Data Sheet

BasicPlus
Floor Heating Room Thermostats

Application

| *FH-CWT* | *FH-CWD* | *FH-CWP* |

The BasicPlus room thermostats are used for room temperature control in water based floor heating systems.
By controlling the room temperature in accordance with the temperature desired by the user, the room thermostats provide optimal energy savings as well as optimal thermal comfort.

The room thermostats are available in three versions:

FH-CWT Room Thermostat (with dial)
By turning the dial to the desired set-point temperature optimal thermal comfort in the room is achieved. In addition to temperature the thermostat setting scale includes a frost symbol, allowing for minimal energy consumption, while keeping the room from freezing.
LED's display the function of the thermostat:
  • green light: the thermostat is ON, but without heat demand.
  • red light: the thermostat is ON and there is heat demand.

FH-CWD Room Thermostats (with display)
In addition to room temperature control, the FH-CWD can be equipped with a floor sensor, thus allowing for control of maximum floor temperature and reducing risk of overheated and damaged floors. For specific maximum floor temperatures, please refer to recommendations

from floor suppliers.

Using the Frost Protection Mode instead of turning the thermostat OFF may protect against damages due to low temperatures. The room temperature will be maintained around 5° C.

FH-CWP Room Thermostat (programmable with display)
Two available timer programs are allowing temperature setback or complete turning off the heat supply during selected periods.
The ON / OFF Timer Function enables to program the thermostat for one period with heating turned OFF and one period with heating turned ON per day. During the ON period the thermostat will regulate in relation to the set temperature and TIMER ON will be shown in the display. During the OFF period, the heating is off, and TIMER OFF is shown in the display.
The Advanced Programmable Timer Function allows to set a timer controlled program for automatic change between comfort temperature and energy saving setback temperature, when standard room comfort temperature is not required.
The Advanced Programmable Timer Function allows for 4 different periods / 5+2 days per week.

Ordering

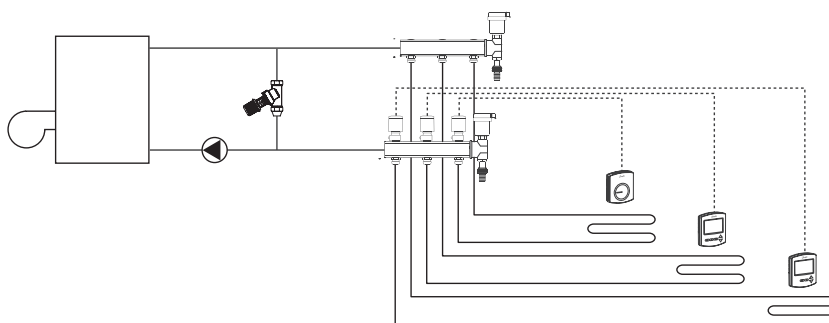| Product	Type	Supply	Output	Code no.
BasicPlus room thermostat with dial	FH-CWT	230 VAC	230 VAC	**088U0601**
BasicPlus room thermostat with display	FH-CWD	85-250 VAC	85-250 VAC	**088U0602**
BasicPlus programmable room thermostat with display	FH-CWP	85-250 VAC	85-250 VAC	**088U0603**

