

# COLOSSUS®

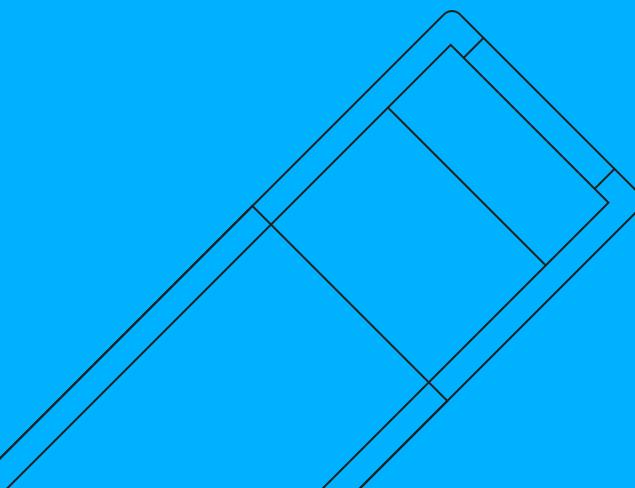
*Excellence inside*

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## DATASHEET

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**EUS25IHIBLECCT42600A**

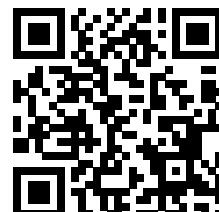


POWERED BY **CASAMBI**

Version: 01



WEBSITE



<https://colossusworld.com/>

\*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 >87%(@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 4KV
- Compatible with BLE MESH
- Nominal Life Time: 50,000 hours @ t<sub>c</sub> ≤ t<sub>c max</sub>

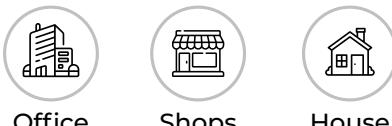
### Functions

- 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 |
|-------------------|-----|

### Power Factor

|                   |       |
|-------------------|-------|
| 240V(@ Full Load) | >0.98 |
|-------------------|-------|

### Efficiency(typ.)

|           |      |
|-----------|------|
| Full Load | >87% |
|-----------|------|

### Protections

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

### Connection Terminals

|                       |   |
|-----------------------|---|
| 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 |
|--------------------------------|-----|

### Protection

|              |      |
|--------------|------|
| Surge        | 4kV  |
| High Voltage | 400V |

### Temperatures (Operation)

| Model No.            | Ambient(ta)  | Case (tc)  |
|----------------------|--------------|------------|
| EUS25IHIBLECCT42600A | 0°C... +50°C | Max + 75°C |

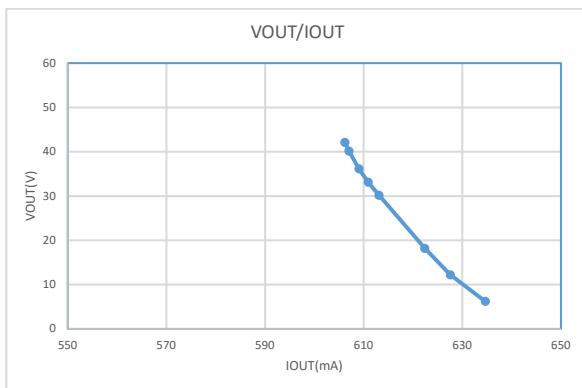
### Product Specifications

| Model No.            | Input Current (max) | Input Power (max) | THD  | Power Factor | Efficiency | Output Current | Output Voltage | Output Power (max) |
|----------------------|---------------------|-------------------|------|--------------|------------|----------------|----------------|--------------------|
| EUS25IHIBLECCT42600A | 120mA               | 27W               | <10% | >0.98        | >87%       | 250-600mA      | 6-42V          | 25W                |

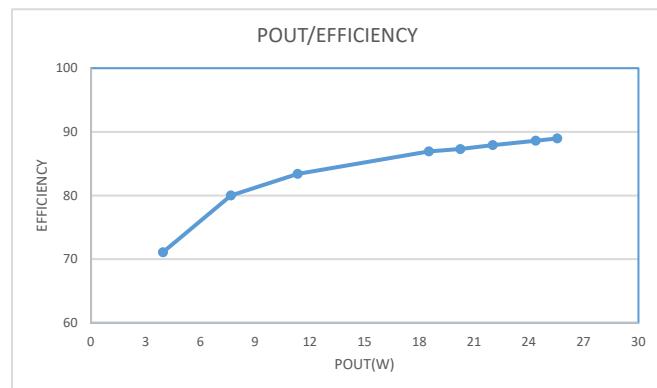
All specifications with 240 VAC are nominal operation and 100% load.

