

When building technology creates perfect places - that's Ingenuity for life.

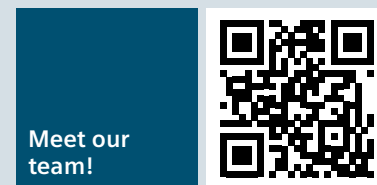
Never too cold. Never too warm.
Always safe. Always secure.

With our knowledge and technology, our products, our solutions and our services, we turn places into perfect places.

We create perfect places for their users' needs - for every stage of life.

#CreatingPerfectPlaces
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The information given in this document only contains general descriptions and/or performance features which may not always be specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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SIEMENS
Ingenuity for life

Heating System Automation

For maximum comfort and energy efficiency

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Greater thermal comfort, increased energy efficiency and longer life of equipment are the main reasons for installing control systems in heating installations.

AUTOMATION IN HEATING SYSTEMS



Heating System Automation

Thermal comfort is achieved by regulating the temperature, so that there is no overheating or underheating.

According to EN 15232 standard energy savings up to 30% can be achieved if thermostatic valves and room thermostats are installed in each individual room and if a weather-compensated control unit is applied.

If the boiler is not designed for operating in condensing mode, longer operations with condensation can cause damage to the equipment. In that case, the return temperature to the boiler has to be controlled so that it is higher than the temperature of condensation.

In this brochure you will find Siemens solu-

tions that bring greater thermal comfort to your building and reduce energy costs at the same time. The presented systems protect non condensing boilers from condensation, with the payback periods of one to two heating seasons.

All the following solutions are in the energy class C.

BASIC LINE

BL100

BL100

The basic line series (Siemens RWD62 controller) controls one heating circuit.

COMFORT AND SAVINGS

The temperature of the heating water is compensated by the outside temperature. It is possible to adjust the heating water temperature and the impact of the outside temperature.

OPTIONS

Automatic switch from day to night mode and vice versa via digital seven-day timer

