

Product features

- Built-in isolated adjustable power LED driver
- Current adjustment via external DIP switch
- Flicker free LED driver
- Output current: 300 ... 500 mA
- Max. output power 20 W
- Nominal life-time up to 50,000 h
- For luminaires with protection class I
- DC emergency
- 5-year warranty



Product specifications

680056 RD ELSCB 20/230/300-500 EDIP H21

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor @ full load	Dimension L x W x H (mm)
300 ... 500 mA	220 ... 240 VAC 220 ... 240 VDC	15 ... 54 VDC	87 % (@ 44 V 450 mA)	± 5 %	> 0.95	157.0 x 30.0 x 21.0

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
Max. input current	0.11 A @ 230 VAC, 0.11 A @ 230 VDC

Battery operation

DC voltage range	220 ... 240 VDC; performance range
Max. DC voltage range	198 ... 280 VDC; operational safety range

Protection against voltage peaks

Withstand voltage	I/p-O/p: 3 kVAC, < 5 mA 60 s, I/p-FG: 1.5 kVAC, < 5 mA 60 s, O/p-FG: 1.5 kVAC, < 5 mA 60 s
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	± 5 % at rated input voltage 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
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Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 60 VDC
Short circuit protection	Hiccup mode. Protection device will trigger when short circuit and will auto recover after the fault mode is removed.

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	Output current 300 ... 500 mA by Connect external DIP switch adjust
Default current	300 mA
Output voltage range	15 ... 54 VDC
Noise level	< 20 dB(A) at full load @ 100 cm distance

Circuit breaker / Inrush current

MCB loading quantity	Inrush current Ipeak: 15.7 A			Inrush current Twidth: 104 us	
	MCB type	B10	C10	B16	C16
	Units	66	80	106	128

Environmental specifications

Operating temperature	-20 ... +60 °C
Storage temperature	-25 ... +85 °C
Working humidity	10 ... 90 %
Storage humidity	5 ... 95 %
Lifetime	at Tc 80 °C: 30,000 h; at Tc 70 °C: 50,000 h @ 230 VAC (0.2 % / 1,000 h failure rate)
Maximum Tc temperature	80 °C

Safety & EMC compliance

ENEC+CE	CCC	SAA
EN 61347-1:2015/A1:2021	/	/
EN 61347-2-13:2014/A1:2017	/	/
EN IEC 62384:2020	/	/
EN IEC 55015:2019/A11:2020	/	/
EN IEC 61000-3-2:2019/A2:2024	/	/
EN 61000-3-3:2013/A2:2021	/	/
EN IEC 61547:2023	/	/

Dimensions

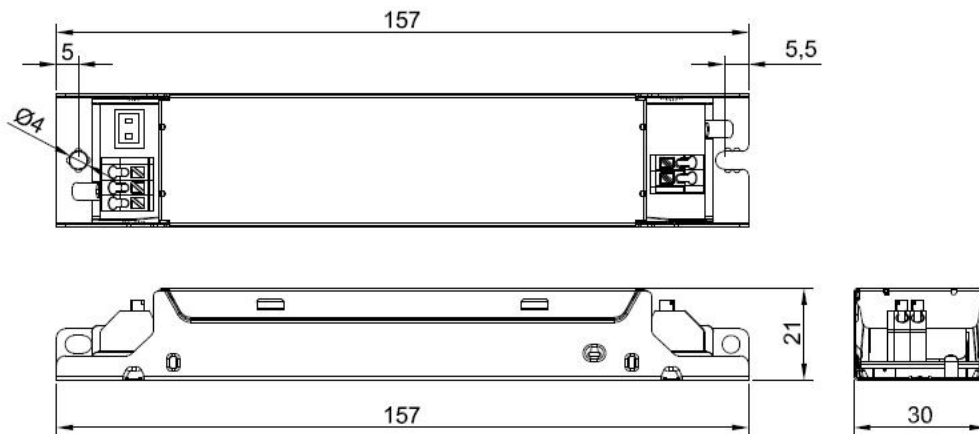
Housing dimensions

Length (L)	157.0 mm
Width (W)	30.0 mm
Height (H)	21.0 mm

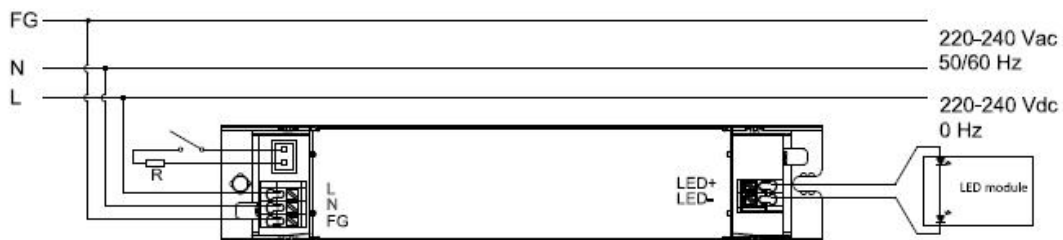
For all dimensions: values in mm; tolerances: ± 0.5 mm

