# Table of contents

**Fan Coil Controller EXT-F2000PS-..**
- Brief description 2
- Technical data 3
- Safety notes 3
- Product features 3
- Buttons and LCD display 3
- Operation 4
- Dimensions [mm] 5
- Mechanical installation 5

**Fan Coil Controller EXT-F2000PS-F3**
- Electrical connection 2-pipe application, 1 x 3-point 7
- Material list 2-pipe application, 1 x 3-point 7
- Configuration 2-pipe application, 1 x 3-point 7
- Parameter settings 2-pipe application, 1 x 3-point 8

**Fan Coil Controller EXT-F2000PS-DF3**
- Electrical connection 4-pipe application, 2 x 3-point 9
- Material list 4-pipe application, 2 x 3-point 9
- Configuration 4-pipe application, 2 x 3-point 9
- Parameter settings 4-pipe application, 2 x 3-point 10

**Fan Coil Controller EXT-F2000PS-21**
- Electrical connection 2-pipe application, 1 x On-off 13
- Configuration 2-pipe application, 1 x On-off 13
- Electrical connection 4-pipe application, 2 x On-off 13
- Configuration 4-pipe application, 2 x On-off 13
- Material list 13
- Parameter settings 14

Products no longer available
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
</table>
| EXT-F2000PS-F3 | • For 2-pipe applications (Change-Over)  
• Standard type with buttons and LCD display  
• Voltage supply: AC 230V  
• Fan outputs: AC 230V, High / Mid / Low  
• 1 Valve output: AC 230 V, 3-point |
| EXT-F2000PS-DF3 | • For 4-pipe applications  
• Standard type with buttons and LCD display  
• Voltage supply: AC 230V  
• Fan outputs: AC 230V, High / Mid / Low  
• 2 Valve outputs: AC 230V, 3-point |
| EXT-F2000PS-21 | • For 2-pipe and 4-pipe applications  
• Standard type with buttons and LCD display  
• Voltage supply: AC 230V  
• Fan outputs: AC 230V, High / Mid / Low  
• 2 Valve outputs: AC 230V, On-off |

**Warranty period**

This is a commercial product not manufactured by Belimo (commercial product in accordance with clause 13 of the General Business Conditions). The warranty period is 2 years from the date of delivery.
Fan Coil Controller

Technical data

Temperature controller for controlling Fan Coil devices:
• Fan control with three-stage output (Low / Mid / High)
• Control of heating and/or cooling valve with digital output

Electrical data
- Nominal voltage: AC 230V ±10%, 50/60 Hz
- Load: Max. 1 A per terminal
- Connections: Terminal block 1 … 7/9: 1.5 mm²

Outputs
- Fan control: 3-stage AC 230V (Low / Mid / High)
  – On-off AC 230V (EXT-F2000PS-21)

Functional data
- Temperature sensor: Type NTC, 5 kΩ
- Measuring range: 5 … 35°C
- Measuring accuracy: ±0.5 K @ 25°C
- Frost protection limit: 5°C
- Ambient conditions:
  - Operation: 0 … +50°C / 0 … 95% rH (non-condensing)
  - Transport and storage: −40 … +50°C / 20 … 95% rH (non-condensing)

Dimensions / Weight / Installation
- Dimensions (H x W x D): 130 x 90 x 32 mm
- Weight: 260 g
- Type of installation: Surface-mounted

Safety notes

- The controller 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!
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by government agency authorities must be observed during assembly.
- 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.

Product features

- LCD display: For displaying and inputting room temperature, setpoint and system statuses
- Operating buttons: For adjusting the room temperature setpoint and for the simple and secure operation of the connected components
- Building protection: If the room temperature drops below 5°C, the system switches on in order to prevent possible damage to the building (activation via parameter)
- Locking functions: In order to prevent incorrect operation, a number of different settings can be protected against manipulation

Buttons and LCD display

<table>
<thead>
<tr>
<th>Buttons</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>On / Off</td>
</tr>
<tr>
<td>2</td>
<td>Change value (−)</td>
</tr>
<tr>
<td>3</td>
<td>Fan speed “Manual” / “Auto”</td>
</tr>
<tr>
<td>4</td>
<td>Change value (+)</td>
</tr>
<tr>
<td>5</td>
<td>Operating mode</td>
</tr>
</tbody>
</table>

