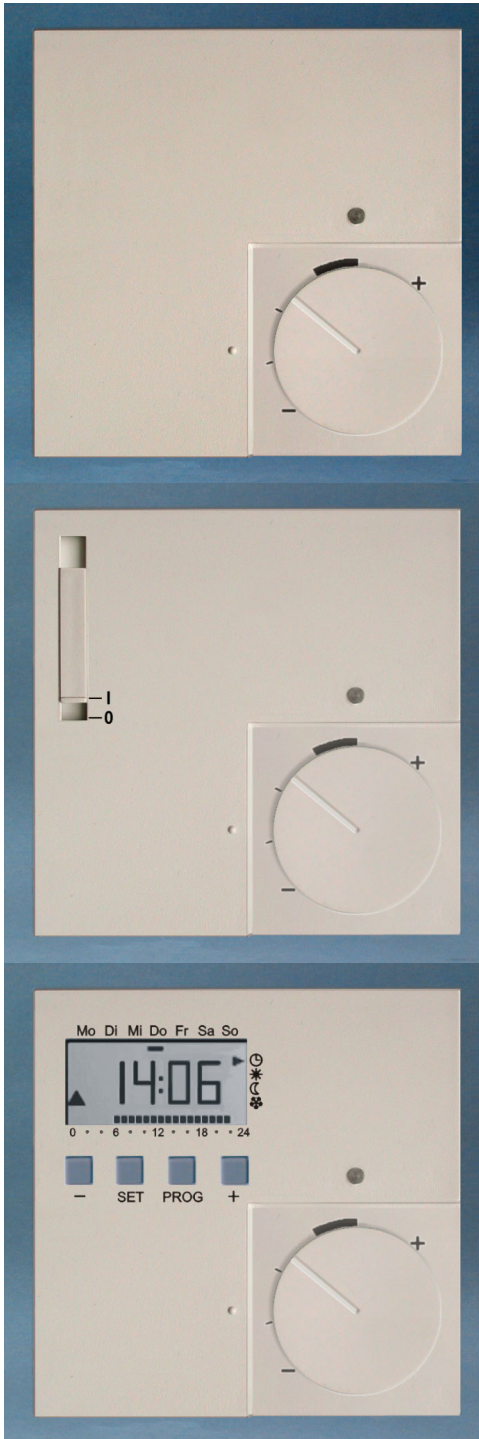


## Room Thermostats Clock Thermostats



Types SF 20, SF 23, SF 29, SF 50, SF 200, SF 220



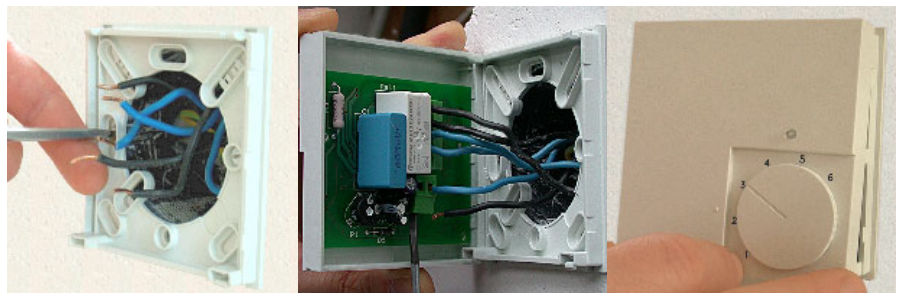
### Application

- Warm water heating
- Electric heating
- Air conditioning

### Versions

- Internal sensor and/or external sensor
- Triac output (noiseless)
- Relay output -potential free-
- Switch automatic / off (also: heating/cooling!)
- Relay output can be switched over to NO or NC function (advantage for stockkeeping)
- Same design of room thermostat and clock thermostat!
- Operating voltage: 24V or 230V
- Clock for heating and setback programmes (clock thermostat)
- Adjustment range limiter (all versions)
- LED for switching indication
- Customer versions on request**

