

COLOSSUSTM

Excellence inside

DATASHEET

ESS40IHI401000W

Version: 01



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*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 @ tc ≤ tc_{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 ² - 1.5mm ²
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)
ESS40IH1401000W	-20°C... +50°C	Max + 85°C

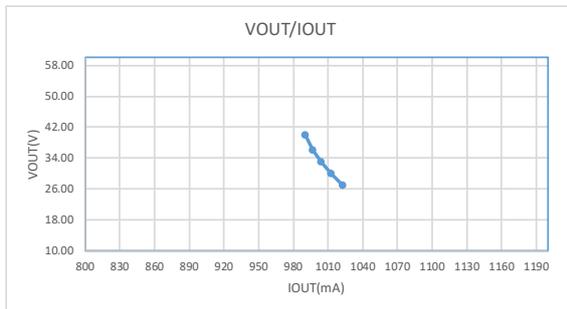
Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
ESS40IH1401000W	190mA	44W	<10%	>0.95	>85%	1000mA	27-40V	40W

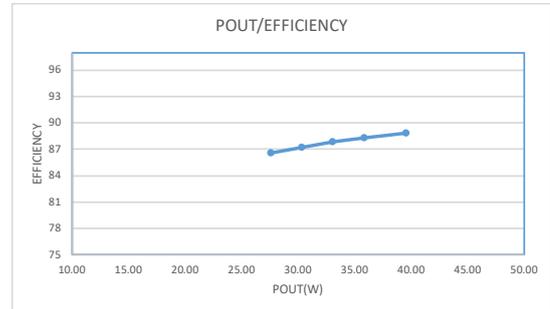
All specifications with 240VAC/50Hz are nominal operation and 100% load.

Graphs

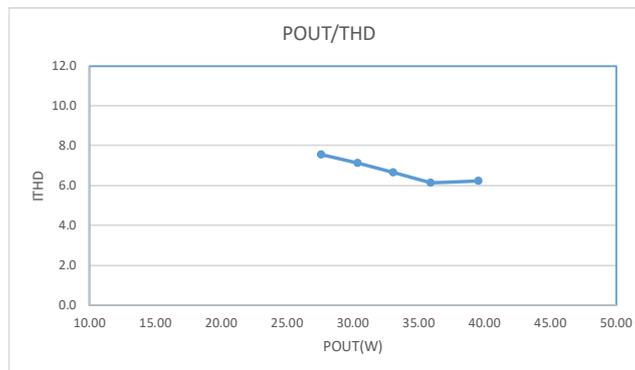
Operating Window



Efficiency Vs Output Power



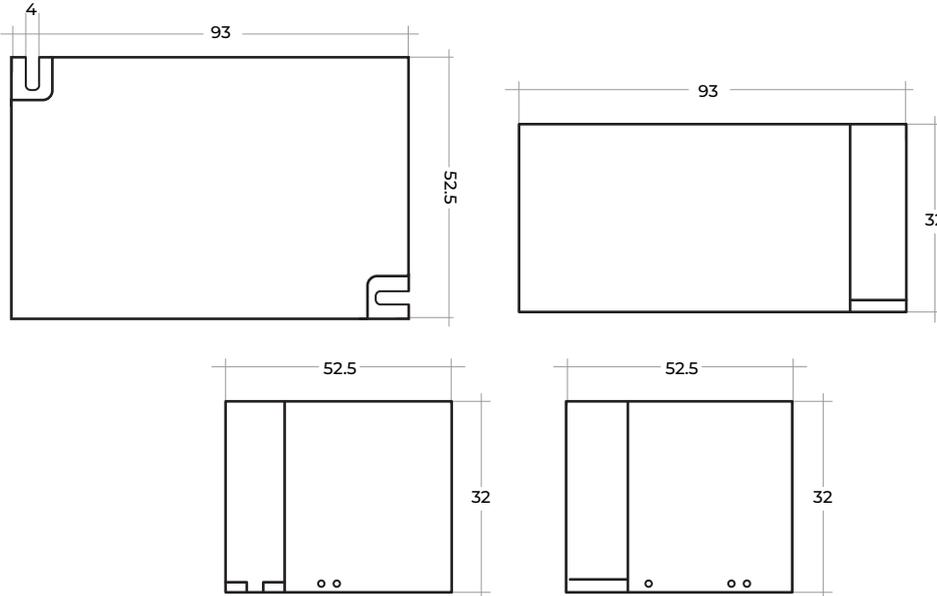
THD Vs Output Power



Housing Properties

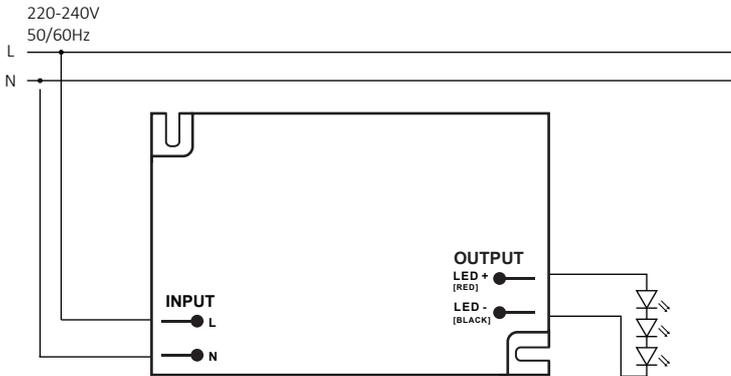
Degree of protection	IP20
Casing	Polycarbonate, White

Housing Dimensions



Dimensions	93x52.5x32mm
Tolerance	± 1mm
Weight	125gm

Wiring Diagrams



Expected Lifetime

Lifetime	50,000 hours
Warranty	5 years

Logistics Data

Model No.	ESS40IH1401000W
Weight (gm)	125gm