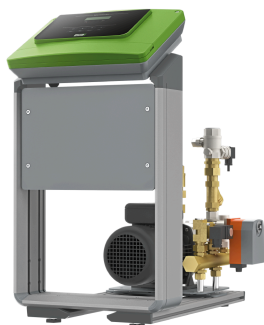


# Variomat control unit VS 1, for pressurisation, degassing and makeup, 6 bar

Article number: 8910100



## Features

Type	VS 1
Max. perm. operating temperature	90 °C
Perm. operating temperature generator	105 °C
Max. perm. operating pressure	6 bar
Max. p <sub>0</sub> setting	2.5 bar
Max. sound pressure level	55 dB(A)
Type of protection	IP 54
Electric connection	230V/50Hz
Expansion line connection	Rp 1"
Make-up connection	Rp 1/2"
Max. electrical rated power	0.70 kW
Height	681 mm
Width	495 mm
Depth	535 mm
Weight	25.00 kg

## Description

### Variomat

Control unit, Hydraulics and control module for pressurisation, degassing, and water make-up in 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 Basic operating unit. Both are ergonomically combined in an easy-to-maintain modular floor-standing framework system made of EV 1 anodized aluminium precision sections and 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 Variomat VG primary tank and/or VF secondary tank that are to be connected. The system pressure is measured with 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.

The Control Basic control unit is integrated in a robust plastic housing in which both the power and communication electronics and the control panel with dirt-resistant membrane-covered keyboard is housed. Control Basic is a fully automatic, freely configurable microprocessor control with real-time clock, differentiating error and parameter memory, two line plain text display for system pressure, tank filling level and all relevant operating and fault messages, LED display for operating modes and general error messaging. Communication electronics comprising:

- RS 485 port as data interface or for the connection of optional communication components
- Potential-free output for the forwarding of the collective message
- Digital input for signal processing of a contact water meter
- 230V output for connection of level-dependent makeup/degassing stations

Control unit completely assembled and wired ready for connection according to VDE regulations, mains power cable and mains plug, system connections by means of integrated shut-off valves.

Functioning of the pressurisation in the limits  $\pm 0.2$  bar including pump monitoring. Optimised system water degassing due to patented, fully-automatic overflow control with cycles for continuous, interval and run-on 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 line. Documentation and control of the entire system in respect of the above mentioned parameters.