

LED Driver

EUCI BA Series



EUCI BA

Highlights & Features

- 15W 、 35W constant current design
- EMEA AC input voltage from 220-240Vac
- Up to 88% efficiency
- Optional strain-relief set for independent applications
- Build-in active PFC and confirm to harmonic current IEC/EN 61000-3-2, Class C
- Bluetooth low energy Mesh dimming available
- 1% -100% dimming range
- Two channels for color mix application

Safety Standards



Dimensions (L x W x H):

EUCI-015035BA	100 x 43 x 25 mm
EUCI-035090BA	150 x 45 x 30 mm
EUCI-035090BAB	100 x 45 x 30 mm

General Description

Delta EUCI BA series of output current LED drivers with Bluetooth low energy Mesh control comes with affordable and reliable features. Compatible with built-in and independent type with clip-in strain relief. Two channels output current design for different color temperature lumen mix application. The user can turn on/off and dim the light, and monitor the status remotely from smartphone apps. Because its wireless, lighting companies can incorporate all these smart features without the added cost of connectors, wires, or modules in their fixtures.

Model Information

EUCI Bluetooth MESH LED Driver

Model Number	Input Voltage Range	Rated Output Voltage Range	Rated Output Current Range
EUCI-015035BA	220-240Vac Typical 198-264Vac Range	15-42Vdc	200-350mA
EUCI-035090BA		20-39Vdc	500-900mA
EUCI-035090BAB		20-39Vdc	500-900mA

Model Numbering

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Safety Approval CE, ENEC, CCC	Constant Current	Indoor	Output Power 015 – 15W 035 – 35W	Max Output Current 035 – 350mA 090 – 900mA	Function B – Bluetooth	Variable A – Standard	Commercial Scope B – Built-in type

LED Driver

EUCI BA Series

Specifications

Model Number	EUCI-015035BA	EUCI-035090BA	EUCI-035090BAB
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Input Ratings / Characteristics

Normal Input Voltage	220-240Vac		
Input Voltage Range	198-264Vac		
Normal Input Frequency	50-60Hz		
Input Frequency Range	47-63Hz		
Max. Input Current	220Vac	0.087A	0.2A
Efficiency ¹⁾	230Vac	86.5%	88%
Inrush Current (Apk / 50% - μ S @ Cold Start)	4A / 50us @ 230Vac		
Max. No. of LED Drivers circuit breaker at 230Vac	B16	90 pcs	54 pcs
Power Factor	> 0.95 @ full load ; > 0.9 @ 50% load		
Total Harmonic Distortion	THD < 20% with load \geq 50% @ 230Vac		
Leakage Current	< 0.7mA		

1) 100% Load (typical) and tested after 30 minutes warm up.

Output Ratings / Characteristics

Output Voltage Range	15-42Vdc	20-39Vdc
Max. No Load Output Voltage	50V	55V
Full Output Load Setting	200-350mA	500-900mA
Max. Output Power Range	Ch1+Ch2=15W	Ch1+Ch2=35W
Adjustable Output Current (Bluetooth)	3.5-350mA	9-900mA
Minimum Output Current	1% (Min dim level)	
Current Accuracy	\pm 5% (@ Typical output current range)	
Line Regulation	\pm 1% (@ 220-240Vac input)	
Load Regulation	\pm 5% (@ Min-Max output voltage)	
Output Current LF Ripple	5% (ripple = peak-average/average) at full load (<100Hz)	
Start-up Time	850ms max. @ 230Vac	

Mechanical

Casing	Plastic, Color: White		
Dimensions (L x W x H) [mm]	100.0 x 43.0 x 25.0	150.0 x 45.0 x 30.0	100.0 x 45.0 x 30.0
Unit Weight [kg]	0.08	0.18	0.16
Cooling System	Convection		
Input Connector	Terminal, 2-pole (Line / Neutral) Conductor 0.75~1.5 mm ² Strip length 8.5...9.5mm		
Output Connector	Terminal, 4-pole (Positive / Negative / Positive / Negative) Conductor 0.75~1.5 mm ² Strip length 8.5...9.5mm		
Noise (30cm distance)	Sound Pressure Level (SPL) < 24dBA		

LED Driver

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Environment

Ambient Temperature	Operating	-25°C to +50°C	
	Storage	-25°C to +85°C	
Maximum Case Temperature		+75°C	+85°C
Lifetime Case Temperature		+75°C	+85°C
Relative Humidity	Operating	10 to 90% RH (Non-Condensing)	
	Storage	5 to 95% RH (Non-Condensing)	

