BPA-Series Microwave Generators

for 15 kW 915 MHz Magnetrons





GENERAL INFORMATION

The BPA15kW microwave generator is an air-cooled power supply for a 15 kW / 915 MHz magnetron. This power supply is designed based on modular interleaving technology to reduce input and output ripple as well as having the ability to protect the magnetron from over voltage and over current.

The BPA15kW autonomously manages the operating status of the magnetron and adjusts the filament voltage according to the input power of the magnetron and switches off the output when alarm events such as overcurrent or overvoltage of the magnetron occur. It is built into a self-ventilated 19" aluminum housing with the 10-U height.

FEATURES

- Air cooling
- Resonance isolated ZCS/ZVS high frequency topology
- Supports all 15 kW Magnetrons on the market
- High efficiency
- Modular design - the SMPS can continue operating at lower power even if one (or more) module/cell fails
- High accuracy output current control
- Low ripple anode current
- Protections: Over temperature/ Over current/ Overvoltage/ Over load/ Under voltage/ Under load/ Short circuit High
- reliability (designed based on MIL-HDBK-338B and MIL-HDBK-217 standards)
- Able to be connect in parallel with similar SMPS
- Low noise SMPS
- Ability to control by PLC or PC, or Profinet

SPECIFICATION

Electrical and Technical Data

	BPA15kW380	BPA15kW400	BPA15kW480	BPA15kW600
Input voltage (Three phase)	380 VAC ±10 %	400 VAC ±10 %	480 VAC ±10 %	600 VAC ±10
Efficiency	up to 95%	up to 96%	up to 96%	% up to 97%
Input frequency	47 Hz to 63 Hz			
Magnetron output power	1500 W to 15000 W			
Output voltage adaptivity	11 kV - 12 kV			
Magnetron output power	180 mA to 1800 mA			
Active operating temperature	-20 to 50 °C			
Working humidity	20 ~ 90% RH non-condensing			
Storage temperature, humidity	-30 ~ +70, 10 ~ 95% RH non-condensing			
Withstand voltage	20 kV			
Size of Magnetron head (WxHxD)	584 x 275 x 394 mm			
Size of Power Supply (WxHxD)	744 x 445 x 483 mm			

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