EQUIPMENT SPECIFICATION

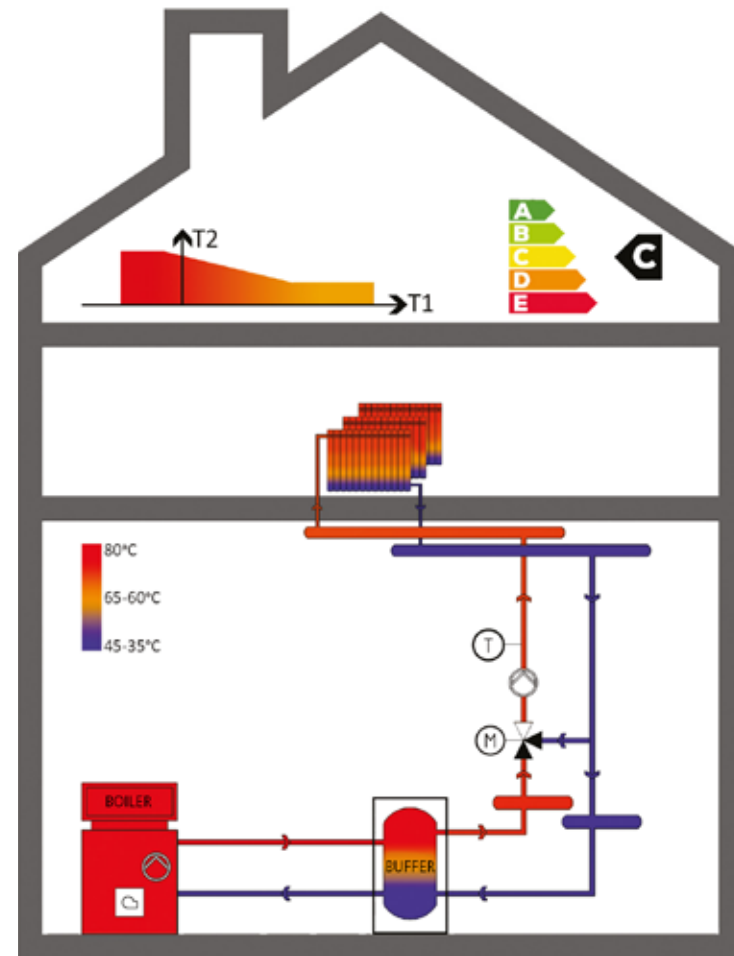
BASIC EQUIPMENT

Control cabinet KO-BL100, Siemens controller RWD62, Water temperature sensor QAD2012 or QAE2112, Outside temperature sensor QAC2012, Three-port mixing valve*

OPTIONAL EQUIPMENT

Digital seven-day timer SEH62.1

*See table for selecting the valve and actuator, page 10



COMPACT LINE

CL100

CL100

The Compact Line Series (Siemens Synco200 Controller) controls two heating circuits.

COMFORT AND SAVINGS

For each circuit independent temperature setting and setting of impact of the outside temperature
Switching pumps control

OPTIONS

Protect the return temperature to the boiler by reducing the temperature of heating circuits
Automatic switch from day to night mode and vice versa via digital seven-day timer

EQUIPMENT SPECIFICATION

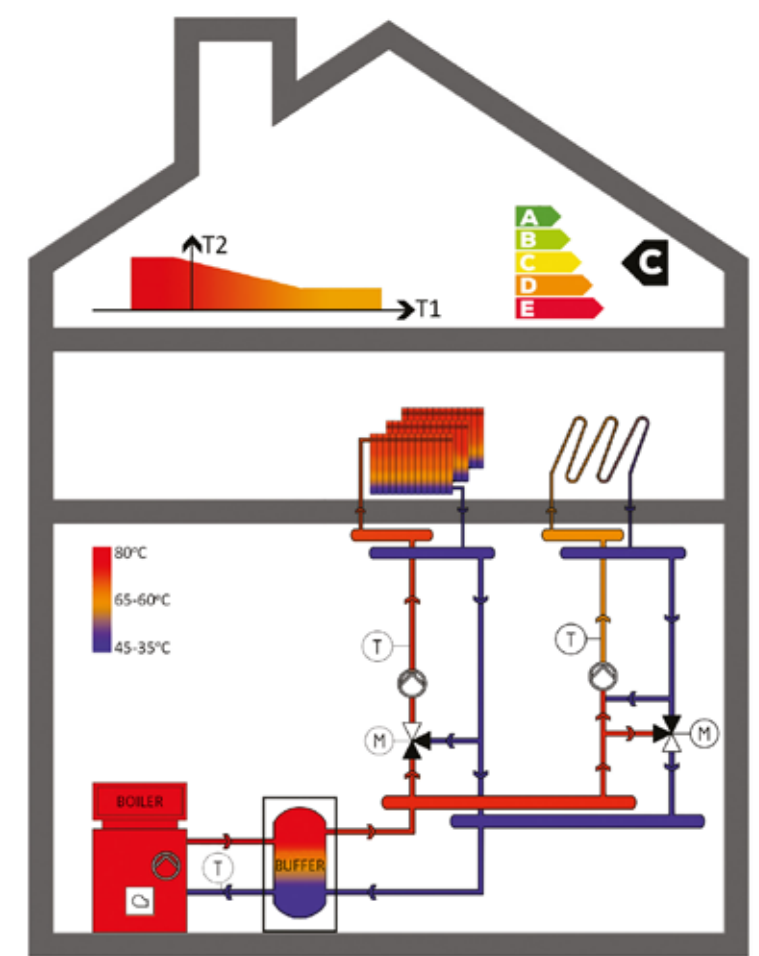
BASIC EQUIPMENT

Control cabinet KO-CL100; Siemens controller RLU222; Water temperature sensor QAD2012 or QAE2112; Outside temperature sensor QAC2012; Three port mixing valve*

