

UNI TEMP

UNI TEMP is a constant temperature controller. It is designed for mounting on mixing valve.

It is also equipped with mounting kit for assembly on mixing valves of other manufacturers.

Controller has a fixed angle rotation of 90° and possibility of manual control.

With DIP switches inside actuator is possible to set the following parameters:

- Direction of rotation (direct CW / inverse CCW)
- Different temperature ranges depending on the application
- Reaction factor x1/x10

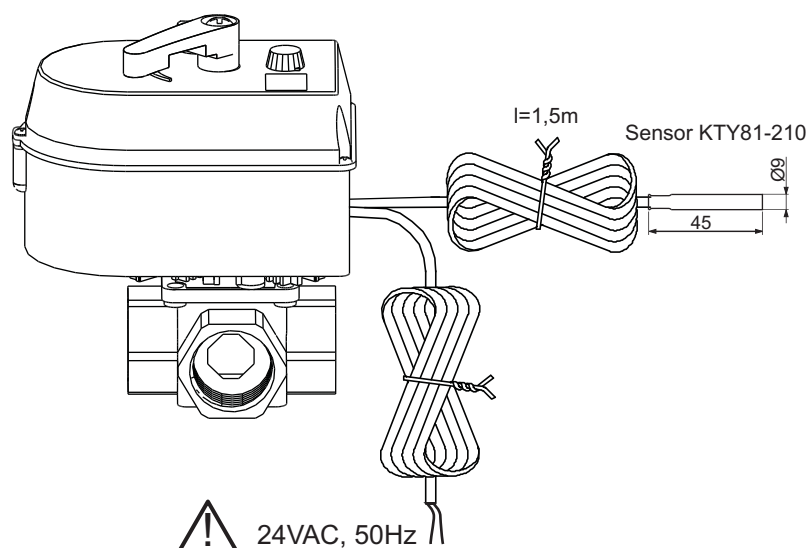


It is intended for:

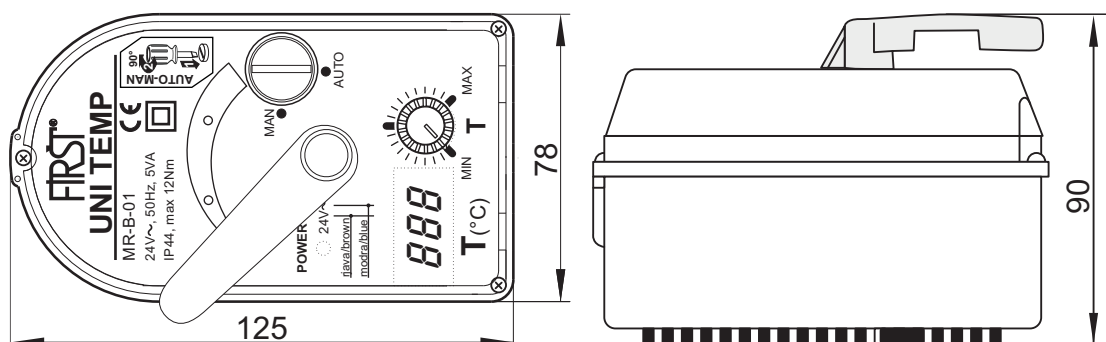
- maintaining a constant temperature in boiler heating circuit (protection against condensation),
- use in under floor heating applications, industrial processes, heat accumulators,
- use in domestic hot water systems or swimming pools (individual systems, SPA, public swimming pools).

