# **Product Specification**

## GSS67H Steam Sterilizer

## **Application**

Backed by more than 100 years of experience, Getinge's global reach and extensive installed base, provides us with the knowledge to assist our customers in planning for optimal and efficient workflows. In this way we help you maximize throughput and provide solutions for efficient production. With our premium equipment, project management, logistics, signature service, and training, you can count on Getinge – right from the start.

The Getinge GSS67H Steam Sterilizers are automatically controlled, high performance steam sterilizers built with the latest technology and highest grade materials. The Red Dot Award winning user interface Centric is intuitive and user friendly.

The sterilizer design includes stainless steel chamber, door, piping and components, and is designed to facilitate easy cleaning and service.



## **Quality Statement**

Confidence in the Getinge group is the most important quality criteria. This is the hallmark of all our external and internal commitments, activities and products. Products and services supplied by Getinge conform to the agreed terms and expectations. The achievement of these quality goals is the basis for continued competitive and successful enterprise.

## **Intended Use**

The sterilizer is intended to sterilize medical items suited for high-pressure steam sterilization.

For further details, see User Manual.

## **Order information**

## **About this form**

This part of the document is an order form. Mark your selections

- = Standard selection (included in base price)
- = Optional selection (not included in base price, additional cost)

## Chamber volume and size

	Inner Dimensions	Chamber Volume	(Nominal Internal)
GSS Conf.	WxHxD	Single Door	Double Door
67H10	660 x 700 x 1000 mm	481 L	468 L
67H13	660 x 700 x 1300 mm	621 L	609 L
67H17	660 x 700 x 1700 mm	809 L	796 L
67H20	660 x 700 x 2000 mm	-	937 L

## Capacity

GSS Conf.	STU	ISO	SPRI
67H10	6	6	6
67H13	8	9	9
67H17	10	12	12
67H20	12	12	12

1 STU = 600 x 300 x 300 mm 1 ISO = 600 x 400 x 200 mm 1 SPRI = 585 x 395 x 195 mm

### Installation

GSS67H is designed to cover a wide range of customer requirements concerning installation of the sterilizer.

#### **Number of doors**

Single door (n/a for 67H20)

Double door (pass through configuration)

#### **Installation options**

GSS67H is installed recessed into wall(s) as standard.

XZMM000001 Cabinet Enclosure (single door).

XZMM000002 Mixed. Recessed into wall on non-control side and a cabinet on the control side (double door).

GSS67H is serviced from left side as seen from control side as standard.

XZMM000003 Right side service.

The vacuum pump on GSS67H is placed within the sterilizer cabinet.

XZMM000004 Remote located vacuum pump. Up to 15 m away from the sterilizer, on the same floor or below.

### Other installation options

XZMM000005 Wheels for installation. To move the sterilizer into place during installation.

XZMM000006 Drip tray. A tray to collect water or condensate underneath the sterilizer.

XZMM000007 CCB HC. The CCB is an air pressure differential seal designed to prevent cross-contamination between classified zones of the facility and to keep an air differential pressure between zones. CCB and control cabinet cannot be placed on the same side.

Control side

Non-control side

### Electrical cabinet service access

Control side. Access from front, packing area (only applicable with side mounted operator panel)

Non-control side. Access from front, sterile area (only applicable for double door and side mounted operator panel)

Access from service area (side- and top mounted operator panel):

Sideways fallback. Placement on control side.

Backwards fallback. Placement on control side.

Sideways fallback. Placement on non-control side.

Backwards fallback. Placement on non-control side.

### **Process and Instrumentation**

GSS67H sterilizers can be configured to meet many different process needs. It is provided with fascia mounted pressure (vacuum) gauges for chamber and jacket on control side and for chamber on non-control side. It is also provided with temperature sensors for chamber (process control), jacket and load (when applicable) as well as pressure sensor for the chamber. An abort button will end the program and take the machine to a safe state.

## **Steam Supply**

GSS67H is configured for connection to a building (central) steam supply as standard.

Integrated electrical steam generator. An automatic, electrically heated steam generator mounted under the sterilizer chamber. The steam generator pressure vessel is made of stainless steel.

Integrated steam-to-steam converter. An automatic, steam-heated steam generator mounted under the sterilizer chamber. The steam generator pressure vessel is made of stainless steel.

