

**SIEMENS**

HVAC Products

# facts

## New semi flush-mount room thermostats RDD310 / RDE410

For heating applications



**No. 32E056BCen**

July 2009

32 – Room Thermostats

Product release

**Product(s)**

RDD310

RDE410

## Contents

---

1	New semi flush-mount room thermostats RDD310 / RDE410 for heating applications .....	3
	Introduction .....	3
	Product range.....	4
	Applications .....	4
	Sales release.....	5
	Technical documentation .....	5
	HIT tool .....	5
	Functions, features and benefits.....	6
	Accessories.....	9
2	Contact persons .....	10

## 1 New semi flush-mount room thermostats RDD310 / RDE410 for heating applications

### Introduction

Some 2 years ago, Siemens launched the first RDF semi flush-mount room thermostats for fan coil and VAV applications. The success of these thermostats generated numerous inquiries from customers, which is why Siemens continues to extend the range. So, additional versions in the form of RDD310 and RDE410 are now introduced – tailored to heating applications, including wall-hung boilers and underfloor heating.

The new RDD310 and RDE410 come with the same stylish, slim look and feel as the RDF semi flush-mount room thermostats. They fit snugly into an 86 x 86 x 47 mm conduit box with 60.3 mm fixing centers (conforming to BS 4662/ IEC 60670). Optional conduit boxes (ARG71) are also available as accessory items. Another accessory item – the plastic mounting bracket ARG70.3 – is specifically designed for conduit boxes with insufficient depth. The ARG70.3 is mounted between the wall and the thermostat to increase space in the box by approximately 10 mm.

The new RDD310 and RDE410 not only guarantee optimum comfort, but...

- are easy to operate,
- provide brilliant, easy-to-read large display with backlight,
- help reduce energy costs thanks to a 7-day time program,
- offer "Comfort", "Energy saving", "Auto timer" and "Frost protection" modes selectable by the touch of a button,
- afford minimum and maximum setpoint limitation,
- offer floor temperature limitation in conjunction with a remote sensor (suitable for electric underfloor heating).

## Product range

### RDD310



#### Key features of RDD310:

- Large display
- Backlit LCD
- Operating modes: "Comfort", "Energy saving" and "Frost protection"
- Minimum and maximum setpoint limitation
- Selectable commissioning and control parameters
- Selectable display of room temperature or setpoint
- Floor temperature limitation
- Input for remote temperature sensor

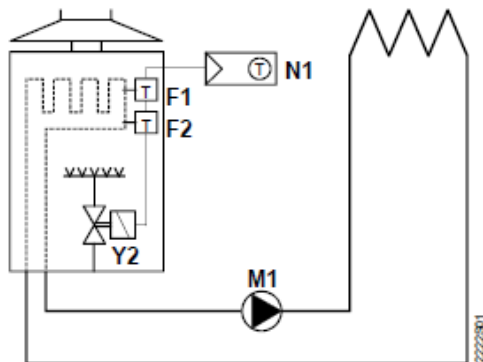
### RDE410



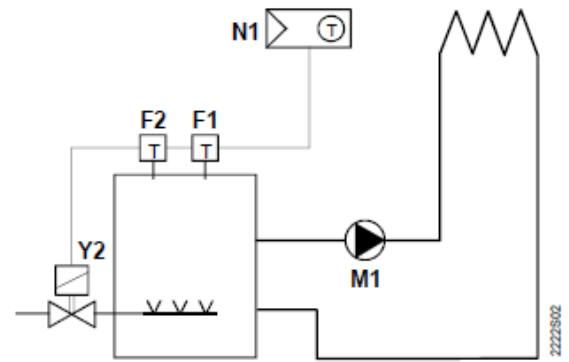
#### Additional key feature of RDE410 vs. RDD310:

- 7-day time program with 8 timer functions

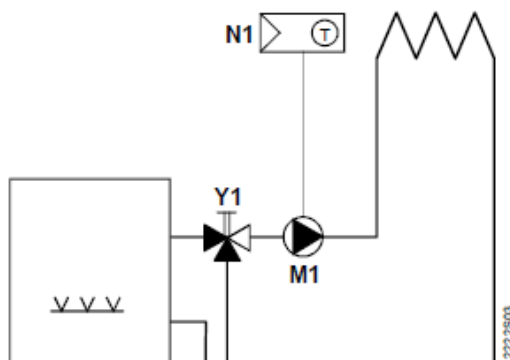
## Applications



Instantaneous hot water



Atmospheric gas burner



Direct control of a heating circuit pump

## Product replacement

The new RDD310 and RDE410 do not replace any existing products. They complement the existing Siemens range of room thermostats to extend the semi flush-mount room thermostat portfolio.

