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## 1 Symbols



### Caution

This symbol warns against risks of injury. Please heed all instructions designated by this symbol to prevent injuries and/or death.



### Attention

This symbol warns against risks of property damage. Please heed the respective instructions to prevent risk of damage to the unit and its functions.



### Notice

This symbol denotes information about the economic use of the equipment or special tips.

## 2 Use

### 2.1 Intended use

The TempTronic RC is an electronic controller for Hoval recirculation and supply air units of the TopVent® and TopVent® gas series.

Also included under intended use are compliance with the installation, commissioning, operating and maintenance provisions (operating instructions). Any usage over and above this use is considered to be not as intended. The manufacturer shall not be held responsible for any resulting damage.

### 2.2 User group

The following user groups apply for the various operation levels:

Operation level	User group
Operation level 1:	Persons familiar with the operating instructions
Operation level 2:	Persons who are familiar with the operating instructions and have also received instruction from and been informed of the risks by an authorised person
Operation level 3:	Hoval Customer Service

Table 1: User groups

### 2.3 Risks

The TempTronic RC represents state-of-the-art design and is safe to operate. But despite all of the precautionary measures taken, there are still some potential hazards that are not obvious, such as:

- Dangers when working on the electrical systems
- Dangers when working on components of the gas circuit
- Hazards from hot water when working on the hot water supply
- When working on the unit, objects (e.g. tools) could be dropped.
- Malfunctions as a result of defective parts
- Danger caused by coming into contact with hot components when carrying out work inside the unit or on the flue gas system

## 3 Basic Principles

### 3.1 Operating elements

The unit is operated via a 4-line display and 4 keys:

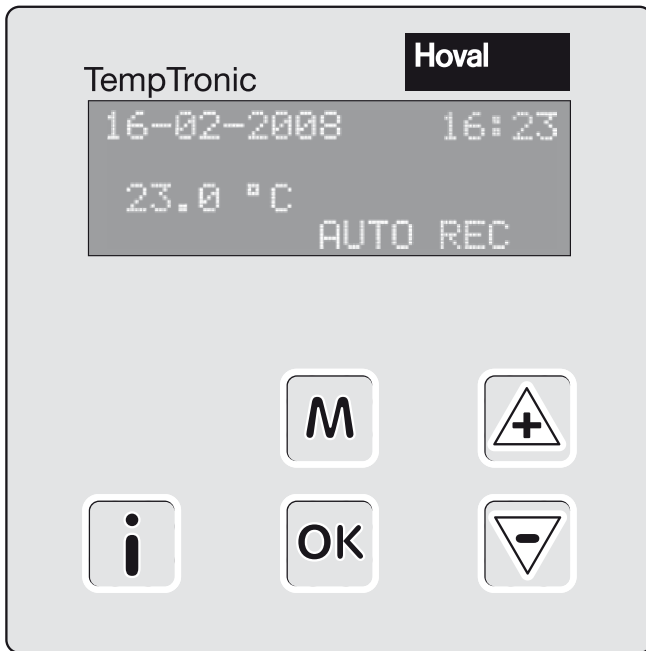


Fig. 1: TempTronic RC

Key	Action
	<ul style="list-style-type: none"> <li>• Navigation to the left</li> <li>• Start up screen: access to the main menu</li> </ul>
	<ul style="list-style-type: none"> <li>• Acknowledge values</li> <li>• Navigation to the right</li> <li>• Start up screen: direct access to submenu 'Operating mode'</li> </ul>
	<ul style="list-style-type: none"> <li>• Increase values</li> <li>• Navigation in upward direction</li> </ul>
	<ul style="list-style-type: none"> <li>• Reduce values</li> <li>• Navigation in downward direction</li> </ul>
	<ul style="list-style-type: none"> <li>• not in use</li> </ul>

Table 2: Assignment of keys

### 3.2 Operation levels

There are 3 operation levels. Access to operation levels 2 and 3 is password-protected.

