

Product features

- Built-in non isolated adjustable power LED driver
- Supports 0...10 V/PWM dimming
- Color temperature adjustable
- DIP control adjusts the current
- 12 V 0.1 A Auxiliary source
- Flicker free LED driver
- Output current 50...400 mA by dip switch adjust
- Max. output power 20 W
- For luminaires with protection class I
- 5 years warranty



Product specifications

163120 ID ELNCB 20/230/50-400 0-10V PWM DIP B

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension LxWxH (mm)
50 mA	220...240 Vac 220...240 Vdc	25...60 Vdc	78%	± 15 mA	0.75	193 x 30 x 21
100 mA		25...60 Vdc	84%		0.85	
150 mA		25...60 Vdc	87%		0.9	
200 mA		25...60 Vdc	88%		0.95	
250 mA		25...60 Vdc	88%	± 5%	0.95	
300 mA		25...60 Vdc	89%		0.95	
350 mA		25...60 Vdc	90%		0.95	
400 mA		25...52 Vdc	89%		0.95	

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	0.11 A @ 230 Vac & 0.11 A @ 230 Vdc

Battery operation

DC voltage range	220...240 Vdc; performance range
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Max. DC voltage range	198...280 Vdc; operational safety range
Withstand voltage	l/p-FG: 1.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N 1 kV, L-FG 2 kV, N-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	50...250 mA ± 15 mA at rated input voltage range
Output current tolerance	300...400 mA ± 5% at rated input voltage range
No load output voltage	≤ 160 Vdc
Ripple output current	5% (ripple = peak/average total 100 Hz)
Turn-on Delay time	0.5 s at full load @ low rated input voltage
Output PstLM	≤ 1 at full load @ rated input voltage
Output SVM	≤ 0.4 at full load @ rated input voltage

Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 160 V
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

Standby power consumption	≤ 0.5 W
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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	DIP control adjusts the current: 50...400 mA
Default current	50 mA
Output voltage range	25...60 Vdc
Noise level	< 20 dB, at full load @ 100 cm distance

Circuit breaker / Inrush current

MCB loading quantity	Inrush current I _{peak} : 22 A			Inrush current T _{width} : 140 μs	
	MCB type	B10	C10	B16	C16
	Units	51	80	82	128

Supplementary instructions

- It is recommended that customers install under voltage protection and surge protection devices in the power supply circuit of lamps to ensure the safety of electricity consumption.
- The power supply is used in combination with the terminal equipment as a part of the whole lamp. Because the EMC performance is affected by LED lamps and wiring, the terminal is set in case the manufacturer needs to reconfirm the EMC of the whole device.
- The outputs of drivers cannot be in paralleled.

Environmental specifications

Operating temperature	-20...+55°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	75°C

Safety & EMC compliance

ENEC+CE	CCC	SAA
EN 61347-1:2015/A1		
EN 61347-2-13:2014/A1		
EN IEC 62384		
EN 61347-1:2015/A1		
EN 61347-2-13:2014/A1		
EN 62493:2015/A1		
EN IEC 55015:2019/A11		
EN IEC 61547		
EN IEC 61000-3-2:2019/A1		
EN 61000-3-3:2013/A2		

