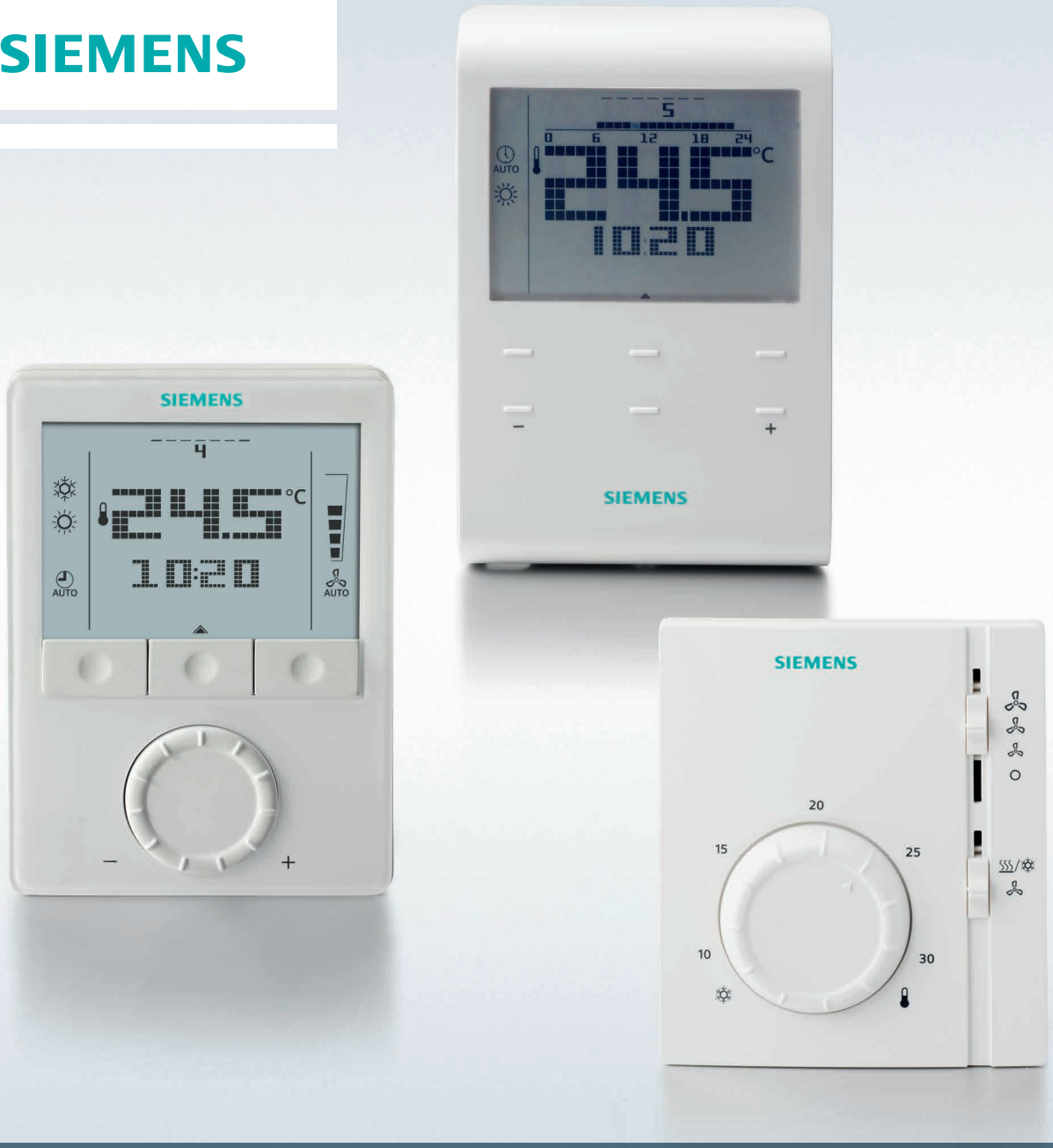
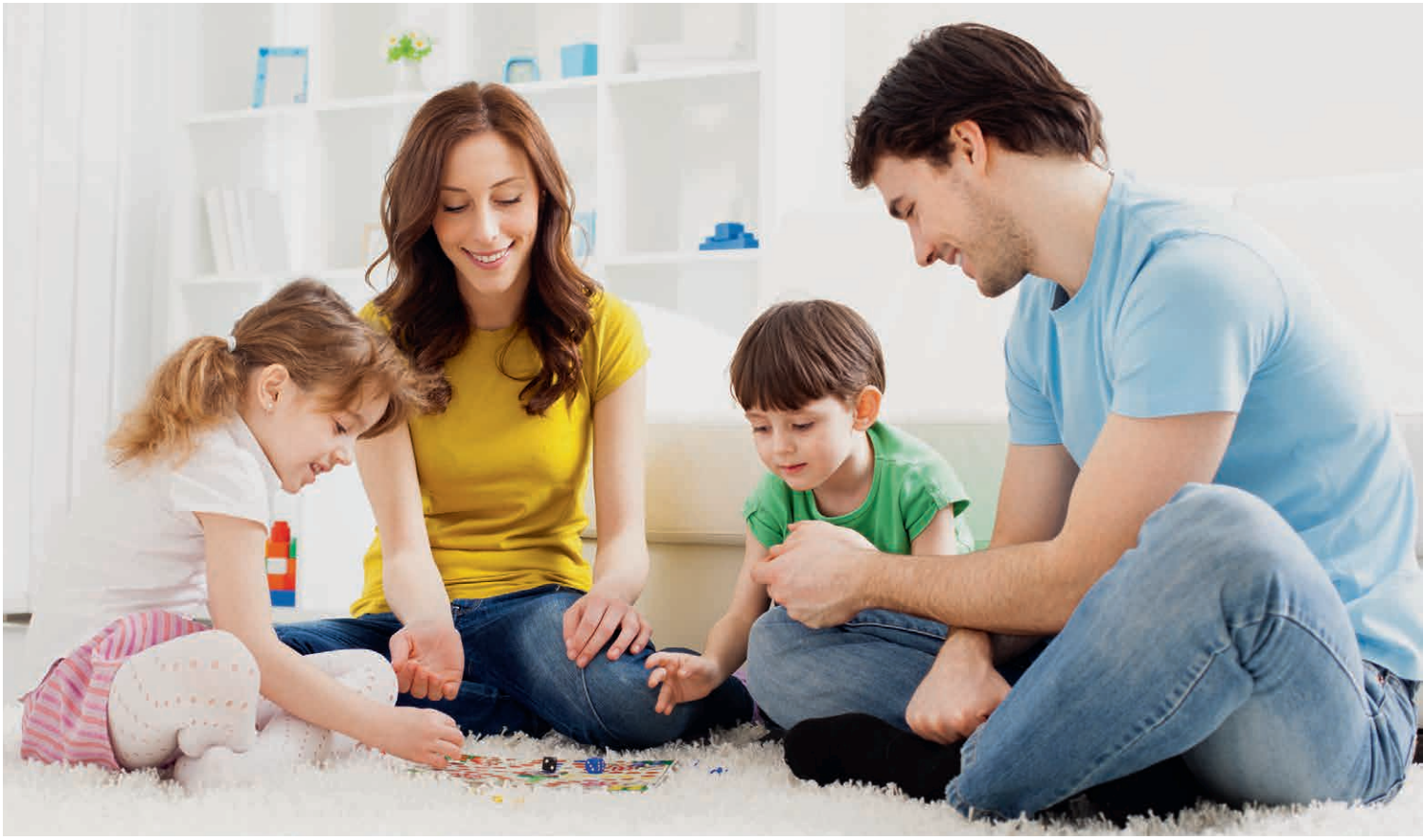
SIEMENS



