

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 is 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.

10W Models

Model Number	Output Voltage (V DC)	Voltage Range Adj (V)	Output Current (A)	Output Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSD20L-0502000	5	4.75~5.5V	2	10	77	80
56YSD20L-1200840	12	10.8 ~ 13.2V	0.84	10	81	120
56YSD20L-1500670	15	13.5 ~ 16.5V	0.67	10	81	120
56YSD20L-2400420	24	21.6 ~ 26.4V	0.42	10	84	150

20W Models

Model Number	Output Voltage (V DC)	Voltage Range Adj (V)	Output Current (A)	Output Power (W)	Efficiency (%)	Ripple & Noise (mVp-p)
56YSD20L-0503000	5	4.75~5.5V	3	15	76	80
56YSD20L-1201670	12	10.8 ~ 13.2V	1.670	20	80	120
56YSD20L-1501340	15	13.5 ~ 16.5V	1.340	20	81	120
56YSD20L-2401000	24	21.6 ~ 26.4V	1	24	84	150

Input Specifications

Input Electrical Phase	Single
Line Frequency	47~63Hz
Inrush Current	35A/115VAC / 70A/230VAC
AC Current	0.33A/115VAC / 0.21A/230VAC
Leakage Current	<1mA/240VAC

Output Specifications

Voltage Tolerance	+/- 2.0%
Line Regulation	± 1.0%
Load Regulation	± 5.0%
Setup, Rise	500ms, 30ms/230VAC - 1000ms, 30ms/115VAC at full load
Hold Up time	120ms/230VAC - 25ms/115VAC at full load

Environment

Operating Temperature	-20 °C to 70 °C (Refer to "Derating Curve")
Operating Humidity	20% ~ 90% RH non-condensing
Storage Temperature	-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

Protection

Overload	105%-150% Rated Output Power Protection type: Hiccup Mode- recovers automatically after fault condition is removed
Over Voltage	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

Approvals

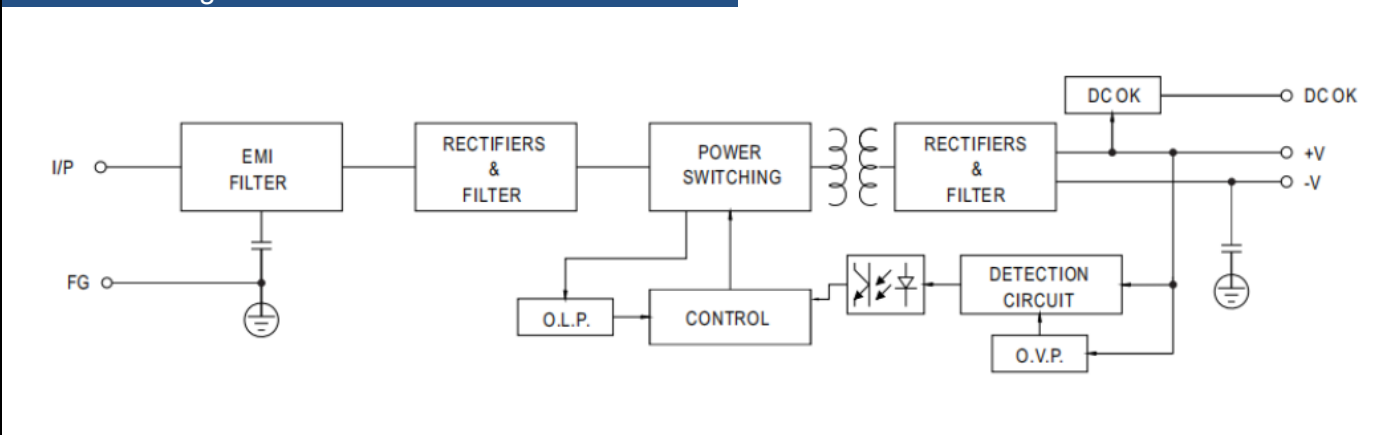
Safety Regulations	UL508/EN62368-1/BS62368-1
Withstand Voltage	1/P-O/P:3KVAC 1/P-FG:2KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH
EMC Emission	BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3
EMC Immunity	BS EN/EN61000-4-2,3,4,5,6,8,11

Mechanical Specifications

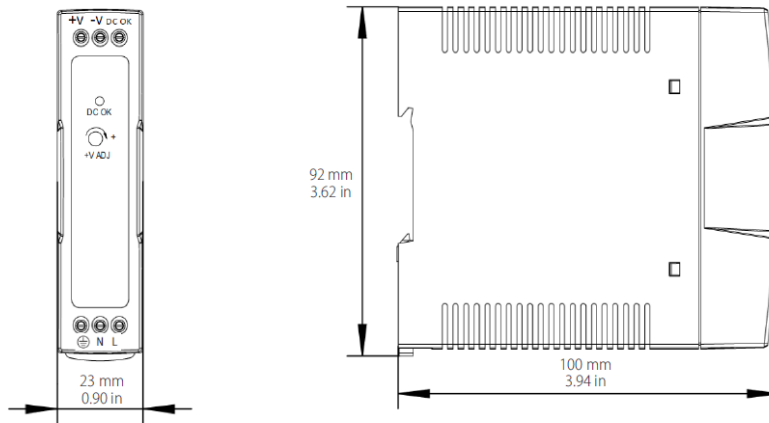
Housing Material	Fully Enclosed Plastic Case
Dimensions	23 x 100 x 92 mm (LxWxH)
Length	23mm / 0.91in
Width	100mm / 3.94in
Height	92mm / 3.62in
Weight	150g

Packaging

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

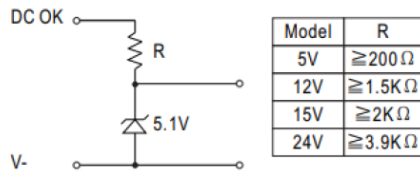
Functional Diagram


Mechanical Drawing

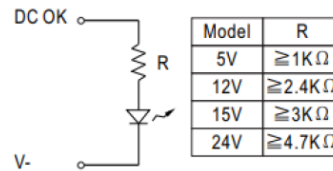


Application of DC OK Active Signal

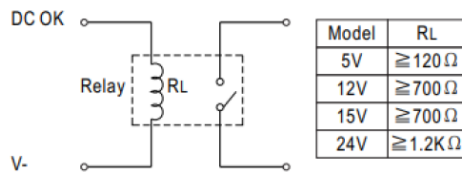
(a) 5V signal



(b) LED

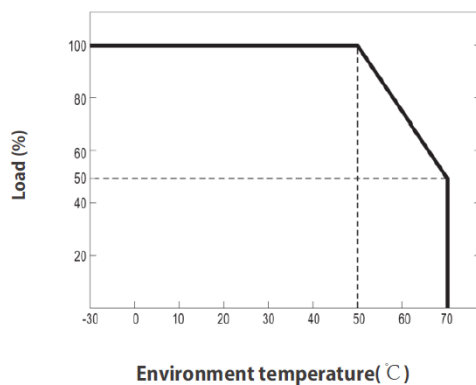


(c) Relay



Curves

Deduction Curve and Temperature



Minus Output and Input Voltage Curves

