



Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

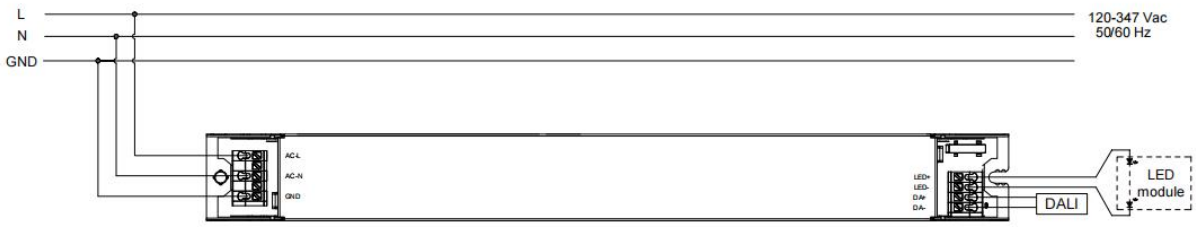
CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

Version: 20260718

www.cupower.com

Errors excepted. We reserve the right to make alterations in the interest of improving our products.

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 circuit.

Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

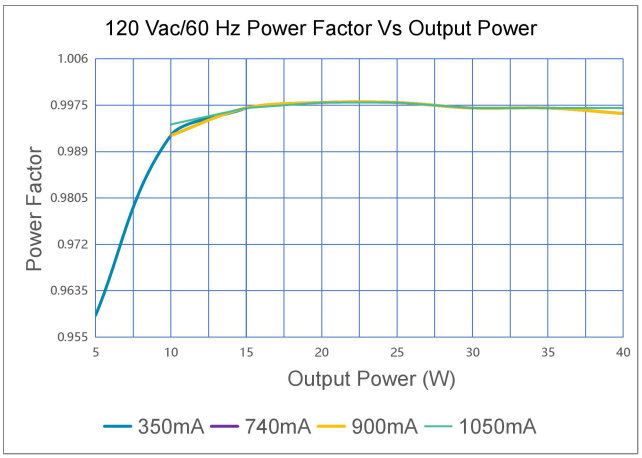
CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

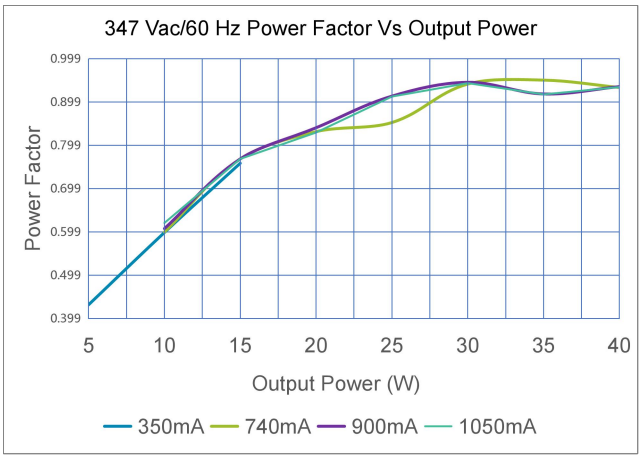
Version: 20260718

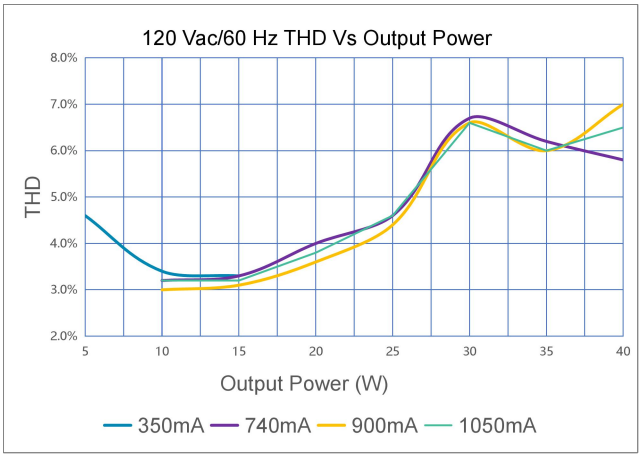
www.cupower.com

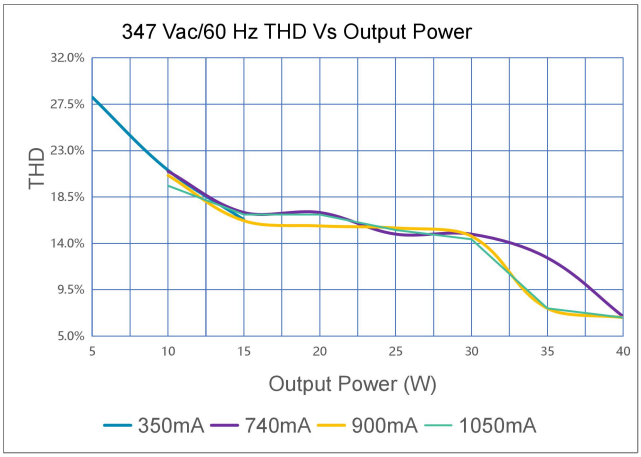
Errors excepted. We reserve the right to make alterations in the interest of improving our products.

