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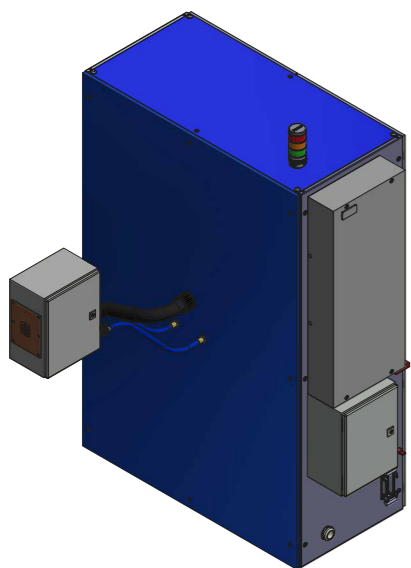
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TNX50/60/80/100 INDUCTION HEATING UNIT

Frequency 10kHz-100kHz

The **induction heating units** consist of two components, the medium frequency generator and the stationary heating station.

The **TNX50/60/80/100** 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.



Connectors cooling cycle

Unit design TNX50/60/80/100

Generator

- + on/off switch
- + internal power supply
- + automatic resonance recognition
- + inductor short-circuit proof
- + User panel
- + controlled target value regulation with potentiometer 0-100
- + remote control socket for PLC controller
- + connection option for foot switch
- + 3m – max. 5m connection cable between generator and heating station

Heating station

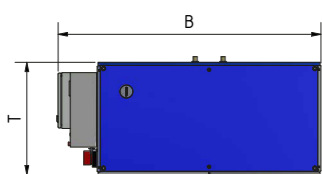
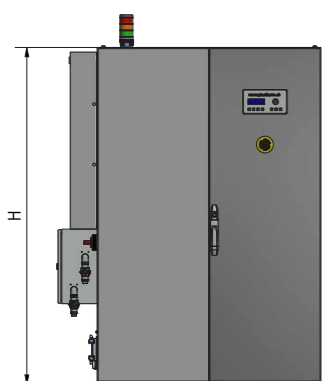
- + Interchangeable condenser bridges
- + inductor connection

Remote control inputs

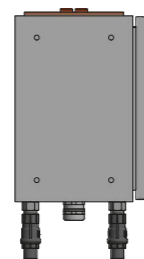
- + digital input for induction unit start
- + analogue input 0-10 V or 4-20 mA for target value
- + optional 4-20mA

Remote control outputs

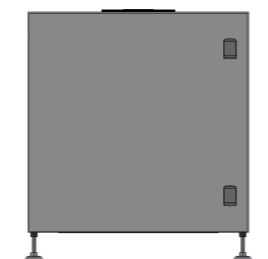
- + digital output for standby
- + digital output for power transmission at the inductor
- + digital output for induction unit error state
- + analogue output for power transmission at the inductor, for frequency or water flow rate and more
- + Error memory with 200 storage spaces
- + Integrated temperature controller (e.g. for external pyrometer)



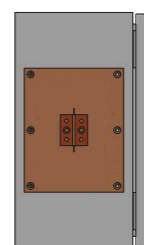
Generator



C-Box - optional



EC-Box - optional



Technical data	TNX50	TNX60	TNX80	TNX100
MF power at the inductor connectors at the nominal operating point for continuous operation	50 kW	60 kW	80 kW	100 kW
Frequency at maximum load	10 - 100 kHz (150 kHz upon request)			
MF-Voltage (rms.)	< 600 V			
Power supply	3 x 400 V + PE			
Frequency	50 Hz			
Allowed voltage fluctuations	+5/-10 %			
Power consumption during stand by	< 200 W			
Power consumption at nominal load	55 kVA	69 kVA	96 kVA	122 kVA
Power factor cosφ at nominal load	approx. 0,94			
Current per phase (400 V) at nominal load	approx. 83 A	approx. 100 A	approx. 138 A	approx. 170 A
Required fuse protection	125A / 500V gl	160A / 500V gl	200A / 500V gl	250A / 500V gl
Supply voltage - Remote Control	24 VDC			
External allowed power	Target value ref. input 0 – 10VDC / 0-20 mA / Optional: 4-20 mA			
Feedback power output	Power ref. output 0 – 10VDC / 0-20 mA / Optional: 4-20 mA			

Dimensions generator				
Dimension (W x D x H)	1410 x 600 x 1900 mm		1410 x 800 x 2100 mm	
Weight	approx. 700 kg	approx. 750 kg	approx. 950 kg	approx. 1000 kg

Heating station	
optional	external heating station (C-Box/EC-Box) upon request

Cooling				
Water amount	30 l / min.	35 l / min.	40 l / min.	45 l / min.
with a pressure of	5 bar dyn.			
Max. allowed pressure	7 bar			
Water outlet temperature for open cooling system	18 °C < T < 28 °C			
	Temperature may not go below the dew point			
Water connections	3/4" external thread		1" external thread	
Water quality	Drinking water or cleaned filtered industrial water (distilled water is also possible) Filter min. 500µm conductivity 50-300µS/cm PH-Range 7.0-8.5			