### Graphs

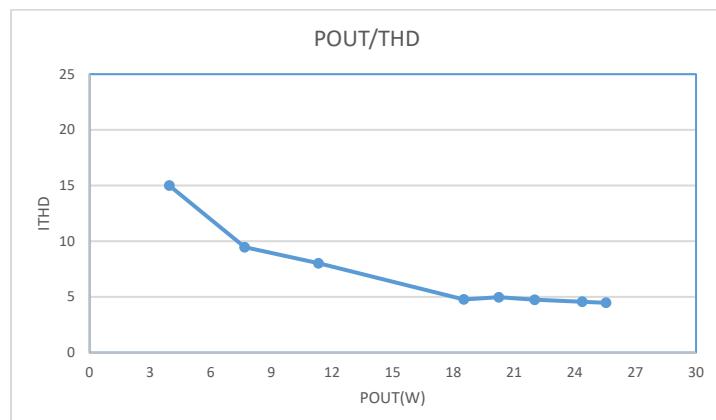
Operating Window



Efficiency Vs Output Power



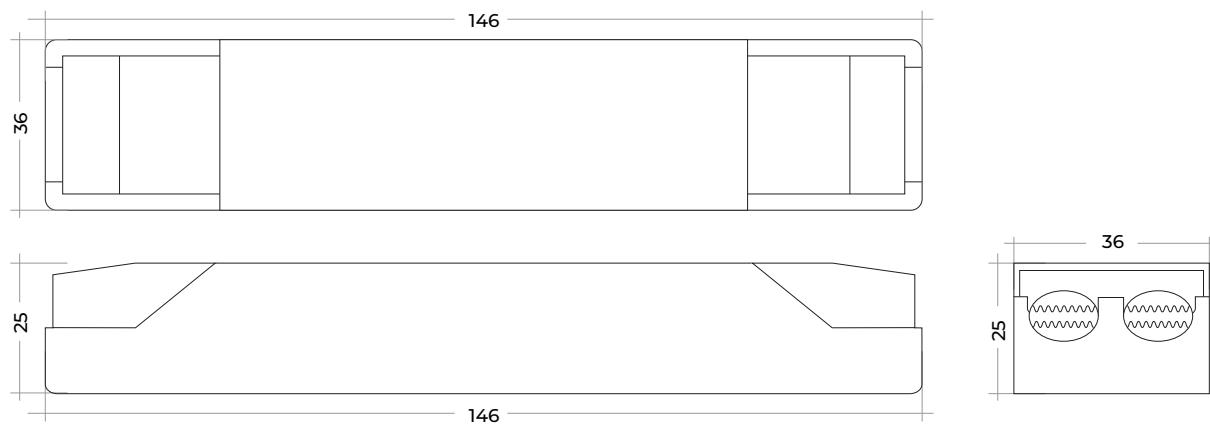
THD Vs Output Power



### Housing Properties

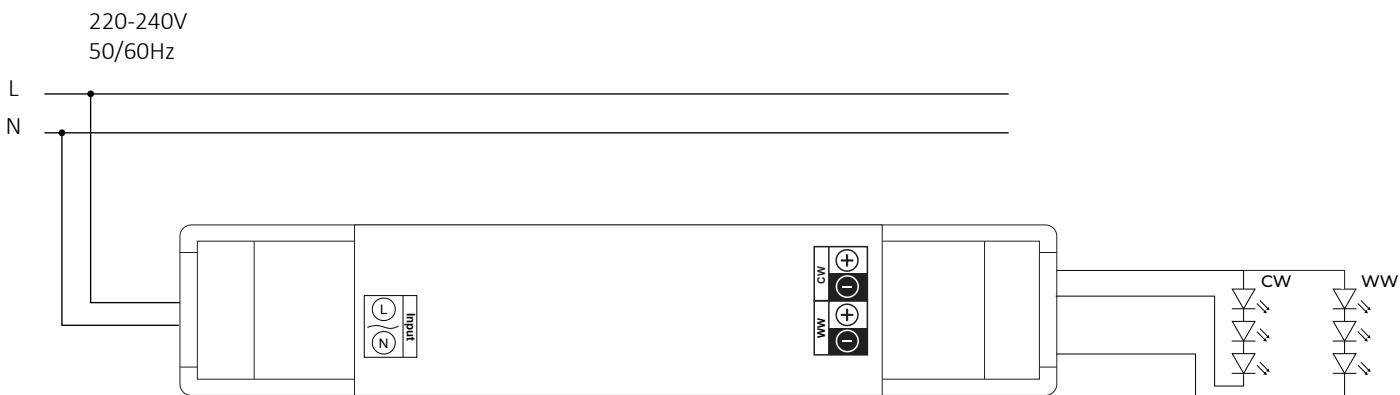
|                      |                      |
|----------------------|----------------------|
| Degree of protection | IP20                 |
| Casing               | Polycarbonate, White |

### Housing Dimensions

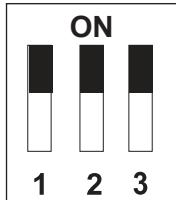


|                    |              |
|--------------------|--------------|
| Dimensions (LxWxH) | 146X36X25 mm |
| Tolerance          | ± 1mm        |
| Weight             | 103 gm       |

### Wiring Diagrams



## Switch Configuration


**DS Output Current Settings**

| S/W1 | S/W2 | S/W3 | DRIVE CURRENT (mA) |
|------|------|------|--------------------|
| OFF  | OFF  | OFF  | 250                |
| ON   | OFF  | OFF  | 300                |
| OFF  | ON   | OFF  | 350                |
| ON   | ON   | OFF  | 400                |
| OFF  | OFF  | ON   | 450                |
| ON   | OFF  | ON   | 500                |
| OFF  | ON   | ON   | 550                |
| ON   | ON   | ON   | 600                |

| SW1 | SW 2 | SW 3 | Input Voltage (V) | Input Current (mA) | Input Power (P) | THD  | Power Factor | Efficiency | Output Current (mA) | Output Voltage (V) | Output Power (P) |
|-----|------|------|-------------------|--------------------|-----------------|------|--------------|------------|---------------------|--------------------|------------------|
| OFF | OFF  | OFF  | 240               | 52.08              | 11.74           | 9.97 | 0.93         | 84.27      | 246.72              | 42.1               | 9.90             |
