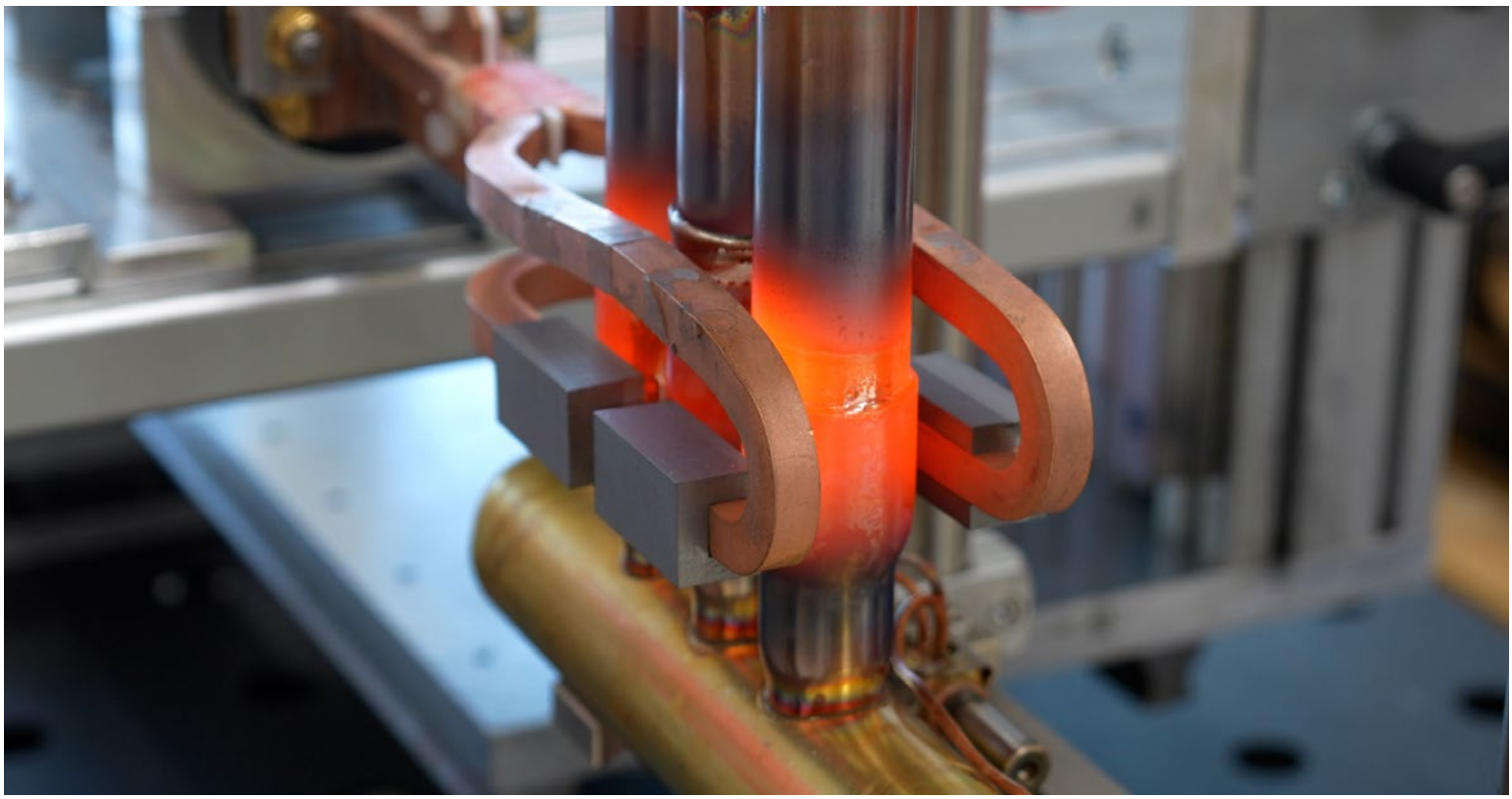
Induction Heating
Energy Efficiency
for Sustainable Results

eldec

ECO-LINE EEI²
HF and MF GENERATORS
Maximised connectivity and intuitive touch display



ECO-LINE EEi²

Standardised energy sources with full range of functions and extensive I4.0 connectivity thanks to SIEMENS PLC. As easy to operate as a smartphone with EEi² interface.

