

SIEMENS

Using the
HomeControl
app for plant
control



Controlling heat simply and energy-efficiently

Easy-to-use heating and district heating controllers for energy-saving
heat control in residential and commercial buildings

Answers for infrastructure.



Efficient heat supply – with energy-saving, easy-to-use controllers

Lowering energy consumption while at the same time increasing the comfort level for living and working spaces – heating and district heating controllers from Siemens with integrated energy saving functions lower energy consumption and costs for the heat supply in residential and commercial buildings. For example, the controllers support the use of renewable energy sources for solar domestic hot water heating and take into account outside and room temperature, for example for a weather- and/or room-compensated flow temperature control.

The heating and district heating controllers are backed by decades of experience from Siemens in the control of HVAC plants. The in-depth application know-how and practical experience gained from an installed base with more than two million controllers worldwide are reflected in the straightforward installation, commissioning and maintenance as well as the high degree of flexibility.

Reliable and comfortable heating controllers

Heating controllers for all requirements

Siemens offers a broad range of high-quality, reliable analog and communicating heating and district heating controllers. The controllers meet all standard applications for heating circuits control as well as domestic hot water heating – and they are tailored to the individual requirements. In addition, they are supplemented by room control units that can be used to individually control the room temperature and thus to optimize comfort in living and work spaces.

Secure investment in long-term benefits

Long-term efficiency combined with a high level of simplicity, durability and compatibility – that is what heating and district heating controllers from Siemens stand for. The integrated energy saving functions provide for a high level of energy and cost efficiency. In addition, straightforward installation and commissioning save time and thus costs. And the controllers are backward compatible, of course, which facilitates the modernization of HVAC plants and prolongs their life cycle.

Comfortable installation and operation

Whether installation, commissioning, or maintenance – the controllers are designed for straightforward mounting and operation. Preprogrammed and tested standard applications make commissioning fast and easy. You also benefit from user-friendly operation: Adjustable operating modes, setpoint values, times and holiday periods allow for optimal HVAC control that matches the current situation, leading to the best possible level of well-being.

Furthermore, you can offer your customers additional state-of-the-art comfort: They can check the status of their heating and set the room temperature from under-way, via Web or the HomeControl app.

Reliable support from a global partner

In every project phase, you receive full support: Practice-oriented tools support you in choosing the right controller – such as, for example, the HVAC product catalog*. It also provides all available documents for all heating controllers, such as data sheets and mounting instructions. Product training keeps you up-to-date. And the global service network from Siemens offers instant support in the event of a plant malfunction and also ensures quick delivery of spare parts.

Highlights

- Eco-friendly thanks to power saving function
- High product quality and reliability backed by many years of experience
- Comprehensive range of heating and district heating controllers
- Investment protection through cost efficiency, durability and backward compatibility
- Fast commissioning and straightforward operation – including remote control via the HomeControl app or Web
- Reliable support with comprehensive service, training and practical tools

* Online at www.siemens.com/hvac-catalog



With the HomeControl app from the iTunes Store^{®*}, building residents and occupants can control their heating from underway. Communicative heating controllers can be accessed via the Web server.

www.siemens.com/app-homecontrol



Energy monitoring via app or Web

An app for plant control

With the HomeControl app, settings of the heating and district heating controllers can be controlled at any time. In addition, the controllers can be set via remote access via the Web server or the app.

Monitored energy efficiency

The energy indicator controls defined end user settings, shows exceeded limit values and reports these periodically to the building occupants via e-mail or app. At every setting, a leaf symbol shows the energy status. A green leaf symbol means that the setting is correct from an energy-usage point of view. An orange-colored leaf signals that the setting is unfavorable from an energy standpoint and actively indicates, for example, that the settings were not reset to an energy-optimized operation. As a result, deviations are always transparent and visible.

At the same time, the user can also intervene: Thanks to a guided navigation, users

can easily and quickly find deviations and their causes, enabling them to quickly correct incorrect manual settings. Users can thus be sure that their plant always runs with the optimal setting and that they won't forget to reset a changed operation mode or value.

Convenient operation in every situation

Users can remotely access their plant via the Web server at any time, regardless of their location. A clear user interface and navigation enable straightforward operation. Push messages also inform of disturbances occurring at the plant. And a memory function ensures that users will not forget to reset the operations to an energy-efficient mode.

