

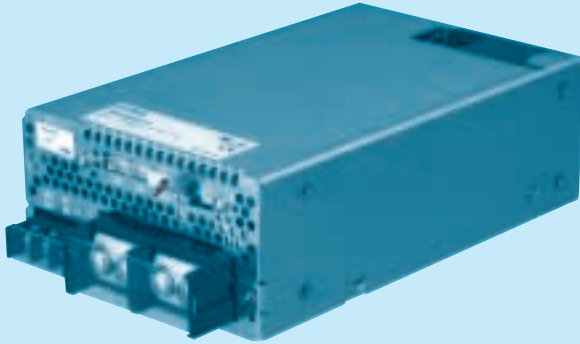
PBA600F

PB A 600 F -5 -□

① ② ③ ④ ⑤ ⑥



RoHS



Recommended EMI/EMC Filter
NAC-16-472



High voltage pulse noise type : NAP series
Low leakage current type : NAM series
*The EMI/EMC Filter is recommended to connect with several devices.

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal input
- ⑤ Output voltage
- ⑥ Optional *6
- C : with Coating
- G : Low leakage current
- U : Operation stop voltage is set at a lower value
- F1 : With Long-Life fan
- F3 : Reverse air exhaust type
- F4 : Low speed fan

Refer to instruction manual 7.1.

MODEL	PBA600F-3R3	PBA600F-5	PBA600F-7R5	PBA600F-12	PBA600F-15	PBA600F-24	PBA600F-36	PBA600F-48
MAX OUTPUT WATTAGE[W]	396	600	600	636	645	648	648	624
DC OUTPUT	ACIN 100V	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27A	36V 18A
	ACIN 200V *3	3.3V 120A	5V 120A	7.5V 80A	12V 53A	15V 43A	24V 27(31)A	48V 13A

SPECIFICATIONS

MODEL	PBA600F-3R3	PBA600F-5	PBA600F-7R5	PBA600F-12	PBA600F-15	PBA600F-24	PBA600F-36	PBA600F-48
INPUT	AC85 - 264 1φ or DC120 - 350 (AC50 or DC70 Please refer to the instruction manual 7. option *5)							
VOLTAGE[V]	ACIN 100V	5.8typ	8.2typ					
	ACIN 200V	3typ	4.1typ					
CURRENT[A]								
FREQUENCY[Hz]		50/60 (47 - 63)						
EFFICIENCY[%]	ACIN 100V	70typ	75typ	76typ	79typ	79typ	81typ	82typ
	ACIN 200V	72typ	77typ	79typ	82typ	82typ	84typ	83typ
POWER FACTOR	ACIN 100V	0.98typ (lo=100%)						
	ACIN 200V	0.95typ (lo=100%)						
INRUSH CURRENT[A]	ACIN 100V	20/40typ (lo=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)						
	ACIN 200V	40/40typ (lo=100%) (Primary inrush current /Secondary inrush current) (More than 3 sec. to re-start)						
LEAKAGE CURRENT[mA]	0.45/0.75max (ACIN 100V/240V 60Hz, lo=100%, According to IEC60950-1, DENAN)							
OUTPUT	VOLTAGE[V]	3.3	5	7.5	12	15	24	36
CURRENT[A]	ACIN 100V	120	120	80	53	43	27	18
	ACIN 200V *3	120	120	80	53	43	27(31)	18
LINE REGULATION[mV]		20max	20max	36max	48max	60max	96max	144max
LOAD REGULATION[mV]		40max	40max	60max	100max	120max	150max	300max
RIPPLE[mVp-p]	0 to +50C *1	80max	80max	120max	120max	120max	120max	150max
	-20 - 0C *1	140max	140max	160max	160max	160max	160max	400max
RIPPLE NOISE[mVp-p]	0 to +50C *1	120max	120max	150max	150max	150max	150max	200max
	-20 - 0C *1	160max	160max	180max	180max	180max	180max	500max
TEMPERATURE REGULATION[mV]	0 to +50C *1	40max	50max	75max	120max	150max	240max	480max
	-20 to +50C *1	60max	75max	120max	180max	180max	290max	600max
DRIFT[mV]	*2	12max	20max	30max	48max	60max	96max	144max
START-UP TIME[ms]	400typ(ACIN 100/200V, lo=100%) *Start-up time is 500ms typ for less than 1minute of applying input again from turning off the input voltage.							
HOLD-UP TIME[ms]	20typ (ACIN 100/200V, lo=100%)							
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		2.64 - 3.96	3.96 - 6.00	5.25 - 8.25	8.25 - 13.20	10.50 - 16.50	16.50 - 26.40	25.20 - 39.60
OUTPUT VOLTAGE SETTING[V]		3.30 - 3.40	5.00 - 5.15	7.50 - 7.80	12.00 - 12.48	15.00 - 15.60	24.00 - 24.96	36.00 - 37.44
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rated current or 101% of peak current and recovers automatically						
OVERVOLTAGE PROTECTION[V] *4		Vo+0.66 - 1.32	Vo+1.0 - 2.0	Vo+1.5 - 3.0	Vo+2.4 - 4.8	Vo+3.0 - 6.0	Vo+4.8 - 9.6	Vo+7.2 - 14.4
OPERATING INDICATION	LED (Green)							
REMOTE SENSING	Provided							
REMOTE ON/OFF	Provided							
ISOLATION	INPUT-OUTPUT - RC	AC3.000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)						
INPUT-FG	AC2.000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
OUTPUT - RC - AUX-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
OUTPUT-RC - AUX	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-20 to +71°C (Required Derating), 20 - 90%RH (Non condensing) 3,000m (10,000feet) max						
STORAGE TEMP.,HUMID.AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing) 9,000m (30,000feet) max							
VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis							
IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis							
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS (At only AC input)	UL60950-1, C-UL(CSA60950-1), EN60950-1, EN50178 Complies with DEN-AN						
CONDUCTED NOISE	Complies with FCC Part15 classB, VCCI-B, CISPR22-B, EN55011-B, EN55022-B							
HARMONIC ATTENUATOR	Complies with IEC61000-3-2							
OTHERS	CASE SIZE/WEIGHT	120×61×190mm [4.72×2.4×7.48 inches] (without terminal block and screw) (W×H×D) /1.6kg max						
COOLING METHOD	Forced cooling (internal fan)							