The basic physical principle of induction heating enables maximum energy efficiency and, in conjunction with a high-quality and therefore durable product, the greatest possible sustainability.

Heating takes place exactly where it is technically necessary, without heating the surroundings or heating workpiece areas that can remain cold.

An induction heating process is powered by electricity and is therefore CO2-free if powered by renewable energy. Without gas or flame, precise and exactly reproducible.

State-of-the-art power electronics and control technology, Industry 4.0 connectivity, eQC modules for quality assurance and the stringent testing of all components make these generators top-class induction energy sources with maximum availability. With the eldec easy intuitive interface - EEi² for short - they are as easy to operate as a smartphone. They have a continuous output of 5 to 150 kW (MF) or 5 to 75 kW (HF), optionally time- and frequency-dependent power increase up to 50% (MF). ECO-LINE EEi² energy sources are available in a frequency range from 8 kHz to 400 kHz.

ECO-LINE EEi² generators are available with single or multiple outputs. Multiple outputs can be supplied as „2A“ (two outputs, heating sequentially), as „x 2“ (two outputs, heating simultaneously, independently of each other) or as „: 2“ (two outputs, heating simultaneously, symmetrically).

The advantages of these powerful and robust energy sources are found in many details - from the high level of device protection through electrical isolation, and short-circuit-proof transistor technology to the precise energy metering and high efficiency.

ECO-LINE EEi² – High Frequency

HF 5 – 75 kW

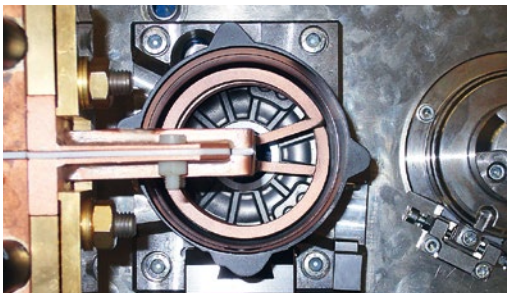
Type Rated power	Rated Capacity 100% ED kW	Mains Connections at 400V, 50Hz A	Required cooling water without inductor l/min	Dimensions H x W x D mm	Weight Generator kg
Basic Version					
ECO-LINE-EEi² - XS HF 5	5 kW (HF)	10	8	340 x 560 x 800	50
ECO-LINE-EEi² - XS HF 10	10 kW (HF)	20	8	340 x 560 x 800	50
ECO-LINE-EEi² - XS HF 15	15 kW (HaF)	32	8	340 x 560 x 800	50
ECO-LINE-EEi² - S HF 25	25 kW (HF)	50	15	590 x 560 x 800	80
ECO-LINE-EEi² - S HF 35	35 kW (HF)	63	15	590 x 560 x 800	80
ECO-LINE-EEi² - XL HF 50	50 kW (HF)	100	27	1170 x 560 x 800	120
ECO-LINE-EEi² - XL HF 75	75 kW (HF)	160	40	1170 x 560 x 800	120
„2A" – Two outputs, heat in sequence					
ECO-LINE-EEi² - S HF 2A	5 kW (HF)	10	50	590 x 560 x 800	60
ECO-LINE-EEi² - S HF 2A	10 kW (HF)	20	50	590 x 560 x 800	60
ECO-LINE-EEi² - S HF 2A	15 kW (HF)	32	50	590 x 560 x 800	60
ECO-LINE-EEi² - M HF 2A	25 kW (HF)	50	50	770 x 560 x 800	80
ECO-LINE-EEi² - M HF 2A	35 kW (HF)	63	50	770 x 560 x 800	100
„x2"– Two outputs, heat simultaneously and independently of each other					
ECO-LINE-EEi² - M HF x2	2 x 5 kW (HF)	20	50	770 x 560 x 800	130
ECO-LINE-EEi² - M HF x2	2 x 10 kW (HF)	32	50	770 x 560 x 800	130
ECO-LINE-EEi² - M HF x2	2 x 15 kW (HF)	63	50	770 x 560 x 800	130

