

# SIEMENS



RDF880KN...



**en** Touch Room Thermostats Operating Instructions  
**zh** 触摸屏房间温控器操作手册

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# INTRODUCTION



**STATUS & OPERATION** of the room thermostat








**SELECTION** of available information and VRF fan modes

**INFORMATION**  
 1<sup>st</sup> line: temperature or humidity, values of parameters  
 2<sup>nd</sup> line: parameters and alarms  
 Both sides: **STATUS**






**ADJUSTMENT** for temperature setpoint, fan speed, operating modes of VRF and Floor Heating, more INFO and settings (for example, Alarm, Delay Off Timer, etc.)

REFERENCE PAGES	TERMINALS	DESCRIPTIONS
	RDF880KN...	
APPLICATION 	L, N	AC 230 V Power Supply Mains & Neutral
	Q11	Relay Input (Dry Contact : 24 V to 230 V)
INSTALLATION 	Q12	Relay Normal Close Output ( NC )
	Q14	Relay Normal Open Output ( NO )
PARAMETERS 	X1, X2	Universal Inputs 1 & 2
	M	Input Reference Ground
	CE+, CE-	KNX Bus + and - Terminals









**STATUS SYMBOLS:**

	ECONOMY ACTIVE		ALARM / SERVICE ACTIVE
	DELAY TIMER ACTIVE		KEY LOCK ACTIVE
	FLOOR HEAT ACTIVE		FAN ACTIVE
		VRF OPERATING MODES	

**SELECTION SYMBOLS:**

	INDOOR TEMPERATURE		VRF FAN SPEED
	OUTDOOR TEMPERATURE		VRF FAN SWING
	RELATIVE HUMIDITY		

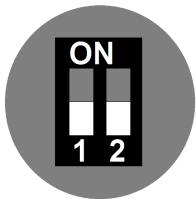
**OPERATIONAL ICONS:**

	INCREMENT, DECREMENT OR SELECTION
	SELECTION OR MOVE TO NEXT ITEMS
	TEMPERATURE, RELATIVE HUMIDITY OR PARAMETER VALUES, ETC.
	PARAMETERS OR PASSWORD, ETC.
	SETPOINT MODE (TEMPERATURE ONLY)
	FAN MODE or FAN SPEED MODE
	VRF & FLOOR HEAT OPERATING MODES
	MORE INFO & SETTINGS

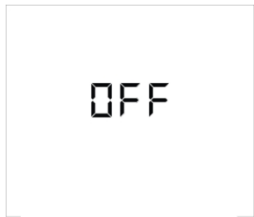
# COMMISSIONING: Download via ETS

1. Dipswitch setting

2. First power up



All in OFF positions



Press to turn ON

3. Touch & hold this icon > 5 s to enter Programming mode



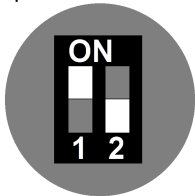
4. Ready for downloading address & application




Touch "ON" to exit

# COMMISSIONING: Local via Dip Switches

1. Set application via dipswitches



Refer to 

Dipswitch Positions		APPLICATION
1	2	
ON	ON	VRF+FLOOR HEAT
OFF	ON	VRF ONLY
ON	OFF	FLOOR HEAT ONLY

2. Configure basic control parameters via Wizard

See Configure Parameters via Wizard on next page

# CONFIGURE PARAMETERS via WIZARD

◀ or ▶ to advance/return to any parameter  
+ or - to select any desired available values\*

| -      | + |      **P02: OPERATION SELECTOR**  
| ◀    P02   ▶ |      (1 = COMFORT-PROTECTION)

| -      | + |      **P22: HUMIDITY SENSOR**  
| ◀    0n   ▶ |      (ON = ENABLED)

| -      | + |      **P53: MAXIMUM FAN SPEED**  
| ◀    3   ▶ |      (3 = 3-SPEED FAN)

— 0 + P54: FAN SWING POSITION  
◀ ▶ (0 = NO FAN SWING)

— 0 + P98: DISPLAY CHINESE TEXT  
◀ ▶ (0 = DISABLE)

◀ END ▶ END OF WIZARD SETUP  
(press END to exit Wizard function)

