

Features

Universal Input 90~264V AC /
127~370 V DC 50/60Hz

DC Output Adjustable

Output Voltages: 12~48V DC

Temperature Range -20~70°C

UL508, BS/EN 62368-1

High-Efficiency up to 88%

Protection: OLP/OVP/OTP/SCP



56YSDN75-xy

75W DIN Rail Mount AC/DC Power Supply



The 56YSDN75-xy Series is a high-performance 75W DIN Rail Mount AC/DC Power Supply. Designed for use in applications such as digital signage, displays and user interfaces. This series is supplied with a Screw Terminal Block input connection and supports input voltages of 90~264V AC 50~60Hz.

Model Number Information

56YSDN 75 x y

Series Name	Rated Wattage	Output Voltage	Rated Current
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Models

Model Number	Rated Power (W)	DC Voltage (V)	Rated Current (A)	Efficiency (%)	Voltage Adj. Range (V)	Ripple & Noise (mVp-p)
56YSDN-12	75.6	12	6.3	85.5	12-14	80
56YSDN-24	76.8	24	3.2	88	24-48	120
56YSDN-48	76.8	48	1.6	88	48-55	150

Input Specifications	
Input Voltage	90~264V AC/127~370V DC [DC input by connecting AC/L(+),AC/N(-)]
Frequency Range	47-63Hz
AC Current	1.45A at 115VAC / 0.9A at 230VAC
Inrush Current	20A at 115V AC / 35A at 230V AC
Leakage Current	< 1mA / 2407V AC

Output Specifications	
Voltage Tolerance	±2.0%
Line Regulation	±0.5%
Load Regulation	±1.0%
Set up	1200ms, 60ms at 230VAC at full load
Rise Time	2000ms, 60ms at 115VAC at full load
Hold up Time	60ms at 230VAC at full load / 12ms at 115VAC at full load

Protection	
Over Load	105~130% rated output power. Protection type: Hiccup mode – auto recovery
Over Voltage	14~17v 12v
	29~33v 24v
	56~65v 48v
	Protection type: Shut down o/p voltage, re-power on to recover
Over Temperature	Protection type: Shut down o/p voltage, re-power on to recover

Environmental Characteristics	
Working Temp	-20 °C to 70 °C (Refer to "Derating Curve")
Working Humidity	20~95% RH non-condensing
Storage Temp., Humidity	- 40°C~+85°C, 10 ~ 95% RH non-condensing
MTBF	450K hrs min. MIL-HDBK-217F (25°C)
Cooling Method	Free air convection design

Safety & EMC	
Safety Standards	UL508, BS/EN62368-1
Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.SKVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC/25 °C/70% RH
EMC Emission	BS EN/EN55032, BS EN/EN61000-3-2,-3
EMC Immunity	BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2)

Notes:

- 1.All parameters NOT specially mentioned at 230VAC input, rated load and 25°C of ambient temperature.
- 2.Ripple & noise are measured from peak to peak with band width limit of 20MHz(0.1 uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25°C ambient temperature).
- 3.Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heating source.
- 4.Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5.Efficiency test after 30 minutes of burn-in.
- 6.The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000m (6500ft).

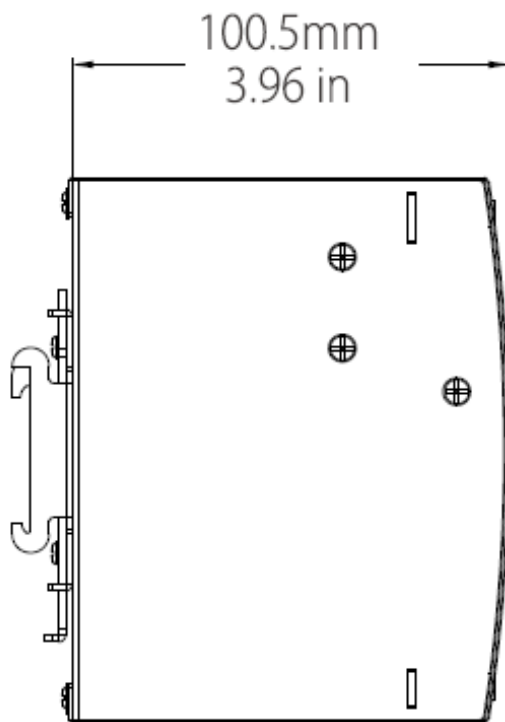
Dimensions & Weight

	Measurements
Height	125mm/4.92in
Width	32mm/1.26in
Depth	100.5mm/3.96in
Weight	0.51kg

Packaging

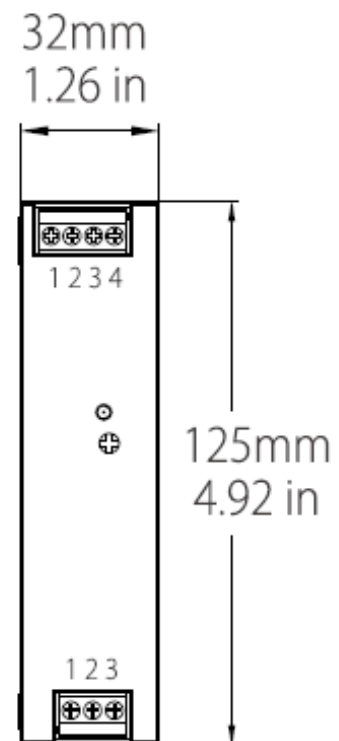
Carton Size	31.5x30x30cm / 12.4x11.8x11.8 in
Master Carton Quantities	20pcs / Carton

Dimensions and Recommended Layout



Input

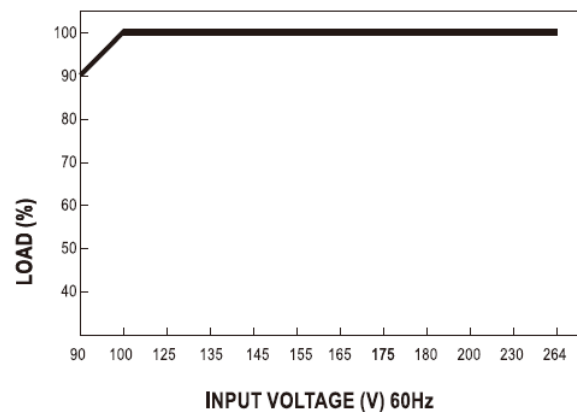
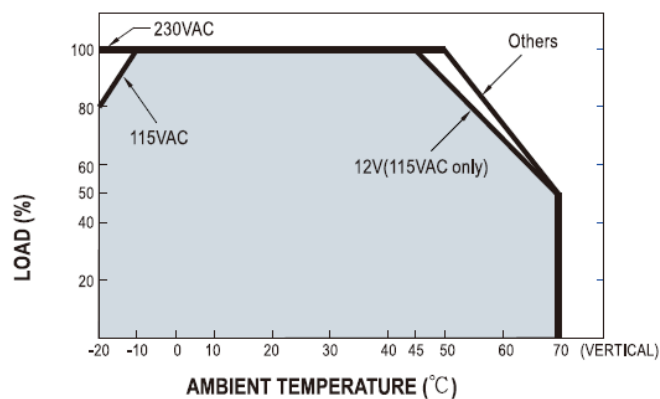
No.	Description
1	FG ⚡
2	AC/N or DC -
3	AC/L or DC +



Output

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

Derating Curves



Block Diagram