Products no longer available
Buttons and LCD display

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Locked when in cooling mode</td>
</tr>
<tr>
<td>2</td>
<td>Cooling</td>
</tr>
<tr>
<td>3</td>
<td>Room temperature</td>
</tr>
<tr>
<td>4</td>
<td>Fan</td>
</tr>
<tr>
<td>5</td>
<td>Operating mode</td>
</tr>
<tr>
<td>6</td>
<td>Heating</td>
</tr>
<tr>
<td>7</td>
<td>Locked when in heating mode</td>
</tr>
<tr>
<td>8</td>
<td>Room temperature</td>
</tr>
<tr>
<td>9</td>
<td>Frost protection active</td>
</tr>
<tr>
<td>10</td>
<td>Fan level 1 (Low)</td>
</tr>
<tr>
<td>11</td>
<td>Off</td>
</tr>
<tr>
<td>12</td>
<td>Fan status</td>
</tr>
<tr>
<td>13</td>
<td>Visible with Valve Open</td>
</tr>
<tr>
<td>14</td>
<td>Invisible with Valve Closed</td>
</tr>
<tr>
<td>15</td>
<td>Setpoint adjustment locked</td>
</tr>
<tr>
<td>16</td>
<td>Fan level 2 (Mid)</td>
</tr>
<tr>
<td>17</td>
<td>Fan level Manual</td>
</tr>
<tr>
<td>18</td>
<td>Fan level 3 (High)</td>
</tr>
<tr>
<td>19</td>
<td>Fahrenheit</td>
</tr>
<tr>
<td>20</td>
<td>Celsius</td>
</tr>
</tbody>
</table>

**Operation**

Display at time of switch-on

After the power has been switched on, the setpoint adjustment appears in the display for approximately 6 seconds, followed by the current room temperature.

Setting the temperature setpoint

With ▲ or ▼. The display flashes for 6 seconds, after which the new value is applied.

Locking the temperature setpoint

Keep the ▲ and ▼ keys pressed down together for 6 seconds. The display ▲ signals that the selection of the temperature setpoint is locked.

Unlocking the temperature setpoint

Keep the ▲ and ▼ keys pressed down together for 6 seconds. The display ▲ goes out.

Setting operating mode

3 different operating modes can be selected by pressing the Switch key. Heating ▲ – Cooling ▼ – Fan ▼.

Operating mode Heating ▲

Room temperature < Setpoint Valve control mode, Fan automatic Low / Mid / High.
Room temperature > Setpoint Valve closed, Fan Low.
The fan can be overridden with the Set key (Display ▼).

Operating mode Cooling ▼

Room temperature > Setpoint Valve control mode, Fan automatic Low / Mid / High.
Room temperature < Setpoint Valve closed, Fan Low.
The fan can be overridden with the Set key (Display ▼).

Operating mode Fan ▼

The fan can be overridden with the Set key (Display ▼). The individual fan stages can be selected with the Switch key.

ATTENTION: During the airing mode, the valves remain closed and the setpoint adjustment is locked.

Locking the operating mode

Heating or Cooling Keep the Switch key pressed down in Heating or Cooling mode for 6 seconds.
The display ▲ or ▼ signals that the selection of the operating mode is locked.
ATTENTION: The fan mode cannot be locked!

Unlocking the operating mode

Heating or Cooling Keep the Switch key pressed down in Heating or Cooling mode for 6 seconds.
The display ▲ or ▼ signals the corresponding Automatic mode.

Information

The symbol ▲ appears as soon as a valve is opened.
Fan Coil Controller

Dimensions [mm]

Using a blunt tool, remove the front plate from the installation base by pressing the two clips on the short side inward. Afterwards, the front plate can be carefully pulled off.

The room temperature controller is ideally mounted at a height ranging from 1.2 to 1.4 m above the floor.

Once the base plate has been mounted, the electrical connections can be set up in accordance with the wiring diagram.

Carefully insert the front plate until the two latches on the sides snap into place.

