

Features

- Universal Input 90~264VAC / 127~370 VDC 47/63Hz
- DC Output Adjustable
- Output Voltages: 24-48V DC
- Meets the latest Safety Standards and Approvals
- UL508, BS/EN62368-1
- High Efficiency
- Protection: Overload/Over voltage/Short circuit



Ideal Power's 56YSDN240-xy 240W DIN Rail Mount AC/DC Power Supply Converter Series are certified to UKCA, CE, cULus & UL508/EN62368-1/BS62368-5 Standards and comply with (EU) 2019/1782, Level VI Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

Models

Model Number	Output Voltage V DC	Output Current A	Output Power W	Efficiency %	Voltage ADJ. Range V
56YSDN240-24010000	24	10	240	87	24-28
56YSDN240-48005000	48	5	340	88	48-55

General Specification

Type	DIN Rail Power Supply
Number of Outputs	1
Mounting Style	Din Rail Mount
Connection Type	Screw Terminal Type
Overload Protection	>105%-130% rated output power: Protection type: Hiccup mode, recovers automatically after fault condition is re-moved
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down
Over Voltage Protection	29~33V - 56YSDN240-24010000 56~65V - 56YSDN240-48005000 Protection type : Shut down o/p voltage, re-power on to recover

Input Specifications

Input Electrical Phase	Single
Line Frequency	47~63Hz
Inrush Current	37.2A/115VAC / 70A/230VAC
AC Current	2.5A/115VAC / 1.3A/230VAC
Leakage Current	<1mA/240VAC

Output Specifications

Ripple & Noise	150mVp-p
Output Voltage Tolerance	± 2.0%
Line Regulation	± 0.5%
Load Regulation	± 1.0%
Setup, Rise Time	1500ms, 60ms/230VAC at full load 3000ms, 60ms/115VAC at full load
Hold Up time	16ms/230VAC at full load 12ms/115VAC at full load

Operational Environment

Operating Humidity	20% ~ 95% RH non-condensing
Operating Temperature Range	-20°C to 70°C, Refer to Derating Curve
Storage Temperature Range	-40°C to 85°C
Storage Humidity	10% ~ 95% RH
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500V DC / 25oC / 70% RH
MTBF	200000 h

Approvals

Safety Regulations	UL508/EN62368-1/BS62368-1
Withstand Voltage	1/P-O/P:3KVAC 1/P-FG:2KVAC O/P-FG:0.5KVAC
EMC Emissions	Compliance to BS EN/EN55032 , BS EN/EN61000-3-2,-3
EMC Immunity	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 UBS EN/EN50082-2)

Note:

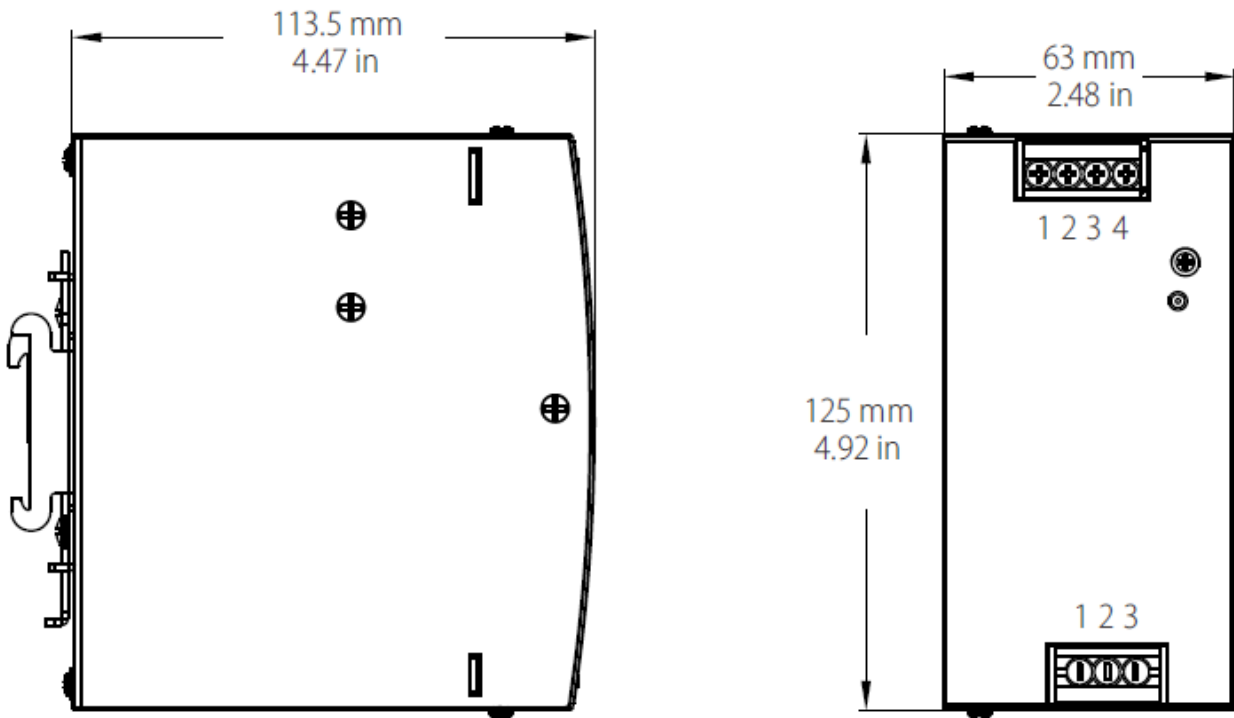
- All parameters NOT specially mentioned at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple&noise are measured from peak to peak with band width limit of 20MHzU0.1uF and 47uF/50V parallel capacitor under DC output full load, AC nominal input 25°C ambient temperature).
- Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- Derating may be needed under low input voltage. Please check the derating curve for more details.
- Efficiency test after 30 minutes of burn-in.
- The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000mU6500ft).

