

Variomat Giga GS 3 + GH 90 with hydraulic module GH 90

reflex

Thinking solutions.

Article number: 8931027

Features



Type	GS 3 + GH 90
Control type	Control Touch
Control unit	Adjoining
Number of pumps	2 St.
Number of overflow lines	2 St.
Max. perm. operating temperature	90 °C
Max. p ₀ setting	8.0 bar
Type of protection	IP 54
Electric connection	400V/50Hz
Expansion line connection	DN80/PN16
Primary tank connection	DN80/PN6
Make-up connection	Rp 1/2"
Max. electrical rated power	6.00 kW
Height	1194 mm
Width	1548 mm
Depth	1307 mm
Weight	240.00 kg

Description

Factory assembled unit consisting of:

Variomat Giga Control Unit GS

For control and operation of the Variomat Giga pump controlled pressurisation system. Actuation of the corresponding Variomat Giga GH hydraulics (separate product), assembled and internally wired with the appropriate components so that it is fully functional. Constructed in compliance with DIN EN 12828 and the requirements of VDI 4708, with CE marking. The Control Touch operating unit with TFT colour display inclusive of communications electronics is integrated in a panel-type rugged 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
- Slot for an HMS network module, one SD card, e.g. for data read-out, software updates, etc.

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
- 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, collective fault message, low water level, functioning of pump, overflow valve and make-up valve. Functioning of the pressurisation in the limits +/- 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

Variomat Giga GS 3 + GH 90 with hydraulic module GH 90



Thinking solutions.

Article number: 8931027

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.

Variomat Giga hydraulic scheme

Hydraulic module in compact design for Variomat Giga pump-controlled pressurisation system.

Suitable for and equipped for use in heat generator systems according to DIN EN 12828, DIN EN 12952, 12953 as well as for meeting the requirements of TRD 604 Sheet 2. and VDI 4708.

Implementation of the functions, pressurisation and automatic make-up in closed heating and cooling circuits. Additional degassing of the system water with corresponding mains connection and operating parameters (70 °C) possible. Then self-regulating and optimised degassing control.

All components are compactly arranged in a self-supporting, plastic coated tubular steel structure with foot plate so that they can be easily accessed and isolated. Pressurisation takes place using two low-noise vertical stainless steel high pressure centrifugal pumps with vibration decoupling in conjunction with two likewise, parallel arranged overflow lines. In detail these comprise a dirt trap connected in series and a dirt-insensitive motorised ball as an automatically adjustable overflow device. The entire overflow path is additionally protected in the event of minimum pressure undershooting by an additional solenoid valve in conjunction with a minimum pressure limiter integrated in the hydraulic scheme.

Replenishment takes place via an electrically actuated valve. Control and operation of the Variomat Giga hydraulics takes place via an appropriate Variomat Giga control unit (separate product) installed in the hydraulic module.