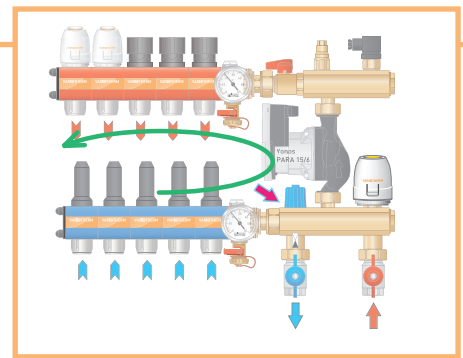
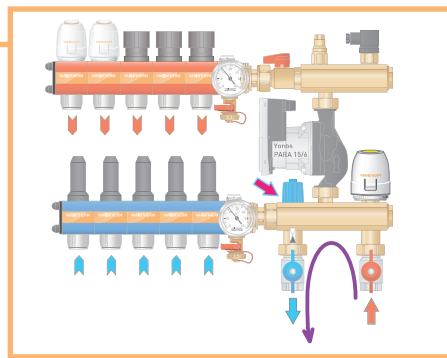
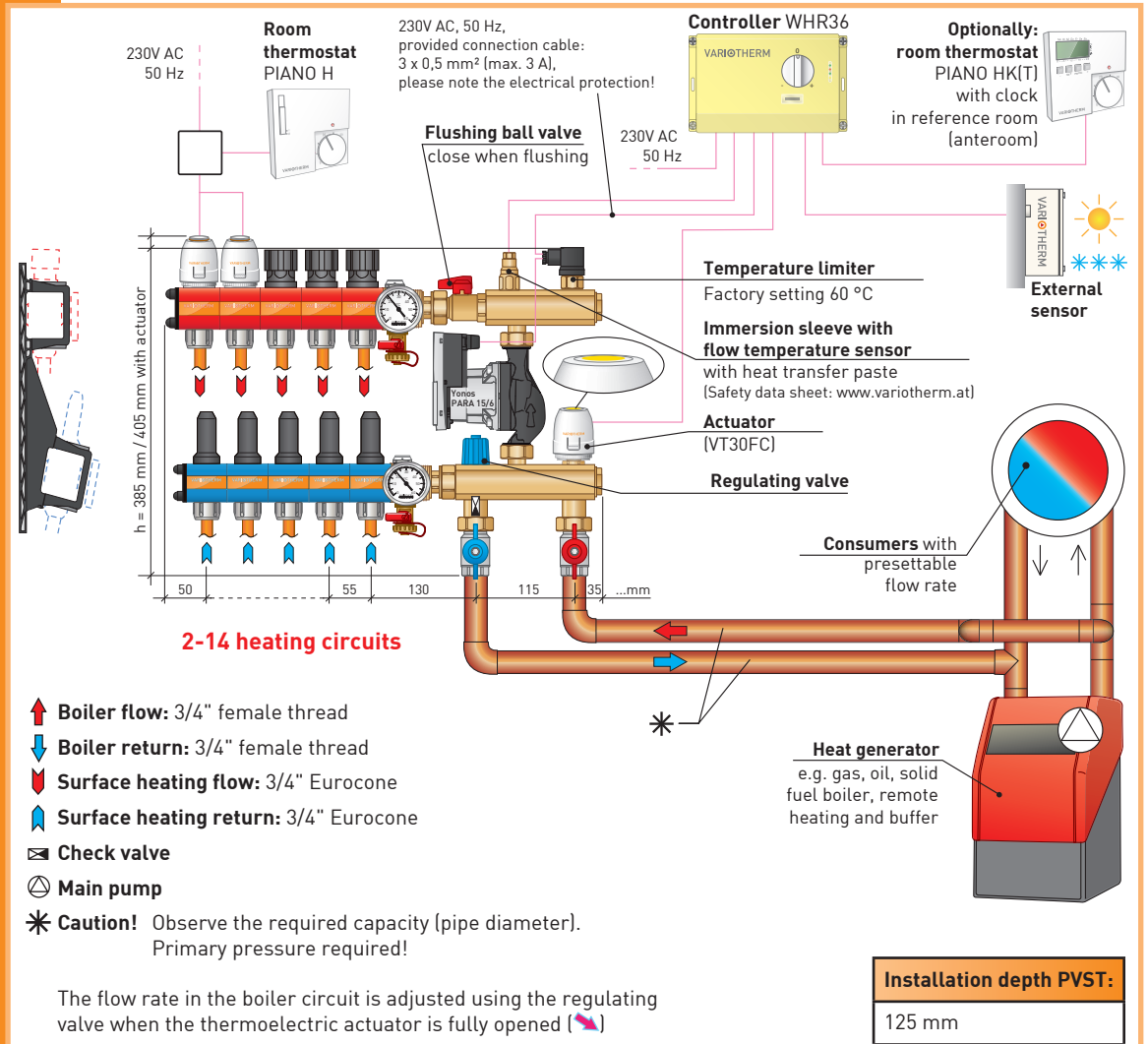


