

Features

- Universal Input 85~264VAC / 120~370 VDC 50/60Hz
- DC Output Adjustable
- Output Voltages: 5-24V DC
- Meets the latest Safety Standards and Approvals
- UL508, BS/EN62368-1
- High Efficiency
- Protection: Overload/Over voltage/Short circuit



Ideal Power's 56YSD20L-xy 20W DIN Rail Mount AC/DC Power Supply Converter Series are certified to UKCA, CE, cULus, RoHS & UL508/EN62368-1/BS62368-1 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 %	Ripple & Noise mVp-p
56YSD20L-0503000	5	3	15	76	80
56YSD20L-1201670	12	1.670	20	80	120
56YSD20L-1501340	15	1.340	20	81	120
56YSD20L-2401000	24	1	24	84	150

General Specification

Type	DIN Rail Power Supply
Number of Outputs	1
Mounting Style	Din Rail Mount
Connection Type	Screw Terminal Type
Overload Protection	>105%-150% rated output power (Hiccup mode, recovers automatically after fault condition is removed)
Over Current Protection	110% - 180%
Over Voltage Protection	5V:5.75~ 6.75V 12V:13.8 ~ 16.2V 15V:17.25 ~ 20.25V 24V:27.6 ~ 32.4V Protection type : Shut down o/p voltage, re-power on to recover

Input Specifications

Input Electrical Phase	Single
Line Frequency	50~60Hz
Inrush Current	35A/115VAC / 70A/230VAC
AC Current	0.33A/115VAC / 0.21A/230VAC
Leakage Current	<0.25mA/240VAC

Output Specifications

Output Voltage Tolerance	+/- 5.0%
Line Regulation	± 1%
Load Regulation	± 5%
Setup, Rise, Hold Up time	500ms, 30ms/230VAC at full load 1000ms, 30ms/115VAC at full load

Operational Environment

Operating Humidity	10% ~ 95% RH non-condensing
Operating Temperature Range	-20°C to 60°C, Full load, Normal operation.
Storage Temperature Range	-40°C to 85°C
Storage Humidity	10% ~ 90% RH
Cooling	Cooling
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 (C1SPR32), BS EN/EN61204-3 Class B, BS EN/EN61000- 3-2,-3, EAC TP TC 020, CNS13438 Class B

