

# COLOSSUS<sup>TM</sup>

*Excellence inside*

**DATASHEET**

---

**SS40IHIBLECCT401000A**

POWERED BY  **plexilent**  
simplifying life



Version: 01

[www.colossusworld.com](http://www.colossusworld.com)



<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 @  $t_c \leq t_{c\max}$

### 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



Office

Shops

House

## 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	100VAC ±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)
SS40IHIBLECCT401000A	0°C... +50°C	Max + 85°C

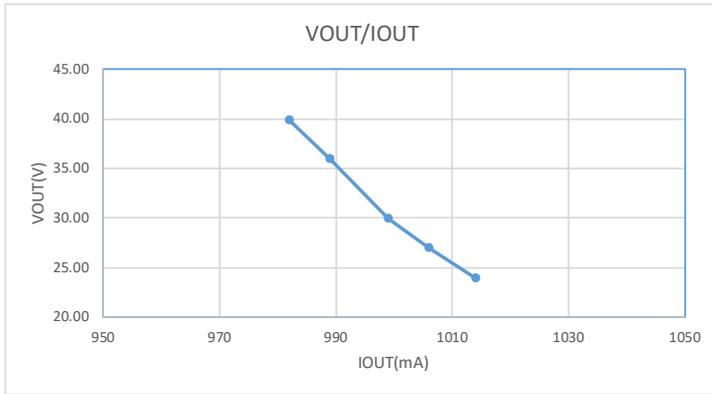
### Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
SS40IHIBLECCT401000A	185mA	44W	<10%	>0.98	>88%	700-1000mA	27-40V	40W

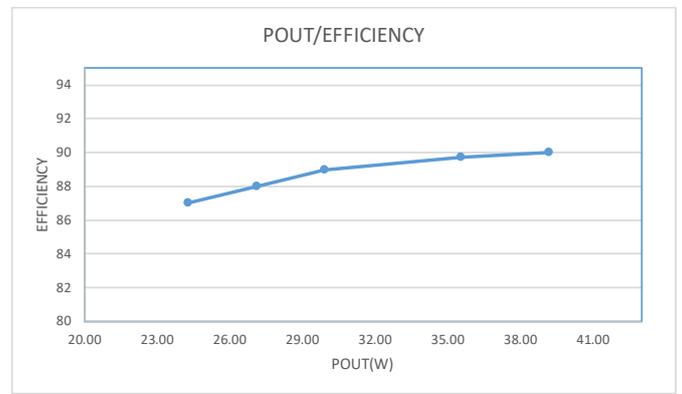
All specifications with 240 VAC are nominal operation and 100% load.