Protections

Over Voltage Protection	Max. 50V for 15W, Max. 55V for 35W model, Auto-Recovery when the fault is removed
Open Load Protection	Auto-Recovery when the fault is removed
Short Circuit Protection	Auto-Recovery when the fault is removed
Over Temperature Protection	Auto-Recovery when the fault is removed
Ingress Protection Classification	IP20
Suitable for Luminaires Class	Class II. Insulation Class according to IEC 60598

Reliability Data

Lifetime	50,000 hrs. @ lifetime case temperature
MTTF	500,000 hrs. @ 40°C ambient temperature as per Telcordia SR-332

Safety Standards / Directives

Electrical Safety	CB scheme to IEC 61347-1, IEC 61347-2-13 ENEC to EN 61347-1, EN 61347-2-13, EN 62384 CCC, GB19510.1, GB19510.14 SELV
CE	In conformance with EMC Directive and Low Voltage Directive
Material and Parts	RoHS Directive Compliant
Galvanic Isolation	Input to Output: 3.75kVac

EMC

Emissions (CE & RE)	Compliance to EN 55015 Class B	
Immunity	Compliance to EN 61547	
Electrostatic Discharge	IEC 61000-4-2	Air Discharge: 8kV ; Contact Discharge: 4kV Criteria A ¹⁾ or B ²⁾
Radiated Disturbances	IEC 61000-4-3	80MHz-1GHz, 3V/m with 1kHz Sine Wave / 80% AM Modulation Criteria A ¹⁾
Electrical Fast Transient / Burst	IEC 61000-4-4	1kV; Criteria A ¹⁾ or B ²⁾
Surge	IEC 61000-4-5	1.2/50µs, 8/20µs Combination Wave with 2ohms (L-N), 12ohms (L-PE & N-PE) source impedance Criteria A ¹⁾ or B ²⁾ 15W :Common Mode ³⁾ : 1kV; Differential Mode ⁴⁾ : 0.5kV 35W :Common Mode ³⁾ : 2kV; Differential Mode ⁴⁾ : 1kV
Conducted Disturbances	IEC 61000-4-6	150kHz-80MHz, 3Vrms; Criteria A ¹⁾
Power Frequency Magnetic Fields	IEC 61000-4-8	3A/Meter; Criteria A ¹⁾
Voltage Dips	IEC 61000-4-11	100% dip; 0.5 cycle; Self Recoverable 30% dip; 10 cycle; Self Recoverable Criteria A ¹⁾ or B ²⁾
Harmonic Current Emission	IEC 61000-3-2	Class C (230Vac @ 100% load)
Voltage Fluctuation and Flicker	IEC 61000-3-3	P _{st} ≤ 1.0 ; d _{max} ≤ 4% ; P _{It} ≤ 0.65 ; d _c ≤ 3.3% ; T _{max} ≤ 500ms

1) Criteria A: Normal performance within the specification limits

2) Criteria B: Temporary degradation or loss of function which is self-recoverable

3) Asymmetrical: Common mode (Line to earth)

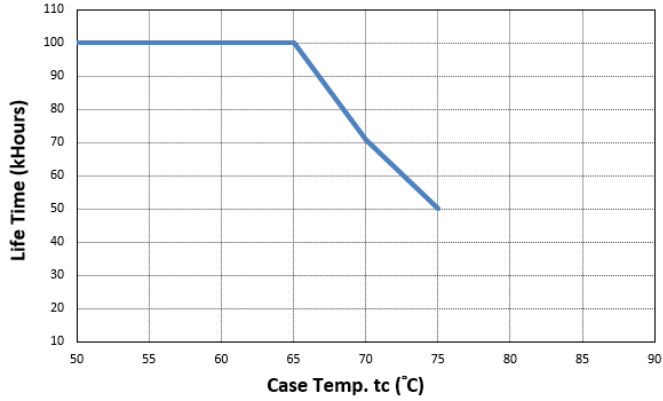
4) Symmetrical: Differential mode (Line to line)

