

## Electrical E 100 – 120 M

steam capacity 135 / 160 kg/h



Steam generators JUNIOR TC series		
Size	Steam capacity kg/h	Method of combustion
1	80 – 120	Oil or gas
2	150 – 200	Oil or gas
3	250 – 400	Oil or gas

Steam generators UNIVERSAL TC series		
Size	Steam capacity kg/h	Method of combustion
4	500 – 600	Oil, gas or combination
5	700 – 850	Oil, gas or combination
6	1000 – 1300	Oil, gas or combination
7	1500 – 1800	Oil, gas or combination

Steam generators ELEKTRO E 6 – 72 M series		
Size	Steam capacity kg/h	Method of heating
One size	8 – 97	Electrical 6 – 72 kW



**CONTAINER STEAM SYSTEM**  
Completely equipped and ready to operate



**CVE**  
Supply unit as complete ready-to-operate boiler housing installation  
In addition: Water softening equipment, measuring equipment



**CERTUSS EXHAUST GAS HEAT EXCHANGERS**  
CERTECON for Junior 80 – 400 as well as CERTECON and ECO SPI for Universal 500 – 1800



**DESALINATION HEAT EXCHANGER**  
Heat recycling from the desalination condensate to heat feed water  
Reduction of the amount of cooling water at steam systems with mixing heat exchangers when waste water cooling is required



## Electrical E 100 – 120 M at a glance

### Operator convenience

- + Easy-to-service compact device, easy to operate
- + Optionally with supply unit for water conditioning and waste water cooling

### Efficiency

- + Only few minutes start-up time
- + Fully electronic pressure and output control, immediate load adjustment
- + Electrical heating rods of stainless steel
- + Constant network load without consumption peaks

### Operation and installation

- + Low space requirement, robust heavy-duty model – like all CERTUSS steam generators
- + Can be installed in work areas
- + No permit required for installation and use in Germany
- + Fully automatic operation by means of integrated clock timer or remote pulse (with supplementary equipment)
- + Automatic blow down\*
- + Automatic desalination

### Safety and quality

- + Function and malfunction indications can be linked to PLC/central control system provided by customer
- + Series fabrication within the total CERTUSS program
- + Customer service standby 24 hours a day, 365 days a year
- + Spare parts supply guaranteed for 20 years
- + On request, all boiler parts made of stainless steel for pure steam production



### E 100 – 120 M: a genuine CERTUSS

The electrical steam generator E 100 – 120 M is a genuine CERTUSS - meaning rapid heat-up time, low space requirement, easy to service, low loss, immediate output adjustment. In accordance with the European Pressure Equipment Directive 2014/68/EU the E100 is classified as Category III with a product of the water contents (l) x maximum permissible steam pressure (bar) < 1000. It has been tested in accordance with the EC type examination. The steam generator E 100 – 120 M has less-restricted conditions for installation and operation in the EC member states. In Germany it does not require supervision and approval by TÜV.

### E 100 – 120 M: small, complete and safe

The E 100 – 120 M is a complete, ready-to-operate, electronically controlled steam generator with built-in feed water tank and feed water pump as well as dual implementation of safety devices for pressure and temperature. Only the disposal and supply lines are to be installed by the customer.

Control is carried out by means of a multifunction display, with all the functions and malfunctions being shown in plain text.

The desired operating steam pressure can be adjusted continuously between 4 bars and the maximum steam pressure (6, 10 or 12 bar).

All the operating and fault indications can be passed on to a central control system provided by the customer

### E 100 – 120 M with "Thermotimat": fully automatic operation

With "Thermotimat" as supplementary equipment, fully automatic start and shutdown operation by means of an

## Electrical E 100 – 120 M in detail

integrated weekly clock timer or customer-provided external pulse from machines, PLC, remote controllers, etc. is possible.

### Automatic desliming device

The steam generator E 100 – 120 M can additionally be equipped with an automatic desliming device that automatically deslimes the pressure system after each manual shutdown or in automatic operation.

### Automatic desalination

A device for fully automatic desalination, that is time-dependent, is included as standard.

### Electronically controlled electrical heating

Heating is carried out by means of a compact heating element with a large heating surface whose heating output is adjusted continuously by means of a pressure sensor, distributed amongst three electronic power contactors. A standard installed, manually operable power selector switch can be used to limit the heating output to 1/3 or 2/3 of the load.

### CERTUSS oil/gas steam generators in 7 sizes

CERTUSS steam generators with oil, gas or combination heating are available for all requirements in seven sizes in the Junior and Universal series from 80 to 1800 kg/h steam output (see table on the back). Can also be used as battery systems for economic and operationally reliable steam supply.

Technical Data E 100 – 120 M		Measurements, weights and further values are rounded up or off. Indicated pressure are overpressure values. Output values stated are related to 10°C feed water temperature and 0.6 MPa (6 bar) steam overpressure. Delivery complete incl. stainless steel feed water tank. Rights reserved for technical alterations.	
Steam output	kg/h	135	160
Heat output	kW	100	120
Electrical connection	kW	105	125
Operating voltage	V/50 Hz	3 x 400, different voltage on request	
Admissible pressure	MPa (bar)	optional equipment 0.6 / 1.0 / 1.2 (6 / 10 / 12 bar)	
Working press. max.	MPa (bar)	0.5 / 0.8 / 1.0 (5 / 8 / 10 bar)	
Water capacity	l	38.8	
Measurements A x B x C	mm	1925 x 1005 x 800	
Empty weight approx.	kg	415	
Connections	DN	water vapors 1" / feed water 1/2" / steam 1/2" / SV-blow-off line 1" / condensate 3/4"	
Regulations	Germany	Boiler group III (PSxV<1000) does not require permit for installation, approval and TÜV monitoring	

\* Supplementary equipment.

**We reserve the right to make technical modifications.**