IDEC

*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 |
|---|---|
| PS9Z-3N2A | PS9Z-3N9AN |
| PS9Z-3N2B | PS9Z-3N9BN |
| PS9Z-3N2C | PS9Z-3N9CN |
| PS9Z-3N2D | PS9Z-3N9DN |
| PS9Z-3N2E | PS9Z-3N9EN |
| PS9Z-3N2F | PS9Z-3N9FN |

| Mounting plate | L-shaped mounting bracket 2 |
|---|---|
| PS9Z-3N1A | PS9Z-3N3B |
| PS9Z-3N1B | PS9Z-3N3C |
| PS9Z-3N1C | PS9Z-3N3D |
| PS9Z-3N1D | PS9Z-3N3F |
| PS9Z-3N1E | |
| PS9Z-3N1F | |

Note: Special products are also included.

### 2. Recommended replacements

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

a) PS3V series will not have connector type or open frame type.
b) Please refer to the replacement list from p.2 to p.6.
c) 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)

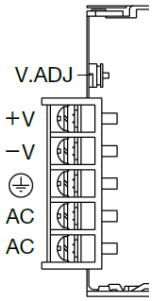
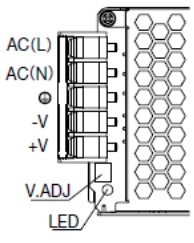
・ Discontinued date: Immediately while supplies last.

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.

# 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 (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) | | | 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.