\* Refer to  for the parameter values & meanings



# IDLE SCREEN SHOWS ROOM TEMPERATURE

1. Screen idle

24.5 °C

2. Touch digits / screen



3. Normal display / mode



With Temperature  
and Humidity



Temperature Only

# IF UNIT IS OFF

1. Screen idle

OFF

2. Touch digits / screen



3. Unit being turned ON

ON

4. Normal display / mode




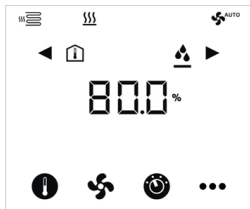
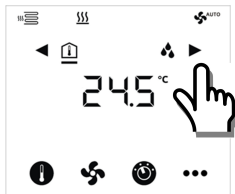
With Temperature  
and Humidity



Temperature Only

## SELECT RELATIVE HUMIDITY (IF ANY)

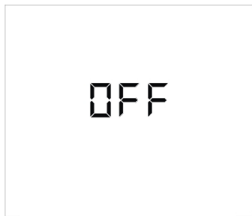
1. Touch ◀ or ▶ to select Relative Humidity 
2. Display Humidity value



Note: Relative Humidity is a display value

## TURN OFF THE UNIT

1. In Normal display, press & hold the digits
2. The unit will be OFF

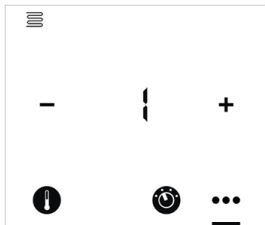


# SELECTION UNDER APPLICATION MODE

1. Touch icon

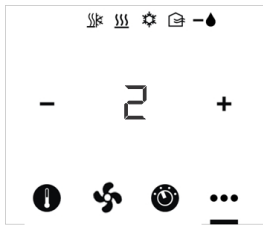


2. Press **+** or **-** to adjust:



Select Floor Heating only

Press **+** or **-** to adjust:



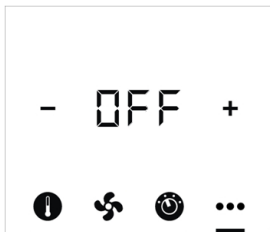
Select VRF only

Press **+** or **-** to adjust:



Select both VRF and Floor Heating

Press **+** or **-** to adjust:



To Turn OFF the Unit

## Notes:

The available selection under Application mode via the HMI of the room thermostat depends on the dipswitch settings (see page 6).

e.g., if dipswitch 1 & 2 = OFF ON, VRF only.

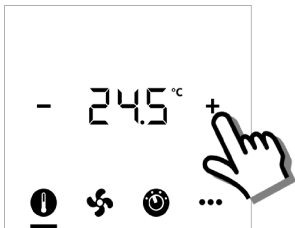
→ Only 2 and OFF can be selected under Application mode.

# CHANGE ROOM TEMPERATURE SETPOINT

1. Touch icon



2. Press **+** or **-** to adjust:

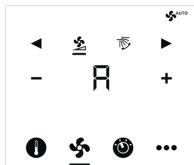


# ADJUST FAN MODE / FAN SPEED (VRF)

1. Touch icon



2. Press **+** or **-** to adjust:



A: Auto

1: Speed 1

2: Speed 2

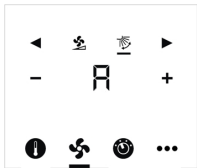
3: Speed 3

...

depends on  
P53

## ADJUST FAN MODE / FAN SWING (VRF if any)

1. Touch icon
2. Use ◀ or ▶ and press + or - to adjust:



A: Auto

1: POS 1

2: POS 2

3: POS 3


...


depends on  
P54

## CHANGE OPERATING MODES (VRF)


1. Touch icon
2. Press + or - to select:



: AUTO

: HEAT

: COOL

: FAN


: DRY

## SAVE ENERGY (VRF & FLOOR HEAT)

1. Touch icon
2. Press ◀ or ▶ to toggle:



When return to Normal display,

a  symbol will be shown.

