

Product features

- Isolated adjustable power LED driver
- Supports DALI-2, push DIM control
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 500...1250 mA by DIP Switch adjust
- Max. output power 50 W
- Flicker-free, dimming range 1%...100% (amplitude dimming)
- Current output default value 100%
- DC emergency
- For luminaires with protection class I
- Constant lumen output (CLO)
- Anti-glow



Product specifications

110403 ID ELSCB 50/230/500-1250 DALI DIP

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension L x W x H (mm)
500...1250 mA	220...240 Vac 220...240 Vdc	12...45 Vdc	90% (@ 45 V 1100 mA)	± 5%	0.9 (Output Power > 19.5 W @ I _o > 1000mA)	405.0 x 20.0 x 11.0

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	0.27 A @ 230 Vac & 0.27 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-O/p: 3 kVac, < 5 mA 60 sec, I/p-DA: 1.5 kVac, < 5 mA 60 sec, O/p-DA: 1.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N 1 kV, L-FG 2 kV, N-FG 2 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 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
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	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	≤ 0.30 W
Dimming mode	DALI-2, push dimming
Dimming method	Amplitude dimming
Dimming current range	1%...100%

Connection terminals

Connection terminal type	0° push in terminal
Wire cross section mains input	0.5...1.5 mm ² stranded and solid-core
Wire cross section control input	0.5...1.5 mm ² stranded and solid-core
Wire cross section output	0.2...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	DIP-switch adjusts the current: 500 mA, 550 mA, 600 mA, 650 mA, 700 mA, 750 mA, 800 mA, 850 mA, 900 mA, 950 mA, 1000 mA; 1050 mA, 1100 mA, 1150 mA, 1200 mA, 1250 mA
Default output current	500 mA
Output voltage range	12...45 Vdc

Circuit breaker / Inrush current

MCB loading quantity	Inrush current I _{peak} : 33.7 A			Inrush current T _{width} : 154 µs	
	MCB type	B10	C10	B16	C16
	Units	20	33	32	53

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 80°C: 50,000 hrs @ 230 Vac
Maximum Tc temperature	85°C

Safety & EMC compliance

ENEC+CE	CCC	SAA
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Dimensions

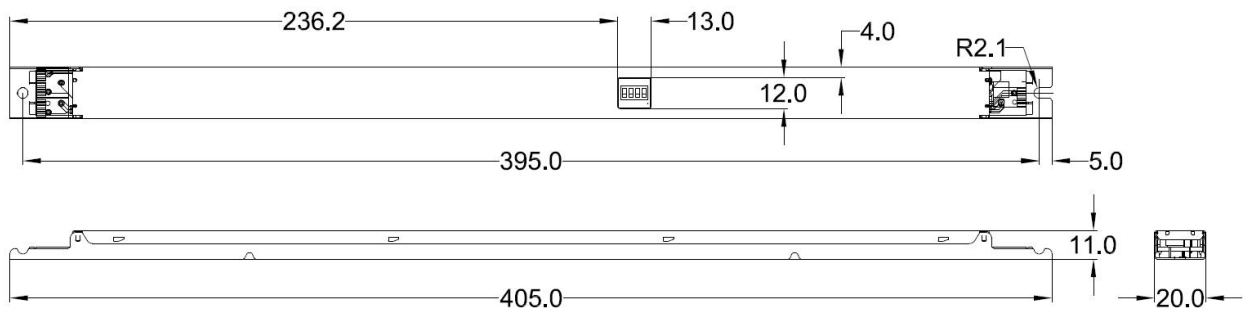
Housing dimensions

Length (L)	405.0 mm
Width (W)	20.0 mm
Height (H)	11.0 mm

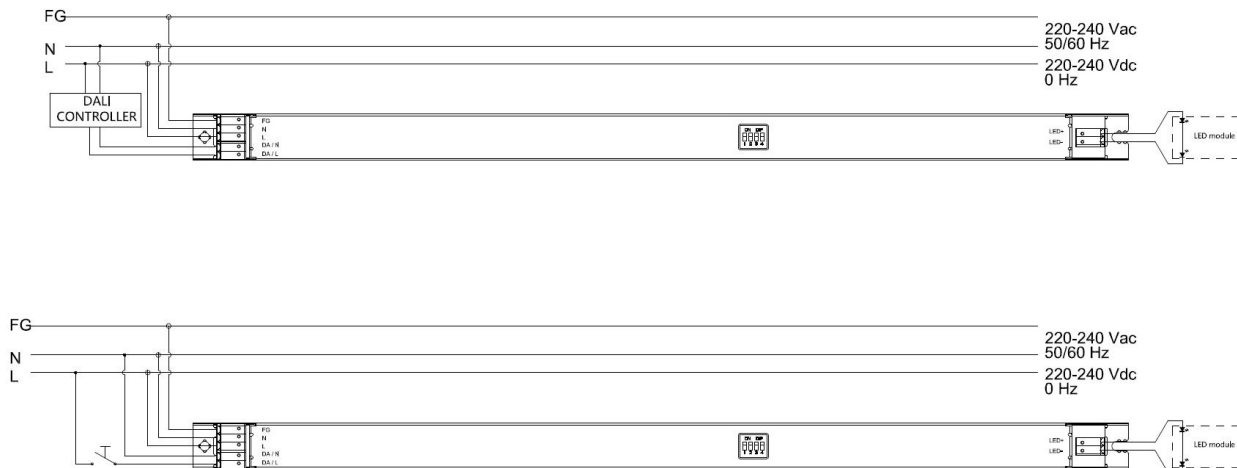
For all dimensions: values in mm; tolerances: ± 0.5 mm