Technical data		
Electrical data	Supply voltage	24VAC, 50Hz, ± 10%
	Power	5VA
	Connection cable	2x0,5mm ² , length 2m
	Sensor type	KTY 81-210 PVC (cable length 1.5m), insulation: -30°C to 105°C (adapter set enclosed)
Functional data	Torque	max 12Nm
	Rotation time	73s/90°
	Manual override	Manual or permanent with pushbutton (for maintenance purposes)
	Position indication	Handle position on controller cover
	Recommended mounting position	All positions except upside down
	DIP switch settings	1. Direction of rotation (direct CW / inverse CCW) 2. Different temperature ranges depending on the application (0°C..100°C, 60°C..85°, 20°C..70°C, 25°C..45°C) 3. Reaction factor x1/x10
Safety	Protection class	II <input type="checkbox"/>
	Degree of protection	IP44 (IEC 60529 (2001-02))
	Ambient temperature	0..+55°C
	Media temperature	According to valve's specifications
	Storage temperature	-20°...+80°C
	Maintenance	Maintenance-free
	Weight	Approx. 480g (without valve)
Enclosed mounting kit	FIRŠT (ROTOMIX, ROTOMIX G), ESBE (VRG, VRB), ACASO (TERMOMIX), BARBERI, FEROTERM, PAW, EURONORM, ESBE, IMP, DANFOSS, BESSER, SELTRON, LOVATO, TUXHORN, STRAWA, CIMBERIO	

Electrical installation:



Dimensions:



Order information:

Code	Article	Voltage	Time	Torque
21135	UNI TEMP/MR-B-01	24VAC, 50Hz	73s/90°	max. 12Nm

Enclosed mounting kit for following mixing valves: FIRŠT (ROTOMIX, ROTOMIX G), ESBE (VRG, VRB), ACASO (TERMOMIX), BARBERI, FEROTERM, PAW, EURONORM, ESBE, IMP, DANFOSS, BESSER, SELTRON, LOVATO, TUXHORN, STRAWA, CIMBERIO.

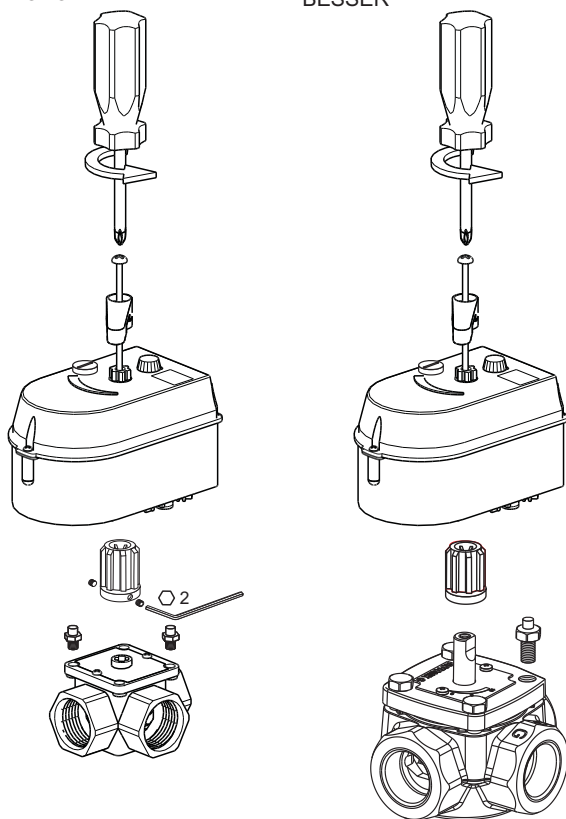
Safety notes:

- The actuator has been designed for use in stationary heating, ventilation and air-conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution power supply voltage – 24VAC.
- It may only be installed by suitably trained personnel. All applicable legal or institutional installation regulations must be complied with.
- The device must be protected from moisture and is not recommended for use in external applications.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The cable must not be removed from the device.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