Mechanical Specifications

Housing Material	Fully Enclosed Plastic Case
Overall Dimensions	63 x 125 x 113 mm (LxWxH)
Overall Length	63mm / 2.48in
Overall Width	125mm / 4.92in
Overall Height	113mm / 4.45in
Weight	1kg

Packaging

Carton Size	52.5 x 33 x 17.5cm / 20.67 x 12.99 x 6.9in
Master Carton Quantities	10pcs / Carton

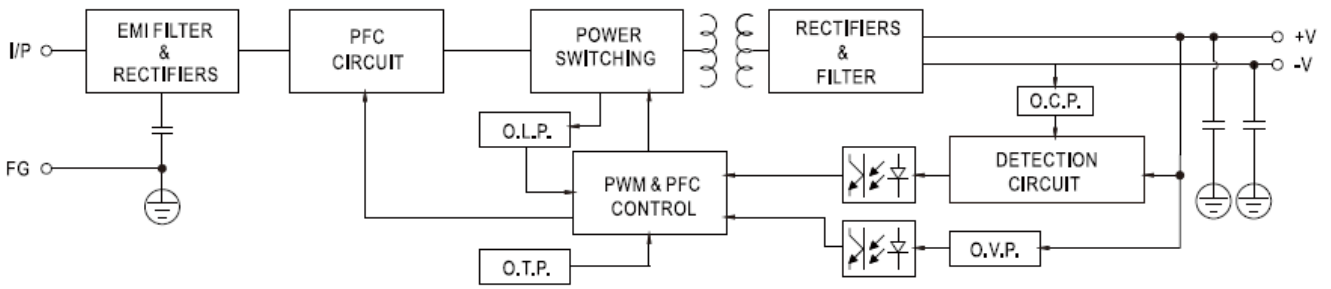
Mechanical Drawing

Input

No.	Description
1	FG \oplus
2	AC/N or DC -
3	AC/L or DC +

Output

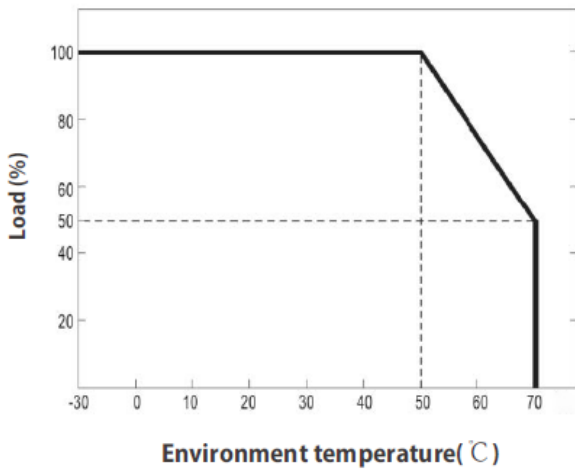
No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

Functional Diagram

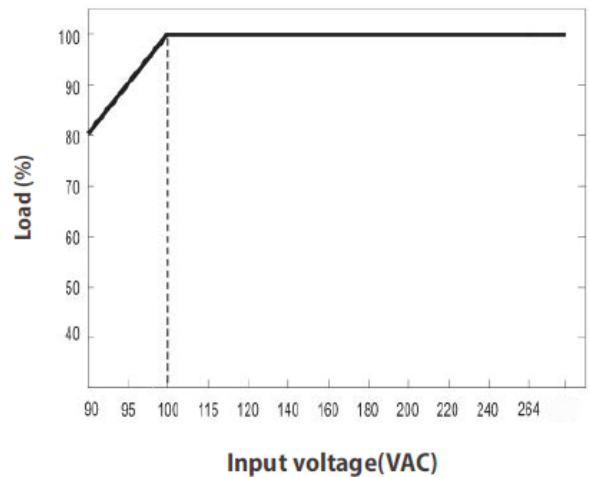


Curves

Deduction Curve and Temperature



Minus Output and Input Voltage Curves



AC – DC