XZMM000013 Combined Central steam/integrated electrical steam generator.

Note! Automatic blowdown of generator is always included with integrated steam generator.

XZMM000014 Sample cooler. This option equips the sterilizer with a clean steam sample cooler for test of steam quality.

XZMM000049 Stainless steel safety valve.

### Steam Supply options for Central Steam

XZMM000015 Condensate return. This option provides the sterilizer with a non-product contact steam condensate return connection (Maximum lift is 5m/16.4ft).

Note! Also applicable for central steam provided for integrated steam-to-steam converter.

XZMM000016 Automatic shut-off valve. A valve to automatic shut off incoming steam when sterilizer is turned off.

XZMM000017 Pressure Reduction Valve (Brass) for incoming steam.

XZMM000018 Pressure Reduction Valve (Stainless Steel) for incoming steam.

Incoming steam pressure above 3.5 Bar (g). Only applicable for EU and China.

#### Steam Supply options for Integral Steam generator

XZMM000019 Degassing filter. Option to reduce non-condensable gases from the feed water for the steam generator. This option is recommended to fulfill EN285 and also in combination with Air Detector and/or Steamcheck.

Note! Maximum feed water temperature is 40 °C.

XZMM000053 Degassing Tank. Option to reduce non-condensable gases from the feed water for the steam generator. This option is recommended to fulfill EN285 and also in combination with Air Detector and/or Steamcheck

Note! For feed water temperature above 40 °C.

#### **Water Saving options**

GSS67H is equipped with a connection to potable water for the internal cooling system as standard.

To reduce water consumption the following options can be chosen:

XZMM000020 Chilled water recirculation. The sterilizer is equipped with a connection to a chilled water recirculation loop for cooling to reduce potable water consumption by as much as 95%. The chilled water recirculation loop is not supplied.

XZMM000021 Air cooler. The sterilizer is equipped to use an air cooler for cooling to reduce potable water consumption by as much as 75 - 80%. Not available for 67H20.

#### **General Process and Instrumentation options**

XZMM000022 Air detector surveillance. The air detector is surveilling that non-condensable gasses are not retained or introduced into the sterilizer during the air removal and steam admission phases. For testing the performance of the air detector, the sterilizer is equipped with a program, which automatically tests the function.

XZMM000054 Steamcheck. Steamcheck detects Non-Condensable Gases (NCG) in the steam sterilizer. It can be combined with the start-up cycle and will then be performed automatically when starting the sterilizer. Steamcheck can also be initiated manually after the warm-up cycle or at any time during the day provided the chamber is pre-heated.

XZMM000023 Media consumption report. Option to monitor consumption of water, steam and energy during a process. The values are also printed on the process report.

XZMM000024 C14 Gauge Package. Additional gauges in service area and power socket for UK.

XZMM000025 Media alarm in case of loss of air, steam and water.

## **Sterilization Programs**

M4111 Program combination. The sterilizer is equipped with a set of pre-programmed programs. The six (6) included programs are:

- P1. Sterilization of wrapped solid and hollow instruments, textiles, porous load (134 °C). Type tested program for sterilization of medical devices, e.g. textiles, utensils.
- P2. Sterilization of wrapped, heat sensitive solid and hollow goods, rubber, plastic, porous load (121 °C). Type tested program for sterilization of medical devices.
- P3. Rapid process for unwrapped solid single instrument (134 °C). A rapid process for e.g. single, non-wrapped instruments. The program can also be used to warm up the sterilizer before daily use or leak test.
- P4. Bowie & Dick Test. A test program adapted to the worldwide standard for chemical indicators EN ISO 11140-1 for control of the air removal & steam penetration of the sterilizer program.
- P5. Leak rate test. The sterilization process is sensitive to residual or ingress of air into the chamber. If the chamber is not leak-tight, sterilization efficacy may be impaired. Getinge sterilizers are equipped with a fully automatic leak test process to confirm tightness of the chamber and process piping.
- P6. Sterilizer start-up. A program to warm up the sterilizer before daily use or leak test. This program is using Autostart function where start time is set beforehand.

The included sterilization processes P1 & P2 have a number of post treatment options which can be fully adapted by the end user to existing goods and local conditions, to achieve an optimal drying result.