Note
Do not mount behind doors or in corners.
Avoid direct sunlight and draughts.
Products no longer available
**Fan Coil Controller**

**Electrical connection 2-pipe application, 1 x 3-point**

<table>
<thead>
<tr>
<th>Wiring diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Wiring Diagram" /></td>
</tr>
</tbody>
</table>

**Controller**

| Terminal 1/2 | Supply AC/DC 230 V |
| Terminal 3   | Fan level High    |
| Terminal 4   | Fan level Mid     |
| Terminal 5   | Fan level Low     |
| Terminal 6   | 3-point valve actuator On |
| Terminal 7   | 3-point valve actuator Off |

**Cable colours Actuator**

1 = blue 2 = brown 3 = white

**Material list 2-pipe application, 1 x 3-point**

- **Room temperature controller, AC 230V**
  - EXT-F2000PS-F3 – 1 Valve control 3-point
- **Valve actuator, AC 230V / 3-point**
  - TRD230-3
- **Suitable valve types**
  - R20xK – Characterised control valve 2-way internal thread DN10
  - R30xK – Characterised control valve 3-way internal thread DN10
  - R40xK – Characterised control valve 2-way outer thread DN10
  - R50xK – Characterised control valve 3-way outer thread DN10
- **Valve actuator, AC 230V / 3-point**
  - TR230-3
- **Suitable valve types**
  - R2xx – Characterised control valve 2-way internal thread DN15/20
  - R3xx – Characterised control valve 3-way internal thread DN15/20
  - R4xx – Characterised control valve 2-way outer thread DN15/20
  - R5xx – Characterised control valve 3-way outer thread DN15/20
- **Valve/actuator combinations**
  - R2BR-6.. – Zone valve with actuator 2-way internal thread DN10-20
  - R3BR-6.. – Zone valve with actuator 3-way internal thread DN10-20

**Configuration 2-pipe application, 1 x 3-point**

<table>
<thead>
<tr>
<th>DIP switch</th>
<th><strong>DIP switch OFF</strong></th>
<th><strong>DIP switch ON</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Operation</td>
<td>Setting the parameters</td>
</tr>
<tr>
<td>1</td>
<td>* Celsius</td>
<td>Fahrenheit</td>
</tr>
</tbody>
</table>

* Default

**Products no longer available**
Caution
Before changing the parameters, check the following table to determine whether such a change is really necessary.

- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON in order to access Parameters mode.
- Mount the front plate back on and switch on the power.

- The Switch key is used for switching between the individual parameters. The value of the selected parameter can be changed with the ▲ and ▼ keys.
- The display flashes for 6 seconds, after which the new value is applied.

- After completing the settings, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.

### Parameter settings 2-pipe application, 1 x 3-point

<table>
<thead>
<tr>
<th>Display</th>
<th>Parameters</th>
<th>Range</th>
<th>Default setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Temperature display correction</td>
<td>±3 K</td>
<td>0 K</td>
</tr>
<tr>
<td>E2</td>
<td>Minimum setpoint</td>
<td>0°C … Maximum</td>
<td>5°C</td>
</tr>
<tr>
<td>E3</td>
<td>Maximum setpoint</td>
<td>Minimum … 50°C</td>
<td>35°C</td>
</tr>
<tr>
<td>E1E2</td>
<td>Building protection</td>
<td>0 – Frost monitoring switched off</td>
<td>1 – Frost monitoring active</td>
</tr>
<tr>
<td>E1E3</td>
<td>Behaviour after power failure</td>
<td>0 – Switching on the controller</td>
<td>1 – Switching off the controller</td>
</tr>
<tr>
<td>E2E3</td>
<td>Behaviour of the fan with the valve closed (only in Auto mode)</td>
<td>1 – Stop</td>
<td>2 – Low when cooling and Stop when heating</td>
</tr>
<tr>
<td>E1E2E3</td>
<td>Time delay between fan stages</td>
<td>0.5 … 90</td>
<td>The greater the value, the slower the switching</td>
</tr>
<tr>
<td>E1</td>
<td>Control speed of the valve (I portion)</td>
<td>0.5 … 99.5</td>
<td>The greater the value, the slower the stabilisation</td>
</tr>
<tr>
<td>E2</td>
<td>Button sounder</td>
<td>0 – switched off</td>
<td>1 – switched on</td>
</tr>
<tr>
<td>E3</td>
<td>Running time of the 3-point valve actuator</td>
<td>10 … 420 s</td>
<td>100 s</td>
</tr>
<tr>
<td>LCD display</td>
<td>range</td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td>XY (number)</td>
<td>10 … 99 seconds</td>
<td>XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>100 … 199 seconds</td>
<td>1XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>200 … 299 seconds</td>
<td>2XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>300 … 399 seconds</td>
<td>3XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>400 … 420 seconds</td>
<td>4XY seconds</td>
<td></td>
</tr>
</tbody>
</table>

### Reset to Default settings

- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON.
- Mount the front plate back on and switch on the power.

