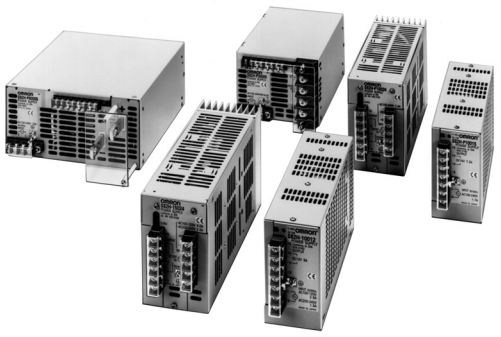
OMRON

Switching Power Supply
S82H

Industrial Power Supply with Power Factor Correction Available

- Models range from 15 to 150 W.
- 120/240 selectable on 15 to 150 W Models.
- All meet UL and CSA standards.
- 100 to 150 W models also have VDE and CE approvals.
- 3-year warranty.



Ordering Information

■ NON-PFC TYPE SWITCHING POWER SUPPLIES

Stock Note: Shaded models are normally stocked.

Rated input voltage	Power ratings	Output voltage	Output current	**Part number**
120/240 VAC selectable	15 W	5 V	3 A	**S82H-3105**
		12 V	1.2 A	**S82H-3112**
		15 V	1 A	**S82H-3115**
		24 V	0.6 A	**S82H-3124**
	30 W	5 V	6 A	**S82H-3305**
		12 V	2.5 A	**S82H-3312**
		15 V	2 A	**S82H-3315**
		24 V	1.3 A	**S82H-3324**
	50 W	5 V	10 A	**S82H-3505**
		12 V	4.5 A	**S82H-3512**
		15 V	3.4 A	**S82H-3515**
		24 V	2.3 A	**S82H-3524**
	100 W	5 V	20 A	**S82H-10005**
		12 V	9 A	**S82H-10012**
		15 V	7.2 A	**S82H-10015**
		24 V	4.6 A	**S82H-10024**
	150 W	5 V	30 A	**S82H-15005**
		12 V	13.5 A	**S82H-15012**
		15 V	10 A	**S82H-15015**
		24 V	7 A	**S82H-15024**

■ ACCESSORIES (ORDER SEPARATELY)

Stock Note: Shaded models are normally stocked.

Item	Applicable power supplies	Mounting type	**Part number**
Mounting bracket	S82H-31□□ (15 W)	Bottom mounting	**S82Y-H01B**
		Side mounting	**S82Y-H01S**
		Front/flush mounting	**S82Y-H01F**
DIN-rail mounting bracket			**S82Y-01N**
DIN rail			**PFP-100N2** **PFP-50N** **PFP-100N**
Mounting bracket	S82H-33□□ (30 W)	Bottom mounting	**S82Y-H03B**
		Side mounting	**S82Y-H03S**
		Front/flush mounting	**S82Y-H03F**
DIN-rail mounting bracket			**S82Y-03N**
DIN rail			**PFP-100N2** **PFP-50N** **PFP-100N**
Mounting bracket	S82H-35□□ (50 W)	Bottom mounting	**S82Y-H05B**
		Side mounting	**S82Y-H05S**
		Front/flush mounting	**S82Y-H05F**
DIN-rail mounting bracket			**S82Y-05N**
DIN rail			**PFP-100N2** **PFP-50N** **PFP-100N**
Mounting bracket	S82H-□100□□ (100 W)	Bottom mounting	**S82Y-H10B**
		Side mounting	**S82Y-H10S**
		Front/flush mounting	**S82Y-H10F**
	S82H-□150□□ (150 W)	Bottom mounting	**S82Y-F15B**
		Side mounting	**S82Y-F15S**
		Front mounting/back mounting	**−−−−−**
Mounting bracket	S82H-P300□□ (300 W)	Bottom mounting	**S82Y-D30B**
		Side mounting	**S82Y-D30S**
		Front mounting/back mounting	**−−−−−**
	S82H-P600□□ (600 W)	Bottom mounting	**S82Y-D60B**
		Side mounting	**S82Y-D60S**
		Front mounting/back mounting	**−−−−−**
Fan	S82H-P300□□	—	**S82Y−DFAN**
	S82H-P600□□	—	
Terminal expansion bracket	S82H-P600□□	—	**S82Y−D60T**

■ MODEL NUMBER LEGEND

15 to 50 W Models

S82H - 3 □□□
1 2

1. Power ratings
1: 15 W
3: 30 W
5: 50W

2. Output voltage
05: 5 V
12: 12 V
15: 15 V
24: 24 V

100 to 600 W Models

S82H - □□□ □□
1 2

1. Output Capacity
100: 100 W
150: 150 W
300: 300 W
600: 600 W

2. Output Voltage
05: 5 V
12: 12 V
15: 15 V
24: 24 V

Specifications

■ NON-PFC TYPE SWITCHING POWER SUPPLIES (15 W, 30 W, 50 W)

Power ratings		15 W	30 W	50 W
Efficiency (typ.)		70% to 80% (24 V)		
Input				
Operating voltage	AC	85 to 132 VAC/170 to 264 VAC (selectable)		
	DC	No		
Frequency		47 to 450 Hz		
Current at rated Input voltage and rated output voltage/current	At 100-V input	0.5 A max.	0.9 A max.	1.3 A max.
	At 200-V input	0.3 A max.	0.6 A max.	0.8 A max.
Leakage current at rated input voltage and output voltage current (See Note 2.)	At 100-V input	0.5 mA max.		
	At 200-V input	1 mA max.		
Inrush current at rated input voltage and rated output voltage/current (See Note 2.)	At 100-V input	25 A max.		
	At 200-V input	50 A max.		
Noise filter		Provided		
Output				
Voltage adjustment		±10% (adjustable with variable resistor V–ADJ)		
Ripple and noise		2% (p-p) max.		
Regulation, line		0.5% max. (at 85 to 132/170 to 264 V input, 100% load)		
Regulation, load		2% max. (at rated input, 10 to 100% load)		
Temperature coefficient		0.05%/°C max. (at rated input/output in range of 0° to 40°C)		
Rise time		200 ms max. (90% output voltage rise at rated input voltage and rated output voltage/current)		
Hold up time		20 ms min. (90% output voltage rise at rated input voltage and rated output voltage/current)		
Additional functions				
Overload protection		120% of rated output current typ., inverted L trailing, automatic reset		
Overvoltage protection		No		
Remote sensing		No		
Remote control		No		

(This table continues on the next page.)

Specifications Table – continued from previous page

Power ratings		15 W	30 W	50 W
Characteristics				
Temperature	Operating	See Derating Curve in *Engineering Data.*		
	Storage	-20° to 85°C (–40° to 185°F)		
Humidity		Operating: 30 to 90% RH; Storage: 20 to 95% RH		
Dielectric strength		2,000 VAC, 50/60 Hz, for 1 minute (between input terminals and output terminals/housing) 500 VDC for 1 minute (between output terminals and input terminals/housing) Refer to Note 3 (on the next page).		
Insulation resistance		100 MΩ min. (between output terminals and input terminals/housing)		
Vibration		10 to 55 Hz, 0.75 mm double amplitude (approx. 4.5 G) in 3 directions, respectively for 2 hours		
Shock		294 m/s^2 (30 G) in 6 directions, respectively 3 times		
Output indicator		Red LED		
Heat radiation		1.9 cal/sec	3.2 cal/sec	4.7 cal/sec
Electro Magnetic Interference		FCC Class B		
Mean Time Between Failures		100,000 hours min.		
Approved standards		UL (E105544), CSA (LR63986)		
Weight		400 g max.	520 g max.	660 g max.