 $\label{eq:main_model} \textbf{M4211 Program combination (XZMM000047). The sterilizer is equipped with a set of pre-programmed programs.} \\ \textbf{The six (6) included programs are:}$ 

- P1. Sterilization of wrapped solid and hollow instruments, textiles, porous load (134 °C). Type tested program for sterilization of medical devices, e.g. textiles, utensils.
- P2. Sterilization of wrapped, heat sensitive solid and hollow goods, rubber, plastic, porous load (121 °C). Type tested program for sterilization of medical devices.
- P3. Rapid process for unwrapped solid single instrument (134 °C). A rapid process for e.g. single, non-wrapped instruments. The program can also be used to warm up the sterilizer before daily use or leak test.
- P4. Bowie & Dick Test. A test program adapted to the worldwide standard for chemical indicators EN ISO 11140-1 for control of the air removal & steam penetration of the sterilizer program.
- P5. Leak rate test. The sterilization process is sensitive to residual or ingress of air into the chamber. If the chamber is not leak-tight, sterilization efficacy may be impaired. Getinge sterilizers are equipped with fully automatic leak test process to confirm tightness of the chamber and process piping.

- P6. Sterilization of open liquids (121 °C). A process to sterilizer liquids in open or vented containers. Not intended for sterilization of liquids used on patient.
- P22. Sterilizer start-up. A program to warm up the sterilizer before daily use or leak test. This program is using Autostart function where start time is set beforehand.

The included sterilization processes P1 & P2 have a number of post treatment options which can be fully adapted by the end user to existing goods and local conditions, to achieve an optimal drying result.

Note! Liquid programs are not intended for sterilization of liquids used on patient.

## **Optional Sterilization Programs**

#### The sterilizer can be equipped with the following set of pre-programmed programs:

XZMM000043 Heavy load sterilization of solid wrapped goods (134 °C). Type tested program for sterilization of medical devices, e.g. textile. Pre-configured with steam pulses for better drying.

XZMM000044 Multiple sterilization for specific goods requiring 134 °C for 18 minutes. Please note that this program is a genereal purpose program, to be configured according to local requirements and regulations.

XZMM000046 Sterilization of wrapped Silicone prosthesis (121 °C). For sterilization of various silicone articles.

XZMM000045 Sterilization of wrapped optical instruments (134 °C). A program, specially designed to sterilize optical instruments and rigid endoscopes.

XZMM000048 Heat treatment (98°C). For heat treatment of e.g. agar or other media. Not applicable for M4111.

XZMM000051 Plastic pieces (134°C). Program for sterilization of ophthalmic surgical instruments e.g. phaco hand pieces and similar goods with lumen suited for steam sterilization

Note! It is the responsibility of the user to ensure that the sterilization of processed goods is carried out successfully.

**Note!** The manufacturer of the medical device to be sterilized is responsible for specifying the applicable sterilization method according to ISO EN 17664.

#### Mechanical

Getinge's hardware and mechanical systems are the result of extensive experience and detailed design. The sterilizer chamber and door plate are made from solid, high quality, EN 1.4404 / ASTM 316L stainless steel. Internal surfaces are highly polished to facilitate cleaning. The internal corners are radiused (also to aid cleaning) and the chamber floor slopes to a central drain. A stainless steel mesh strainer protects the drain port from blockage by debris as well as protecting the components in the drain line. The sterilizer chamber is completely insulated with a 30–80 mm chloride free mineral wool, encased in rigid sheet aluminum housing. The chamber is as standard mounted on a corrosion protected framework with adjustable feet.

The door is fully automatic in operation and is raised and lowered by a pneumatic cylinder. Door operation is controlled via the operator touch panel. A mechanical safety edge stops the door if it is obstructed while closing, thus protecting the operator and loading equipment. The door is automatically sealed, with safety interlock (for double door units). The door seal is a silicon rubber 'O' ring. On commencement of a process, the gasket is pressed against the rear face of the door by compressed air. At the end of the process, the seal is retracted by vacuum and the door on the unloading side is opened for unloading.

The front fascia of the sterilizer is also made from stainless steel. The fascia is designed in a hygienic way to support cleaning. It is designed to avoid pockets or other places where it could be difficult to clean.

