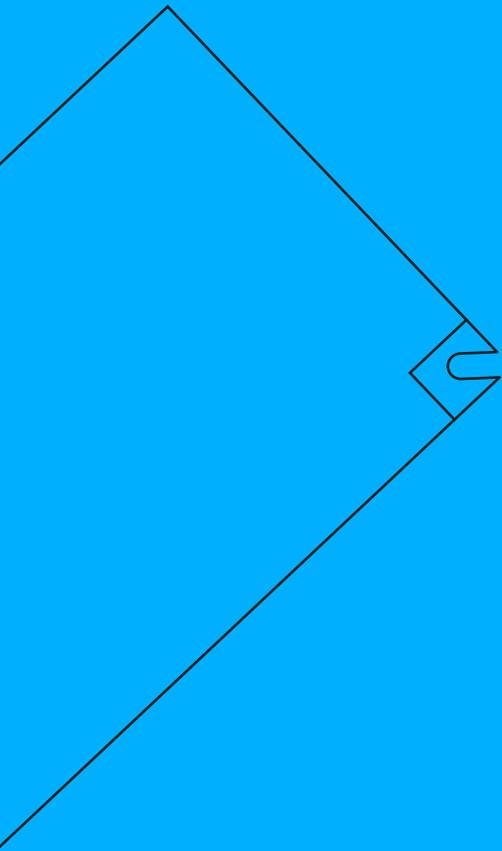


**COLOSSUS**<sup>TM</sup>  
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**DATASHEET**

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**ESS32IHI40800W**



Version: 01



<https://colossusworld.com/>

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

### Approval Markings:



### Product Description

- Constant current driver for led modules
- Input voltage 240VAC
- High efficiency >85%(@100% Load)
- Power factor >0.95,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
- Nominal Life Time: 50,000 hours @  $t_c \leq t_{c\max}$

### Functions

- Application oriented operation for maximum compatibility

### 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	440VAC for 2hrs

### Output Data

#### Constant current

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

### Interface And Dimming Operation

Dimming Interface	None
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### Power Factor

240V(@ Full Load)	>0.95
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### Efficiency(typ.)

Full Load	>85%
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### Protections

Open Circuit	<50VDC
Output Short Circuit Operation	YES
Input Over Voltage Cutoff	300VAC ±10%
Input Under Voltage Cutoff	100VAC ±10%

### Connection Wires

Type	Solid or Stranded Wire
Wire Cross Section	0.5mm <sup>2</sup> - 1.5mm <sup>2</sup>
Wire Length	150mm (±15mm)

### Wire Lengths

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

Surge	4kV
High Voltage	440V

### Temperatures (Operation)

Model No.	Ambient(ta)	Case (tc)
ESS32IHI40800W	-20°C... +50°C	Max + 75°C

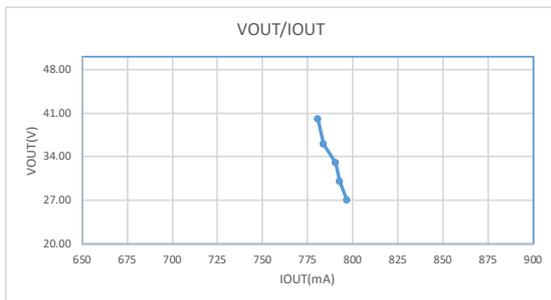
### Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
ESS32IHI40800W	150mA	36W	<10%	>0.95	>85%	800mA	27-40V	32W

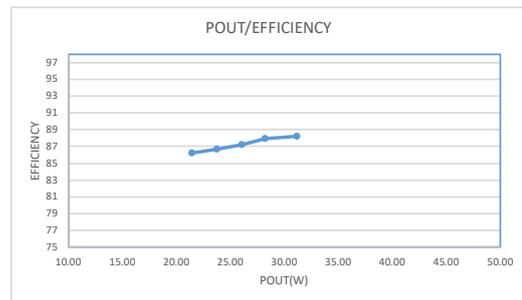
All specifications with 240VAC/50Hz are nominal operation and 100% load.

