

EKOHEAT²

With Advanced Internal Monitoring™

Power to 50 kW; Operation from 5 kHz to 40 kHz

The New Benchmark in Digitally-Controlled Induction Heating

We've designed and engineered the EKOHEAT 2 product offering to better solve your process heating challenges with an innovative, industry-leading internal control and power delivery system. From the evolution of Ambrell's exclusive VPA Technology, our enhancements can boost your process accuracy, reduce your system cooling requirements, and support your work with a new control panel and suite of diagnostics and guides.

By applying the latest semiconductor technologies, the control and monitoring of output, voltage, power and resonant frequency are digitized, thereby improving your process efficiencies and responsiveness. The EKOHEAT 2 is smaller, more economical, and can perform in extreme situations.

EKOHEAT 2 systems use Silicon Carbide (SiC), which is more robust and efficient than IGBT transistor technology. The system offers precise energy output with steps of less than 0.1%. A headless design is available.



The EKOHEAT 2: More flexible, more robust, and with a smaller footprint.

EKOHEAT 2 With Advanced Internal Monitoring

- **Lower system costs** are realized as EKOHEAT 2 is designed to use a higher temperature water cooling solution than competitive models
- **Real-time monitoring** of internal components provides predictive fault control, enhanced preventative maintenance capabilities and more
 - Delivers more 'up' time and reduces waste due to unexpected faults
- **Speed and quantity of data** are exponentially increased to address new Industry 4.0 standards
- **30% fewer water connections**, which increases reliability and lessens the chance for leaks
- **Full digital tuning** is provided via control loops for both tuning and setpoint
- **Highly efficient** with inverter efficiencies more than 95% (depending on operating conditions)
- EtherCAT, PROFINET and other fieldbuses available on request

EKOHEAT 2 is CE marked and manufactured at our ISO 9000-certified facility.

SPECIFICATIONS

SPECIFICATION	50 kW	UNITS
RF Terminal Power ⁵	50	kW
AC Line Power	60	kVA
Power Factor	0.92	
Output Frequency	5 – 40	kHz
AC Line Voltage	360 - 520	Vac, 3Ø
AC Line Protection ¹	100	A
Display	7-inch color touchscreen	
Serial Communication	RS485, Modbus RTU	
Process Timer	.01 seconds to 252 hours	
Max Ambient Temp	45 (115)	Degrees C (F)
Compliance ²	CE, EN61010, EN55011, NRTL listed to UL 61010, PL d functional safety compliance (per ISO 13849-1) available on request	
Ingress Protection	IP54	
Power Unit Dimensions	431 x 689 x 640 (17 x 27 x 25)	W x D x H mm (in)
Weight	73 (160)	kg (lb)
WATER COOLING		
Flow ³	2.0 (0.5)	l/m (g/m)
Flow Including Workhead and Coil ⁴	20 (5.2)	l/m (g/m)
Pressure Differential (Range)	2.8 – 6.0 (40 - 87)	bar (lb/in ²)
Maximum Input Pressure	6.0 (87)	bar (lb/in ²)
Max Water Temp (power supply)	45 (115)	Degrees C (F)

1) Fast-acting fuses

2) Suitable for incorporation into equipment for compliance with Machinery Directive

3) Power supply only; workhead coil flow requirements vary by application

4) Assumes 70% coil losses

5) Continuous, 8% overload allowed



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