A highly efficient two-stage type liquid ring vacuum pump is provided to effectively remove air from within the chamber. Process valves are pneumatically operated piston valves for extended life and limited maintenance. Safety valves are provided according to pressure vessel codes and local regulations. Standard Process and Non-Process Piping consist of Stainless Steel and automatic valves that are connected with threaded and press fittings. The pipes are insulated with chloride free, high temperature, high density material.

Components are not insulated for easy access. The drain discharge is cooled to reduce the effluent temperature to an average of  $70^{\circ}$ C or less. An easy to replace chamber vent filter is provided as standard. The filter separation efficiency is higher than 99.995% for particle size 0.3  $\mu$ m.

#### **Mechanical options**

XZMM000026 Seismic restraints. According to California Zone 4, see specific drawing for details.

The stand is made in corrosion protected material as standard. As option the stand can be made in Stainless steel material.

XZMM000027 Stainless steel stand

## **Control System**

The G1 controller is dedicated to control Getinge sterilizers. The control system is operated via a very easy-to-use user interface, Centric. The G1 controls all system functions and monitors system operations. G1 both visually and audibly alerts the operator of program malfunctions and provides visual indication of process status. The G1 controller has a built in battery backup, that can support the controller and operator panel for up to 10 seconds in case of power loss.



#### **Operator Panels**

Control side:

As standard Getinge supply the P30 Panel. This is a 10" touch panel with the Getinge Blue Circle.

Non-control side:

As standard Getinge supply the P30 Panel. This is a 10" touch panel.

### **Monitoring and Records**

XZMM000028 Supervisor. The G1 Supervisor is an independent monitoring and documentation system. The G1 Supervisor evaluates the process independently of the Controller G1. The system also has an interlock functionality included, preventing doors from opening in unsafe state. Process data from G1 Supervisor is either printed on a paper or is enabled to be stored on the network. For GSS67H G1 supervisor is included as standard.

GSS67H has the operating panel and HMI mounted beside the sterilizer chamber (same side as service side) for ergonomically reasons as standard. Optional mounting alternative is above the sterilizer chamber.

XZMM000029 Operator panel mounted above the chamber. N/A for UK.

Process reports can be produced in many different ways to suit a facility's workflow.

XZMM000030 A4 printer. For printout of process report including process chart on a printer directly connected to the sterilizer.

2" Fascia printer. For printout of process report. Printer situated in front fascia. Pickup device always included.

Printer on control side

Printer on non-control side

XZMM000032 4" Fascia printer. For printout of process report including process chart. Printer situated in front fascia. Pick-up device always included.

Printer on control side

Printer on non-control side

XZMM000033 Enabling network printing. For printout of process report including process chart.

For network printing, Lexmark printers are recommended. One printer per order is needed, please chose option XZMM000030 above.

XZMM000034 Enabling network storage. Generating a process report in PDF format.

XZMM000035 Extra loud audio notification. 80 dB alarm and process ready notification.

XZMM000036 User authentication via RFID. RFID reader on control. Using a RFID tag to authenticate the user eliminates the need to enter user ID and password when there is need to secure only authorized personnel performing certain tasks.

XZMM000037 Multilanguage. Enabling possibility to use different language on operator panel and process report. Make your choice in the Language section.

XZMM000038 USB port on (select one of below options):

Control side

Non-control side

## **Electrical**

## **Power Supply**

50Hz	60Hz
200V	200V
208V	208V
220V	220V
230V	230V
240V	380V
380V	400V
400V	415V

## Language

Operator displays and operator manuals are available in a selection of languages. Other information and manuals are in English. See XZMM000037 Multilanguage.

Tick your selections in the check boxes below, English is default:

A - Display and manuals

B - Process report

A B A B

Chinese Bulgarian Czech Croatian Danish Dutch English Estonian Finnish French German Greek Icelandic Hungarian Italian Japanese Korean (Operator Manuals only) Latvian

Lithuanian Macedonian (Operator Manuals only)

Norwegian Polish

Portuguese - Brazil Portuguese - Europe

Romanian Russian
Serbian Slovak
Slovene Spanish
Swedish Turkish

Ukrainian (Operator Manuals only)

## **Directives, Standards & Codes (HC)**

Getinge sterilizers comply with the applicable requirements such as current versions of directives and standards:

93/42/EEC Medical Device Directive as amended by Directive 2007/47/EC

2014/68/EU Pressure Equipment Directive

2011/65/EU Restriction of Hazardous Substances Directive
2012/19/EU Waste Electrical and Electronic Equipment Directive

EN ISO 13485 Medical Devices – Quality management systems – Requirements for regula-

tory purposes.