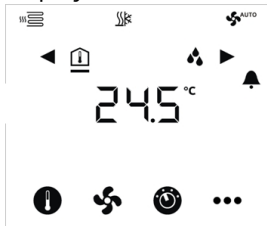
## SELECT ADDITIONAL INFORMATION

1. If Outdoor Temperature is available via KNX BUS,  
Press ◀ or ▶ to select:



# VIEW ALARMS

1. When Alarm Bell is displayed



2. Touch icon once and Press ◀ or ▶ to view all alarms

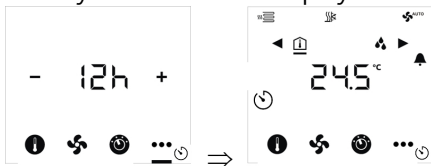


PRIORITY	ALARM/SERVICE	DISPLAY	ERROR CODE	TYPE
1	Bus Power Supply	BUS	5000	Fault
2	Device Address Error	ADR	6001	
3	Ext Fault Input 1	AL1	9001	
4	Ext Fault Input 2	AL2	9002	



## SETTING DELAY TIMER (P28=1)

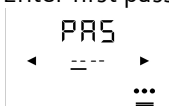
1. Touch icon
2. Delay Timer mode is displayed



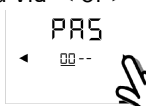
- Press +/- to select the required operating hours
- Confirm by pressing the HOUR location. i.e. 12h
- Cancel by pressing any Navigation icons

## PARAMETER MODE USER ACCESS

1. Touch icon & hold > 5 s
2. Enter first password via ◀ or ▶



PAS: Password



Factory: 00 00

- 
3. Enter second password via ◀ or ▶



#### 4. After 3 seconds

Note: Press the Setting icon to EXIT or re-enter the password if not correct

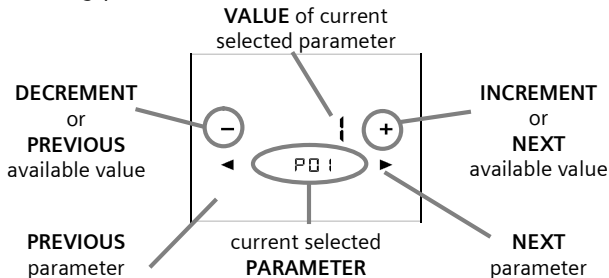


**P: Successful Login**



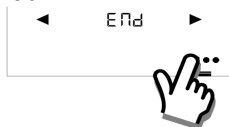
**F: Fail to Login**

#### 5. Editing parameters



#### 6. Exit parameter mode

EXIT by touching Setting mode icon



NOTE: modify password via system only




## User Level Control Parameters

	<b>FUNCTION DESCRIPTIONS</b>	<b>RANGE</b>	<b>FACTORY SETTINGS</b>
<b>P02</b>	Operation Selector	1: COMF > PROT 2: COMF > ECON > PROT	<b>1</b>
<b>P05</b>	Sensor Calibration	-5...5 K	<b>0 K</b>
<b>P06</b>	Standard Display	0: Room temperature 1: Setpoint	<b>0</b>
<b>P08</b>	Comfort Setpoint	P09...P10 °C	<b>21 °C</b>
<b>P09</b>	Comfort Min. Setpoint	5...P10 °C	<b>5 °C</b>
<b>P10</b>	Comfort Max. Setpoint	P09...40 °C	<b>35 °C</b>
<b>P11</b>	Econ Heating Setpoint	OFF, 5...40°C	<b>15 °C</b>
<b>P14</b>	Keylock Function	0: Unlock 1: Total lock 2: Setpoint	<b>0</b>
<b>P16</b>	Buzzer Function	OFF: Disable ON: Enable	<b>ON</b>
<b>P22</b>	Internal Relative Humidity Sensor	OFF: Disable ON: Enable	<b>ON</b>
<b>P23</b>	Calibration Internal Humidity Sensor	+/- 20%	<b>0%</b>
<b>P27</b>	Operating Mode After Power Failure / Reset	0: Return to Previous Mode 1: Protection Mode	<b>0</b>
<b>P28</b>	Timer with Delay Off	OFF: Disable ON: Enable	<b>OFF</b>



