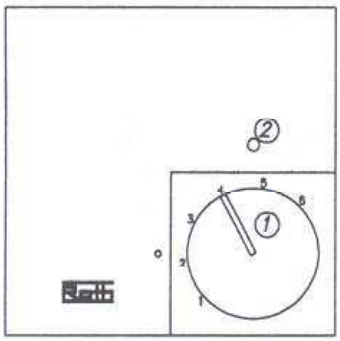
CE

1. Application

The electronic RSF 20.T/... room thermostat for the room temperature-dependent regulating of heating equipment is designed for use in dry closed areas.

2. Function

The internal temperature sensor measures the room temperature. The rotary button ① is used to set the desired room temperature to a value within the range 5° C to 30° C. The light-emitting diode ② indicates that the heating is switched on.
An input allows the setpoint to be lowered using a suitable control device (RSF 220.T/...) or an external clock.



Temperater range

scale-digits	1	2	3	4	5	6
temperature	5°C	10°C	15°C	20°C	25°C	30°C

2.1 Heating

The output is triggered when the room temperature falls below the set setpoint. The active lowering reduces the setpoint by approximately 2 K.

3. Installation – only by authorized trained personnel

Warning: **Connection errors can cause damage to the automatic control device! No responsibility will be taken for any damage resulting from the incorrect connection and/or improper use!**

- The device must be disconnected from the mains before any work is done on it.
- Only authorized trained personnel may make the connection and perform service!
- The connection must be made using the accompanying block diagram.
- **The same phase must be used for the power supply (terminal 2) and the lowering (terminal 5).**
- The device is designed only for connection to permanent wiring in dry closed areas.
- The VDE 0100, EN 60730 (Part 1) and the regulations of the local power utility company must be observed.
- The automatic control device must be installed so that it measures the average room temperature (avoid the vicinity of inlet and outlet channels, windows and doors). Install on interior walls approximately 1.3 to 1.5 m above the floor (avoid direct sunshine).

If the device does not function, first check the correct connection and the power supply.

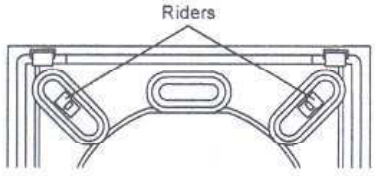
3.1 Limiting the range

If the complete setpoint range of the rotary button is not to be used, it is possible to mechanically limit this range.

First remove the rotary button. Turn the rotary button to a position that will later lie within the limited range. Mark this position. Use a screwdriver to raise the rotary button at the opening opposite the marking.
Note: The rotary button may only be removed once!

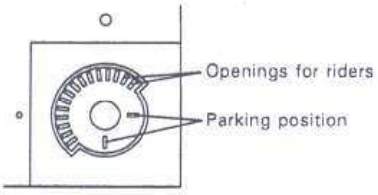
Remove the two riders from the lower part of the housing (see the following diagram).

Insert these riders with the narrow edge at the bottom in the openings located below the button.



Orient yourself on the visible scale when you insert the upper and lower rider.

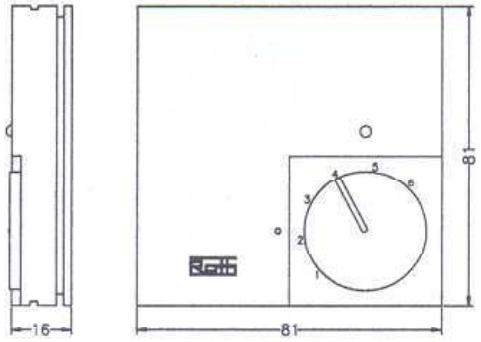
Finally, the button must be replaced at the original position. **Note: Ensure that you replace the button at this position, otherwise the scale will not match.**



4. Technical data

Type:		**RSF 20.T/...**
Temperature range:		+ 5 to + 30° C
Sensor tolerance:		± 1 K
Switching difference:		± 0.2 K fixed
Sensor:		Internal KTY semiconductor sensor
Desired temperature setting:		Exterior rotary button
Operating voltage:		
	RSF 20.T/1	230 VAC / 50 Hz (± 10%)
	RSF 20.T/2	24 VAC / 50 Hz (20...30 VAC)
Output:		Triac output with potential
Maximum permitted switching current:		
	RSF 20.T/1	0.8 A, 230 VAC (resistive / max. 5 actuators)
	RSF 20.T/2	0.8 A, 24 VAC (resistive / max. 5 actuators)
Electrical connections:		Screw terminals
Method of operation:		1.C (no limiter method of operation)
Impulse voltage withstand level:		4.0 kV
Permitted ambient temperature:		0 to +40° C
Housing:	Material	Upper part ABS (impact-resistant, flame-protected)
	Lower part	PA6 GF30
	Dimensions	81 x 81 x 16 (25) mm
	Mounting	With flush-mounting box
	Cable routing	Through flush-mounting box
	Degree of protection	IP 30
	Safety class	II
	Weight	Approx. 90 g

5. Dimensions



6. Connection diagram