

PBW50F

PB

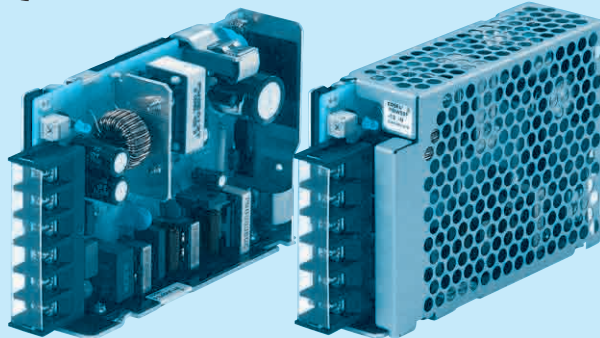
W

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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 Dual output
 - ③ Output wattage
 - ④ Universal input
 - ⑤ Output voltage
 - ⑥ 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-
ly

Cover is optional

MODEL	PBW50F-5	PBW50F-12	PBW50F-15
MAX OUTPUT WATTAGE[W]	30	50.4	51
VOLTAGE[V]	± 5 (+10)	± 12 (+24)	± 15 (+30)
DC OUTPUT	CURRENT1[A]	2.1	1.7
	CURRENT2[A]	2.7	2.4

SPECIFICATIONS

MODEL	PBW50F-5	PBW50F-12	PBW50F-15
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)	81typ (CURRENT1)
	ACIN 200V 77typ (CURRENT1)	83typ (CURRENT1)	83typ (CURRENT1)
POWER FACTOR(Lo=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, Lo=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]	4.0 / -	2.7 / -	2.4 / -
LINE REGULATION[mV]	20max / 36max	48max / 96max	60max / 96max
LOAD REGULATION 1[mV]	250max / 100max	600max / 150max	600max / 150max
LOAD REGULATION 2[mV]	500max / -	750max / -	750max / -
RIPPLE[mVp-p]	0 to +50°C 80max / 240max	120max / 240max	120max / 240max
	-10 - 0°C 140max / 320max	160max / 320max	160max / 320max
RIPPLE NOISE[mVp-p]	0 to +50°C 120max / 300max	150max / 300max	150max / 300max
	-10 - 0°C 160max / 360max	180max / 360max	180max / 360max
TEMPERATURE REGULATION[mV]	0 to +50°C 50max	120max	150max
	-10 to +50°C 60max	150max	180max
DRIFT[mV]	20max	48max	60max
START-UP TIME[ms]	350typ(ACIN 100V, Lo=100%)		
HOLD-UP TIME[ms]	20typ (ACIN 100V, Lo=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)
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)		
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)		
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		
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		
HARMONIC ATTENUATOR	Complies with IEC61000-3-2 *10		
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.

*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.

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

*10 Please contact us about class C.

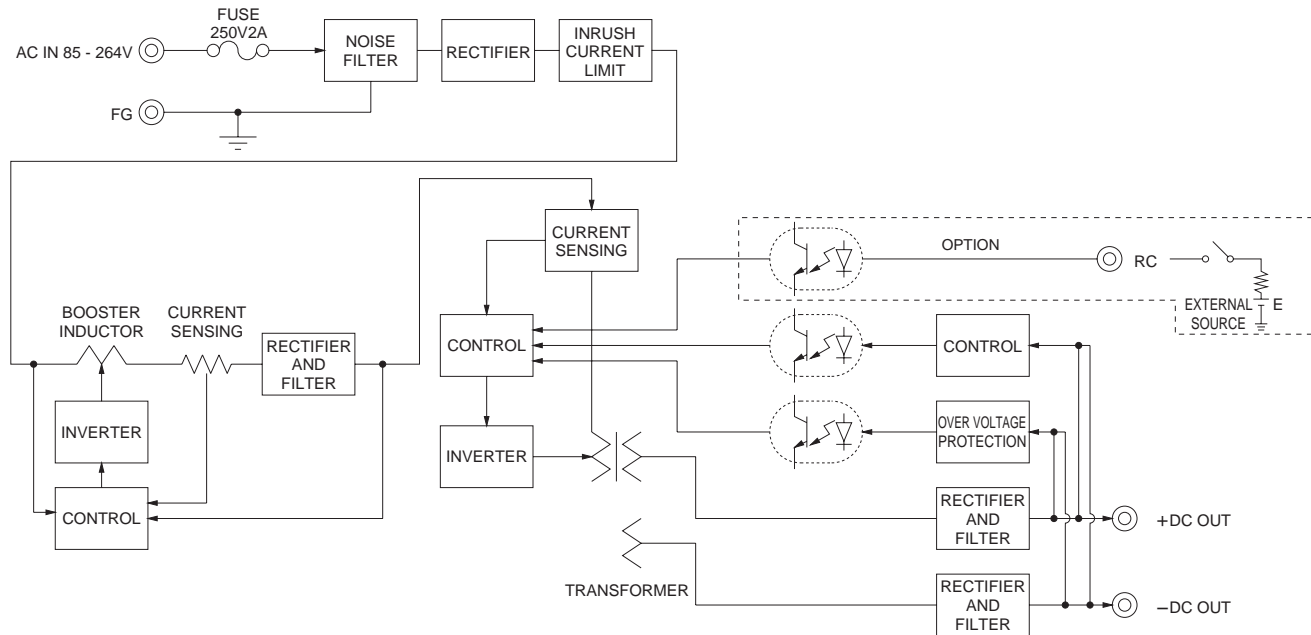
* Parallel operation with other model is not possible.

