

The latest generation of electronic flush mounted temperature controllers

Room temperature controllers, Underfloor heating controllers, Room temperature controllers with floor temperature limiters



HEATING



NEW

Great Variety of Applications

The new generation of controllers is designed to reach and maintain the set temperature at optimum level and to ensure the most efficient use of heating energy. By pushing a single button one can switch between comfort and set-back temperature. The easy-to-operate versions with timer perform this switch-over automatically. When the room is not in use, e.g. overnight, the temperature is automatically set back to the energy-saving mode, typically by 5°C for seven hours.

Set-back time and temperature can also be tailored to individual customer requirements. Jumpers offer the opportunity to choose whether the temperature should be set back every day or only on weekdays. Controllers with a set-back input are switched between comfort and set-back temperature via a central timer.

A maximum switching current of 16A and the 2-pole power switch make these controllers suitable for any purpose. They can be mounted in a standard 60 mm conduit box.

The temperature limiter function of this new generation of controllers is particularly important for electric underfloor heating applications. If the connection to the external temperature sensor is faulty, e.g. due to a short-circuit or an interruption, the controller will automatically go into fault mode. This means the heating output will be reduced to 30% to prevent the room from overheating or cooling out.

Designed using the latest technologies, the controllers are suitable for a wide variety of applications.

Applications:

- As room thermostat: for controlling the room temperature
- As underfloor heating controller: for controlling the floor temperature of electric floor heating e.g. in bathrooms
- As room temperature controller with floor temperature limiter: for controlling the room temperature and limiting the floor temperature (to a selectable max. value) for:
 - Electric underfloor heating (direct heating)
 - Hydronic underfloor heating



Tailored for any type of application

RTR R2T



FRe F2A



FRe F2T



FRe L2A



FRe L2T



Features

- Temperature set-back can be set via built-in timer function (depending on version)
- Temperature set-back via external timer (depending on version)
- Display of “temperature set-back” and “heating on”
- Switching current up to 16 A
- 2-pole mains switch
- In the event of a sensor fault: fault mode with 30% heating
- Mounting in a 60 mm conduit box
- Timer operating modes (selectable by means of jumpers):
 - Same for all days (set-back 5 °C for 7 h)
 - 5-2 days (set-back 5 °C for 7 h on weekdays, no set-back on Saturdays and Sundays)
 - On-timer (on 2 h after pressing the pushbutton)
- Set-back temperature and set-back time can be adjusted
- Connection via screw-type terminals

Versions

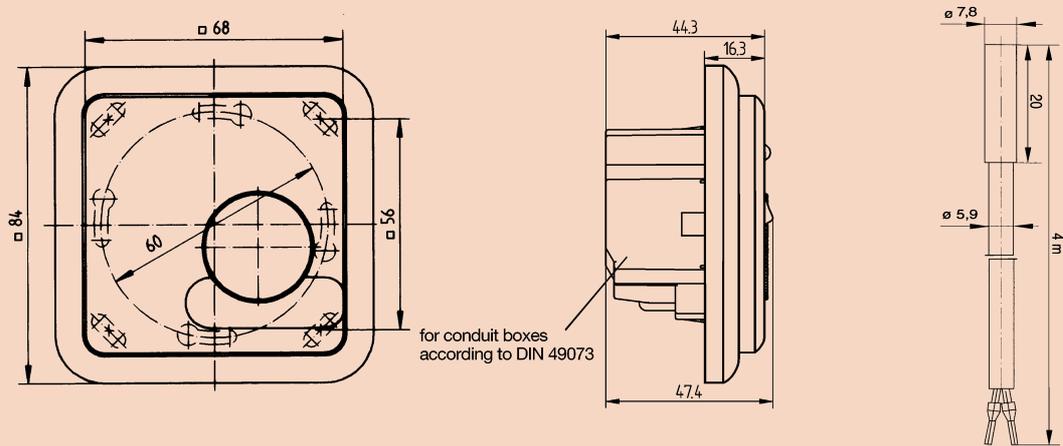
Features	RTR R2T	FRe F2A	FRe F2T	FRe L2A	FRe L2T
Room temperature controller Temp. 5...30°C	■				
Underfloor heating controller Temp. *...5 (= 10...50°C)		■	■		
Limiter Temp. room *...6 (= 5...30°C) floor 20...50°C				■	■
Timer	■		■		■
Set-back temperature input		■		■	
Day/night/auto switch	on request	on request		on request	
Article No. 517 81...	-44	-61	-64	-81	-84



Technical data

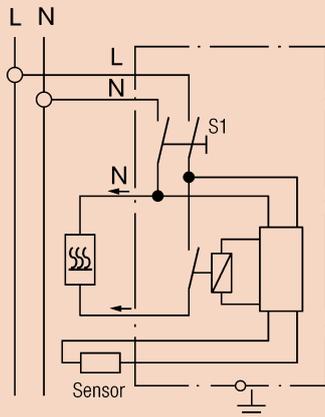
Temperature set-back	by 3 or 5 °C (selectable)
Supply voltage	230 V AC (195...253 V) 50 Hz
Output	Relay 1 break contact, effective direction can be changed, not for versions with timer
Switching current	max. 16(4) A
Indicator lamps red green	Controller calls for heat Set-back temperature
Control behavior	Proportional controller (similar to continuous through PWM)
Remote sensor	F193 720, length 4 m, can be extended to 50 m
Connection	via screw-type terminals

Dimensions



Circuit diagram

For versions with timer
FRe L2T, F2T; RTR R2T



For versions with set-back temperature input
FRe L2A, F2A