EN ISO 14971 Risk Management for Medical Devices

EN 285 Sterilization – Steam sterilizers – Large sterilizers

EN/IEC 61010-2 – 040 Safety requirements for electrical equipment for measurement, control and

laboratory use - Part 2-040: Particular requirements for sterilizers and wash-

er-disinfectors used to treat medical materials.

EN 61326-1 Electrical equipment for measurement, control and laboratory use

EN 62304 Medical Device Software - Software life cycle processes

International and National Standards Other applicable regulations and standards for sterilizers at the country of

intended installation

## **Ventilation Requirements**

The delivered crate or case is intended to be used for transport and short term storing.

Requirement	Range
Temperature	5 to 40 °C (41 to 104 °F)
Relative humidity	Max 80% for temperatures up to 31°C (88°F), then a linear
	decrease to a maximum of 50% by 40°C (104°F)

These requirements apply to all work areas, including the service area.

When unloading after a sterilization, the goods emits heat that adds to the ventilation needs of the work area. This heat emission is not stated in the document "Technical Data Sheet".

Note! Moisture and temperature outside the specified range can damage equipment and lead to harm to users.

For cabinet models there shall be a space of a minimum of 10 cm (4 inches) between the floor and the bottom of the cabinet claddings for ventilation purposes.

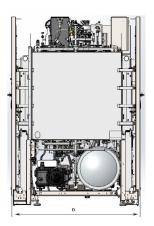
## Storing the Sterilizer in a Crate/Case

The delivered crate or case is intended to be used for transport and short term storing.

The sterilizer must be stored and shipped in a temperature between -18 $^{\circ}$ C and 60 $^{\circ}$ C (0 $^{\circ}$ F and 140 $^{\circ}$ F) and at a relative humidity between 10% and 90% (non-condensing). The atmospheric pressure must range from -500m to 3690m (-1640 to 12000 ft) elevation.

## **Specification of Layout**





GSS Conf.	Instrumentation location	Width W	Height H	Loading height LH	Depth D 1 Door	Depth D 2 Doors
67H10					1330mm	1350mm
67H13	Beside	1250mm	1980mm	790mm	1630mm	1650mm
67H17	Deside	123011111	130011111	73011111	2030mm	2050mm
67H20					2330mm	2350mm
67H10					1330mm	1350mm
67H13	Above	900mm	1980mm	790mm	1630mm	1650mm
67H17	Above	30011111	136011111	730111111	2030mm	2050mm
67H20					2330mm	2350mm

This is only a rough layout drawing for general purpose. For the specific layout drawing for chosen configuration, please see Getinge document T16923.

## Loading equipment and accessories

XZMM000041 Prepared for Automatic loader.

XZMM000042 Prepared for Automatic unloader.

#### Rails for chamber:

XZMM000060 Rails for Basket 6710

XZMM000061 Rails for Basket 6713

XZMM000062 Rails for Basket 6717

XZMM000063 Rails for Shelf Rack 6710

XZMM000064 Rails for Shelf Rack 6713

XZMM000065 Rails for Shelf Rack 6717

XZMM000066 Rails for Shelf Rack 6720

Loading Equipment are separate products and therefore have their own product specifications.

See also list of approved accessories.

## Disclaimer

Do not use this product specification for installation of equipment!

We reserve the right to correct clerical errors and the right to change without notification!