■ NON-PFC TYPE SWITCHING POWER SUPPLIES (100 W, 150 W)

Power ratings		100 W	150 W
Efficiency		70% to 86% (depending on the model)	
Life expectancy (See Note 1.)		10 years min. in standard installation conditions at 40°C (104°F) at the rated input with 50% load.	
Input			
Voltage		100 to 120 VAC/200 to 240 VAC automatically selected (85 to 132 VAC/170 to 264 VAC)	
Frequency		47 to 450 Hz	
Current	at 100-V input	2.5 A max.	4 A max.
	at 200-V input	1.5 A max.	2.5 A max.
Leakage current (See Note 2.)	at 100-V input	0.5 mA max.	
	at 200-V input	1 mA max.	
Inrush current (See Note 2)	at 100-V input	25 A max.	
	at 200-V input	50 A max.	
Power factor		0.5 to 0.7 (depending on the model)	
Output			
Voltage adjustment range		±10% (adjustable with variable resistor (V.ADJ))	
Ripple		2% (p-p) max.	
Input variation influence		0.4 % max. (at 85- to 132-VAC/170- to 264-VAC input, 100% load)	
Load variation influence		0.8% max. (with rated input voltage, 0 to 100% load)	
Temperature variation influence		0.05%/°C max. with rated I/O at an ambient temperature range between -10°C to 50°C	
Rise Time		0.8 s max. (Rises up to 90% of the rated voltage under rated input.)	
Hold time		20 ms min.	

(This table continues on the next page.)

Specifications Table – continued from previous page

Power ratings		100 W	150 W
Additional functions			
Overload protection		105% max. of rated load current, inverted L drop type, automatic reset	
Overvoltage protection		120% of rated output voltage (typical), shutoff type, input reset	
Parallel operation		No	Yes, up to five units
Series operation		Yes	
Remote sensing		Yes	
Remote control		No	Yes
Remote voltage adjustment		Yes	
Cooling method		Natural air-cooling used	
Fan alarm function		No	
Characteristics			
Ambient temperature	Operating	See the derating curve in the *Engineering Data* section. (No condensation or icing.)	
	Storage	–25°C to 65°C (–13°F to 149°F) with no condensation or icing	
Ambient operating humidity		25% to 85%	
Dielectric strength		3 kVAC, 50/60 Hz for 1 min between all inputs and all outputs with a current leakage of 25 mA max. 2.5 kVAC, 50/60 Hz for 1 min between all inputs and GR terminals with a current leakage of 25 mA max. 1.0 kVAC, 50/50 Hz for 1 min between all outputs and GR terminals with a current leakage of 15 mA max. for each 100-W model, 20 mA max. for each 150-W model.	
Insulation resistance		100 MΩ min. between all outputs and all inputs/GR terminals at 500 VDC	
Vibration resistance	Malfunction	10 to 55 Hz, 0.375-mm single amplitude for 2 hrs each in X, Y, and Z directions	
Shock resistance	Malfunction	300 m/s^2 (approx. 30G), 3 times each in ±X, ±Y, and ±Z directions	
Output indicator		Yes (green)	
EMC		Emission Enclosure (See Note 4.): EN55022 Group 1 class B Emission AC Mains: EN55022 Group 1 class B Immunity ESD: EN61000-4-2:4 kV contact discharge (level 2) 8 kV air discharge (level 3) Immunity RF-interference: ENV50140:10 V/m (10 k to 1 GHz) (level 3) Immunity Conducted Disturbance: ENV50141:10 V (0.15 to 80 MHz) (level 3) Immunity Burst: EN61000-4-4:2 kV power-line (level 3) 2 kV I/O signal-line (level 4)	
Limits for harmonic current emission		---	
EMC standards		Conforms to EN50081-1, EN50082-2	
Electromagnetic interference		Conforms to FCC class B, EN50081–1	
Approved standards		UL1012, CSA E.B. 1402C, VDE 0160, IEC 950, EN 60950, CE	
Weight		950 g max.	1,800 g max.

Note: 1. The fan is one of the replacement parts (300- and 600-W models).
2. As defined with the rated input voltage and rated output voltage/current.
3. A surge absorber is provided for the input circuits. To test the dielectric strength and insulation resistance of these models, remove the short bar attached across the GR and ACG terminals.
4. To ensure emission enclosure rating, ferrite cores should be used on all cabling.

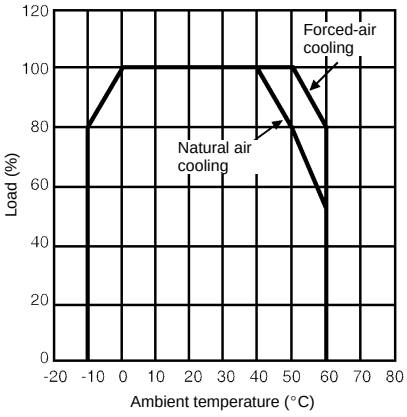
Engineering Data

■ DERATING CURVE

Note: The derating curve differs depending on the mounting position of the power supply.

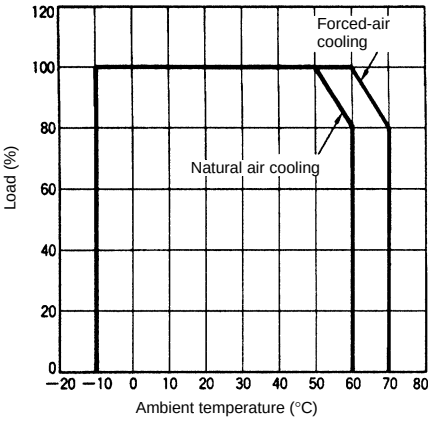
15, 30, 50 W Models

Standard Mounting



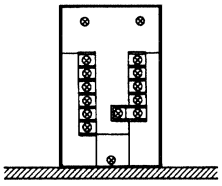
100 and 150 W Models

Standard Mounting

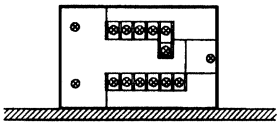


■ MOUNTING POSITION

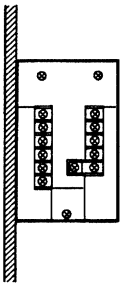
Standard Mounting



Horizontal Mounting
(100- and 150-W Models Only)



Side Mounting
(150-W Models Only)

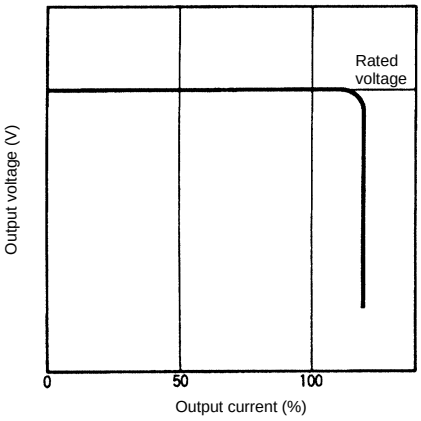


Note: 1. Forced-air cooling must be applied at an minimum air capacity rate of 1 m^3/min.
2. Units cannot be mounted vertically.