### Graphs

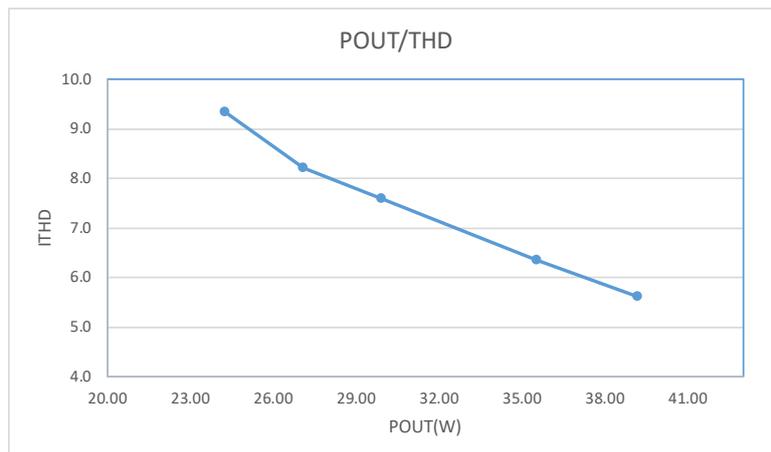
Operating Window



Efficiency Vs Output Power



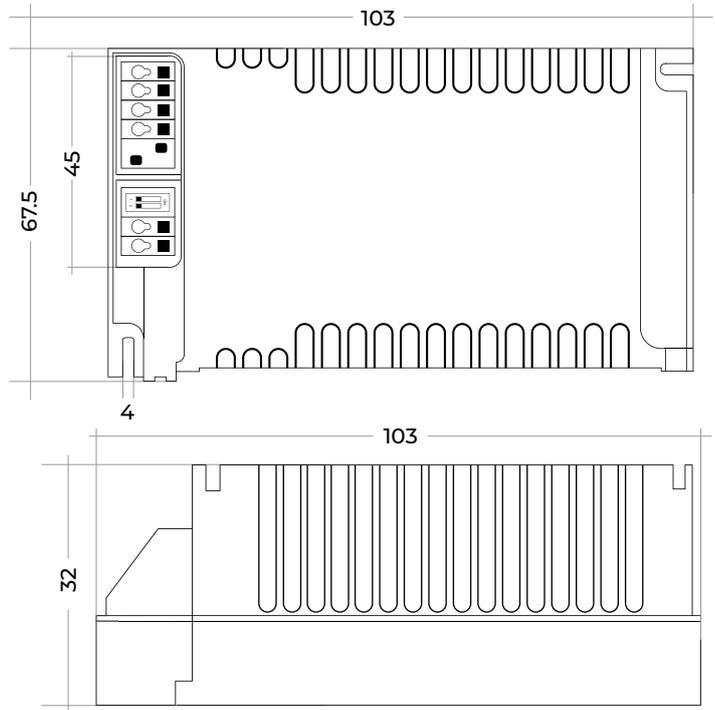
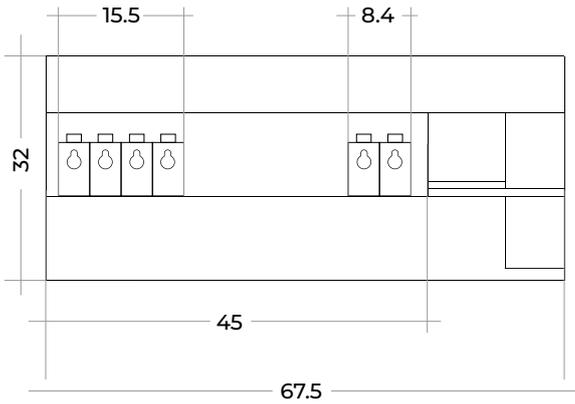
THD Vs Output Power



### Housing Properties

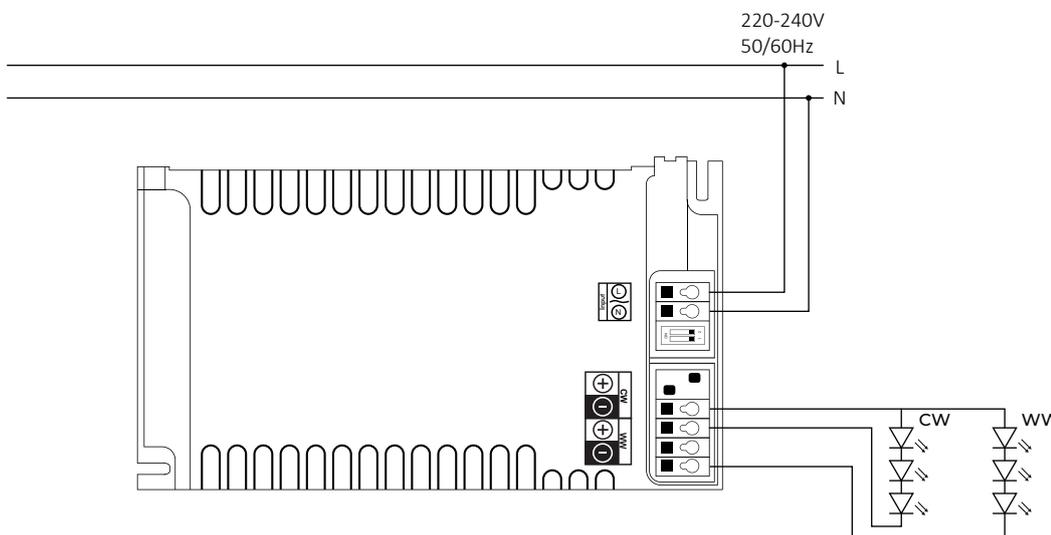
Degree Of Protection	IP20
Casing	Polycarbonate, White

### Housing Dimensions

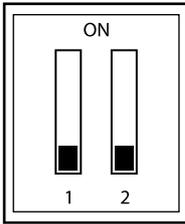


Dimensions (LxWxH)	103x67.5x32 mm
Tolerance	± 1mm
Weight	130 gm

### Wiring Diagrams



## Switch Configuration



SW1	SW2	Current(mA)
OFF	OFF	700
OFF	ON	800
ON	OFF	900
ON	ON	1000

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	135.00	30.70	5.53	0.99	89	689	39.88	27.33
OFF	ON	240	152.60	34.99	5.64	0.98	90	785	39.88	31.11
ON	OFF	240	172.10	39.28	5.63	0.99	90	886	39.88	35.54
ON	ON	240	190.00	43.50	5.53	0.99	90	992	39.87	39.31

\*Only for reference with respect to DIP Switch.

## Expected Lifetime

Lifetime	30,000 hours
Warranty	2 years

## Logistics Data

Model No.	SS40IHIBLECCT401000A
Weight (gm)	130 gm