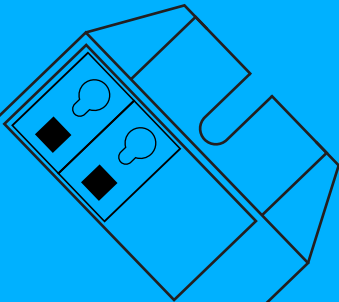


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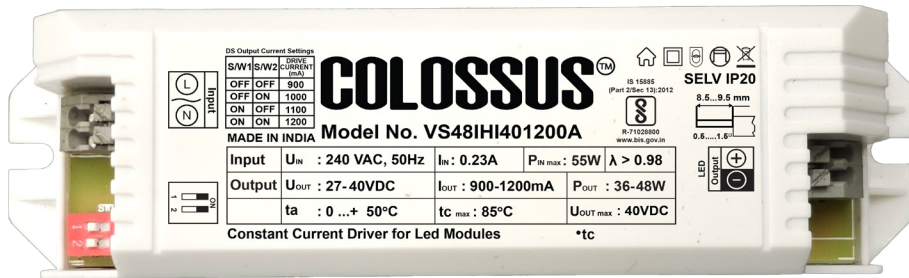
Excellence inside

DATASHEET

VS48IHI401200A



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 >88%(@100% Load)
- Power Factor >0.98, THD<10%
- 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: 30,000 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)	100-265VAC
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 Starting Time	<1s

Interface And Dimming Operation

Dimming Interface	None
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Power Factor

240V(@ Full Load)	>0.98
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Efficiency(typ.)

Full Load	>88%
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Protections

Open Circuit	<53VDC
Output Short Circuit Operation	YES
Input Over Voltage Cutoff	310VAC ±10%
Input Under Voltage Cutoff	100VAC ±10%

Connection Terminals

Type	For solid Or stranded wire
Wire Cross Section	Push Terminal
Wire Stripping Length	0.5mm ² - 1.5mm ²
	8.5mm - 9.5mm

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)
VS48IHI401200A	0°C... +50°C	Max + 85°C

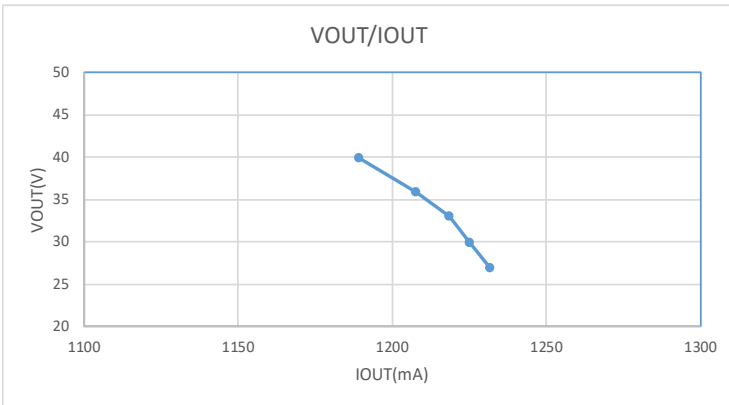
Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
VS48IHI401200A	230mA	55W	<10%	>0.98	>88%	900-1200mA	27-40V	48W

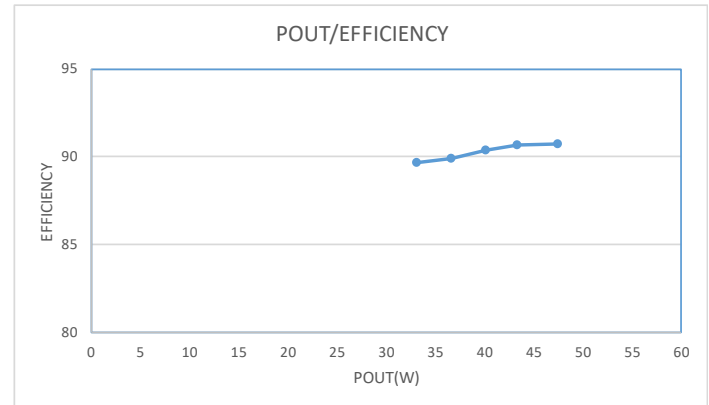
All specifications with 240 VAC are nominal operation and 100% load.

