

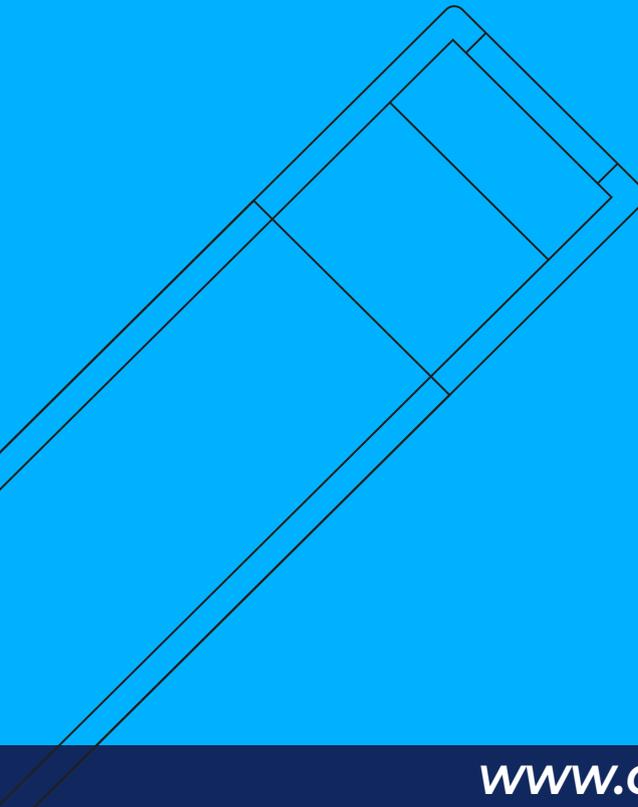
# COLOSSUS<sup>®</sup>

*Excellence inside*

**DATASHEET**

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**EUS12IHIBLECCT42300A**

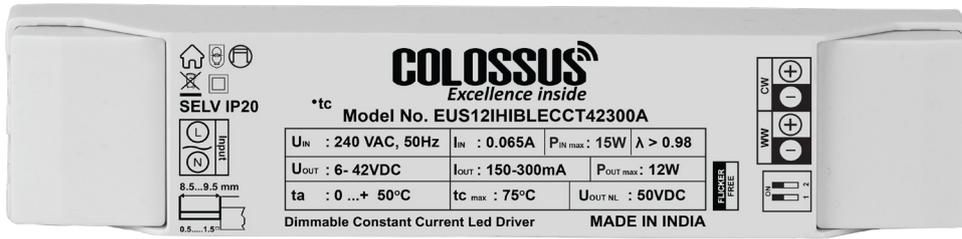


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Version: 01

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\*Image is for viewing purpose. Technical Data not to be drawn from above image.

### Approval Markings:



### Product Description

- Smart Dimmable Constant Current Driver For Led Modules
- Input Voltage 240VAC
- Output Ripple Current <5% (@ Full Load) - Flicker Free
- High Efficiency >84%(@100% Load)
- Power Factor >0.98, THD<10%(@100%Load)
- For use in combination with Luminaries of Protection Class II
- Protection against Abnormal Operating Conditions Like Input Over Voltage Protection, Under Voltage Protection, Short Circuit Protection, Open Voltage Protection, Overload Protection.
- Surge Protection 3KV
- Compatible with BLE, BLE MESH & ZIGBEE Module
- Nominal Life Time: 50,000 hours @  $t_c \leq t_{c\max}$

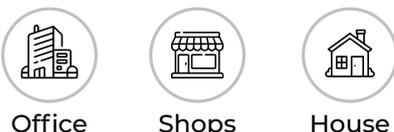
### Functions

- Seamless Control
- Adjustable output current with Dip Switch
- CCT & Dimming Control
- Application oriented operation for maximum compatibility

### Benefits

- 1-100% Deep Dimming
- Low Standby Power
- Smooth Transition over wide range of CCT & Intensity

### Applications



## Technical Data

### Mains Voltage Supply

Rated Voltage Range	240VAC
Rated Frequency	50/60 Hz
Max. Admissible Input Voltage Range(AC)	175-265VAC
Total Harmonic Distortion (THD)	<10% (@Full Load)
Mains voltage withstanding capacity	400VAC for 8hrs (with overvoltage shutdown)

### Output Data

#### Constant current

Output current tolerance	±5%
Max. Ripple output current(with LED Load)	<5% (@ Full Load)
Max starting Time	<1s

### Interface And Dimming Operation

Dimming Interface	PWM
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### Power Factor

240V(@ Full Load)	>0.98
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### Efficiency(typ.)

