



Announcement

May 2021

Product discontinuation: PS3N series switching power supplies

IDEC would like to inform you that we will discontinue our PS3N series switching power supplies.



1. Products to be discontinued

We will discontinue all PS3N series switching power supplies.

Please see page 2 for list of part numbers.

The following accessories will be also discontinued.

| L-shaped mounting bracket | Frame cover | Mounting plate | L-shaped mounting bracket 2 |
|---------------------------|-------------|----------------|-----------------------------|
| PS9Z-3N2A | PS9Z-3N9AN | PS9Z-3N1A | PS9Z-3N3B |
| PS9Z-3N2B | PS9Z-3N9BN | PS9Z-3N1B | PS9Z-3N3C |
| PS9Z-3N2C | PS9Z-3N9CN | PS9Z-3N1C | PS9Z-3N3D |
| PS9Z-3N2D | PS9Z-3N9DN | PS9Z-3N1D | PS9Z-3N3F |
| PS9Z-3N2E | PS9Z-3N9EN | PS9Z-3N1E | |
| PS9Z-3N2F | PS9Z-3N9FN | PS9Z-3N1F | |

Note: Special products are also included.

2. Recommended replacements

PS3V series switching power supplies to be launched in **June 2021**.

Notes:

- PS3V series will not have connector type or open frame type.
- Please refer to the replacement list from p.2 to p.6.
- Regarding the specification differences, please refer to the replacement manual "From PS3N series switching power supplies to PS3V series switching power supplies (20-SMBE104)"

3. Schedule (TBD)

- Discontinued date: Immediately while supplies last.

Note: We will not provide the discontinued products for maintenance.

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-C12A1N | Open frame | Terminal block | PS3V-030AF12C | With cover | Terminal block |
| PS3N-C12A1CN | With cover | Terminal block | | | |
| PS3N-C12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C12A1DN | With cover | Connector | | | |
| PS3N-C24A1N | Open frame | Terminal block | PS3V-030AF24C | With cover | Terminal block |
| PS3N-C24A1CN | With cover | Terminal block | | | |
| PS3N-C24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C24A1DN | With cover | Connector | | | |

Note: Special products are also included.



Announcement

Replacement list: PS3N series to PS3V series

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-A05A1N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-A05A1CN | With cover | Terminal block | | | |
| PS3N-A05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A05A1DN | With cover | Connector | | | |
| PS3N-A05A2N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-A05A2CN | With cover | Terminal block | | | |
| PS3N-A05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A05A2DN | With cover | Connector | | | |
| PS3N-A12A1N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-A12A1CN | With cover | Terminal block | | | |
| PS3N-A12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A12A1DN | With cover | Connector | | | |
| PS3N-A12A2N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-A12A2CN | With cover | Terminal block | | | |
| PS3N-A12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A12A2DN | With cover | Connector | | | |
| PS3N-A24A1N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-A24A1CN | With cover | Terminal block | | | |
| PS3N-A24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A24A1DN | With cover | Connector | | | |
| PS3N-A24A2N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-A24A2CN | With cover | Terminal block | | | |
| PS3N-A24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A24A2DN | With cover | Connector | | | |
| PS3N-B05A1N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-B05A1CN | With cover | Terminal block | | | |
| PS3N-B05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B05A1DN | With cover | Connector | | | |
| PS3N-B05A2N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-B05A2CN | With cover | Terminal block | | | |
| PS3N-B05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B05A2DN | With cover | Connector | | | |



Announcement

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-B12A1N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-B12A1CN | With cover | Terminal block | | | |
| PS3N-B12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B12A1DN | With cover | Connector | | | |
| PS3N-B12A2N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-B12A2CN | With cover | Terminal block | | | |
| PS3N-B12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B12A2DN | With cover | Connector | | | |
| PS3N-B24A1N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-B24A1CN | With cover | Terminal block | | | |
| PS3N-B24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B24A1DN | With cover | Connector | | | |
| PS3N-B24A2N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-B24A2CN | With cover | Terminal block | | | |
| PS3N-B24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B24A2DN | With cover | Connector | | | |
| PS3N-C05A1N | Open frame | Terminal block | PS3V-030AF05C | With cover | Terminal block |
| PS3N-C05A1CN | With cover | Terminal block | | | |
| PS3N-C05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C05A1DN | With cover | Connector | | | |
| PS3N-C05A2N | Open frame | Terminal block | PS3V-030AF05C | With cover | Terminal block |
| PS3N-C05A2CN | With cover | Terminal block | | | |
| PS3N-C05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C05A2DN | With cover | Connector | | | |
| PS3N-C12A2N | Open frame | Terminal block | PS3V-030AF12C | With cover | Terminal block |
| PS3N-C12A2CN | With cover | Terminal block | | | |
| PS3N-C12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C12A2DN | With cover | Connector | | | |



Announcement

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | | | | |
|-----------------------------------|------------|----------------|--|------------|----------------|---------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal | | | |
| PS3N-C24A2N | Open frame | Terminal block | PS3V-030AF24C | With cover | Terminal block | | | |
| PS3N-C24A2CN | With cover | Terminal block | | | | | | |
| PS3N-C24A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-C24A2DN | With cover | Connector | | | | | | |
| PS3N-D05A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 50W and output voltage is 5V) | | | | | |
| PS3N-D05A1CN | With cover | Terminal block | | | | | | |
| PS3N-D05A1AN | Open frame | Connector | | | | | | |
| PS3N-D05A1DN | With cover | Connector | | | | | | |
| PS3N-D05A2N | Open frame | Terminal block | | | | | | |
| PS3N-D05A2CN | With cover | Terminal block | | | | | | |
| PS3N-D05A2AN | Open frame | Connector | | | | | | |
| PS3N-D05A2DN | With cover | Connector | | | | | | |
| PS3N-D12A1N | Open frame | Terminal block | | | | PS3V-050AF12C | With cover | Terminal block |
| PS3N-D12A1CN | With cover | Terminal block | | | | | | |
| PS3N-D12A1AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D12A1DN | With cover | Connector | | | | | | |
| PS3N-D12A2N | Open frame | Terminal block | PS3V-050AF12C | With cover | Terminal block | | | |
| PS3N-D12A2CN | With cover | Terminal block | | | | | | |
| PS3N-D12A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D12A2DN | With cover | Connector | | | | | | |
| PS3N-D24A1N | Open frame | Terminal block | PS3V-050AF24C | With cover | Terminal block | | | |
| PS3N-D24A1CN | With cover | Terminal block | | | | | | |
| PS3N-D24A1AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D24A1DN | With cover | Connector | | | | | | |
| PS3N-D24A2N | Open frame | Terminal block | PS3V-050AF24C | With cover | Terminal block | | | |
| PS3N-D24A2CN | With cover | Terminal block | | | | | | |
| PS3N-D24A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D24A2DN | With cover | Connector | | | | | | |