■ OVERLOAD PROTECTION

The Power Supply is provided with an overload protection function that protects the load and the power supply from possible damage by overcurrent. When the output current rises above a set value (105% of the rated output current for S82H), the protection function is triggered, decreasing the output voltage. When the output current falls within the rated range, the overload protection function is automatically cleared.

15-/30-/50-/100- and 150-W Models

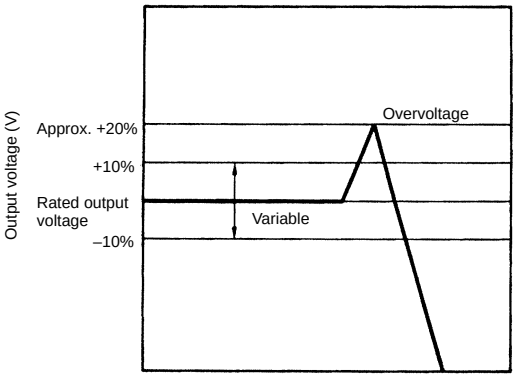


Note: If the product is continuously used under short-circuit or overcurrent conditions, deterioration or damage to internal elements may occur.

■ OVERVOLTAGE PROTECTION

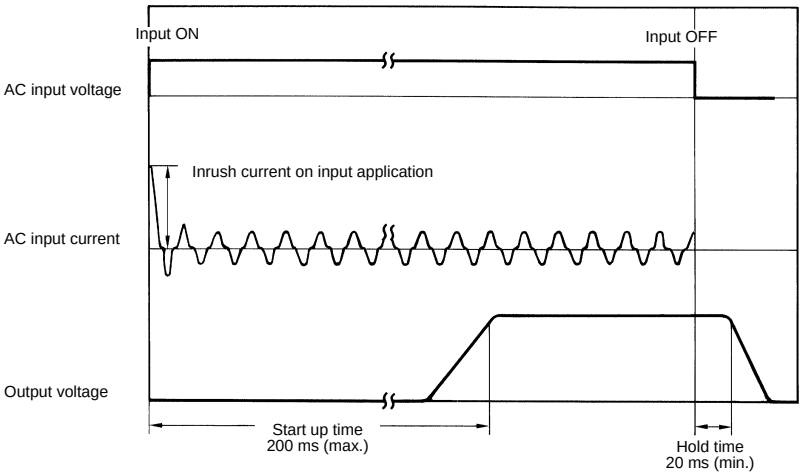
All – Except 15, 30, and 50 W Models

The Power Supply is provided with an overvoltage protection function that protects the load and the Power Supply from possible damage by overvoltage. When the output voltage rises above a set value (120% of the rated output voltage), the protection function is triggered, shutting off the output voltage. If this occurs, reset the S82H by turning it off for more than 1 minute and then turning it on again.



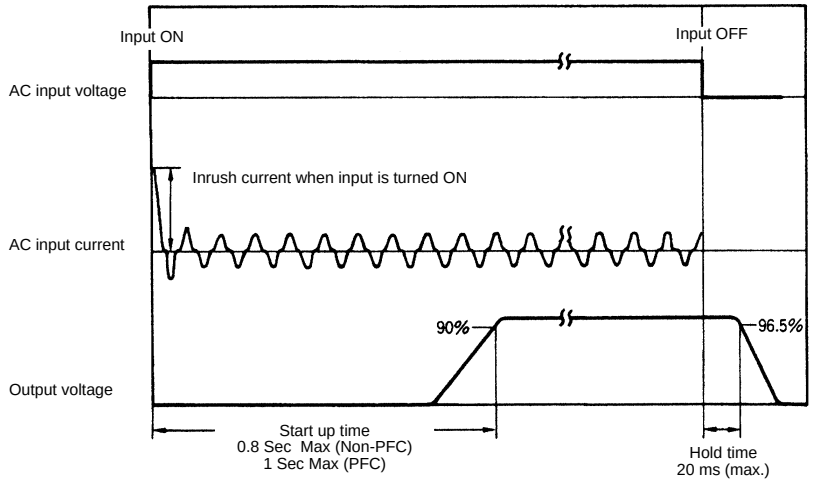
■ INRUSH CURRENT, START UP TIME, HOLD TIME

15 – 50 W Models



■ INRUSH CURRENT, START UP TIME, HOLD TIME

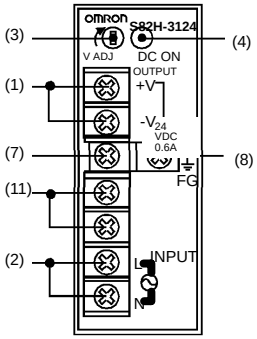
100 – 600 W Models



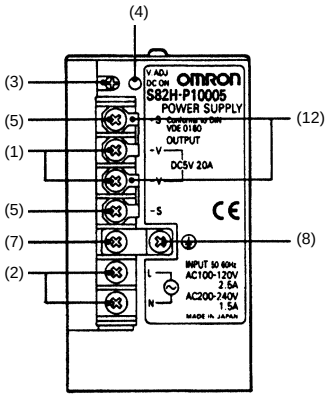
Nomenclature

■ TERMINAL ARRANGEMENT

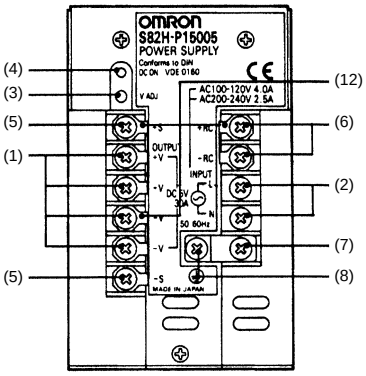
S82H-31□□
S82H-33□□
S82H-35□□

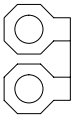


S82H100□□ (100 W)



S82H150□□ (150 W)



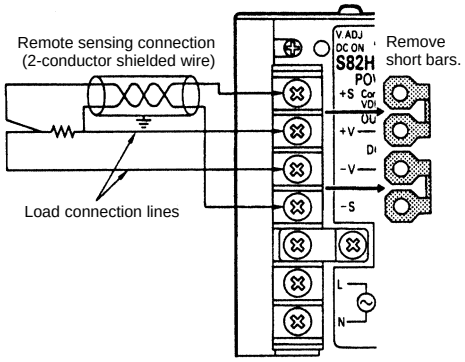
1. **DC output terminals:** Connect the load lines to these terminals.
2. **Input terminals L and N (with fuse inserted into the L side):** Connect the input lines to these terminals.
3. **Output voltage adjustment trimmer V.ADJ (with adjustment range of ±10% of rated output):** Adjusts the output voltage.
4. **Output indicator DC ON:** Lit while a DC output is ON.
5. **Remote sensing terminals:** Corrects the voltage drop in the load lines.
6. **Remote control terminals:** Enables external signals to turn the output ON and OFF while the input voltage is imposed. The terminals are short-circuited with a short bar before shipping.
7. **ACG terminal:** The intermediate point of the input filter. The terminal is short-circuited to the GR terminal before shipping.
8. **GR/FG terminal:** Shorted to the housing. Ground the Power Supply through this terminal.
9. **Fan alarm terminals FAN ALM:** Turns ON when the revolution of the built-in fan drops.
10. **Output voltage monitor terminals:** Connected to the DC output terminals internally. No output current can be obtained from these terminals. Short-circuit the terminals to the remote sensing terminals +S and –S if the remote sensing function is not used.
11. **Input voltage selector and terminals:** Switch the input voltage by connecting or removing the short bar (short circuit: 100–120V; Open circuit: 200–240V)
12. **Short bar** 

Operation

■ REMOTE SENSING FUNCTION

The remote sensing function makes it possible to compensate for voltage drops caused by load lines. To use this function, remove the short bar from the remote sensing terminals and wire the Power Supply and load as shown in the following illustration. The remote sensing terminals are short-circuited with the short bar before shipping.

