

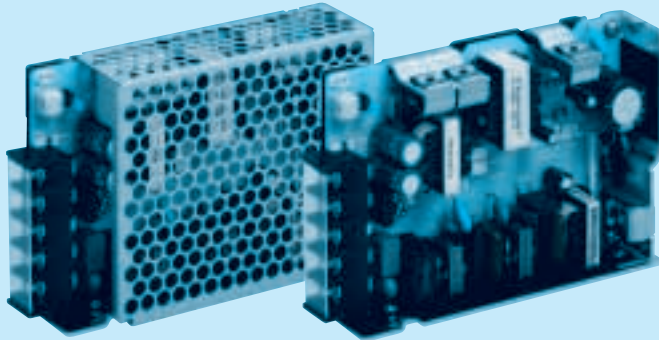
PBA50F

PB A 50 F -5 -□

① ② ③ ④ ⑤ ⑥



RoHS



Recommended EMI/EMC Filter
NAC-06-472



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 *5
- C :with Coating
- G :Low leakage current (0.15mA max / ACIN 240V)
- E :Low leakage current and EMI class A (0.5mA max / ACIN 240V)
- T :Vertical terminal block
- J :Connector type
- R :with Remote ON/OFF
- N :with Cover (Only 24V UL508 is acquired)
- N1 :with DIN rail
- V :Output voltage setting potentiometer externaly

Cover is optional

MODEL	PBA50F-3R3	PBA50F-5	PBA50F-9	PBA50F-12	PBA50F-15	PBA50F-24	PBA50F-36	PBA50F-48
MAX OUTPUT WATTAGE[W]	33	50	50.4	51.6	52.5	52.8	50.4	52.8
DC OUTPUT	3.3V 10A	5V 10A	9V 5.6A	12V 4.3A	15V 3.5A	24V 2.2A	36V 1.4A	48V 1.1A