* Derating is required when operated with cover.

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

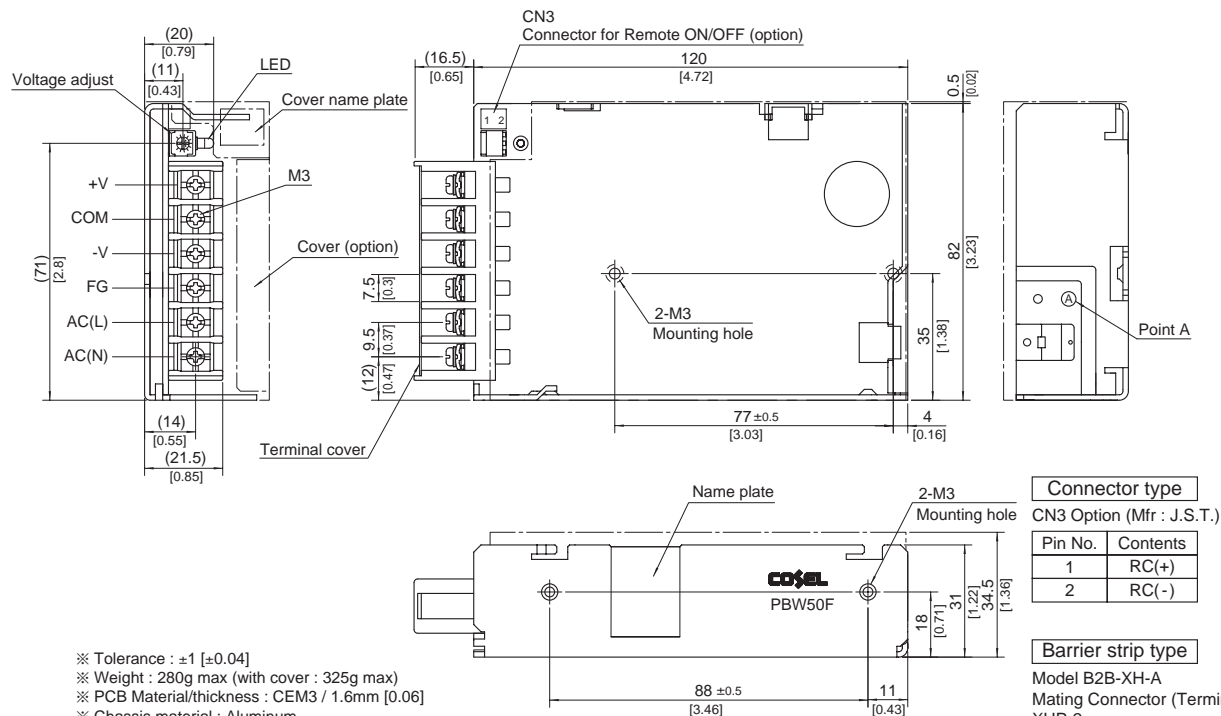
PBA/PBW-30

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.



- ※ Tolerance : ±1 [±0.04]
- ※ Weight : 280g max (with cover : 325g max)
- ※ PCB Material/thickness : CEM3 / 1.6mm [0.06]
- ※ Chassis material : Aluminum
- ※ Dimensions in mm, [] = inches
- ※ Mounting torque : 0.49N • m(5kgf • cm)max
- ※ Screw tightening torque : M3 0.8N • m(8.5kgf • cm)max
- ※ Please connect safety ground to the unit in 2-M3 holes.

Connector type

CN3 Option (Mfr : J.S.T.)

Pin No.	Contents
1	RC(+)
2	RC(-)

Barrier strip type

Model B2B-XH-A
Mating Connector (Terminal)
XHP-2
(BXH-001T-P0.6
or SXH-001T-P0.6)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

[PBW50F-12-CN](#) [PBW50F-12-EJ](#) [PBW50F-12-EN](#) [PBW50F-12-GN](#) [PBW50F-12-GN1](#) [PBW50F-12-JN](#) [PBW50F-12-RN](#) [PBW50F-12-TN](#) [PBW50F-12-VN](#) [PBW50F-15-CN](#) [PBW50F-15-CN1](#) [PBW50F-15-EN](#) [PBW50F-15-GN](#) [PBW50F-15-JN](#) [PBW50F-15-JV](#) [PBW50F-15-RN](#) [PBW50F-15-TN](#) [PBW50F-15-VN](#) [PBW50F-5-CN](#) [PBW50F-5-EJ](#) [PBW50F-5-EN](#) [PBW50F-5-GN](#) [PBW50F-5-JN](#) [PBW50F-5-RN](#) [PBW50F-5-TN](#) [PBW50F-5-VN](#)