21 good reasons for buying Cloriüs Self-acting Temperature Controllers

Cloriüs
Controls A/S

- ensures reliable control of heating, cooling and ventilation systems since 1902.

How you benefit...

Good economy

Flexibility

Reliability

Serviceability

Good economy

1. Clorius thermostatic temperature controllers are self-acting and require no external power supply. This means no running costs and minimum installation costs.

2. Clorius thermostatic temperature controllers respond accurately and quickly to load changes due to their direct acting liquid system.

Flexibility

3. Clorius thermostatic controllers can be delivered with different proportional bands fitting any control requirement.

4. Clorius thermostatic valves can be supplied from DN 4 mm up to DN 150 mm. 2-way and 3-way valves are available in gun metal, cast iron, nodular cast iron or cast steel.

5. The valves can be supplied for working pressures up to PN 40 and maximum operating temperatures of 350°C, making them suitable for water, steam and hot oil systems.

6. The seat and cone design ensures a quadratic characteristic, providing excellent control at all loads.

7. Clorius thermostats can be supplied with three different closing forces:

   Type V2: 200 N
   Type V4: 400 N
   Type V8: 800 N

8. Clorius thermostats can be supplied with rod or spiral sensors with threaded or flanged connections. Sensors are made in copper or stainless steel.

9. Clorius thermostats are available with setting ranges between -30°C and 280°C.

10. Clorius thermostats can be supplied with capillary tubes in lengths up to 21 m in either copper, stainless steel or PVC-covered copper.

Reliability

11. State-of-the-art mechanical technology and sturdy design ensure optimum reliability and accuracy, and give the thermostatic temperature controllers a long life.

12. Clorius direct acting thermostat systems have a very narrow neutral zone (1.5°C - 2.5°C) compared with bellow systems.

13. The use of a solid piston with a single "O" ring instead of bellows secures maximum actuator force and allows for complete on-site maintenance, if required.

14. In case of excessive temperatures a built-in safety spring will compensate for any additional expansion in the thermostat's liquid system thereby preventing it from failure. One look at the controller will indicate whether the thermostat is exposed to excessive temperatures as the cylinder protrudes from the setting element.

Serviceability

15. No special tools are required for servicing Clorius thermostatic temperature controllers.

16. The stuffing box is an integral part of the thermostatic element for easy and simple maintenance of the valve.

17. Clorius thermostats can be calibrated to ensure that scale values correspond to the value at the sensor.

18. Glycerin is available at local supermarkets etc. for refilling of the Clorius thermostat. In emergencies even water may be used. We refer to the instruction manual.

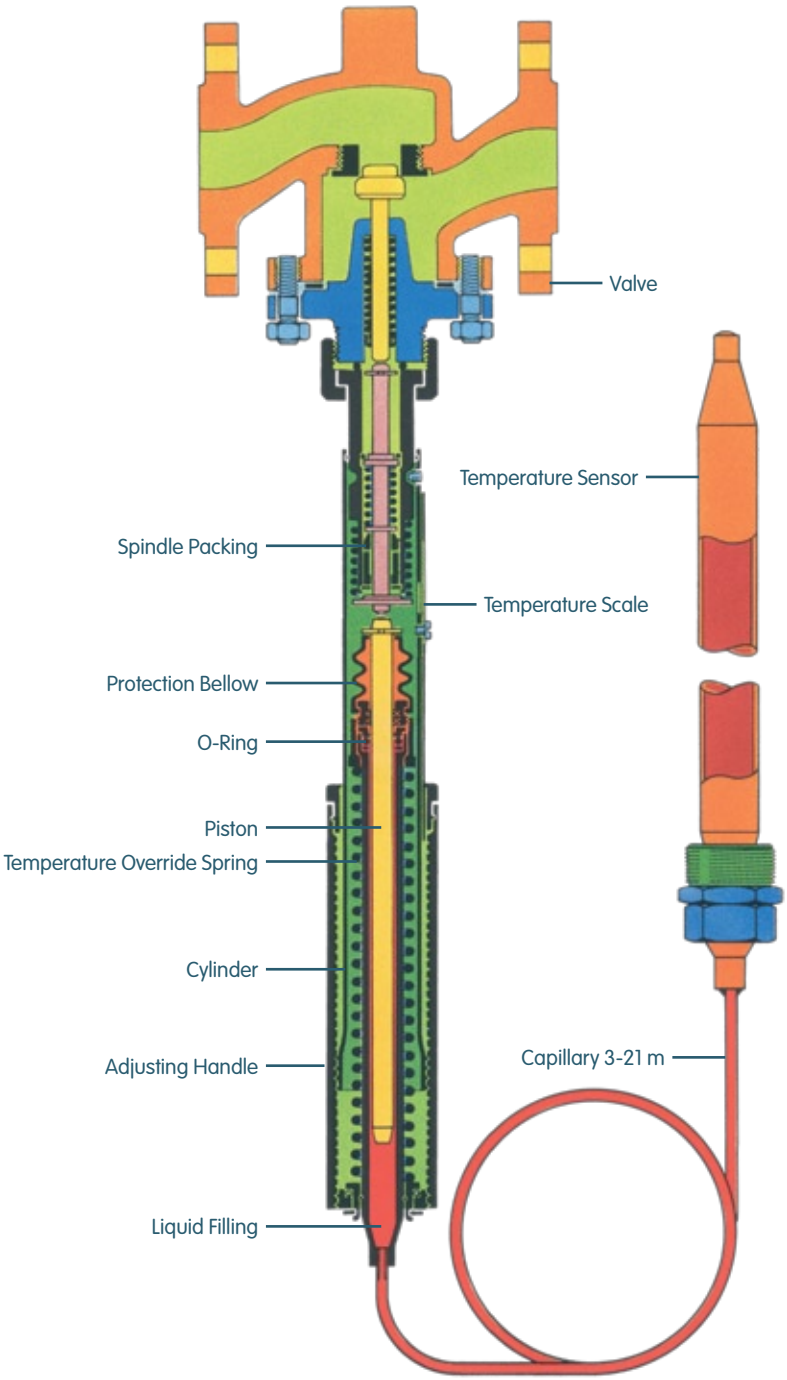
19. An optional manual adjusting device is also available for continuous operation of the valve during installation, repair and maintenance of the Clorius thermostat.

