



HYGROMATIK® SPA

member of CAREL group

CAREL

FlexLine Plus

Heater type steam generators



The **HygroMatik FlexLine Plus** units complement the FlexLine series with an extremely robust and long-lasting design on modern **heater type steam generators**.

- Steam cylinders made of corrosion-resistant stainless steel
- Integrated rinsing and lime collection system
- Hygienic and mineral-free steam
- Individual configuration



Steam generation
for spa and wellness applications

HygroMatik FlexLine Plus

High-quality, low-maintenance and durable

The robust stainless steel cylinders – high quality and hygienically clean

The stainless steel cylinders of the **HygroMatik FlexLine Plus** generate hygienic, mineral-free steam and are explicitly designed for spa and wellness applications.

- The **stainless steel split cylinders** can be opened easily and cleaned without chemicals
- The **robust heater mounting** allows a simple and fast installation and removal of the heating elements
- Available in two cylinder sizes with **volumes attuned to the humidification capacity**

Compact and low-maintenance

When operated with softened or tap water, the minerals and salts contained in the water precipitate. These deposits are stirred up by the **integrated rinsing and lime collection system** during partial blowdown and can be removed by the **powerful blowdown pump**. The amount of particles accumulated in the strainer is thus significantly reduced

- The combined rinsing and lime collection system is integrated in the unit and ensures **compact dimensions** for HygroMatik FlexLine Plus
- **Robust removable strainer** allows easy removal of hardeners
- Plug connections, cylinder clamping ring and steam hose adapter enable **fast and easy maintenance**



Large cylinder
(FLP30 - FLP50)

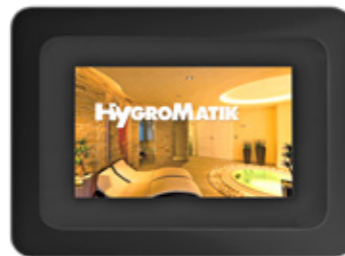
Benefit from extensive functions

Powerful, smart and efficient

Small cylinder
(FLP05 - FLP25)



3,5" touch display



OPTIONAL: Spa Touch Control
5" touch display for external control

Excellent ease of operation

All **HygroMatik FlexLine Plus** units are equipped with a capacitive 3.5" touch display. Operation and programming are selected via a flat and intuitive menu structure analogous to modern smartphone logic. In addition to this, subsequent software updates are quickly and easily possible via USB flash drive.

- At a glance comprehensible pictographs provide information on the operating condition
- Simple and fast navigation
- Information and system messages displayed as plain text
- Easy planning of operating periods by means of programmable timer functions
- Readout of service messages with date and time
- Integrated real-time clock



Smart control – powerful and quick response

The control and regulation technology of the **HygroMatik FlexLine Plus** units provides extensive possibilities that are simple and easy to operate.

- **Highest regulating accuracy and top protection** against excessive temperatures by means of second supply air and ventilation steam bath fan
- The option of up to **4 different lighting scenarios**
- Flexible switchover of up to **4 essences** without changing containers
- Freely programmable, overload-protected **digital input**
- **Integrated communication** protocol Modbus RTU or BACnet
- **Numerous control and reporting functions** can be assigned to up to 11 relays depending on the unit



Integrated rinsing and lime collection system

Durable and safe

HygroMatik FlexLine Plus units heat the water with the aid of one, three or six resistance heater elements in the stainless steel cylinder according to the immersion heater principle.

The heater elements are made of **highly corrosion-resistant Incoloy825** (chrome-nickel-molybdenum alloy) and therefore extremely durable. The mechanical overheating protection of the heater elements together with the electronic proportional level control provide double protection.



Resistor type heater elements
in highly corrosion-resistant alloy



Optimized unit performance for efficient utilization

As with all our products, the HygroMatik FlexLine has been developed for an especially long life. The units feature technologies that not only reduce the amount of maintenance required, but also the wear of components. In addition, they are highly efficient with energy and resources.