Room thermostats – for energy-efficient temperature control

Broad portfolio for heating, ventilation and cooling applications

Answers for infrastructure.



Room thermostats – choosing from a wide variety

With the comprehensive portfolio of room thermostats from Siemens, you can satisfy all customer requirements. From fan coils, variable air volume systems, chilled ceilings to radiators and heat pumps, the product range includes room thermostats for every application. Time programs enable individual rooms to be heated or cooled at preset times to the desired temperatures. This means that energy is not wasted in rooms that are not in use. All thermostats are easy to install and to adjust. Help your customers enjoy a comfortable room climate, save energy, lower costs and reduce CO_2 emissions.

Everything needed for efficient temperature control

Efficient temperature control
The room thermostats excel in high energy efficiency. Time programs adjust the room temperature to the desired comfort level at predefined times. What's more, the thermostats provide a wide choice of easy-to-set energy saving functions that help reduce energy consumption, like self-learning PID control, setpoint limitation, vacation function or fan control. They can also be connected to external sensors or contact switches such as window contacts.

One portfolio for all customer needs
With room thermostats from Siemens, you are optimally prepared to meet any customer requirement. The extensive product portfolio comprises simple as well as complex, communicating devices. The thermostats can be either standalone or networked with others to create tailored solutions for demanding applications. Your major benefit: You can cover a wide range of different heating, ventilation and cooling applications while addressing individual customer needs – be it in homes, commercial buildings, hotels or office buildings.

Enhancing comfort all the way
Easy-to-understand symbols on the products, a backlit display with large lettering as well as large buttons and setting knobs are just a few of the features that ensure straightforward operation.

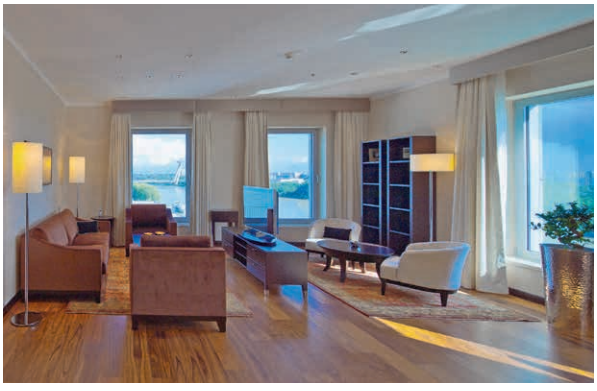
Easy installation
The room thermostats are easy to install. Thanks to the uniform product concept, you will also benefit from fast and simple commissioning. Siemens' patented control technology ensures constant room temperatures.

