

Features

- Compact installation
- High performance
- reliable
- Wide voltage input
- LED indicator light

RS PRO DIN Rail Power Supplies

RS Stock No.: 0558368



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

- Universal Input 90~264Vac
- 100% Full Load Burn-in Test
- Cooling by Free Air Convection
- All Round Protections: Short Circuit, Over Voltage,
- Over Current, Over Temperature
- LED Indicator for DC Power On
- LED Indicator for DC Low

General Specifications

Type	Switched Mode Power Supply
AC or DC Input Voltage	90~264Vac
AC or DC Output Voltage	48Vdc
Number of Outputs	1
Mounting Type	DIN Rail Mount
Connection Type	Spring & Screw terminal type
Short Circuit Protection	Yes
Over Voltage Protection	Yes
Indication of Output Voltage	LED, continuous green light
Internal Surge Voltage Protection	Varistor

Electrical Specifications

RS Stock#	Input Voltage	Output Voltage	Output Current	Output Wattage	Efficiency (Typ)
0558368	100~240 VAC	+ 48V DC	10A	480W	94%

Input Specifications		
Input Electrical Phase	Single	
Input current	115Vac-5A; 230Vac-2.5A	
Line Frequency	47 to 63Hz	
Input Power Dissipation	480W	
Inrush current at 25°C 230V	80A	
Efficiency (Typ.)	94%	
Leakage Current	<1mA / 240Vac@Full load	
Power Factor (Cos phi)	0.97	
Output Specifications		
Output Voltage Adjustment	48V	
Ripple and Noise	1%Vo mVp-p	
Rise Time	3600ms	
Hold Up Time	>20ms (230VAC Full load)	
Line Regulation	± 2%	
Load Regulation	± 3%	
Voltage Isolation	Input-Output	3000V ac / 4242V dc
	Input-Ground	1500V ac / 2121V dc
	Output-Ground	500V ac / 710V dc
Isolation Resistance	Input-Output, @ 500VDC : 100MΩ	
MTBF	230Khrs,MIL-HDBK-217F(25□)	

Mechanical Specifications

Height	130mm
Depth	125mm
Width	60mm
Weight	1000g
Dimensions	425 x 320 x 200mm
Case Material	Plastic

Operation Environment

Operating Humidity	20% to 95% RH
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Operating Temperature Range	Ta= -25-70□
Storage Temperature Range	-40-+85°C, 10-95% RH, non-condensing
Cooling	Natural convection
Vibration Resistance	Mounting on rail : 10-500 Hz, 2G, along X, Y,Z each Axis, 60 min for each Axis