- Press down the Switch key for at least 25 seconds, until the controller switches itself off and back on again automatically.

- Afterwards, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.

- All parameters are once again in their default settings.
Fan Coil Controller

Electrical connection 4-pipe application, 2 x 3-point

<table>
<thead>
<tr>
<th>Wiring diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC 230 V</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Valve actuator TR(D)230-3</td>
</tr>
<tr>
<td>Valve actuator TR(D)230-3</td>
</tr>
<tr>
<td>Fan</td>
</tr>
<tr>
<td>H</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>Terminal 1/2 Supply AC/DC 230 V</td>
</tr>
<tr>
<td>Terminal 3 Fan level High</td>
</tr>
<tr>
<td>Terminal 4 Fan level Mid</td>
</tr>
<tr>
<td>Terminal 5 Fan level Low</td>
</tr>
<tr>
<td>Terminal 6 3-point valve actuator Heating On/Off</td>
</tr>
<tr>
<td>Terminal 7 3-point valve actuator Heating On/Off</td>
</tr>
<tr>
<td>Terminal 8 3-point valve actuator Cooling On/Off</td>
</tr>
<tr>
<td>Terminal 9 3-point valve actuator Cooling On/Off</td>
</tr>
</tbody>
</table>

Cable colours Actuator: 1 = blue, 2 = brown, 3 = white

Material list 4-pipe application, 2 x 3-point

- Room temperature controller, AC 230V: EXT-F2000PS-DF3 – 2 Valve controls 3-point
- Valve actuator, AC 230V / 3-point: TRD230-3
- Suitable valve types:
  - R20xK – Characterised control valve 2-way internal thread DN10
  - R30xK – Characterised control valve 3-way internal thread DN10
  - R40xK – Characterised control valve 2-way outer thread DN10
  - R50xK – Characterised control valve 3-way outer thread DN10
- Valve actuator, AC 230V / 3-point: TR230-3
- Suitable valve types:
  - R2xx – Characterised control valve 2-way internal thread DN15/20
  - R3xx – Characterised control valve 3-way internal thread DN15/20
  - R4xx – Characterised control valve 2-way outer thread DN15/20
  - R5xx – Characterised control valve 3-way outer thread DN15/20
- Valve/actuator combinations:
  - R2BR-6.. – Zone valve with actuator 2-way internal thread DN10-20
  - R3BR-6.. – Zone valve with actuator 3-way internal thread DN10-20

Configuration 4-pipe application, 2 x 3-point

<table>
<thead>
<tr>
<th>DIP switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
</tr>
<tr>
<td>OFF</td>
</tr>
<tr>
<td>ON</td>
</tr>
</tbody>
</table>

DIP switch settings:

1. * Operation – Setting the parameters
2. * Celsius – Fahrenheit
3. 2-pipe application → 1 Valve actuator 3-point → 4-pipe application → 2 Valve actuators 3-point

Note:
DIP3 = OFF – Utilisation with only one 3-point valve actuator: Automatic switching between Cooling/Heating is locked. DIP4 has no function.

Products no longer available.
Parameter settings 4-pipe application, 2 x 3-point

Caution
Before changing the parameters, check the following table to determine whether such a change is really necessary.

- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON in order to access Parameters mode.
- Mount the front plate back on and switch on the power.
- The Switch key is used for switching between the individual parameters. The value of the selected parameter can be changed with the ▲ and ▼ keys.
- The display flashes for 6 seconds, after which the new value is applied.
- After completing the settings, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.

