SIEMENS

Live **Smarter**

Energy efficient control for your home.

www.siemens.co.uk/residential-controls



Introduction

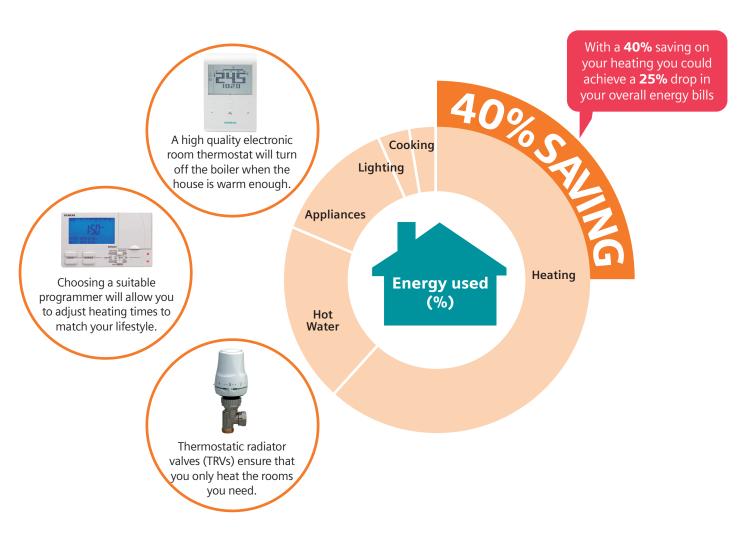
Siemens are one of the World's leading suppliers of products for the safe and efficient control of heating systems in residential installations. Our reputation is second to none, we aim to maintain this reputation through our commitment to design and product quality.

Throughout a 160+ year history of proven research and engineering talent, with more than 50,000 active patents, Siemens has continuously provided its customers with innovations in the areas of healthcare, energy, industry, and infrastructure – globally and locally.

Adding controls to your heating system can reduce running costs by 40%*

A properly installed heating control system will maintain suitable temperatures in every room in your home, prevent wasted heat and make sure your boiler runs efficiently.

Heating controls from Siemens are cost effective and readily available. They are also easy to fit and can be installed with minimal disruption.



^{*}Recent independent tests by the University of Salford comparing a conventional heating system with no controls against the same system with a room thermostat and TRVs added.

Contents

TIME CONTROLS

PAGES 5-8



WIRELESS THERMOSTATS

PAGES 17-20



ROOM THERMOSTATS

PAGES 9-12



CYLINDER, PIPE & FROST THERMOSTATS PAGES 21-22



PROGRAMMABLE ROOM THERMOSTATS PAGES 13-16



THERMOSTATIC RADIATOR VALVES & VALVE HEADS PAGES 23-25



For technical specifications and further information please refer to our website www.siemens.co.uk/residential-controls

Contents

Time Controls At-a-glance guide	Page 5
RWB30E	6
RWB2E	6
RWB1007	7
RWB2007	7
RWB27Si	8
RWB29Si	8

Wireless Thermostats At-a-glance guide	Page 17
RDH100RF/SET	18
RDJ100RF/SET	18
RDD100.1RFS	19
RDE100.1RFS	19
REV24RF/SET	20
RDE50.1RF/SET	20

Room Thermostats At-a-glance guide	Page 9
RDD100	10
RDD100.1	10
RDH100	11
RDD50.1	11
RAA21	12
RAA11	12

Cylinder, Pipe and Frost Thermostats							
At-a-glance guide	Page 21						
RAM-TR.2000M	22						
RAM-TW.2000M	22						
RAA11	22						

Programmable Room Thermostats At-a-glance guide Page 13						
RDE100	14					
RDE100.1	14					
RDE100.1DHW	15					
RDJ100	15					
RDE50.1	16					
REV24	16					

Thermostatic Radiator valves & valve heads	Page 23-25
VPD/VPE/VDN/VEN	23
ADN/AEN	24
RTN51/71/81	25
STA	25

Time Controls at-a-glance

FEATURES	RWB27Si	RWB29Si	RWB30E	RWB2E	RWB1007	RWB2007
Menu driven programming						
Large backlit display						
Daily programming						
Daily, weekday/weekend programming						
Two or three ON/OFFs per day						
Two ON/OFFs per day						
Clock with auto summer/ winter changeover						•
Holiday programming						
LED 'ON' light						
Advance facility						
1 hour boost facility						
Up to 3 hour boost facility						
Override facility						
Service Interval Function						
Visual service reminder						
Audible service reminder						
Independent timing for hot water and central heating						-
Combination Boilers						
Gravity or fully pumped systems						
Direct replacement using industry standard backplate						
Battery back up						
Volt free contacts						