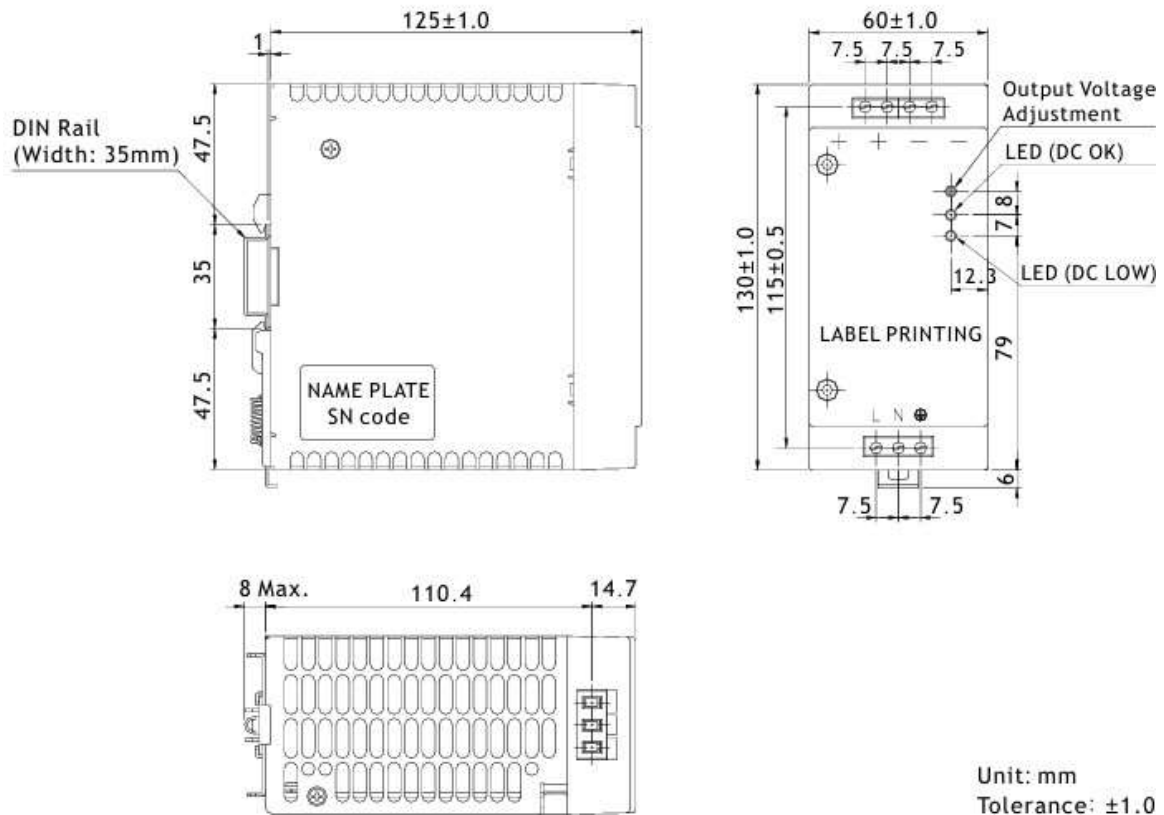
Protection Category

IP Rating	IP20
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Approvals

Compliance/Certifications	UL UKCA FCC CB CE
Standards Met	UL UKCA FCC CB CE

Mechanical

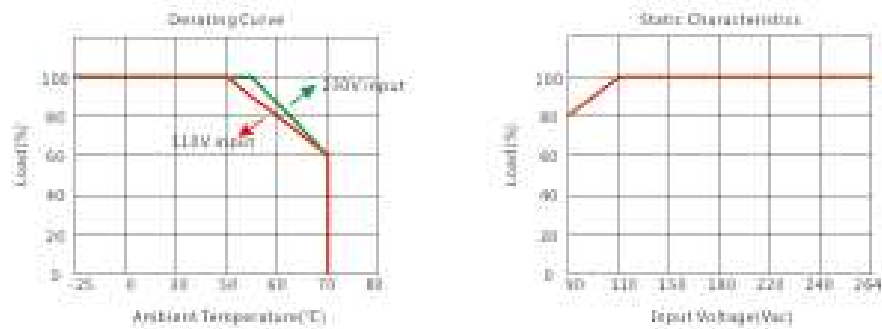


Mechanical

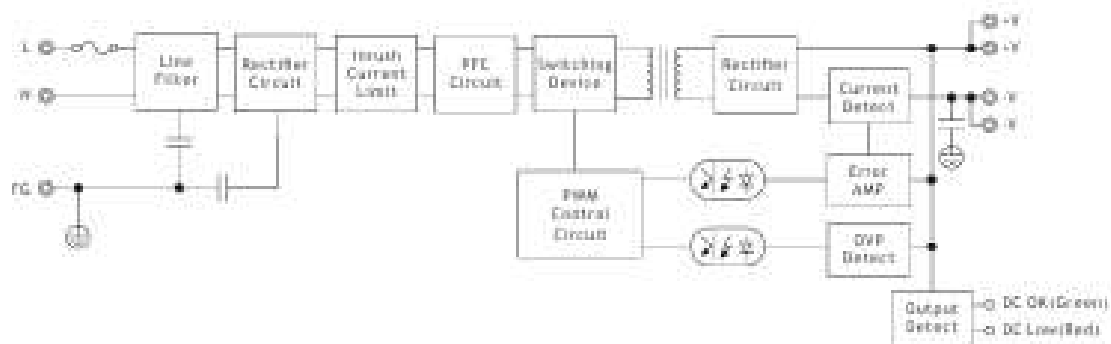


Marking	No.	Assignment
+	1	DC(+) Output Terminal
+	2	
-	3	DC(-) Output Terminal
-	4	
L	5	AC(L) Input Terminal
N	6	AC(N) Input Terminal
	7	AC Grounding Terminal
V-ADJ.	/	DC Output voltage adjustment trimmer
DC OK	/	DC Output OK indication LED(Green)
DC LOW	/	DC Output Low indication LED(Red)

Electrical Curve

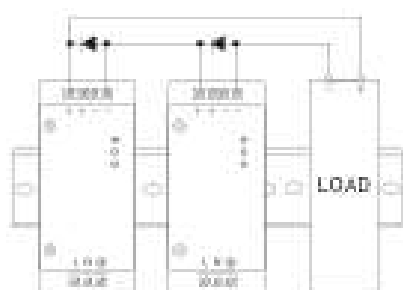


