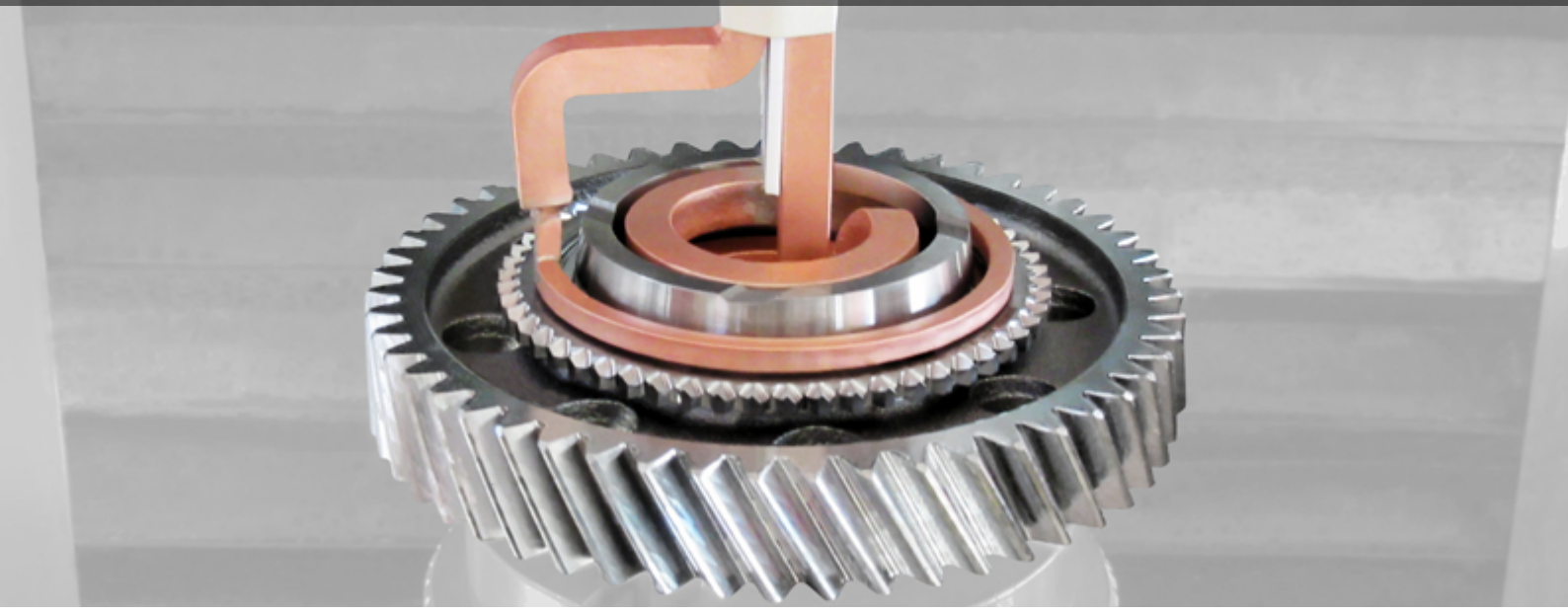
Induction Heating · Hardening · Tempering · Brazing · Preheating · Shrinking · Postheating

eldec

ENERGY efficient


# eldec SYSTEM LINE



## eldec SYSTEM LINE – Full integration

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# SYSTEM LINE – Full Integration Into Machines and Fully Automated Systems

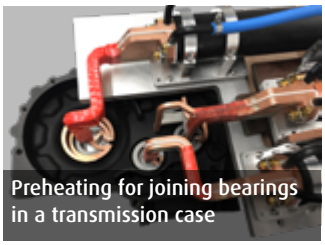
SYSTEM LINE induction generators are designed to be integrated into complete systems. Therefore, these energy sources do not have a user interface display. Their control and visualization systems are integrated into a cell controller for the complete system (for example, an assembly system).

A SIEMENS PLC with Profinet, Profibus and, upon request, other fieldbus systems is available to connect them. A password-protected web server interface means that the initial configuration can be completed easily by using the Ethernet interface. The operating parameters, such as error messages, water flow rates, current and voltage display, as well as power and frequency, can be displayed using the web server.

Protection and safety functions can be integrated right away. The eQC (eldec quality control) modules enable a wide range of process parameters to be recorded and processed.