Highlights

- Higher energy efficiency due to memory function and reporting of unfavorable energy settings
- Optimal plant control and fast correction of settings through time- and location-independent plant access
- Intuitive operation, thanks to clear user interface and navigation

* iTunes[®] is a trademark of Apple Inc., registered in the U.S. and other countries.

All functions at a glance

Device type	Applications					Communication				General			
	Number of heating circuits mix/pump heating circuit	Boiler (burner)	Pre-controller	Domestic hot water/ solar	District heating transfer station	LPB	M-bus	Modbus	Web connection via OZW672	Pre-programmed plant types	Device configuration using schemata	Setting heating curve	Device dimensioning (WxHxD in mm)
RVP201.. ¹⁾²⁾	1	1-stage									DIP switch	Steepness	144x96x115
RVP211.. ¹⁾²⁾	1	1-stage		■ (without solar)							DIP switch	Steepness	144x96x115
RVP340 ²⁾	1				■	■			■	2	■	Digital	144x96x109
RVP350 ²⁾	1	2-stage		■		■			■	3	■	Digital	144x96x109
RVP351 ²⁾	1	2-stage		■						3	■	Digital	144x96x109
RVP360 ²⁾	2	2-stage		■		■			■	6	■	Digital	144x96x109
RVP361 ²⁾	2	2-stage		■						6	■	Digital	144x96x109
RVL479 ³⁾	1					■ (slave)			■	1	■	By bar Digital	144x144x113
RVP480 ³⁾	1	2-stage	■		■	■			■	6	■	By bar Digital	144x144x113
RVL481 ³⁾	1	2-stage	■	■	■	■			■	29	■	By bar Digital	144x144x113
RVL482 ³⁾	1	2-stage, modulating	■	■		■			■	21	■	By bar Digital	144x144x113
RVD120.. ²⁾	1			■ (without solar)	■			■		3	■	Digital	144x96x109
RVD140.. ²⁾	1			■	■ (with refill)			■		8	■	Digital	144x96x109
RVD250.. ²⁾	1		■	■	■ (with refill)	■	■ (slave)		■	28	■	Digital	144x96x109
RVD260.. ²⁾	2			■	■ (with refill)	■	■ (slave)		■	14	■	Digital	144x96x109

In general: device operating voltage AC 230 V

¹⁾ Without illuminated display

²⁾ IP protection: IP40

³⁾ IP protection: IP42



Whether it's for one or more heating circuits, for a boiler, precontroller, or domestic hot water – we have the ideal controller for any application. A wide variety of pre-programmed and tested standard applications provide for fast and safe commissioning.

RVP2.. – cost-efficient heating controllers with analog operation for single- and multi-family houses and small commercial/industrial buildings



RVP2.. – cost-efficient heating controllers with analog operation

RVP2.. applications

The weather-compensated and autonomous RVP2.. heating controllers are suitable for buildings that have their own heat generation. They offer a cost- and energy-efficient solution for renovations or new construction of – single- and multi-family houses, – small commercial buildings, – small industrial buildings.

Cost-efficient, autonomous standard controllers

RVP2.. heating controllers include standard applications to control one heating circuit and domestic hot water heating. They are optionally available with a time switch – either with an analog weekly or daily time switch or with a digital weekly time switch.

Moreover, the controllers also take into account changes in outside and room temperature. By adding a room control unit, external heat sources can be included – the room influence of the room control unit can be adjusted at the controller.

The RVP2.. heating controllers offer intuitive operation, thanks to their clear, analog user interface with a mode slider. Installation and commissioning are also straightforward. In addition, when exchanging devices, you can simply plug the controller onto the mounted plug-in socket.

Highlights

- Comprehensive range for controlling one heating circuit and domestic hot water heating
- Optimized energy consumption at a consistent level of comfort
- Intuitive operation, thanks to clear, analog user interface
- Straightforward installation, commissioning and modernization

RVP3.. – compact heating controllers with communication for single- and multi-family houses, small- to medium-sized commercial/industrial buildings and public buildings



RVP3.. – compact heating controllers with communication

RVP3.. applications

The compact and communicating RVP3.. heating controllers are used in residential and commercial buildings that have their own heat generation, with district heat connection as well as domestic hot water plants with storage tank. They are the ideal choice for all kinds of heating in

- single- and multi-family houses,
- small- to medium-sized commercial buildings,
- small- to medium-sized industrial buildings,
- public buildings.