Packaging details

Packing units	60 pcs
Carton size	317 x 167 x 160 mm
Carton weight	5.9 kg
Product weight	0.09 kg



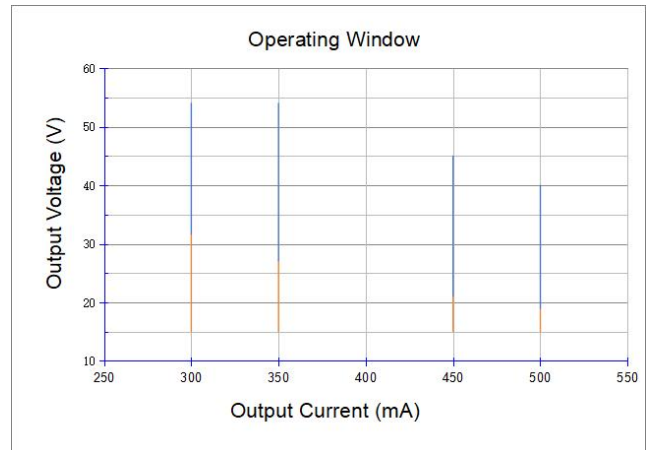
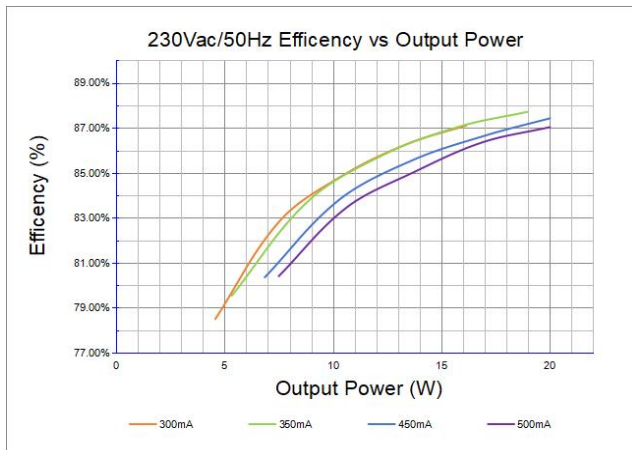
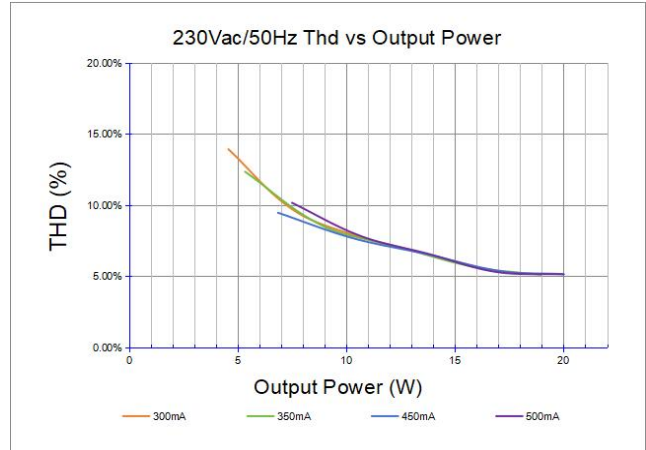
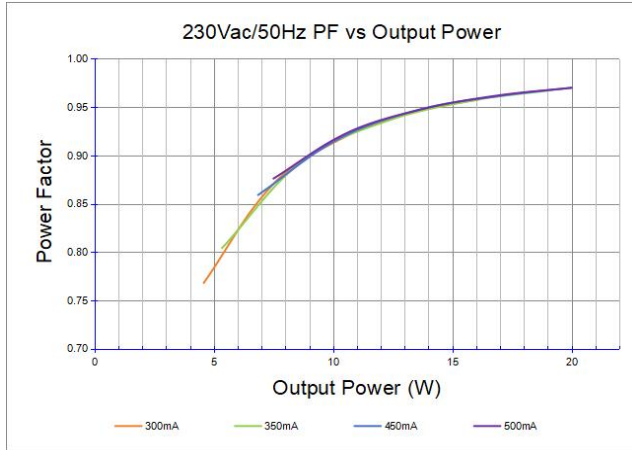
Wiring diagram



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.
- The length of the wire connecting the external DIP switch is recommended to be within 30 cm.

Technical information



at Tc 80 °C (0.2 % / 1,000 h failure rate)

Connect external DIP switch (example)

Output current	External resistor (kΩ)
300 mA	NC (Default)
350 mA	24
400 mA	8.2
450 mA	2.7
500 mA	0

Current calculation formula (for reference)

$$I_{out} \approx 500 - 0.023 * (R // 8800) \text{ mA}$$