## Sales release

The RDD310 (SSN: S55770-T107) is now available for ordering.

The RDE410 (SSN: S55770-T108) will be released at the end of October 2009.

Product	Price list 2009 (€)	Order quantity	Sales release
RDD310	66,18	1 (10)	August 2009
RDE410	81,95	1 (3)	November 2009
ARG71	6,98	1 (5)	May 2009

## Technical documentation

Product	Type of document	Document number
RDD310 / RDE410	Data Sheet	N3077
	Mounting / Installation Instructions	M3077
	Operating Instructions	CE1B3077
	CE Product Declaration	CE1T3076
	Environmental Product Declaration	CE1E3076

The Data Sheet and technical Documentation are available and can be downloaded from:

<http://www.siemens.gr/buildingtechnologies/?lang=en>

If you have any questions about documentation, please feel free to contact with George Voulvoutzis, phone +30 210 6864177, e-mail: [george.voulvoutzis@siemens.com](mailto:george.voulvoutzis@siemens.com)


## HIT tool

For the next HIT tool HQ update, the RDD310 / RDE410 will be added to the product selection tool.


Select required features			
<b>Application</b> - all -	<b>Heating / Cooling changeover</b> - all -	<b>User Interface</b> - all -	<b>Operating voltage</b> - all -
<b>Output Heating</b> - all -	<b>Output Cooling</b> - all -	<b>Input</b> - all -	
<input type="checkbox"/> Operating Mode Switch			
<input type="checkbox"/> Return air sensor			
<input type="checkbox"/> Secondary Heating			

## Functions, features and benefits


### Slim and stylish with semi flush-mount design

Features / functions	Benefits
	<p>New semi flush-mount room thermostat offers a very slim, modern and stylish look.</p> <p>Ergonomic user interface with large display and buttons make this thermostat particularly user-friendly.</p>



### Backlit LCD

Features / functions	Benefits
	<p>Backlit LCD with soft blue color improves readability in dark environments and at night.</p>


### Display of setpoint or current room temperature

Features / functions	Benefits
 <p>Current room temperature</p>	<p>As an alternative to displaying current room temperature, the thermostat can be configured to display the setpoint only, simplifying user-operation, which is of particular interest for hotel rooms and public areas.</p>

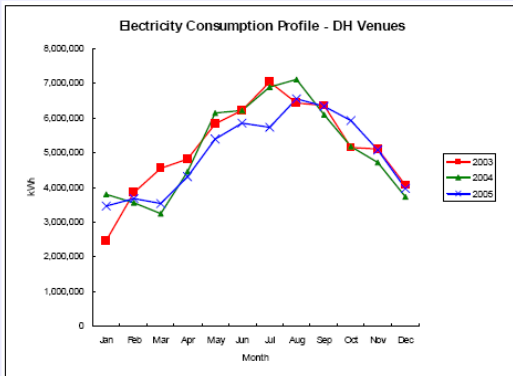
### Different operating mode at the touch of a button

Features / functions	Benefits
 <p>(RDD310 / RDE410)</p> <p>or</p>  <p>(RDE410)</p>	<p>User easily selects operating mode best suited to his needs.</p> <p>RDD310 / RDE410 offer 4 operating modes:</p> <ul style="list-style-type: none"> <li>- Always "Protection"</li> <li>- Always "Comfort"</li> <li>- Always "Energy saving"</li> <li>- Auto: "Comfort" or "Energy saving" mode according to timer (RDE410 only)</li> </ul>


## 7-day time program with 8 timer functions (RDE410 only)

Features / functions	Benefits
 (RDE410)	<p>7-day time program enables thermostat to manage appropriate room temperature day and night by switching automatically between "Comfort" and "Energy saving" mode.</p> <p><b>Example:</b> Guarantees perfect comfort when user awakens.</p>

