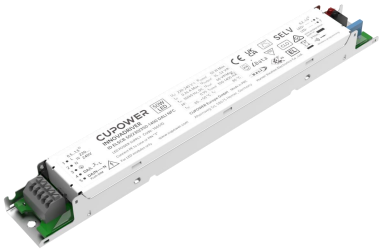
CUPOWER

ID ELSCB 50/230/350-1400 DALI NFC

Art.166510

Product features

- Built-in isolated adjustable power LED driver
- Supports DALI-2, push DIM
- Current adjustment via NFC
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 350…1400 mA
- Max. output power 50 W
- DC emergency
- Flicker-free, dimming range 1%...100% (amplitude dimming)
- Constant lumen output (CLO)
- For luminaires with protection class I
- 5 years warranty



Product specifications

166510 ID ELSCB 50/230/350-1400 DALI NFC

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension L x W x H (mm)
350...1400 mA	220…240 Vac 220…240 Vdc	15…52 Vdc	89%(@ 52V 960 mA)	± 5%	0.9 (Output Power > 20 W)	238 x 30 x 21

Electrical specifications

Mains voltage supply

Rated input voltage range	220…240 Vac; performance range
Max. input voltage range	198...264 Vac; operational safety range
Rated frequency range	0/50/60 Hz
Performance/Operational safety	47...63 Hz
Max. input current	0.26 A @ 230 Vac & 0.26 A @ 230 Vdc

Battery operation

DC voltage range	220…240 Vdc; performance range
Max. DC voltage range	176…276 Vdc; operational safety range

Protection against voltage peaks

Withstand voltage	I/p-FG: 1.5 kVac, < 5 mA 60 s; I/p-DA: 1.5 kVac, < 5 mA 60 s I/p-O/p: 3.75 kVac, < 5 mA 60 s, O/p-DA: 1.5 kVac, < 5 mA 60 s O/p-FG: 1.5 kVac, < 5 mA 60 s, DA-FG: 1.5 kVac, < 5 mA 60 s
Mains surge immunity	L-N 1 kV, L/N-FG 2 kV per IEC 61000-4-5

Total harmonic distortion (THD)

At rated input voltage range @ full load	≤ 10%

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

Version: 20250603

www.cupower.com

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

Output data

Output current tolerance	± 5% at rated input voltage 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
DC emergency level	Current output decreased to 15% (programmable range: 1%...100%)

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 55 W
Short circuit protection	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

Dimming mode	DALI-2, push dimming
Dimming method	Amplitude dimming
Dimming current range	1%...100% （3.5...1400 mA)
Standby power consumption	< 0.3 W

Connection terminals

Connection terminal type	45° push in terminal
Wire cross section	Input wire: 0.5…1.5 mm²; output wire: 0.2…1.5 mm²
Wire stripping length	8…9 mm

Degree of protection

Protection rating	IP20

Operating data

Output current range	NFC control adjusts the current: 350…1400 mA
Default current	350 mA
Output voltage range	15…52 Vdc
Noise level	< 20 dB, at full load @100 cm distance

Circuit breaker / Inrush current

MCB loading quantity	Inrush current Ipeak: 24.4 A			Inrush current Twidth: 242 µs	
	MCB type	B10	C10	B16	C16
	Units	17	29	28	47

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

Version: 20250603

www.cupower.com

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

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.

Environmental specifications

Operating temperature	-20…+50°C
Storage temperature	-25…+85°C
Working humidity	10%…90%
Store humidity	5%…95%
Lifetime	at Tc 75°C: 50,000 hrs; at Tc 65°C: 100,000 hrs @ 230 Vac
Maximum Tc temperature	80°C

Safety & EMC compliance

ENEC+CE
EN 61347-1:2015/A1:2021
EN 61347-2-13:2014/A1:2017
EN IEC 62384:2020
EN IEC 55015:2019/A11:2020
EN IEC 61547:2023
EN IEC 61000-3-2:2019/A2:2024
EN 61000-3-3:2013/A2:2021
EN 300 330 V2.1.1:2017
EN 62479:2010
EN 50663:2017
EN 301 489-1 V2.2.3:2019
EN 301 489-3 V2.3.2:2023