Block Diagram

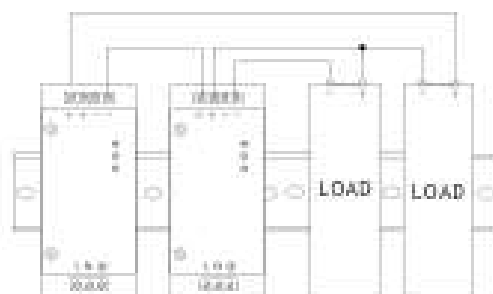


Application Note

1. Series Operation



Series Operation A



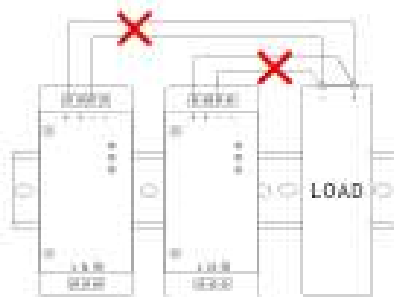
Series Operation B

Note:

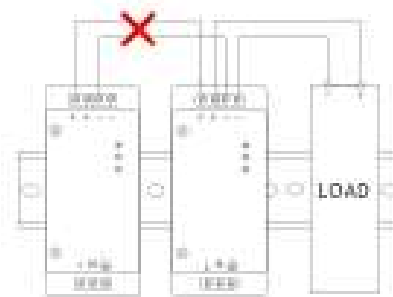
1. Series operation can be connected as shown in above;
2. Load current should be less than the current value of the product with the lowest output current specified at the product specification with the power supply at series connection.

Application Note

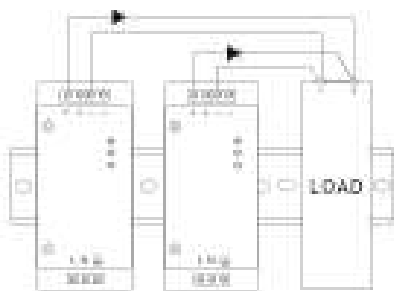
2. Parallel Operation



Parallel Operation A
(Unable to use)



Parallel Operation B
(Unable to use)



Parallel Operation C
(Backup)

Note:

