

Product features

- Built-in non isolated adjustable power LED driver
- Supports DALI-2, push DIM control
- Current adjustment via NFC
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 250...1600 mA
- Max. output power 300 W
- DC emergency
- Flicker-free, dimming range 1%...100% (amplitude dimming)
- Current output default value 100%
- For luminaires with IEC protection class I
- Anti-glow



Product specifications

163663 ID ECNCB 300/230/250-1600 DALI NFC

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension L x W x H (mm)
250...1600 mA	220...240 Vac 220...240 Vdc	64...290 Vdc	95% (@ 290 V 1034 mA)	± 5%	0.9 (Output Power > 75 W)	360.0 x 45.0 x 28.0

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	1.5 A @ 230 Vac & 1.5 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 sec, I/p-DA: 1.5 kVac, < 5 mA 60 sec,
Mains surge immunity	L-N 4 kV, L-FG 4kV, N-FG 4kV per IEC 61000-4-5
Control interface surge immunity	DA - DA 1 kV per IEC 61000-4-5

Total harmonic distortion (THD)

At rated input voltage range @ full load	< 10 %
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Output data

Output current tolerance	± 5% at rated input voltage performance range
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No load output voltage	≤ 300 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

Overpower protection	The output power is less than or equal to 330 W
Short circuit protection	Short circuit protection is designed to turn off the output and cannot be automatically restored. After removing the short circuit, the output can be restored by one of the following two operations: • After receiving DALI instruction Off, turn on the light by dimming instruction. • Restart the driver: Power on the driver five seconds after the power failure.
Overvoltage protection	Overvoltage protection is designed to turn off the output and cannot be automatically restored. After removing the short circuit, the output can be restored by one of the following two operations: • After receiving DALI instruction Off, turn on the light by dimming instruction. • Restart the driver: Power on the driver five seconds after the power failure.

Dimming operation and interface

Standby power consumption	< 0.30 W
Dimming mode	DALI-2, push dimming
Dimming method	Amplitude dimming
Dimming current range	1%...100% (5...1600 mA)

Connection terminals

Connection terminal type	45° push in terminal
Wire cross section mains input	Built-in: 0.5...1.5 mm ² stranded and solid-core
Wire cross section control input	Built-in: 0.5...1.5 mm ² stranded and solid-core
Wire cross section output	0.5...1.5 mm ² stranded and solid-core
Wire stripping length	8...9 mm

Degree of protection

Protection rating	IP20
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Operating data

Output current range (DT8)	NFC control adjusts the current: 250...1600 mA
Default output current	250 mA
Output voltage range	64...290 Vdc

Circuit breaker / Inrush current

MCB loading quantity	Inrush current I _{peak} : 15.5 A			Inrush current T _{width} : 126 µs	
	MCB type	B10	C10	B16	C16
	Units	6	6	10	10

Environmental specifications

Operating temperature	-40... +65°C
Storage temperature	-40... +85°C
Working humidity	10%...90%
Store humidity	5%...95%
Lifetime	at Tc 85°C: 50,000 hrs @ 230 Vac (0.2% / 1,000 h failure rate)
Maximum Tc temperature	90°C

Safety & EMC compliance

ENEC+CE	CCC	SAA
EN 61347-1: 2015/A1:2021	/	/
EN 61347-2-13: 2014/A1: 2017	/	/
EN 62384: 2020	/	/
EN 300 330 V2.11: 2017	/	
EN 62479: 2010	/	
EN 50663: 2017	/	
EN 301 489-1 V2.2.3:2019	/	
EN 301 489-3V2.3.2: 2023	/	
EN 55015:2019/A11: 2020	/	
EN 61547: 2009	/	
EN 61000-3-2:2019/A1: 2021	/	
EN 61000-3-3:2013/A2: 2021	/	
		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
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Dimensions

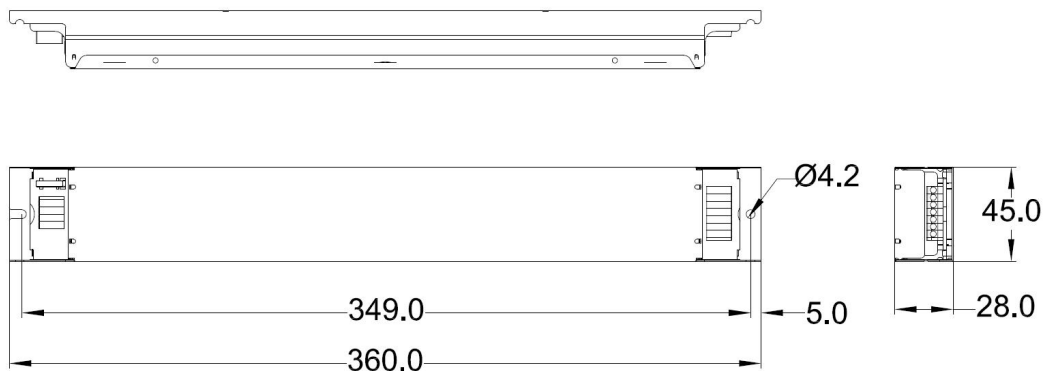
Housing dimensions

Length (L)	360.0 mm
Width (W)	45.0 mm
Height (H)	28.0 mm

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

Packaging details

Packing units	16 pcs.
Carton size	381 x 188 x 131 mm
Carton weight	9.5 kg
Product weight	0.530 kg