Pumped Manifold (PVST) [1/4]

Weather-guided control station for surface heating for systems with existing main pump



Settings via operating knob



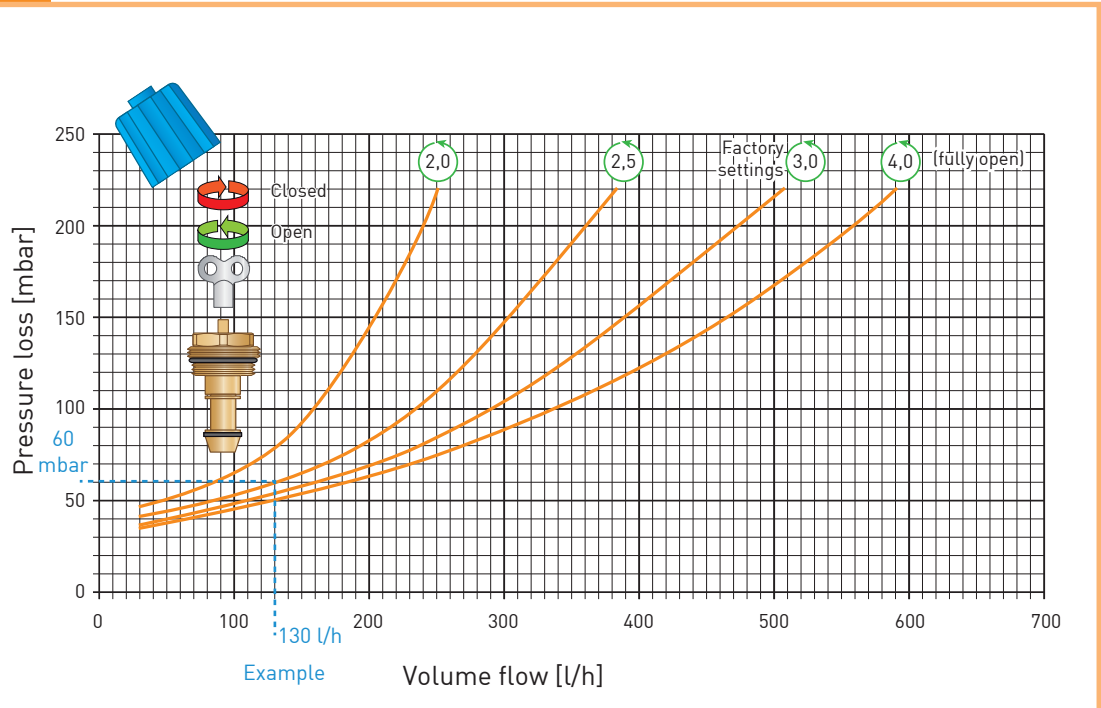
- Constant differential pressure ($\Delta p-c$), for surface heating
- Entlüftungsfunktion
- Variable differential pressure ($\Delta p-v$)

VARIOTHERM
HEATING. COOLING. COMFORT.

Pumped Manifold (PVST) [2/4]

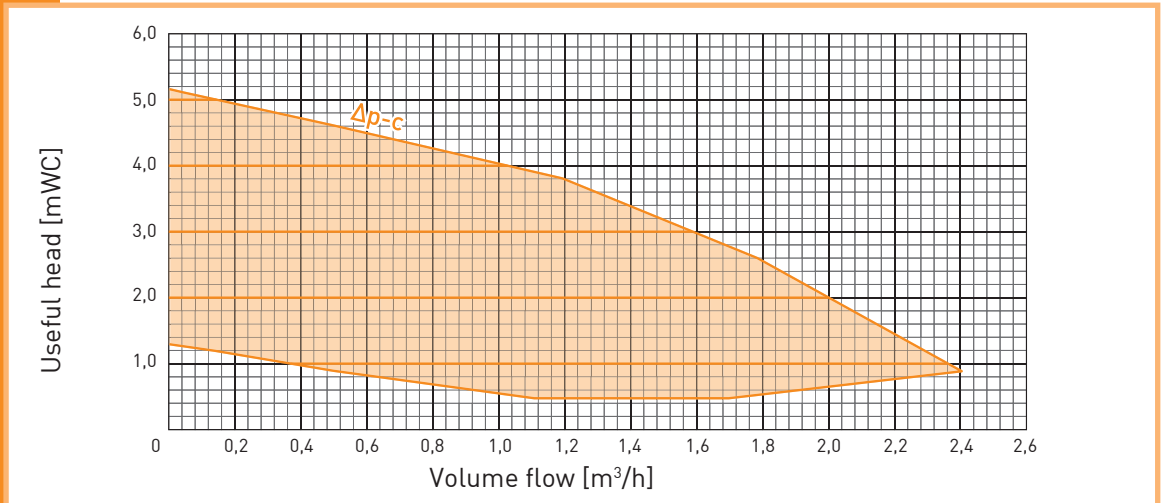
Weather-guided control station for surface heating for systems with existing main pump