Announcement

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | | | | |
|-----------------------------------|------------|----------------|--|-------|--------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal | | | |
| PS3N-E05A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 100W and output voltage is 5V or 12V) | | | | | |
| PS3N-E05A1CN | With cover | Terminal block | | | | | | |
| PS3N-E05A1AN | Open frame | Connector | | | | | | |
| PS3N-E05A1DN | With cover | Connector | | | | | | |
| PS3N-E05A2N | Open frame | Terminal block | | | | | | |
| PS3N-E05A2CN | With cover | Terminal block | | | | | | |
| PS3N-E05A2AN | Open frame | Connector | | | | | | |
| PS3N-E05A2DN | With cover | Connector | | | | | | |
| PS3N-E12A1N | Open frame | Terminal block | | | | | | |
| PS3N-E12A1CN | With cover | Terminal block | | | | | | |
| PS3N-E12A1AN | Open frame | Connector | | | | | | |
| PS3N-E12A1DN | With cover | Connector | | | | | | |
| PS3N-E12A2N | Open frame | Terminal block | | | | | | |
| PS3N-E12A2CN | With cover | Terminal block | | | | | | |
| PS3N-E12A2AN | Open frame | Connector | | | | | | |
| PS3N-E12A2DN | With cover | Connector | | | | | | |
| PS3N-E24A1N | Open frame | Terminal block | | | | PS3V-100AF24C | With cover | Terminal block |
| PS3N-E24A1CN | With cover | Terminal block | | | | Please use terminal block type | | |
| PS3N-E24A1AN | Open frame | Connector | | | | | | |
| PS3N-E24A1DN | With cover | Connector | | | | PS3V-100AF24C | With cover | Terminal block |
| PS3N-E24A2N | Open frame | Terminal block | | | | | | |
| PS3N-E24A2CN | With cover | Terminal block | Please use terminal block type | | | | | |
| PS3N-E24A2AN | Open frame | Connector | | | | | | |
| PS3N-E24A2DN | With cover | Connector | | | | | | |
| PS3N-F12A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 150W and output voltage is 12V) | | | | | |
| PS3N-F12A1CN | With cover | Terminal block | | | | | | |
| PS3N-F12A1AN | Open frame | Connector | | | | | | |
| PS3N-F12A1DN | With cover | Connector | | | | | | |
| PS3N-F12A2N | Open frame | Terminal block | | | | | | |
| PS3N-F12A2CN | With cover | Terminal block | | | | | | |
| PS3N-F12A2AN | Open frame | Connector | | | | | | |
| PS3N-F12A2DN | With cover | Connector | | | | | | |



Announcement

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-F24A1N | Open frame | Terminal block | PS3V-150AF24C | With cover | Terminal block |
| PS3N-F24A1CN | With cover | Terminal block | | | |
| PS3N-F24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-F24A1DN | With cover | Connector | | | |
| PS3N-F24A2N | Open frame | Terminal block | PS3V-150AF24C | With cover | Terminal block |
| PS3N-F24A2CN | With cover | Terminal block | | | |
| PS3N-F24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-F24A2DN | With cover | Connector | | | |

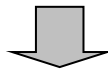
Think Automation and beyond...



From PS3N series switching power supplies to
PS3V series switching power supplies

Replacement Manual

Issue No. 20-SMBE104_4



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■ About this document

This document is a manual for replacing PS3N series switching power supplies with the PS3V series switching power supplies.

■ Replacement with PS3V series

- Dimensions are different between PS3N series and PS3V series. Refer to [Dimensions from page 22 to 23].
- The size and terminal arrangement of the I/O terminals are different between PS3N series and PS3V series. Refer to [Comparison of specifications from page 8 to 20].
- Overcurrent protection characteristics and derating characteristics are different between PS3N series and PS3V series. Refer to [Derating curves, overcurrent protection characteristics in page 21].
- PS3V series cannot be used on DC input.

Replacement list (PS3N series -> PS3Vseries) (1)

| PS3N | | | PS3V | | |
|--------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-A05A1N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-A05A1CN | With cover | Terminal block | | | |
| PS3N-A05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A05A1DN | With cover | Connector | | | |
| PS3N-A05A2N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-A05A2CN | With cover | Terminal block | | | |
| PS3N-A05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A05A2DN | With cover | Connector | | | |
| PS3N-A12A1N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-A12A1CN | With cover | Terminal block | | | |
| PS3N-A12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A12A1DN | With cover | Connector | | | |
| PS3N-A12A2N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-A12A2CN | With cover | Terminal block | | | |
| PS3N-A12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A12A2DN | With cover | Connector | | | |
| PS3N-A24A1N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-A24A1CN | With cover | Terminal block | | | |
| PS3N-A24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A24A1DN | With cover | Connector | | | |
| PS3N-A24A2N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-A24A2CN | With cover | Terminal block | | | |
| PS3N-A24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-A24A2DN | With cover | Connector | | | |
| PS3N-B05A1N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-B05A1CN | With cover | Terminal block | | | |
| PS3N-B05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B05A1DN | With cover | Connector | | | |
| PS3N-B05A2N | Open frame | Terminal block | PS3V-015AF05C | With cover | Terminal block |
| PS3N-B05A2CN | With cover | Terminal block | | | |
| PS3N-B05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B05A2DN | With cover | Connector | | | |
| PS3N-B12A1N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-B12A1CN | With cover | Terminal block | | | |

Replacement list (PS3N series -> PS3Vseries) (2)

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--------------------------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-B12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B12A1DN | With cover | Connector | | | |
| PS3N-B12A2N | Open frame | Terminal block | PS3V-015AF12C | With cover | Terminal block |
| PS3N-B12A2CN | With cover | Terminal block | | | |
| PS3N-B12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B12A2DN | With cover | Connector | | | |
| PS3N-B24A1N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-B24A1CN | With cover | Terminal block | | | |
| PS3N-B24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B24A1DN | With cover | Connector | | | |
| PS3N-B24A2N | Open frame | Terminal block | PS3V-015AF24C | With cover | Terminal block |
| PS3N-B24A2CN | With cover | Terminal block | | | |
| PS3N-B24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-B24A2DN | With cover | Connector | | | |
| PS3N-C05A1N | Open frame | Terminal block | PS3V-030AF05C | With cover | Terminal block |
| PS3N-C05A1CN | With cover | Terminal block | | | |
| PS3N-C05A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C05A1DN | With cover | Connector | | | |
| PS3N-C05A2N | Open frame | Terminal block | PS3V-030AF05C | With cover | Terminal block |
| PS3N-C05A2CN | With cover | Terminal block | | | |
| PS3N-C05A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C05A2DN | With cover | Connector | | | |
| PS3N-C12A1N | Open frame | Terminal block | PS3V-030AF12C | With cover | Terminal block |
| PS3N-C12A1CN | With cover | Terminal block | | | |
| PS3N-C12A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C12A1DN | With cover | Connector | | | |
| PS3N-C12A2N | Open frame | Terminal block | PS3V-030AF12C | With cover | Terminal block |
| PS3N-C12A2CN | With cover | Terminal block | | | |
| PS3N-C12A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C12A2DN | With cover | Connector | | | |
| PS3N-C24A1N | Open frame | Terminal block | PS3V-030AF24C | With cover | Terminal block |
| PS3N-C24A1CN | With cover | Terminal block | | | |
| PS3N-C24A1AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-C24A1DN | With cover | Connector | | | |

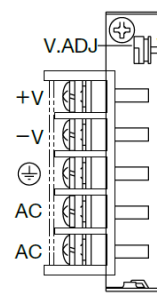
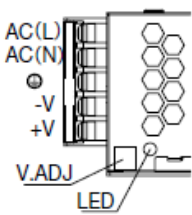
Replacement list (PS3N series -> PS3Vseries) (3)