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN :RM101).

*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C.

*3 () means peak current. Peak loading for 10s. And Duty 35% max, refer to Instruction manual in detail.

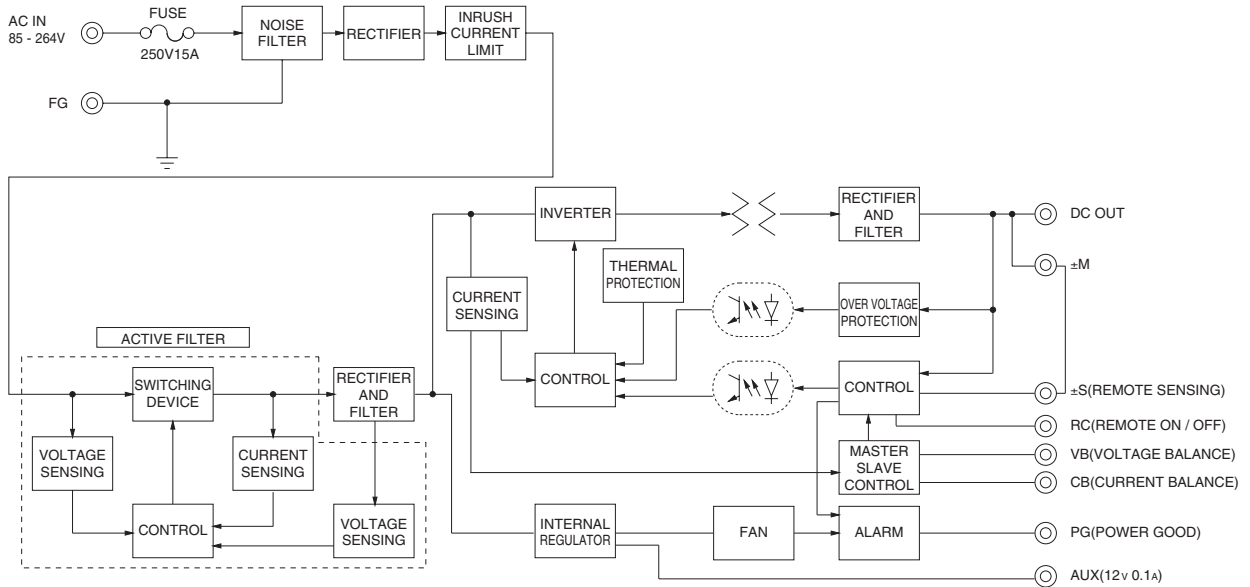
*4 Overvoltage protection circuit to follow to output voltage setting. Standard overvoltage protection circuit is please contact us for details.

