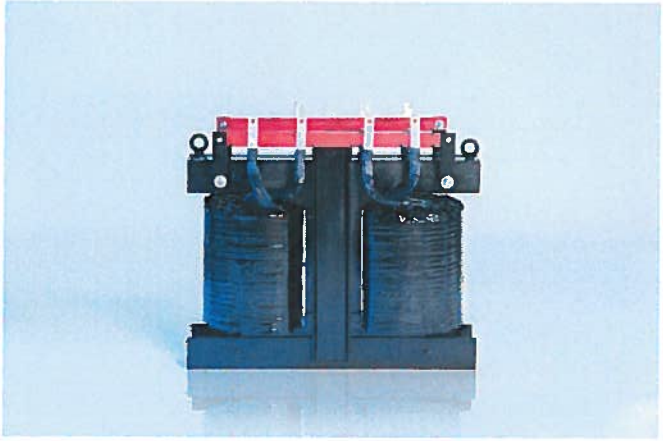
POWER MAGNETICS INC
377 RESERVOIR STREET, TRENTON, NJ 08618



Furnace Transformer

Power Magnetics supplies Furnace Transformers to industry for deployment across the globe because of their extraordinarily long life and reliability. Power Magnetics manufactures high and low volume specialty Furnace Transformers in a wide range of voltages and power. Power Magnetics Furnace Transformers are designed to supply AC power to the resistive heating elements of arc and induction furnaces. It is usually assumed that there is an SCR amplifier in the primary circuit for control. These devices are used in in induction heating and furnace markets.

Capabilities

- Power up to 2500 kVA
- Single, three or three to two phase Scott T
- Frequency 50/60 Hz
- Dry Construction using copper or aluminum windings
- Manufactured to meet US and International UL, CE, IEC, CSA and ANSI standards.
- Varnished using atmospheric tank and gas-fired oven cured
- Insulation Class 150, 180 and 220

Optional

- NEMA 1 or NEMA 3R enclosure
- Thermal Switches
- Manual Tap Changer
- Issue of Certificate of Compliance and Test Reports
- VPI (Vacuum – Pressure Impregnation varnish with gas-fired oven curing)

Scott Connection The Scott or "T" connection is another way of saying that the unit is designed for 3-2Ø operation. In the case where the load is divided equally into (2) zones, this connection results in a balanced 3Ø line current.

Globar ™ Silicon carbide heating elements have the characteristic that their resistance increases as the elements age. So unless the voltage to the element can increase, the power (and temperature of the furnace) will drop. The transformer thus has taps that can be utilized to boost voltage (usually no more than 100%). Almost always the kVA of the transformer will be greater than the kW of the load. As a result of increasing resistance the element will have to be run at the next higher voltage tap, which translates into more kVA.

Globar is a trademark of American Resistor Company

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