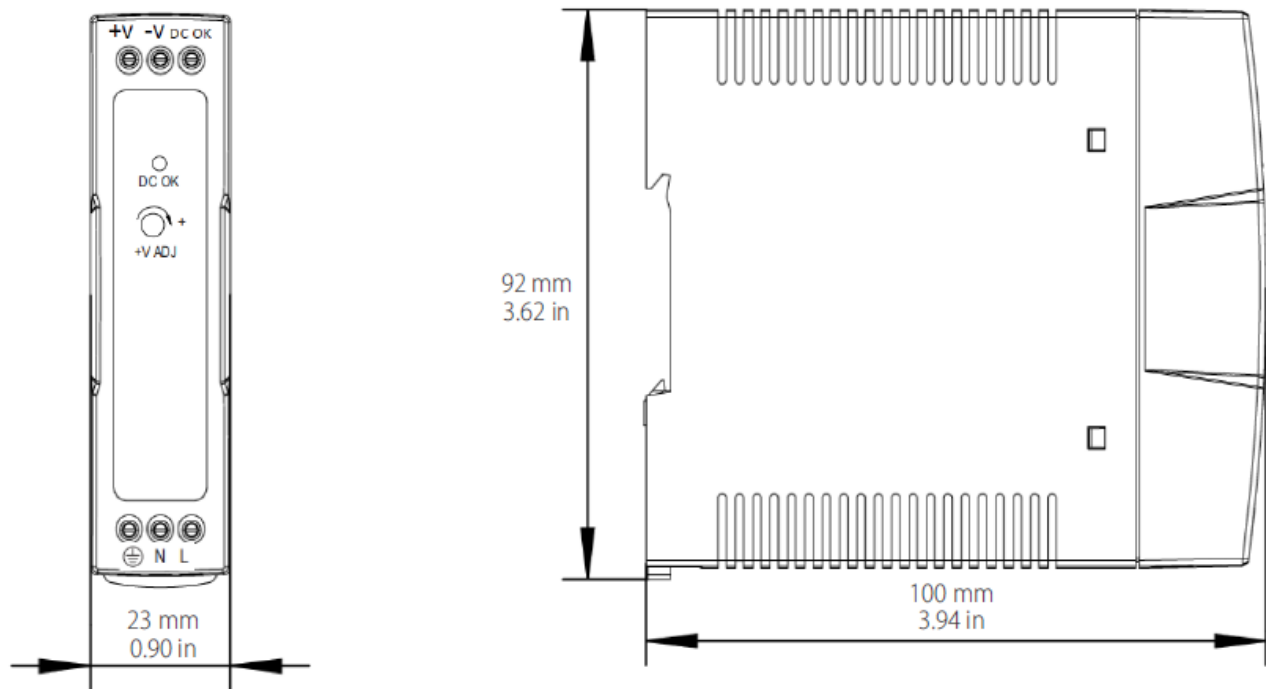
Mechanical Specifications

Housing Material	Fully Enclosed Plastic Case
Overall Dimensions	23 x 100 x 92 mm (LxWxH)
Overall Length	23mm / 0.91in
Overall Width	100mm / 3.94in
Overall Height	92mm / 3.62in
Weight	150g

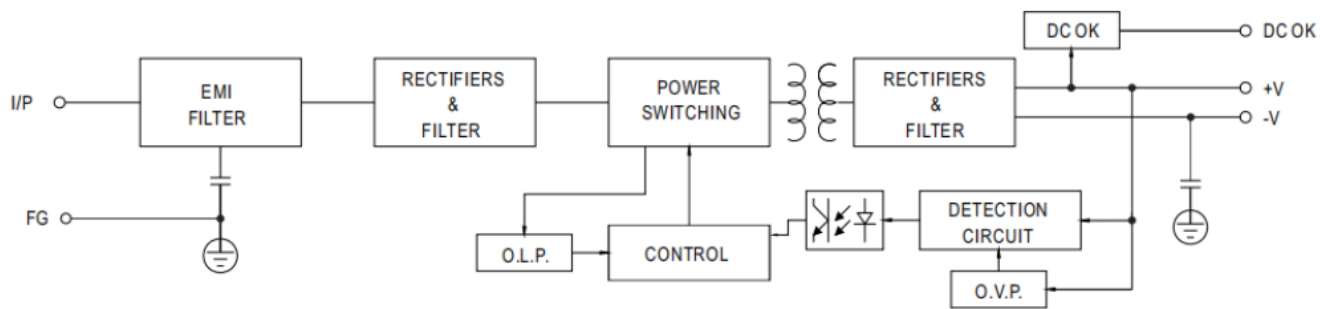
Packaging

Carton Size	54x30x24cm / 21.26x11.81x9.45in
Master Carton Quantities	100pcs / Carton

Mechanical Drawing

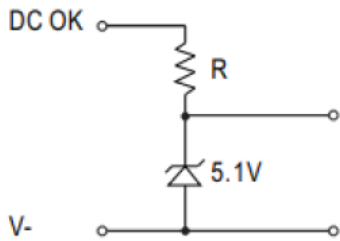


Functional Diagram



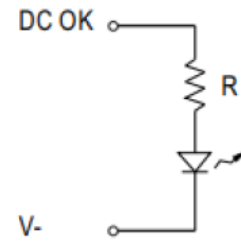
Application of DC OK Active Signal

(a) 5V signal



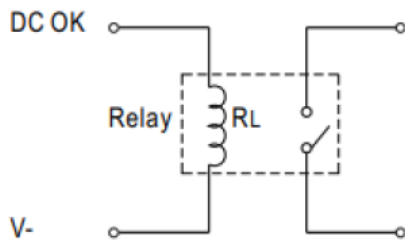
Model	R
5V	$\geq 200\Omega$
12V	$\geq 1.5K\Omega$
15V	$\geq 2K\Omega$
24V	$\geq 3.9K\Omega$

(b) LED



Model	R
5V	$\geq 1K\Omega$
12V	$\geq 2.4K\Omega$
15V	$\geq 3K\Omega$
24V	$\geq 4.7K\Omega$

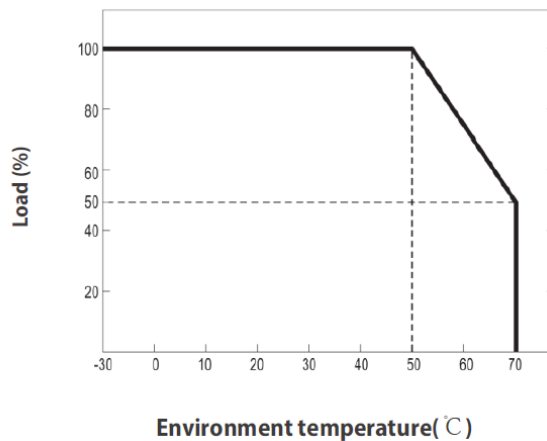
(c) Relay



Model	RL
5V	$\geq 120\Omega$
12V	$\geq 700\Omega$
15V	$\geq 700\Omega$
24V	$\geq 1.2K\Omega$

Curves

Deduction Curve and Temperature



Minus Output and Input Voltage Curves