Accessories

Product	Type	Code no.
BasicPlus floor sensor	FH-CWF	**088U0610**

Technical specifications

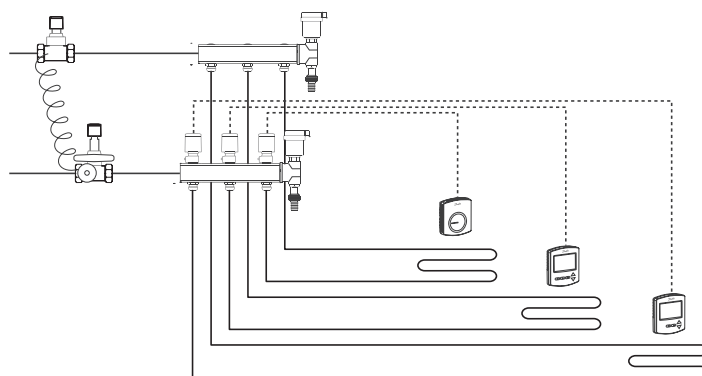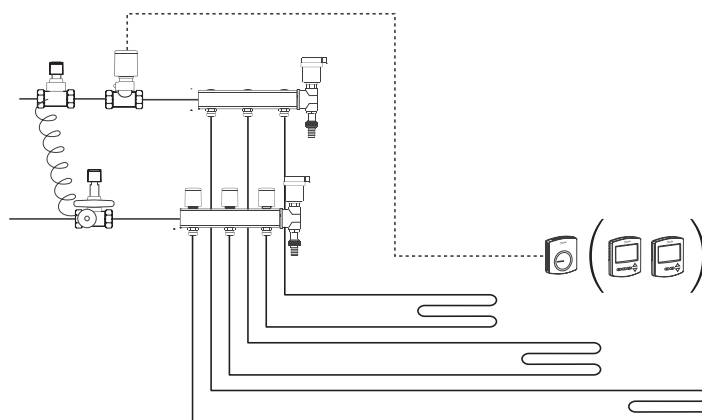|	FH-CWT	FH-CWD	FH-CWP
Adjustment mode	Dial	Buttons	
Programmable	-		Yes, two programs: 1. ON/OFF, two periods / day 2. Automatic shift between comfort and setback temp., 4 periods / 5 + 2 days
LED indicator	Green: thermostat ON, no heat demand. Red: thermostat ON, heat demand.	-	
LCD display	-	Yes, with backlight / nightlight	
Temperature range	5 - 30° C	5 - 35° C	
Precision	±1.5° C	±1.0° C	
Frost protection	Yes, with dial at ❄ (5° C)	Yes, if enabled (5° C / 7° C, ON / OFF)	
Operating rating	0 - 40 °C, 5 - 95% RH (non-condensing)		
Room sensor	NTC 10K, accuracy ±1%	NTC 100K, accuracy ±1%	
Floor sensor	-	Optional (FH-CWF)	
Floor sensor setting range	-	20 - 45° C	
Sensor fault indication	All outputs turned off	All outputs turned off, display shows E1 (room sensor failure) or E2 (floor sensor failure)	
Off-set function / Temp. calibration	-	Yes, ±10° C	
Max. load (inductive)	< 1 A		
Max. load (resistive)	< 3 A		
Power consumption	7 W	2 W	
Power supply	230 VAC ±10%, 50/60 Hz	85 - 250 VAC, 50/60 Hz	
Settings back-up	-	Settings retained if power failure	
Mounting	Wall mounting	Flush mounting for European and Chinese built-in sockets	
Ambient temperature	-10° - 60° C		
Approval	CE Marking, EN 60730		
ErP class	**ErP** Product **Class 1** (1%)		
IP class	30		
Shell material	ABS + PC, inflammable		
Static protection	Yes		
Colour	White RAL 9016 / Grey RAL 7011	White RAL 9016	
Dimensions	86 x 99 x 29 mm	86 x 99 x 19 mm	86 x 99 x 19 mm

Application examples

Individual room temperature control

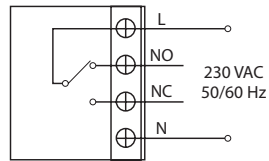*Reference room temperature control*

Individual room temperature control

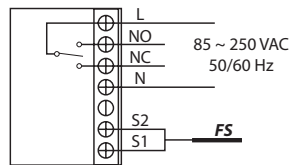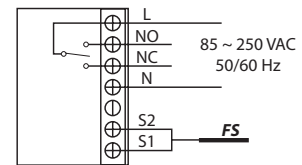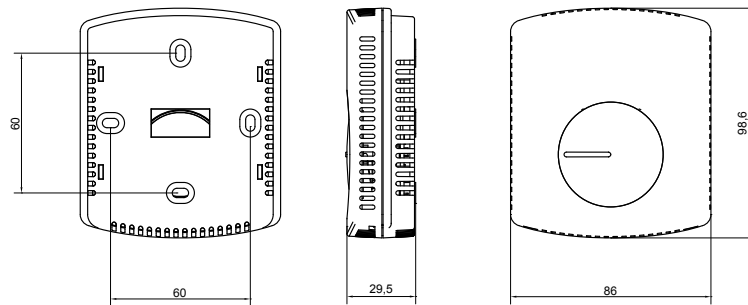*Reference room temperature control*

Wiring connections

FH-CWT
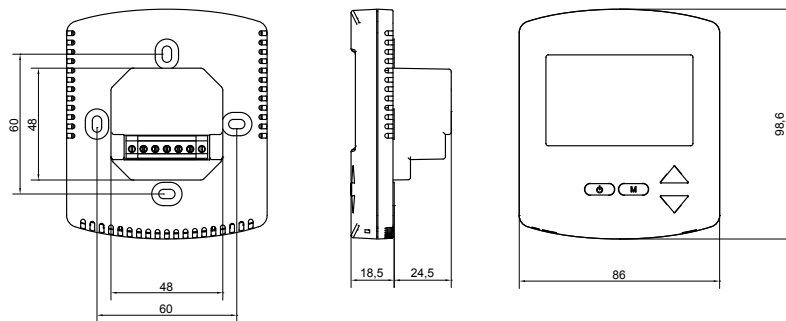
L
NO
NC
N

230 VAC
50/60 Hz

FH-CWD

L
NO
NC
N

S2
S1

85 ~ 250 VAC
50/60 Hz

FS

FH-CWP

L
NO
NC
N

S2
S1

85 ~ 250 VAC
50/60 Hz

FS

FS = *Remote floor sensor*

Dimensions

60
60
29,5
98,6
86

FH-CWT Room Thermostat with Dial

60
48
48
60
18,5
24,5
98,6
86

FH-CWD Room Thermostat with Display

60
48
48
60
18,5
24,5
98,6
86

FH-CWP Programmable Room Thermostat with Display

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