

# Servimat L, combi-device pressurisation and degassing station

Article number: 8910700



Thinking solutions.



## Features

Type	L
Control type	Control Touch
Control unit	Adjoining
Max. system volume	220 m <sup>3</sup>
Max. perm. operating temperature	70 °C
Perm. operating temperature generator	105 °C
Max. perm. operating pressure	10 bar
Minimum inlet pressure makeup	0,10 bar
Trigger pressure SV tank side	5,0 bar
Max. p <sub>0</sub> setting	6,5 bar
Max. sound pressure level	55 dB(A)
Type of protection	IP 54
Number of connections	2 St.
Electric connection	230V/50Hz
Expansion line connection	Rp 1"
Make-up connection	Rp 1/2"
Separation level, dissolved gases to	90 %
Max. partial volume flow network	0,550 m <sup>3</sup> /h
Max. volume flow makeup	0,550 m <sup>3</sup> /h
Max. electrical rated power	1,10 kW
Height	1160 mm
Width	560 mm
Depth	710 mm
Weight	60,00 kg

## Description

### Servimat control unit

Hydraulics and control module for pressurisation, vacuum spray tube degassing system and water make-up for sealed heating water and cooling circuits. Constructed in compliance with DIN EN 12828 and the requirements of VDI 4708, with CE marking. Suitable for use in noise-sensitive areas.

Functional unit comprising a hydraulic part and a Control Touch operating unit. Both are ergonomically combined in an easy-to-maintain modular floor-standing framework system made of EV 1 anodized aluminium precision sections with CE marking.

### Hydraulic part:

Pressure maintenance is implemented using a stainless steel circulation pump in conjunction with a rugged dirt-insensitive motorised ball valve with upstream dirt trap as an overflow device. A safety relief valve is included to act as a pressure safeguard for the Servimat VG primary tank and/or VF secondary tank that are to be connected. The system pressure is measured using an electronic sensor. Pressure-side system connections are implemented as backed up shut-off valves. All fittings are located on a rotatable base plate to enable a variable hydraulic system arrangement. Degassing is performed using the stainless steel centrifugal pump in combination with a vertically arranged stainless steel vacuum spray pipe. This is equipped with a vacuum spray nozzle, dipstick-tube degassing unit and pressure/level monitoring.

The Control Touch operating unit with TFT colour display inclusive of communications electronics is integrated in a panel-type rugged plastic housing and mounted directly on the control unit with a horizontal alignment. An optional separate and vertical wall mounting plate at maximum three metres distance from the power electronics is possible. Communication electronics comprising:

- 4,3" resistive colour touchscreen for programming, operating documentation and monitoring as well as provision of help texts for all functions
- Two RS485 serial interfaces as data and/or communication interfaces
- Serial TTL-interface with two connection terminals for connection of 2 IO-boards
- Potential-free output for forwarding of the collective message
- Two electrically isolated analogue outputs e.g. for system pressure
- Input for the evaluation of contact water meters

The power electronics are installed in a dedicated plastic control cabinet which is mounted directly below the operating unit. Power supply is via a main switch. Featuring in detail:

- Main switch on housing exterior
- Pump control

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- Cable management for external connections
  - Mounting slot for optional modules
- Control unit completely piped and wired ready for connection according to VDE regulations. System connections by means of integrated shut-off valves.

Control Touch is a fully automatic and freely programmable microprocessor control with touchscreen operation, real-time clock, differentiating error and parameter memory, combined graphical and clear-text display of system pressure, tank level and all relevant operating and fault messages, functional diagram, signalling of the active operating mode, group fault message, low water level, functioning of pump, overflow valve and make-up valve.

Functioning of the pressure maintenance in the limits  $\pm 0.2$  bar including pump monitoring. Vacuum spray degassing of the content and make-up water in self-optimising operation with continuous and interval degassing. Controlled make-up, automatic interruption and fault message upon exceeding of the runtime and/or the number of cycles. Processing of the signal of a contact water meter for maximum volume limit and/or capacity evaluation of ion exchangers located in the make-up pipe. Documentation and control of the entire system in respect of the above mentioned parameters.