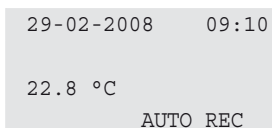
Operation level	User group	Actions
Operation level 1	untrained user	<ul style="list-style-type: none"><li>• Display operating mode</li><li>• Display alarms</li></ul>
Operation level 2	trained user	in addition: <ul style="list-style-type: none"><li>• Set operating mode</li><li>• Set set values</li><li>• Program switching times</li><li>• Switch between heating/cooling mode</li><li>• Select language</li><li>• Set time/date</li></ul>
Operation level 3	Hoval Customer Service	in addition: <ul style="list-style-type: none"><li>• Set configuration parameters</li></ul>

Table 3: Operation levels of the TempTronic RC

### 3.3 Start up screen

During operation, the following information is displayed:

- Date and time
- current room temperature
- current operating mode for the zone  
(AUTO = automatic mode, MAN = manual mode)



29-02-2008	09:10
22.8 °C	AUTO REC

Fig. 2: Start up screen

## 3.4 Logging in

```
29-02-2008 09:10  
  
22.8 °C  
AUTO REC
```

To access the main menu, press **M**.

```
29-02-2008 09:10  
Alarms  
>Password  
Settings 1
```

Use **▲** **▼** to select 'Password' and press **OK**.

```
Password  
change  
>login  
logout
```

Use **▲** **▼** to select 'login' and press **OK**.

```
login  
  
0.3.9.9
```

Set the 4 digits of the password (factory setting: 0.3.9.9) in sequence using **▲** **▼** and acknowledge with **OK**.

```
Password  
change  
>login  
logout
```

Return to start up screen: Press **×** **M** twice. Depending on the password entered, operation level 2 or 3 is active.



### Notice

If 10 minutes elapse without a key being pressed, you will automatically be logged out. Operation level 1 is activated.

## 4 Menu tree

The following illustration of the menu tree shows a maximum configuration. The elements actually displayed will vary according to:

- the configured unit type
- the current operation level (password)

### 4.1 Main menu

Settings 2	Operation level3
>Operating mode	} Operation level1
Alarms	
Password	
Settings 1	Operational level2

### 4.2 Menu 'Operating mode'

Main menu	Submenu 1	Submenu 2
29-02-2008 09:10		
Settings 2		
>Operating mode	Operating mode	
Alarms	Unit 8 OFF	
Password	>Zone AUTO	Zone
Settings 1	Unit 1 AUTO	DOOR
	Unit 2 AUTO	>AUTO
	Unit 3 AUTO	OFF
	Unit 4 AUTO	REC
	Unit 5 AUTO	RECN
	Unit 6 AUTO	REC1
	Unit 7 AUTO	SA2
		SA1
	>Unit 1 AUTO	Unit 1
		OFF
		>AUTO

## 4.3 Menu 'Alarms'

Main menu	Submenu 1	Submenu 2
29-02-2008 09:10 Settings 2 Operating mode <b>&gt;Alarms</b> Password Settings 1	<b>Alarms</b> Unit 8 <b>&gt;Group alarm</b> Unit 1 * ...	<b>Group alarm</b> On
	<b>&gt;Unit 1</b> *	<b>Unit 1</b> Condensate pump <b>&gt;Fan</b> ! Gas burner Isolation Fresh air sensor Filter Fresh air damper Frost

## 4.4 Menu Password

Main menu	Submenu 1	Submenu 2
29-02-2008 09:10 Settings 2 Operating mode Alarms <b>&gt;Password</b> Settings 1	<b>Password</b> change <b>&gt;login</b> logout	<b>login</b> 0.3.9.9
	<b>&gt;logout</b>	<b>logged out</b>
	<b>&gt;change</b>	<b>change</b> 0.3.9.9

