

Product features

- Built-in non isolated adjustable power LED driver
- Supports DALI-2, push DIM
- Current adjustment via NFC
- Flicker-free LED driver
- Supports i-Data function (DALI part 251, 252, 253)
- Output current 50...400 mA
- Max. output power 40 W
- DC emergency
- For luminaires with protection class I
- 5 years warranty



Product specifications

168002 ID ELNCB 40/230/050-400 DALI NFC H21

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension L x W x H (mm)
50...400 mA	220...240 Vac 220...240 Vdc	50...137 Vdc	92.5%	± 5%	0.95	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	0.21 A @ 230 Vac & 0.21 A @ 230 Vdc

Battery operation

DC voltage range	220...240 Vdc; performance range
Max. DC voltage range	176...280 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; DA-FG: 1.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N: 1 kV, L/N-FG: 2 kV per IEC 61000-4-5
Control interface surge immunity	DA-DA: 1 kV, DA-FG: 2 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	100...400 mA $\pm$ 5% at rated input voltage range
Output current tolerance	50...99 mA $\pm$ 8% at rated input voltage range
No load output voltage	$\leq$ 160 Vdc
Ripple output current	5% (ripple = peak/average total 100 Hz)
Output PstLM	$\leq$ 1 at full load @ rated input voltage
Output SVM	$\leq$ 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 160 Vdc
Overpower protection	The output power is less than or equal to 44 W
Short circuit protection & Over voltage protection	Short circuit protection and overvoltage protection are 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

Dimming mode	DALI-2, push dimming
Dimming method	Amplitude dimming
Dimming current range	1%...100% (0.5...400 mA)
Standby power consumption	$\leq$ 0.3 W

Connection terminals

Connection terminal type	45° push in terminal
Wire cross section	Input wire: 0.5...1.5 mm ² ; output wire: 0.2...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: 50...400 mA
Default current	50 mA
Output voltage range	50...137 Vdc
Noise level	< 20 dB, at full load @ 100 cm distance

Circuit breaker / Inrush current

MCB loading quantity	Inrush current I _{peak} : 27.8 A		Inrush current T _{width} : 150 μs		
	MCB type	B10	C10	B16	C16
	Units	25	41	41	66

Dimensions

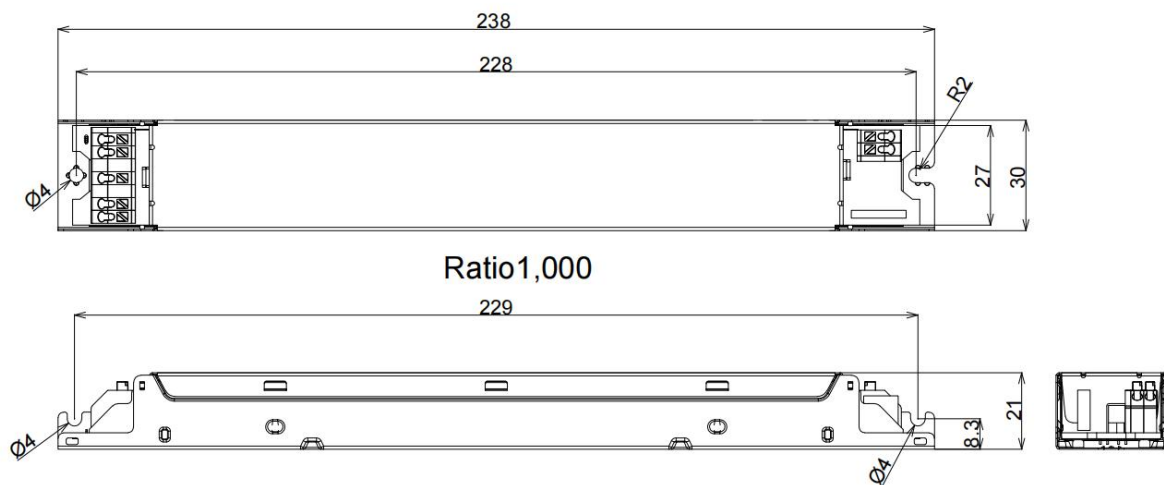
Housing dimensions

Length (L)	238 mm
Width (W)	30 mm
Height (H)	21 mm

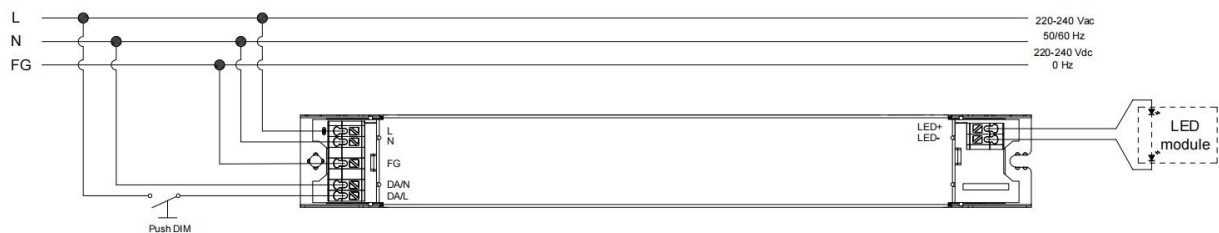
For all dimensions: values in mm; tolerances: ± 0.5 mm