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | | | | |
|-----------------------------------|------------|----------------|---|------------|----------------|---------------|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal | | | |
| PS3N-C24A2N | Open frame | Terminal block | PS3V-030AF24C | With cover | Terminal block | | | |
| PS3N-C24A2CN | With cover | Terminal block | | | | | | |
| PS3N-C24A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-C24A2DN | With cover | Connector | | | | | | |
| PS3N-D05A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 50W and output voltage is 5V) | | | | | |
| PS3N-D05A1CN | With cover | Terminal block | | | | | | |
| PS3N-D05A1AN | Open frame | Connector | | | | | | |
| PS3N-D05A1DN | With cover | Connector | | | | | | |
| PS3N-D05A2N | Open frame | Terminal block | | | | | | |
| PS3N-D05A2CN | With cover | Terminal block | | | | | | |
| PS3N-D05A2AN | Open frame | Connector | | | | | | |
| PS3N-D05A2DN | With cover | Connector | | | | | | |
| PS3N-D12A1N | Open frame | Terminal block | | | | PS3V-050AF12C | With cover | Terminal block |
| PS3N-D12A1CN | With cover | Terminal block | | | | | | |
| PS3N-D12A1AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D12A1DN | With cover | Connector | | | | | | |
| PS3N-D12A2N | Open frame | Terminal block | PS3V-050AF12C | With cover | Terminal block | | | |
| PS3N-D12A2CN | With cover | Terminal block | | | | | | |
| PS3N-D12A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D12A2DN | With cover | Connector | | | | | | |
| PS3N-D24A1N | Open frame | Terminal block | PS3V-050AF24C | With cover | Terminal block | | | |
| PS3N-D24A1CN | With cover | Terminal block | | | | | | |
| PS3N-D24A1AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D24A1DN | With cover | Connector | | | | | | |
| PS3N-D24A2N | Open frame | Terminal block | PS3V-050AF24C | With cover | Terminal block | | | |
| PS3N-D24A2CN | With cover | Terminal block | | | | | | |
| PS3N-D24A2AN | Open frame | Connector | Please use terminal block type | | | | | |
| PS3N-D24A2DN | With cover | Connector | | | | | | |
| PS3N-E05A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 100W and output voltage is 5V) | | | | | |
| PS3N-E05A1CN | With cover | Terminal block | | | | | | |
| PS3N-E05A1AN | Open frame | Connector | | | | | | |
| PS3N-E05A1DN | With cover | Connector | | | | | | |
| PS3N-E05A2N | Open frame | Terminal block | | | | | | |
| PS3N-E05A2CN | With cover | Terminal block | | | | | | |

Replacement list (PS3N series -> PS3Vseries) (4)

| Products to be discontinued: PS3N | | | Recommended replacements: PS3V | | |
|-----------------------------------|------------|----------------|--|------------|----------------|
| Part number | Shape | I/O Terminal | Part number | Shape | I/O Terminal |
| PS3N-E05A2AN | Open frame | Connector | No recommended replacements (PS3V series does not have products that the output capacity is 100W and output voltage is 5V or 12V) | | |
| PS3N-E05A2DN | With cover | Connector | | | |
| PS3N-E12A1N | Open frame | Terminal block | | | |
| PS3N-E12A1CN | With cover | Terminal block | | | |
| PS3N-E12A1AN | Open frame | Connector | | | |
| PS3N-E12A1DN | With cover | Connector | | | |
| PS3N-E12A2N | Open frame | Terminal block | | | |
| PS3N-E12A2CN | With cover | Terminal block | | | |
| PS3N-E12A2AN | Open frame | Connector | | | |
| PS3N-E12A2DN | With cover | Connector | | | |
| PS3N-E24A1N | Open frame | Terminal block | PS3V-100AF24C | With cover | Terminal block |
| PS3N-E24A1CN | With cover | Terminal block | Please use terminal block type | | |
| PS3N-E24A1AN | Open frame | Connector | | | |
| PS3N-E24A1DN | With cover | Connector | Please use terminal block type | | |
| PS3N-E24A2N | Open frame | Terminal block | | | |
| PS3N-E24A2CN | With cover | Terminal block | PS3V-100AF24C | With cover | Terminal block |
| PS3N-E24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-E24A2DN | With cover | Connector | | | |
| PS3N-F12A1N | Open frame | Terminal block | No recommended replacements (PS3V series does not have products that the output capacity is 150W and output voltage is 12V) | | |
| PS3N-F12A1CN | With cover | Terminal block | | | |
| PS3N-F12A1AN | Open frame | Connector | | | |
| PS3N-F12A1DN | With cover | Connector | | | |
| PS3N-F12A2N | Open frame | Terminal block | | | |
| PS3N-F12A2CN | With cover | Terminal block | | | |
| PS3N-F12A2AN | Open frame | Connector | | | |
| PS3N-F12A2DN | With cover | Connector | | | |
| PS3N-F24A1N | Open frame | Terminal block | PS3V-150AF24C | With cover | Terminal block |
| PS3N-F24A1CN | With cover | Terminal block | Please use terminal block type | | |
| PS3N-F24A1AN | Open frame | Connector | | | |
| PS3N-F24A1DN | With cover | Connector | Please use terminal block type | | |
| PS3N-F24A2N | Open frame | Terminal block | | | |
| PS3N-F24A2CN | With cover | Terminal block | PS3V-150AF24C | With cover | Terminal block |
| PS3N-F24A2AN | Open frame | Connector | Please use terminal block type | | |
| PS3N-F24A2DN | With cover | Connector | | | |

Comparison of specifications (PS3N-A05A**N -> PS3V-015AF05C)

| Description | | PS3N-A05A**N | PS3V-015AF05C | | |
|-------------------------|---|---|---|-----------------------------|-------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | AC100 to 240V (Voltage Range: AC85 to 264V) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.27A (Typ.), 200V: 0.15A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | | |
| | Inrush Current | 100V: 30A max., 200V: 60A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 71% | 77% 100VAC, 76% 230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 5V, 2A | 5V, 3A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 15ms Typ. (100V AC), 120ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 20 mV max. | 0.4% max. | |
| | | Load Fluctuation | 40 mV max. | 1% max. | |
| | | Temperature Fluctuation | 60 mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 8% p-p max. |
| | | | -10 to 0°C | 160 mV max. | 5% p-p max. |
| 0 to 50°C | 100 mV max. | | 2.5% p-p max. | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 70H x 27W x 68D (with cover: 70H x 32W x 68D) | 50.8H x 34W x 65D (with cover) | | |
| | Weight (approx.) | 110g | 135g | | |
| | Terminal Screw | M3.5 | M3 | | |
| | Terminal Arrangement |  |  | | |

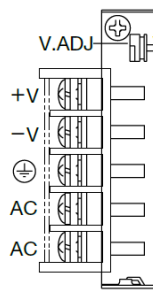
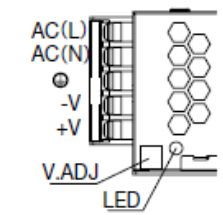
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-A12A**N -> PS3V-015AF12C)

| Description | | PS3N-A12A**N | PS3V-015AF12C | | |
|-------------------------|--|---|---|-----------------------------|---------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.27A (Typ.), 200V: 0.15A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | | |
| | Inrush Current | 100V: 30A max., 200V: 60A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 76% | 82%/100VAC, 81%/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 12V, 0.9A | 12V, 1.3A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 15ms Typ. (100V AC), 120ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 48 mV max. | 0.4% max. | |
| | | Load Fluctuation | 100 mV max. | 1% max. | |
| | | Temperature Fluctuation | 150 mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 6% p-p max. |
| | | | -10 to 0°C | 200 mV max. | 2.5% p-p max. |
| 0 to 50°C | 150 mV max. | 1.5% p-p max. | | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 70H x 27W x 68D (with cover: 70H x 32W x 68D) | 50.8H x 34W x 65D (with cover) | | |
| | Weight (approx.) | 110g | 135g | | |
| | Terminal Screw | M3.5 | M3 | | |
| | Terminal Arrangement |  |  | | |