Communicating controllers with heating curve that can be set digitally

RVP3.. controllers allow for a weather-compensated flow temperature control of heating circuits. Room temperature can also be included. Integrated eco-applications lower energy consumption – such as a weekly program with automatic day and night settings, a holiday program, or

a demand-dependent on/off switching of the heating, depending on a building's construction and the outside temperature. In addition, solar applications can be integrated in order to take advantage of renewable energies.

RVP3.. controllers communicate with other devices via the LPB (Local Process Bus). This way, the heat demand of several controllers, for example, can be reported to the heat producers and measuring values – such as the outside temperature – can be exchanged. Device functions can also be set remotely via Web server.

An intuitive user interface facilitates the optimal setting of the controllers: A control knob allows for corrections to the temperature setpoint value. All other parameters are digitally set via operating lines.

Highlights

- Cost efficiency, thanks to the energy-optimized operation through eco-function and the option of including solar applications
- Straightforward operation, thanks to clear user interface and adjustable temperature setpoint values
- Straightforward installation through preprogrammed standard applications

RVL4.. – multifunctional heating controllers with communication and directly adjustable heating curve for single- and multi-family houses, small- to medium-sized commercial/industrial buildings and public buildings



RVL4.. – with communication and directly adjustable heating curve

RVL4.. applications

The application range of the multifunctional, communicating RVL4.. heating and district heating controllers includes plants with their own heat generation as well as plants with a district heat connection. The controllers are ideal for flexible usage in

- single- and multi-family houses,
- small- to medium-sized commercial buildings,
- small- to medium-sized industrial buildings,
- public buildings.

Communicating controllers with directly adjustable heating curve

RVL4.. controllers include standard applications for heating circuit control and domestic hot water heating. They can control the flow temperature in a weather-compensated manner or the main flow based on demand. Integrated energy saving functions lower the energy consumption.

The most important functions include solar domestic hot water heating, a weather-compensated flow temperature control with and without room influence, an eco-function as well as an optimum start/stop control through quick setback and boost heating.

LPB communication enables communication between RVL4.. controllers as well as with additional devices. Thanks to the Web server, the plant can be accessed independent of location.

The operating mode, setpoint values, time and holiday periods can be quickly and easily set with the click of a button. The illuminated display clearly shows the current settings. The analog heating curve settings as well as the control knob for room temperature corrections allow the user to directly influence the room control.

Highlights

- Energy-efficient plant operation, thanks to integrated energy saving functions
- User-friendly operation with a push-button and a control knob
- Fast commissioning, due to preprogrammed standard applications
- Optimal operation, thanks to tested applications

RVD1.. and RVD2.. – environmentally friendly district heating controllers with communication for transfer stations in single- and multi-family houses, small- to medium-sized commercial buildings and public buildings



RVD.. – environmentally friendly district heating controllers with communication

RVD.. applications

The multifunctional, communicating RVD.. district heating controllers for heating circuits and/or domestic hot water heating are used for district heating transfer stations in

- single- and multi-family houses,
- small- to medium-sized commercial buildings,
- public buildings.

Communicating district heating controllers

The functional and communicating RVD.. controllers are ideal for a broad application range, extending all the way to plants with several heating circuits and domestic hot water heating. A communication interface enables the controllers to be integrated into a system with extensive control tasks.

An integration into a standard communication system also allows remote maintenance.

In addition to energy saving functions such as an eco-function and an optimum start/stop control, a patented DRT limit (difference of return flow temperature) lowers energy consumption. The support of solar domestic hot water heating enables the use of solar heat. A refill function maintains the secondary-side plant pressure by refilling water from an external tank or directly from the primary side. And due to a programmable heating period, the heating circuits can be switched based not only on the daily heating limits, but also on a parameterized heating period.

Buttons, operating lines and control knobs facilitate the operation of the temperature setpoint values of up to two heating circuits.

Highlights

- Energy-efficient plant operation, thanks to integrated energy saving functions
- Straightforward operation due to intuitive operating modes and adjustable temperature setpoint values for up to two heating circuits
- Straightforward installation, thanks to preprogrammed applications

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly

growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

“We are the preferred partner for energy-efficient, safe and secure buildings and infrastructure.”