

Actuators



WITA Fixed-setpoint controller

Product description

The actuator is a temperature controller for heating or cooling systems. Its purpose is to maintain a constant setpoint temperature at the return in heating or cooling systems, to regulate room heating. The drive is fitted with a special mounting flange. By pressing the mounting/dismounting button the controller can be easily mounted or removed on the mixing valve or other valve without using any extra tools. With pre-assembled connection cables, such as the power mains and temperature sensor with cable, the SM WR FR actuator is immediately ready for operation. The control unit of the actuator is designed to be resistant to blocking for a long time. The actuator is equipped with a color

display, indicating the unit's basic operating temperature. The orientation of the display continuously adapts to the mounting position of the controller. There are 4 control buttons under the manual movement button for configuring the fixed setpoint temperature controller. When the manual mode clutch is activated, the motor of the temperature controller switches off for energy saving reasons. The setup of the temperature controller is carried out with the start-up assistant. After selecting the parameters, such as:

- type of application (heating or cooling)
- hydraulic placement (control of supply or return side) you can configure the operating parameters of the controller.

Technical data

| SM WR 05 FR

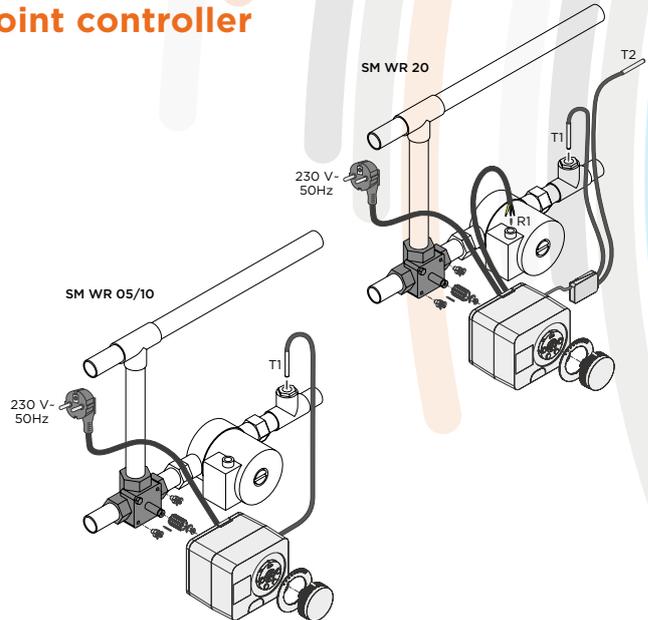
| SM WR 10 FR

| SM WR 20 FR

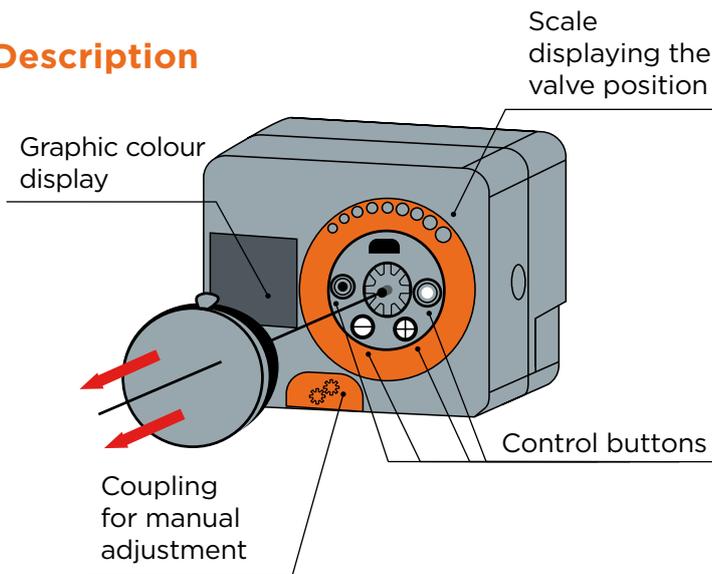
Torque	5 Nm	10 Nm	20 Nm
Rotation angle	90°	90°	90°
Rotational speed	2 Min./90°	2 Min./90°	2 Min./90°
Operating mode	3-point PID	3-point PID	3-point PID
Circulation pump control	-	-	2-point (ON/OFF)
Control output	-	-	Solid state relay, 1 (I) A-, 250 V-
Supply voltage	230 V AC, 50 Hz	230 V AC, 50 Hz	230 V AC, 50 Hz
Power consumption	max. 5 W	max. 5 W	max. 5 W
Power consumption in standby mode	max. 0.5 W	max. 0.5 W	max. 0.5 W
Temperature range	0 °C - 50 °C	0 °C - 50 °C	0 °C - 50 °C
Protection rating	I according to EN 60730-1	I according to EN 60730-1	I according to EN 60730-1
Protection class	IP 42 according to EN 60529	IP 42 according to EN 60529	IP 42 according to EN 60529
Dimensions (W x L x H)	95 x 80 x 92 mm	95 x 80 x 92 mm	95 x 95 x 92 mm
Weight	ca. 900 g	ca. 900 g	ca. 1000 g
Colour / material	dark grey / polycarbonate	dark grey / polycarbonate	dark grey / polycarbonate

Product advantages of the fixed setpoint controller

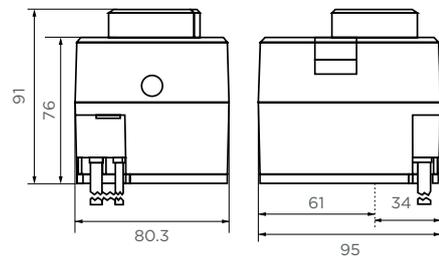
- Easy assembly and configuration
- Temperature range
- Selectable temperature range
- Selection of hydraulic systems is 0 - 50 °C
- Selection and configuration of rotation direction
- Digital display of temperatures
- Setting of heating or cooling mode
- Signaling of the rotation direction
- Signaling in case of broken sensor
- PID control of mixing valves and other valves
- Protection against frost and overheating
- Blockage resistant



Description

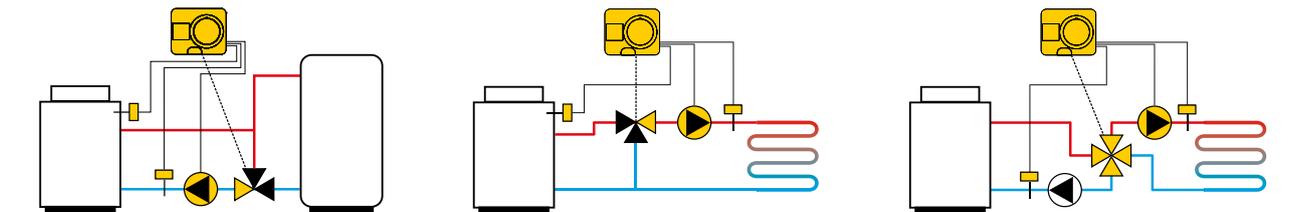


Dimensions



All product dimensions are presented in mm.

Examples of application SM WR 20 FR



1. Control of return-pipe temperature.

2. Control of supply temperature.

3. Control of supply temperature and limitation of return-pipe temperature.