



## Induction Heating Generators

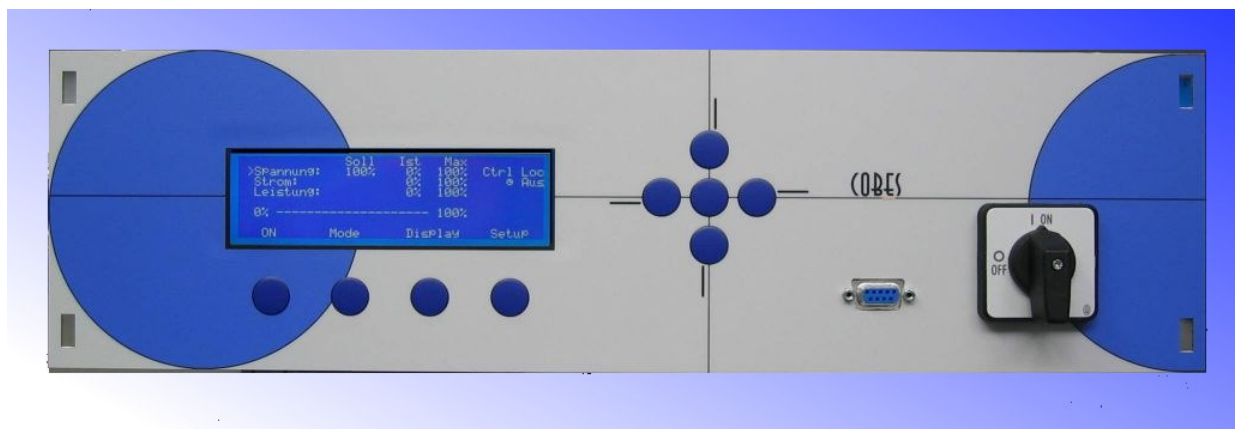
### Type i-class

- Parallel tank circuit technology, 500W up to 12 kW  
( for high power generators up to 100 kW see our series tank circuit technology **Type i-class SK**)
- Control and regulation by voltage, current or power
- Water cooled induction coils (standard)
- Air cooled induction coils (on request, dep. on application)
- Frequencies between 10 kHz and 500 kHz
- Many accessories are available, such as Infrared Measurement, water cooling systems, control units, etc.

The i-class series are state-of-the-art processor-controlled high-frequency generators for inductive heating. The i-class series covers the power range up to 12kW. Depending on the requirements, the generators can be offered in power levels from 500W to 12kW.

Different versions of these power levels are available with different output voltages. Depending on the application, low-resistance inductors (1-3 turns) but also high-resistance inductors (4 and more turns) can be optimally adapted to the heating task and the workpiece.

The generator consists of a power pack (with control unit and interfaces) and the oscillator section (with the resonant circuit and inductor connection). The two components are connected via flexible cables and can therefore be easily integrated into workstations or production lines.



Picture: i-class 19'' 3HU—Power Supply

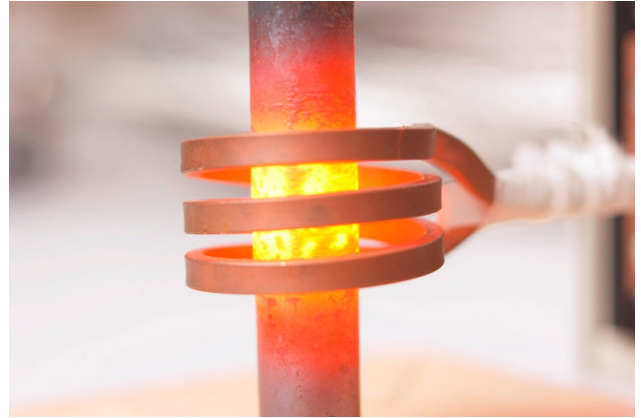


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## Induction Heating Solutions

Generators and Application Knowledge

-> The complete solution



The power supply is designed as a 19" insert. It is therefore easy to integrate into a corresponding control cabinet or can be set up as a tabletop device. Depending on the power or installation conditions, it can be air-cooled or water-cooled.