RWB30E Traditional Daily Timer



- Daily programming
- Advance and 1 hour boost facility
- 2 ON/OFFs per day
- All day option
- Override facility
- LED 'ON' lamp
- Volt free contacts 12-250V
- Industry standard backplate
- Ideal for Combination boilers

Operating voltage: AC230V ± 10%

Contact rating: 6A Resistive 2A Inductive

Dimensions: 145mm x 90mm x 50mm

RWB2E Traditional Daily Programmer



- Daily programming
- Advance and 1 hour boost facility
- 2 ON/OFFs per day
- All day option
- Override facility
- LED 'ON' lamps
- Volt free contacts 12-250V
- Ideal for gravity or fully pumped systems

Operating voltage: AC230V ± 10%

Contact rating: 6A Resistive 2A Inductive

Dimensions: 145mm x 90mm x 34mm

Time Controls

RWB1007 • RWB2007

RWB1007 Timer



- Easy to read backlit display
- Daily, weekday/weekend or 7 day programming
- Advance and 1 hour boost facility
- 2/3 ON/OFFs per day
- Clock with auto summer/ winter changeover
- Clock supplied preset to correct time and date
- LED 'ON' lamp
- Service interval function
- Audio and visual service reminder
- Battery back-up
- Volt free contacts 12-250V
- Industry standard backplate
- Ideal for Combination boilers

Operating voltage: AC230V ± 10%

Contact rating: 6A Resistive 2A Inductive

Dimensions: 145mm x 85mm x 34mm

RWB2007 Programmer



- Easy to read backlit display
- Daily, weekday/weekend or 7 day programming
- Advance and 1 hour boost facility
- 2/3 ON/OFFs per day
- Clock with auto summer/ winter changeover
- Clock supplied preset to correct time and date
- LED 'ON' lamps
- Service interval function
- Audio and visual service reminder
- Battery back-up
- Industry standard backplate
- Ideal for gravity or fully pumped systems

Operating voltage: AC230V ± 10%

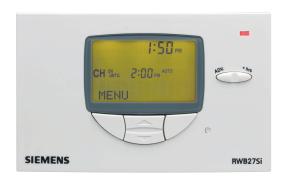
Contact rating: 6A Resistive 2A Inductive

Dimensions: 145mm x 85mm x 34mm

Time Controls

RWB27Si • RWB29Si

RWB27Si Timer



- Menu driven programming
- Easy to read, larger than average backlit display
- Daily, weekday/weekend or 7 day programming
- Advance and up to 3 hour boost facility
- 2/3 ON/OFFs per day
- Holiday programming
- LED 'ON' lamp
- Battery back-up
- Volt free contacts 12-250V
- Industry standard backplate
- Ideal for Combination Boilers
- Service interval function

Operating voltage: AC230V ± 10%

Contact rating: 6A Resistive 2A Inductive

Dimensions: 145mm x 90mm x 34mm

RWB29Si Programmer



- Menu driven programming
- Easy to read, larger than average backlit display
- Daily, weekday/weekend or 7 day programming
- Advance and up to 3 hour boost facility
- 2/3 ON/OFFs per day
- Holiday programming
- LED 'ON' lamps
- Battery back-up
- Industry standard backplate
- Ideal for gravity or fully pumped systems
- Service interval function

Operating voltage: AC230V ± 10%

Contact rating: 6A Resistive 2A Inductive Dimensions: 145mm x 90mm x 34mm

Room thermostats at-a-glance

FEATURES	RAA21	RAA11	RDD100	RDD100.1	RDH100	RDD50.1
Combination Boilers						
TPI control with ON/OFF output						
2-position control with ON/OFF output						
Gas filled bellows						
24 - 250V						
Changeover contacts						
Setting range 5°C - 30°C						
Setting range 8°C - 30°C						
Setting range 5°C - 35°C						
Limiting or locking facility						
Setback temperature 5°C - 35°C						
Double insulated (no earth required)						•
Electronic display						
Heating or cooling operation						
Tamperproof						
5 Amp rated						
6 Amp rated						

RDD100 Digital Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF output
- Mains powered
- Volt free contacts
- Ideal for Combination Boilers
- Temperature setting range 5°C 35°C