# Installer Level Control Parameters



<b>P30</b>	Switching Differential in Heating Mode	0.5 to 6.0 K	1K
<b>P38</b> <b>P40</b>	Functionality of X1 and X2 	0: --- No function 1: Ext / Return Temp (AI) 3: Window open detect (DI) 6: Fault input (DI) 7: Monitor input (Digital) 8: Monitor input (Temp)	<b>P38</b> → <b>X1 = 0</b>  <b>P40</b> → <b>X2 = 0</b>
<b>P39</b> <b>P41</b>	Operating action of X1, X2 as digital inputs	NO: Normally Open / Open NC: Normally Close / Close	<b>P39: X1=NO</b> <b>P41: X2=NO</b>
<b>P48</b>	Minimum on time for 2-position control output	1...20 minutes	1 min.
<b>P49</b>	Minimum off time for 2-position control output	1...20 minutes	1 min.
<b>P51</b>	Floor Heating Limit Temperature	OFF, 10...50 °C	OFF
<b>P53</b>	Maximum Fan Speed	1 to 7	3
<b>P54</b>	Maximum Fan Swing	0: no swing function 1 to 10 positions	0
<b>P65</b>	Protection heating setpoint	OFF, 5 ... WcoolPro; WcoolPro = 40 °C max	8 °C

<b>P71</b>	Reload factory setting	OFF: Disable ON: Reload Start	<b>OFF</b>
<b>P98</b>	Chinese Text Display	0: Disable 1: Enable	<b>0</b>

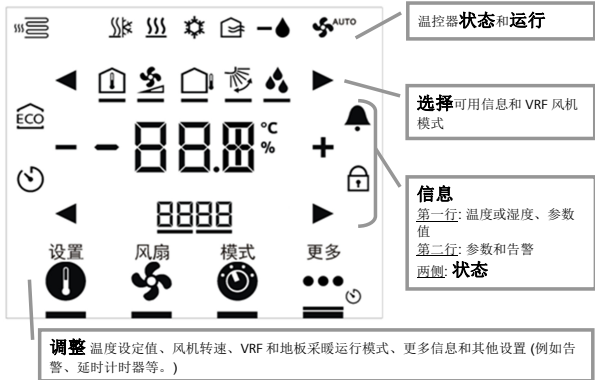
For complete parameter list, please refer to the documents listed in the following table.

<b>Ref.</b>	<b>Document title</b>	<b>Document number</b>
[1]	Data sheet	A6V11282546
[2]	Basic document	CE1P3174

You can download the above documents from <http://siemens.com/bt/download> by searching the document numbers listed above.

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# 介绍








参考页	端子	说明
	RDF880KN...	
应用	L, N	AC 230 V 电源和中性线
	Q11	中继输入 (干触点: 24 V 至 230 V)
安装	Q12	中继常闭输出 (NC)
	Q14	中继常开输出 (NO)
参数	X1, X2	通用输入 1; 通用输入 2
	M	输入信号接地
	CE+, CE-	KNX 总线 + 和 - 端子




### 状态图标:

	节能模式开启		告警 / 服务开启
	延时计时器开启		按键锁定开启
	地板采暖开启		风机开启
		VRF 运行模式	

### 选择图标:

	室内温度		VRF 风机转速
	室外温度		VRF 风机摆动
	相对湿度		

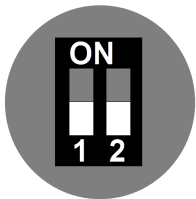
### 运行图标:

	调高、调低或选择
	选择或切换到下一条目
	温度、相对湿度或参数值等
	参数或密码等
	设定值模式 (仅限温度)
	风机模式或风机转速模式
	VRF 和地板采暖运行模式
	更多信息和其他设置



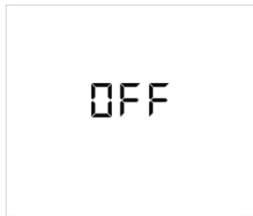
## 调试：通过 ETS 下载

1. 拨码开关设置



全部置于 OFF 位

2. 初次上电



按下屏幕以打开温控器

3. 按住图标超过 5 秒进入编程模式



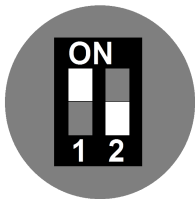
4. 地址和应用下载就绪



触摸“ON”退出

# 调试：通过拨码开关在本地进行

## 1. 通过拨码开关设置应用



拨码开关位置		应用
1	2	
ON	ON	VRF+地板采暖
OFF	ON	仅 VRF
ON	OFF	仅地板采暖

## 2. 初次上电后,根据提示配置基本参数

参见下页内容

## 根据提示配置参数

◀ 或 ▶ 向前 / 向后切换到任一参数

+ 或 - 按需选择任何可用数值\*



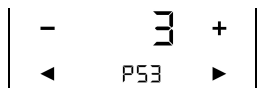
**P02: 操作选择**

(1 = 舒适 - 保护)