The large, illuminated LCD display shows all important operating data at a glance and the simple menu navigation allows the setting of interfaces, limit values and timer programs.

The regulation of voltage, current or power with adjustable limit values allows use in a variety of applications with optimal protection of the workpiece.

The power supply is designed up to 3kW for mains voltages from 187 - 265 V (50/60 Hz) single phase. A 3-phase connection must be provided for larger outputs.

In order to integrate the generator into a control environment, the power supply of the i-class series offers a variety of options. As standard, 4 interfaces offer:

- Manual operation via the front panel
- "Quick commissioning interface" consists of emergency stop interlock, power ON and power setting via ext. Potentiometer
- 25-pin. Sub-D connector with the analog and digital signals
- 9-pin Sub-D interface for loading new firmware

If desired, a further serial interface can be installed (also later). Then the world is open to Profibus, Interbus-S, DeviceNet, RS 232/485 or others.



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Picture: i-class 19" 3HU—Power Supply

The separate, water-cooled oscillator serves as a connection for the inductor coil and contains the inverter and resonant circuit. By varying the installed resonant circuit capacitors, a wide range of workpiece sizes and materials can be heated with the optimal adjustment of reactive power and frequency.

The usable frequency range is 10 - 500 kHz and thus covers almost all heating tasks.

The oscillator is connected to the power supply unit using robust Harting industrial connectors (standard 3m, longer connection possible). The integrated temperature and cooling water flow monitoring, short-circuit detection and frequency measurement protect the i-class series against incorrect operation or malfunctions.

The inductors are simply connected to the oscillator via a combined screw connection for electricity and cooling water. The resonant circuit capacitors can be easily replaced via a separate opening. The small size allows installation in or close to system parts.

Have we made you curious?

Then take a look at the following detailed data sheet or call us at

+49 7822 78724-0

or contact us using the options below:

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#### ▶ GENERAL MANAGERS

- DIPL.-ING. CAY-OLIVER BARTSCH
- DIPL.-ING. MATTHIAS STADELMAIER

▶ AMTSGERICHT FREIBURG I.BR. B270530




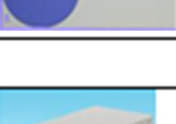


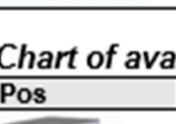
▶ EU VAT-ID DE 812 311 306

#### ▶ BANK DETAILS

SPARKASSE FREIBURG-NÖRDLICHER BREISGAU  
IBAN DE20680501010022115588

## Technical Data

### Chart of available standard power supplies

Pos	Typ	Abmessungen (B x H x T)	Leistung	Bemerkung
	i-class	19" / 3 HE / 500mm	750W-3kW	Mains 1/N/PE 230V With extensive control and interfaces
	i-class	19" / 3 HE / 500mm 19" / 6 HE / 500mm	4kW-6kW 6kW-12kW	Mains 3/N/PE 400V With extensive control and interfaces
	i-class V2	19" / 3 HE / 500mm	750W-3kW	Mains 1/N/PE 230V With extensive control and interfaces
	i-class V2	19" / 3 HE / 500mm	4kW-9kW	Mains 3/N/PE 400V With extensive control and interfaces
	i-class 800	127 x 47 x 250mm	800W	Control by customer PLC via iFC or A/D
	i-class 1500	127 x 63,5 x 280mm	1500W	Control by customer PLC via iFC or A/D
	i-class 3000	170 x 63,5 x 280mm	3000W	Control by customer PLC via iFC or A/D

### Chart of available standard oscillating units

Pos	Typ	Abmessungen (B x H x T)	Leistung	Bemerkung
	small	100 x 100 x 120mm	max. 2kW	
	compact	100 x 100 x 200mm	max. 2,8kW	
	Standard 1,5/3kW	120 x 120 x 250mm	max. 3kW	
	Standard 3-9kW	200 x 120 x 250mm	max. 9kW	