## 4.5 Menu 'Settings 1'

Main menu	Submenu 1	Submenu 2	Submenu 3
29-02-2008 09:10 Settings 2 Operating mode Alarms Password <b>&gt;Settings 1</b>	<b>Settings 1</b> Language <b>&gt;Set values</b> Program Fresh air rate Heat/Cool Time/Date	<b>Set values</b> Day 20.0 °C Night 15.0 °C Frost 5.0 °C	
	<b>&gt;Program</b> Calendar <b>&gt;Week program</b> Calendar 1 OFF 11-08-2008 24-08-2008	<b>Program</b> Calendar <b>&gt;Week program</b> Calendar 1	<b>Week program 1</b> MO TU WE TH FR 06:00 REC 18:00 RECN
	<b>&gt;Fresh air rate</b> <b>&gt;Heat/Cool</b> <b>&gt;Time/Date</b> <b>&gt;Language</b>	<b>Fresh air rate</b> Fresh air 20 % <b>Heat/Cool</b> COOL >Heat <b>Time/Date</b> Time 09:10 Date FR 29-02-2008 <b>Language</b> Nederlands >Deutsch English ...	



## 4.6 Menu 'Settings 2'

Main menu	Submenu 1	Submenu 2	Submenu 3
29-02-2008 09:10			
<b>&gt;Settings 2</b>	<b>Settings 2</b>		
Operating mode	KI		
Alarms	<b>&gt;Unit type</b>	<b>Unit type</b>	
Password	Options	MH, MK, CAU	
Settings 1	VarioTronic	>GV	
	Supply air temp.	DGV, NGV	
	Fan	DHV, DKV, NHV, HV,	
		CUM	
	RT correction	GA, MG	
	Overrun CUR		
	<b>&gt;Options</b>	<b>Options</b>	
		Condens. pump No	
		>Door contact No	
		Filter No	
	<b>&gt;VarioTronic</b>	<b>VarioTronic</b>	
		Speed 2	
		<b>&gt;Summer shifting</b>	<b>Summer shifting</b>
		Speed 1	40 °C
		<b>&gt;Speed 1</b>	<b>Speed 1</b>
			ISO 1 42 °
			A 1 1.0 °/K
			R 1 2.0 °/K
	<b>&gt;Supply air temp.</b>	<b>Supply air temp.</b>	
		Maximum 60 °C	
		Minimum 15 °C	
	<b>&gt;Fan</b>	<b>Fan</b>	
		Overrrun 5 min	
		Soft start 0 min	
		On delay 0 min	
	<b>&gt;RT correction</b>	<b>RT correction</b>	
		0.0 °C	
	<b>&gt;Overrun CUR</b>	<b>Overrun CUR</b>	
		10 min	
	<b>&gt;KI</b>	<b>KI</b>	
		10	

## 5 Operating Modes

### 5.1 Switching operating modes

The operating modes of the units can be switched at various levels:

- at zone level:  
In the menu 'Operating mode' - 'Zone', either select automatic mode (in acc. with week programme) or switch the zone manually to a selected operating mode.
- at unit level:  
In the menu 'Operating mode' - 'Unit No.', either select automatic mode (in acc. with control zone parameters) or switch the unit off manually.

### 5.2 List of operating modes

OFF \_\_\_\_\_ Off  
REC \_\_\_\_\_ Recirculation  
RECN \_\_\_\_\_ Recirculation night  
REC1 \_\_\_\_\_ Recirculation speed 1  
SA2 \_\_\_\_\_ Supply air speed 2  
SA1 \_\_\_\_\_ Supply air speed 1  
DOOR \_\_\_\_\_ Door contact  
AUTO \_\_\_\_\_ Automatic mode



#### Info

Detailed information regarding the operating modes can be found in the documentation for the respective unit type.

Precondition: Operation level 2 or 3 is active (login see Chap. 3.4).

#### ■ Example

Unit no. 1 is to be switched off manually.

29-02-2008 09:10 22.8 °C AUTO REC	To access the main menu, press <b>M</b> .
29-02-2008 09:10 Settings 2 >Operating mode Alarms	Use <b>▲</b> <b>▼</b> to select 'Operating mode' and press <b>OK</b> .
Operating mode Zone >Unit 1 Unit 2	Use <b>▲</b> <b>▼</b> to select 'Unit 1' and press <b>OK</b> .
Unit 1 >OFF AUTO	Use <b>▲</b> <b>▼</b> to select 'OFF' and press <b>OK</b> .