SYSTEM LINE series devices are available with a wide range of options and output versions. For example, SYSTEM LINE generators are also available in 2A form (two outputs, heating sequentially), x2 form (two outputs heating simultaneously and independently of each other) and :2 form (heating simultaneously and symmetrically).


Preheating for welding


Preheating for joining bearings in a transmission case


Preheating for inserting a stator into a housing

| Type / Nominal rating | Power connection ± 10 % 50/60Hz | | Cooling water consumption without inductor | Dimensions / Weight Generator* | |
|---|---|---|---|---|---|
| | V | A | l/min | W x H x D mm (in) | kg |
| SYSTEM LINE-M MFG 5 | 3 x 400 | 10 | 19 | 550 x 790 x 800 (22 x 31 x 31) | 40 |
| SYSTEM LINE-M MFG 10 | 3 x 400 | 20 | 19 | 550 x 790 x 800 (22 x 31 x 31) | 40 |
| SYSTEM LINE-M MFG 15 | 3 x 400 | 32 | 17 | 550 x 790 x 800 (22 x 31 x 31) | 45 |
| SYSTEM LINE-M MFG 20 | 3 x 400 | 35 | 24 | 550 x 790 x 800 (22 x 31 x 31) | 60 |
| SYSTEM LINE-M MFG 30 | 3 x 400 | 63 | 24 | 550 x 790 x 800 (22 x 31 x 31) | 60 |
| SYSTEM LINE-M MFG 50 | 3 x 400 | 100 | 30 | 550 x 790 x 800 (22 x 31 x 31) | 90 |
| SYSTEM LINE-M MFG 75 | 3 x 400 | 160 | 35 | 550 x 790 x 800 (22 x 31 x 31) | 100 |
| SYSTEM LINE-L MFG 100 | 3 x 400 | 200 | 44 | 550 x 970 x 800 (22 x 31 x 31) | 135 |
| SYSTEM LINE-XL MFG 150 | 3 x 400 | 315 | 50 | 550 x 1,180 x 800 (22 x 46 x 31) | 180 |
| SYSTEM LINE-M HFG 5 | 3 x 400 | 10 | 12 | 550 x 790 x 800 (22 x 31 x 31) | 50 |
| SYSTEM LINE-M HFG 10 | 3 x 400 | 20 | 12 | 550 x 790 x 800 (22 x 31 x 31) | 50 |
| SYSTEM LINE-M HFG 15 | 3 x 400 | 32 | 12 | 550 x 790 x 800 (22 x 31 x 31) | 50 |
| SYSTEM LINE-M HFG 20 | 3 x 400 | 35 | 19 | 550 x 790 x 800 (22 x 31 x 31) | 90 |
| SYSTEM LINE-M HFG 30 | 3 x 400 | 63 | 19 | 550 x 790 x 800 (22 x 31 x 31) | 90 |
| SYSTEM LINE-XL HFG 50 | 3 x 400 | 100 | 28 | 550 x 1,180 x 800 (22 x 46 x 31) | 130 |
| SYSTEM LINE-XL HFG 75 | 3 x 400 | 160 | 38 | 550 x 1,180 x 800 (22 x 46 x 31) | 150 |

**MF** Rating: 5–150 kW
**HF** Rating: 5–75 kW

**MF** Frequency range: 10–25 kHz
**HF** Frequency range: 140–350 kHz

Other frequency ranges available on request

* Dimensions and weight may differ depending on equipment features (options).

## Range of functions, equipment and options

Industrial safety and high availability are important to us. Therefore, the devices come with that familiar eldec quality. The cooling water and cooling element temperature, as well as the generator and inductor cooling water temperatures, are also monitored continuously.

**Equipment:**
- Siemens PLC
- Control via Profinet from a higher level controller
- Control types: power, current and temperature using a pyrometer
- Web server interface for initial configuration and operating parameter visualisation, such as error messages, water flow rates, current and voltage display, as well as power and frequency
- Enclosure type IP21

**Options:**
- eldec Quality Control: eQC Energy Control, eQC Earth Fault and eQC Process Data supply
- Hose package up to 15 meters in length, for MF generators only
- Mains voltage 200 V, 380 V, 400 V, 480 V, 560 V
- Frequency switchover, for example 8–20 / 16–40 kHz
- Profibus interface
- Integration of safety equipment (for example, safety door, etc.)
- Cooling systems are passive or active, tailored to the generator and application
- All MF generators are available with a short-term power increase, e.g., MFG 50 (80) to 80 kW, on request and for an extra charge.



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