CCC

SAA
AS 61347.2.13
AS/NZS 61347.1:2016+A1

DALI-2 Acc. to EN 62386
Acc. to IEC 62386-101:Ed2
Acc. to IEC 62386-102:Ed2
Acc. to IEC 62386-207:Ed1
Acc. to IEC 62386-251:Ed2
Acc. to IEC 62386-252:Ed2
Acc. to IEC 62386-253:Ed2

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

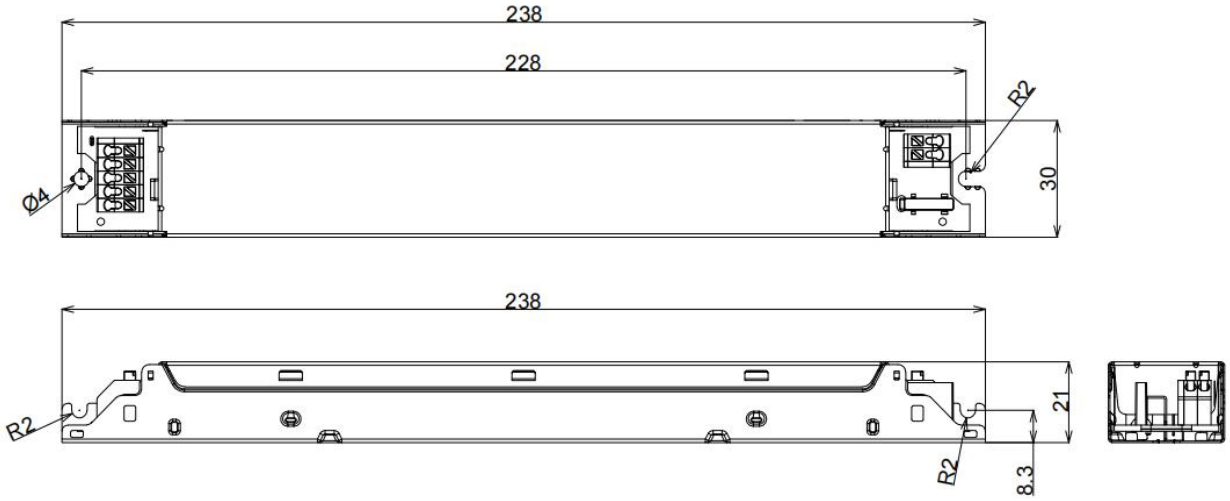
Version: 20250603

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

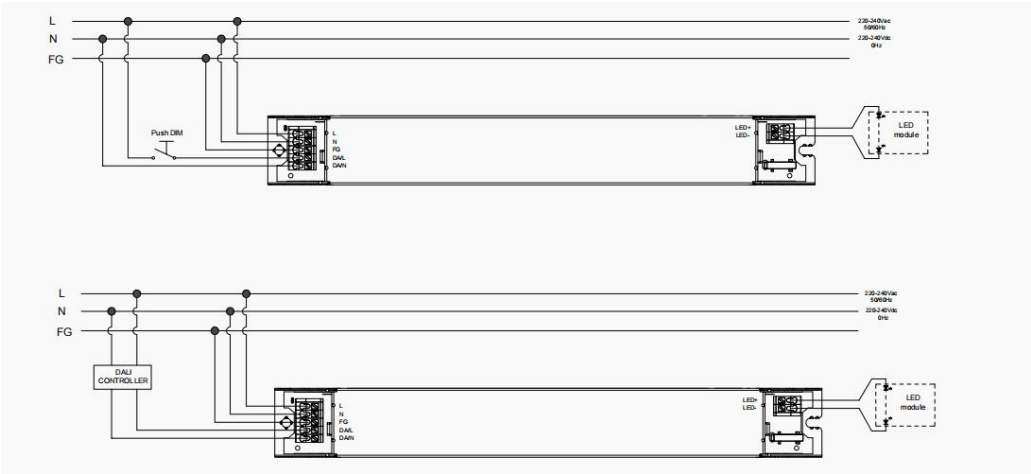
Dimensions

Housing dimensions	
Length (L)	238 mm
Width (W)	30 mm
Height (H)	21 mm
For all dimensions: values in mm; tolerances: ± 0.5 mm	

Packaging details	
Packing units	20 pcs
Carton size	255 mm × 126 mm × 133 mm
Weight	3.6 kg
Product weight	0.17 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 circuit.