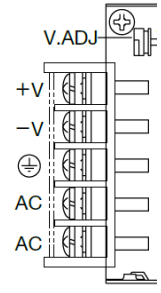
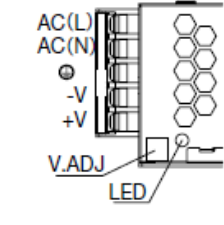
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-A24A**N -> PS3V-015AF24C)

| Description | | PS3N-A24A**N | PS3V-015AF24C | |
|-------------------------|--|---|---|-----------------------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | |
| | Input Current (at rated output) | 100V: 0.27A (Typ.), 200V: 0.15A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | |
| | Inrush Current | 100V: 30A max., 200V: 60A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | |
| | Efficiency (Typ.) | 79% | 84%/100VAC, 83%/230VAC (at rated output) | |
| Output | Rated Voltage/Current | 24V, 0.5A | 24V, 0.63A | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | |
| | Output Holding Time | 20ms min. (at rated input and output) | 20 ms typ. (100V AC), 130 ms typ. (230V AC) (at rated output) | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. |
| | | Load Fluctuation | 150mV max. | 1% max. |
| | | Temperature Fluctuation | 290mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) |
| | | Ripple | -25 to 10°C -10 to 0°C | - |
| | | (including noise) | 0 to 50°C | 200mV max. |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | |
| | Operation Indicator | LED (green) | LED (green) | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | |
| Structure | Dimensions (mm) | 70H x 27W x 68D (with cover: 70H x 32W x 68D) | 50.8H x 34W x 65D (with cover) | |
| | Weight (approx.) | 110g | 135g | |
| | Terminal Screw | M3.5 | M3 | |
| | Terminal Arrangement |  |  | |

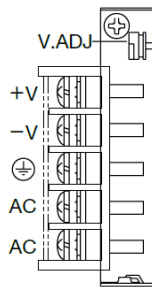
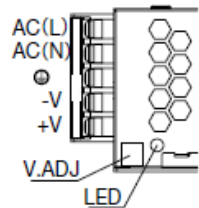
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-B05A**N -> PS3V-015AF05C)

| Description | | PS3N-B05A**N | PS3V-015AF05C | | |
|-------------------------|--|---|---|-----------------------------|------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.36A (Typ.), 200V: 0.21A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | | |
| | Inrush Current | 100V: 30A max., 200V: 50A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 73% | 77% 100VAC, 76% 230VAC(at rated output) | | |
| Output | Rated Voltage/Current | 5V, 3A | 5V, 3A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 15ms Typ. (100V AC), 120ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 20mV max. | 0.4% max. | |
| | | Load Fluctuation | 40mV max. | 1% max. | |
| | | Temperature Fluctuation | 60mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 8%p-p max. |
| | | | -10 to 0°C | 160mV max. | 5%p-p max. |
| 0 to 50°C | 100mV max. | 2.5%p-p max. | | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 69H x 30W x 76D (with cover: 69H x 34W x 76D) | 50.8H x 34W x 65D (with cover) | | |
| | Weight (approx.) | 160g | 135g | | |
| | Terminal Screw | M3.5 | M3 | | |
| | Terminal Arrangement |  |  | | |

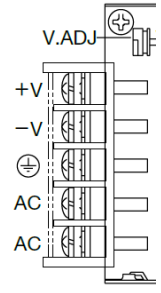
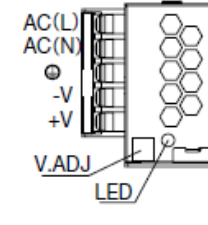
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-B12A**N -> PS3V-015AF12C)

| Description | | PS3N-B12A**N | PS3V-015AF12C | | |
|-------------------------|--|---|---|-----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.36A (Typ.), 200V: 0.21A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | | |
| | Inrush Current | 100V: 30A max., 200V: 50A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 76% | 82%/100VAC, 81%/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 12V, 1.3A | 12V, 1.3A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 15ms Typ. (100V AC), 120ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 48mV max. | 0.4% max. | |
| | | Load Fluctuation | 100mV max. | 1% max. | |
| | | Temperature Fluctuation | 150mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 6%p-p max. |
| | | | -10 to 0°C | 200mV max. | 2.5%p-p max. |
| 0 to 50°C | 150mV max. | 1.5%p-p max. | | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 69H x 30W x 76D (with cover: 69H x 34W x 76D) | 50.8H x 34W x 65D (with cover) | | |
| | Weight (approx.) | 160g | 135g | | |
| | Terminal Screw | M3.5 | M3 | | |
| | Terminal Arrangement |  |  | | |

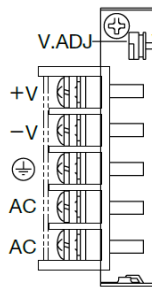
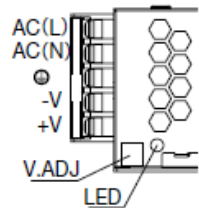
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-B24A**N -> PS3V-015AF24C)

| Description | | PS3N-B24A**N | PS3V-015AF24C | | |
|-------------------------|--|---|---|-----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.36A (Typ.), 200V: 0.21A (Typ.) | 100V: 0.32A (Typ.), 230V: 0.2A (Typ.) | | |
| | Inrush Current | 100V: 30A max., 200V: 50A max. | 40A Typ. (at 100V AC), 60A Typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 79% | 84%/100VAC, 83%/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 24V, 0.7A | 24V, 0.63A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 20ms Typ. (100V AC), 130ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 100ms max. (at rated input and output) | 300ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. | |
| | | Load Fluctuation | 150mV max. | 1% max. | |
| | | Temperature Fluctuation | 290mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 4%p-p max. |
| | | | -10 to 0°C | 200mV max. | 1.5%p-p max. |
| 0 to 50°C | 150mV max. | 1%p-p max. | | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Intermittent operation, auto reset at 120% min. | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 69H x 30W x 76D (with cover: 69H x 34W x 76D) | 50.8H x 34W x 65D (with cover) | | |
| | Weight (approx.) | 160g | 135g | | |
| | Terminal Screw | M3.5 | M3 | | |
| | Terminal Arrangement |  |  | | |

