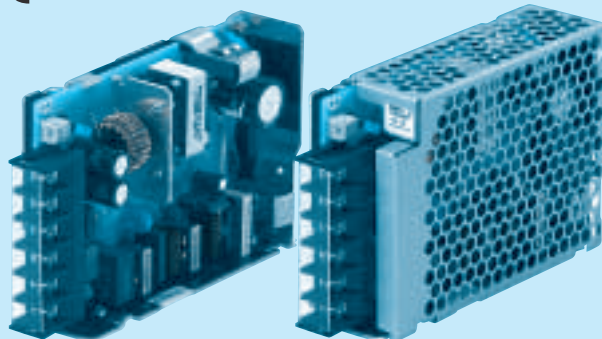




RoHS

Recommended Noise Filter  
NAC-06-472High voltage pulse noise type : NAP series  
Low leakage current type : NAM series  
\* The Noise Filter is recommended to connect with several devices.

- ① Series name  
② Dual output  
③ Output wattage  
④ Universal input  
⑤ Output voltage  
⑥ Optional  
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

MODEL	PBW50F-5	PBW50F-12	PBW50F-15
MAX OUTPUT WATTAGE[W]	30	50.4	51
DC OUTPUT	VOLTAGE[V]	±5 (+10)	±12 (+24)
	CURRENT1[A]	3.0	2.1
	CURRENT2[A]	4.0	2.7

## SPECIFICATIONS

MODEL	PBW50F-5	PBW50F-12	PBW50F-15	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ 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)
		ACIN 200V	0.30typ (CURRENT1)	0.40typ (CURRENT1)
	FREQUENCY[Hz]	50/60 (47 - 63)		
	EFFICIENCY[%]	ACIN 100V	76typ (CURRENT1)	81typ (CURRENT1)
		ACIN 200V	77typ (CURRENT1)	83typ (CURRENT1)
	POWER FACTOR(10=100%)	ACIN 100V	0.98typ	0.99typ
ACIN 200V		0.87typ	0.93typ	
INRUSH CURRENT[A]	ACIN 100V	15typ (CURRENT1) (At cold start)		
	ACIN 200V	30typ (CURRENT1) (At cold start)		
LEAKAGE CURRENT[mA]	0.40/0.75max (ACIN 100V/240V 60Hz, 10=100%, According to IEC60950-1.DENAN)			
OUTPUT	VOLTAGE[V]	±5	±12	±15
	CURRENT1[A]	3.0	/ 3.0	/ 2.1
		4.0	/ -	/ -
	CURRENT2[A]	4.0	/ -	2.4
		2.4	/ -	/ -
	LINE REGULATION[mV]	20max	48max	60max
	LOAD REGULATION 1[mV]	250max	600max	600max
		120max	150max	150max
	LOAD REGULATION 2[mV]	500max	750max	750max
		80max	120max	120max
	RIPPLE[mVp-p]	0 to +50°C	140max	160max
		-10 - 0°C	120max	150max
	RIPPLE NOISE[mVp-p]	0 to +50°C	120max	150max
		-10 - 0°C	160max	180max
TEMPERATURE REGULATION[mV]	0 to +50°C	50max	150max	
	-10 to +50°C	60max	180max	
DRIFT[mV]	20max	48max	60max	
START-UP TIME[ms]	350typ (ACIN 100V, 10=100%)			
HOLD-UP TIME[ms]	20typ (ACIN 100V, 10=100%)			
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	4.99 - 6.00 (+V and -V are simultaneously adjusted)	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)	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rated current and recovers automatically		
	OVERVOLTAGE PROTECTION[V]	6.90 - 10.0	16.8 - 24.0	20.0 - 29.0
	OPERATING INDICATION	LED (Green)		
	REMOTE ON/OFF	Optional (Required external power source)		
ISOLATION	INPUT-OUTPUT · RC	AC3.000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)		
	INPUT-FG	AC2.000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)		
	OUTPUT · RC-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)		
ENVIRONMENT	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) 3,000m (10,000feet) max		
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis		
SAFETY AND NOISE REGULATIONS	IMPACT	196.1m/s <sup>2</sup> (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	CE MARKING	Low Voltage Directive, EMC Directive		
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2		
	CASE SIZE/WEIGHT	31 × 82 × 120mm (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 Derating is required.  
\*4 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 side is fixed.  
\*6 The sum of +power -power must be less than output power.  
\*7 RC is applied to remote ON/OFF option. RC is isolated with input/output and FG.

- \*8 ±5, ±12, ±15 can be used as +10, +24 and +30.  
\* 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.