Protecting the investment of your customers
The use of high-quality materials, careful manufacturing and comprehensive quality management ensure that room thermostats from Siemens deliver the highest reliability and a long life. Also, conformance to international norms and standards is guaranteed.

The fact that the room thermostats can also be used on applications with renewable energy sources, makes them a future-proof choice.

Relying on an experienced partner
Siemens has been developing room thermostats for more than 70 years. So benefit from our in-depth application know-how and decades of experience.

Highlights
- Wide range of room thermostats to meet every requirement
- Energy-efficient and cost-saving room temperature control
- Simple operation and high control accuracy for optimal comfort
- Fast and easy installation and commissioning
- Investment protection thanks to high-quality products conforming to norms and standards
- Benefit from long-term experience and in-depth know-how of Siemens



Optimal room comfort with the perfect room climate at the right timing – thanks to room thermostats with time schedules.

A room should only be heated or cooled when used. With room thermostats from Siemens, the room temperature can be easily set to a comfortable level – according to a time program. This saves your customers energy and money.

Perfect room temperature at all times

Intelligent temperature settings

A comfortable room environment means having the right temperature at the right time. This is why room thermostats from Siemens feature settable time programs. They enable users to heat or cool rooms only when needed, which is both cost- and energy-efficient. Also, the time programs offer a choice of settings. If a room is used differently every day, the heating and cooling phases can be set individually for each weekday. If room usage is always the same, the weekday/weekend program is the perfect choice.

Consistent product concept

Fan coils, variable air volume systems, chilled ceilings, radiators or heat pumps – Siemens offers the ideal room thermostat for any type of application. All thermostats are based on the same product concept. This means for you: Fast, cost-efficient installation and commissioning. What's more, communicating thermostats can be seamlessly integrated into existing systems via KNX.

Saving energy and costs

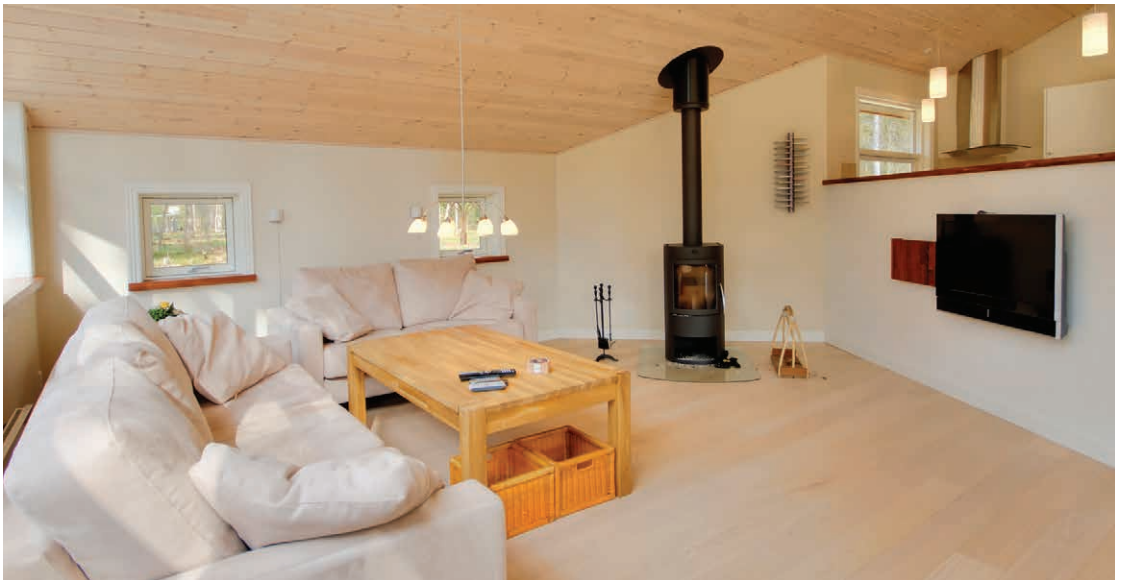
External sensors and switches can be quickly connected to the room thermostats. This ensures significant energy savings for your customers. For example, room thermostats connected to a keycard contact automatically lower the temperature to energy-saving mode the moment the user leaves the room. With window contacts, the setpoint is automatically adjusted when a window is opened. It is also possible to connect manual switches or a telephone modem. And with the help of changeover sensors, some models can be automatically switched from heating to cooling and vice versa.

Highlights

- Energy and cost savings thanks to time programs, absence function or sensors
- Extensive range of thermostats to meet every requirement
- Seamless integration into existing systems via KNX

The worldwide standard for home and building management

Our portfolio of room thermostats comprises products for every type of application and every customer need.