## **Legal Manufacturer**

MAQUET GmbH

Kehler Str. 31

76437 Rastatt

**GERMANY** 

Phone: +49 7222 932-0

	Technical Data GSS67H											T16310 Revision 16						
		lear	Consumption/cycle <sup>2</sup>										110310	Revision	סו			
Ref <sup>1</sup>	Connection			67H10	)	6	7H13		67H17 67H20						Peak/h	Supply Condition <sup>16</sup>	Size	
			Е	1/2	1/1	E	1/2	1/1	Е	1/2	1/1	Е	1/2	1/1				
1/4¹ 3	Steam Potable Water	(kg)	6 112	9.5	12 185	6.5	11.5 188	15.5 228	7 133	13.5 205	17.5 262	8 216	15 313	21 386	80 2000	2.5 - 4.5 bar <sup>12,13</sup> 3 - 6 bar, <35°C	1" DN25 3/4" DN20	
13	Compressed Air	(l) (Nm³)	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.25	0.25	0.2	0.2	0.2	4	6-8bar	ø6mm hose	
8	Drain	(1)	118	170	197	_	200	244	140	219	280	224	328	407	3000	< 70°C	2 1/2" DN65	
	Option Condensate Return [XZMM0000	15]																
12	Condensate Return	(l)	0.5	0.6	0.7	0.7	0.85	0.95	0.75	0.95	1.05	0.9	1.15	1.4	110	max lift 5m	1/2" DN15	
	Option Chilled Water Recirculation [XZN		10	10	10	10	10	10	10	10	10	10	10	10	2000	201 250	0/4// DNI00	
3 10	Potable Water Chilled Water <sup>5</sup>	(l)	10	10	10	10	10	10	10	10	10	10	10	10	2000 5000	3 - 6 bar, < 35°C Δp > 0.5 bar	3/4" DN20 1" DN25	
10	Cooling Energy to Chilled Water System		6	9	10	6.5	10	12	7	11	14	8	12	15	200 (kW)	Δp > 0.5 bar	1" DN25	
	Option Air Cooler [XZMM000021]														, ,			
	Potable Water <sup>14</sup>	(1)	28	40	46	33	47	57	33	51	66	54	78	97	2000	3 - 6 bar, < 35°C	3/4" DN20	
_	Option Integral Electrical Steam Genera		Ι.,	0.5	10			45.5	_	40.5	47.5		45		200			
2	Feed Water Option Integral Steam to Steam General	(l)	6	9.5	12	6.5	11.5	15.5	7	13.5	17.5	8	15	21	600	3 - 6 bar, < 60°C15	3/4" DN20	
17	Steam	(kg)	7	11	14	7	14	17.5	7	14.5	20	9	18	26	100	5.5 – 6 bar	3/4" DN20	
2	Feed Water	(1)	6	9.5	12	6.5	11.5	15.5	7	13.5		8	15	21	600	3 - 6 bar, < 60°C15	3/4" DN20	
	Performance and Dimensions			67H10	)		7H13			67H17			67H20			Comments		
	Process Time, metal load <sup>2,4</sup>	(h:mm)	0:20	0:25	0:27	0:23	0:29	0:32	0:25	0:31	0:36	0:25	0:32	0:39				
	Process Time, textile load <sup>3,4</sup> Usable Space (WxHxL)	(h:mm)		- 0x611x1	0:33	- 660	0:37 660x611x1300			- )x611x1	0:43	-	- )x611x2	0:47	landura	ding use of loading eq	uin m a n t	
	Chamber Capacity	(mm) (STU)	000	6	1000	UOUX	8	500	JOU	10	700	000	12	500	HICIUC	ang use of loduling eq	urpinelli	
	Weight	(kg)		880			960			1100			1200					
	Sound Power Level LwA <sup>6</sup>	(dBA)		80			80			80			79		ENI	285-2015 and ISO 2744	3-2010	
<u> </u>	Sound Pressure Level LpA <sup>6</sup>	(dBA)	_	< 70			< 70			< 70		< 70		EN 285:2015 and ISO 3746:2010				
	Heat Generation7	(kW)	104	2.4			2.7			2.8			3.2					
	Option Integral Electrical Steam General Weight <sup>8</sup>	(kg)	graist	970	Steam	T	1050			1190			1290		T			
	Heat Generation <sup>7</sup>	(kW)		3.3			3.6			3.7			4.1					
	Option Air Detector [XZMM000022]		0.0					5.7										
	Air Detector Leak	(mbar/10 min)	35 - 40			35 - 40				35 - 40	)		25 - 30					
	Test Probe insertion	(mm)		120			120			120			120			0 "		
	Electrical Data, required supply fuse <sup>9</sup> Central Steam Supply as standard or Inte	arated Steam-t	n-Staa	67H10		6	7H13			67H17			67H20			Connection		
	3x200V 50/60 Hz	(A)	T	20 20						20			25					
	3x208V 50 Hz	(A)		20			20			20			25					
