

EKOHEAT®

With VPA Technology™

Power to 50kW: Operation from 15 kHz to 40 kHz

World-class Induction Heating Systems

EKOHEAT induction heating systems for 15-40 kHz range provide reliable and repeatable solutions for heating with large coils or for heating larger parts. Among the many typical applications are heating of hard-to-couple parts, deeper heat penetration, crystal growing, heat treating steel, preheating for forging of steel, aluminum, copper or brass, and melting in crucibles.

With the versatile EKOHEAT power control system you get rapid tuning, efficient and precise heating of your parts, power control within 0.2% resolution and an easy-to-use, easy-to-read front panel. Remote control is accomplished with 0-10V, 4-20mA inputs, RS485 serial port, 24V controls and remote E-Stop input so integration with your automated production lines is easy.

EKOHEAT technology improves return on investment by reducing your energy usage compared to gas-fired and resistive heating techniques. Flameless, non-contact induction heating minimizes energy waste by focusing energy only on the part and zone to be heated. With very efficient power conversion and a power factor greater than 0.9, utility demand charges are reduced, lowering monthly energy bills. EKOHEAT systems are designed for efficient use of cooling water, further lowering your operating costs.

This is a water-cooled system, requiring connection to a heat exchanger or other means of dissipating heat.



EKOHEAT AT-A-GLANCE

Versatile

- Efficient heating of many part geometries, sizes and compositions
 - Multiple capacitor configurations
 - Multiple tap transformer configurations
 - Voltage or Power control
- Repeatable, reliable heating, agile frequency tuning
- Through-Curie heating
- Movable workhead; up to 30m (100')
- Sub-second to continuous cycle times
- Remote operation or logging with RS485 port
- Accepts international AC line voltages

Easy to Use

- User-friendly operator front panel controls
- System configuration from front panel
- Cycle timer, peak and short-cycle data capture
- 10 ten-step heating profiles
- Overload-tolerant output management
- 7-language display suite (EN, ES, FR, DE, IT, PT, PL)

SPECIFICATION	20/25	35/25	50/25	UNITS
RF Terminal Power (continuous)	20	35	50	kW
AC Line Power	23	41	58	kVA
Power Factor	0.92			
Output Frequency	15 – 40			kHz
AC Line Voltage	360 - 520			Vac, 3Ø
AC Line Protection ¹	50	80	100	A
Display	LCD Monochrome, 240w x 128h Pixels			
Serial Communication	RS485 standard (RS485/232 converter optional)			
Process Timer	0.01 - 10000			sec
Max Ambient Temp	45 (115)			° C (° F)
Compliance ²	CE, UKCA, EN61010, EN55011			
Ingress Protection	IP54			
Dimensions	432 x 711 x 762 (17 x 28 x 30)			WxDxH mm (in)
Weight	88 (195)			kg (lb)
WATER COOLING				
Flow ³	9.5 (2.5)			l/m (g/m)
Pressure Differential (Range)	2.8 - 5.6 (40 - 80)			Bar (lb/in ²)
Maximum Input Pressure	5.6 (80)			Bar (lb/in ²)
Max Water Temp	35 (95)			° C (° F)

- 1) Fast-acting fuses
- 2) Suitable for incorporation into equipment for compliance with Machinery Directive
- 3) Power supply; required workhead coil flow requirements vary by application

OPTIONS AND ACCESSORIES



EKOHEAT features a front panel programmable controller for monitoring, timer and power-level control, diagnostics and system configuration. Up to 10 ten-step heating profiles can be configured to control power levels over your specified timing requirements.

- Start-up assistance
- Cooling systems
- Pendant station
- Footswitch
- Redundant safety relays
- Complete spare parts kits
- eVIEW serial data reporting
- Extended workhead cable lengths
- Optical pyrometer (closed-loop temperature control)
- External controller (plc)
- Front E-stop with retransmission
- Broadband frequency range (5-40 kHz)



www.ambrell.com

Ambrell Corporation
United States
Tel: +1 585 889 9000
Fax: +1 585 889 4030
sales@ambrell.com

Ambrell B.V.
The Netherlands
Tel: +31 880 150 100
Fax: +31 546 788 154
sales-eu@ambrell.com

Ambrell Ltd.
United Kingdom
Tel: +44 1242 514042
Fax: +31 546 788 154
sales-uk@ambrell.com