LED Driver

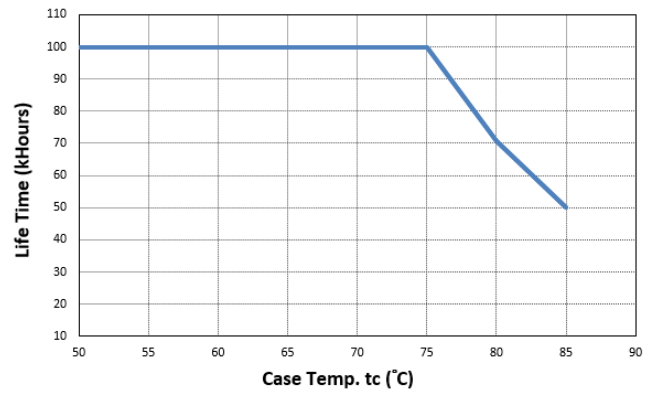
EUCI BA Series

Lifetime VS Case Temperature

EUCI-015035BA



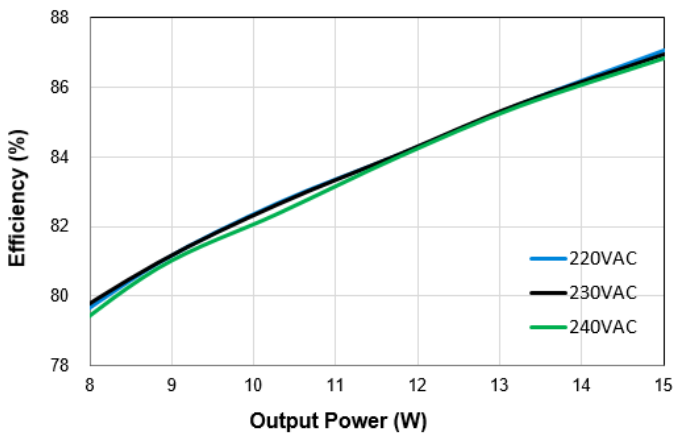
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Efficiency VS Output Power

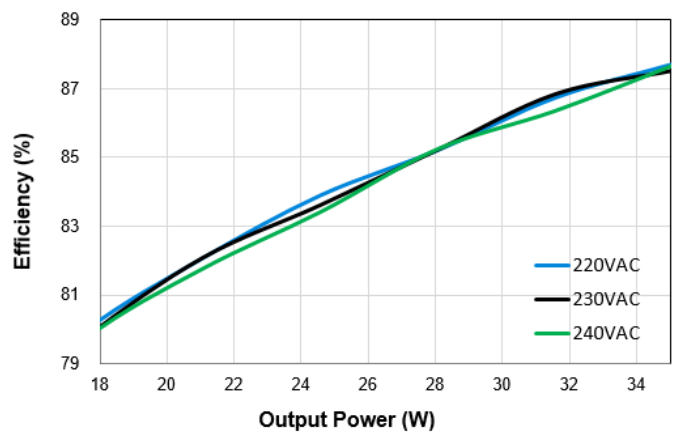
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Efficiency vs Output Power