## Setpoint limitation


Features / functions	Benefits																																																										
<div>DEPARTMENT OF HEALTH ENVIRONMENTAL REPORT 2005-06</div> <table><tr><th>Description of energy saving measures</th><th>Expected completion date</th><th>Status as at end 2005</th></tr><tr><td>Adjustment of indoor A/C temperature to 25.5°C in the summer time for DH buildings equipped with central A/C facilities (except there are special operational reasons to maintain a lower indoor temperature such as drug stores, mortuaries etc.)</td><td>Sep-05</td><td>Implemented</td></tr></table> <div><table border="1"><caption>Estimated Electricity Consumption (kWh) from DH Venues</caption><thead><tr><th>Month</th><th>2003</th><th>2004</th><th>2005</th></tr></thead><tbody><tr><td>Jan</td><td>2,500,000</td><td>3,500,000</td><td>3,500,000</td></tr><tr><td>Feb</td><td>3,800,000</td><td>3,800,000</td><td>3,800,000</td></tr><tr><td>Mar</td><td>4,500,000</td><td>3,500,000</td><td>3,500,000</td></tr><tr><td>Apr</td><td>4,800,000</td><td>4,500,000</td><td>4,500,000</td></tr><tr><td>May</td><td>5,800,000</td><td>6,200,000</td><td>5,500,000</td></tr><tr><td>Jun</td><td>6,200,000</td><td>6,200,000</td><td>5,800,000</td></tr><tr><td>Jul</td><td>7,000,000</td><td>7,000,000</td><td>5,800,000</td></tr><tr><td>Aug</td><td>6,500,000</td><td>7,200,000</td><td>6,200,000</td></tr><tr><td>Sep</td><td>6,200,000</td><td>6,200,000</td><td>6,000,000</td></tr><tr><td>Oct</td><td>5,200,000</td><td>5,200,000</td><td>5,800,000</td></tr><tr><td>Nov</td><td>5,000,000</td><td>4,800,000</td><td>5,000,000</td></tr><tr><td>Dec</td><td>4,000,000</td><td>3,800,000</td><td>4,000,000</td></tr></tbody></table><p>(* information provided by EMSD)</p><p>The diagram indicates a decreasing trend in electricity consumption in 2005 during summer months from April to September as compared to previous years. Upon</p></div>	Description of energy saving measures	Expected completion date	Status as at end 2005	Adjustment of indoor A/C temperature to 25.5°C in the summer time for DH buildings equipped with central A/C facilities (except there are special operational reasons to maintain a lower indoor temperature such as drug stores, mortuaries etc.)	Sep-05	Implemented	Month	2003	2004	2005	Jan	2,500,000	3,500,000	3,500,000	Feb	3,800,000	3,800,000	3,800,000	Mar	4,500,000	3,500,000	3,500,000	Apr	4,800,000	4,500,000	4,500,000	May	5,800,000	6,200,000	5,500,000	Jun	6,200,000	6,200,000	5,800,000	Jul	7,000,000	7,000,000	5,800,000	Aug	6,500,000	7,200,000	6,200,000	Sep	6,200,000	6,200,000	6,000,000	Oct	5,200,000	5,200,000	5,800,000	Nov	5,000,000	4,800,000	5,000,000	Dec	4,000,000	3,800,000	4,000,000	<p>Maximum and minimum setpoint limitation:</p> <p>Setpoint setting range can be limited. This is particularly helpful in public areas where energy consumption is to be controlled, resulting in lower energy costs.</p>
Description of energy saving measures	Expected completion date	Status as at end 2005																																																									
Adjustment of indoor A/C temperature to 25.5°C in the summer time for DH buildings equipped with central A/C facilities (except there are special operational reasons to maintain a lower indoor temperature such as drug stores, mortuaries etc.)	Sep-05	Implemented																																																									
Month	2003	2004	2005																																																								
Jan	2,500,000	3,500,000	3,500,000																																																								
Feb	3,800,000	3,800,000	3,800,000																																																								
Mar	4,500,000	3,500,000	3,500,000																																																								
Apr	4,800,000	4,500,000	4,500,000																																																								
May	5,800,000	6,200,000	5,500,000																																																								
Jun	6,200,000	6,200,000	5,800,000																																																								
Jul	7,000,000	7,000,000	5,800,000																																																								
Aug	6,500,000	7,200,000	6,200,000																																																								
Sep	6,200,000	6,200,000	6,000,000																																																								
Oct	5,200,000	5,200,000	5,800,000																																																								
Nov	5,000,000	4,800,000	5,000,000																																																								
Dec	4,000,000	3,800,000	4,000,000																																																								