- **Adjustable power limitation** from 25-100%
- **Adjustable load shedding** to temporarily adapt operation to the respective load conditions
- Active energy saving with the **ECO function** and flexible adjustment of the timer functions
- **Long-term continuous operation:** A robust base material provides our reusable cylinders to achieve a high temperature resistance and dimensional stability
- The **split cylinder** is easy to open and can be cleaned without using chemicals
- **Extremely durable:** All FlexLine cabinets are manufactured in corrosion-resistant stainless steel; the powder coating of the housing increases the lifespan and offers optimum work safety
- **Robust blowdown pump** for removing scale deposits to ensure long operating life cycles and minimal maintenance
- Highest safety standard for electrode steam generators due to integrated **mechanical circuit breaker and mechanical safety temperature limiter** for heater type steam generators
- Heater type steam generators with **capacitive proportional water level sensor** without wearing parts



For the sake of the environment

Active energy saving
with the **ECO function**

Robust and
durable cabinet

Reusable
steam cylinders

Long and flexible
service intervals

High resource
efficiency

Comprehensive service functions



We have equipped the **HygroMatik FlexLine Plus** with intelligent service functions for operational safety. These provide a high level of safety, reliability, control and comfort.

- **Innovative:** Preventive maintenance through permanent monitoring and intelligent evaluation of operating parameters can avoid unplanned downtimes
- **Convenient:** Detailed messages enable deviations to be identified and rectified more quickly
- **Simple:** The diagnostic mode can be started directly via the touch display without commissioning the unit completely
- **Flexible:** Service intervals can be calculated by the unit according to time as well as the amount of steam produced

FlexLine Plus technical data

A higher humidification performance is possible by connecting units together.

Electrical supply ⁽¹⁾	Type	FLP05	FLP08	FLP15	FLP25	FLP30	FLP40	FLP50
208-240 VAC / 1 / N / 50-60Hz	Steam output [kg/h]	4.1-5.5						
	Steam output [lbs/h]	9.0-12.1						
	Rated power [kW]	3.1-4.1						
	Rated current [A]	14.9-17.2						
208-240 VAC / 3 / 50-60Hz	Steam output [kg/h]	4.1-5.5		12.4-16.6				
	Steam output [lbs/h]	9.0-12.1		27.3-36.5				
	Rated power [kW]	3.1-4.1		9.3-12.4				
	Rated current [A]	14.9-17.2		25.9-29.9				
440-480 VAC / 3 / 50-60Hz	Steam output [kg/h]	4.6-5.5	7.7-9.1	13.9-16.6	23.1-27.4	27.8-33.1	37.0-44.0	43.7-52.0
	Steam output [lbs/h]	10.1-12.1	16.9-20.0	30.6-36.5	50.8-60.3	61.2-72.8	81.4-96.8	96.1-114.4
	Rated power [kW]	3.5-4.1	5.8-6.9	10.4-12.4	17.3-20.6	20.9-24.8	27.7-33.0	32.8-39.0
	Rated current [A]	7.9-8.6	13.1-14.3	13.7-14.9	22.7-24.8	27.4-29.9	36.4-39.7	43.0-46.9
575-600 VAC / 3 / 50-60Hz	Steam output [kg/h]	3.8-4.2	6.4-6.9	11.5-12.6	19.1-20.8	23.1-25.1	30.7-33.4	39.5-43.0
	Steam output [lbs/h]	8.4-9.2	14.1-15.2	25.3-27.7	42.0-45.8	50.8-55.2	67.5-73.5	86.9-94.6
	Rated power [kW]	2.9-3.1	4.8-5.2	8.7-9.4	14.3-15.6	17.3-18.8	23.0-25.0	29.6-32.2
	Rated current [A]	5.0-5.2	8.3-8.7	8.7-9.1	14.4 - 15.0	17.4-18.1	23.1-24.1	29.7- 31.0
Number of cylinders	1							
Control type	FlexLine mainboard with capacitive 3.5" touch color display							
Internal control voltage	208-240V / 50-60Hz							
Steam hose connection [mm]	1 x DN 40 ID				2 x DN 40 ID ⁽³⁾		2 x DN 40 ID	
Steam hose connection [in]	1 x 1.6 ID				2 x 1.6 ID ⁽³⁾		2 x 1.6 ID	
Dimensions ⁽⁴⁾								
Height [mm/in]	855 / 33.7							
Width [mm/in]	650 / 25.6							
Depth [mm/in]	380 / 15.0							
Water installation	Fully demineralized water / cleaned condensate: 1-10 bar / 14.5-145 PSI, with 3/4" connection Partially softened water / tap water of varying qualities: 1-10 bar / 14.5-145 PSI, for 3/4" external thread							

We reserve the right to make technical changes.

⁽¹⁾ Other voltages upon request. ⁽³⁾ Incl. Y-piece DN40. ⁽⁴⁾ Outer dimensions of width and depth. Hight incl. drain connection.

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