Return to start up screen: Press **M** twice.

## 6 Set set values

Precondition: Operation level 2 or 3 is active (login see Chap. 3.4).

### ■ Example:

The following set values are to be set:

Room temperature set value Day..... 22 °C

Room temperature set value Night..... 14 °C

Frost protection temperature ..... 5 °C

<pre>29-02-2008 09:10 22.8 °C       AUTO REC</pre>	To access the main menu, press <b>M</b> .
<pre>29-02-2008 09:10 Password &gt;Settings 1   Settings 2</pre>	Use <b>▲</b> <b>▼</b> to select 'Settings 1' and press <b>OK</b> .
<pre>Settings 1   Language &gt;Set values   Program</pre>	Use <b>▲</b> <b>▼</b> to select 'Set values' and press <b>OK</b> .
<pre>Set values Day      20.0 °C Night   15.0 °C Frost    5.0 °C</pre>	Use <b>▲</b> <b>▼</b> to set '22 °C' and press <b>OK</b> . Use <b>▲</b> <b>▼</b> to set '14 °C' and press <b>OK</b> . Use <b>▲</b> <b>▼</b> to set '5 °C' and press <b>OK</b> .
	Return to start up screen: Press <b>M</b> twice.

## 7 Program switching times

Precondition: Operation level 2 or 3 is active (login see Chap. 3.4).

### 7.1 Week programme

The week programme is used to define regular weekly switching times. You can enter up to 10 week programmes, each with 2 switching times. A day programme is assigned to each week programme and defines on which days the switching commands are executed. The following day programmes are available:

- Monday - Sunday
- Monday - Friday
- Saturday - Sunday
- individual days of the week (Mo, Tu, ...)

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# Hoval

## ■ Example:

The following operating modes are to be programmed:

Days	Period	Operating mode
Mo - Fr	00:00 - 06:30	RECN
	06:30 - 07:30	REC
	07:30 - 17:00	SA2
	17:00 - 24:00	RECN
Sa - Su	00:00 - 24:00	RECN

```
29-02-2008 09:10
22.8 °C
AUTO REC
```

To access the main menu, press **M**.

```
29-02-2008 09:10
Password
>Settings 1
Settings 2
```

Use **▲** **▼** to select 'Settings 1' and press **OK**.

```
Settings 1
Set values
>Program
Fresh air rate
```

Use **▲** **▼** to select 'Program' and press **OK**.

```
Program
Calendar
>Week program
```

Use **▲** **▼** to select 'Week programme' and press **OK**.

```
Week program 1
OFF
00:00
00:00
```

Activate week programme 1: press **OK**.

Use **▲** **▼** to select the day programme 'MO TU WE TH FR' and press **OK**.

```
Week program 1
MO TU WE TH FR
06:30 REC
07:30 SA2
```

Switching point 1:

Use **▲** **▼** to set '06', '30', 'REC' pressing **OK** each time.

Switching point 2:

Use **▲** **▼** to set '07', '30', 'REC' pressing **OK** each time.

```
Week program 2
OFF
00:00
00:00
```

To carry on to week programme 2: press **▲**.

Activate week programme 2: press **OK**.

Use **▲** **▼** to select the day programme 'MO TU WE TH FR' and press **OK**.

```
Week program 1
MO TU WE TH FR
17:00 RECN
00:00 RECN
```

Switching point 1:

Use **▲** **▼** to set '17', '00', 'RECN', pressing **OK** each time.

Switching point 2:

Use **▲** **▼** to set '00', '00', 'RECN', pressing **OK** each time.

Return to start up screen: Press **M** four times.

## 7.2 Calendar

The calendar can be used to switch the plant to operating mode 'OFF' or 'REC' for defined periods of time (e.g. during company vacation periods). You can define a maximum of 5 such periods.

