



Product features

- Flicker-free LED driver
- Supports DALI-2, push DIM
- 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
- Current output default value 100%
- For luminaires with protection class I



Product specifications

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

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension LxWxH (mm)
250...1600 mA	220...240 Vac 220...240 Vdc	64...290 Vdc	95%	± 5%	0.9 (@ 60...300 W)	360x45x28

Electrical specifications

Mains voltage supply

Rated input voltage range	220...240 Vac
Max. input voltage range	198...264 Vac
Rated frequency range	0/50/60 Hz
Max. input current	1.5 A @ 230 Vac

Battery operation

DC voltage range	220...240 Vdc
Max. DC voltage range	176...276 Vdc

Protection against voltage peaks

Withstand voltage	I/p-FG: 1.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N 4 kV, L-FG 4 kV, N-FG 4 kV

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 range
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	DALI current output decreased to 15% (programmable)

Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 300 V
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: <ul style="list-style-type: none"> • 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.
No load output voltage	Open circuit protection is designed to turn off the output and cannot be automatically restored. After removing the open circuit, the output can be restored by one of the following two operations: <ul style="list-style-type: none"> • 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	≤ 0.3 W
Dimming mode	DALI-2, Push dimming
Dimming method	Amplitude dimming
Dimming current range	1%...100%

Connection terminals

Connection terminal type	Push in terminal
Wire cross section	Input and output wire: 0.5...1.5 mm ²
Wire stripping length	8...9 mm

Degree of protection

Protection rating	IP20
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Operating data

Output current range	NFC control adjusts the current: 250...1600 mA
Default 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

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	-40...+65°C
Storage temperature	-40...+85°C
Working humidity	10%...90%
Store humidity	5%...95%
Lifetime	at Tc 75°C: 50,000 hrs @ 230 Vac
Maximum Tc temperature	85°C

Safety & EMC compliance

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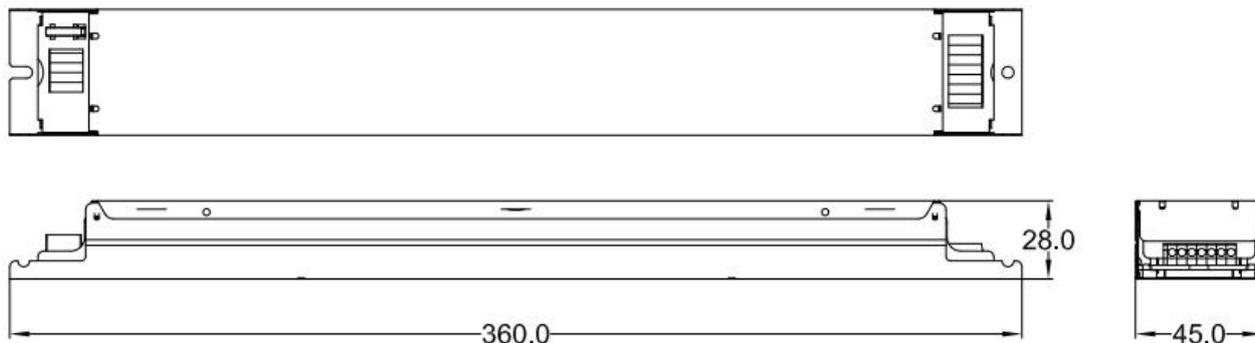
Dimensions

Housing dimensions

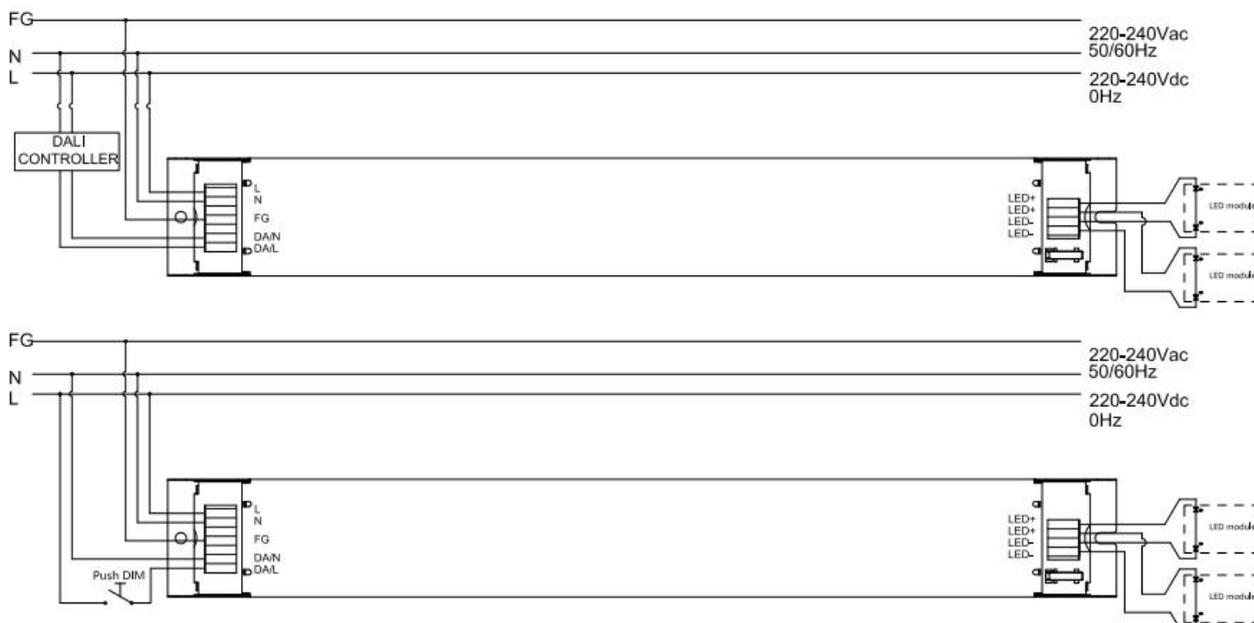
Length (L)	360 mm
Width (W)	45 mm
Height (H)	28 mm
Weight	0.48 kg