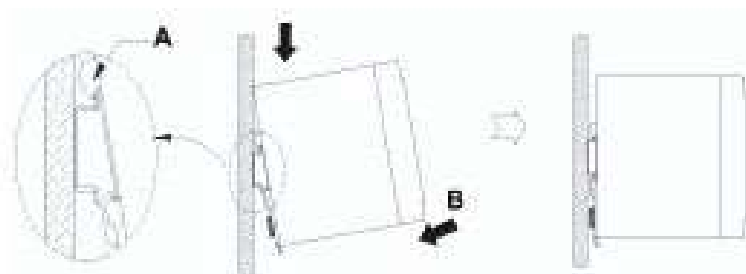
1. Parallel operation should be composed with the same products, while the connection should be as shown as "Parallel operation C";
2. In parallel operation C, current capacity cannot be increased, while it should be used for backup only. Moreover, diode that is to be added during parallel operation should be selected after considering its voltage drop, output voltage and current capacity.

Application Note

3. Mounting Method

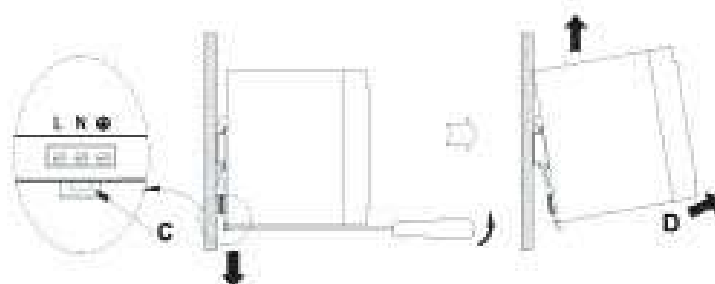
(1) How to fix

Firstly hang A part on the top of Rail as shown in below, then push the power supply into B direction to fix it.



(2) How to remove

Remove the power supply to D direction, pulling C part by using tools, such as a screwdriver, to downward direction.

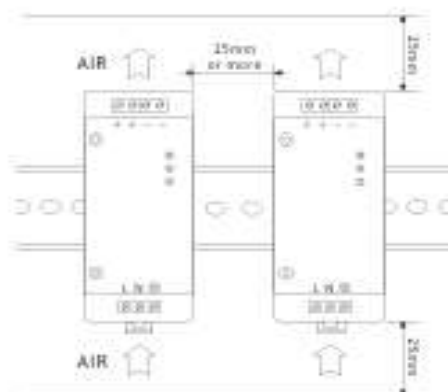


Application Note

3. Mounting Method

(3) Mounting Spacing

Mounting method should be considered with airflow. Leave enough space between the units when several units are mounted together. Forced air cooling makes protection against heat better.



Application Note

4. Cautions

- (1) Please confirm if the capacity of the product is suitable for your intended application before putting it in use;
- (2) Only the rated input voltage specified on the product should be used;
- (3) Only the wires with rated capacity should be connected to this product, as allowable voltage and current is varied according to each type of wire;
- (4) Ground terminal of the power supply must be grounded before use to prevent electric shock or electromagnetic interference;
- (5) Be cautious to keep the product clean as foreign matter near the input & output terminal or inside if the product could cause series damages;
- (6) If a fuse installed in the product blows off, the product should experience damages not only to the fuse but also to other parts as well. Therefore, the product is to be required for maintenance work from customer service department as well as replacement of the fuse;
- (7) Due to constant leakage current flows within the product, extra caution should be made if multiple number of products are used connecting to each other as total leakage current could be amounted beyond the capacity;
- (8) Be sure to avoid any physical contact with the product since some of the parts inside of the product are being functioned at high voltage, which could cause serious electric shock;
- (9) For the purpose of safety as well as reliability of the product, please avoid using the product at the following sites:
 - A place near water or fire
 - A place with high room temperature and poor ventilation
 - A place with a presence of foreign subject or dust
 - A place near volatile or flammable compounds
 - A place with high humidity
 - A place vulnerable for vibration or shock
- (10) Do not inspect or repair the product while the power is applied;
- (11) Unauthorized modification should be avoided in order to prevent series injury or physical loss due to any malfunction;
- (12) In case of power outage while in operation, be sure to turn off the power supply.