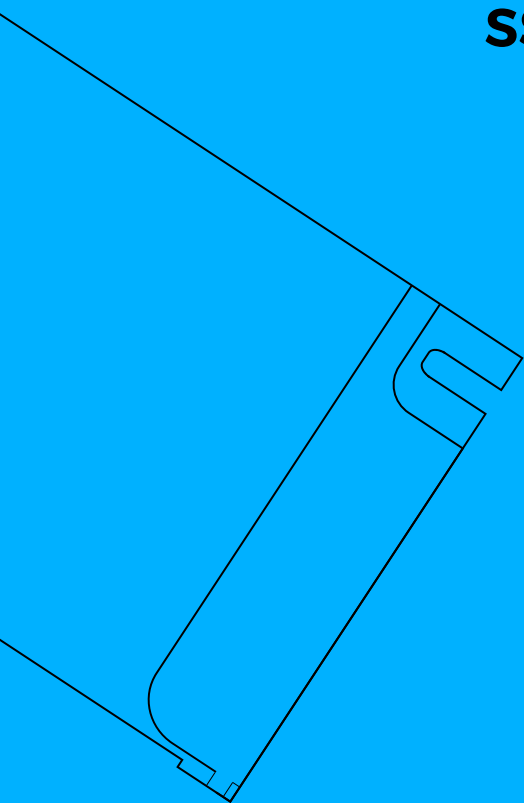


# COLOSSUS<sup>TM</sup>

*Excellence inside*

## DATASHEET

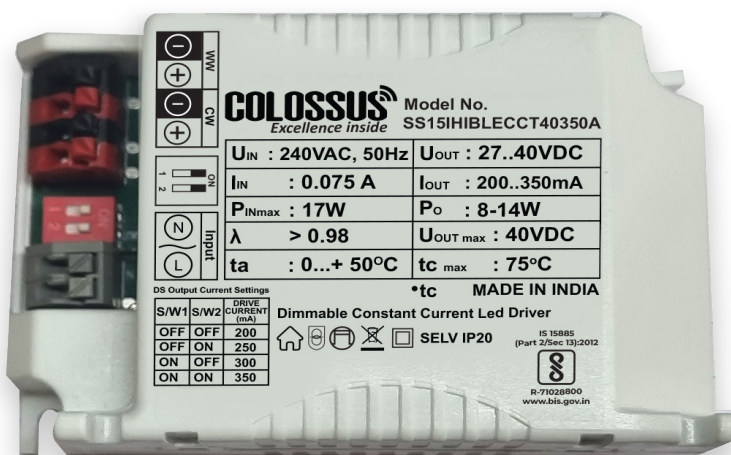
**SS15IHIBLECCT40350A**



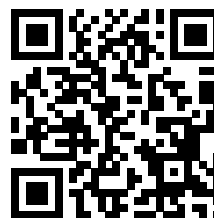
POWERED BY  **plexilent**  
simplifying life



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
- High Efficiency >88%(@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, BLE MESH & ZIGBEE Module
- Nominal Life Time: 30,000 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

### Applications



### Benefits

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

### 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     | 440VAC for 2hrs (with overvoltage shutdown) |

#### Output Data

##### Constant current

|   |      |
|---|------|
| Output Current Tolerance                  | ±5%  |
| Max. Ripple Output Current(With Led Load) | <30% |
| Max Starting Time                         | <1s  |

#### Interface And Dimming Operation

|                   |     |
|-------------------|-----|
| Dimming Interface | PWM |
|-------------------|-----|

#### Power Factor

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

#### Efficiency(typ.)

|           |      |
|-----------|------|
| Full Load | >88% |
|-----------|------|

#### Protections

|                                |             |
|--------------------------------|-------------|
| Open Circuit                   | <55VDC      |
| Output Short Circuit Operation | YES         |
| Input Over Voltage Cutoff      | 300VAC ±10% |
| Input Under Voltage Cutoff     | 90VAC ±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 |
|--------------------------------|-----|

### Protection

|              |      |
|--------------|------|
| Surge        | 4kV  |
| High Voltage | 440V |

### Temperatures (Operation)

| Model No.           | Ambient(ta)  | Case (tc)  |
|---------------------|--------------|------------|
| SS15IHIBLECCT40350A | 0°C... +50°C | Max + 75°C |