100-W and 150-W Models

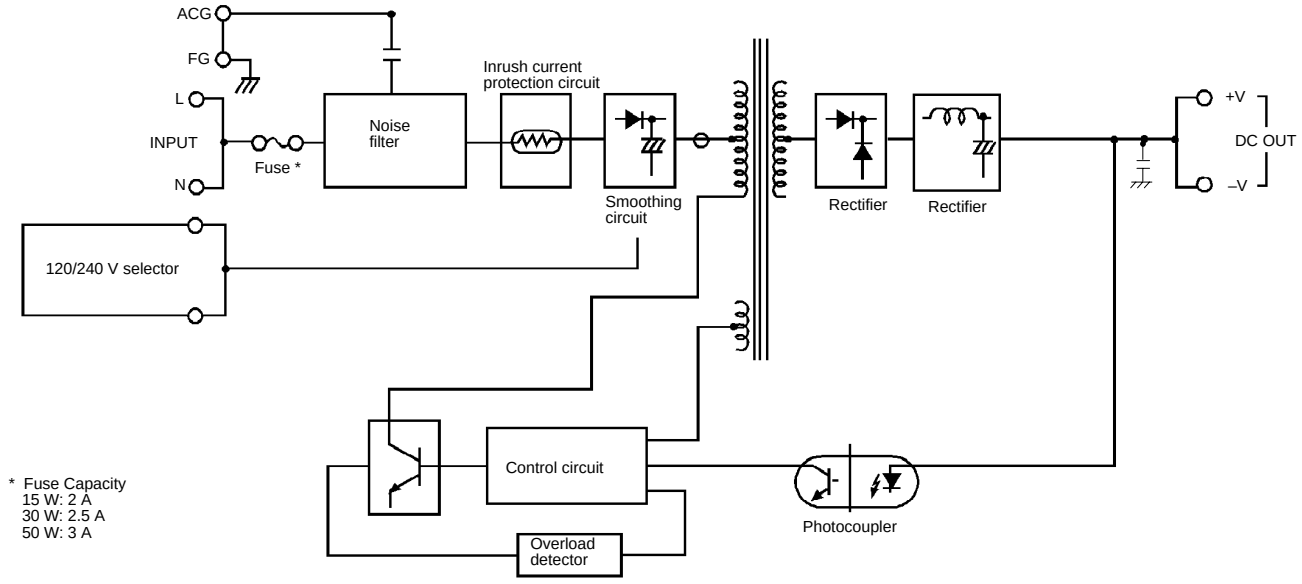


Level	Output voltage
L (0.8 V max.)	ON
H (2 V min.)	OFF

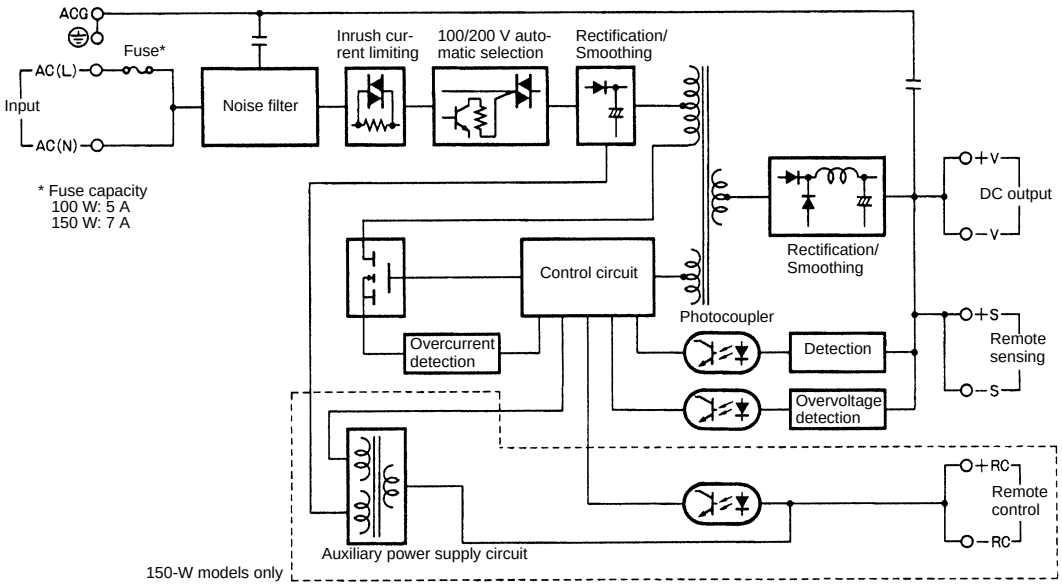
Note: No output will be produced if the terminals are left unconnected. Be sure to firmly tighten the terminal screws.

■ BLOCK DIAGRAMS

S82H-31□□
S82H-33□□
S82H-35□□



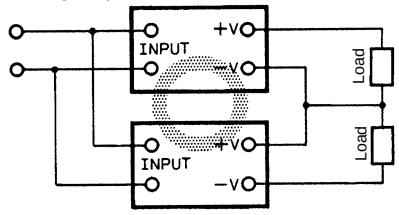
S82H-100□□ (100 W)
S82H-150□□ (150 W)



■ GENERATING OUTPUT VOLTAGE (±)

The output of two Power Supplies can be combined in series.

An output of ± can be generated by using two power supplies (as shown below) because the power supply produces a floating output.

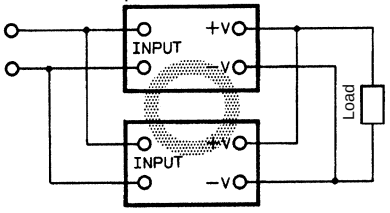


■ PARALLEL OPERATION

Parallel operation is possible by simply connecting the output terminals in parallel. (Other than 100 W models)

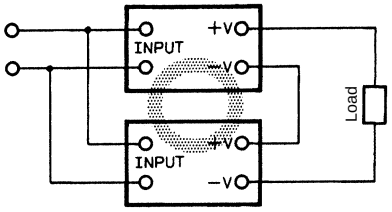
Using the output voltage adjustment trimmer, adjust the output of each power supply to the same value.

Operate the Power Supplies connected in parallel at 80% of the rated output current.



■ SERIES OPERATION

The output of two power supplies can be combined in series.

