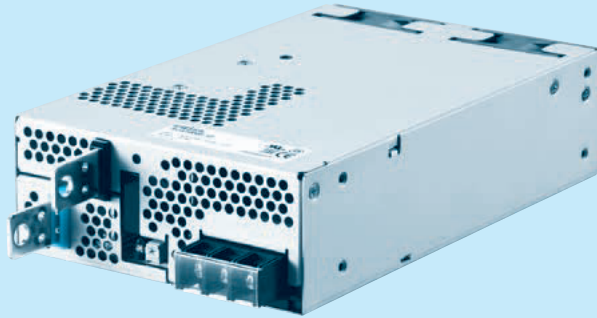


PJA1000F

① **PJ** ② **A** ③ **1000** ④ **F** ⑤ **-□**



Example recommended EMI/EMC filter
NAC-20-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage

*Make sure necessary tests will be carried out on your end equipment with the power supply installed in accordance with any required EMC/EMI regulations.

SPECIFICATIONS

| | MODEL | PJA1000F-24 | PJA1000F-48 | |
|------------------------------------|---|---|--|-----------------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ (Output derating is required at AC85V - 115V. See 1.1 and 3.2 in Instruction Manual) | | |
| | CURRENT[A] | ACIN 100V | 12.5typ (Io=90%) | |
| | | ACIN 115V | 11.0typ (Io=100%) | |
| | | ACIN 230V | 5.5typ (Io=100%) | |
| | FREQUENCY[Hz] | 50 / 60 (47 - 63) | | |
| | EFFICIENCY[%] | ACIN 100V | 84typ (Io=90%) | 84typ (Io=90%) |
| | | ACIN 115V | 85typ (Io=100%) | 85typ (Io=100%) |
| | | ACIN 230V | 88typ (Io=100%) | 88typ (Io=100%) |
| | POWER FACTOR | ACIN 100V | 0.98typ (Io=90%) | |
| | | ACIN 115V | 0.98typ (Io=100%) | |
| ACIN 230V | | 0.95typ (Io=100%) | | |
| INRUSH CURRENT[A] | ACIN 100V | 15/30typ (Io=90%) (Primary inrush current /Secondary inrush current) (More than 10sec to re-start) | | |
| | ACIN 115V | 15/30typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 10sec to re-start) | | |
| | ACIN 230V | 30/30typ (Io=100%) (Primary inrush current /Secondary inrush current) (More than 10sec to re-start) | | |
| LEAKAGE CURRENT[ma] | 1.5max (ACIN 240V, 60Hz, Io=100%, According to IEC62368-1 and DEN-AN) | | | |
| OUTPUT | VOLTAGE[V] | 24 | 48 | |
| | CURRENT[A] | ACIN 85-115V | Output derating is required at ACIN 115V or less (refer to instruction manual 3.2) | |
| | | ACIN 115V-264V | 42 | 21 |
| | WATTAGE[W] | ACIN 85-115V | Output derating is required at ACIN 115V or less (refer to instruction manual 3.2) | |
| | | ACIN 115V-264V | 1008 | 1008 |
| | LINE REGULATION[mV] | *2 | 96max | 192max |
| | LOAD REGULATION[mV] | *2 | 150max | 300max |
| | RIPPLE[mVp-p] | 0 to +50°C | 120max | 200max |
| | | *1 -20 to 0°C | 160max | 500max |
| | RIPPLE NOISE[mVp-p] | 0 to +50°C | 150max | 300max |
| | | *1 -20 to 0°C | 180max | 600max |
| | TEMPERATURE REGULATION[mV] | 0 to +50°C | 240max | 480max |
| | | -20 to +50°C | 290max | 600max |
| | DRIFT[mV] | *3 | 96max | 192max |
| | START-UP TIME[ms] | 800typ (ACIN 115V, Io=100%) | | |
| | HOLD-UP TIME[ms] | 20typ (ACIN 115V, Io=100%) | | |
| OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | 20.40 to 28.50 | | 40.80 to 55.20 | |
| OUTPUT VOLTAGE SETTING[V] | 24.00 to 24.96 | | 48.00 to 49.92 | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | |
| | OVERVOLTAGE PROTECTION[V] | 28.80 to 34.80 | 57.00 to 67.20 | |
| | OPERATING INDICATION | LED (Green) | | |
| ISOLATION | INPUT-OUTPUT | AC3,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At room temperature) | | |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At room temperature) | | |
| | OUTPUT-FG | AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At room temperature) | | |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE *4 | -20 to +70°C (Output derating is required), 20 - 90%RH (Non condensing), 3,000m (10,000 feet) max | | |
| | STORAGE TEMP., HUMID. AND ALTITUDE | -20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000 feet) max | | |
| | VIBRATION | 10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axes | | |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each X, Y and Z axes | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL62368-1, C-UL (CSA62368-1), EN62368-1 Complies with DEN-AN | | |
| | CONDUCTED NOISE | Complies with FCC-B, VCCI-B, CISPR22-B, EN55011-B, EN55022-B | | |
| | HARMONIC ATTENUATOR *5 | Complies with IEC61000-3-2 class A | | |