### Easy mounting in 3 steps





① Mount base plate  
on wall box

② Connect wires

③ Snap in the  
thermostat

## Delivery Programme

Room Thermostats	Room Thermostats with switch	Clock Thermostats
<ul style="list-style-type: none"> <li>• SF20.R10/1</li> <li>• SF20.T/1</li> <li>• SF20.T/1.I</li> <li>• SF29.T/1</li> <li>• SF29.T/2</li> <li>• SF50.R10/1</li> <li>• SF50.T/1</li> </ul>	<ul style="list-style-type: none"> <li>• SF20.R10/2</li> <li>• SF20.T/2</li> <li>• SF20.T/2.I</li> <li>• SF20.To/2</li> <li>• SF29.T/2</li> <li>• SF50.T/2</li> </ul> 	<ul style="list-style-type: none"> <li>• SF200.R10/1</li> <li>• SF220.T/1</li> <li>• SF200.R10/2</li> <li>• SF220.T/2</li> </ul> 

Type	Triac (noiseless)												Relais							
	230V						24V						230V		24V					
	SF 20.T/1	SF 20.T/1.I	SF 20.T/1.S2	SF 23.T/1.S2	SF 29.T/1	SF 50.T/1	SF 220.T/1	SF 20.T/2	SF 20.T/2.I	SF 20.T/2.S2	SF 20.To/2	SF 29.T/2	SF 50.T/2	SF 220.T/2	SF 20.R10/1	SF 20.R10/1.S2	SF 50.R10/1	SF 200.R10/1	SF 20.R10/2	SF 20.R10/2.S2
<b>Technical Data</b>																				
Temperature Range																				
comfort and lowered temperature	+5 ... +30°C																			
frost-prevention	+5 ... +10°C																			
limit temperature	+5 ... +55°C																			
Resolution of Temperature	stepwise 0,5K																			
Temperature Setback	2 ... 10K, adjustable																			
approx. 2K, fix																				
Outside Scale	plus -minus																			
Inside Scale																				
Sensor KTY	internal																			
internal and external																				
internal or external																				
Sensor Tolerance	max. ± 1K																			
Operating Differential	± 0.1 ... ± 1.3K adjustable																			
± 0.2K, fix																				
Operating Voltage	24V AC																			
230V AC																				
Lowering output	Triac (noiseless), not potential-free																			
Max. Current	0.5A, 24V AC																			
0.5A, 230V AC																				
Output	Relay (NO), potential-free																			
Triac (noiseless), not potential-free																				
Max. Current	0.8A, 24V AC																			
0.8A, 230V AC																				
10(4)A, 24V AC																				
10(4)A, 230V AC																				
Pilot-Function																				
Control-LED	heating on																			
Switch	automatic / off																			
heating / cooling																				
<b>Connection of Actuators</b>																				
max. 5 actuators																				
max. 10 actuators																				
currentless closed																				
currentless open																				
currentless open or closed																				
inverted by jumper																				
<b>Week Time Switch electronic</b>																				
Reserve Power	(refers to the clock, time programmes are stored permanently)																			
approx. 4 hours																				
32 Program Places	(max. 112 switching times)																			
Programming	4 keys																			
Default Settings	Mo-Su 06:00 heating																			
Mo-Fr 22:00 setback																				
Sa-Su 23:00 setback																				
<b>Housing</b>																				
Protectiv System	IP 30																			
Protectiv Class	II according to EN 60335																			
Weight	approx. 90g																			
approx. 110g																				

\*\* ) Remote sensor FK 133/4 included in delivery (for limited temperature)

