BALSEAL® Electric

BPS Series Compact High-Efficiency Switching Power Supplies

Power range：500-1000W

Compact high-efficiency switching power supply

Features

-Full-range AC input 96-264VAC/100-240VAC
-Small, ultra-thin, compact design
-Operating temperature up to 70℃
-Short circuit/overload/overvoltage protection
-CE and RoHS compliant
-High efficiency, long lifespan, and high reliability
-Low power consumption under no-load design



• Machine tools • Semiconductor manufacturing equipment • Injection molding machines • Food and packaging equipment • Automated parking systems
• Automotive equipment • Logistics handling equipment • Agricultural equipment • Energy-related equipment, etc.

Technical Data

project \ model	【500W】BPS*-500	【600W】BPS*-600	【800W】BPS*-800	【1000W】BPS*-1000
	12□/24□/48□VDC	12□/24□/48□VDC	24□/48□VDC	24□/48□VDC
input parameters				
Control voltage range	170-240VAC			
frequency range	47-63Hz			
efficiency(TYP)	＞83% typ			
AC current	3.88A/230VAC	4.66A/230VAC	6.66A/230VAC	7.76A/230VAC
surge current	cold start 30A/230VAC	–	–	–
leakage current	< 0.5mA/220VAC	–	–	–
Output parameters				
DC voltage	Rated current (A)	Rated current (A)	Rated current (A)	Rated current (A)
12V	41.7	50.0	–	–
24V	20.8	25.0	33.0	41.7
48V	10.42	12.5	16.7	20.83
Ripple and noise	<150mVp-p			
Voltage adjustment range	±10%			
temperature coefficient	＜±0.03%/℃			
Linear adjustment rate	±1.0%			
load regulation	±1.0%			
Start-up and rise time	<2.0 S at 120Vac input/<1.0 S at 230Vac input			
Duration (Typ)	> 20 mS at 120Vac input/> 20 mS at 230Vac input			
Protect				
overload	110-230% of rated output power (intermittent, automatic reset)			
Overvoltage	–			
action display	LED (Green)			

Withstand Voltage		**Vibration resistance and impact resistance**	
Between input and output terminals	3000 V AC · per minute	Frequency 10-55 Hz 2G fixed value, X/Y/Z direction, 60 minutes each	
Between input and ground terminals	2,000V AC · per minute	**Impact resistance: 200 m/s², 11 m/s, 6 directions, 1 time each**	
Between output and ground terminal	500VAC · per minute		
Insulation resistance	Megohmmeter with a resistance of 100MΩ or higher and a voltage of 500V aDC (at 25°C and 70%RH) (between input and output terminals, and between input and ground te		
Use ambient temperature	**Use ambient humidity**	**Storage temperature and humidity**	**temperature coefficient**
-30 to +70°C (non-icing, with output rating decreasing characteristic)	20–90% RH (non-condensing)	-40~+85°C, 10-95% RH, non-condensing	±0.03%/°C (0~50°C)

Safety Design and Standards	
conform to	EN55032(CLSPR32)Class 8,EN55014,EN61000-3-2,-3 GB/T 9254,BSMI CNS13438,EAC TP TC020
	EN61000-4-2,3,4,5,6,8,11,EN61000-6-2(EN50082-2),EAC TP TC 020

Precautions
* Operating temperature up to 70°C [158°F], with linear derating of 50°C to 70°C at half power [122°F to 158°F]. For more information, please contact your distributor.

BALSEAL® Electric

BPS Series Compact High-Efficiency Switching Power Supplies

Power range：500-1000W

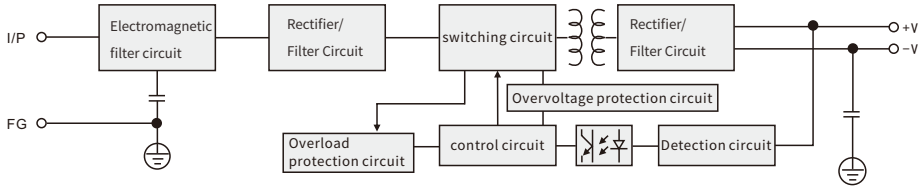
Model and naming

- Select according touapplication requirements.
- Product model code

BPS	24	—	500	*
Series code	**Output voltage: V/DC** 12 24 48		**Power (W)** 500:500W 600:600W 800:800W 1000:1000W	**special request**

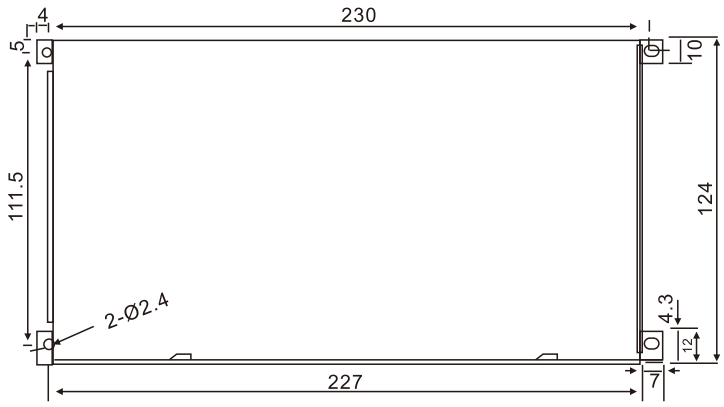
block diagram

Oscillation frequency: 115VAC :75KHz /230VAC :110KHz



Dimensions

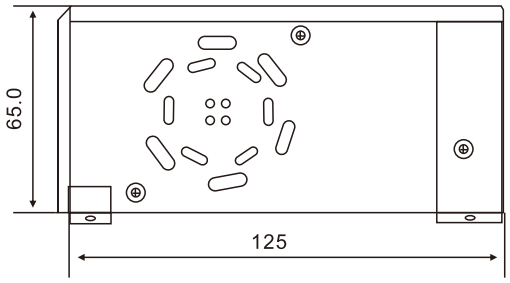
●BPS(500-1000W)/Dimensional drawing(mm)



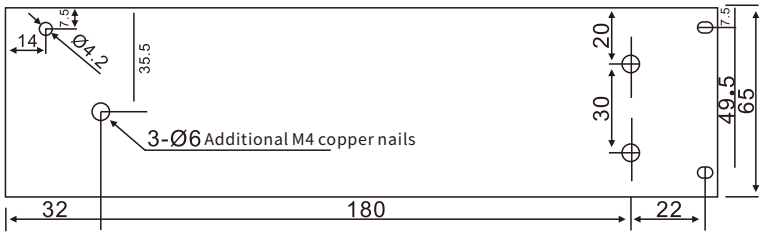
front view (mm)

Wiring and connections

input		output	
L	Wire	V-	out-
N	neutral	V+	out+
⏚	Ground wire		



rear view (mm)



side view (mm)