OPTIONAL EQUIPMENT

Digital seven-day timer SEH62.1

*See table for selecting the valve and actuator, page 10



COMPACT LINE

CL110

CL110

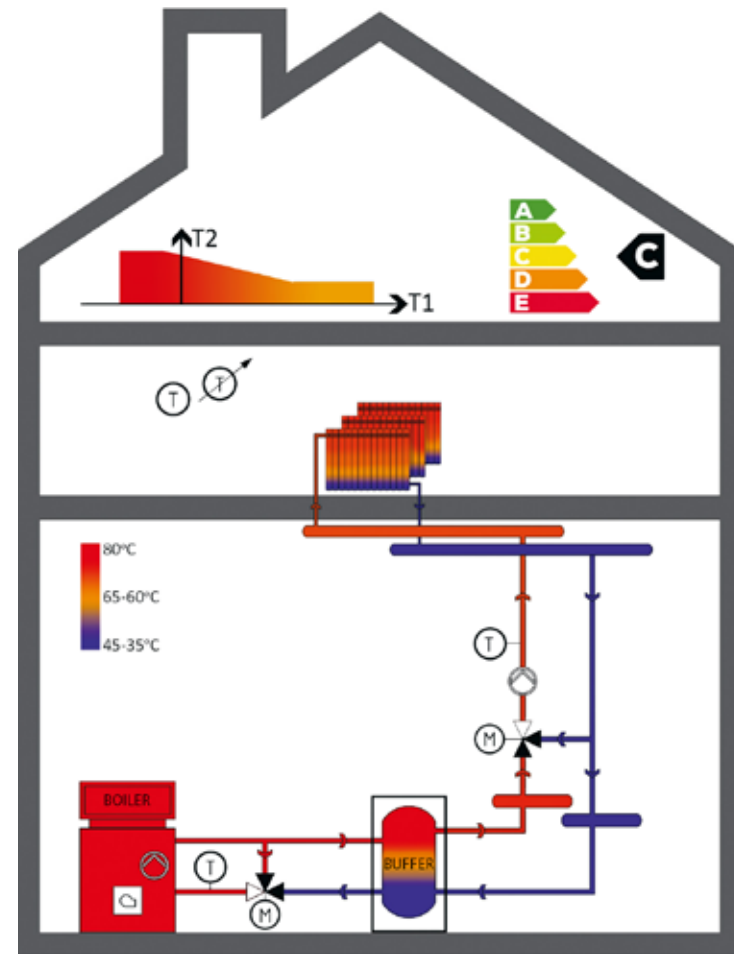
The Compact Line Series (Siemens Synco200 Controller) controls one heating circuit and protects the boiler from the low return temperature.

COMFORT AND SAVINGS

Setting the room temperature in the reference room
Protection of the boiler from the low return temperature
Switching pumps control

OPTIONS

Automatic switch from day to night mode and vice versa via digital seven-day timer



EQUIPMENT SPECIFICATION

BASIC EQUIPMENT

Control cabinet KO-CL110, Siemens controller RLU222, Water temperature sensor QAD2012 or QAE2112, Room temperature sensor QAA25, Three-port mixing valve*