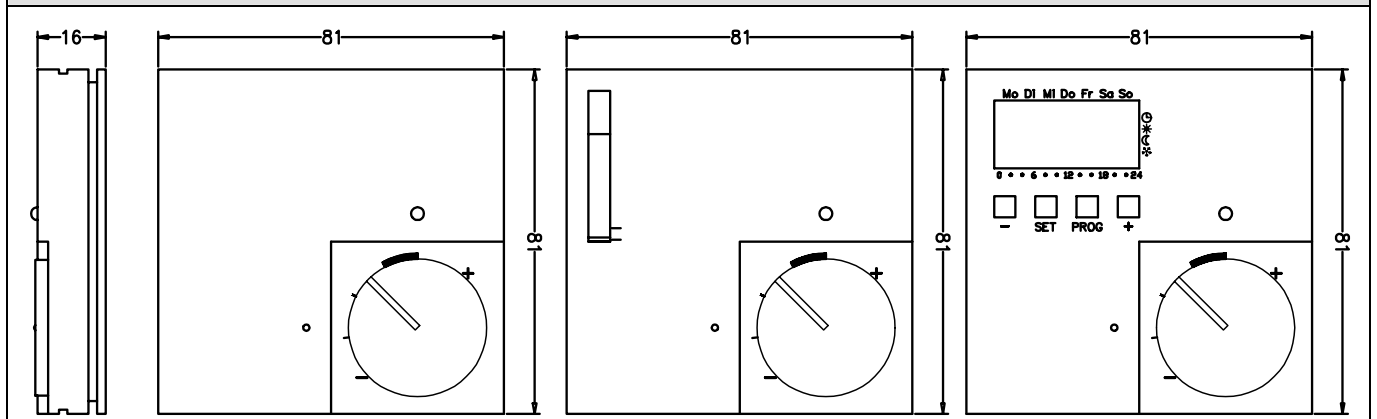
\*) Remote sensor FK 133/4 please order separately

At the clock thermostats, the following parameters can be set or displayed



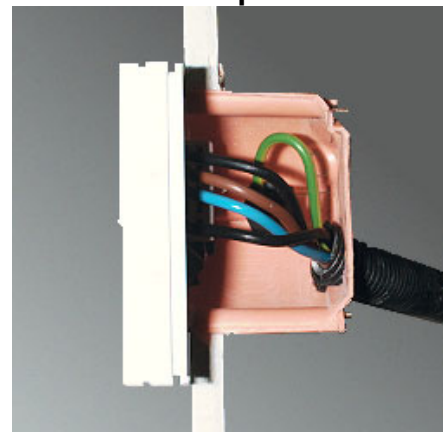
- **Normal display:** desired temperature, actual temperature, time
- **Operating mode:** internal sensor, external sensor or internal sensor with limit function  
heating/cooling, currentless open/ closed
- **Operating differential**
- **Activate/deactivate the frost-prevention temperature**
- **Limit temperature:** upper and lower limit value
- **Temperature at the external sensor**
- **Minimum switching duration** in seconds
- **Sensor compensation** to compensate for any building effects
- **Initial heating optimization** on/off
- **Gradient of the initial heating optimization** in minutes per Kelvin
- **Activate/deactivate the daylight saving setting**
- **New - vacation program** – the exactly date is adjustable

### Housing Dimensions



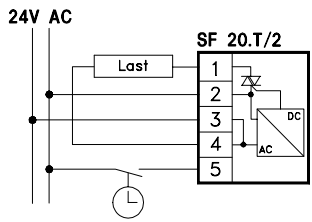
Relay output can be switched over  
for currentless open / closed  
valve actuators!