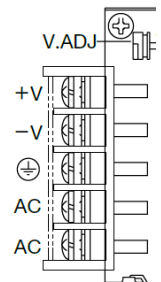
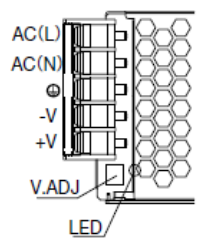
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-C05A**N -> PS3V-030AF05C)

| Description | | PS3N-C05A**N | PS3V-030AF05C | |
|-------------------------|--|---|---|--|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | |
| | Input Current (at rated output) | 100V: 0.65A (Typ.), 200V: 0.36A (Typ.) | 100V: 0.66A (Typ.), 230V: 0.35A (Typ.) | |
| | Inrush Current | 100V: 40A max., 200V: 60A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | |
| | Efficiency (Typ.) | 71% | 77%/100VAC, 77%/230VAC (at rated output) | |
| Output | Rated Voltage/Current | 5V, 5A | 5V, 6A | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | |
| | Output Holding Time | 20ms min. (at rated input and output) | 18ms Typ. (100V AC), 110ms Typ. (230V AC) (at rated output) | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | |
| | Rise Time | 100ms max. (at rated input and output) | 200ms max. (at rated input and output) | |
| | Regulation | Input Fluctuation | 20mV max. | 0.4% max. |
| | | Load Fluctuation | 40mV max. | 1% max. |
| | | Temperature Fluctuation | 60mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) |
| | | Ripple (including noise) | -25 to 10°C -10 to 0°C | - |
| | | 0 to 50°C | 160mV max. 100mV max. | 8%p-p max. 5%p-p max. 2.5%p-p max. |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | |
| | Overvoltage Protection | 120% min. (*3) | Output off at 120% min., reset by turning on the input again | |
| | Operation Indicator | LED (green) | LED (green) | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | |
| Structure | Dimensions (mm) | 68.5H x 30.5W x 95.5D (with cover: 68.5H x 34.5W x 95.5D) | 68.5H x 34.5W x 95.5D (with cover) | |
| | Weight (approx.) | 210g | 190g | |
| | Terminal Screw | M3.5 | M3.5 | |
| | Terminal Arrangement |  |  | |

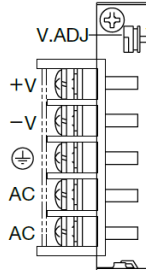
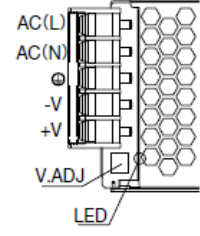
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-C12A**N -> PS3V-030AF12C)

| Description | | PS3N-C12A**N | PS3V-030AF12C | | |
|-------------------------|--|---|---|----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 0.65A (Typ.), 200V: 0.36A (Typ.) | 100V: 0.66A (Typ.), 230V: 0.35A (Typ.) | | |
| | Inrush Current | 100V: 40A max., 200V: 60A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 80% | 83%/100VAC, 83%/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 12V, 2.5A | 12V, 2.5A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min.(at rated input and output) | 18ms Typ. (100V AC), 110ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 200ms max.(at rated input and output) | 650ms max.(at rated input and output) | | |
| | Rise Time | 100ms max.(at rated input and output) | 200ms max.(at rated input and output) | | |
| | Regulation | Input Fluctuation | 48mV max. | 0.4% max. | |
| | | Load Fluctuation | 100mV max. | 1% max. | |
| | | Temperature Fluctuation | 150mV max.(-10 to +50°C) | 0.05%/°C max.(-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 6%p-p max. |
| | | | -10 to 0°C | 200mV max. | 2.5%p-p max. |
| | 0 to 50°C | 150mV max. | 1.5%p-p max. | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | 120% min. (*3) | Output off at 120% min., reset by turning on the input again | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 68.5H x 30.5W x 95.5D (with cover: 68.5H x 34.5W x 95.5D) | 68.5H x 34.5W x 95.5D (with cover) | | |
| | Weight (approx.) | 210g | 190g | | |
| | Terminal Screw | M3.5 | M3.5 | | |
| | Terminal Arrangement |  |  | | |

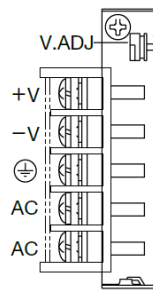
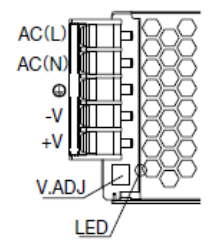
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-C24A**N -> PS3V-030AF24C)

| Description | | PS3N-C24A**N | PS3V-030AF24C | |
|-------------------------|--|---|---|--|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | |
| | Input Current (at rated output) | 100V: 0.65A (Typ.), 200V: 0.36A (Typ.) | 100V: 0.66A (Typ.), 230V: 0.35A (Typ.) | |
| | Inrush Current | 100V: 40A max., 200V: 60A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | |
| | Efficiency (Typ.) | 85% | 85%/100VAC, 84%/230VAC (at rated output) | |
| Output | Rated Voltage/Current | 24V, 1.3A | 24V, 1.3A | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | |
| | Output Holding Time | 20ms min. (at rated input and output) | 18ms Typ. (100V AC), 110ms Typ. (230V AC) (at rated output) | |
| | Start Time | 200ms max. (at rated input and output) | 650ms max. (at rated input and output) | |
| | Rise Time | 100ms max. (at rated input and output) | 200ms max. (at rated input and output) | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. |
| | | Load Fluctuation | 150mV max. | 1% max. |
| | | Temperature Fluctuation | 290mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) |
| | | Ripple (including noise) | -25 to 10°C -10 to 0°C 0 to 50°C | - 200mV max. 150mV max. |
| | | | | 4%p-p max. 1.5%p-p max. 1%p-p max. |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | |
| | Overvoltage Protection | 120% min. (*3) | Output off at 120% min., reset by turning on the input again | |
| | Operation Indicator | LED (green) | LED (green) | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | |
| Structure | Dimensions (mm) | 68.5H x 30.5W x 95.5D (with cover: 68.5H x 34.5W x 95.5D) | 68.5H x 34.5W x 95.5D (with cover) | |
| | Weight (approx.) | 210g | 190g | |
| | Terminal Screw | M3.5 | M3.5 | |
| | Terminal Arrangement |  |  | |

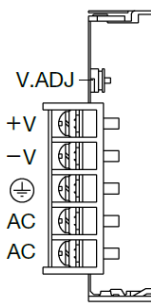
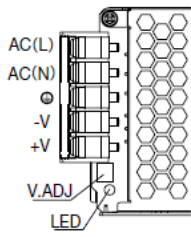
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Zener limiter.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-D12A**N -> PS3V-050AF12C)

| Description | | PS3N-D12A**N | PS3V-050AF12C | | |
|-------------------------|--|---|---|-----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 1.15A (Typ.), 200V: 0.65A (Typ.) | 100V: 1.1A (Typ.), 230V: 0.6A (Typ.) | | |
| | Inrush Current | 100V: 40A max., 200V: 60A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 80% | 84%/100VAC, 84%/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 12V, 4.5A | 12V, 4.5A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 17ms Typ. (100V AC), 125ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 400ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 200ms max. (at rated input and output) | 200ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 48mV max. | 0.4% max. | |
| | | Load Fluctuation | 100mV max. | 1% max. | |
| | | Temperature Fluctuation | 150mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 6%p-p max. |
| | | | -10 to 0°C | 200mV max. | 2.5%p-p max. |
| 0 to 50°C | 150mV max. | 1.5%p-p max. | | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | Output off at 130% (Typ.), reset by turning on the input again (*3) | Output off at 120% min., reset by turning on the input again | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 85H x 33W x 118.5D (with cover: 85H x 37W x 118.5D) | 80H x 36W x 99D (with cover) | | |
| | Weight (approx.) | 230g | 230g | | |
| | Terminal Screw | M3.5 | M3.5 | | |
| | Terminal Arrangement |  |  | | |