**P22: 湿度传感器**

(ON = 启用)



**P53: 最大风机速度**

(3 = 三速风机)

— 0 +  
◀ P54 ▶


**P54: 风机摆动位置**  
(0 = 无风机摆动功能)

— 0 +  
◀ P98 ▶

**P98: 显示中文文本**  
(0 = 禁用)

◀ END ▶

**配置结束**  
(按 END 退出设置)

\* 参见  页上的参数值和含义

# 空闲界面显示室内温度

## 1. 空闲界面

24.5 °C

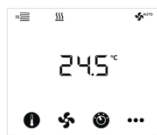
## 2. 触摸数字 / 屏幕



## 3. 正常显示 / 模式



显示温度和湿度



仅显示温度

# 如果温控器关闭

## 1. 空闲界面

OFF

## 2. 触摸数字 / 屏幕



## 3. 温控器正在激活

00

## 4. 正常显示 / 模式



显示温度和湿度




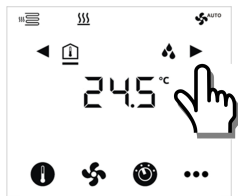
仅显示温度

## 选择相对湿度（若有）

1. 触摸箭头选择

2. 显示湿度值

相对湿度 

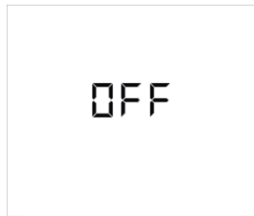


注意: 相对湿度仅显示数值

## 关闭温控器

1. 正常显示模式下，  
按住数字

2. 温控器将关闭

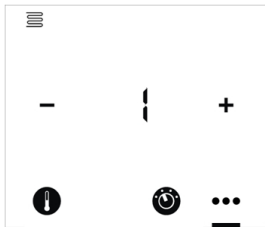


# 应用模式下选择

## 1. 触摸图标

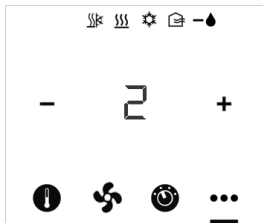


## 2. 按 + 或 - 调整:



选择 VRF 和地板采暖

## 按 + 或 - 调整:



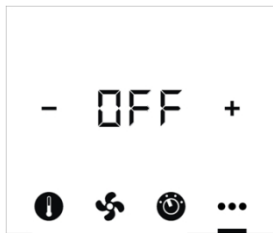
仅选择 VRF

## 按 + 或 - 调整:



仅选择地板采暖

按 + 或 - 调整:



关闭温控器

**注意:**通过室内温控器 HMI，应用模式下的可用选项取决于拨码开关的设置。(参见第 6 页)

例如，如拨码开关 1 和 2 = OFF ON, 仅 VRF.

→ 应用模式下，只能选择 2 和 OFF.



## 更改室内温度设定值

1. 触摸图标



2. 按 + 或 - 调整:

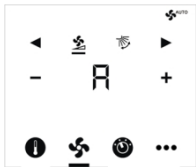


## 调整风机模式 / 风机转速 (VRF)

1. 触摸图标



2. 按 + 或 - 调整:



A: 自动

1: 一级风速

2: 二级风速

3: 三级风速

...

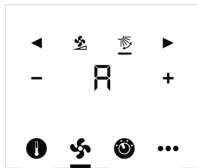
取决于 P53

## 调整风机模式/风机摆动(若有 VRF)

1. 触摸图标



2. 使用 ◀ 或 ▶ 并按 + 或 - 调整:



A: 自动

1: 位置 1

2: 位置 2

3: 位置 3

...