### Graphs

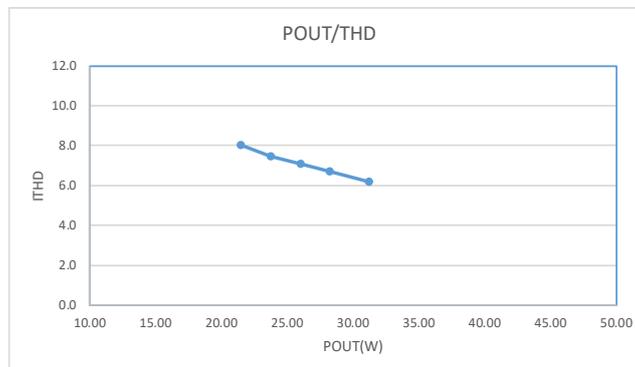
Operating Window



Efficiency Vs Output Power



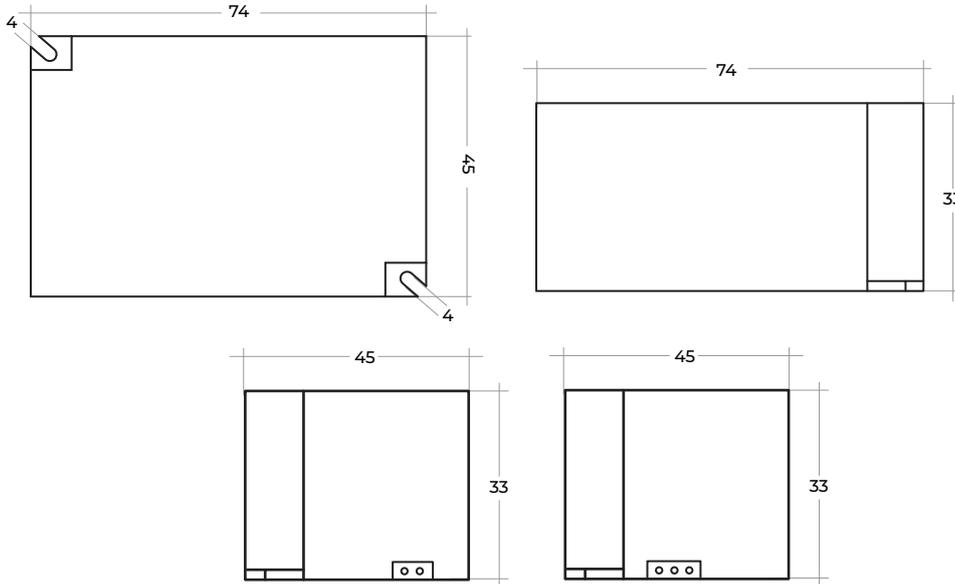
THD Vs Output Power



### Housing Properties

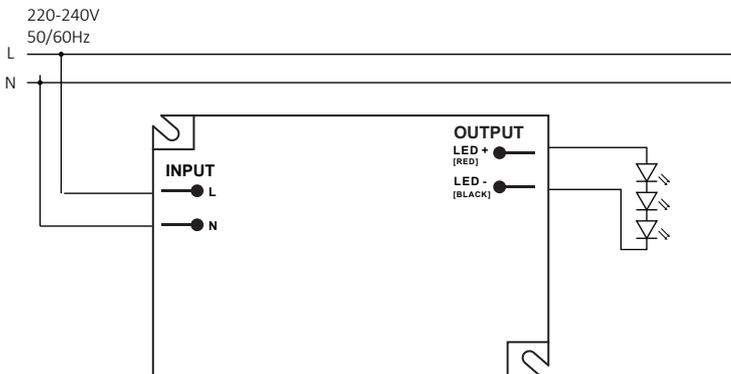
Degree of protection	IP20
Casing	Polycarbonate, White

## Housing Dimensions



<b>Dimensions</b>	74x45x33mm
<b>Tolerance</b>	± 1mm
<b>Weight</b>	85gm

## Wiring Diagrams



## Expected Lifetime

<b>Lifetime</b>	50,000 hours
<b>Warranty</b>	5 years

## Logistics Data

<b>Model No.</b>	ESS32IH140800W
<b>Weight (gm)</b>	85gm