Room thermostats for optimal room climate

With the extensive portfolio of room thermostats, you can offer customers an excellent answer for an optimal room climate. All models are easy to use, provide a variety of time setting functions and come in an elegant design.

Perfect for heating and/or cooling

For living spaces and work areas, you can offer your customers all types of thermostats for heating and/or cooling. They are ideally suited for switching and controlling hot water, electrical heaters, radiators, floor heating systems and chilled ceilings in small zones. Whether ergonomic buttons or large control knobs – all models are intuitive to operate. They allow users to set the exact room temperatures and times for heating and energy saving phases. Wireless models provide additional flexibility.

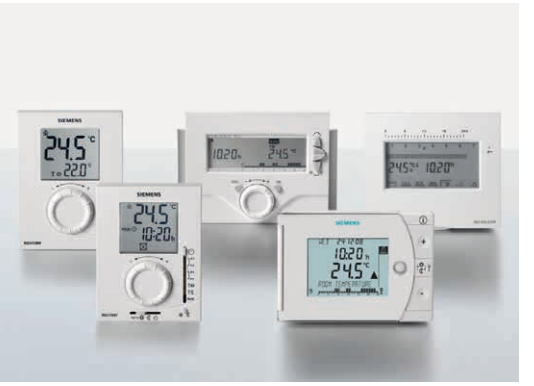
Ideal for heat pumps

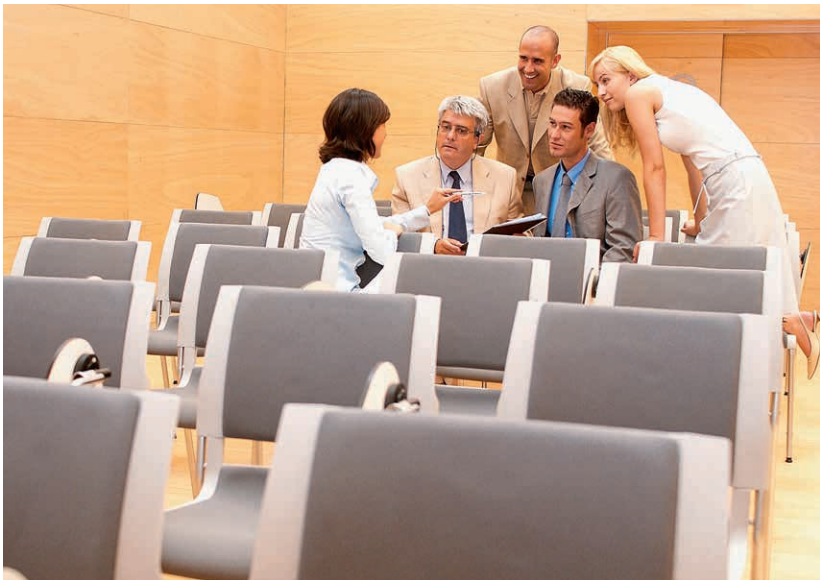
Renewable energy becomes increasingly important. With heat pumps, you can extract energy either from the air, water or ground and supply it to buildings. With our thermostats for use with heat pumps, you can offer your customers a smart solution to save energy and reduce CO_2 emissions.

Covering VAV applications

With the thermostat portfolio, you are best prepared to meet customer requirements for demanding applications – like switching and controlling variable air volume or ventilation systems. A button lock ensures that settings cannot be accidentally changed. Remote control provides for convenient operation, for example, from a hotel bed. Connection options for external sensors and switches, such as keycards, enhance flexibility and energy efficiency.

Room thermostats for heating and/or cooling





Controlling fan coils

The thermostats for controlling fan coils are the perfect choice for small zones in commercial buildings, single- or multi-family houses and hotel rooms. They are highly energy-efficient, user-friendly and automatically adapt the fan speed. This means for your customers that they can save energy and thus money.

Constant control for enhanced comfort

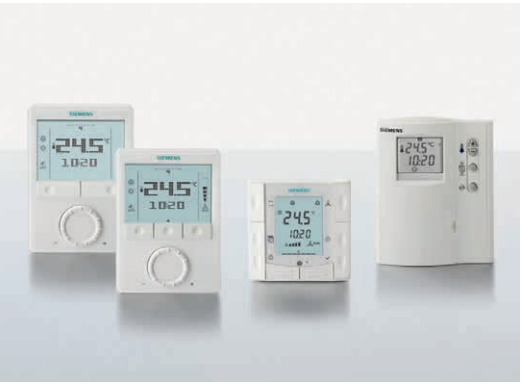
Whatever the type of application, our thermostats set the temperature right down to the degree and minute. What's more, thanks to Siemens' patented control technology, a perfectly even temperature is ensured throughout the room or the entire building – so your customers can enjoy the highest possible levels of well-being.

And your benefit? You can equip buildings with different heating and cooling systems using the same design throughout, plus standardized operation.

