

Intellifire™ 250

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Induction Heating System
Power Source 

Quick Specs

Applications

Preheat
Hydrogen Bake Out
Stress Relieving

Processes

Induction Heating

Input Power 3-Phase, 460 VAC, 50/60 Hz

Rated Output 25 kW at 100% Duty Cycle

Weight Net: 165 lb (74.9 kg) Ship: 187 lb (84.9 kg)

Infinitely variable power control allows operators to preset exact power values over a range from 0 to 25 kW. A patented self-regulating circuit ensures that the power delivered to the part precisely matches the preset value.

All critical components are heat sink mounted and air-cooled. By eliminating water-cooling, used in conventional induction power sources, the unit provides greater flexibility and reduced installation costs. For safety, the power source is thermostatically protected against overheating and thermal failure.

Patent-pending Ground Fault Protection® provides automatic system shutdown should power source output short to ground. A 50 ft (15.2 m) sense cable provides direct feedback to the power source of a fault condition. Fault indication is via a front-panel-mounted LED.



Shown with optional running gear.

Compact design occupies minimal space with a footprint of 3.3 sq ft (.30 m²) and total weight of 165 lb (74.9 kg). The power source can be conveniently mounted in almost any location and the open base allows for easy lift truck access for portability.

Unit has **automatic protection** which ceases operation of power source if it senses limit or fault conditions, such as out-of-range frequency, low input voltage or an over current condition. A series of front panel indicator lights identifies the limit or fault condition. In addition, the unit incorporates voltage, current and power control that automatically adjusts output power in response to out-of-range or changing impedances.

Includes **remote control** provisions for system control and metering. A 14-contact connector on the front of the power source provides access for **output control and monitoring** system operating parameters such as output power and frequency, tank voltage and current and fault signals.

High operating efficiency of approximately 92% makes unit cost-efficient to operate. 100% duty cycle allows continuous operation, further enhancing its value.

Specifications (Subject to change without notice.)

Type of Input Power	Output Frequency	Rated Output	Required Reflective Inductance	Input Amperes at Rated Output	kVA/kW Used at Rated Output	Dimensions	Weight
3-Phase, 460 VAC, 50/60 Hz	10–50 kHz	25 kW at 100% Duty Cycle; Max 750 Amps (RMS), 700 V (RMS)	2.5–50 µh	39 A at 460 V (0.29 A while idling)	30.8 kVA/27.19 kW (0.24 kVA/0.15 kW while idling)	H: 27-1/4 in (692 mm) W: 15 in (381 mm) D: 31-1/2 in (800 mm)	Net: 165 lb (74.9 kg) Ship: 187 lb (84.9 kg)



MADE IN **USA**
APPLETON, WI **USA**



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Control Panel

1. Power Switch with indicator light
2. Remote Power Control Switch
3. Power Adjust Control (limits power in remote control operation)



Genuine Miller Accessories

Running Gear #043 924

For mobility, the Intellifire™ power source running gear is easily installed to base of the unit. Running gear includes rear main wheels, front casters and front and rear handles.

IH/PC™ Induction Pendant Control #043 109

Single-station controller capable of remotely controlling output power and output contactor. Unit features a LCD display that shows system operating parameters. Includes 15 ft (4.6 m) interconnect cable.

Remote Contactor Control #043 932

A simple remote pendant allowing operator to energize system using a simple rocker-style contact switch. Comes complete with 25 ft (7.6 m) cable and 14-contact connector.

IH/TC Temperature Control #194 672

Single-station controller capable of process temperature feedback from a thermocouple sensor and automatically adjusting power source output to regulate and maintain part temperature. Includes 30 in (762 mm) interconnect cable, 25 ft (7.6 m) thermocouple extension cable and thermocouple temperature sensor.

IH/TS Temperature Control-Recorder #194 916

Controller provides for simple to advanced thermal cycle programs. Programming is facilitated with a graphic presentation of the heat cycle and corresponding controller program. Unit is equipped with large run, hold and stop buttons and coolant flow switch.

Two configurations available:

1. Without temperature recorder — use your existing recorders or purchase an alternative recorder of your choice. The unit is equipped with a blank panel, which can be removed to install a 100 mm recorder.
2. With digital recorder — built-in recorder provides six thermocouple inputs and is equipped with a touch-screen for simple programming and use. Color display permits clear monitoring of the heat treat process and provides alarms for process control. Data is stored on a floppy disc for printing, storage, or further analysis. Operating temperature range of the recorder is 41° F to 104° F.

Ordering Information

Power Source	Stock No.	Description	Qty.	Price
Intellifire™ 250	#903 469	230/460 VAC		
Accessories				
Running Gear	#043 924			
IH/PC™ Induction Pendant Control	#043 109			
Remote Contactor Control	#043 932			
IH/TC Temperature Control	#194 672			
IH/TS Temperature Control-Recorder	#194 916			

Date:

Total Quoted Price:

Note: See Lit. Index No. IN/9.0 for information on Induction Heating System 25 kW — Preheat and Post Weld Heat Treatment.

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