Packaging details

Packing units	20 pcs
Carton size	381 x 188 x 162 mm
Weight	10.5 kg

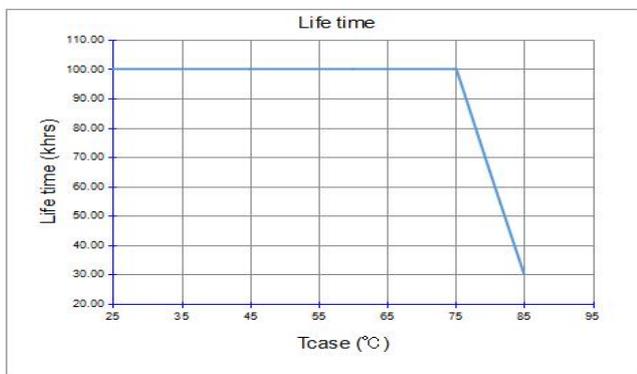
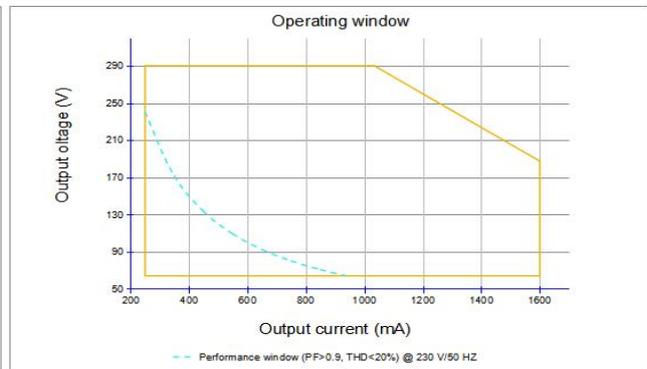
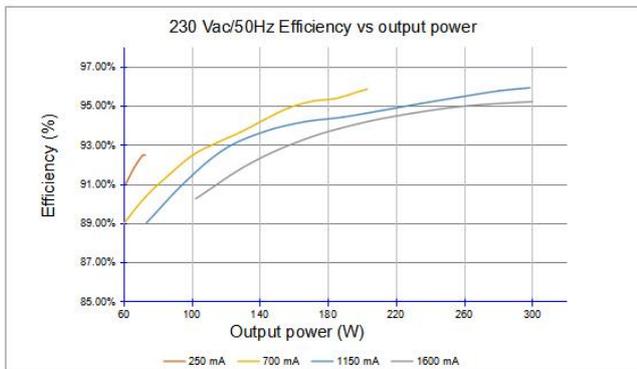
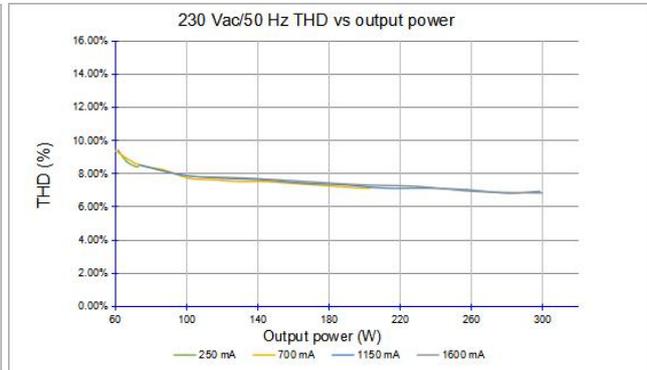
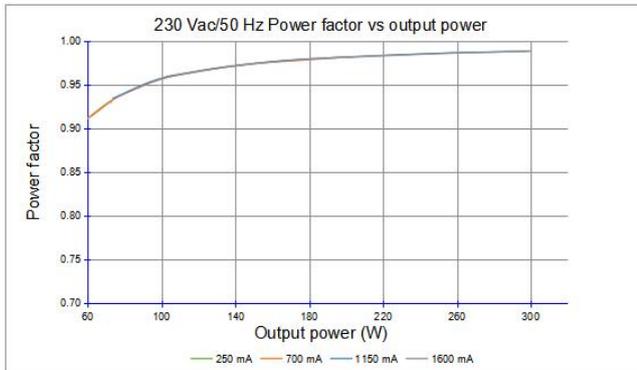


Wiring diagram



- 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.

Technical information



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