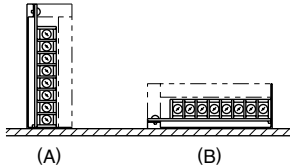


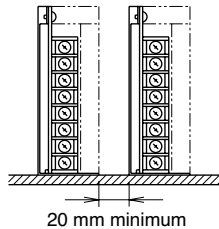
Instructions

Notes for Installation

- PS3L switching power supplies can be installed in either (A) or (B) directions as shown below. For PS3L-E/F/G types, the operating temperature vs. output current characteristics vary with the mounting direction. See the derating curves on page L-15.



- Mount the switching power supply on a metallic surface that provides adequate heat dissipation. Be sure to prevent heat built-up around the power supplies.
- Maintain 20 mm clearance between the power supplies.



- Use mounting screws of a proper length so that screws do not penetrate into the housing of the switching power supply 6 mm or more.
- Mounting screws cannot be fastened on a PC board. Be sure to fasten the screws on the chassis side.

Overcurrent Protection

The output voltage drops automatically when an overcurrent flows due to an overload or short circuit. Normal voltage is automatically restored when the load returns to normal conditions.

Overvoltage Protection (PS3L-A)

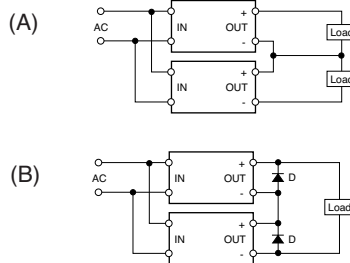
The PS3L-A uses a Zener diode for overvoltage protection. In case overvoltage damages the zener diode, contact IDEC for repair. Do not apply an external overvoltage to the output terminal.

(PS3L-B/C/D/E/F/G)

The output is turned off by overvoltage protection when an overvoltage is applied. When the output voltage has dropped due to an overvoltage (120% or more), turn the input off, and after one minute, turn the input on again.

Series Operation

The following series operations are allowed.



For the series operation (B), insert Schottky diodes D as shown in the figure. Select a Schottky diode in consideration of the rated current.

Notes for Operation

- Output interruption may indicate blown fuses. Contact IDEC.
- The internal fuse inside the power supply is for AC input. When using with DC input, install an external fuse for DC input. To avoid blown fuses, select fuses in consideration of the rated current of internal fuses.

Rated Current of Internal Fuses

| Type No. | Rated Current of Fuse |
|----------|-----------------------|
| PS3L-A | 2A |
| PS3L-B | |
| PS3L-C | 3.15A |
| PS3L-D | 2A |
| PS3L-E | 4A |
| PS3L-F | |
| PS3L-G | 6.3A |

- Avoid overload and short-circuit for a long period of time, otherwise the internal elements may be damaged.

4. Not suitable for parallel operation.

- DC input operation is not subject to safety standards.

Insulation/Dielectric Test

When conducting an insulation/dielectric test, short-circuit the input (between AC) and output (between + and -). Do not apply or interrupt the voltage suddenly, otherwise the surge voltage may be generated and the power supply may be damaged.

