

# IGBT系列中频电源

## IGBT Series Medium Frequency Power Supply

### Introduction

The IGBT MF power supply is the series resonance type of induction heating power supply, which adopts a new type semiconductor device IGBT (Insulated gate bipolar transistor). It's new designed equipment to replace KGPS SCR medium frequency power supply.

### Product feature

- Constant output power, fast melting speed: SCR MF power supply will adjust voltage to adjust power, while IGBT power supply will adjust frequency to adjust power. The power factor of IGBT power supply will never be affected by the material volume in crucible or thickness variation of kiln lining, the power is outputted constantly all the time. Especially when melting the poor magnetic conductive material such as stainless steel, copper and aluminum, the advantage is much superior of fast melting speed and less element burned.

- Power saving: As the inversion part IGBT is applied for half bridge inversion, the inversion voltage is about 2800V, so the inversion current will be less than 25% of KGPS power supply with the same power capacity. So the power consumption of IGBT power supply is less, 10% power will be saved more than SCR power supply.

- No harmonic interference: Higher harmonic is mainly generated by burr voltage when rectifier adjusting the voltage. It will severely pollute the power Grid, damage the other electric equipments working properly. While IGBT MF power supply apply 3 phase full-wave uncontrolled rectification, no phase sequence, no conduction angle and the DC voltage is always working at the max value. So it won't generate higher harmonic nor power system pollution.

- Reliable start-up ratio: since the series resonance inversion technology is applied, easy to start and 100% successful.

- High power factor: The power factor is more than 0.95 and less reactive loss.

### 技术参数 Technical parameter

型号 Model	进线电压 Input voltage (V)	额定功率 Rated power (kW)	额定频率 Rated frequency (kHz)	中频电压 MF voltage (V)
IGBT/S-10/1-30	220	10	1, 2, 4, 5, 8, 10, 20, 30	240
IGBT/S-15/1-30	220	15	1, 2, 4, 5, 8, 10, 20, 30	240
IGBT/S-20/1-30	3N-380	20	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-30/1-30	3N-380	30	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-50/1-30	3N-380	50	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-100/1-30	3N-380	100	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-160/1-30	3N-380	160	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-250/1-30	3N-380	250	1, 2, 4, 5, 8, 10, 20, 30	540
IGBT/S-500/1-8	3N-380	500	1, 2, 4, 5, 8	540