UNI TEMP

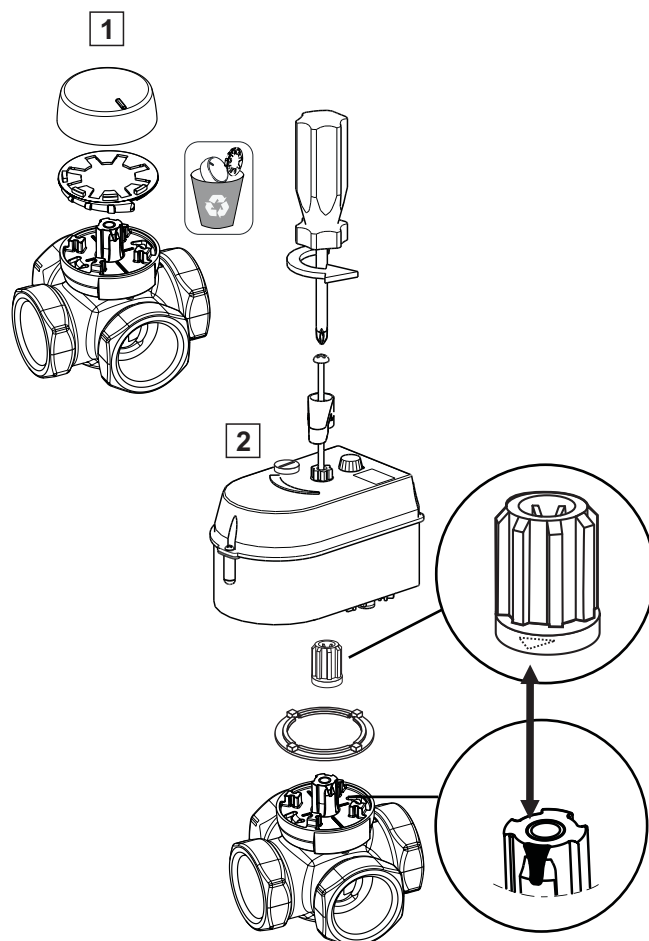
Mounting on the valve:

3-way mixing brass valve
ROTOMIX F3
ROTOMIX F4



FIRST (ROTOMIX G), ESBE, ACASO (TERMOMIX), BARBERI, FEROTHERM, PAW, EURONORM, IMP, DANFOSS, BESSER

Mixing valves ESBE VRB, VRG

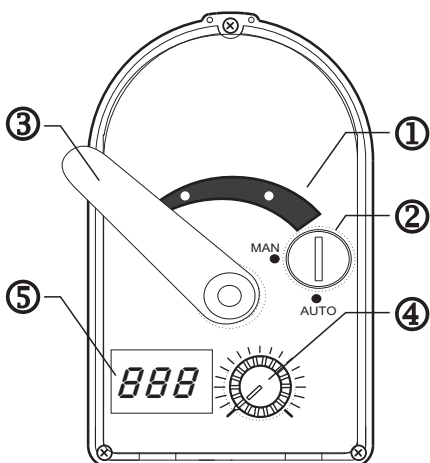


Mounting kit

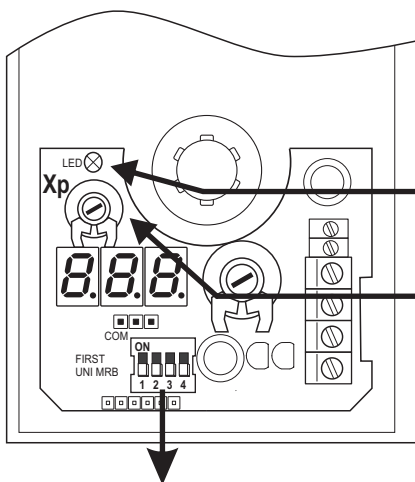
Code **Enclosed mounting kit**
58024 FIRST (ROTOMIX, ROTOMIX G), ESBE (VRG, VRB), ACASO (TERMOMIX), BARBERI, FEROTHERM, PAW, EURONORM, ESBE, IMP, DANFOSS, BESSER, SELTRON, LOVATO, TUXHORN, STRAWA, CIMBERIO