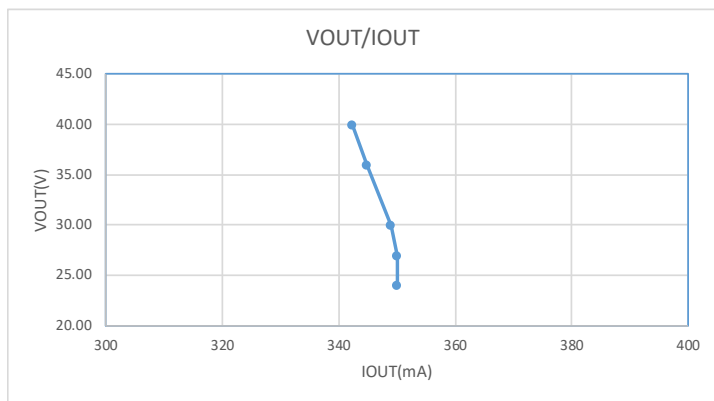
### Product Specifications

| Model No.           | Input Current (max) | Input Power (max) | THD  | Power Factor | Efficiency | Output Current | Output Voltage | Output Power (max) |
|---------------------|---------------------|-------------------|------|--------------|------------|----------------|----------------|--------------------|
| SS15IHIBLECCT40350A | 75mA                | 17W               | <10% | >0.98        | >88%       | 200-350mA      | 27-40V         | 14W                |

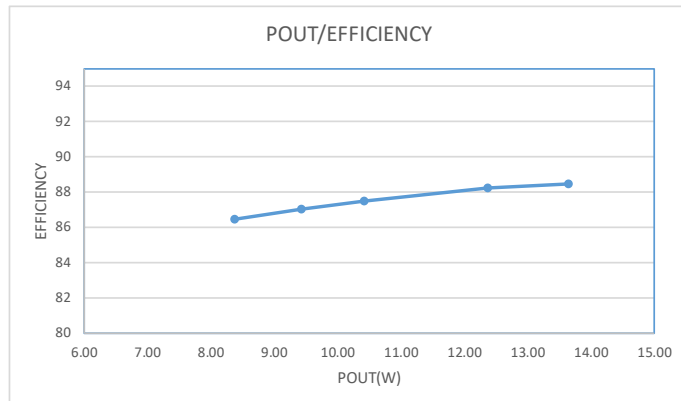
All specifications with 240 VAC are nominal operation and 100% load.