Full Load	>84%
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### Protections

Open Circuit	<50VDC
Output Short Circuit Operation	YES
Input Over Voltage Cutoff	320VAC ±10%
Input Under Voltage Cutoff	80VAC ±10%

### Connection Terminals

For Solid Or Stranded Wire

Type	Push Terminal
Wire Cross Section	0.5mm <sup>2</sup> - 1.5mm <sup>2</sup>
Wire Stripping Length	8.5mm - 9.5mm

### Wire Lengths

Max. Wire Length To Led Module	<1m
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### Protection

Surge	3kV
High Voltage	400V

### Temperatures (Operation)

Model No.	Ambient( $t_a$ )	Case ( $t_c$ )
EUS12IHIBLECCT42300A	0°C... +50°C	Max + 75°C

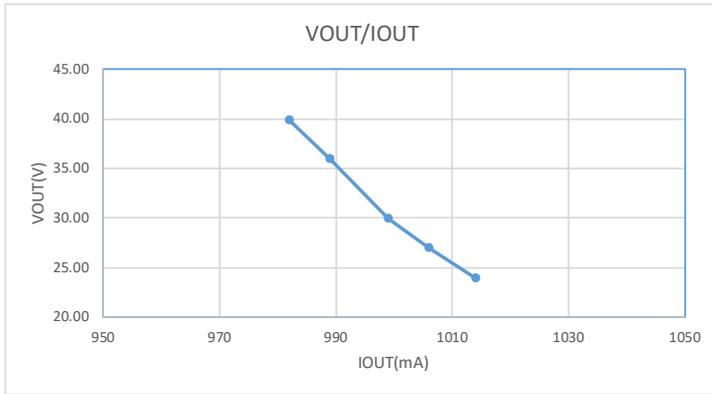
### Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
EUS12IHIBLECCT42300A	65mA	15W	<10%	>0.98	>84%	150-300mA	6-42V	12W

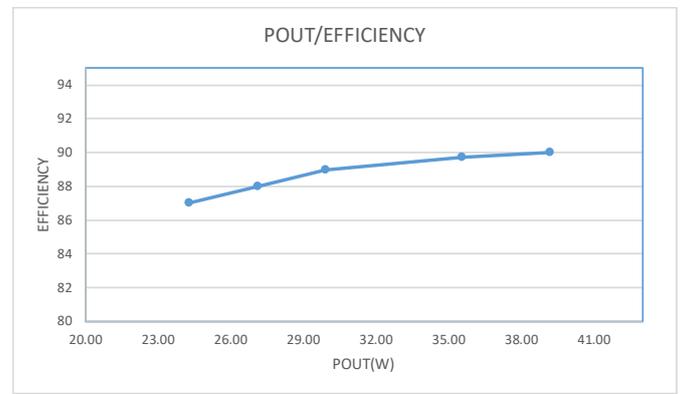
All specifications with 240 VAC are nominal operation and 100% load.