## Maximum temperature limitation for electric underfloor heating (conforming to DIN EN 1264)


Features / functions	Benefits
 <p>* Max. 5 A res.</p>	<p>Function for electric underfloor heating*. Floor temperature sensor, connected to multifunctional input, monitors the floor temperature.</p> <p>This function enhances comfort and protects the floor on applications with underfloor heating.</p>



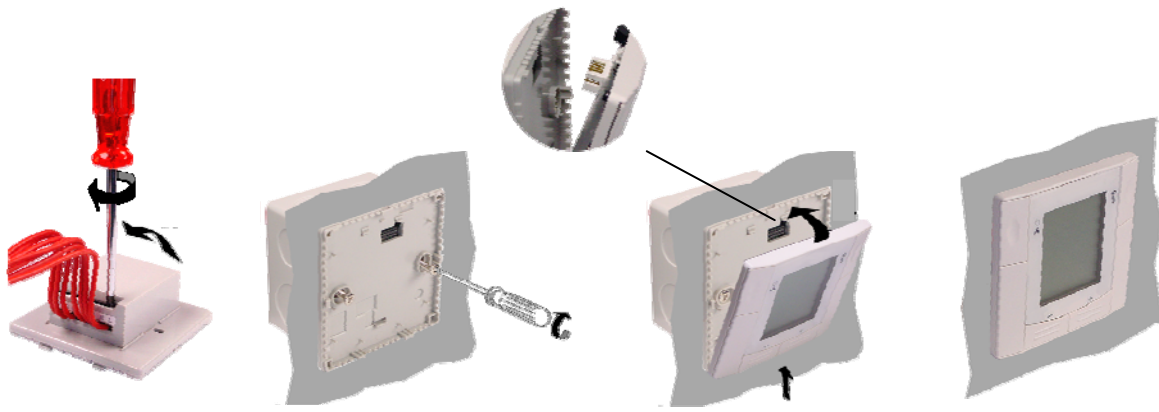
## Button lock

Features / functions	Benefits
 <p>Buttons locked. Can be unlocked by pressing operating mode button for</p>	Automatic / manual lock of buttons helps prevent unauthorized readjustment of room thermostat.

## Adjustable control parameters

Features / functions	Benefits
	<p>Many control parameters (service or expert level) can be adjusted to meet individual needs. This gives high flexibility and enables the thermostat to adapt to any type of application.</p> <p><b>Example:</b> Low / high setpoint range can be set accordingly (within) allowable range of heat demand.</p>