OPTIONAL EQUIPMENT

Digital seven-day timer SEH62.1

*See table for selecting the valve and actuator, page 10

COMPACT LINE

CL120

CL120

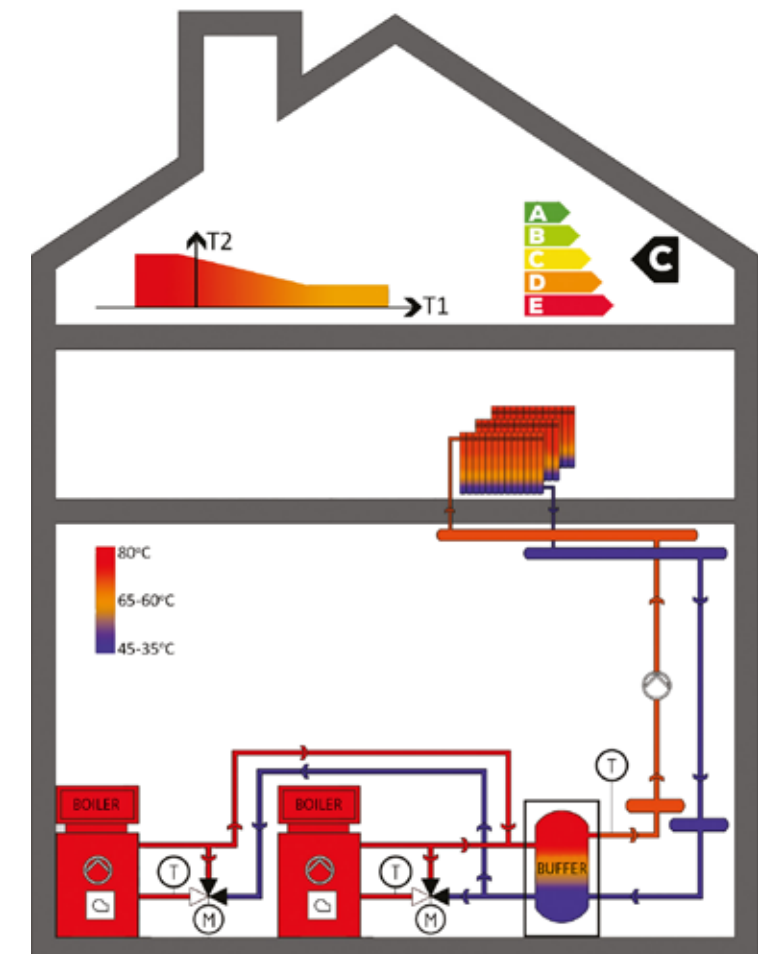
The Compact Line Series (Siemens Synco200 Controller) controls the temperature in the buffer tank with the cascade control of two boilers.

COMFORT AND SAVINGS

Setting the temperature in the buffer tank compensated with outside temperature
Switching on the second boiler in case the first boiler is insufficient

OPTIONS

Automatic switch from day to night mode and vice versa via digital seven-day timer



EQUIPMENT SPECIFICATION

BASIC EQUIPMENT

Control cabinet KO-CL120, Siemens controller RLU222, Water temperature sensor QAD2012 or QAE2112, Three-port mixing valve*

OPTIONAL EQUIPMENT

Digital seven-day timer SEH62.1

*See table for selecting the valve and actuator, page 10

PREMIUM LINE

PL100

PL100

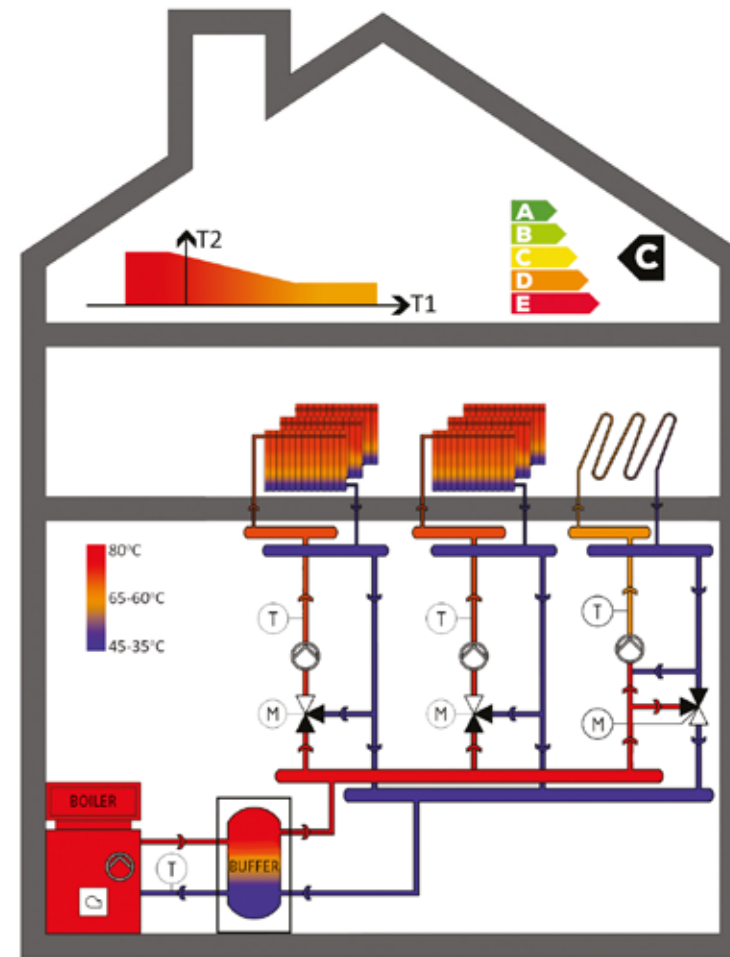
The premium line series (Siemens Synco700 controller) controls the temperature in three heating circuits.