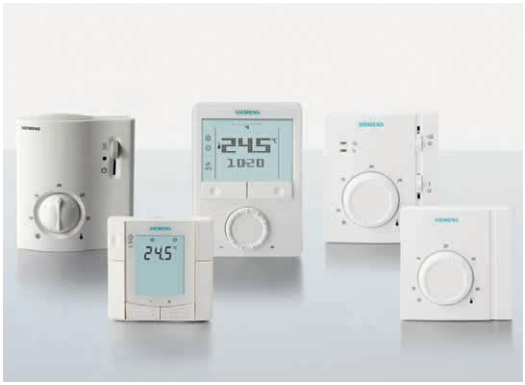
Highlights

- Heating and/or cooling – offer your customers highest flexibility
- Energy savings and reduced CO_2 emissions with heat pump applications
- Inputs for external sensors and switches
- Enhanced comfort thanks to constant room temperature

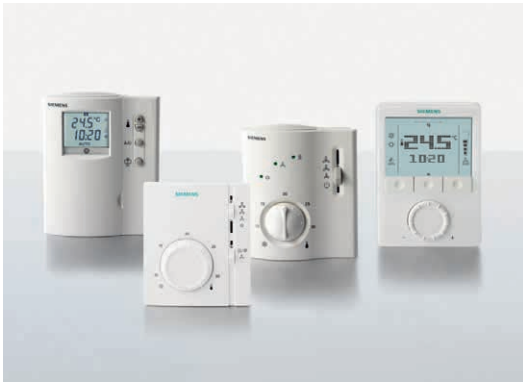
Heat pumps



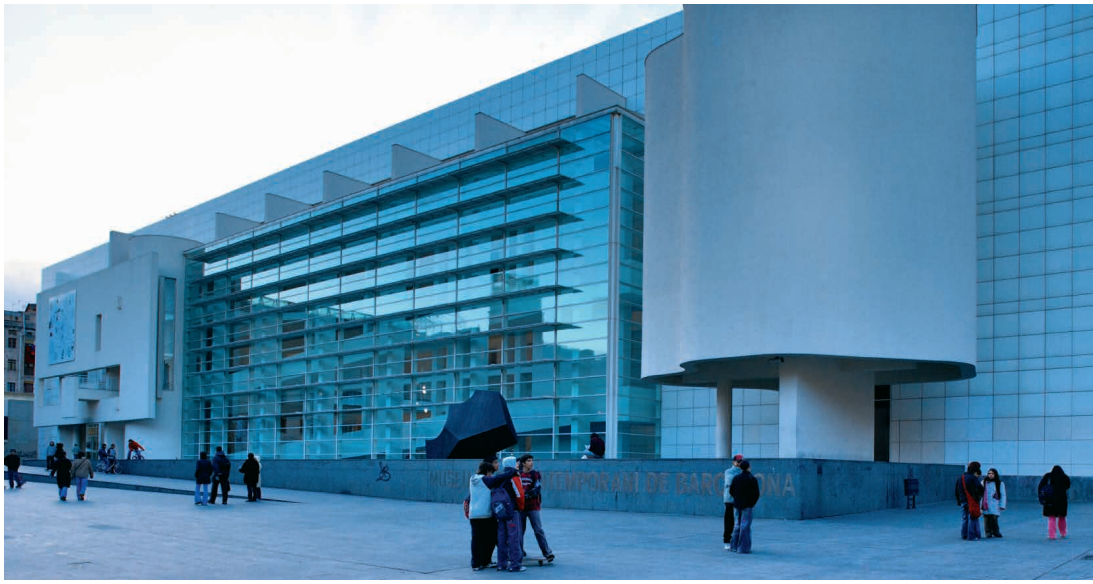
VAV



Fan coil applications



Our extensive portfolio of room thermostats covers all possible application areas. This means that you can always offer your customers an ideal solution – whatever their requirements.



Room thermostats for different applications

The right thermostat for any requirement

The portfolio of room thermostats covers a comprehensive range of HVAC applications – be it in homes, hotels, offices or public buildings: From simple electromechanical ON/OFF and wireless thermostats to room thermostats with a continuous output signal to efficient OpenTherm models – be it programmable with 24-hour or 7-day time programs or non-programmable with or without display – the right product for any budget.

Covering a host of applications

With room thermostats from Siemens, you can cover a wide variety of applications:

– Fan coils
– Heat pumps
– VAV
– Domestic hot water
– Floor heating
– Radiators
– Electric heating
– Ventilation systems for heating/cooling
– Chilled ceilings

Highlights

- Thermostats for heating, ventilation and cooling applications – meeting all requirements
- Suited for homes, hotels, offices or public buildings
- Thermostats for every budget and every type of application

	Heating	Cooling	DHW	Heat pumps	VAV*	Fan coils
Analog	RAA.., RAV..	RAA..	–	–	–	RAB..
Digital without display	RCU10, RCU20	RCU10, RCU20	–	–	RCU5..	RCC..
Digital with display, no time program	RDD.., RDG.., RDH.., RDU..	RDG.., RDH.., RDU..	RDD..	RDF.., RDG..	RDG.., RDU..	RDF.., RDG..
Digital with display and time program	RDE.., RDG.., RDJ.., REA.., REV..	RDG.., REA.., REV..	RDE..	RDF.., RDG..	–	RDF.., RDG..