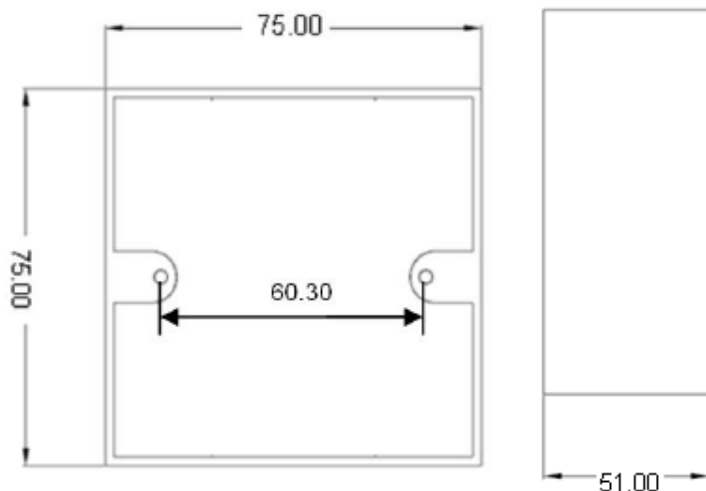
## Easy to install

Features / functions
<p>Thermostat is fast and easy to install: Wire (1), mount (2) and snap on (3) – no cumbersome ribbon cable or dangerous exposure to mains voltage.</p> <div style="text-align: center;">  <p>(1)                      (2)                      (3)</p> </div> <p><b>Important:</b> Please verify to ensure thermostat fits the respective conduit box. Thermostat requires at least 53 mm (W) x 68 mm (H) x 46 mm (D) for mounting in rectangular conduit box with 60.3 mm fixing center. Alternatively, respective conduit box can be ordered in the form of the ARG71.</p>



## Accessories

### ARG71 – conduit box for RDD310 / RDE410 room thermostats

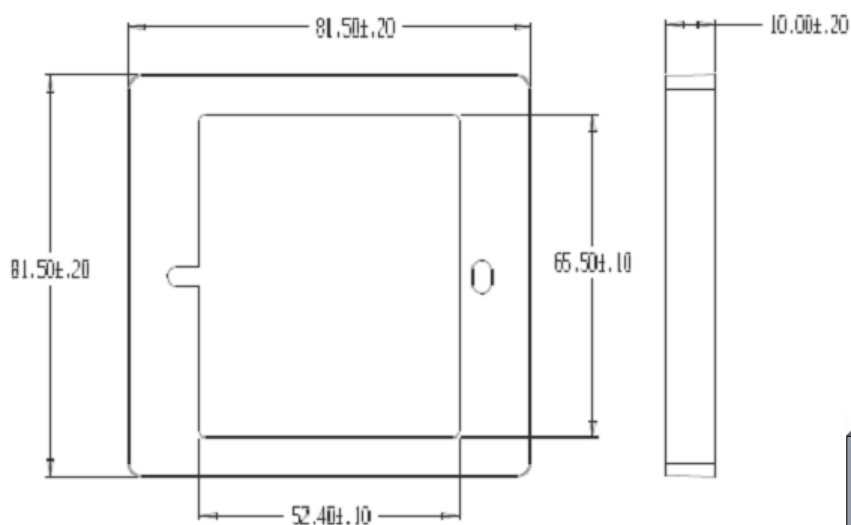


#### Key features:

- Size: 75 x 75 x 51 mm with 60.3 mm fixing center
- For installation of all types of semi flush-mount room thermostats
- Conforms to BSI standard BS4662, EN 50086-2-1, and IEC/670

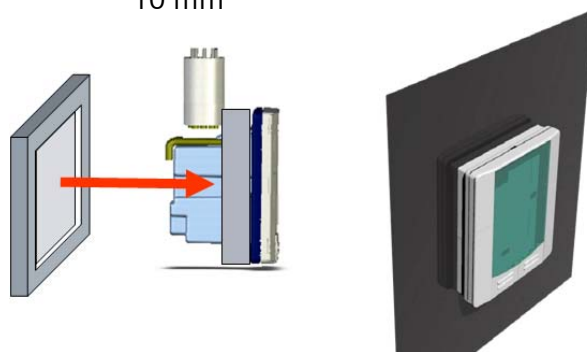


### ARG70.3 – plastic mounting bracket for conduit boxes without sufficient depth



#### Key features:

- For installation of all types of semi flush-mount room thermostats
- ARG70.3 placed between wall and room thermostat increases space in the box by 10 mm



## 2 Contact persons

---

The new RDD310 and RDE410 are easy-to-understand devices that do not require special training. Individuals familiar with the RDF semi flush-mount room thermostats will easily understand the functionality of the new offering.

If you have any questions relating to this fact, please do not hesitate to contact with us

### **Voulvoutzis George**

Product Manager

Siemens A.E.  
Industry Sector  
Building Technologies Division  
HVAC Products

tel: 0030 210 6864177

[george.voulvoutzis@siemens.com](mailto:george.voulvoutzis@siemens.com)

### **Kottaras George**

Division Regional Head HVP

Siemens A.E.  
Industry Sector  
Building Technologies Division  
HVAC Products

tel: 0030 210 6864173

[george.kottaras@siemens.com](mailto:george.kottaras@siemens.com)