*5 Derating is required.Consult us for details.

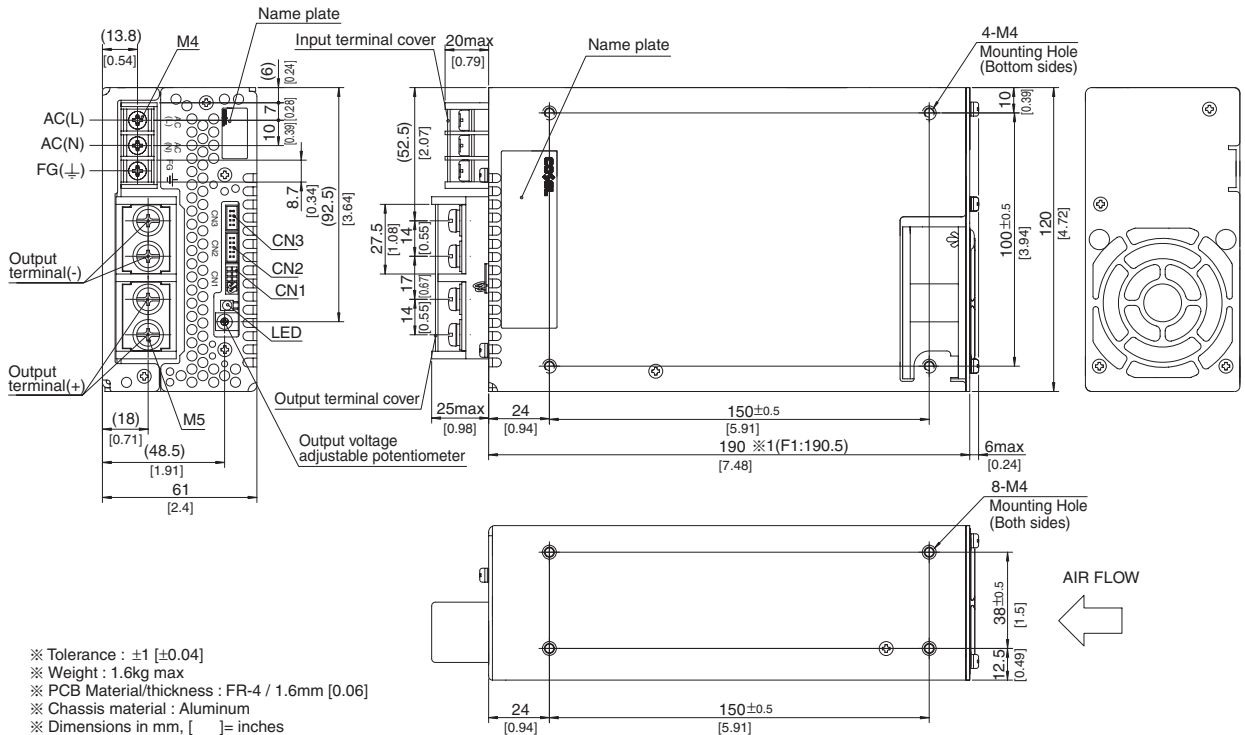
*6 Please contact us about safety approvals for the model with option.

* A sound may occur from power supply at pulse loading.

Block diagram



External view



- ※ Tolerance : ± 1 [± 0.04]
- ※ Weight : 1.6kg max
- ※ PCB Material/thickness : FR-4 / 1.6mm [0.06]
- ※ Chassis material : Aluminum
- ※ Dimensions in mm, [] = inches
- ※ Mounting torque : 1.2N · m (12.8kgf·cm) max
- ※ Screw tightening torque : M4 1.6N · m (16.9kgf · cm) max
M5 2.5N · m (24.5kgf · cm) max
- ※ The housing for the remote sensing unused is mounted on CN1
- ※ 1 F1(Optional):190.5
- ※ Please connect safety ground to FG terminal on the unit.