EUCI-035090BA/BAB

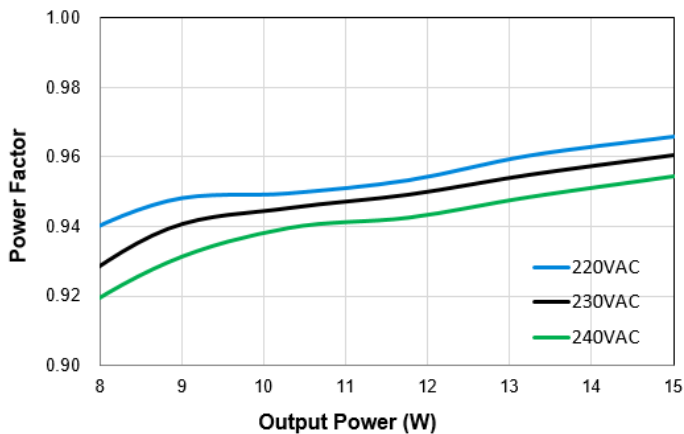
Efficiency vs Output Power



Power Factor VS Output Power

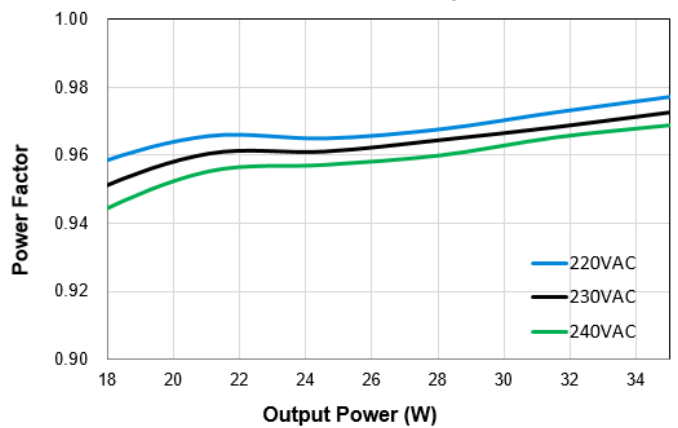
EUCI-015035BA

Power Factor vs Output Power



EUCI-035090BA/BAB

Power Factor vs Output Power

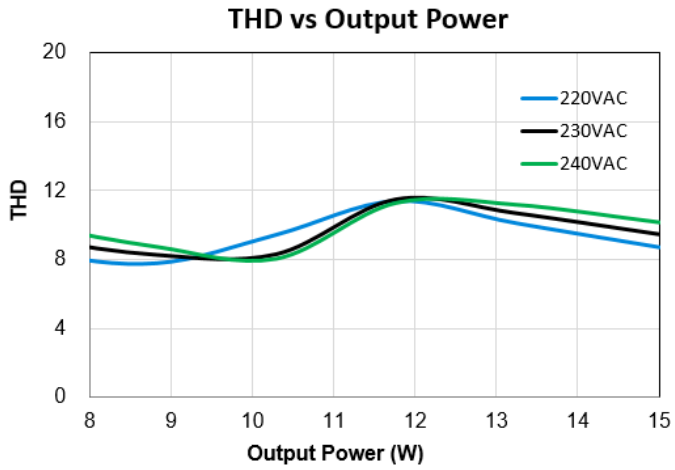


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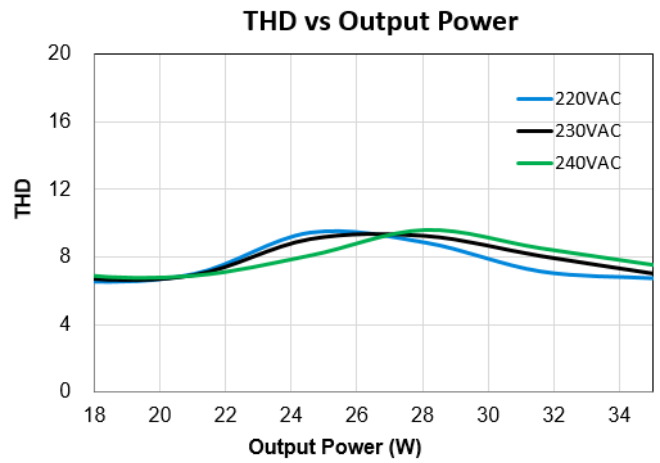
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Total Harmonic Distortion VS Output Power

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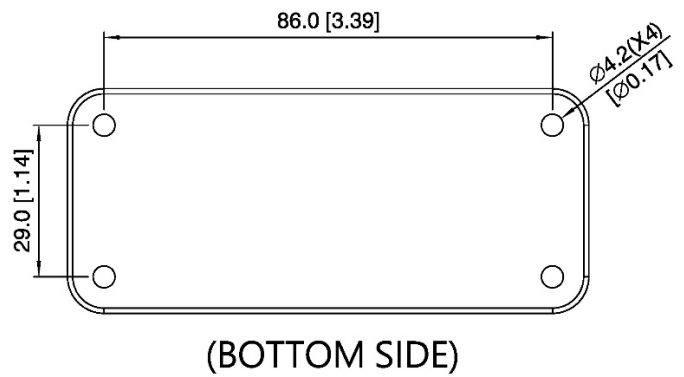
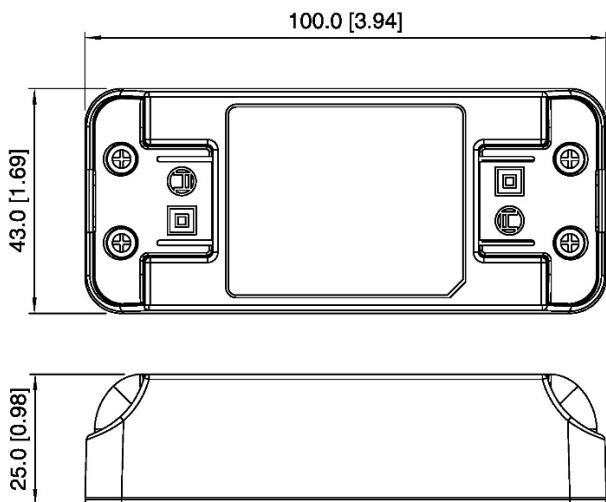