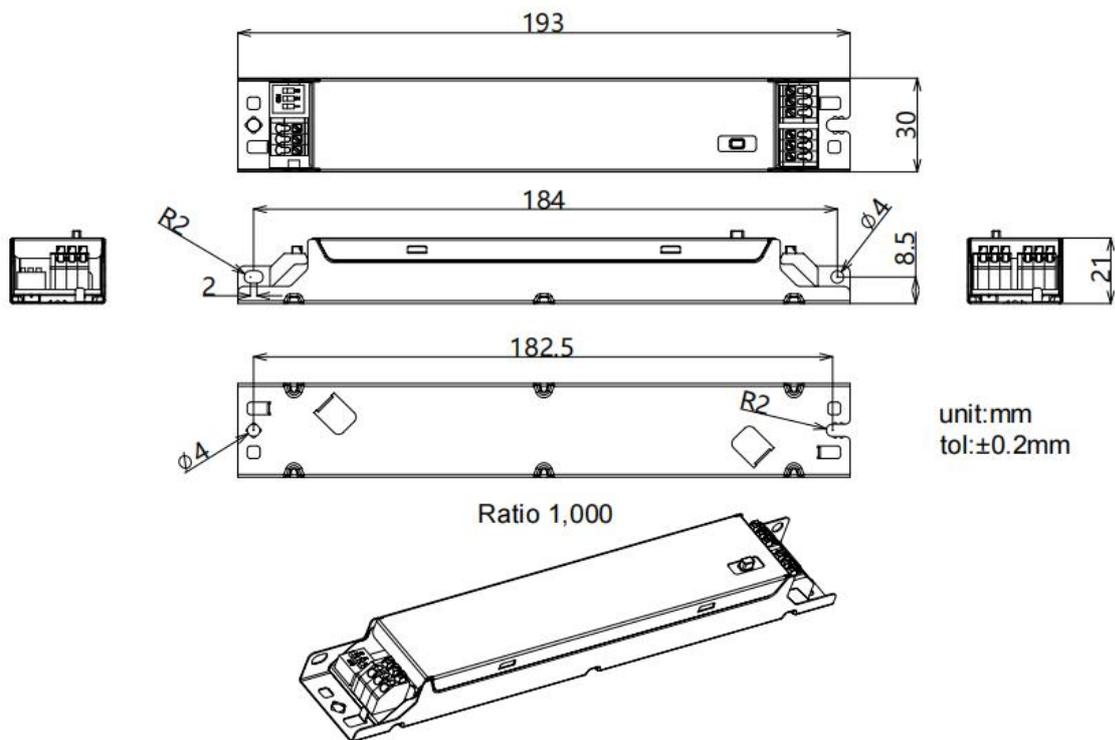
Dimensions

Housing dimensions

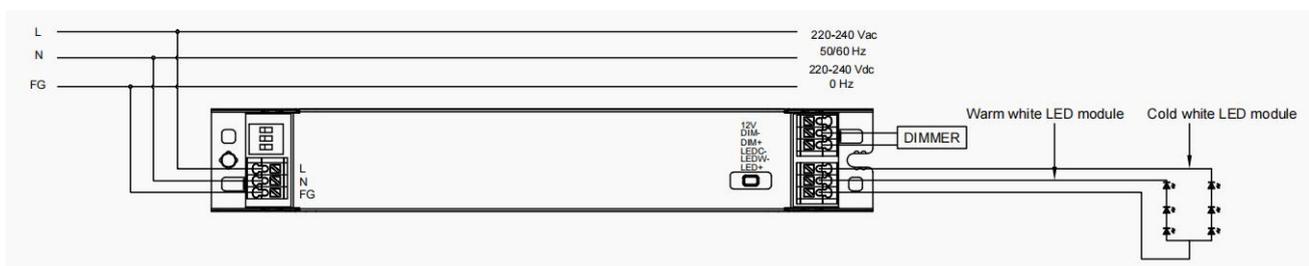
Length (L)	193 mm
Width (W)	30 mm
Height (H)	21 mm
Weight	0.11 kg