* VAV = variable air volume

Room thermostats for heating and heat pu

		Applications									Functionalities						
		Heating only	Cooling only	Heating or cooling	Heating and cooling	2-stage heating	2-stage heating or cooling	Cooling or heating and electric heating	Heating and independent output/DHW	Control algorithm	Semi flush-mounted unit	Automatic heating/cooling changeover	Manual heating/cooling changeover	Floor heating limitation	Dew point monitoring	Infrared remote control	24-hour time program
Heating	**Slide switch operation**																
	REV13	■								PID							■
	REV13DC	■								PID							■
	REV17	■								PID							■
	REV17DC	■								PID							■
	REV34	■								PI							■
	REV34DC	■								PI							■
	Analog operation																
	RAV11.1	■								PID							
	RAV11.7	■								PID							
	Digital operation, slimline																
	RDD100	■								2P							
	RDD100.1	■								2P							
	RDD100.1DHW	■							■	2P							
	RDD310	■								2P	■						
	RDE100	■								2P							■
	RDE100.1	■								2P							■
	RDE100.1DHW	■							■	2P							■
	RDE410	■								2P	■						■
	Rotary knob/slide switch operation																
	RDH10M	■								PID							
	RDJ10	■								2P							■
	RDJ10RF/SET	■								2P							■
Heat pumps	**RDG100 line**[1]	■	■	■	■	■	■	■		2P/PI		■	■	■	■	■	
	RDF300/400 line[3]	■	■	■	■	■		■		2P/PI	■	■	■		■	■	

(X): X = number of outputs [1] RDG100 line (fan coil) thermostats are also suited for chilled ceiling and radiator applications. For detailed information, refer to the fan coil overview.
[2] Either ON/OFF, 3-position or PWM signal [3] RDF300/400 line (fan coil) thermostats are also suited for heat pump applications.

mp applications

				Outputs				Inputs			Power supply	User interfaces						
7-day/weekend time program	7-day time program	Radio frequency	Modulating (OpenTherm)	ON/OFF	PWM	3-position	Output heating/cooling changeover	Operating mode/ Remote contact	Heating/cooling changeover sensor	Remote or return air temperature sensor	Power supply	Setpoint knob	Setpoint buttons	Operating mode button (B)/ switch (S)	Digital display (LCD), indicator (LED)	Programming knob and slider	Analog clock	Additional operation selector/remarks
				■				■			battery		■	B	LCD	■		
				■				■			battery		■	B	LCD	■		
■				■				■			battery		■	B	LCD	■		
■				■				■			battery		■	B	LCD	■		
	■					■		■			battery		■	B	LCD	■		
	■					■		■			battery		■	B	LCD	■		
				■							battery	■		S			■	
				■							battery	■		S			■	
				■							AC 230 V		■	B	LCD			
				■							battery		■	B	LCD			
				■							battery		■	B	LCD			
				■							AC 230 V		■	B	LCD			
■	■			■							AC 230 V		■	B	LCD	■		
■	■			■							battery		■	B	LCD	■		
■	■			■							battery		■	B	LCD	■		
■	■			■							AC 230 V		■	B	LCD	■		
			■	■							battery	■		B	LCD			
				■							battery	■		S	LCD	■		
		■		■							battery	■		S	LCD	■		
	■			(3)[2]	(2)[2]	(2)[2]		■	■	■	AC 230 V	■		B	LCD			Time prog. buttons
	■			(2)[2]		(1)[2]		■	■	■	AC 230 V		■	B	LCD			Time prog. buttons

Room thermostats for heating and/or coolin

		Applications										Functionalities						
		Heating only	Cooling only	Heating or cooling	Heating and cooling	2-stage heating	2-stage heating or cooling	Cooling or heating and electric heating	Heating and independent output/DHW	Cooling and independent output	Control algorithm	Semi flush-mounted unit	Automatic heating/cooling changeover	Manual heating/cooling changeover	V_{min}, V_{max} limitation of supply air	Floor heating limitation	Dew point monitoring	24-hour time program
Heating and/or cooling	**Basic**																	
	RAA11	■	■								2P							
	RAA21	■	■								2P							
	RAA200	■	■								2P							
	RAA31	■	■								2P							
	RAA31.16	■	■								2P							
	RAA31.26	■	■						■	■	2P							
	RAA41			■							2P			■				
	Modern																	
	RCU10				■	■		■			2P/PI							
	RCU15				■	■					2P/PI							
	RCU20	■	■	■							PI		■					
	Communicating																	
	RDG100KN[2)]	■	■	■	■	■	■	■			2P/PI		■	■		■	■	
	RDG160KN[2)]	■	■	■	■	■	■	■			2P/PI		■	■		■	■	
	Slide switch operation																	
	REV24	■	■								PID							■
	REV24DC	■	■								PID							■
	REV24RF/SET	■	■								PID							■
	REV24RFDC/SET	■	■								PID							■
	REV26	■	■								PID							■
	Rotary knob/ slide switch operation																	
	RDH10	■	■								2P							
	RDH10RF/SET	■	■								2P							
VAV	**Modern**																	
	RCU50	■	■	■							P		■		■ [4)]			
	RCU50.2	■	■	■							P			■				
	RLA162	■	■		■	■					PI				■ [4)]			
	Advanced																	
	RDU340	■	■	■	■	■		■			P/PI	■	■	■	■		■	
	RDG400	■	■	■	■	■		■			P/PI		■	■	■	■	■	
	Communicating																	
	RDU341	■	■	■	■	■		■			P/PI	■	■	■	■		■	
	RDG400KN	■	■	■	■	■		■			P/PI		■	■	■	■	■	

