



Type 7120 Electric Steam Generator

For steam generation

Application

Electric steam generator with 300 kW for steam generation.

The electric steam generator with a 300 kW rating is a standard ready-to-use unit.

Complete boiler rooms with a rating of up to 900 kW can be implemented by using tailor-made accessories (e.g. SAMSON Type 7124, Type 7127 and Type 7128).

The Type 7121 Electric Steam Generator with up to 90 kW rating exists for lower steam outputs. We recommend the Type 7129 Electric Steam Generator with up to 1 MW rating for outputs greater than 900 kW.

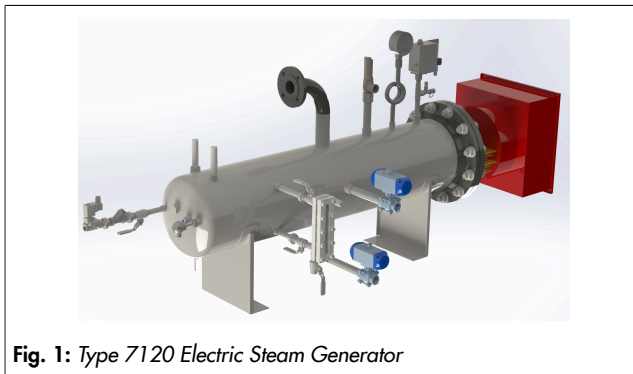


Fig. 1: Type 7120 Electric Steam Generator

Special features

- Directly available steam supply
- Flexible and scalable heating and steam supply to meet different requirements
- No primary energy transfer medium (oil or gas)
Eco-friendly steam generation when operated with green power
- Turnkey solution
- Integration into the process automation
- Compact design with an extremely high power density
- Excellent energy efficiency
- Little installation work required
- Low cost of operation and maintenance
- Including switching/power cabinet
- Up to three 300 kW generators can be combined into a system

Versions of the Type 7120 Electric Steam Generator

Versions

300 kW heating power · Design pressure up to max. 12 bar(a)
· Operating pressure up to max. 11 bar(a) · Operating temperature up to max. 184 °C

Special versions

Our solution with the Type 7128 Boiler Room allows you to use up to three electric steam generators in combination with the following cost-effective, ready-to-use accessories:

- Type 7127 Boiler Feedwater System
- Type 7124 Blowdown Vessel
- Or a water treatment unit

Fields of application

Steam is an important utility required in various industries.

For generation of small to medium steam output as stationary units, SAMSON offers high-performance electric steam generators with 300 kW heating power. In comparison with conventional steam generators, fully electric steam generators are better suited to meet a varying steam demand in processes due to the fast start-up and flexible control of steam temperature and output. Furthermore, electric steam generators have a much higher efficiency.

Electric steam generators are highly versatile for use in a wide range of applications. They help maximize the efficiency and cost-effectiveness of processes (see Fig. 1).

Accessories

Accessories for operation of up to three 300 kW steam generators:

- Type 7127 Boiler Feedwater System
- Type 7124 Blowdown Vessel
- Type 7128 Boiler Room

Table 1: Fields of application

Automotive industry <ul style="list-style-type: none"> Parts cleaning Shaping of plastic pipes in steam-pressure bending stations 	Construction industry <ul style="list-style-type: none"> Clean-up of contaminated sites Wood processing Concrete works Glass and ceramic industry 	Chemicals and petrochemicals <ul style="list-style-type: none"> Processing and recovery of fats, oil and grease Mineral oil refining Tank cleaning
Service business <ul style="list-style-type: none"> Dry cleaning Disinfection Hotels Hospitals Saunas Textile processing 	Luxury foods industry <ul style="list-style-type: none"> Distilleries Chocolates Confectionery Tobacco products Tee and coffee 	Beverage industry <ul style="list-style-type: none"> Breweries Soft drinks Fruit juices Mineral water springs
Textile industry <ul style="list-style-type: none"> Dyeworks Leather processing Recycling Textile printing Weaving mills 	Food industry <ul style="list-style-type: none"> Meat Industry Dairies Bakeries Mills Refineries 	Other industries <ul style="list-style-type: none"> Aviation and shipping Surface treatment

Table 2: Main properties and data

Type 7120 Electric Steam Generator		
Rating		300 kW
Operating pressure (steam generator)		11 bar(a)
Design pressure (boiler)		12 bar(a); Operating pressure 1 bar below the design pressure
Permissible operating temperature		-10 to +184 °C
Rated volume		114.5 l
Voltage		400 V, three phase, 50 Hz
Amperage		435 A
Steam output		400 kg/h
Material	Boiler	Stainless steel
Design basis		DIN EN 12953, DIN EN 14222, DIN EN 12952, PED 2014/68/EU
Weight, approx.	Boiler unit	300 kg

The SAMSON Type 7121 Steam Generator is suitable for generation of small steam output and mobile use. The Type 7129 is to be used for larger outputs.

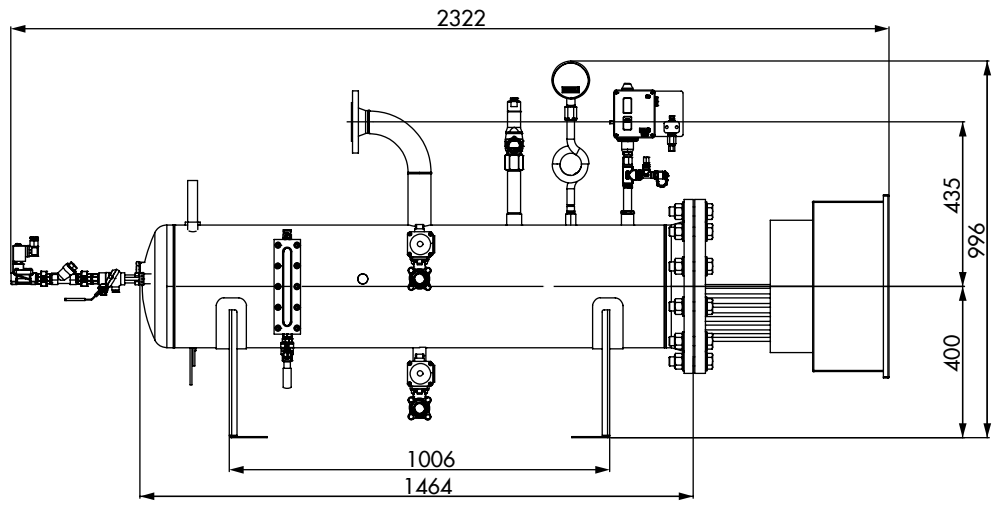


Fig. 2: Type 7120 Electric Steam Generator · Dimensions

RFQ Form

Type 7120 Electric Steam Generator



Customer data	
Company	
Address	
Name	
Phone number	
E-mail	
Send your inquiry to your regional SAMSON contact or e-mail it to ► systems-de@samsongroup.com.	
Operating data	
Operating temperature	Max. 184 °C
Max. power	300 kW
Max. steam output	400 kg/h
Feedwater pressure	bar(g)
Options	
Type 7127 Boiler Feedwater System	Type 7124 Blowdown Vessel
Type 7150 Pressure Control System (steam output)	Type 7128 Boiler Room
	Pneumatic Without auxiliary power
	Electric
Control valve (steam outlet)	Pneumatic Without auxiliary power
	Electric
On/off valve (steam outlet)	Pneumatic
	Electric
Comments	