ECO-LINE EEI² – Middle Frequency

MF 5 – 150 kW

Type Rated power	Rated Capacity 100% ED kW	Mains Connections at 400V, 50Hz A	Required cooling water without inductor l/min	Dimensions H x W x D mm	Weight Generator kg
Basic Version					
ECO-LINE-EEI² - XS MF 5	5 kW (MF)	10	12	340 x 560 x 800	50
ECO-LINE-EEI² - XS MF 10	10 kW (MF)	20	12	340 x 560 x 800	50
ECO-LINE-EEI² - XS MF 15	15 kW (MF)	32	12	340 x 560 x 800	50
ECO-LINE-EEI² - XS MF 20	20 kW (MF)	40	12	340 x 560 x 800	50
ECO-LINE-EEI² - XS MF 30	30 kW (MF)	63	12	340 x 560 x 800	50
ECO-LINE-EEI² - S MF 20	20 kW (MF)	40	12	590 x 560 x 800	50
ECO-LINE-EEI² - S MF 30	30 kW (MF)	63	12	590 x 560 x 800	50
ECO-LINE-EEI² - M MF 50	50 kW (MF)	100	29	770 x 560 x 800	120
ECO-LINE-EEI² - M MF 70	80 kW (MF)	160	27	770 x 560 x 800	120
ECO-LINE-EEI² - M MF 80	75 kW (MF)	160	29	770 x 560 x 800	120
ECO-LINE-EEI² - XL MF 100	100 kW (MF)	200	37	1170 x 560 x 800	170
ECO-LINE-EEI² - XL MF 150	150 kW (MF)	315	50	1170 x 560 x 800	20
„:2"– Two outputs, simultaneous symmetrical heating					
ECO-LINE-EEI² - S MF 15 :2	15 MF (7,5 kW per coaxtrafo)	32	50	590 x 560 x 800	60
ECO-LINE-EEI² - S MF 20 :2	20 MF (10 kW per coaxtrafo)	35	20	590 x 560 x 800	60
ECO-LINE-EEI² - S MF 30 :2	30 MF (15 kW per coaxtrafo)	63	20	590 x 560 x 800	60





MF 5 – 150 kW

Type Rated power	Rated Capacity 100% ED kW	Mains Connections at 400V, 50Hz A	Required cooling water without inductor l/min	Dimensions H x W x D mm	Weight Generator kg
„2A" – Two outputs, heat in sequence					
ECO-LINE-EEi² - S MF 5 2A	5 kW (MF)	10	50	590 x 560 x 800	60
ECO-LINE-EEi² - S MF 10 2A	10 kW (MF)	20	50	590 x 560 x 800	60
ECO-LINE-EEi² - S MF 15 2A	15 kW (MF)	32	50	590 x 560 x 800	60
ECO-LINE-EEi² - S MF 20 2A	20 kW (MF)	40	50	590 x 560 x 800	60
ECO-LINE-EEi² - S MF 30 2A	30 kW (MF)	63	50	590 x 560 x 800	100
ECO-LINE-EEi² - M MF 50 2A	50 kW (MF)	100	30	770 x 560 x 800	130
ECO-LINE-EEi² - M MF 75 2A	75 kW (MF)	160	30	770 x 560 x 800	130
ECO-LINE-EEi² - XL MF 100 2A	100 kW (MF)	200	50	1170 x 560 x 800	200
ECO-LINE-EEi² - XL MF 150 2A	150 kW (MF)	315	55	1170 x 560 x 800	200
„x2"– Two outputs, heat simultaneously and independently of each other					
ECO-LINE-EEi² - M MF 5 x2	2 x 5 kW (MF)	20	50	770 x 560 x 800	130
ECO-LINE-EEi² - M MF 10 x2	2 x 10 kW (MF)	32	50	770 x 560 x 800	130
ECO-LINE-EEi² - M MF 15 x2	2 x 15 kW (MF)	63	50	770 x 560 x 800	130
ECO-LINE-EEi² - M MF 20 x2	2 x 20 kW (MF)	80	50	770 x 560 x 800	130
ECO-LINE-EEi² - M MF 30 x2	2 x 30 kW (MF)	125	50	770 x 560 x 800	130
ECO-LINE-EEi² - XL MF 50 x2	2 x 50 kW (MF)	200	50	1170 x 560 x 800	150
ECO-LINE-EEi² - XL MF 75 x2	2 x 75 kW (MF)	315	50	1170 x 560 x 800	250