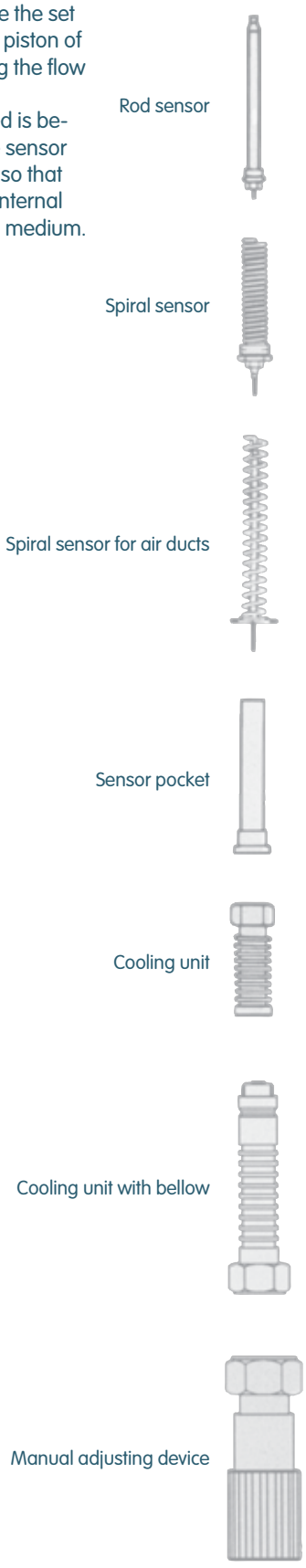
20. Our customers can easily change the set point by turning the adjusting handle.

21. Clorius thermostatic temperature controllers can generally be repaired on-site, if required.

How does it work?

The thermostatic temperature controller, which consists of a thermostat and a valve, is used for controlling temperatures in central heating and district heating systems, industrial plants or marine systems. It can be used for the control of cold or hot water, steam or oil, in heating or cooling systems.
A thermostat consists of a sensor and a capillary tube filled with liquid, and an adjusting cylinder. The thermostat is self-acting and based on the principle of liquid expansion; it has a sturdy design and operates with a large closing force.
The adjusting cylinder of the thermostat is set at the required temperature for the heated medium in °C.
The temperature control is carried out by the thermostatically controlled valve reducing or increasing the flow of the heating (or cooling) medium. If the temperature of the medium to be heated is above the set point, the sensor liquid expands, causing the piston of the thermostat to act upon the valve, reducing the flow of the heating medium.
If the temperature of the medium to be heated is below the required level, the temperature of the sensor liquid falls, reducing the volume of the liquid, so that the piston allows the valve to open under its internal spring, thus increasing the flow of the heating medium.





Complete control systems

Clorius Controls offers a complete range of tested and reliable equipment for control of heating, cooling and ventilation systems, all with the purpose of achieving the highest reliability and saving energy.

Specialists in selected areas

Maritime industry

Industry and Building Automation

Controllers

Clorius Controls offers a wide range of electronic controllers for heating, cooling and ventilation systems. The controllers are available for systems in the maritime industry, general industry, institutions and residences. Clorius Controls offers controllers for simple stand-alone solutions or for larger BMS-plants.

Control valves

Clorius valves are simple and reliable for regulation of temperature and pressure differences in heating, cooling and ventilation systems for maritime industry, general industry, institutions and residences.

Electric valve actuators

Clorius Controls offers a large program of conventional regulation actuators and analogue actuators. This includes special actuators for maritime use, which are designed to withstand vibrations.

Thermostats

Self-acting thermostats from Clorius Controls are direct-acting and available with sensors for air or liquids. They are also available as safety thermostats for the protection of secondary pipe installations.

Pressure controls

The controllers from Clorius Controls lower large and variable pump pressure to stabilize the flow in the plant.

Clorius control valves and other products can be supplied with certificates of approval from recognized classification societies.

Our quality control system is ISO 9001:2008 certified.

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