

# COLOSSUS<sup>®</sup>

*Excellence inside*

**DATASHEET**

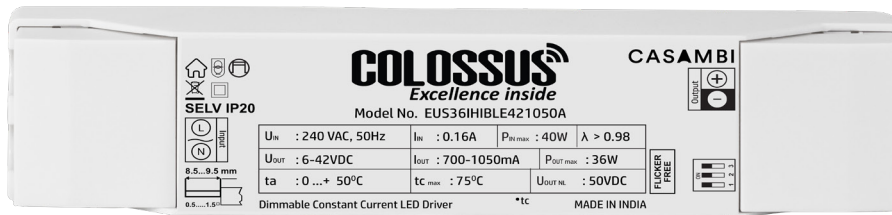
**EUS36IHIBLE421050A**



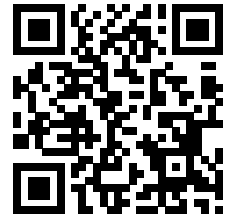
POWERED BY CAS<sup>A</sup>MBI

Version: 01

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



WEBSITE



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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 >86%(@100% Load Voltage)
- 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 @  $t_c \leq t_{c_{max}}$

### Functions

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

### Benefits

- 1-100% Deep Dimming
- Low Standby Power
- Smooth Transition over wide range of 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	400VAC for 2hrs (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	>86%
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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	4kV
High Voltage	400V

### Temperatures (Operation)

Model No.	Ambient(ta)	Case (tc)
EUS36IHIBLE421050A	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)
EUS36IHIBLE421050A	160mA	40W	<10%	>0.98	>86%	700-1050mA	6-42V	36W

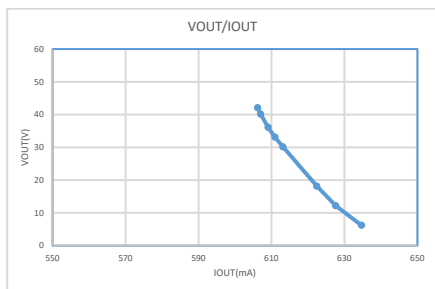
All specifications with 240 VAC are nominal operation and 100% load.

### LED Current Selection

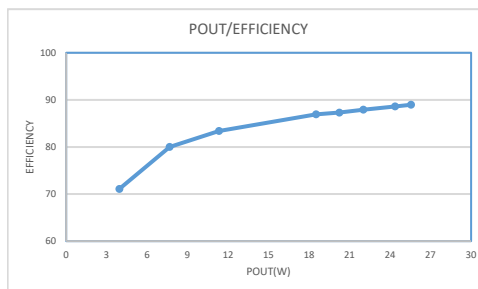
DIP Switch									 ON OFF
Output Current	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA	
Output Voltage	6-42V	6-42V	6-42V	6-42V	6-40V	6-36V	6-36V	6-34V	
Output Power	4.2-29.4W	4.5-31.5W	4.8-33.6W	5.1-35.7W	5.4-36W	5.7-34.2W	6-36W	6.3-35.7W	