取决于 P54


## 更改运行模式 (VRF)


1. 触摸图标





2. 按 + 或 - 选择:



: 自动

: 供热

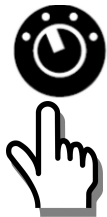
: 制冷

: 风扇

: 干燥

## 节能 (VRF 和地板采暖)

1. 触摸图标



2. 按 ◀ 或 ▶ 切换:



当返回正常显示模式时，会显示  标识。

## 选择其他信息

1. 如显示经由 KNX 总线传输过来的室外温度，按 ◀ 或 ▶ 选择:



# 查看告警

1. 当显示告警铃时



2. 触摸一次图标并按 ◀ 或 ▶ 查看所有告警



优先级	告警 / 服务	显示	错误代码	类型
1	总线电源	BUS	5000	故障
2	设备地址错误	ADR	6001	
3	外部故障输入 1	AL1	9001	
4	外部故障输入 2	AL2	9002	

# 设置延时计时器(P28=1)

1. 触摸图标

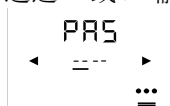
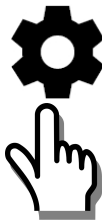


2. 延时计时器模式显示



## 进入参数模式

1. 按住图标超过2. 通过 ◀ 或 ▶ 输入密码第一个数值  
5 秒



PAS: 密码



出厂: 00 00

3. 通过 ◀ 或 ▶ 输入密码第二个数值

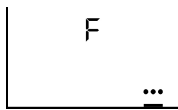


## 4. 3 秒后

注：按设置图标退出密码输入；若密码输入错误，可重复输入

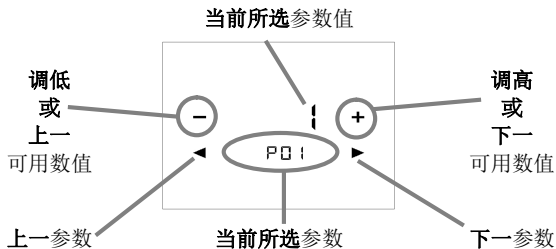


P: 登录成功



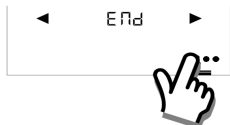
F: 登录失败

## 5. 编辑参数



## 6. 退出参数模式

触摸设置图标退出



注意：仅可通过系统修改参数



## 用户级控制参数

功能说明	范围	出厂设置
P02 选择运行模式	1: 舒适 > 保护 2: 舒适 > 节能 > 保护	1
P05 传感器校验	-5...5 K	0 K
P06 标准显示	0: 室内温度 1: 设定值	0
P08 舒适模式设定值	P09...P10 °C	21 °C
P09 舒适模式最低设定值	5...P10 °C	5 °C
P10 舒适模式最高设定值	P09...40 °C	35 °C
P11 节能模式供热设定值	OFF, 5...40 °C	15 °C
P14 按键锁定	0: 解锁 1: 全部锁定 2: 设定值	0
P16 蜂鸣器功能	OFF: 禁用 ON: 启用	ON
P22 内部相对湿度传感器	OFF: 禁用 ON: 启用	ON
P23 内部湿度传感器校验	+/- 20%	0%
P27 电源故障/重置后运行模式	0: 返回上一模式 1: 保护模式	0
P28 延时计时器	OFF: 禁用 ON: 启用	OFF



## 安装级控制参数

<b>P30</b>	供热模式下的转换偏差	0.5 至 6.0 K	1K
<b>P38</b> <b>P40</b>	X1 和 X2 功能 	0: --- 无功能 1: 外部温度 / 回风温度 (模拟输入) 3: 开窗监测 (数字输入) 6: 错误输入 (数字输入) 7: 监测输入 (数字输入) 8: 监测输入 (温度)	<b>P38</b> → X1 = 0  <b>P40</b> → X2 = 0
<b>P39</b> <b>P41</b>	X1, X2 作为数字输入的 运行功能	NO: 常开 / 开启 NC: 常闭 / 关闭	<b>P39:X1=NO</b> <b>P41:X2=NO</b>
<b>P48</b>	两位控制输出最短开启 时间	1...20 分钟	1 min.
<b>P49</b>	两位控制输出最短关闭 时间	1...20 分钟	1 min.
<b>P51</b>	地暖温度限值	OFF, 10...50 °C	OFF
<b>P53</b>	最高风机速度	1 至 7	3
<b>P54</b>	最大风机摆动	0: 无摆动功能 1 至 10 位	0
<b>P65</b>	保护加热设置点	OFF, 5 ... WcoolPro; WcoolPro = 40 °C max	8 °C



<b>P71</b>	恢复工厂设置模式	OFF: 禁用 ON: 启用	<b>OFF</b>
<b>P98</b>	中文字体显示	0: 禁用 1: 启用	<b>0</b>