ECO-LINE EEi² XS 15 MF

ECO-LINE EEi² 75 MF

ECO-LINE EEi² L 75 MF 2A

ECO-LINE EEi² – Specifications

Intuitive handling with EEi² touch-screen

Power, frequency, current and voltage display

Control modes: power, temperature (PID)

Operation modes: Continuous, Tap, Timer

SIEMENS PLC, safety controller from Pilz

8 different timers, each min. 0.1 sec. to max. 9,999 sec. running time

Recipe management memory: up to 500 recipes

Housing in protection class IP20

Sensor signals for temperature detection 4-20 mA

External control and data exchange via Profinet interface

Flow and temperature monitoring of various water circuits

Short-circuit and open-circuit proof IGBT transistor technology

Automatic adaptation to resonance frequency

Circuit topology with electrical isolation

Precise energy output due to power setting in 1% steps

Energy transmission via flexible hose package 5 m (MF) and 3 m (HF)

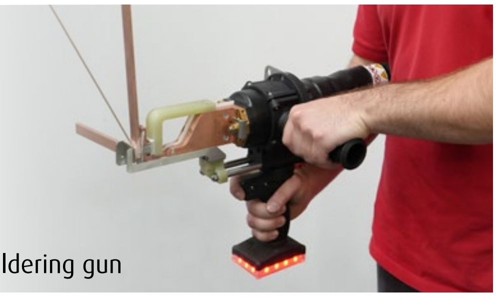
Temperature and volume flow monitored fluid circuits with alarm function

Automatic adaptation and power regulation by pulse width modulation (MF) and pulse packet control (HF), even when exceeding the Curie temperature

Interfaces & connections: Pyrometer, foot switch, foot pedal, emergency stop 1-channel, re-cooling system, 24V, signal lamp 4 coloured.

Inverter efficiencies > 95% (depending on operating condition)

Cable box with glow cable
for heat shrink applications



Heat Controller
as mono configuration with soldering gun

ECO-LINE EEI^{2} – Options

Control type: Current

Heat controller usable

Special coating possible

Foot pedal and/or foot switch

Pyrometer (single and multiple)

Mains voltage 200 V, 480 V. Others on request

Annealing cable (connection via cable box or directly)

Energy transmission via flexible hose package up to 15 m (MF) and 5 m (HF)

Adjustment range extension through serial / parallel switching (manual or automatic)

Profibus, EtherCat, other fieldbuses on request

Emergency stop 2-channel to external

Quick-change device coax / cable box

Adjustment range extension through switchable second frequency band

UL standard optionally available

eQC Moduls: eSM earth fault, ePM flux, ePM energy & eSM RFID

Remote maintenance

Temperature curves (100 pcs.)

Separate inductor cooling water supply

Quick coupling for cooling water connections

Protection option for your generator: the Heavy Duty Field Case (HDFC):

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AR-based Service

With our AR glasses, you are directly in contact with our service specialists at the machine. Quick fault diagnosis and repair saves time, costs, and gets your machine up and running again as quickly as possible.

For more information, please contact our service colleagues in Dornstetten, see contacts above