### ■ Example:

The plant is to be switched to operating mode 'OFF' from 4th to 15th August 2008.

```
29-02-2008 09:10
22.8 °C
AUTO REC
```

To access the main menu, press **M**.

```
29-02-2008 09:10
Password
>Settings 1
Settings 2
```

Use **▲** **▼** to select 'Settings 1' and press **OK**.

```
Settings 1
Set values
>Program
Fresh air rate
```

Use **▲** **▼** to select 'Program' and press **OK**.

```
Program
>Calendar
Week program
```

Use **▲** **▼** to select 'Calendar' and press **OK**.

```
Calendar 1
OFF
00-00-0000
00-00-0000
```

To activate calendar 1: press **OK**.  
Use **▲** **▼** to select 'OFF' and press **OK**.

```
Calendar 1
OFF
04-08-2008
15-08-2008
```

Starting date:  
Use **▲** **▼** to select '04', '08', '2008', pressing **OK** each time.

Finishing date:  
Use **▲** **▼** to select '15', '08', '2008', pressing **OK** each time.

Return to start up screen: Press **M** four times.

## 8 Alarms

The system monitors itself. All the alarms are registered in the alarm list and displayed by TempTronic RC. Priority A alarms are also displayed via the collective alarm (if installed).

### 8.1 Alarm list

Alarm	System reaction	Priority
Condensate pump	The affected unit switches to operating mode 'Off'.	A
Fan	The affected unit switches to operating mode 'Off'.	A
Gas burner	The affected unit switches to operating mode 'Off'.	A
Isolation	–	B
Supply air sensor	The plant operates with the minimum heat output until the fault is eliminated. The fresh air damper closes. The supply air is blown into the room horizontally.	B
Filter	–	B
Fresh air damper	The affected unit switches to operating mode 'Off'.	A
Frost	<ul style="list-style-type: none"> <li>• The affected unit switches to operating mode 'Off'.</li> <li>• The heating/cooling pump switches on.</li> <li>• The mixing valve heating opens.</li> </ul>	A

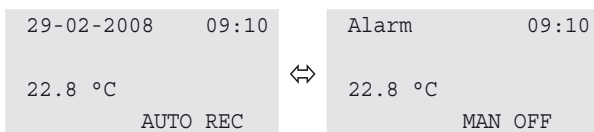
In the event of a power failure:

- on the first unit, all units in the control zone are off
- on another unit, the affected unit is off

If voltage is present again, the units automatically return to the previously set operating mode.

### 8.2 Alarm processing

If an alarm is triggered, 'Alarm' flashes alternately with the date display on the start up screen:



Procedure for processing alarms:

- Open submenu 'Alarms'.
- If necessary: switch off collective alarm.
- Identify unit and alarm in question.
- Remedy fault.



#### Notice

You will find detailed information on remedying faults in the technical documents belonging to the corresponding unit type.

- When the fault has been remedied, the unit affected automatically switches back to the previously set operating mode. It is not necessary to acknowledge the alarm.

■ Example:

On unit no. 1, the actuator of the fresh air/recirculation damper is defective. 'Alarm' flashes on the display and the collective alarm signal is activated (warning lamp, siren or similar).

```
Alarm          09:10
22.8 °C
MAN OFF
```

To access the main menu, press **M**.

```
29-02-2008    09:10
Operating mode
>Alarms
Password
```

Use **▲** **▼** to select 'Alarms' and press **OK**.

```
Alarms
Unit 8
>Group alarm
Unit 1 *
```

Use **▲** **▼** to select 'Group alarm' and press **OK**.

```
Group alarm
On
```

To switch off collective alarm: press **OK**.

```
Group alarm
Off
```

To return to submenu 'Alarms': press **M**.

```
Alarms
Group alarm
>Unit 1 *
Unit 2
```

The unit affected is marked '\*'.

Use **▲** **▼** to select unit 1 and press **OK**.

```
Unit 1
Filter
>Fresh air damper !
Condensate pump
```

The active alarm is marked '!'.  
Consult the documentation for the respective unit type to find out how to remedy the fault.

Return to start up screen: Press **M** three times.