By special request
58025 SELTRON, LOVATO, PAW
58026 LAZZARI, LANDIS
58027 HONEYWELL MS
58028 SIEMENS
58029 MUT
58030 W.I.L.B
58031 CENTRA
58032 MEIBES, WITA, OVENTROP, HOLTER HORA BR80 SMD/SMV
58033 TEHNOPLANT, EXCELSIOR, KRAMER, DE PALA

Settings:



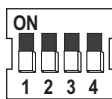
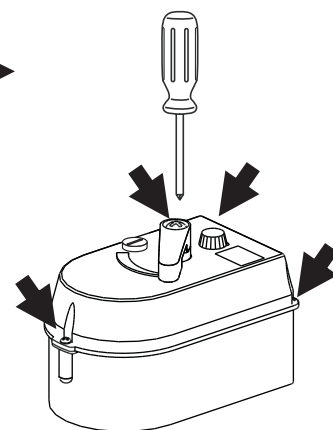
- 1 Mechanical indication.
Indicator can be set according to the valve assembly
- 2 Button for manual/auto control
- 3 Handle for manually controlling the drive, which also serves for the indication position of the valve
- 4 Button for adjusting the required temperature. When adjusting the temperature, the set value flashes on LCD screen.
- 5 LCD screen for displaying temperature



DIP switches and trimmer Xp are located inside controller. To open the controller it is necessary to loosen the screws on the cover (3x), and handle screw (1x).

LED indication of operation:
 - Blinking – controller calibration
 - ON: normal operation

Xp parameter - a proportional control range of valve (from 10K to 100K)



With DIP switches inside actuator is possible to set the following parameters:

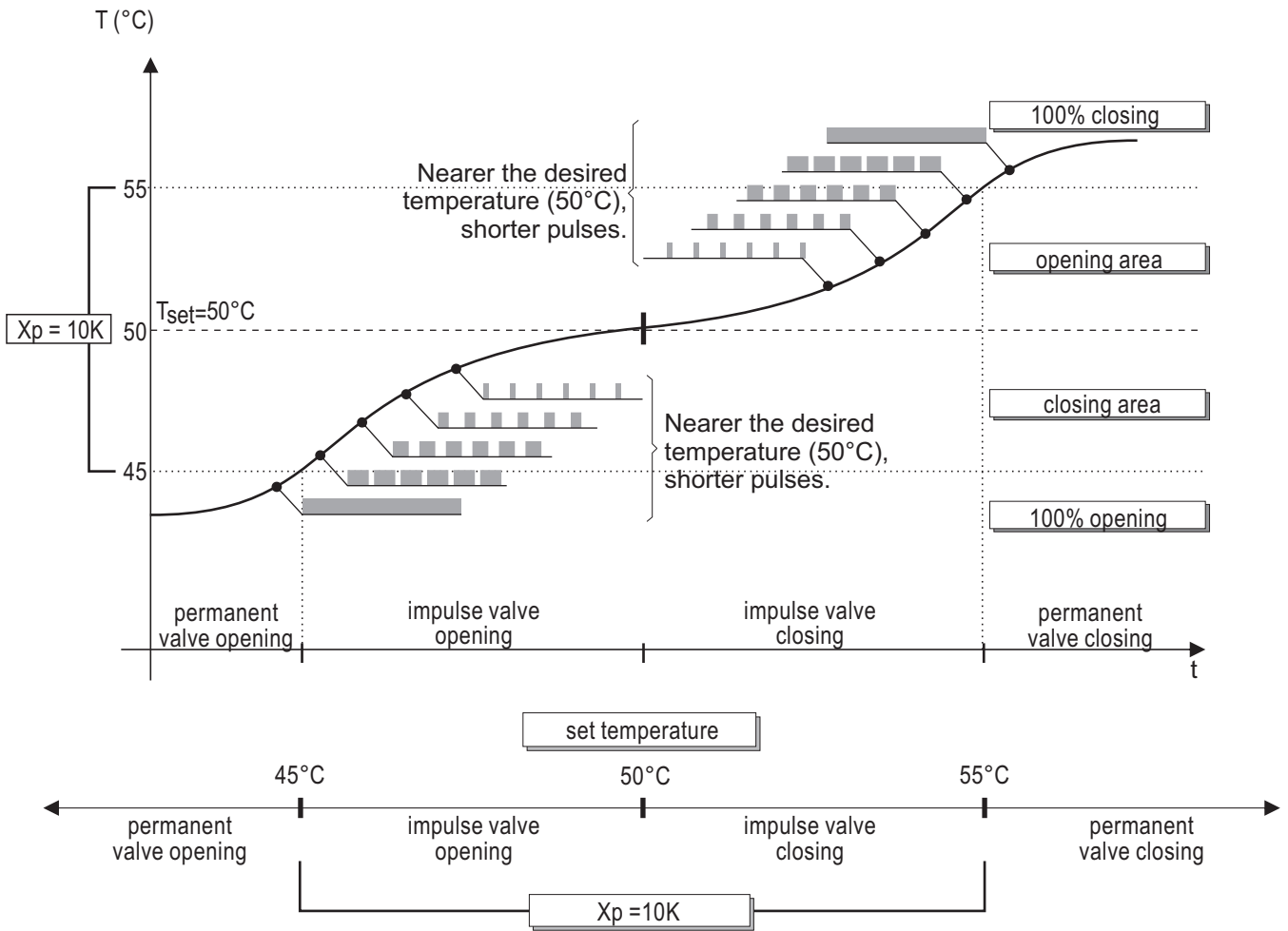
- DIP 1 Direction of rotation (direct CW / inverse CCW)
- DIP 2,3 Different temperature ranges depending on the application (0°C..100°C, 60°C..85°, 20°C..70°C, 25°C..45°C)
- DIP 4 Reaction factor