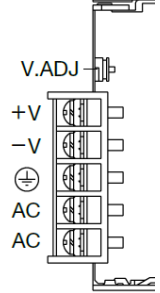
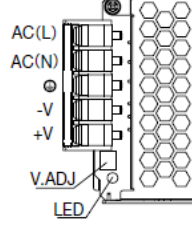
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Output off.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-D24A**N -> PS3V-050AF24C)

| Description | | PS3N-D24A**N | PS3V-050AF24C | |
|-------------------------|--|---|---|-----------------------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | |
| | Input Current (at rated output) | 100V: 1.15A (Typ.), 200V: 0.65A (Typ.) | 100V: 1.1A (Typ.), 230V: 0.6A (Typ.) | |
| | Inrush Current | 100V: 40A max., 200V: 60A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | |
| | Efficiency (Typ.) | 83% | 87%/100VAC, 87%/230VAC (at rated output) | |
| Output | Rated Voltage/Current | 24V, 2.3A | 24V, 2.3A | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | |
| | Output Holding Time | 20ms min. (at rated input and output) | 17ms Typ. (100V AC), 125ms Typ. (230V AC) (at rated output) | |
| | Start Time | 400ms max. (at rated input and output) | 650ms max. (at rated input and output) | |
| | Rise Time | 200ms max. (at rated input and output) | 200ms max. (at rated input and output) | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. |
| | | Load Fluctuation | 150mV max. | 1% max. |
| | | Temperature Fluctuation | 290mV max. (-10 to 50°C) | 0.05%/°C max. (-10 to 50°C) |
| | | Ripple | -25 to 10°C - | 4%p-p max. |
| | | (including noise) | -10 to 0°C 200mV max. 0 to 50°C 150mV max. | 1.5%p-p max. 1%p-p max. |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | |
| | Overvoltage Protection | Output off at 130% (Typ.), reset by turning on the input again (*3) | Output off at 120% min., reset by turning on the input again | |
| | Operation Indicator | LED (green) | LED (green) | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | |
| Structure | Dimensions (mm) | 85H x 33W x 118.5D (with cover: 85H x 37W x 118.5D) | 80H x 36W x 99D (with cover) | |
| | Weight (approx.) | 230g | 230g | |
| | Terminal Screw | M3.5 | M3.5 | |
| | Terminal Arrangement |  |  | |

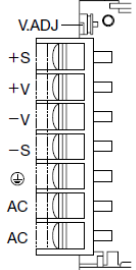
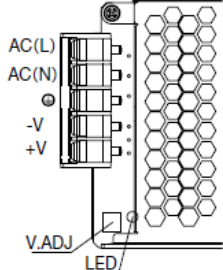
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Output off.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-E24A**N -> PS3V-100AF24C)

| Description | | PS3N-E24A**N | PS3V-100AF24C | | |
|-------------------------|--|---|---|----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 2.2A (Typ.), 200V: 1.2A (Typ.) | 100V: 1.3A (Typ.), 230V: 0.6A (Typ.) | | |
| | Inrush Current | 100V: 20A max., 200V: 20A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 85% | 85%/100VAC, 88%/230VAC (at rated output) | | |
| | Power Factor (Typ.) | - | 0.98/100VAC, 0.9/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 24V, 4.5A | 24V, 4.5A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 35ms Typ. (100V AC), 35ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 400ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 200ms max. (at rated input and output) | 200ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. | |
| | | Load Fluctuation | 150mV max. | 1% max. | |
| | | Temperature Fluctuation | 290mV max.(-10 to +50°C) | 0.05%/°C max.(-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 4%p-p max. |
| | | | -10 to 0°C | 200mV max. | 1.5%p-p max. |
| 0 to 50°C | 150mV max. | | 1%p-p max. | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | Output off at 130% (Typ.), reset by turning on the input again (*3) | Output off at 120% min., reset by turning on the input again | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 93H x 34.5W x 150D (with cover: 93H x 39W x 150D) | 93H x 39W x 108D (with cover) | | |
| | Weight (approx.) | 460g | 380g | | |
| | Terminal Screw | M4 | M3.5 | | |
| | Terminal Arrangement |  |  | | |

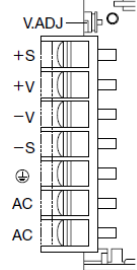
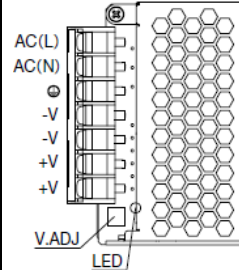
*1) Ta = 25°C, cold start.

*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Output off.

*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Comparison of specifications (PS3N-F24A**N -> PS3V-150AF24C)

| Description | | PS3N-F24A**N | PS3V-150AF24C | | |
|-------------------------|--|---|---|-----------------------------|--------------|
| Input | Rated Input Voltage (Single-phase two-wire) | 100V AC (Voltage Range: 85 to 132V AC/105 to 170V DC) 200V AC (Voltage Range: 170 to 264V AC/210 to 340V DC) | 100 to 240V AC (Voltage Range: 85 to 264V AC) | | |
| | Frequency | 47Hz to 63Hz | 47Hz to 63Hz | | |
| | Input Current (at rated output) | 100V: 3.2A (Typ.), 200V: 1.85A (Typ.) | 100V: 1.9A (Typ.), 230V: 0.9A (Typ.) | | |
| | Inrush Current | 100V: 20A max., 200V: 20A max. | 18A typ. (at 100V AC), 45A typ. (at 230V AC) (*1) | | |
| | Leakage Current | 100V: 0.5mA max., 200V: 1mA max. | 120V: 0.5mA max., 240V: 1mA max. | | |
| | Efficiency (Typ.) | 85% | 85%/100VAC, 88%/230VAC (at rated output) | | |
| | Power Factor (Typ.) | - | 0.98/100VAC, 0.95/230VAC (at rated output) | | |
| Output | Rated Voltage/Current | 24V, 6.5A | 24V, 6.5A | | |
| | Adjustable Voltage Range | ±10% | ±10% (Adjustable by front and V.ADJ volume) | | |
| | Output Holding Time | 20ms min. (at rated input and output) | 24ms Typ. (100V AC), 24ms Typ. (230V AC) (at rated output) | | |
| | Start Time | 400ms max. (at rated input and output) | 650ms max. (at rated input and output) | | |
| | Rise Time | 200ms max. (at rated input and output) | 200ms max. (at rated input and output) | | |
| | Regulation | Input Fluctuation | 96mV max. | 0.4% max. | |
| | | Load Fluctuation | 150mV max. | 1% max. | |
| | | Temperature Fluctuation | 290mV max. (-10 to +50°C) | 0.05%/°C max. (-10 to 50°C) | |
| | | Ripple (including noise) | -25 to 10°C | - | 4%p-p max. |
| | | | -10 to 0°C | 200mV max. | 1.5%p-p max. |
| 0 to 50°C | 150mV max. | | 1%p-p max. | | |
| Supplementary Functions | Overcurrent Protection | 105% min. (auto reset) (*2) | 105% min. (auto reset) (*2) | | |
| | Overvoltage Protection | Output off at 130% (Typ.), reset by turning on the input again (*3) | Output off at 120% min., reset by turning on the input again | | |
| | Operation Indicator | LED (green) | LED (green) | | |
| Dielectric Strength | | Between input and output terminals: 2000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | Between input and output terminals: 3000V AC, 1 minute Between input and ground terminals: 2000V AC, 1 minute Between output and ground terminals: 500V AC, 1 minute | | |
| Insulation Resistance | | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | 100MΩ min. 500V DC megger (at 25°C, 70% RH) (between input and output terminals, between input and ground terminals) | | |
| Operating Temperature | | -10 to 60°C (no freezing, see output derating) (*4) | -25 to 70°C (no freezing, see output derating) | | |
| Storage Temperature | | -30 to 75°C (no freezing) | -25 to 75°C (no freezing) | | |
| Operating Humidity | | 20 to 90%RH (no condensation) | 20 to 90%RH (no condensation) | | |
| Vibration Resistance | | 10 to 55Hz, 20m/s ² constant, sweep cycle 1 minute, 2 hours each in X, Y, Z axes | 10 to 55Hz, 2G constant, 2 hours each in X, Y, Z axes | | |
| Shock Resistance | | 200 m/s ² , 11 ms, 1 shock each in 6 axes | 200 m/s ² , 11ms, 1 shock each in 6 axes | | |
| Structure | Dimensions (mm) | 93H x 39.5W x 170D (with cover: 93H x 44W x 170D) | 95H x 39W x 159D (with cover) | | |
| | Weight (approx.) | 640g | 510g | | |
| | Terminal Screw | M4 | M3.5 | | |
| | Terminal Arrangement |  |  | | |

*1) Ta = 25°C, cold start.