**ADVANTAGE:** much space for connection!

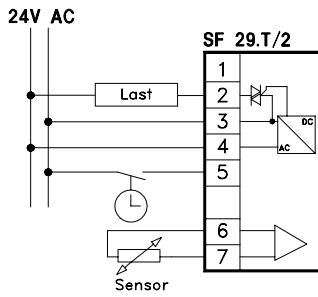


## Connection Diagrams

### 24V Triac

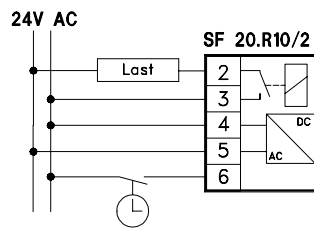


SF 20.T/2    SF 20.T/2.S2  
SF 20.T/2.I   SF 20.To/2

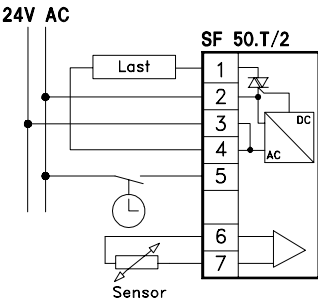


SF 29.T/2

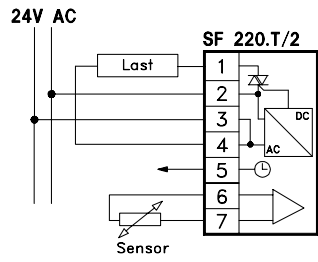
### 24V Relay



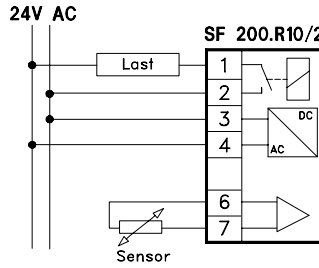
SF 20.R10/2    SF 20.R10/2S.2



SF 50.T/2

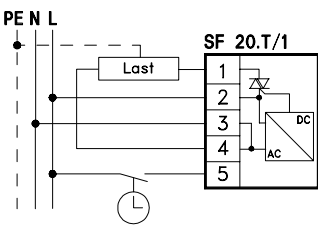


SF 220.T/2

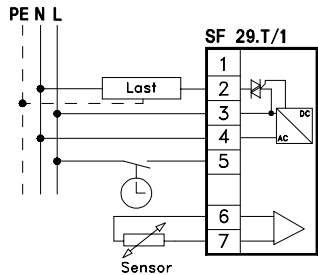


SF 200.R10/2

### 230V Triac

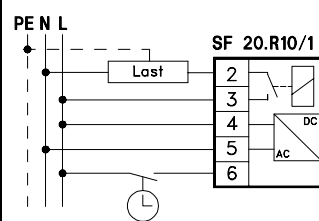


SF 20.T/1    SF 20.T/1.S2  
SF 20.T/1.I   SF 23.T/1.S2

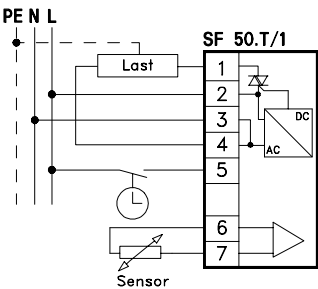
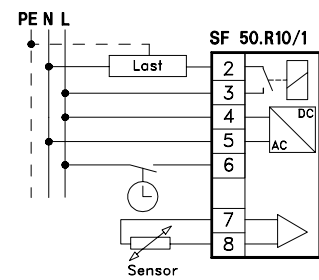


SF 29.T/1

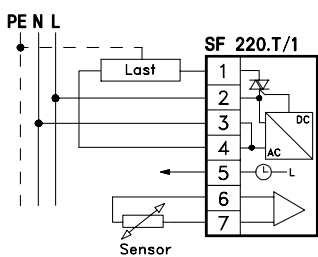
### 230V Relay



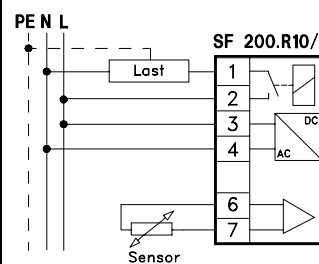
SF 20.R10/1    SF 20.R10/1S.2



SF 50.T/1



SF 220.T/1



SF 200.R10/1

**Do you know the complete product range of Stuhl Regelsysteme?**