iew

Datasheet
TTH2/TTH3/TTH5 EN

Induction heating unit TTH2/TTH3/TTH5

Power 2kW/3kW/5kW

Frequency 70kHz-450kHz

Stationary design with one output for continuous operation

Unit design TTH2/TTH3/TTH5

The induction heating unit TTH2/TTH3/TTH5 consists of two components, the high frequency Generator and the stationary heating station with the corresponding inductor.

The TTH2/TTH3/TTH5 has been designed with state of the art semiconductor technology and therefore enables an optimal overall efficiency of the unit. The generator automatically selects the resonance frequency for any inductor and thereby always achieves maximum output.

Generator:

- on/off switch
- internal power supply
- automatic resonance recognition
- inductor short-circuit proof
- with measuring device for output power and frequency
- display of generator status with LEDs
- continuous target value regulation with potentiometer 0-100%
- remote control socket for PLC controller
- connection option for foot switch
- 1.5m connection cable between generator and heating station

Heating station:

- matching transformator with electrical insulation
- replaceable condenser bridges
- inductor connection
- inductor rapid fastener

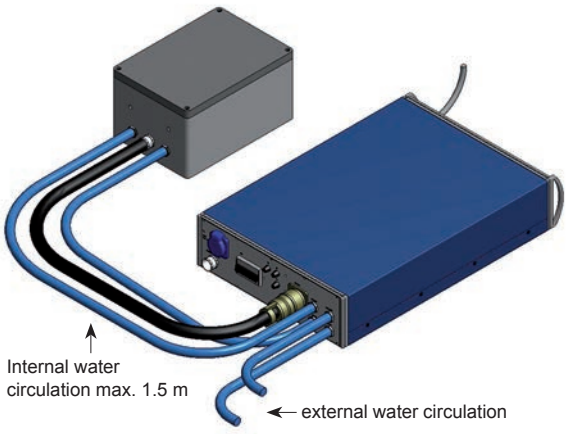
Remote control inputs:

- digital input for induction unit start
- analogue input 0-10V or 0-20mA for target value

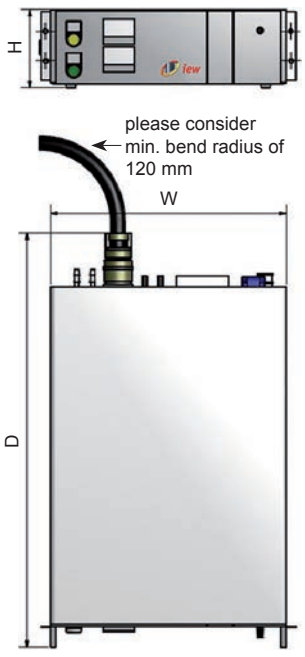
Remote control outputs:

- digital output for standby
- digital output for power transmission at the inductor
- digital output for induction unit error state
- analogue output 0-5V for power transmission at the inductor

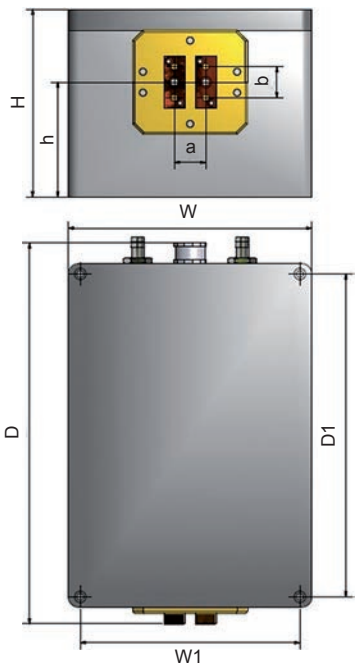
COOLING CIRCUIT CONNECTORS



GENERATOR



HEATING STATION



Technical Data TTH2/TTH3/TTH5

Generator		
TTH2	HF-output: Total input power:	2 kW 2,5 kVA
TTH3	HF-output: Total input power:	3 kW 4 kVA
TTH5	HF-output: Total input power:	5 kW 7 kVA
Power supply		3 x 400 V/N+PE 16A, 50-60 Hz
Internal control voltage		230 V/N AC 50-60 Hz
Amount of heating stations		1 (stationary)
Power-on time		100% (= continuous operation)
Frequency		70 kHz bis 450 kHz
Housing		Table housing 3HE, 84TE HF-design
Dimensions [W x H x D]		450 x 150 x 650 mm
Dimensions [W x H x D] with handles		450 x 150 x 690 mm
Weight		approx. 20 kg