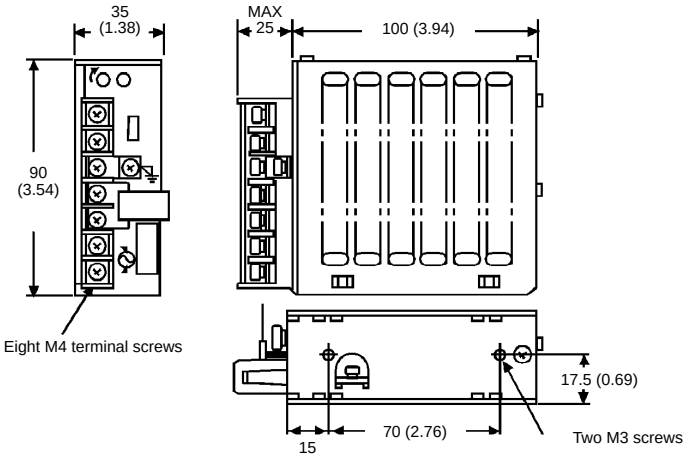


Dimensions

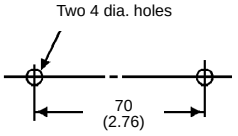
Unit: mm (inch)

■ SWITCHING POWER SUPPLIES

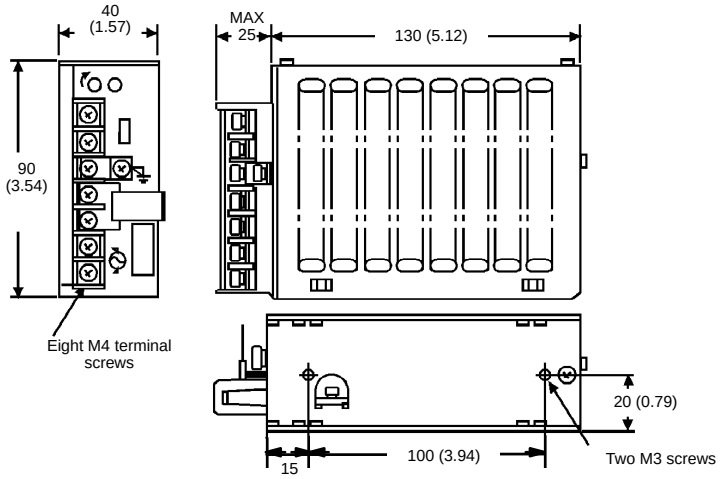
S82H-31□□



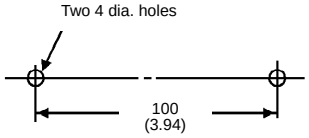
Mounting Holes – Bottom mounting



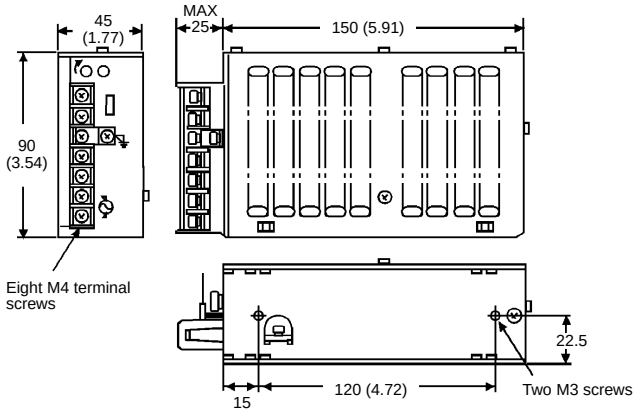
S82H-33□□



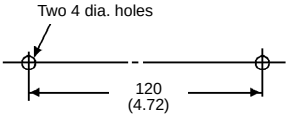
Mounting Holes



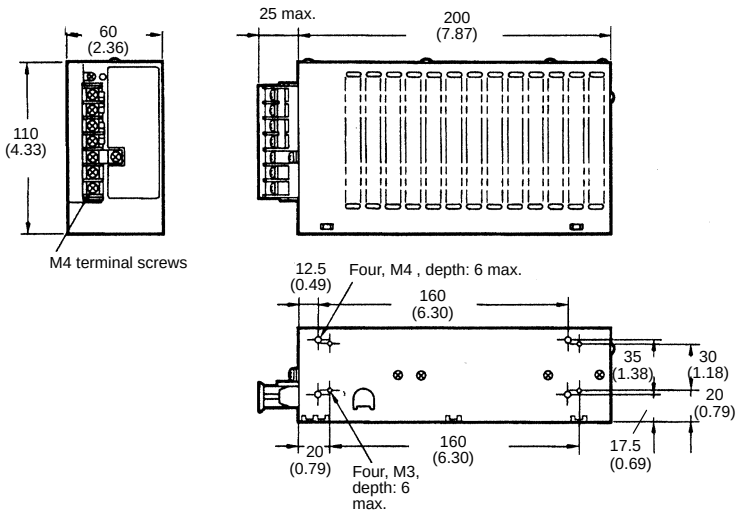
S82H-35□□



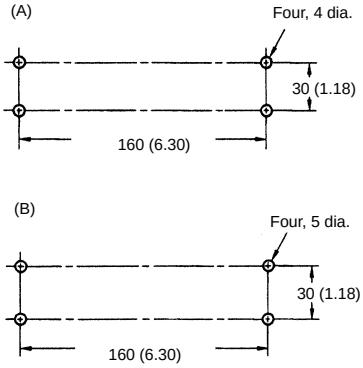
Mounting Holes



S82H100□□ (100 W)

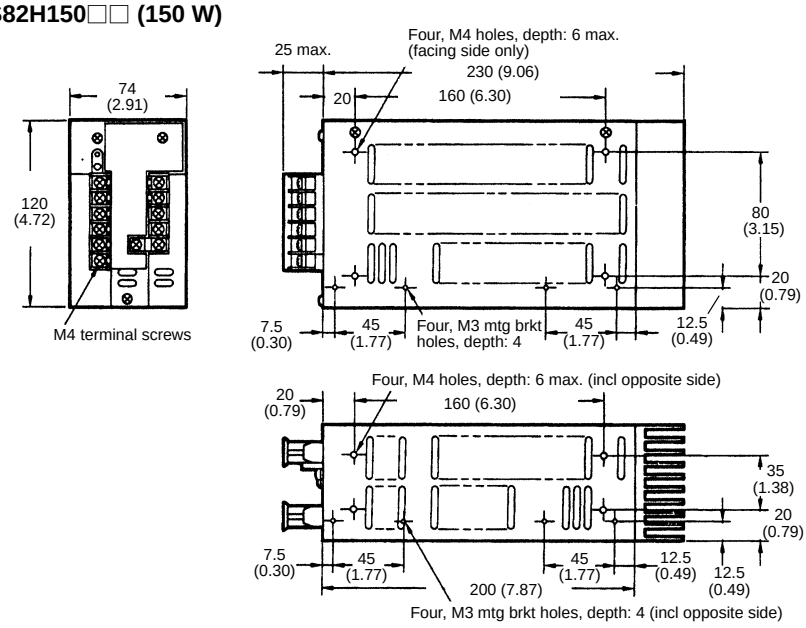


Mounting Holes



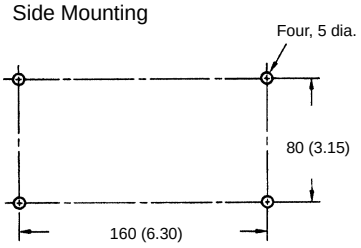
(A): Compatible with conventional S82H (100 W) models
(B): Compatible with S82P (100 W) discontinued models

S82H150□□ (150 W)