(X): X = number of outputs [1)] Either ON/OFF, 3-position or PWM signal [2)] RDG100 line (fan coil) thermostats are also suited for chilled ceiling and radiator applications. For detailed
[4)] Only with V_{min} limitation [5)] External setpoint shift by DC 0...10 V input [6)] External setpoint shift by outdoor temperature sensor

g and VAV applications

			Outputs				Inputs				Power supply	User interfaces					
7-day time program	Radio frequency	Communication interface KNX	ON/OFF	PWM	3-position	DC 0…10 V	Operating mode/ Remote contact	Heating/cooling changeover sensor	Remote or return air temperature sensor	External setpoint shift	Power supply	Setpoint knob	Setpoint buttons	Operating mode button (B)/ switch (S)	Digital display (LCD), indicator (LED)	Programming knob and slider	Additional operation selector/remarks
			(1)								AC 24…250 V						
			(1)								AC 24…250 V	■					
			(1)								AC 24…250 V	■					Large setting knob
			(1)								AC 24…250 V	■					ON/OFF switch
			(1)								AC 230 V	■			LED		ON/OFF switch
			(2)								AC 230 V	■			LED		ON/OFF switch
			(1)								AC 24…250 V	■					Heat/OFF/cool switch
			(2)[1]	(2)[1]			■				AC 230 V	■					
			(2)[1]	(2)[1]			■		■		AC 24 V	■					
					(1)		■	■			AC 230 V	■					
		■	(3)[1]	(2)[1]	(2)[1]		■	■	■	■[3]	AC 230 V	■		B	LCD		
		■	(2)[1]			(2)	■	■	■	■[3]	DC 0…10 V and AC 24 V	■		B	LCD		
■			■				■				battery		■	B	LCD	■	
■			■				■				battery		■	B	LCD	■	
■	■		■								battery		■	B	LCD	■	
■	■		■								battery		■	B	LCD	■	
■			■								battery		■	S	LCD	■	
			■								battery	■			LCD		
	■		■								battery	■			LCD		
						(1)	■	■		■[5]	AC 24 V	■					
						(1)					AC 24 V	■					Heat/OFF/cool switch
						(2)				■[6]	AC 24 V	■					
			(1)			(1)	■	■	■		AC 24 V		■	B	LCD		
			(1)[1]	(1)[1]	(1)[1]	(1)	■	■	■		AC 24 V	■		B	LCD		
		■	(1)			(1)	■	■	■	■[3]	AC 24 V		■	B	LCD		
		■	(1)[1]	(1)[1]	(1)[1]	(1)	■	■	■	■[3]	AC 24 V	■		B	LCD		