完整参数列表，参见下表中所列的文档。

参考	文件标题	文件编号
[1]	数据表	A6V11282546
[2]	用户手册	CE1P3174

通过搜索上表中所示的文件编号，可从

<http://siemens.com/bt/download> 下载上述文件。

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# RDF880KN...

en Heating

zh 供热

de Heizung

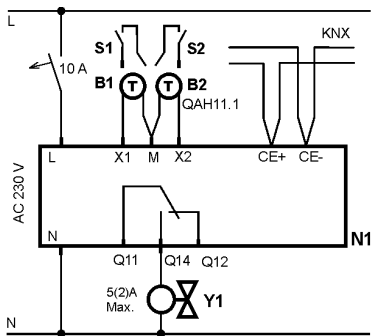
fr Chauffage

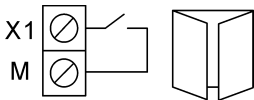
it Riscaldamento

es Calefacción

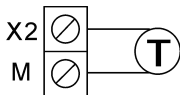
tr Isıtma

ru Отопление




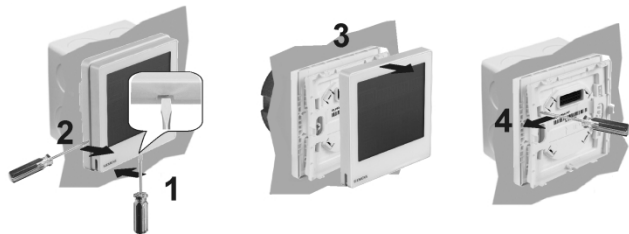
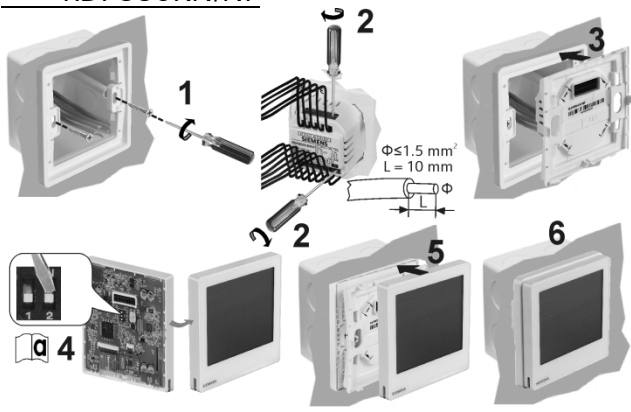


**P38 = 3**



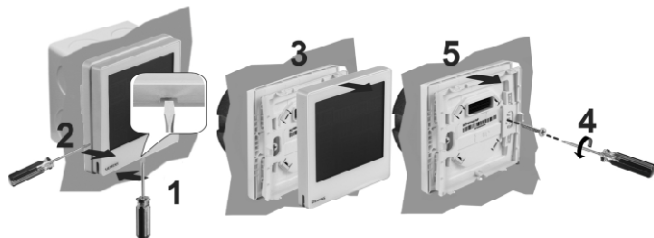
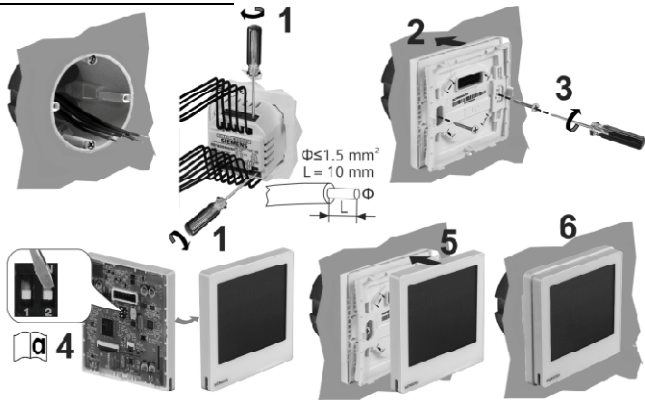
**P40 = 1**

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- en** Touch Room Thermostats Installation Instructions
- zh** 触摸屏房间温控器安装手册
- de** Installationsanleitung
- fr** Instructions d'installation
- it** Istruzioni di montaggio
- es** Instrucciones de montaje
- tr** Kurulum talimatları
- ru** Сенсорный комнатный термостат Инструкция по монтажу