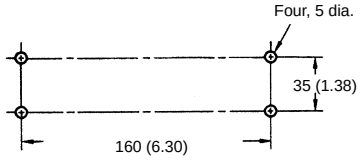


Mounting Holes

Side Mounting



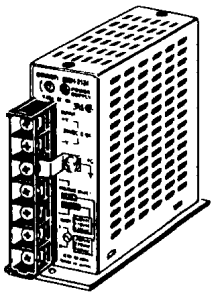
Bottom Mounting

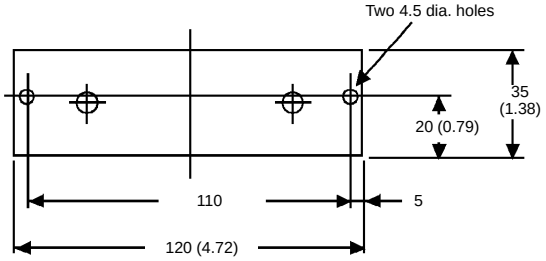


■ MOUNTING BRACKET

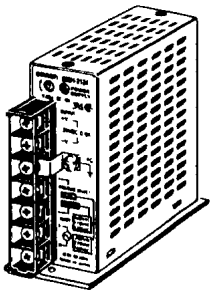
Bottom-Mounting Bracket

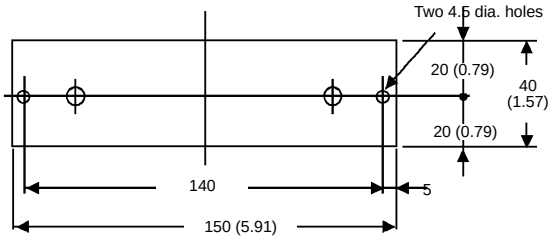
S82Y-H01B (15 W)



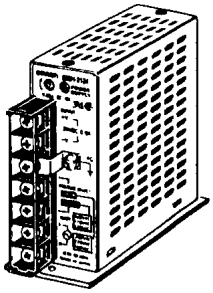


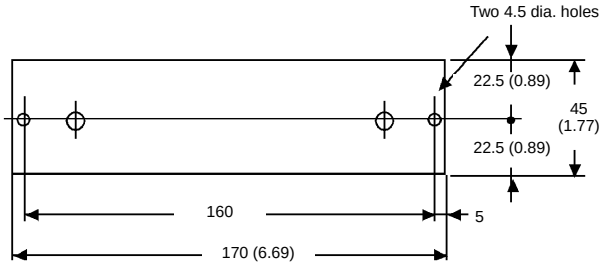
S82Y-H03B (30 W)



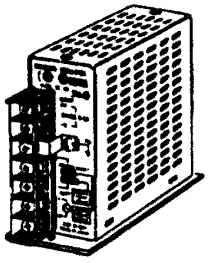


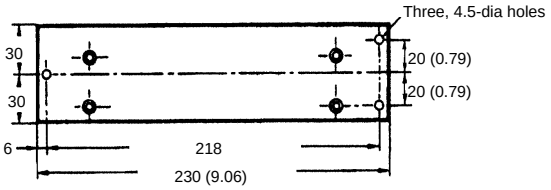
S82Y-H05B (50 W)



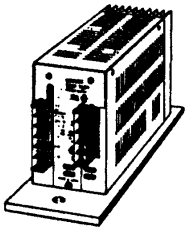


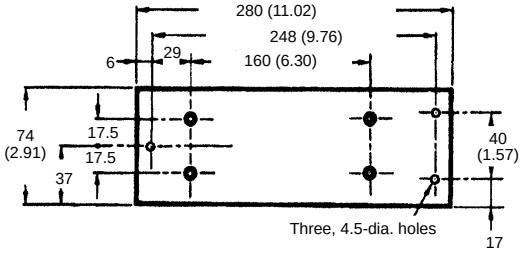
S82Y-H10B (100 W)





S82Y-F15B (150 W)



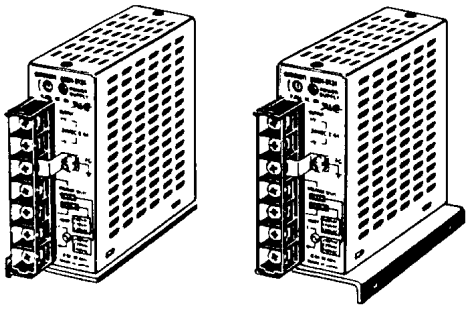


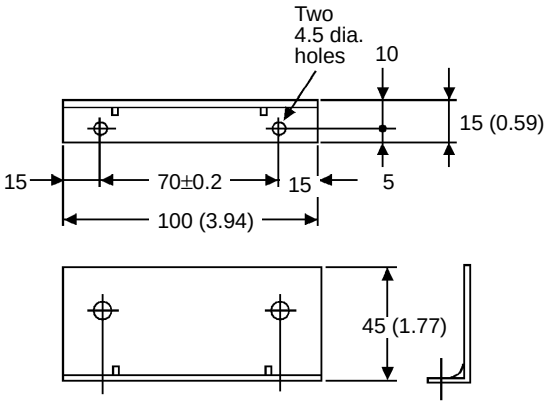
Note: Use countersink screws of M4 x 8 max. when attaching to the unit.

Unit: mm (inch)

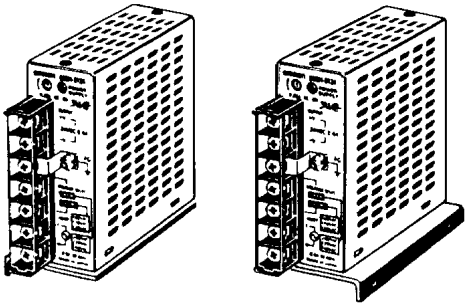
Side-Mounting Bracket

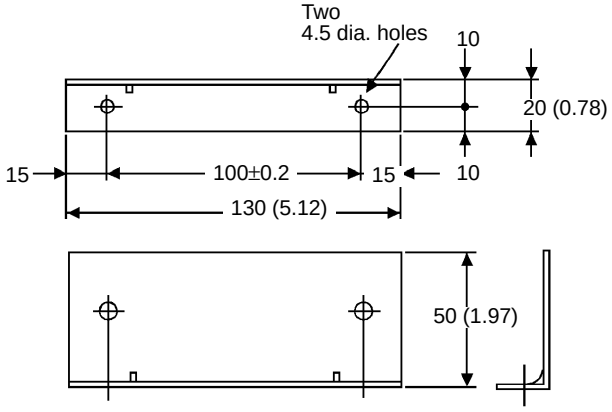
S82Y-H01S (15 W)



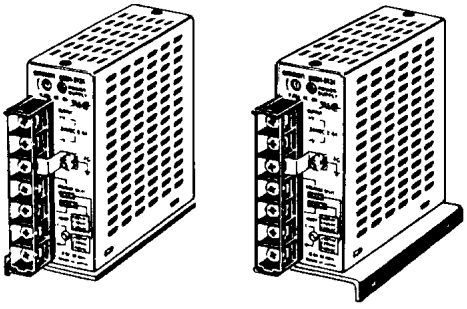


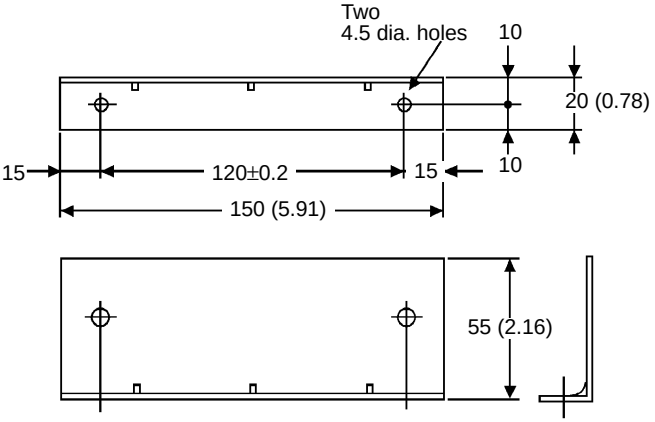
S82Y-H03S (30 W)