<table>
<thead>
<tr>
<th>Display</th>
<th>Parameters</th>
<th>Range</th>
<th>Default setting</th>
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<tbody>
<tr>
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<td>Temperature display correction</td>
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<td>E2</td>
<td>Minimum setpoint</td>
<td>0°C … Maximum 5°C</td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>Maximum setpoint</td>
<td>Minimum … 50°C 35°C</td>
<td></td>
</tr>
<tr>
<td>E1E2</td>
<td>Building protection</td>
<td>0 – Frost monitoring switched off 1 – Frost monitoring active</td>
<td>0</td>
</tr>
<tr>
<td>E1E3</td>
<td>Behaviour after power failure</td>
<td>0 – Switching on the controller 1 – Switching off the controller 2 – Retaining last status</td>
<td>2</td>
</tr>
<tr>
<td>E2E3</td>
<td>Behaviour of the fan with the valve closed (only in Auto mode)</td>
<td>1 – Stop 2 – Low when cooling and Stop when heating 3 – Low when heating and Stop when cooling 4 – Low when heating and cooling</td>
<td>4</td>
</tr>
<tr>
<td>E1E2E3</td>
<td>Time delay between fan stages</td>
<td>0.5 … 90 The greater the value, the slower the switching</td>
<td>20</td>
</tr>
<tr>
<td>E1 +</td>
<td>Control speed of the valve (I portion)</td>
<td>0.5 … 99.5 The greater the value, the slower the stabilisation</td>
<td>25</td>
</tr>
<tr>
<td>E2 +</td>
<td>Button sounder</td>
<td>0 – switched off 1 – switched on</td>
<td>0</td>
</tr>
<tr>
<td>E3 +</td>
<td>Zero energy band Heating</td>
<td>1 … 4 K</td>
<td>1.5 K</td>
</tr>
<tr>
<td>E1E2 +</td>
<td>Zero energy band Cooling</td>
<td>1 … 4 K</td>
<td>1.5 K</td>
</tr>
<tr>
<td>E1E3 +</td>
<td>Running time of the 3-point valve actuator Heating</td>
<td>10 … 420 s</td>
<td>100 s</td>
</tr>
<tr>
<td>LCD display</td>
<td>Range</td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td>XY (number)</td>
<td>10 … 99 seconds</td>
<td>XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>100 … 199 seconds</td>
<td>1XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>200 … 299 seconds</td>
<td>2XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>300 … 399 seconds</td>
<td>3XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>400 … 420 seconds</td>
<td>4XY seconds</td>
<td></td>
</tr>
<tr>
<td>E2E3 +</td>
<td>Running time of the 3-point valve actuator Cooling</td>
<td>10 … 420 s</td>
<td>100 s</td>
</tr>
<tr>
<td>LCD display</td>
<td>Range</td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td>XY (number)</td>
<td>10 … 99 seconds</td>
<td>XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>100 … 199 seconds</td>
<td>1XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>200 … 299 seconds</td>
<td>2XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>300 … 399 seconds</td>
<td>3XY seconds</td>
<td></td>
</tr>
<tr>
<td>XY (number) +</td>
<td>400 … 420 seconds</td>
<td>4XY seconds</td>
<td></td>
</tr>
</tbody>
</table>
Parameter settings 4-pipe application, 2x 3-point

**Reset to Default settings**

- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON.
- Mount the front plate back on and switch on the power.
- Press down the Switch key for at least 25 seconds, until the controller switches itself off and back on again automatically.
- Afterwards, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.
- All parameters are once again in their default settings.
**Electrical connection 2-pipe application, 1 x On-off**

Wiring diagram

- Controller
  - Terminal 1/2: Supply AC/DC 230 V
  - Terminal 3: Fan level High
  - Terminal 4: Fan level Mid
  - Terminal 5: Fan level Low
  - Terminal 6: On-off valve actuator Cooling
  - Terminal 7: Do not use

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Supply AC/DC 230 V</td>
</tr>
<tr>
<td>3</td>
<td>Fan level High</td>
</tr>
<tr>
<td>4</td>
<td>Fan level Mid</td>
</tr>
<tr>
<td>5</td>
<td>Fan level Low</td>
</tr>
<tr>
<td>6</td>
<td>On-off valve actuator</td>
</tr>
<tr>
<td>7</td>
<td>Do not use</td>
</tr>
</tbody>
</table>

**Configuration 2-pipe application, 1 x On-off**

DIP switch

Note:
- DIP3 OFF: Utilisation with only one on-off valve actuator. Automatic switching between Cooling/Heating is locked.
- DIP4 No function.