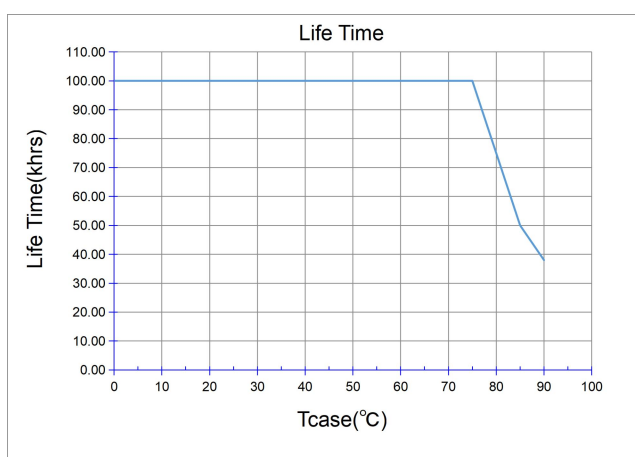
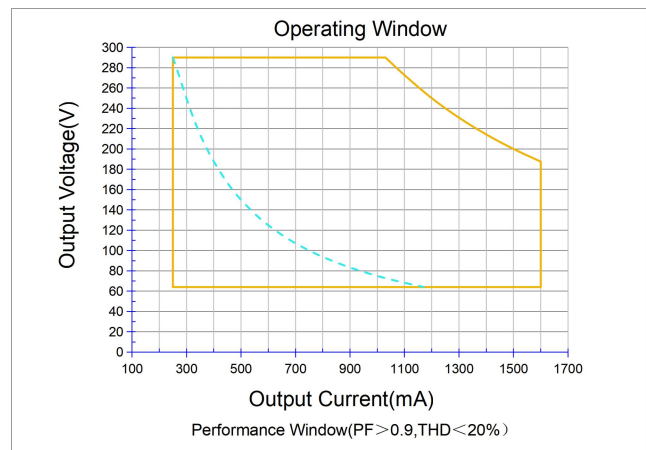
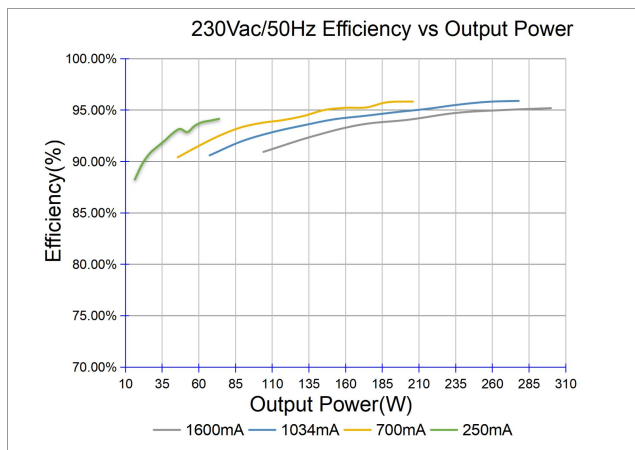
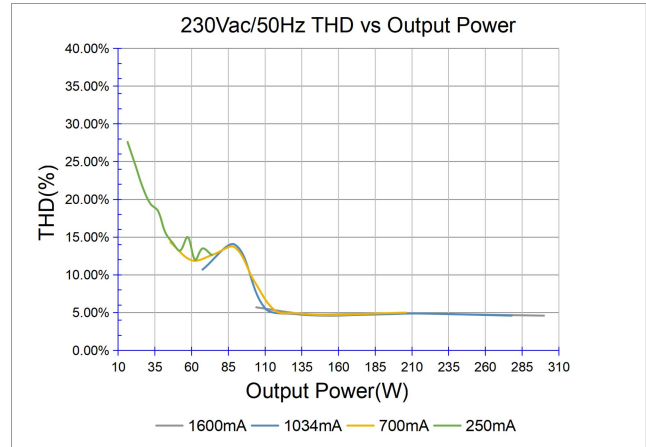
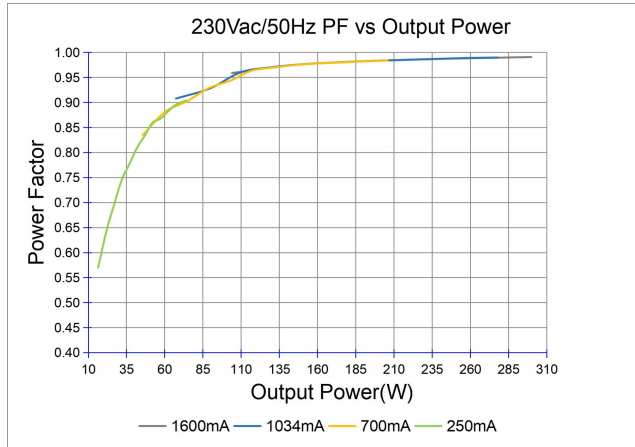
Wiring diagram



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. 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 recommended NFC communication distance: 5...20 mm.
- For the PUSH DIM instruction manual, please refer to the link: [CUPOWER PUSH DIM Manual](#)
- For the Corridor Function instruction manual, please refer to the link: [CUPOWER Corridor Function Manual](#)

Technical information



at Tc 85 °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 300 W + 5 %.

Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
290	1030 mA	300
250	1200 mA	300
200	1500 mA	300
187.5	1600 mA	300