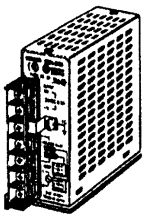


S82Y-H05S (50 W)

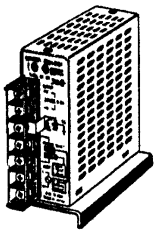




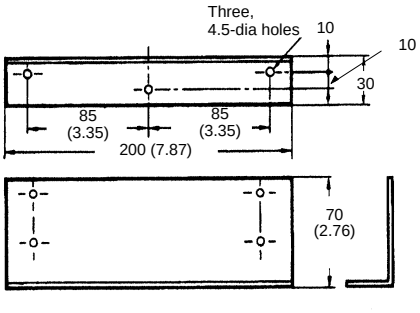
S82Y-H10S (100 W)



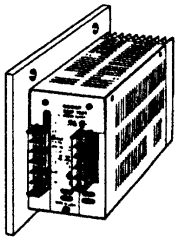
Left-side mounting

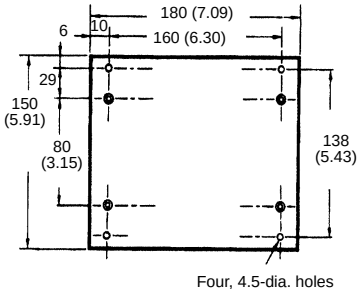


Right-side mounting



S82Y-F15S (150 W)

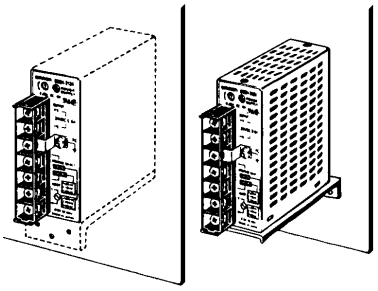


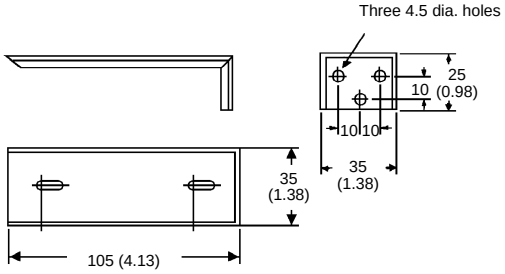


Note: Use countersink screws of M4 x 8 max. when attaching to the unit.

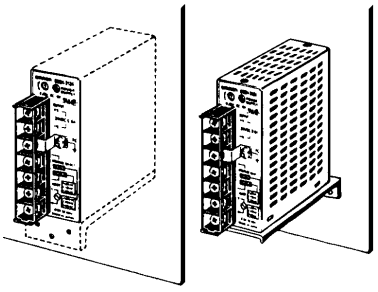
Front/Flush Mounting Bracket

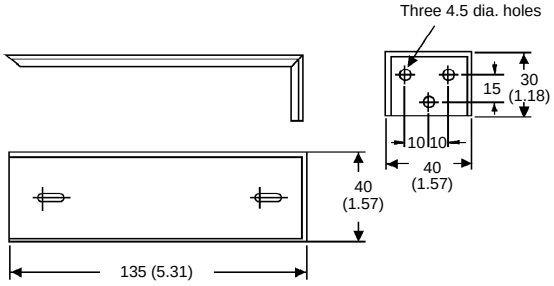
S82Y-H01F (15 W)



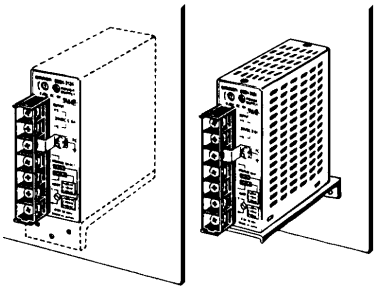


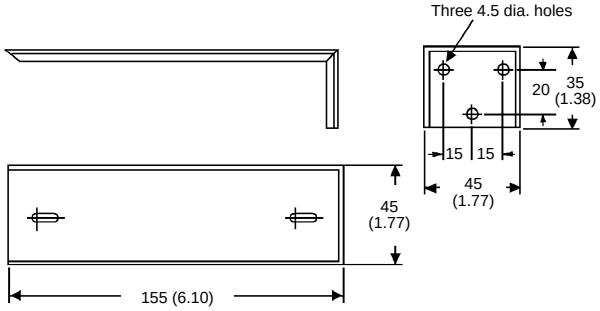
S82H-H03F (30 W)



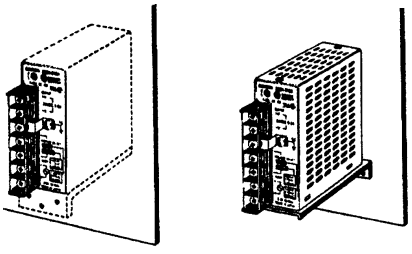


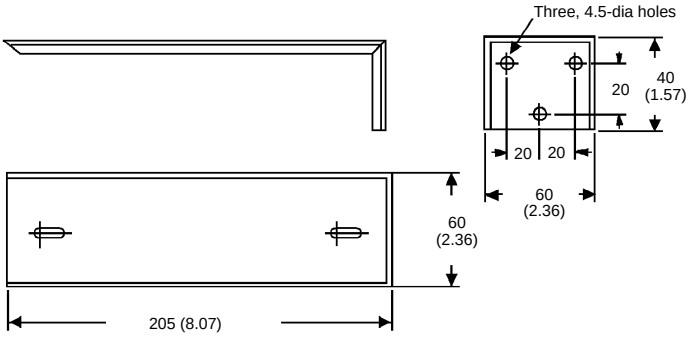
S82H-H05F (50 W)





S82Y-H10F (100 W)

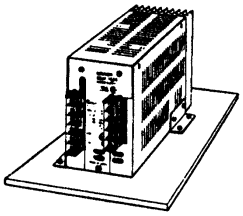




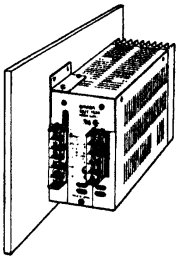
■ OTHER ACCESSORIES AND ATTACHMENTS FOR S82H150□□ (150 W)

Using the mounting brackets supplied with the unit, the unit can be attached in two directions.

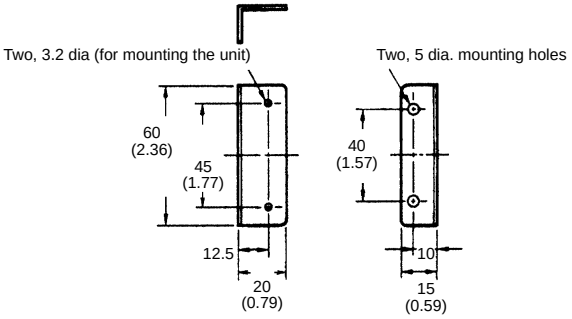
Bottom or Side Mounting Bracket (Included as an Attachment)



Bottom mounting



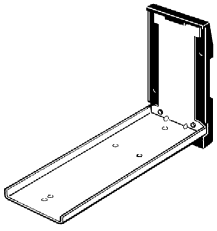
Side mounting

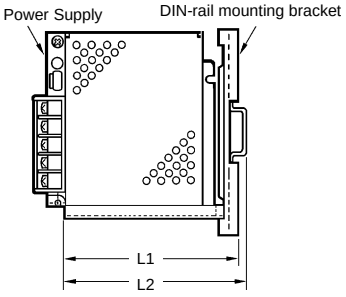


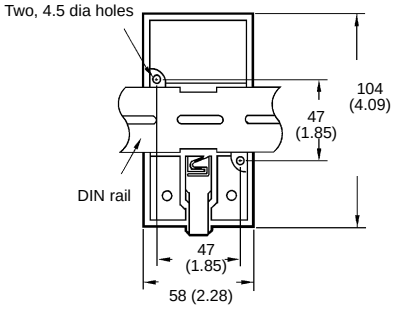
Note: Using two screws, attach the mounting bracket to the unit and then attach it to the panel.