Packaging details

Packing units	20 pcs
Carton size	260 x 130 x 130 mm
Carton weight	3.62 kg
Product weight	0.151 kg

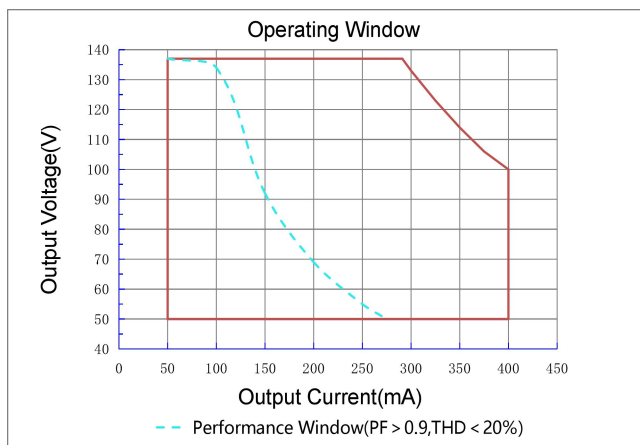
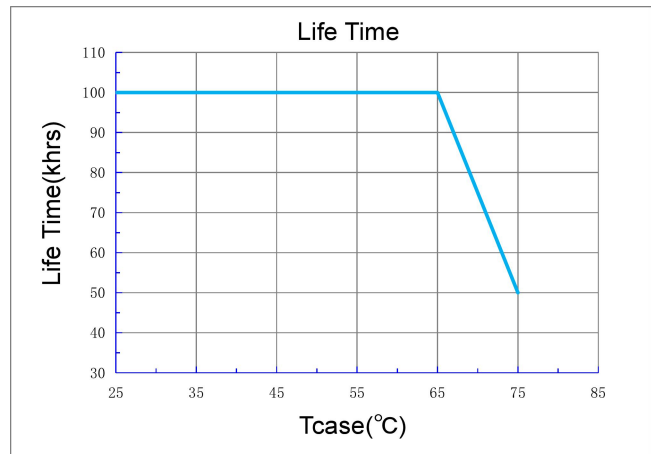
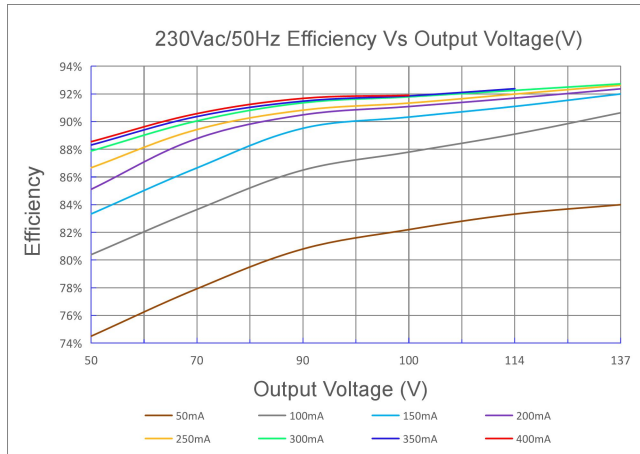
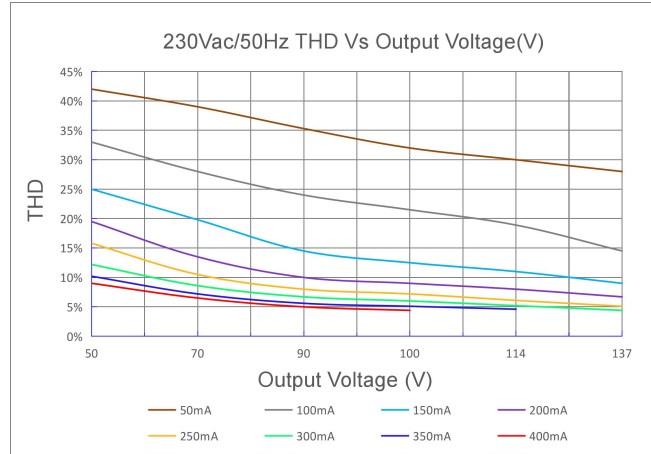
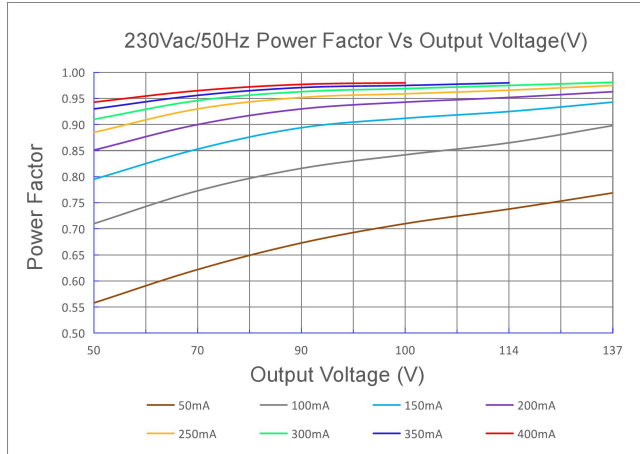


Wiring diagram



- 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.
- The outputs of drivers cannot be in paralleled.

Technical information



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 40 W + 5%.

Example of AOC settings

V_LED (Vdc)	AOC max	Pout (W)
100	400 mA	40
114	350 mA	39.9
133	300 mA	39.9
137	291 mA	39.8