Pressure loss in the boiler circuit with fully open actuator - balance with regulating valve



Example PVST 5 heating circuits:
 Desired: Pressure loss = 60 mbar
 Required: Turns when open
 → open the regulating valve 2.5 turns

Useful head of PVST pump (WILO Yonos PARA 15/6)

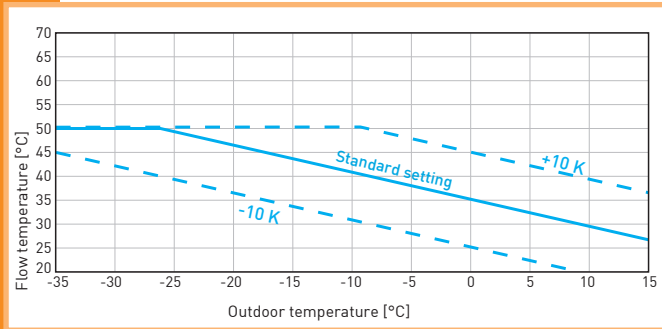


VARIOTHERM
 HEATING. COOLING. COMFORT.

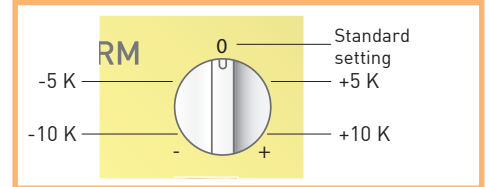
Pumped Manifold (PVST) [3/4]

Weather-guided control station for surface heating for systems with existing main pump

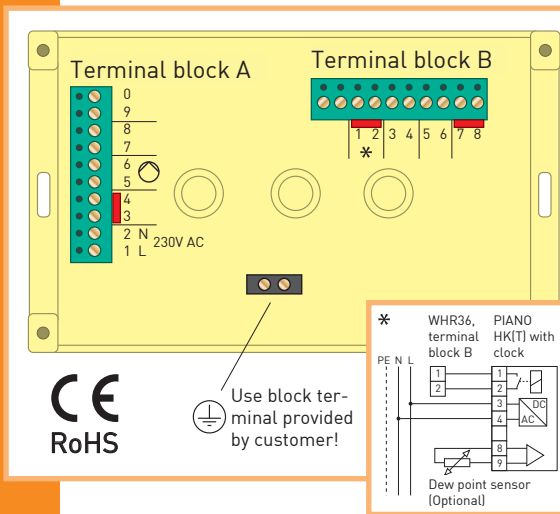
Setting the heating curve:



The boiler flow temperature \uparrow must be at least 10 K higher than the set flow temperature of the surface heating \downarrow .



Electrical connection:

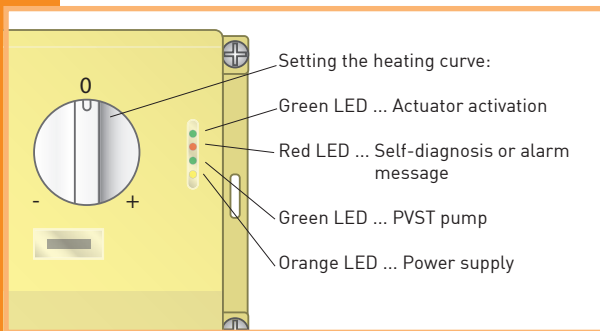


Terminal block A, 230V AC	
1	Power supply phase
2	Power supply neutral conductor
3-4	Free (bridge)
5-6	PVST pump incl. safety thermostat Switching current relay max. 8 A
7-8	Actuator (only item number VT30FC permissible)
9-0	Free