Packaging details

Packing units	60 pcs
Carton size	317 x 203 x 160 mm
Weight	7 kg

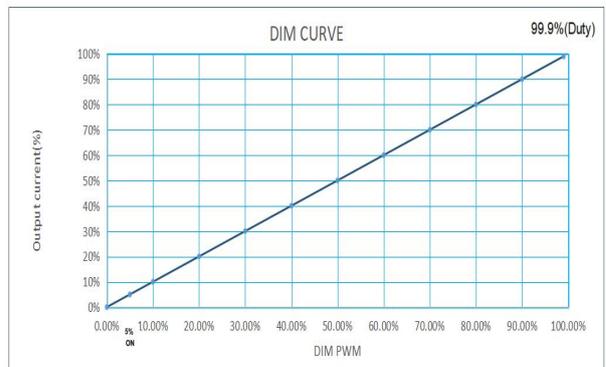
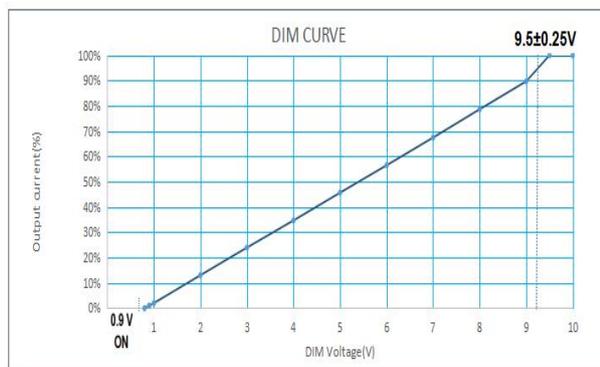
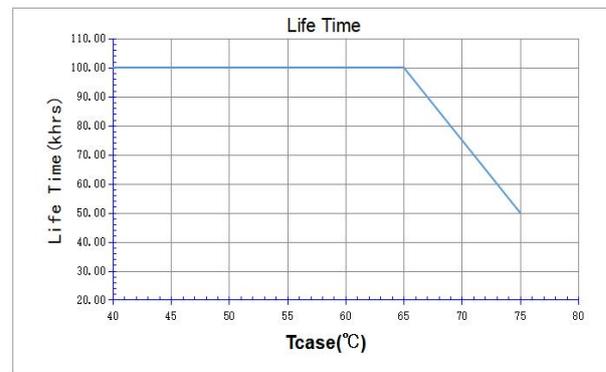
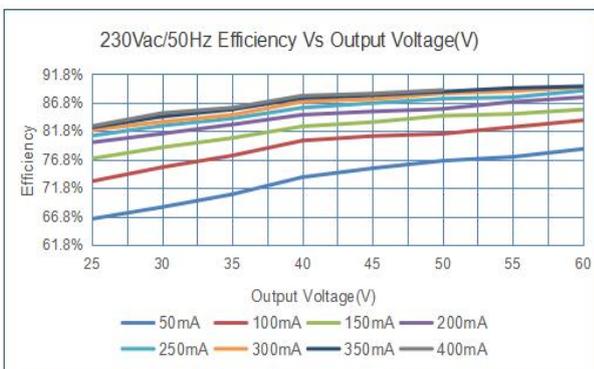
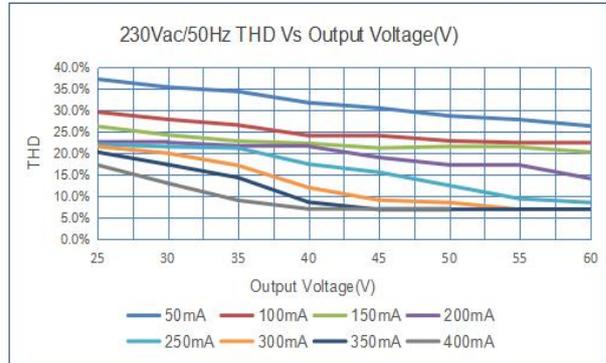
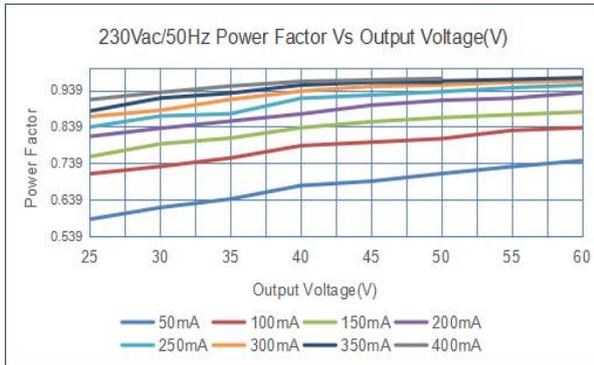


Wiring diagram



- 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).
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuit.

Technical information



ADJUSTABLE OUTPUT CURRENT WITH DIP-SWITCH					
V _{out}	P _{out}	I _{out}	1	2	3
25...60 V _{dc}	3 W	50 mA	OFF	OFF	OFF
	6 W	100 mA	ON	OFF	OFF
	9 W	150 mA	OFF	ON	OFF
	12 W	200 mA	ON	ON	OFF
	15 W	250 mA	OFF	OFF	ON
	18 W	300 mA	ON	OFF	ON
25...52 V _{dc}	21 W	350 mA	OFF	ON	ON
	20.8 W	400 mA	ON	ON	ON