information, refer to the fan coil overview. [3] External setpoint shift via KNX

Room thermostats for fan coil applications

		Applications									Functionalities										
		2-pipe/heating only	2-pipe/cooling only	2-pipe/heating or cooling	2-pipe with electric heater	2-pipe and radiator	4-pipe/cooling and heating	4-pipe with electric heater	2-stage/heating or cooling	Control algorithm	Semi flush-mounted unit	Manual heating/cooling changeover	Automatic heating/cooling changeover	Floor heating limitation	Manual fan speed off / I / II / III	Automatic fan control	Ventilation function	Electronic commutated fan motor[1)]	7-day time program	Fan function enable/disable	Infrared remote control
Fan coils	**Basic**																				
	RAB11			■						2P		■			■						
	RAB11.1			■						2P		■			■		■				
	RAB21	■	■	■						2P					■						
	RAB21.1	■	■	■						2P			■		■		■				
	RAB31						■			2P		■			■						
	RAB31.1						■			2P		■			■		■				
	RAB91									No					■						
	Modern																				
	RCC10	■	■	■						2P			■		■						
	RCC20				■					2P			■		■						
	RCC30					■	■			2P			■		■						
	Advanced: semi flush-mounted																				
	RDF600	■	■	■	■		■			2P/PI	■ R	■	■	■	■	■				■	
	RDF300	■	■	■	■		■			2P/PI	■	■	■	■	■	■				■	
	RDF300.02	■	■	■	■		■			2P/PI	■	■	■	■	■	■				■	
	RDF310.2	■	■	■						2P	■	■			■	■					
	RDF310.21	■	■	■						2P	■	■			■	■					■
	RDF340	■	■	■	■		■			P/PI	■	■	■	■	■	■				■	
	RDF600T	■	■	■	■		■			2P/PI	■ R	■	■	■	■	■			■	■	■
	RDF410.21	■	■	■						2P	■	■			■	■			■		■
	Advanced: wall-mounted																				
	RDF110	■	■	■						2P			■		■	■					
	RDF110.2			■						2P		■			■	■					
	RDF210/IR	■	■	■						2P			■		■	■			■		■
	RDG100	■	■	■	■	■	■	■	■	2P/PI		■	■	■	■	■				■	
	RDG100T[6)]	■	■	■	■	■	■	■	■	2P/PI		■	■	■	■	■			■ [7)]	■	■
	RDG110	■	■	■	■	■	■		■	2P		■	■	■	■	■				■	
	RDG140	■	■	■	■	■	■		■	P/PI		■	■	■	■	■				■	
	RDG160	■	■	■	■	■	■		■	P/PI		■	■	■	■	■		■		■	
	Communicating: semi flush-mounted																				
	RDF600KN	■	■	■	■		■			2P/PI	■ R	■	■	■	■	■				■	
	RDF301	■	■	■	■		■			2P/PI	■	■	■	■	■	■				■	
	RDF301.50	■	■	■	■		■			2P/PI	■	■	■	■	■	■				■	
	RDF302	■	■	■	■		■			2P/PI	■	■	■	■	■	■					
	Communicating: wall-mounted																				
	RDG100KN	■	■	■	■	■	■	■	■	2P/PI		■	■	■	■	■				■	
	RDG160KN	■	■	■	■	■	■		■	2P/PI		■	■	■	■	■		■ [4)]		■	

(X): X = number of outputs R = round flush mounting box [1)] ECM DC 0...10 V fan control [2)] Either ON/OFF, 3-position or PWM signal [3)] Either return air temp. sensor or heating/cooli
[4)] Selectable between EC fan or 3 speeds [5)] Either DC or ON/OFF signal [6)] Also available as horizontal model [7)] Switch program can be switched off

		Outputs				Inputs				Power supply	User interfaces							
Lighting and shading control	Communication interface	ON/OFF	PWM	3-position	DC 0...10 V	Multifunctional inputs	Operating mode changeover contact	Return air temperature sensor	Heating/cooling changeover sensor	Power supply	Setpoint knob	Setpoint buttons	Fan speed switch	Fan speed button	Operating mode button	Display (LCD), indicator (LED)	Backlight	Additional operation selector/remarks
		(1)								AC 24...250 V	■		■					Heat-cool CO switch
		(1)								AC 24...250 V	■		■					Vent-heat-cool switch
		(1)								AC 24...250 V	■		■					
		(1)								AC 24...250 V	■		■					Heat/cool-vent switch
		(2)								AC 24...250 V	■		■					Heat-cool CO switch
		(1)								AC 24...250 V	■		■					Heat-vent-cool CO switch
										AC 24...250 V			■					
		(1)					■	■	■	AC 230 V	■		■			LED		
		(2)					■	■	■	AC 230 V	■		■			LED		
		(2)					■	■		AC 230 V	■		■			LED		
		(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	
		(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD		
		(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	
		(1)								AC 230 V		■		■		LCD		Heat-cool button
		(1)								AC 230 V		■		■		LCD	■	Heat-cool button
					(2)	■	■	■	■	AC 24 V		■		■	■	LCD		
		(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	Time prog. buttons
		(1)								AC 230 V		■		■	■	LCD	■	Heat-cool button, time prog. buttons
		(1)					■	■[3]	■[3]	AC 230 V		■		■		LCD		
		(1)								AC 230 V		■		■		LCD		Heat-cool button
		(1)						■[3]	■[3]	AC 230 V		■		■	■	LCD		Time prog. buttons
		(3)[2]	(2)[2]	(2)[2]		■	■	■	■	AC 230 V	■			■	■	LCD	■	
		(3)[2]	(2)[2]	(2)[2]		■	■	■	■	AC 230 V	■			■	■	LCD	■	Time prog. buttons
		(2)				■	■	■	■	AC 230 V	■			■	■	LCD	■	
					(2)	■	■	■	■	AC 24 V	■			■	■	LCD	■	
					(2)	■	■	■	■	AC 24 V	■			■	■	LCD	■	
	KNX	(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	
	KNX	(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	
■	KNX	(2)[2]		(1)[2]		■	■	■	■	AC 230 V		■		■	■	LCD	■	
	M-bus	(2)[2]		(1)[2]		■	■	■	■	AC 230 V	■		■	■		LCD	■	
	KNX	(3)[2]	(2)[2]	(2)[2]		■	■	■	■	AC 230 V	■			■	■	LCD	■	
	KNX	(2)[5]			(2)[5]	■	■	■	■	AC 24 V	■			■	■	LCD	■	

ng changeover sensor

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