### Graphs

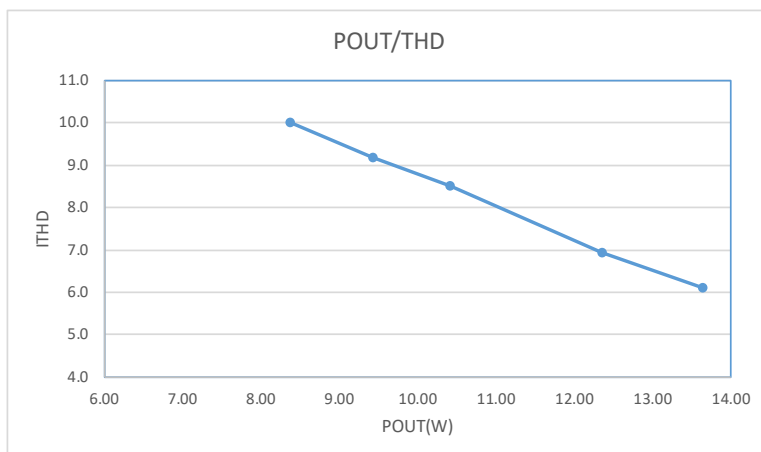
Operating Window



Efficiency Vs Output Power



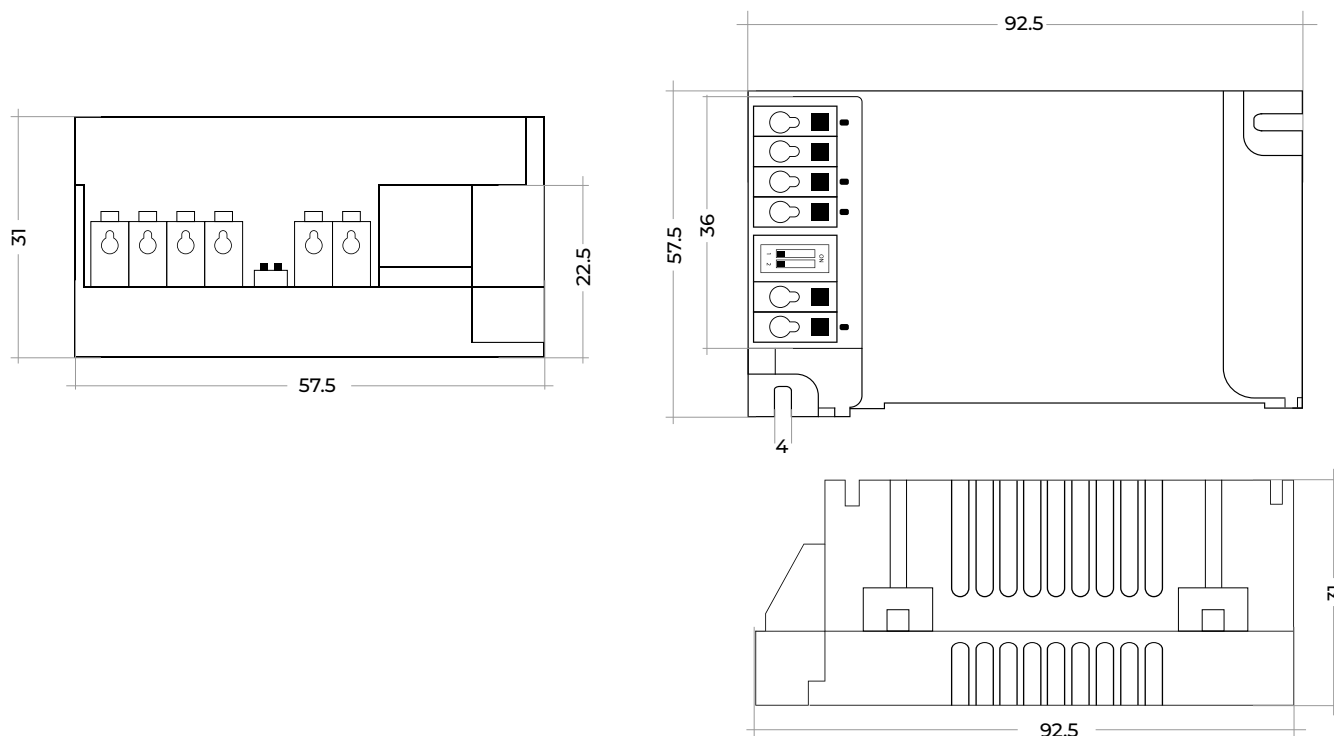
THD Vs Output Power



### Housing Properties

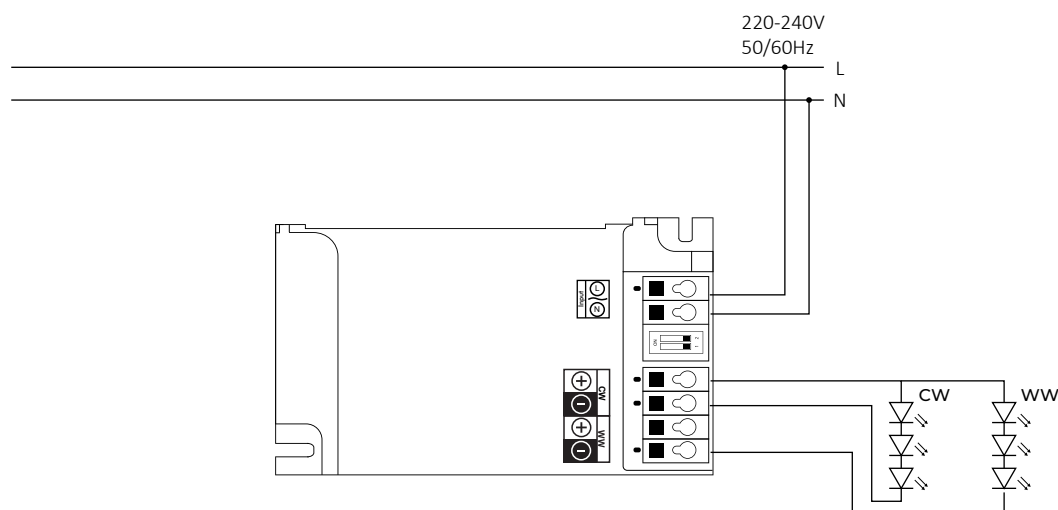
|                      |                      |
|----------------------|----------------------|
| Degree of protection | IP20                 |
| Casing               | Polycarbonate, White |

### Housing Dimensions

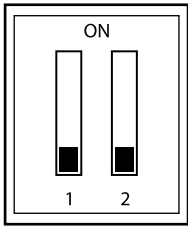


|            |                 |
|------------|-----------------|
| Dimensions | 92.5x57.5x31 mm |
| Tolerance  | ± 1mm           |
| Weight     | 90 gm           |

### Wiring Diagrams



Switch Configuration



| SW1 | SW2 | Current(mA) |
|-----|-----|-------------|
| OFF | OFF | 200         |
| OFF | ON  | 250         |
| ON  | OFF | 300         |
| ON  | ON  | 350         |

| 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               | 43.40              | 9.45            | 8.97 | 0.95         | 86         | 202.6               | 39.83              | 8.08             |
| OFF  | ON   | 240               | 51.84              | 11.51           | 7.47 | 0.97         | 87         | 250.6               | 39.83              | 9.98             |
| ON   | OFF  | 240               | 60.35              | 13.48           | 6.35 | 0.98         | 88         | 296.1               | 39.84              | 11.80            |
| ON   | ON   | 240               | 68.59              | 15.46           | 6.19 | 0.98         | 88         | 341.6               | 39.84              | 13.60            |

\*Only for reference with respect to DIP Switch Configuration.

Expected Lifetime

|          |              |
|----------|--------------|
| Lifetime | 30,000 hours |
| Warranty | 2 years      |

Logistics Data

|             |                     |
|-------------|---------------------|
| Model No.   | SS15IHIBLECCT40350A |
| Weight (gm) | 90 gm               |