| ON  | OFF  | OFF  | 240               | 61.22              | 13.98           | 7.97 | 0.94         | 85.34      | 297.36              | 42.1               | 11.93            |
| OFF | ON   | OFF  | 240               | 70.01              | 16.16           | 6.62 | 0.95         | 86.46      | 347.81              | 42.2               | 13.95            |
| ON  | ON   | OFF  | 240               | 82.55              | 19.39           | 4.69 | 0.97         | 87.69      | 403.70              | 42.3               | 17.00            |
| OFF | OFF  | ON   | 240               | 86.93              | 20.42           | 5.70 | 0.97         | 87.91      | 447.25              | 42.4               | 17.95            |
| ON  | OFF  | ON   | 240               | 95.91              | 22.59           | 5.63 | 0.98         | 88.58      | 496.94              | 42.5               | 19.95            |
| OFF | ON   | ON   | 240               | 104.33             | 24.75           | 6.12 | 0.98         | 88.46      | 545.40              | 42.5               | 21.90            |
| ON  | ON   | ON   | 240               | 113.25             | 26.97           | 6.20 | 0.99         | 88.67      | 595.55              | 42.6               | 23.91            |

\*Only for reference with respect to DIP Switch.

## Expected Lifetime

|          |              |
|----------|--------------|
| Lifetime | 50,000 hours |
| Warranty | 5 years      |

## Logistics Data

|             |                      |
|-------------|----------------------|
| Model No.   | EUS25IHIBLECCT42600A |
| Weight (gm) | 103 gm               |