Heating station	
Dimensions [W x H x D]	230 x 180 x 330 mm
Mounting holes [W1 x D1]	180 x 310 mm
Inductor level h	110 +/-5mm
Connecting system inductor [a x b]	4 x M6, 30 x 30 mm
Weight	approx. 20 kg

Remote control	
Power supply	24V/100mA and 12V/100mA DC
Inputs: Digital input coil energy transfer Digital input external reset External performance settings	 24V DC 24V DC 0-10V or 0-20mA DC
Outputs (alternatively): Potential free relay contacts or Photomos outputs (high switching operation amounts) Outputs for generator conditions	 24V/1,25A (AC/DC) 24V/0,25A (AC/DC) • standby state • power transmission to inductor • error state

Water demand		
Water quality		Drinking water or cleaned filtered industrial water (no deionised or destilled water)
Water hardness		max 8 German degrees of hardness
Water connection		1x flow & 1x return
Water connection flow & return		1/2“ hose clip, tube di=12mm
Pressure difference		4 – 6 bar
Supply temperature		18°C – 25°C (max. 30°C)
TTH2	Rate of flow Switchpoint of waterflow	approx. 2 l/min (including coil cooling) approx. 1,5 l/min
TTH3	Rate of flow Switchpoint of waterflow	approx. 3 l/min (including coil cooling) approx. 2 l/min
TTH5	Rate of flow Switchpoint of waterflow	approx. 4 l/min (including coil cooling) approx. 3 l/min

Article numbers and accessory list

ORDER NUMBER	ARTICLE DESCRIPTION	DESCRIPTION
Induction heating unit - stationary design		
IND0020	TTH2	continuous operation 100% with output power 2kW
IND0021	TTH3	continuous operation 100% with output power 3kW
IND0022	TTH5	continuous operation 100% with output power 5kW
Accessories		
IND0200	industry foot switch	foot switch to turn on and off the induction power
IND0203	industry foot switch with output power control	foot switch to turn the induction unit on and off and also to control the power output 0...100%
IND0205	10turn potentiometer	fixed adjustment of the output power with interlock
IND0251m	lifting device TTH2-TTH5 320mm m	manual lifting device for heating stations TTH2 / TTH3 / TTH5
IND0251e	lifting device TTH2-TTH5 a	automatic lifting device for heating stations TTH2 / TTH3 / TTH5
Inductor		
IND0300	inductor	customer specific inductors
Optional: temperature control		
S-REGULUSxxx	Regulus	temperature control or programm control
IND0850	SPS	automatic sequence control & temperature control prepared for small devices
IND0850small	SPS-Small	automatic sequence control & temperature control
S-Sirius	infrared pyrometer	infrared pyrometer 300°C...1300°C
S-Metis	infrared pyrometer	infrared pyrometer 75°C…550°C
S-xxx	accessories	accessories, mounts, air purge for pyrometer
Optional: cooling system		
RKA-Chilly 15	cooling system CHILLY15-Sonder 1.425kW	cooling system for induction heating unit and inductor
RKA-Chilly 35	cooling system CHILLY35-Sonder 3.5kW	cooling system for induction heating unit and inductor


IND0200
IND0203


IND0250m


IND0300


IND0850small


IND0850

iew Induktive Erwärmungsanlagen GmbH
Novomaticstr. 16 • 2352 Gumpoldskirchen • Austria
T +43 2252 607 000-0 • F +43 2252 607 000-20 • E office@iew.eu
www.iew.eu

Experts for every case of inductive heating
Soldering and brazing • Hardening • Annealing • Tempering • Shrink technology • Bonding • Welding • Smelting • Continuous heating • Material testing • Inert gas- and vacuum technology • Special applications according to customer requirements • Science