Graphs

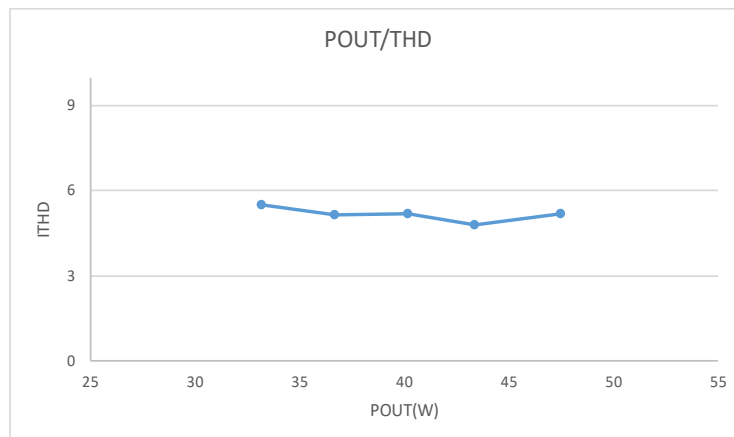
Operating Window



Efficiency Vs Output Power



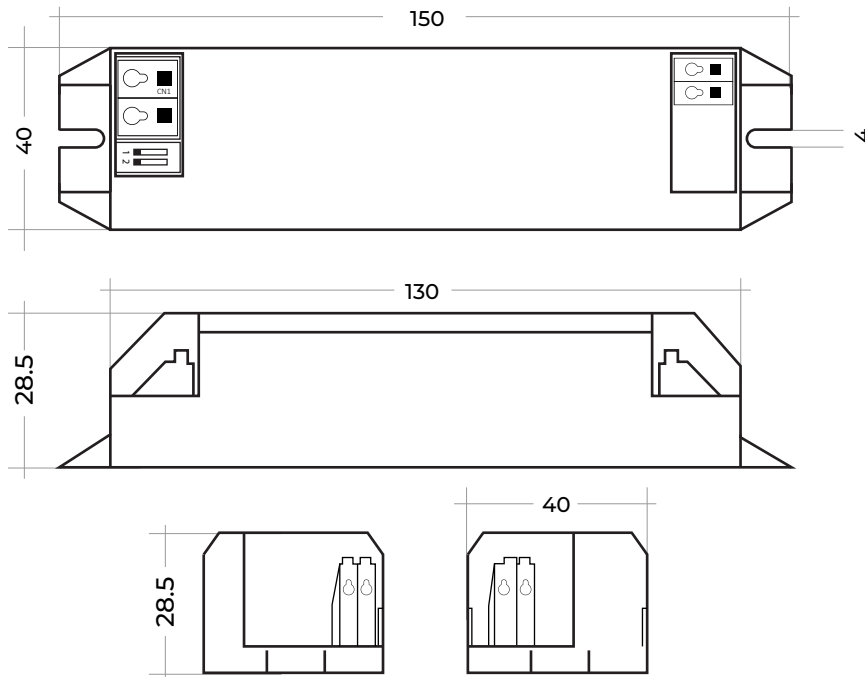
THD Vs Output Power



Housing Properties

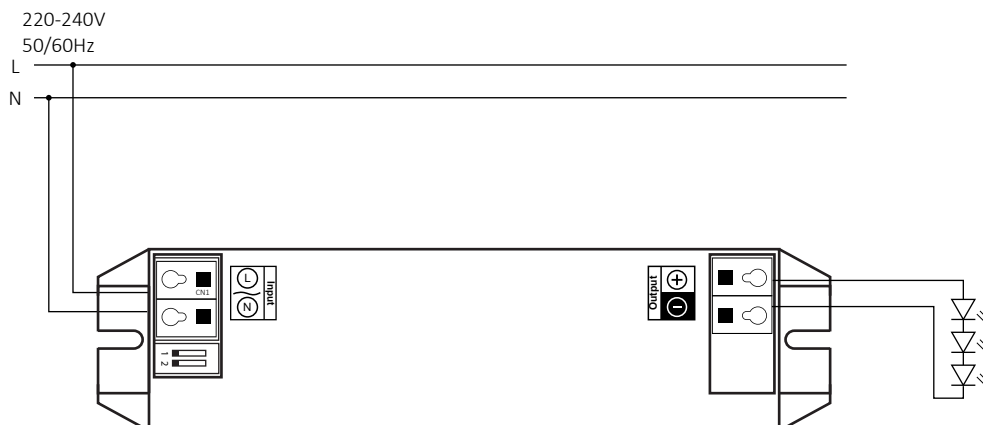
Degree Of Protection	IP20
Casing	Polycarbonate, White

Housing Dimensions

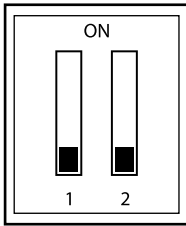


Dimensions (LxWxH)	150x40x28.5 mm
Tolerance	± 1mm
Weight	110 gm

Wiring Diagrams



Switch Configuration



SW1	SW2	Current(mA)
OFF	OFF	900
OFF	ON	1000
ON	OFF	1100
ON	ON	1200

SW1	SW2	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	167	39	5	0.98	91	904	40	36
OFF	ON	240	187	44	6	0.99	91	1011	40	40
ON	OFF	240	206	48	4	0.99	91	1116	40	45
ON	ON	240	224	53	4	0.99	91	1216	40	49

*Only for reference with respect to DIP Switch.

Expected Lifetime

Lifetime	30,000 hours
Warranty	2 years

Logistics Data

Model No.	VS48IH1401200A
Weight (gm)	110 gm