Packaging details

Packing units	60 pcs.
Carton size	426 x 210 x 102 mm
Carton weight	10.0 kg
Product weight	0.16 kg



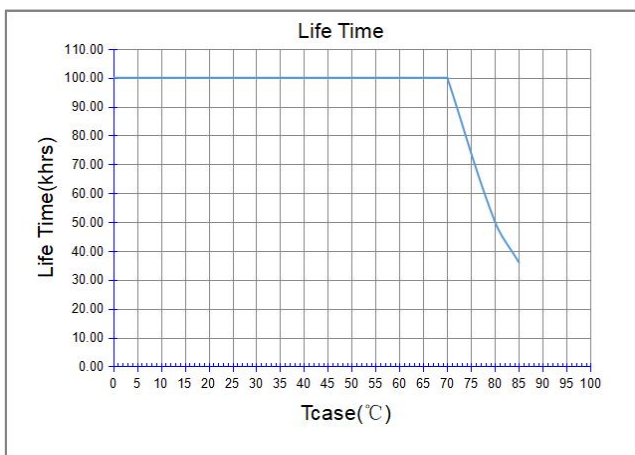
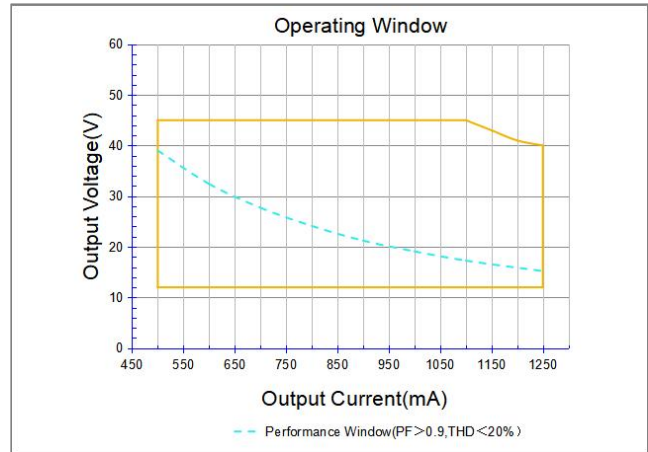
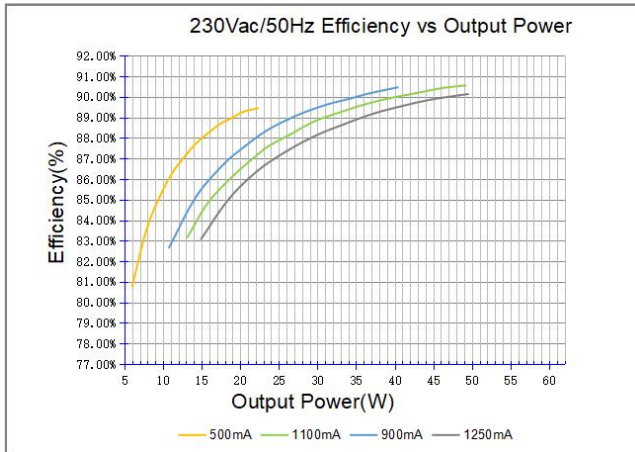
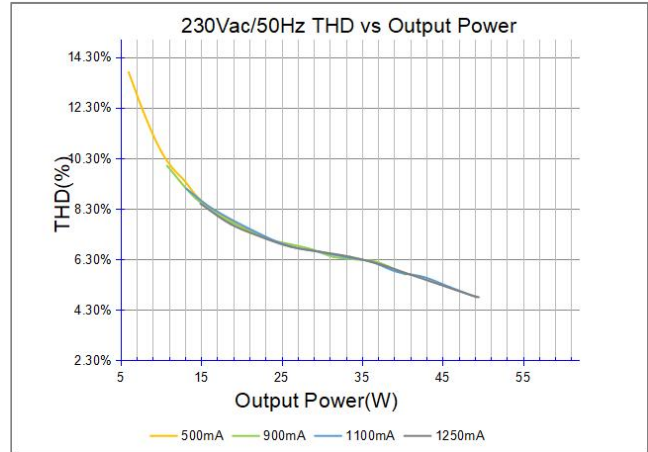
Wiring diagram



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.
- PUSH DIM instruction manual please refer to the link: [CUPOWER PUSH DIM MANUAL 2024_03](#)

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

Vout (V)	Pout (W)	Iout (mA)	1	2	3	4
12-45	22.5	500	-	-	-	-
	24.8	550	-	-	-	ON
	27.0	600	-	-	ON	-
	29.3	650	-	-	ON	ON
	31.5	700	-	ON	-	-
	33.8	750	-	ON	-	ON
	36.0	800	-	ON	ON	-
	38.3	850	-	ON	ON	ON
	40.5	900	ON	-	-	-
	42.8	950	ON	-	-	ON
	45.0	1000	ON	-	ON	-
	47.3	1050	ON	-	ON	ON
12-43	49.5	1100	ON	ON	-	-
	49.5	1150	ON	ON	-	ON
	49.2	1200	ON	ON	ON	-
	50.0	1250	ON	ON	ON	ON