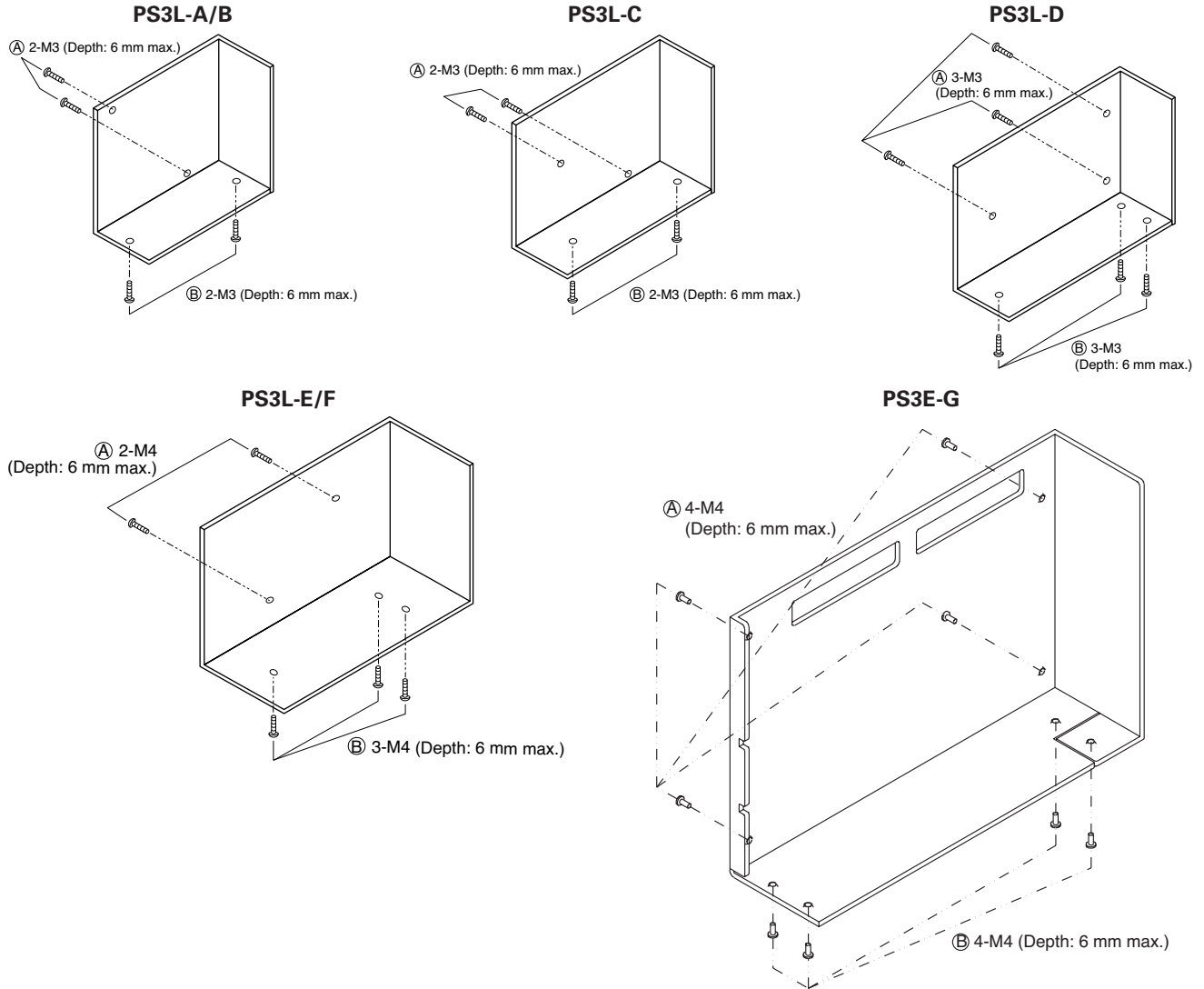
Adjustment of Output Voltage

The output voltage can be adjusted within $\pm 10\%$ of the rated output voltage by using the V.ADJ control on the front. Turning the V.ADJ clockwise increases the output voltage. When using a higher output voltage, reduce the output current to make sure that the output capacity is within the rating. Note that overvoltage protection may work when increasing the output voltage.

Safety Precautions

- Do not use switching power supplies with electric equipment whose malfunction or inadvertent operation may damage the human body or life directly.
- Make sure that the input voltage and output current do not exceed the ratings. If the input voltage and output current exceed the ratings, electric shock, fire, or malfunction may occur.
- Do not disassemble, repair, or modify the power supplies, otherwise the high voltage internal part may cause electric shock, fire, or malfunction.
- Do not touch the switching power supplies while input voltage is applied, otherwise electric shock may occur.
- Provide the final product with protection against malfunction or damage that may be caused by the malfunction of switching power supplies.
- Operating temperatures should not exceed the ratings. Be sure to note the derating characteristics. If the operating temperature exceeds the ratings, electric shock, fire, or malfunction may occur.
- Blown fuses indicate that the internal circuits are damaged. Contact IDEC for repair. Do not just replace the fuse and reoperate, otherwise electric shock, fire, or malfunction may occur.
- Do not use the switching power supplies to charge rechargeable batteries.

Installation



The figures above show the frames only. PC board and parts are omitted for illustration purposes.

| Installation | Mounting Hole Layout | | | | |
|--|----------------------|--------|--------|----------|--------|
| | PS3L-A/B | PS3L-C | PS3L-D | PS3L-E/F | PS3L-G |
| A Side Mounting (screw from the back) | | | | | |
| B Side Mounting (screw from the back) | | | | | |