### Graphs

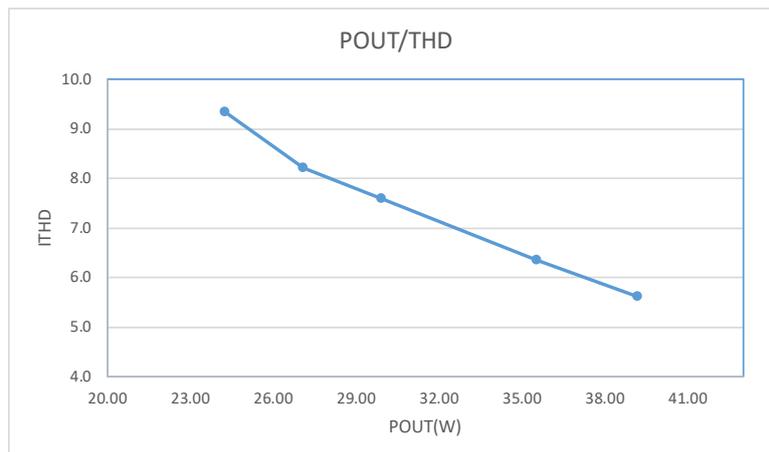
Operating Window



Efficiency Vs Output Power



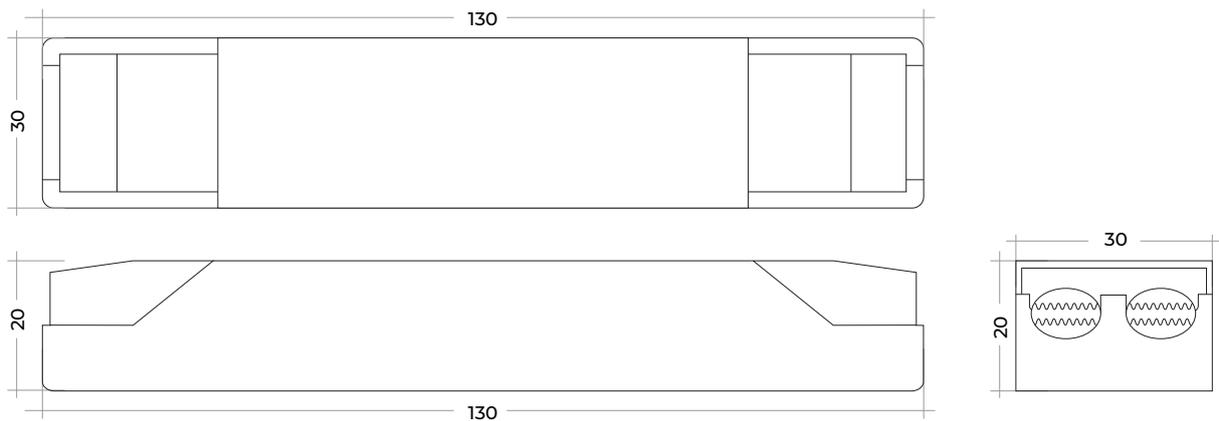
THD Vs Output Power



## Housing Properties

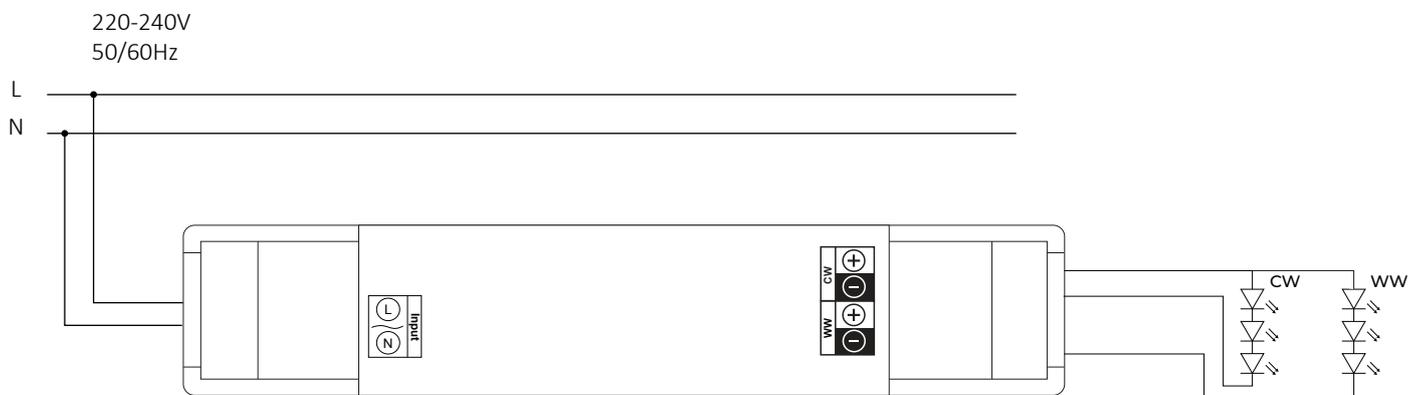
Degree of protection	IP20
Casing	Polycarbonate, White

## Housing Dimensions

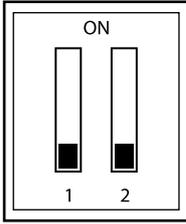


Dimensions (LxWxH)	130X30X20 mm
Tolerance	± 1mm
Weight	62 gm

## Wiring Diagrams



## Switch Configuration



SW1	SW2	Current(mA)
OFF	OFF	150
ON	OFF	200
OFF	ON	250
ON	ON	300

SW 1	SW 2	Input Voltage (V)	Input Current (mA)	Input Power (P)	THD	Power Factor	Efficiency	Output Current (mA)	Output Voltage (V)	Output Power (P)
OFF	OFF	240	30.69	7.23	9.1	0.98	80.34	145.3	40.00	5.81
ON	OFF	240	39.82	9.48	8.2	0.99	83.34	197.4	40.00	7.90
OFF	ON	240	48.49	11.58	6.3	0.99	84.91	246.7	40.00	9.83
ON	ON	240	60.32	14.45	4.7	0.99	86.30	296.8	42.03	12.50

\*Only for reference with respect to DIP Switch.

## Expected Lifetime

Lifetime	50,000 hours
Warranty	5 years

## Logistics Data

Model No.	EUS12IHIBLECCT42300A
Weight (gm)	62 gm