EUCI-035090BA/BAB



Dimensions

EUCI-015035BA



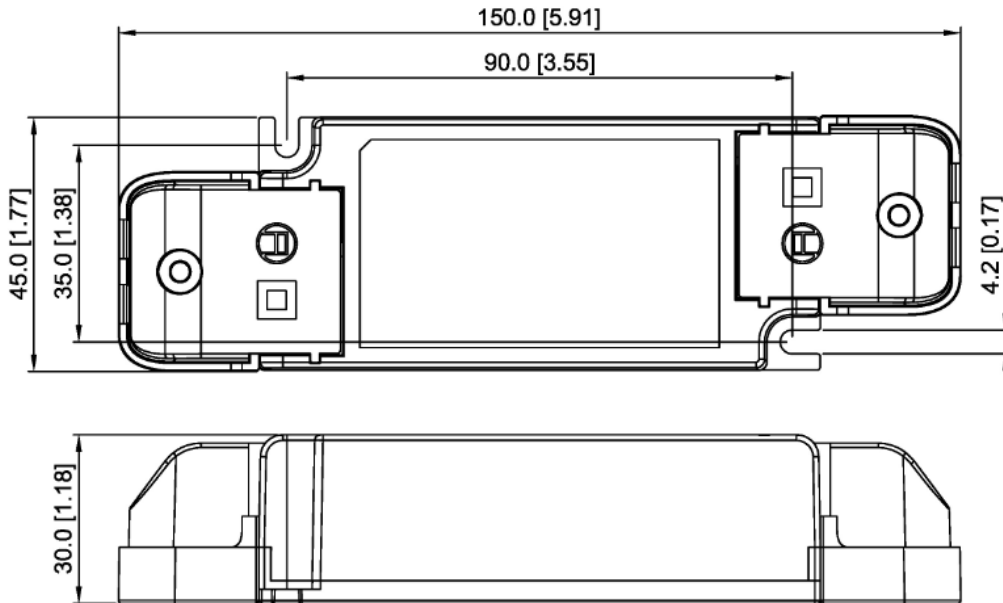
Unit: mm [inch]

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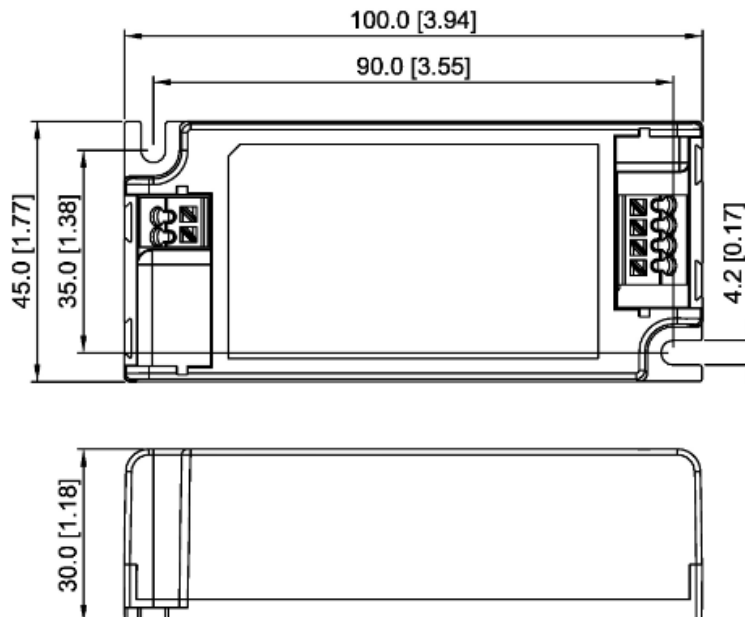
EUCI BA Series

Dimensions

EUCI-035090BA



EUCI-035090BAB



Unit: mm [inch]

Others

Warranty Policy

Please reach out our [Warranty Policy](#) should you require any further clarification.