**Electrical connection 4-pipe application, 2 x On-off**

Wiring diagram

- Controller
  - Terminal 1/2: Supply AC/DC 230 V
  - Terminal 3: Fan level High
  - Terminal 4: Fan level Mid
  - Terminal 5: Fan level Low
  - Terminal 6: On-off valve actuator Cooling
  - Terminal 7: On-off valve actuator Heating

**Configuration 4-pipe application, 2 x On-off**

DIP switch

- Controller
  - Terminal 1/2: Supply AC/DC 230 V
  - Terminal 3: Fan level High
  - Terminal 4: Fan level Mid
  - Terminal 5: Fan level Low
  - Terminal 6: On-off valve actuator Cooling
  - Terminal 7: On-off valve actuator Heating

**List of materials**

- Room temperature controller, AC 230V: EXT-F2000PS-21 – 1 or 2 Valve control On-off
- Valve/actuator combinations:
  - EXT-SW-E152V ... E252V – Zone valve with rotary actuator 2-way internal thread DN15 ... 25
  - EXT-SW-E153V ... E253V – Zone valve with rotary actuator 3-way internal thread DN15 ... 25
  - EXT-SW-G152V ... E252V – Zone valve with rotary actuator 2-way external thread DN15 ... 25
  - EXT-SW-G153V ... E253V – Zone valve with rotary actuator 3-way external thread DN15 ... 25

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### Parameter settings

**Caution**
Before changing the parameters, check the following table to determine whether such a change is really necessary.

- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON in order to access Parameters mode.
- Mount the front plate back on and switch on the power.
- The Switch key is used for switching between the individual parameters. The value of the selected parameter can be changed with the ▲ and ▼ keys.
- The display flashes for 6 seconds, after which the new value is applied.
- After completing the settings, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.

<table>
<thead>
<tr>
<th>Display</th>
<th>Parameters</th>
<th>Range</th>
<th>Default setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Temperature display correction</td>
<td>±3 K</td>
<td>0 K</td>
</tr>
<tr>
<td>E2</td>
<td>Minimum setpoint</td>
<td>0°C ... Maximum 5°C</td>
<td>35°C</td>
</tr>
<tr>
<td>E3</td>
<td>Maximum setpoint</td>
<td>Minimum ... 50°C</td>
<td>35°C</td>
</tr>
<tr>
<td>E1E2</td>
<td>Building protection</td>
<td>0 – Frost monitoring switched off 1 – Frost monitoring active</td>
<td>0</td>
</tr>
<tr>
<td>E1E3</td>
<td>Behaviour after power failure</td>
<td>0 – Switching on the controller 1 – Switching off the controller 2 – Retaining last status</td>
<td>2</td>
</tr>
<tr>
<td>E2E3</td>
<td>Behaviour of the fan with the valve closed (only in Auto mode)</td>
<td>1 – Stop 2 – Low when cooling and Stop when heating 3 – Low when heating and Stop when cooling 4 – Low when heating and cooling</td>
<td>4</td>
</tr>
<tr>
<td>E1E2E3</td>
<td>Time delay between fan stages</td>
<td>0.5 ... 90</td>
<td>The greater the value, the slower the switching</td>
</tr>
<tr>
<td>E1 +</td>
<td>Button sounder</td>
<td>0 – switched off 1 – switched on</td>
<td>0</td>
</tr>
<tr>
<td>E2 +</td>
<td>Zero energy band Heating</td>
<td>1 ... 4 K</td>
<td>1.5 K</td>
</tr>
<tr>
<td>E3+</td>
<td>Zero energy band Cooling</td>
<td>1 ... 4 K</td>
<td>1.5 K</td>
</tr>
<tr>
<td>E1E2 +</td>
<td>Hysteresis for opening the valve</td>
<td>0 ... 5 K</td>
<td>0.5 K</td>
</tr>
<tr>
<td>E1E3 +</td>
<td>Hysteresis for closing the valve</td>
<td>0 ... 5 K</td>
<td>0.5 K</td>
</tr>
<tr>
<td>E2E3 +</td>
<td>Selection of operating mode</td>
<td>0 – Heating/Cooling 1 – Heating/Cooling/Ventilation</td>
<td>1</td>
</tr>
</tbody>
</table>

**Reset to Default settings**
- Switch the power off to the controller and carefully remove the front plate.
- Set DIP switch 1 to ON.
- Mount the front plate back on and switch on the power.
- Press down the Switch key for at least 25 seconds, until the controller switches itself off and back on again automatically.
- Afterwards, switch the power off to the controller and carefully remove the front plate.
- Set the DIP switch 1 back to OFF.
- Mount the front plate back on and switch on the power.
- All parameters are once again in their default settings.
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