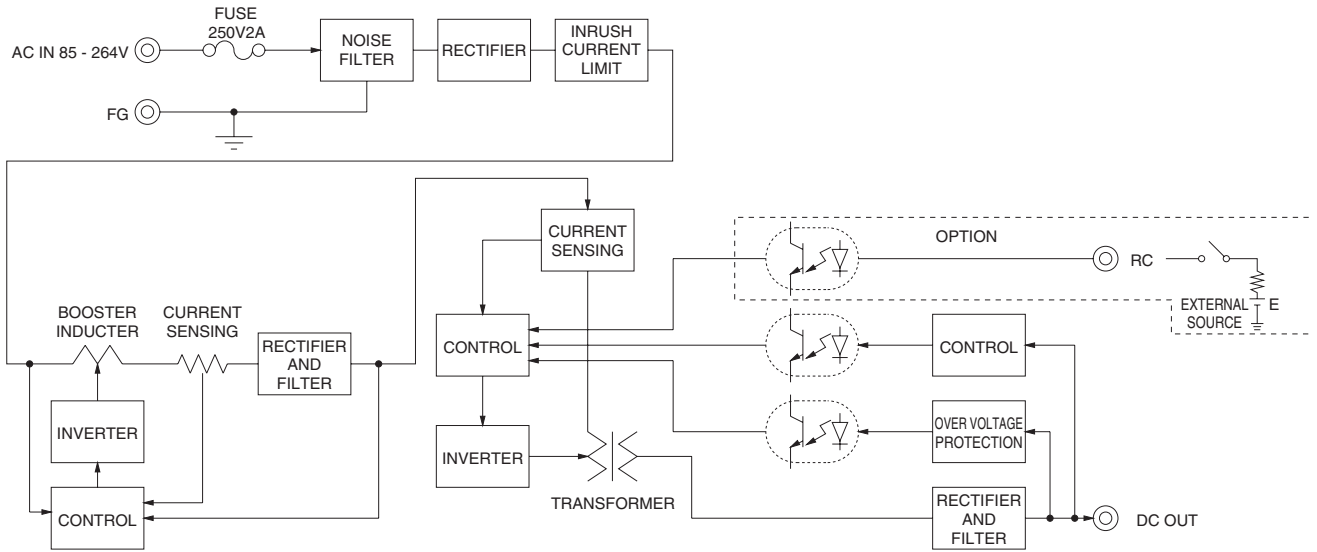
SPECIFICATIONS

	MODEL	PBA50F-3R3	PBA50F-5	PBA50F-9	PBA50F-12	PBA50F-15	PBA50F-24	PBA50F-36	PBA50F-48	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage *4)								
	CURRENT[A]	ACIN 100V	0.5typ	0.7typ						
		ACIN 200V	0.3typ	0.4typ						
	FREQUENCY[Hz]	50/60 (47 - 63)								
	EFFICIENCY[%]	ACIN 100V	75typ	80typ	79typ	80typ	81typ	82typ	83typ	83typ
		ACIN 200V	76typ	82typ	81typ	82typ	83typ	84typ	85typ	85typ
	POWER FACTOR(lo=100%)	ACIN 100V	0.98typ	0.99typ						
ACIN 200V		0.87typ	0.93typ							
INRUSH CURRENT[A]	ACIN 100V	15typ (lo=100%) (At cold start)								
	ACIN 200V	30typ (lo=100%) (At cold start)								
LEAKAGE CURRENT[mA]	0.4/0.75max (ACIN 100V/240V 60Hz, lo=100%, According to IEC60950-1.DENAN)									
OUTPUT	VOLTAGE[V]	3.3	5	9	12	15	24	36	48	
	CURRENT[A]	10	10	5.6	4.3	3.5	2.2	1.4	1.1	
	LINE REGULATION[mV]	20max	20max	36max	48max	60max	96max	144max	192max	
	LOAD REGULATION[mV]	40max	40max	100max	100max	120max	150max	240max	240max	
	RIPPLE[mVp-p]	0 to +50C *1	80max	80max	120max	120max	120max	120max	150max	150max
		-10 - 0C *1	140max	140max	160max	160max	160max	160max	200max	200max
	RIPPLE NOISE[mVp-p]	0 to +50C *1	120max	120max	150max	150max	150max	150max	250max	250max
		-10 - 0C *1	160max	160max	180max	180max	180max	180max	300max	300max
	TEMPERATURE REGULATION[mV]	0 to +50C	50max	50max	90max	120max	150max	240max	360max	480max
		-10 to +50C	60max	60max	120max	150max	180max	290max	450max	600max
	DRIFT[mV]	*2	20max	20max	36max	48max	60max	96max	144max	192max
	START-UP TIME[ms]	350typ(ACIN 100V, lo=100%)								
	HOLD-UP TIME[ms]	20typ (ACIN 100V, lo=100%)								
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 - 3.63 4.00 - 5.50 7.50 - 10.0 10.0 - 13.2 13.2 - 18.0 19.2 - 27.0 28.8 - 39.6 39.0 - 53.0									
OUTPUT VOLTAGE SETTING[V]	3.30 - 3.40 5.00 - 5.15 9.00 - 9.36 12.00 - 12.48 15.00 - 15.60 24.00 - 24.96 35.00 - 37.44 48.00 - 49.92									
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rated current and recovers automatically								
	OVERVOLTAGE PROTECTION[V]	4.00 - 5.25 5.75 - 7.00 11.5 - 14.0 15.0 - 18.0 20.0 - 25.0 30.0 - 37.0 43.0 - 50.0 58.0 - 65.0								
	OPERATING INDICATION	LED (Green)								
ISOLATION	REMOTE ON/OFF	Optional (Required external power source)								
	INPUT-OUTPUT · RC	*3	AC3.000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
	INPUT-FG	*3	AC2.000V 1minute, Cutoff current = 10mA, DC500V 50MΩmin (At Room Temperature)							
ENVIRONMENT	OUTPUT · RC-FG	*3	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩmin (At Room Temperature)							
	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 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								
SAFETY AND NOISE REGULATIONS	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis								
	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								
OTHERS	HARMONIC ATTENUATOR	Complies with IEC61000-3-2								
	CASE SIZE/WEIGHT	31 × 82 × 120mm [1.22 × 3.23 × 4.72 inches] (without terminal block) (W×H×D) / 280g max (without cover)								
	COOLING METHOD	Convection								

*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 Applicable when Remote ON/OFF(optional) is added. RC is insulated with input, output and FG.
 *4 Derating is required.

*5 Please contact us about safety approvals for the model with option.
 * Parallel operation with other model is not possible.
 * Derating is required when operated with cover.
 * A sound may occur from power supply at peak loading.

Block diagram



External view

※ External size of option T,J,R,N,N1 and V is different from standard model and refer to 7 Option of instruction manual for details.