Terminal block B, safety-low voltage	
1-2	Bridge, or optionally: Room thermostat with clock (part no. RT43) (see connection diagram*)
3-4	External sensor ¹⁾ (cable e.g. 2 x 0,75 mm ² , max. 50 m)
5-6	Flow sensor ¹⁾ (cable e.g. 2 x 0,75 mm ² , max. 50 m)
7-8	Free (bridge)

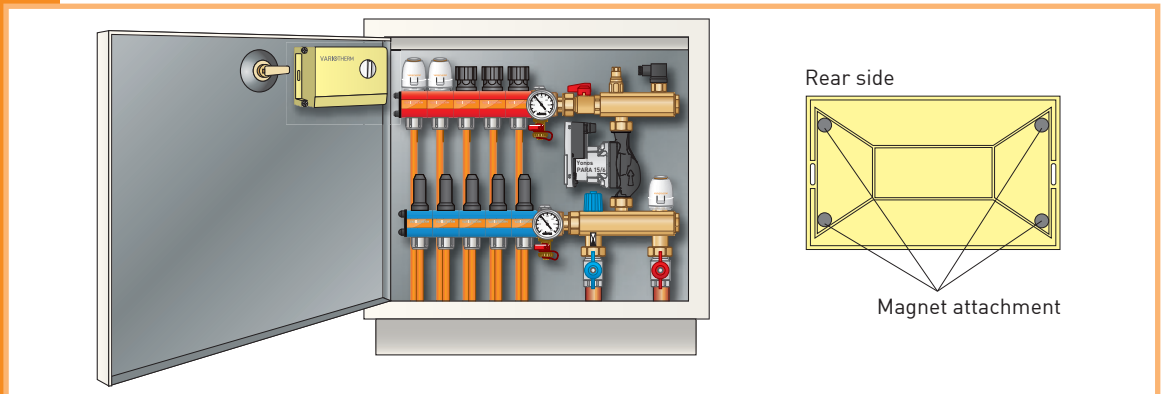
¹⁾ Use original sensor!

Control lamps:



Self-diagnosis is performed when starting for the first time. The red LED flashes for about 5 seconds and goes out. After about 5 minutes the controller begins to adjust the flow temperature to the heating curve. If the red LED is continuously illuminated an alarm is present. In this case the wiring must be checked. An alarm occurs if the flow temperature in the surface heating circuits exceeds 55 °C. The controller returns to normal operation when the flow temperature cools to below 52 °C.

Attachment:

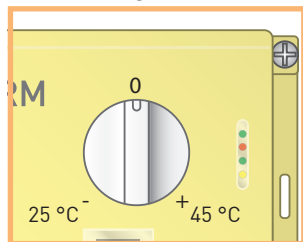


VARIOTHERM
 HEATING. COOLING. COMFORT.

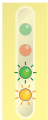
Pumped Manifold (PVST) [4/4]

Weather-guided control station for surface heating for systems with existing main pump

Dry heating:



During the heating-up process the outdoor sensor is disconnected (terminal strip B, 3-4). The controller works as a fixed value regulator from 25 °C (knob turned fully counter-clockwise to -) to 45 °C (knob turned fully clockwise to +). The temperature is adjusted manually every day.

Fault	Troubleshooting
<ul style="list-style-type: none"> • Surface heating circuit temperature too low 	<ul style="list-style-type: none"> • Main pump must be available and running • Switch main pump to a higher setting level • Increase flow in the boiler circuit (regulating valve) • Check if the flow/return in the boiler circuit has been reversed • Flush the surface heating circuit • Fully open the flushing ball valve • Switch on the controller WHR36, orange LED (power on) + green LED (pump on) should glow, check the heating curve setting • Adjust the surface heating circuit flow 
<ul style="list-style-type: none"> • Surface heating circuit temperature too high 	<ul style="list-style-type: none"> • Actuator adapter is not screwed all the way to the end stop • Check the heating curve setting

⚠ Safety information

- The electrical and hydraulic connection and service work on the device may only be provided by authorised specialist personnel.
- The devices are designed for use in dry, closed rooms.
- The electrical installation standards and regulations specified by the local energy supply companies should be observed, together with the locally applicable regulations and standards for heating installations.
- Faults in the connection can cause damage to the device! We bear no liability for damage caused by incorrect connection and/or inappropriate handling of the device.
- If the system components are installed or commissioned incorrectly, all claims on the basis of the manufacturer's warranty and guarantee become void.