BPA-Series Microwave Generators for 15 kW 2.45 GHz Magnetrons







GENERAL INFORMATION

The BPA15kW microwave generator is an air-cooled power supply for a 15 kW / 2.45 GHz 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 15kW 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, PC or Profinet

SPECIFICATION

Electrical and Technical Data

Input voltage
Efficiency
Input frequency
Magnetron output power
Output voltage adaptivity
Anode current variation range
Active operating temperature
Working humidity
Storage temperature, humidity
Withstand voltage

BPA15kW380 380 V_{AC} ±10 % up to 95 %

 $400 \text{ V}_{AC} \pm 10 \text{ \%} \\ \text{up to 96 \%} \\ \text{47 Hz to 63 Hz} \\ 1500 \text{ W to 15000 W} \\ \text{11 kV to 12 kV} \\ 180 \text{ to 1800 mA} \\ -20 \text{ to 50 °C}$

BPA15kW400

-20 to 50 °C 20 to 90 % RH non-condensing -30 to +70 °C, 10 to 95 % RH non-condensing 20 kV

BPA15kW480