COMFORT AND SAVINGS

For each heating circuit compensation with outside temperature
Automatic transition from day to night mode and vice versa via built in timer
KNX communication

OPTIONS

Protect the return temperature to the boiler by reducing the temperature of heating circuits
Set the room temperature in the referent room
Remote Web control



EQUIPMENT SPECIFICATION

BASIC EQUIPMENT

Control cabinet KO-PL100, Siemens controller RMS705 + RMZ790
Water temperature sensor QAD2012 or QAE2112, External temperature sensor QAC2012, Three-port mixing valve*

OPTIONAL EQUIPMENT

Room unit QAA25, Web server OZW772.01 for remote access

*See table for selecting the valve and actuator, page 10

PREMIUM LINE

PL110

PL110

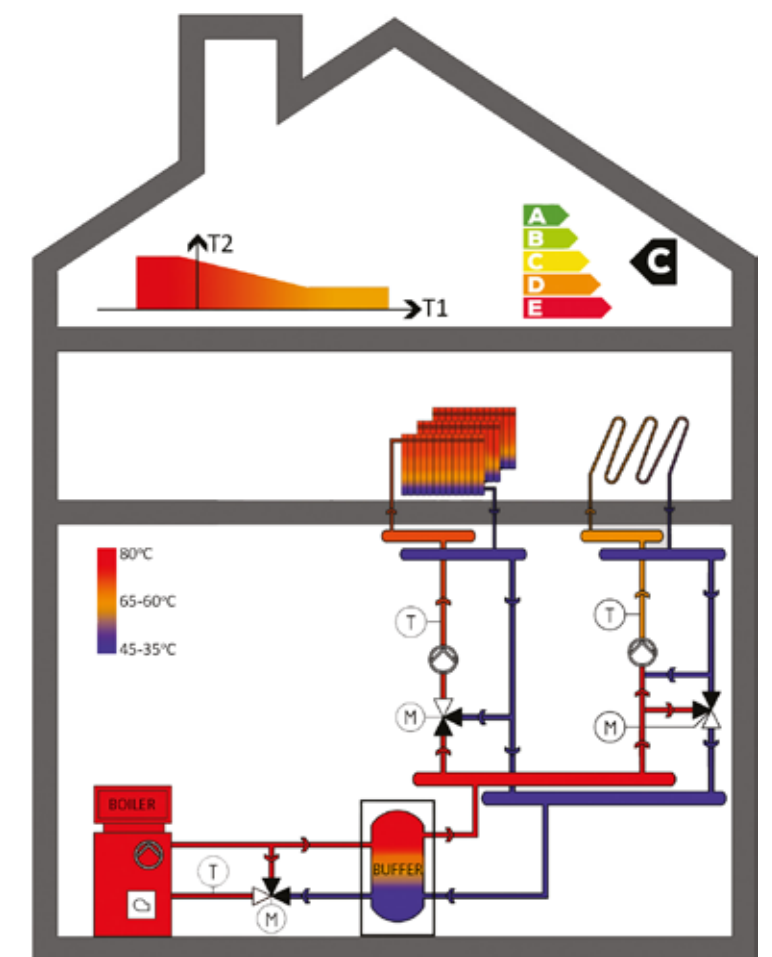
The premium line series (Siemens Synco700 controller) controls the temperature in two independent heating circuits and protects the boiler from the low return temperature.

