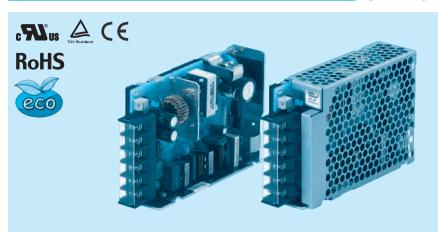
## PBW50F

**50** 





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

\*The EMI/EMC Filter is recommended to connect with several devices.

- Series name
   Dual output (3)Output wattage
  - 4 Universal input
  - ⑤Output voltage

  - (B) Optional \*9
    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 N1 :with DIN rail
  - V :Output voltage setting potentiometer external-

Cover	is	optional
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MODEL		PBW50F-5 PBW50F-12		PBW50F-15	
MAX OUTPUT WATTAGE[W] *6		30	50.4	51	
	VOLTAGE[V] *8	±5 ( +10 )	±12 ( +24 )	±15 (+30)	
DC OUTPUT	CURRENT1[A]	3.0	2.1	1.7	
	CURRENT2[A] *6	4.0	2.7	2.4	

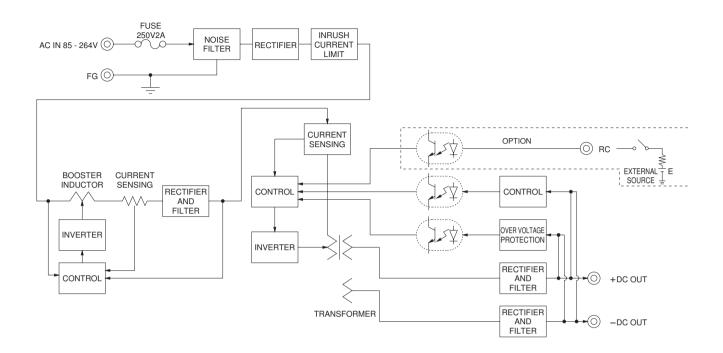
### **SPECIFICATIONS**

	MODEL						PBW50F-15	
	VOLTAGE[V]		AC85 - 264 1 $\phi$ or DC120 - 370 (AC50 or DC70 Please refer to the instruction manual 2.1 Input voltage $*3$ )					
	CURRENT[A]	ACIN 100V	0.45typ (CURRENT1)		0.70typ (CURRENT1)			
	CURRENT[A]	ACIN 200V	0.30typ (CURRENT	1)	0.40typ (CURRENT1)			
	FREQUENCY[Hz]		50/60 (47 - 63)					
INPUT	EEEIOIENOVIO/1	ACIN 100V	76typ (CURRENT1)		81typ (CURRENT1)		81typ (CURRENT1)	
	EFFICIENCY[%]	ACIN 200V			83typ (CURRENT1)		83typ (CURRENT1)	
		ACIN 100V	/ 0.98typ		0.99typ			
		ACIN 200V	0.87typ		0.93typ			
	INRUSH CURRENT[A]	ACIN 100V	15typ (CURRENT1)	(At cold start)				
	INKUSH CUKKENI[A]	ACIN 200V	30typ (CURRENT1) (At cold start)					
	LEAKAGE CURRENT[mA]		0.40/0.75max (ACIN 100V/240V 60Hz, Io=100%, According to IEC60950-1,DENAN)					
VOLTAGE[V]			±5	/ ( +10V reference number )	±12	/ ( +24V reference number )	±15	/ ( +30V reference number )
	CURRENT1[A]		3.0	/ 3.0	2.1	/ 2.1	1.7	/ 1.7
	CURRENT2[A] *6		4.0	/ -	2.7	/ -	2.4	/ -
	LINE REGULATION[mV]		20max	/ 36max	48max	/ 96max	60max	/ 96max
	LOAD REGULATION 1[		250max	/ 100max	600max	/ 150max	600max	/ 150max
	LOAD REGULATION 2[	[mV] *5	500max	/ -	750max	/ -	750max	/ -
	RIPPLE[mVp-p]	0 to +50°C <b>*</b> 1	80max	/ 240max	120max	/ 240max	120max	/ 240max
	HIPPEE[IIIVP-P]	-10 - 0°C *1	140max	/ 320max	160max	/ 320max	160max	/ 320max
OUTPUT	RIPPLE NOISE[mVp-p]	0 to +50°C <b>*</b> 1	120max	/ 300max	150max	/ 300max	150max	/ 300max
		-10 - 0℃ *1	160max	/ 360max	180max	/ 360max	180max	/ 360max
	TEMPERATURE REGULATION[mV]	0 to +50°C			120max		150max	
		-10 to +50℃			150max		180max	
	DRIFT[mV] *2		20max 48max 60max					
	START-UP TIME[ms]		350typ(ACIN 100V, Io=100%)					
	HOLD-UP TIME[ms]		20typ (ACIN 100V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]				9.60 - 13.2 (+V and -V are simultaneously adjusted)		13.2 - 16.5 (+V and -V are simultaneously adjusted)	
	OUTPUT VOLTAGE SETTING[V]		4.99 - 5.30 (+V and -V CURRENT1) 11.5 - 12.5 (+V and -V CURRENT1)			14.4 - 15.6 (+V and -V CURRENT1)		
DROTECTION	OVERCURRENT PROT			f rated current and rec				
PROTECTION CIRCUIT AND	OVERVOLTAGE PROTEC		6.90 - 10.0   16.8 - 24.0   20.0 - 29.0					
OTHERS	OPERATING INDICATION	ON	LED (Green)					
	REMOTE ON/OFF		Optional (Required external power source)					
	INPUT-OUTPUT · RC *7							
ISOLATION	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (At Room Temperature)					
	OUTPUT · RC-FG	*7						
ENVIRONMENT	OPERATING TEMP.,HUMID.AND							
	STORAGE TEMP.;HUMID.AND	ALTITUDE						
	VIBRATION		10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT		196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis					
SAFETY AND	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 ATTENUAT	UK	Complies with IEC61000-3-2 *10					
OTHERS	CASE SIZE/WEIGHT		31 x 82 x 120mm [1.22 x 3.23 x 4.72 inches] (without terminal block) (W x H x D) / 280g max (with cover : 325g max)					
	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 Derating is required.
- Figures for 0 to rated current 1.The current not measured side is fixed.
- \*5 Figures for 0 to rated current 2.The current not measured
- The sum of +power -power must be less than output power. RC is applied to remote ON/OFF option. RC is isolated with input/output and FG.
- \*8  $\pm 5, \pm 12, \pm 15$  can be used as +10,+24 and +30.
- \*9 Please contact us about safety approvals for the model with option.
- \*10 Please contact us about class C.
- 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.

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### **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.