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

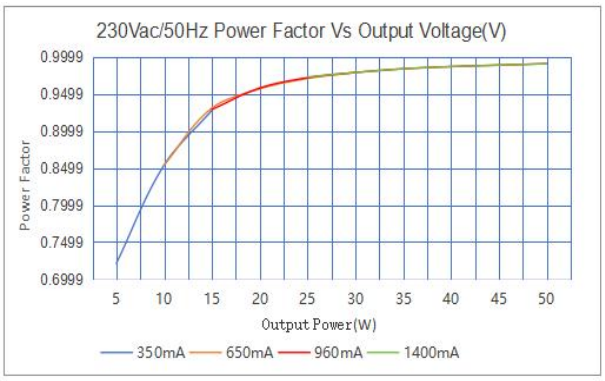
CUPOWER Europe GmbH
Ahornweg 5a
58675 Hemer - Germany

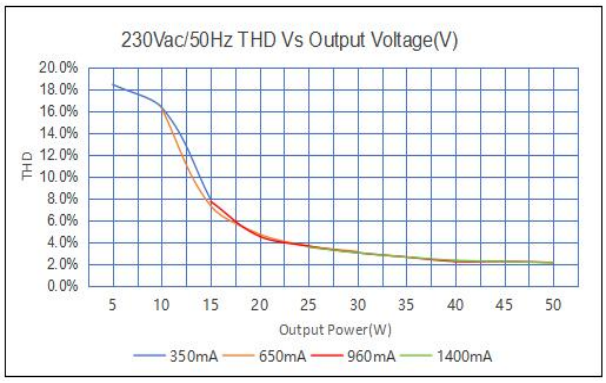
Version: 20250603

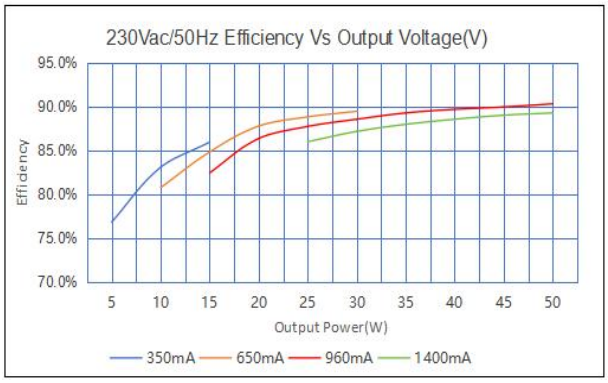
www.cupower.com

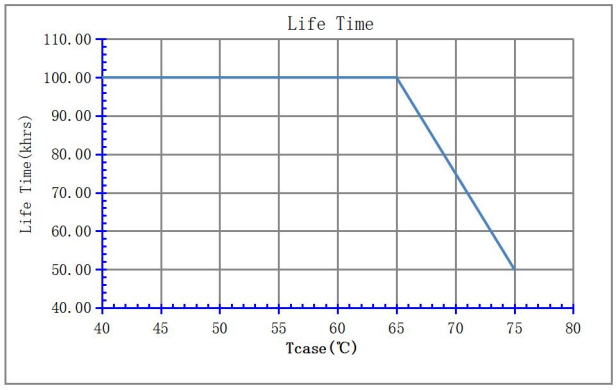
Errors excepted. We reserve the right to make alterations in the interest of improving our products.

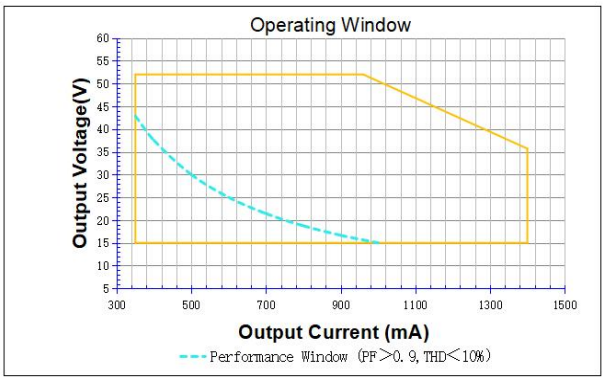
Technical information











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)
52	350 mA	18.2
52	650 mA	33.8
52	960 mA	50
35.7	1400 mA	50

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

Version: 20250603

www.cupower.com

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