NOTE – when changing DIP1 position, controller calibration is carried out

<p>Xp parameter a proportional control range of valve</p>	<p>DIP switch settings</p> <table border="1"> <tr> <td>ON</td> <td>CW</td> <td colspan="2">Temperature range setting</td> <td>x10</td> </tr> <tr> <td>1 2 3 4</td> <td>CCW</td> <td>1</td> <td>2</td> <td>3</td> <td>x1</td> </tr> <tr> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>				ON	CW	Temperature range setting		x10	1 2 3 4	CCW	1	2	3	x1			1	2	3	4
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1 2 3 4	CCW	1	2	3	x1																
		1	2	3	4																
<p>Temperature range setting</p> <table border="1"> <tr> <td>DIP</td> <td>0°C..100°C</td> <td>60°C..85°</td> <td>20°C..70°C</td> <td>25°C..45°C</td> </tr> <tr> <td>2</td> <td>OFF</td> <td>OFF</td> <td>ON</td> <td>ON</td> </tr> <tr> <td>3</td> <td>OFF</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> </table>	DIP	0°C..100°C	60°C..85°	20°C..70°C	25°C..45°C	2	OFF	OFF	ON	ON	3	OFF	ON	OFF	ON						
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2	OFF	OFF	ON	ON																	
3	OFF	ON	OFF	ON																	

Controller behavior diagram as a function of temperature:

Example:
 -Desired temperature: 50°C
 -Xp parameter – proportional control range of valve (10K)



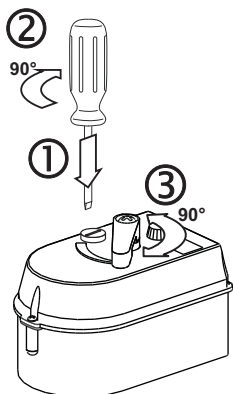
When the temperature is less than 45°C, controller gives continuous signal for opening mixing valve.