SPECIFICATIONS

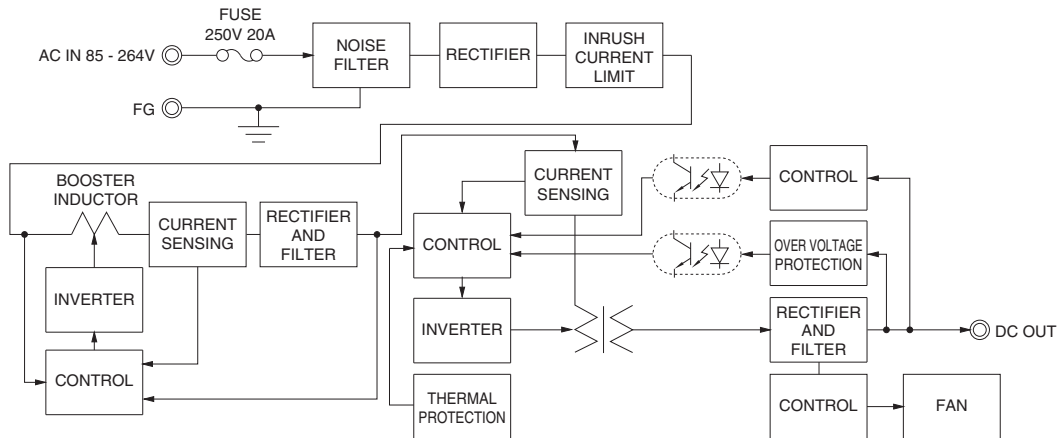
| | | |
|----------|------------------|---|
| OTHERS | CASE SIZE/WEIGHT | 150×61×240mm [5.91×2.40×9.45 inches] (Excluding terminal block and screw) (W×H×D) / 2.8kg max |
| | COOLING METHOD | *6 Forced cooling (internal fan) |
| WARRANTY | WARRANTY | *7 5 years (subject to the operating conditions) |

- *1 This is the result of measurement of the testing board with capacitors of 22 μF and 0.1 μF placed at 150 mm from the output terminals by a 20 MHz oscilloscope or a ripple-noise meter equivalent to Keisoku-Giken RM103.
See 1.6 of Instruction Manual for more details.
- *2 Consult us about dynamic load and input response.
- *3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.
- *4 Output power derating is required. See 3.2 in Instruction Manual.
- *5 Consult us about other classes.
- *6 The fan speed slows down or stops at no load.
- *7 See 3.3 in Instruction Manual for more details.
- * Do not use the power supply in overcurrent conditions or in unspecified input voltage ranges. Otherwise the internal components may be damaged.
- * Parallel operation is not possible with this mode.
- * Sound noise may be heard from the power supply when used for pulse load.

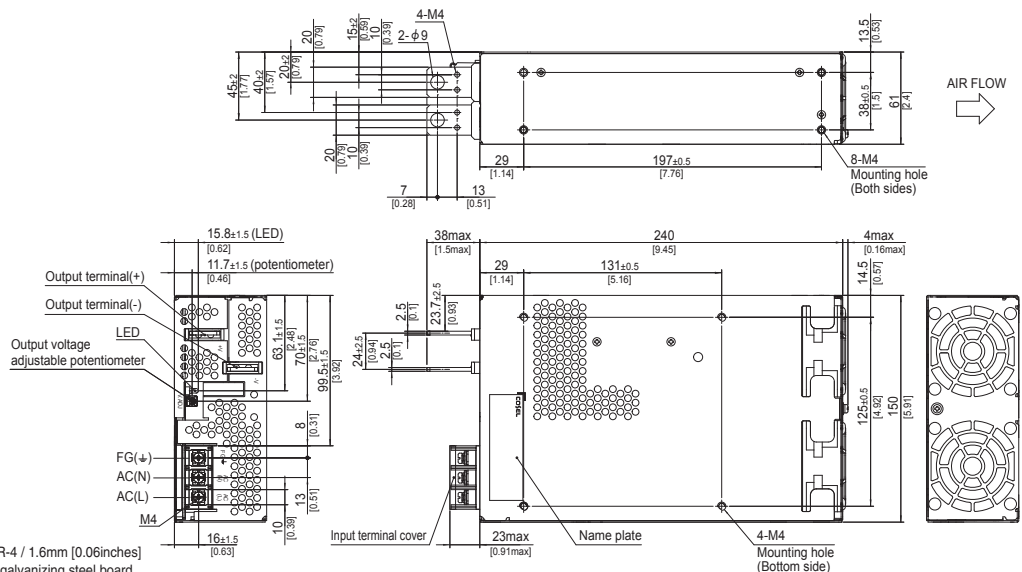
Features

- Cost-effective
- Longer life (see Instruction Manual)
- Low profile (meets 2U height = 61 mm or 2.4 inches)
- Wide operating temperature range (-20°C to +70°C see instruction manual)
- Stop or slow fan speed at no load

Block diagram



External view



- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 2.8kg max
- ※ PCB Material/thickness : FR-4 / 1.6mm [0.06inches]
- ※ Chassis material : Electric galvanizing steel board
- ※ Case material : Electric galvanizing steel board
- ※ Dimensions in mm, []=inches
- ※ Mounting torque : 1.5N · m max
- ※ Screw tightening torque : 1.6N · m max
- ※ Output terminal M4 tightening torque : 1.2N · m max
- ※ Connect the input FG to safety earth ground.