

The TOCCOtron SS is a family of solid-state radio frequency power supplies developed by Ajax Tocco for higher frequency induction heating requirements. Applications include processing small parts where narrow heat patterns must be precisely controlled, as well as, a broad range of related automotive and industrial heating tasks. The standard control for the TOCCOtron SS MPC power supply is a shop floor programmable, microprocessor-based system. Job set up is as simple as entering keyboard data and verifying values on the oversized alphanumeric display. In addition, the microprocessor prompts the user on proper load matching.



Benefits

- Reliable high efficiency radio frequency power supply
- Delivers full power from 50 - 200 kHz
- The right power to meet job requirements
- Easy to use and maintain
- Lower output voltages for longer life
- Provides years of trouble free service
- Integrates easily into modern equipment and SPC systems

Features

- MOSFET solid state design
- Selectable frequency range
- 20 kW to high power 360 kW
- Microprocessor user interface available
- Parallel tuned power circuit
- Built in protection devices and circuits
- RS-232 communication port

Specifications

Frequency & Output Power:

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Microprocessor-Controlled Models:
50 - 200 kHz, 20 - 360 kW

Architecture:

Load-commutated, parallel-tuned, voltage source, full-bridge, high frequency inverter

Input Power:

230 V, 3 Phase, 50/60 Hz (up to 40 kW)
480 V, 3 Phase 50/60 Hz (80 kW and above)

Input Power Factor:

Exceeds 0.90 at full load

Regulation Accuracy

+/- 1% with +/- 10% line variation

Ramp Time

Fast: 0 to 100% power in 50 milliseconds
Slow: 0 to 100% power in 250 milliseconds

Power Supply Efficiency

90 to 95% overall (min.)

Cooling Water Volume

Approximately 20 GPM (77.5 liters) per 100 kW including load matching components.

Input Water Temperature:

95 degrees Fare height (35 degrees Celsius) Max.

Input Water Pressure:

90 PSI Maximum (6.2 bar)
30 PSI (2.0 bar) minimum differential

Safety Features (MPC Models)

NEMA 12 (JIC E7.1.3) enclosure, interlocks on doors, control and high voltage disconnect.

Dimensions (W x D x H)

MPC Models

20 & 40 kW - 30 x 24 x 48 in.
(762 x 610 x 1219 mm)
60 & 80 kW - 56 x 36 x 78 in.
(1422 x 924 x 1981 mm)
120, 160, 200, 240 kW - 99 x 36 x 78 in.
(2525 x 914 x 1981 mm)
280, 320, 360 kW - 168 x 36 x 84 in.
(4267 x 914 x 2133 mm)

Microprocessor Control Logic System

CMOS - type microprocessor - based with 20 function keyboard and four line (20 characters per line) alphanumeric display utilizing interactive operator prompts.

Remote Communications

Two RS-232 ports to interface with PLC, plant computer system or PC. Four non-dedicated channels to monitor/display external functions.

Diagnostics

Built-in routines to monitor/display component status. Interactive prompts to locate failed components and aid in load matching.

Operating Temperature

32 Degrees Fare heights to 125 Degrees Fare height (0 Degrees Celsius to 52 degrees Celsius)

Options

Digital interface card. Coil Monitor. 12-pulse rectifier. Cabinet light. Automatic frequency switching standard.

Specifications subject to change without notice