### Graphs

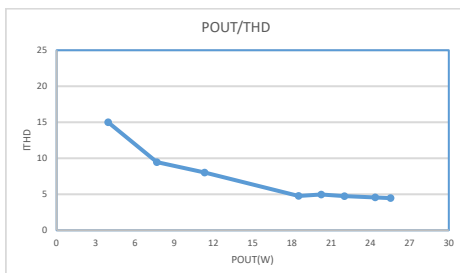
Operating Window



Efficiency Vs Output Power



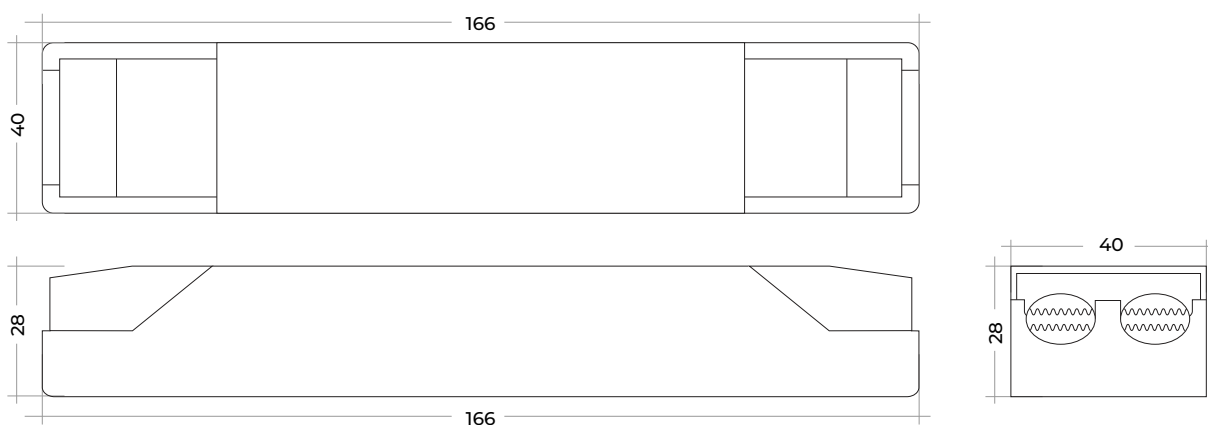
THD Vs Output Power



### Housing Properties

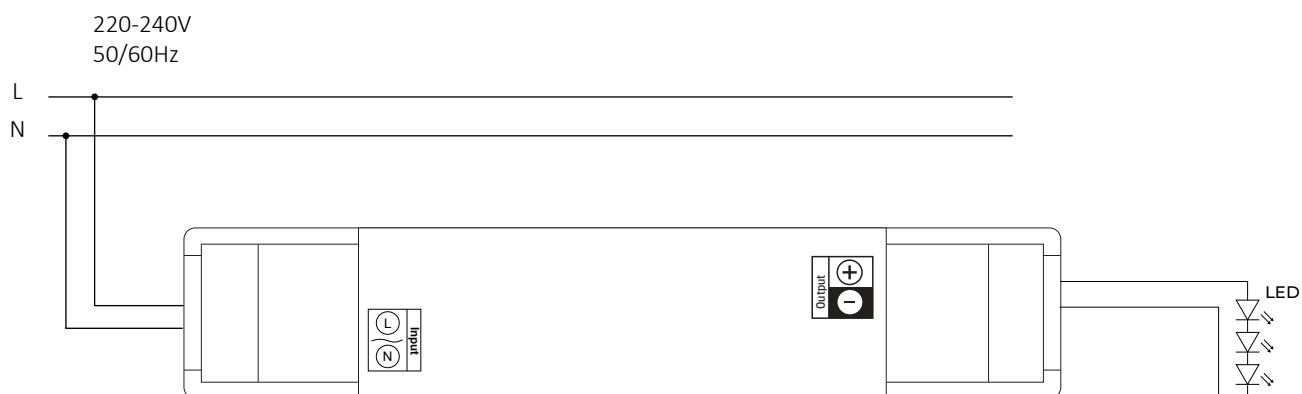
Degree of protection	IP20
Casing	Polycarbonate, White

### Housing Dimensions

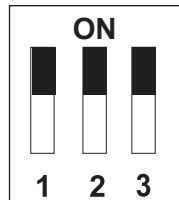


Dimensions (LxWxH)	166X40X28 mm
Tolerance	± 1mm
Weight	132 gm

### Wiring Diagrams



### Switch Configuration



DS Output Current Settings

S/W1	S/W2	S/W3	DRIVE CURRENT (mA)
OFF	OFF	OFF	700
ON	OFF	OFF	750
OFF	ON	OFF	800
ON	ON	OFF	850
OFF	OFF	ON	900
ON	OFF	ON	950
OFF	ON	ON	1000
ON	ON	ON	1050

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	241.34	141.77	33.62	4.36	0.98	88.17	702.62	42.1	29.64
ON	OFF	OFF	241.37	152.22	36.17	4.17	0.98	88.15	755.63	42.2	31.89
OFF	ON	OFF	241.38	162.13	38.57	4.36	0.98	88.30	806.85	42.2	34.05
ON	ON	OFF	241.38	173.07	41.62	3.66	0.98	88.55	861.00	42.2	36.71
OFF	OFF	ON	241.12	174.22	41.32	4.29	0.98	88.14	906.61	40.1	36.42
ON	OFF	ON	241.23	174.28	41.59	4.31	0.98	87.98	957.91	38.2	36.60
OFF	ON	ON	241.32	174.01	41.55	4.38	0.98	87.73	1007.07	36.1	36.45
ON	ON	ON	241.33	173.40	41.40	4.31	0.98	87.45	1059.76	34.1	36.20

\*Only for reference with respect to DIP Switch.

### Expected Lifetime

Lifetime	50,000 hours
Warranty	5 years

### Logistics Data

Model No.	EUS36IHIBLE421050A
Weight (gm)	132 gm