■ DIN-RAIL MOUNTING BRACKET

S82Y-01N (15 W)
S82Y-03N (30 W)
S82Y-05N (50 W)





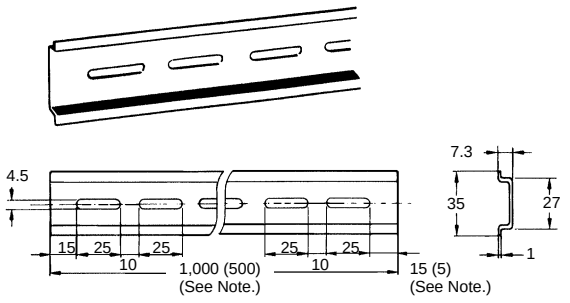


Item	S82Y-01N	S82Y-03N	S82Y-05N
Applicable power supply	S82H-31	S82H-33	S82H-35
Dimensions L1	113 mm (4.45)	143 mm (5.63)	163 mm (6.42)
Dimensions L2	114.8 mm (4.52)	144.8 mm (5.70)	164.8 mm (6.49)

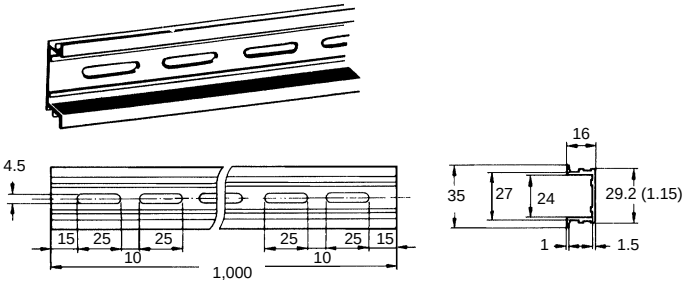
Note: The figures in row L1 apply if a mounting bracket is attached to the power supply. The figures in row L2 apply if PFP-50N or PFP-100N DIN rail is used. Add 10.5 mm to each figure in the L1 row if PFP-100N2 DIN rail is used.

■ DIN RAIL

PFP-100N/PFP-50N



PFP-100N2



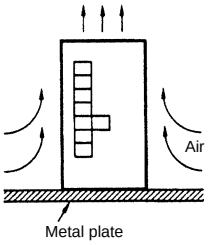
Note: The values shown in parentheses are for the PFP-50N.

Precautions

■ MOUNTING

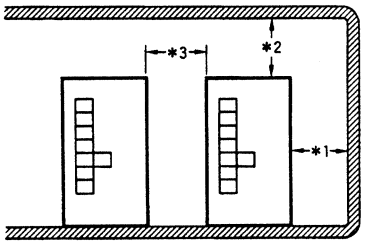
Note: Be careful not to impose any excessive vibration or impact when installing.

- To improve and maintain the reliability of the Power Supply over a long period of time, adequate consideration must be given to heat dissipation.
- Mount the Power Supply so that air flow takes place around the Power Supply. The Power Supply is designed to dissipate heat through natural air-flow.
- It is recommended that the Power Supply be mounted on a metal plate.



Provide at least the spaces listed in the following table.

Model	*1	*2	*3	*4	*5
100W, 150W	30 mm (1.18)	50 mm (1.97)	20 mm (0.78)	20 mm (0.78)	20 mm (0.78)
300W	30 mm (1.18)	50 mm (1.97)	20 mm (0.78)	50 mm (1.97)	40 mm (1.57)
600W	30 mm (1.18)	50 mm (1.97)	20 mm (0.78)	70 mm (2.76)	50 mm (1.97)



- Forced-air cooling is recommended.
- Don’t expose the product to the direct sunlight.
- Be careful not to allow any machining chips or dust into the product while fabricating mounting plates.
- Don’t use the product where fluids, foreign matter, or corrosive gases may enter the product.
- Provide at least the spaces listed in the following table.

■ WIRING PRECAUTIONS

The Power Supply is provided with reinforced insulation between the primary and secondary terminals. When using the secondary circuit as an SELV circuit, the circuit connected to the output terminals and auxiliary function terminals must be a SELV circuit.

Certain Terms and Conditions

1. Offer; Acceptance. These terms and conditions (these "Terms") are deemed part of all catalogs, manuals or other documents, whether electronic or in writing, relating to the sale of goods or services (collectively, the "Goods") by Omron Electronics LLC and its subsidiary companies ("Seller"). Seller hereby objects to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms. Please contact your Omron representative to confirm any additional terms for sales from your Omron company.
2. Prices. All prices stated are current, subject to change without notice by Seller. Buyer agrees to pay the price in effect at time of shipment.
3. Discounts. Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be allowed only if (i) the invoice is paid according to Seller's payment terms and (ii) Buyer has no past due amounts owing to Seller.
4. Orders. Seller will accept no order less than $200 net billing.
5. Governmental Approvals. Buyer shall be responsible for, and shall bear all costs involved in, obtaining any government approvals required for the importation or sale of the Goods.
6. Taxes. All taxes, duties and other governmental charges (other than general real property and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Seller or required to be collected directly or indirectly by Seller for the manufacture, production, sale, delivery, importation, consumption or use of the Goods sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and remitted by Buyer to Seller.
7. Financial. If the financial position of Buyer at any time becomes unsatisfactory to Seller, Seller reserves the right to stop shipments or require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with these Terms or any related agreement, Seller may (without liability and in addition to other remedies) cancel any unshipped portion of Goods sold hereunder and stop any Goods in transit until Buyer pays all amounts, including amounts payable hereunder, whether or not then due, which are owing to it by Buyer. Buyer shall in any event remain liable for all unpaid accounts.
8. Cancellation; Etc. Orders are not subject to rescheduling or cancellation unless Buyer indemnifies Seller fully against all costs or expenses arising in connection therewith.
9. Force Majeure. Seller shall not be liable for any delay or failure in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.
10. Shipping; Delivery. Unless otherwise expressly agreed in writing by Seller:
    a. Shipments shall be by a carrier selected by Seller;
    b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall constitute delivery to Buyer;
    c. All sales and shipments of Goods shall be FOB shipping point (unless otherwise stated in writing by Seller), at which point title to and all risk of loss of the Goods shall pass from Seller to Buyer, provided that Seller shall retain a security interest in the Goods until the full purchase price is paid by Buyer;
    d. Delivery and shipping dates are estimates only.
    e. Seller will package Goods as it deems proper for protection against normal handling and extra charges apply to special conditions.
11. Claims. Any claim by Buyer against Seller for shortage or damage to the Goods occurring before delivery to the carrier must be presented in writing to Seller within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Goods from Seller in the condition claimed.
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