COMFORT AND SAVINGS

For each heating circuit compensation with outside temperature, Protection of the boiler from the low return temperature, Automatic transition from day to night mode and vice versa via built in timer
KNX communication

OPTIONS

Room unit QAA25, Web server OZW772.01 for remote access



EQUIPMENT SPECIFICATION

BASIC EQUIPMENT

The premium line series (Siemens Synco700 controller) controls the temperature in two independent heating circuits and controls in cascade the heat pump, boiler and electrical boiler.

OPTIONAL EQUIPMENT

Room unit QAA25, Web server OZW772.01 for remote access

*See table for selecting the valve and actuator, page 10

PREMIUM LINE

PL120

PL120

The premium line series (Siemens Synco700 controller) controls the temperature in two independent heating circuits and controls in cascade the heat pump, boiler and electrical boiler.

COMFORT AND SAVINGS

Outside temperature compensation for each heating circuit
 Cascade control of the heat pump of the pump, boiler and electrical boiler
 KNX communication

OPTIONS

Set the room temperature in the referent room
 Remote Web control

EQUIPMENT SPECIFICATION

BASIC EQUIPMENT

Control cabinet KO-PL120, Siemens controller RMS705 + RMZ790, Water temperature sensor QAD2012 or QAE2112, External temperature sensor QAC2012, Three-port mixing valve*