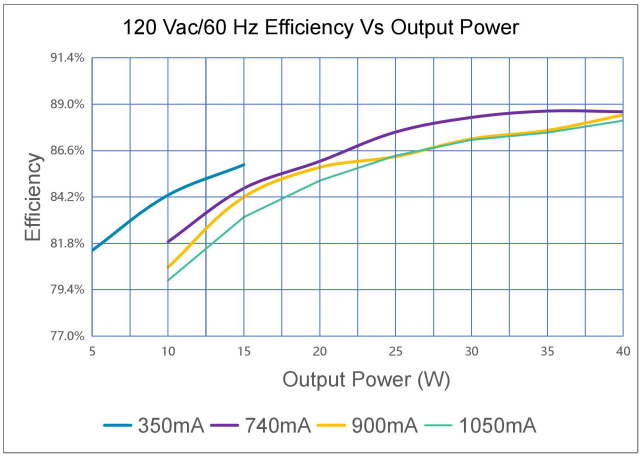
Technical information

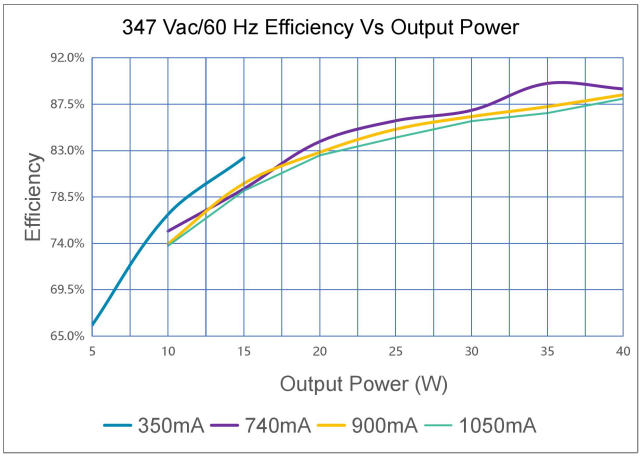












Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

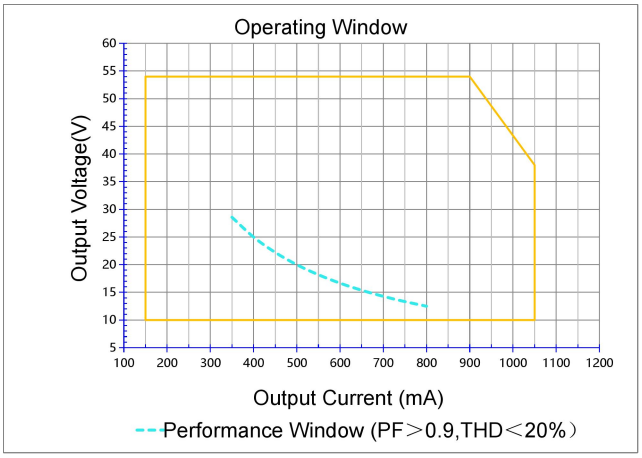
CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

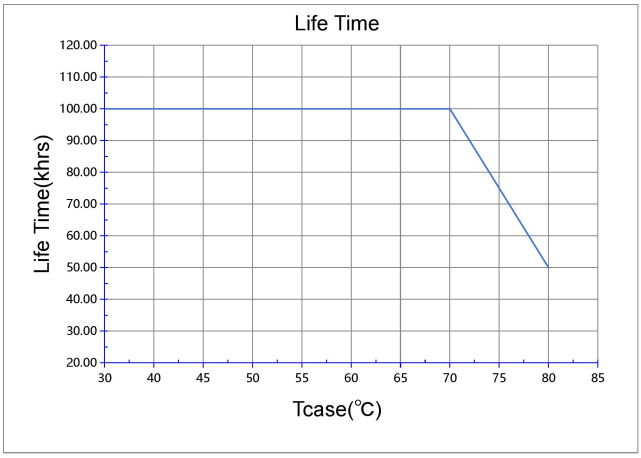
CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

Version: 20260718

www.cupower.com

Errors excepted. We reserve the right to make alterations in the interest of improving our products.





It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 54 W + 5%.

Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
54	350 mA	18.9
54	700 mA	40
44.4	900 mA	40
38	1050 mA	40

Hunan Xiezhen Electronics Co., Ltd.
Block A&B, Building 11, Innovation Park Linyi Road,
Baillutang Town Suxian District, Chenzhou, Hunan - China

CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

CUPOWER North America, Inc.
655 Raco Dr. Suite A,
Lawrenceville, GA 30046 - USA

Version: 20260718

www.cupower.com

Errors excepted. We reserve the right to make alterations in the interest of improving our products.