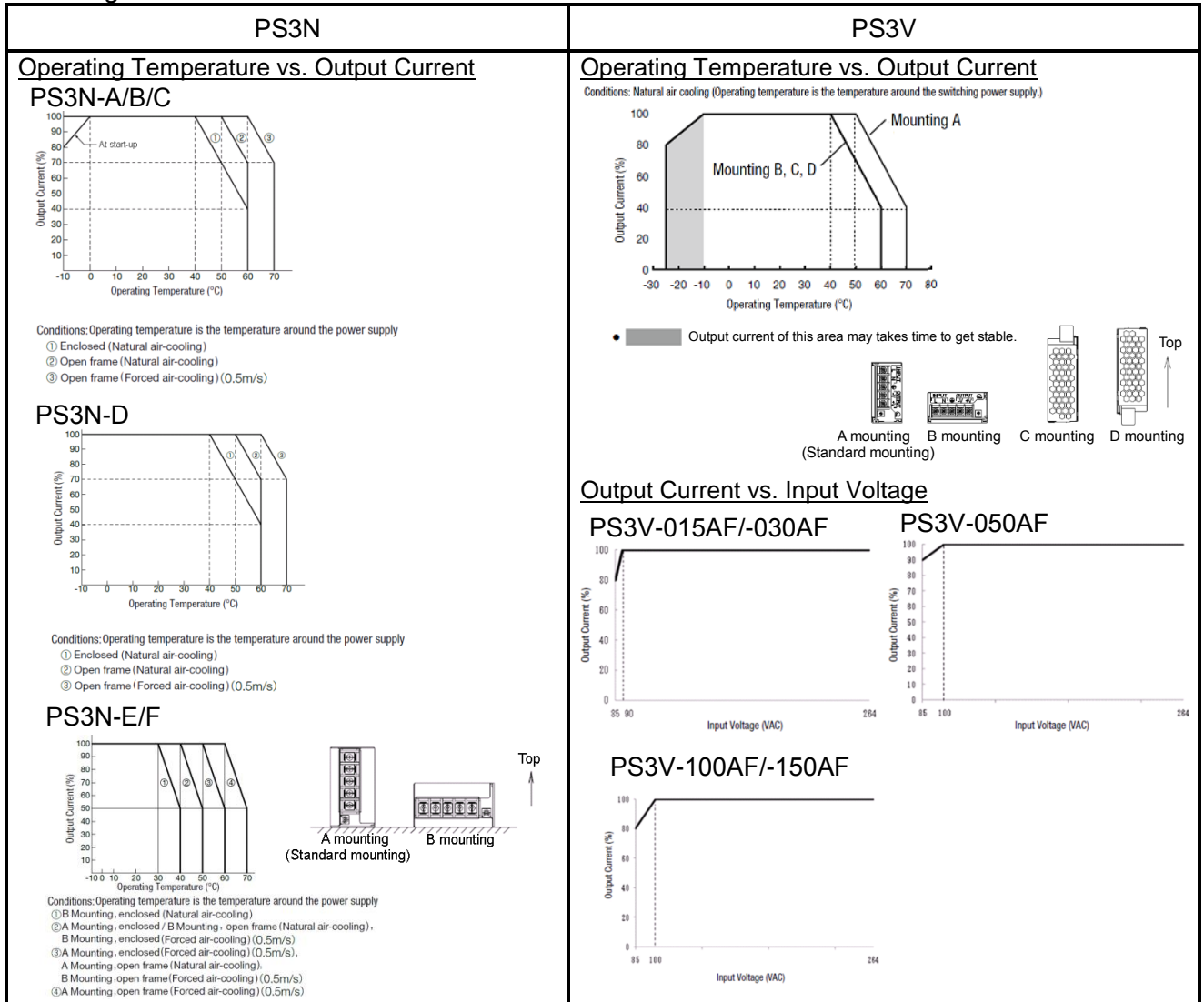
*2) Overload for 30 seconds or longer may damage the internal elements.

*3) Output off.

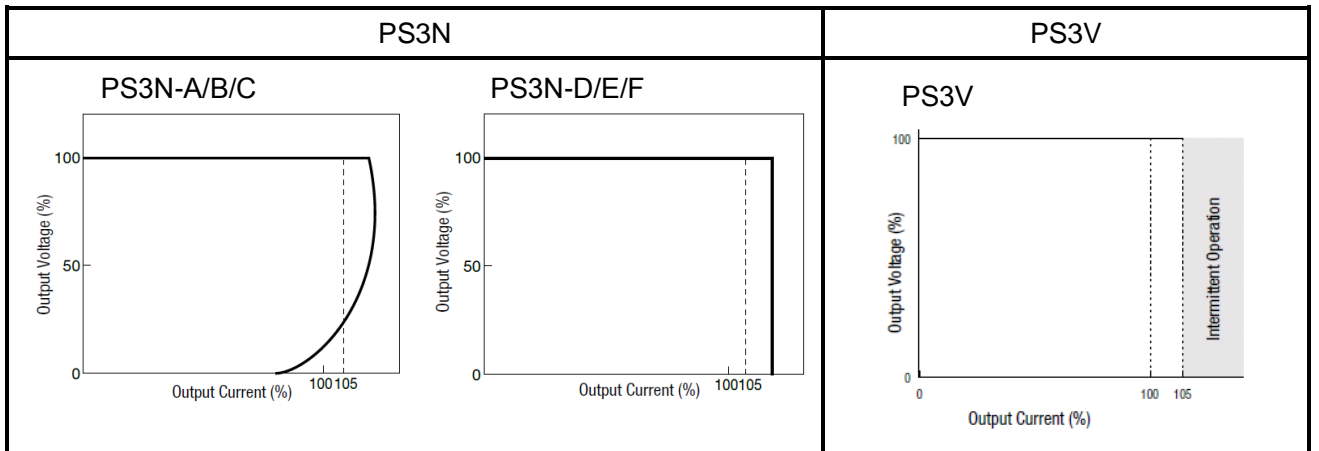
*4) The initial fluctuation time of the output voltage maybe longer for operations at low temperature.