	3x208V 60 Hz	(A)		20			20			20			25					
	3x220V 50 Hz	(A)		20			20			20			25					
	3x220V 60 Hz	(A)		20 16			20 16			20 16			25 25					
	3x230V 50 Hz 3x230V 60 Hz	(A)		20			20			20			25					
	3x240V 50 Hz	(A)		16			16		16			25			TN-C system;			
	3x240V 60 Hz	(A)		20			20			20			25					
	3x380V 50 Hz	(A)		16			16			16			16		3 ph	ases + protective ear	th (PE)	
	3x380V 60 Hz	(A)		16			16			16			16					
	3x400V 50 Hz 3x400V 60 Hz	(A)		16 16			16 16			16 16			16 16					
	3x415V 50 Hz	(A)		16			16			16			16					
	3x415V 60 Hz	(A)		16			16			16			16					
	Power <sup>10</sup>	(kWh)	0.5	0.53	0.55	0.6	0.7	0.75	0.65	0.8	0.8	0.85			_			
	Peak	(kW)		3.5			3.5		3.5 5									
	Integrated Electrical Steam Generator o							team (				200						
	3x200V 50/60 Hz 3x208V 50 Hz	(A)	160 200				200		200		200		-					
	3x208V 60 Hz	(A)		200			200			200		200						
	3x220V 50 Hz	(A)		160		_	160			200		200		1				
	3x220V 60 Hz	(A)		160			160			200			200					
	3x230V 50 Hz	(A)		160			160		200			200			-			
	3x230V 60 Hz 3x240V 50 Hz	(A)		160 160			160 160			200		200			TN-C system;			
	3x240V 50 Hz 3x240V 60 Hz	(A)		160			160			200		200			1	i iv-C system;		
	3x380V 50 Hz	(A)		100			100		100			100			3 phases + protective earth (I		th (PE)	
	3x380V 60 Hz	(A)		100			100			100		100			]			
	3x400V 50 Hz	(A)		100			100			100			100					
	3x400V 60 Hz	(A)		100			100			100			125		-			
	3x415V 50 Hz 3x415V 60 Hz	(A)		100			100			125 125			125 125		1			
	Power <sup>10</sup>	(kWh)	3.6	6.6	8.3	4.7	8.8	10.9	4.7	9.1	12.3	6.1	11.5	16.0				
	Peak	(kW)		57			57			68			70					
	Notes																	
1	Reference to typical installation drawing  Metal lead according to EN/95-73. 5 yearum level 95 mbar E-Empty chamber no lead: 1/2-Half lead: 1/1-Full lead: 15 kg/								Tolerances acc to EN61010-1-1.4.1									
2	Metal load according to EN285-23.5, vacuum level 85 mbar; E-Empty chamber, no load; 1/2-Half load; 1/1-Full load. 15 kg/ STU. P1 program. The process time includes 5 minutes vacuum drying. Additional air pulses or steam pulses are not								@400V 50Hz									
	included.																	
3	Textile load according to EN285-23.4, vacuum level 85 mbar; 1/1-Full load. 7.5 kg/STU. P1 program. Process time include drying according to EN285-8.3.2							11	Maximum pressure change rate is less than 10bar/min as required by EN285.									
4	Reference measurement point is located 95 mm below by	ottom of the chamber	, positior	of contr	olling tem	perature se	ensor	12	Steam supply with pressure in range 3.5-4.5 bar(g) requires jacket safety valve which is optional for EU and CN									
5	Chilled water @ΔT≈40°C							13	Steam supply above 3.5 bar(g) is not allowed for Japan									
6	Maximum impulsive noise index for 6710-6717: 5.0 for 67						_	14	Performance measured at 23 °C air temperature and 15 °C water temperature. Max dimensioning air temperature 40 °C						emperature 40°C.			
7	Total heat thermal power released from sterilizer with e 23 °C ± 2°C. Thermal power released through the front is							15	With option degassing filter, is the maximal feed water temperature 40°C.									
8	Total weight of sterilizer including steam							16	Read the pre-installation manual and Installation for detailed requirements on media									