When the temperature is between 45°C and 50°C, controller pulsating opens mixing valve. Nearer the desired temperature (50°C), shorter pulses.

When the temperature is between 50°C and 55°C, controller pulsating closes mixing valve. Nearer the desired temperature (50°C), shorter pulses.

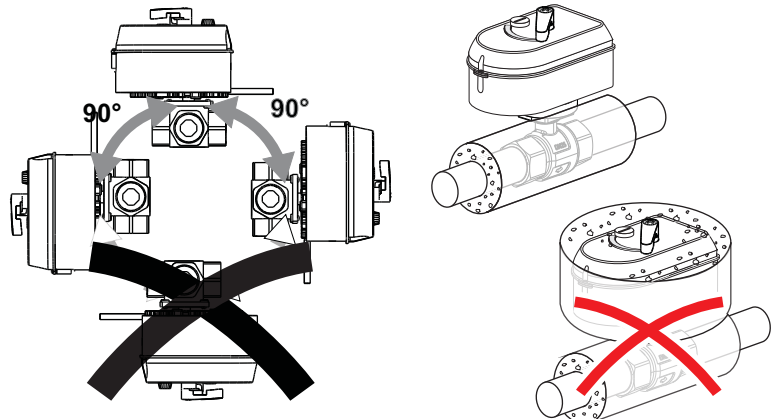
When the temperature is higher than 55°C, controller gives continuous signal for closing mixing valve.

Manual control:

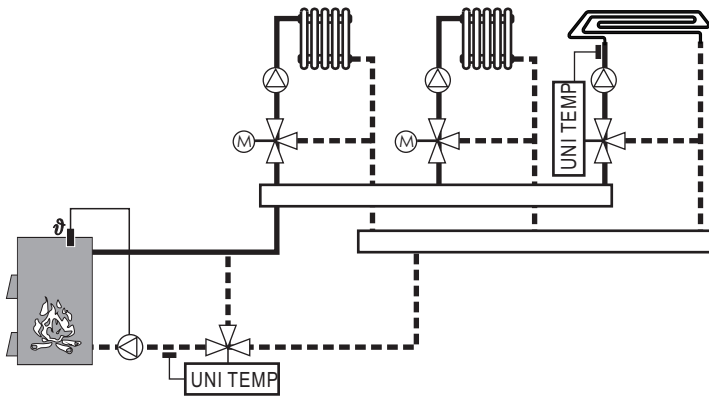


Note: when the button for manual operation is in <MAN> position, controller stays in temporary position irrespective of control signal.

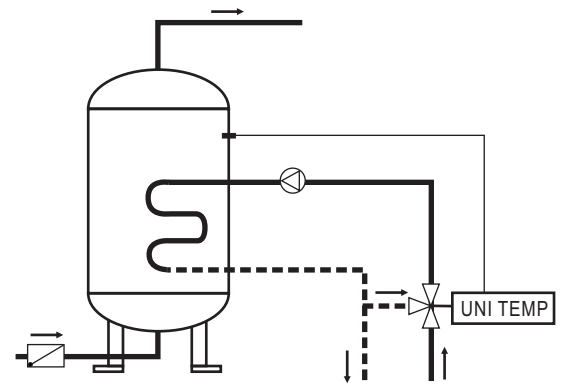
Recommended mounting position



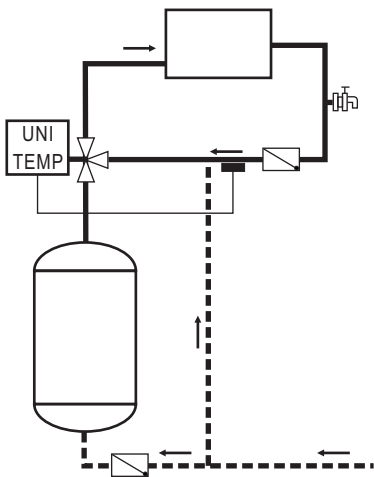
Examples:



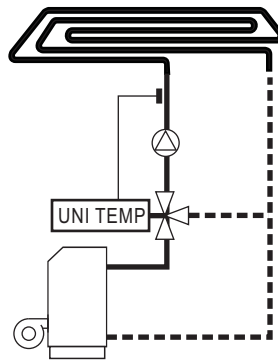
Solid fuel boiler - Maintain a constant temperature in heating circuit



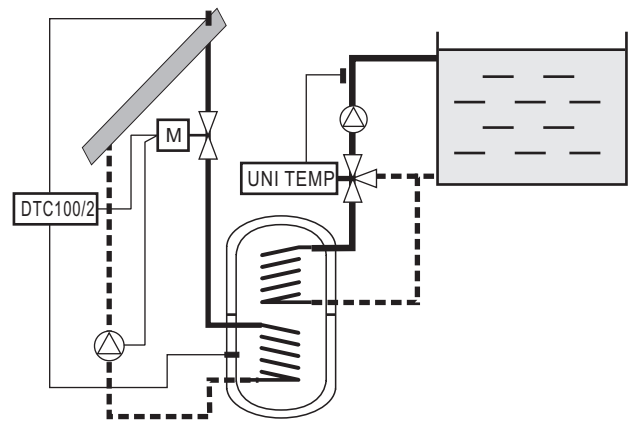
Maintain a constant temperature of heat reservoir



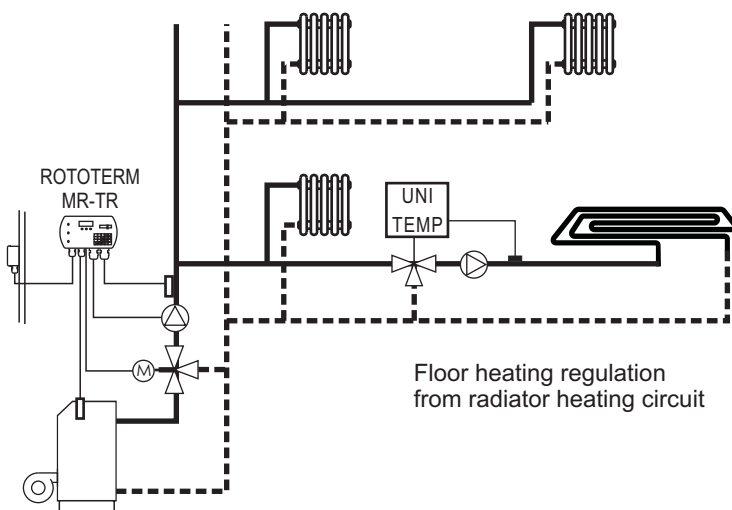
Maintain a constant temperature in sanitary water circuit



Floor heating - Maintain a constant temperature of heating circuit



Solar pool heating - Maintain a constant temperature of heating circuit



Floor heating regulation from radiator heating circuit

In compliance with standards

All our products fulfil the essential safety and protection requirements for CE conformity marking according to the following directives: EMC directive: 2004/108/EEC / LV directive: 2006/95/EEC / PAH directive 2005/69/EEC.

In compliance with standards:

EN 60730-2-14; 1997 + A1:2001 + A11:2005 + A2:2008
EN60730-1:2000 + A12:2003 + A12:2004 + A14:2005 + A16:2007 + A2:2008
EN 55014-1:2006
EN 61000-3-2:2006
EN 61000-3-3:2006
EN 62233:2008
ZEK 01.2-08

We reserve the right to modify the instructions and the technical data of the product without prior notice.

FIRŠT®**FIRŠT-ROTOTEHNIKA, s.p.,**

Radegunda 54, 3330 Mozirje

info@first.si, <http://www.first.si>**PE VELENJE:**

Koroška c. 56a, 3320 Velenje

tel: 03 / 898 35 00, fax: 03 / 898 35 35