

Art.166978

# **Product features**

- Flicker-free LED driver
- Supports MESHLE DIM, CCT control
- Current adjustment via NFC
- Output current 50...400 mA
- Max. output power 36 W
- DC emergency
- Current output default value 100%
- For luminaires with protection class I
- Anti-glow



# **Product specifications**

#### 166916 ID ELNCB 36/230/050-400 BH16 NFC TW MM

Output current	Input voltage	Output voltage	Efficiency @full	Current accuracy	Power factor	Dimension LxWxH (mm)
50400 mA	220240 Vac 220240 Vdc	50240 Vdc	90%	± 5%	0.9 (@ 1236 W)	278x30x16

## **Electrical specifications**

#### Mains voltage supply

Rated input voltage range	220240 Vac
Max. input voltage range	198264 Vac
Rated frequency range	0/50/60 Hz
Max. input current	0.2 A @ 230 Vac

#### **Battery operation**

DC voltage range	220240 Vdc
Max. DC voltage range	176278 Vdc

#### Protection against voltage peaks

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

### Total harmonic distortion (THD)

At rated input voltage range @ full load	10%
------------------------------------------	-----

Hunan Xiezhen Electronics Co., Ltd. Block A&B, Building 11, Innovation Park Linyi Road, BailLutang Town Suxian District, Chenzhou, Hunan - China



Art.166916

#### 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		

### Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 250 V				
Overpower protection	The output power is less than or equal to 39 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:				
	• After receiving MESHLE 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 shut off the output and cannot be automatically restored. After the open circuit is removed, the output can be restored by one of the following two operations				
No load output voltage	• 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 $\leq 0.4W$
---------------------------------------

#### **Connection terminals**

Connection terminal type	0° Push in terminal		
Wire cross section	Input wire: 0.51.5 mm <sup>2</sup> ; Output wire: 0.21.5 mm <sup>2</sup>		
Wire stripping length	89 mm		

### Degree of protection

Protection rating	IP20

# Operating data

Output current range	NFC control adjusts the current: 50400 mA		
Default current	50 mA		
Output voltage range	50240 Vdc		

#### Circuit breaker / Inrush current

	Inrush current Ipeak: 21.3 A			Inrush current Twidth: 142 µs		
MCB loading quantity	MCB type	B10	C10		B16	C16
	Units	35	46		56	73

# 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**

Hunan Xiezhen Electronics Co., Ltd. Block A&B, Building 11, Innovation Park Linyi Road, BailLutang Town Suxian District, Chenzhou, Hunan - China page 2



Art.166916

Operating temperature	-25+55°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	75°C

# Safety & EMC compliance

ENEC+CE	CCC	SAA
/	1	1
/	1	1
/	1	1
/	1	1
/	1	1
/	1	1
1	1	1
/	/	1
/	1	1
/	1	1
/	1	1
/	1	1
/	/	1
1	/	/

# Dimensions

## Housing dimensions

Length (L)	278 mm
Width (W)	30 mm
Height (H)	16 mm
Weight	0.18 kg

Packing units	20 pcs.
Carton size	299 x 128 x 103 mm
Weight	4.7 kg

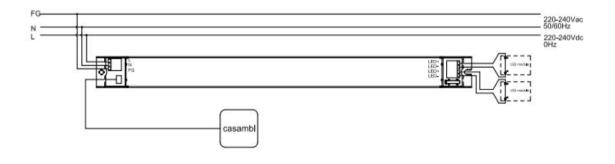


# Wiring diagram

Hunan Xiezhen Electronics Co., Ltd. Block A&B, Building 11, Innovation Park Linyi Road, BailLutang Town Suxian District, Chenzhou, Hunan - China CUPOWER Europe GmbH Ahornweg 5a 58675 Hemer – Germany



Art.166916

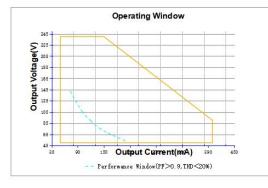


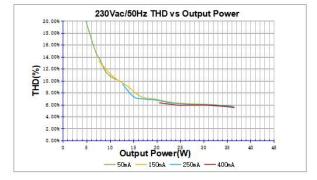
- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5 10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuit.

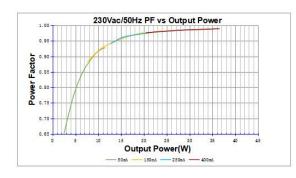


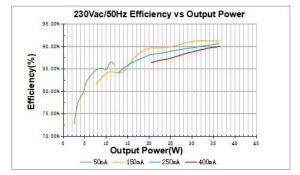
Art.166916

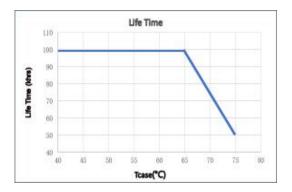
# **Technical information**











It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 36 W + 5%.

#### Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
137	262 mA	36
120	300 mA	36
100	360 mA	36
90	400 mA	36

Hunan Xiezhen Electronics Co., Ltd. Block A&B, Building 11, Innovation Park Linyi Road, BailLutang Town Suxian District, Chenzhou, Hunan - China CUPOWER Europe GmbH Ahornweg 5a 58675 Hemer – Germany