Derating curves, overcurrent protection characteristics

Derating Curves

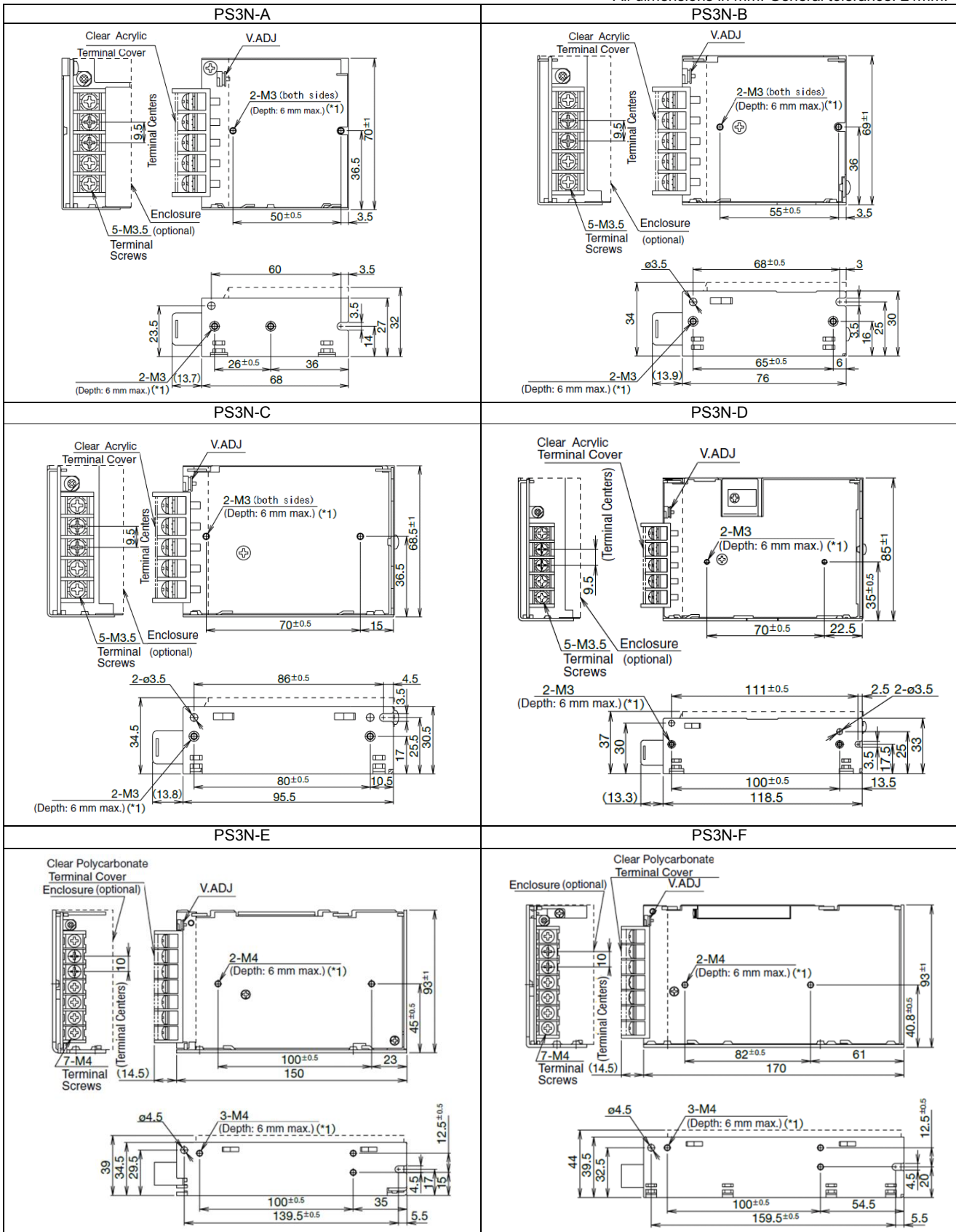


Overcurrent Protection Characteristics



PS3N Dimensions

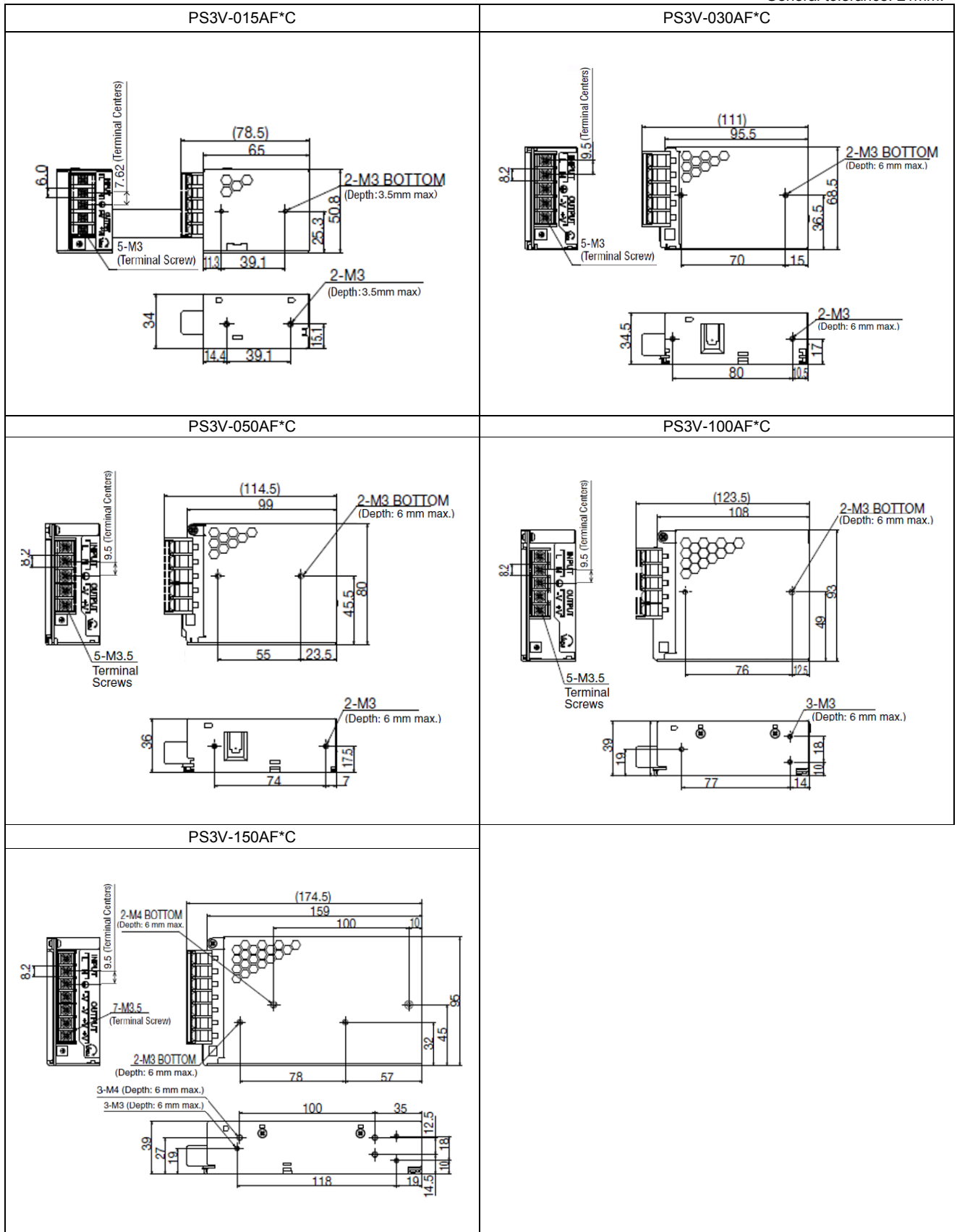
All dimensions in mm. General tolerance: ± 1 mm.



(*1) Make sure that the mounting screws do not penetrate into the power supply unit for 6 mm or more.

PS3V Dimensions

General tolerance: ± 1 mm.



All dimensions in mm.



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