OPTIONAL EQUIPMENT

Room unit QAA25, Web server OZW772.01 for remote access

*See table for selecting the valve and actuator, page 10

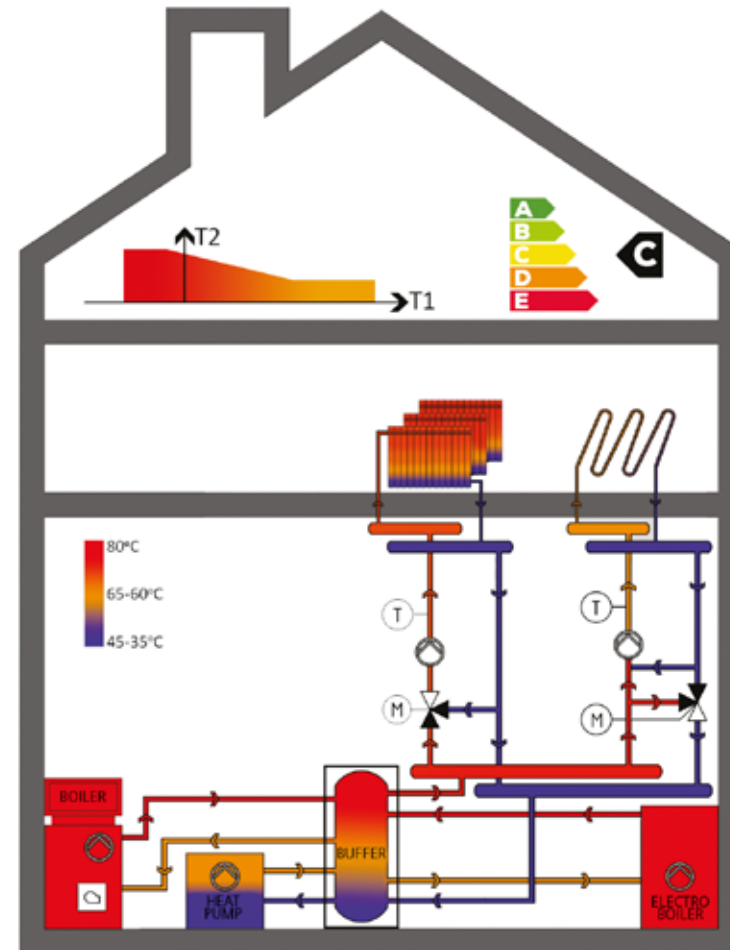


TABLE FOR SELECTING THE VALVE AND ACTUATOR

RADIATOR HEATING 80 / 60C	POWER RH	VALVE / FITTING / ACUATOR	FLOOR HEATING 45 / 40C	POWER RH	VALVE / FITTING / ACUATOR
	20KW	VXP45.20-4, ALG153, SSB61		20KW	VXP45.32-16, ALG323, SSC61
	30KW	VXP45.25-6.3, ALG203, SSB61		30KW	VXP45.40-25, ALG403, SSC61
	40KW	VXP45.25-6.3, ALG253, SSC61		40KW	VXF22.50-40, SAV61.00
	50KW	VXP45.25-10, ALG253, SSC61		50KW	VXF22.50-40, SAV61.00
	60KW	VXP45.32-16, ALG323, SSC61		60KW	VXF22.50-40, SAV61.00
	80KW	VXP45.32-16, ALG323, SSC61		80KW	VXF22.65-63, SAV61.00
	150KW	VXP45.40-25, ALG403, SSC61		150KW	VXF22.80-100, SAV61.00
	250KW	VXF22.50-40, SAV61.00		250KW	VXF22.100-160, SAV61.00
	350KW	VXF22.65-63, SAV61.00		350KW	VFX32.125-250, SAV61.00

Note: The data has to be checked for each installation

COMPARISON TABLE OF FUNCTIONALITY

	NUMBER OF CONTROL CIRCUITS	OUTSIDE TEMPERATURE COMPENSATION	ROOM TEMPERATURE SETTING	TIME PROGRAM	PROTECTION OF BOILER FROM LOW RETURN TEMPERATURE	CASCADE CONTROL	WEB ACCESS
BL100	1	✓	✗	Optional	✗	✗	✗
CL100	2	✓	✗	Optional	Reduction of temperature in heating circuits	✗	✗
CL110	2	✓	✓	Optional	✓	✗	✗
CL120	2	✓	✗	Optional	✓	2	✗
PL100	3	✓	Optional	✓	Reduction of temperature in heating circuits	✗	Optional
PL110	3	✓	Optional	✓	✓	✗	Optional
PL120	3	✓	Optional	✓	✗	3	Optional

BENEFITS OF SIEMENS PRODUCTS



At the heart of every solution

Covering every area of use and any technical application, you can be confident that for every device with the Siemens name on it a premium is placed on quality, reliability and durability. Optimally matched heating components minimize installation effort, reduce operating costs, and decrease the probability of failure. Electrically powered actuating devices (valve and damper actuators), variable speed drives as well as room controllers are all designed to be low energy consumers and that translates into a lower total cost of operation.

Energy efficiency as a key argument

Heating products from Siemens effectively re-

duce operating costs thanks to their extremely efficient use of energy. This means you can achieve up to 30% savings - while still maintaining a comfortable room climate.

Creating perfect places

We spend about 90 percent of our lives indoors - starting with our birth in hospitals, learning at school, studying at universities, succeeding in office buildings. Buildings are not just places for working and living. They are the places where we spend our lives. That is the reason why building technology is so important. Using the right technology, we improve the lives of people by improving their buildings.

Siemens Building Products offers a broad portfolio that covers a wide variety of requirements and applications. This extensive product range forms the basis for efficient and cost-effective solutions across the entire lifecycle of a building. The interplay of heating, ventilation and air conditioning as well as lightning and shading maximizes energy savings and user comfort.

With new product developments Siemens continues to expand its product portfolio. Transform your buildings into perfect places using innovative products and proven applications from Siemens.