Operating voltage: AC230V \pm 10%-15% Dimensions: 85mm x 106mm x 21.5mm

RDD100.1 Digital Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF output
- Battery powered
- Volt free contacts
- Ideal for Combination Boilers
- Temperature setting range 5°C 35°C

Operating voltage: DC 3V (2 x 1.5V AAA batteries)

Dimensions: 85mm x 106mm x 21.5mm

Room Thermostats

RDD50.1 • RDH100

RDD50.1 Digital Room Thermostat with LCD



- Room temperature control
- 2-position control with ON/OFF relay output for heating
- Comfort and economy modes
- Double insulated (no earth required)
- Large easy to read display
- Battery powered
- Volt free contacts
- Temperature setting range 5°C 35°C

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 86mm x 87mm x 20mm

RDH100 Digital Room Thermostat with LCD



- Room temperature control
- TPI control with ON/OFF output
- Double insulated (no earth required)
- Large easy to read display
- Large dial for settings
- Battery powered
- Volt free contacts
- Temperature setting range 5°C 30°C

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 90mm x 120mm x 35mm

Room Thermostats

RAA21 Standard Room Thermostat



- Room temperature control
- Double insulated (no earth required)
- Gas bellows type operation (no neutral required)
- Large dial for settings
- Battery powered
- Volt free contacts
- Temperature setting range 8°C 30°C

Nominal voltage: 24 - 250V

Contact rating: 5A Resistive 2A Inductive Dimensions: 96mm x 97mm x 35mm

RAA11 Tamperproof Room Thermostat



- Room temperature control
- Double insulated (no earth required)
- Gas bellows type operation (no neutral required)
- Ideal for Combination Boilers
- Suitable for use as a frost thermostat
- Tamperproof
- Volt free contacts
- Temperature setting range 8°C 30°C

Nominal voltage: 24 - 250V

Contact rating: 5A Resistive 2A Inductive Dimensions: 96mm x 97mm x 35mm

Programmable Room thermostats at-a-glance

FEATURES	RDJ100	REV24	RDE100	RDE100.1	RDE100.1DHW	RDE50.1
Combination Boilers						
Underfloor heating						
Self-learning logic						
Digital display						
Programmable away from backplate						
PI control with ON/OFF output						
24 - 250V						
Daily programming						
Weekday/weekend programming						
7 day programming						
Lockable display						
Holiday programming						
Setback facility						
Frost protection						
Changeover contacts						
Party mode (up to 9 hour boost)						
5 Amp rated						
6 Amp rated						

Programmable Room Thermostats

RDE100 • RDE100.1

RDE100 Programmable Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output
- Holiday programming
- Mains powered
- Volt free contacts
- Ideal for combination boilers

Operating voltage: AC230V \pm 10%-15% Contact rating: 5A Resistive 2A Inductive Dimensions: 85mm x 127mm x 21.5mm

RDE100.1 Programmable Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output
- Holiday programming
- Battery powered
- Volt free contacts
- Ideal for combination boilers

Operating voltage: DC 3V (2 x 1.5V AAA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 85mm x 127mm x 21.5mm

Programmable Room Thermostats

RDE100.1DHW • RDJ100

RDE100.1DHW Programmable Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output
- Holiday programming
- Battery powered
- Volt free contacts
- Independent ON/OFF control of DHW

Operating voltage: DC 3V (2 x 1.5V AAA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 85mm x 127mm x 21.5mm

RDJ100 Programmable Room Thermostat



- Room temperature control
- TPI control with ON/OFF output
- Large, easy to read LCD display
- Double insulated (no earth required)
- Large dial for settings
- Daily programming
- Battery powered
- Volt free contacts
- Ideal for combination boilers

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 90mm x 120mm x 35mm

Programmable Room Thermostats

RDE50.1 • REV24

RDE50.1 Programmable Room Thermostat with LCD



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output
- Holiday programming
- Battery powered
- Volt free contacts
- Screen lock

Operating voltage: DC 3V (2 x 1.5V AAA batteries)

Contact rating: 5A Resistive 2A Inductive Dimensions: 84mm x 129mm x 20mm

REV24 Programmable Room Thermostat



- Room temperature control
- Double insulated (no earth required)
- Large, easy to read LCD display
- Slider settings and text instructions
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- PID control with ON/OFF output
- Up to 9 hour boost
- Holiday programming
- Battery powered
- Volt free contacts
- Ideal for combination boilers

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Current rating: 6A Resistive 2A Inductive Dimensions: 134mm x 94mm x 30mm

RF (Wireless) Thermostats at-a-glance

FEATURES	RDH100 RF/SET	RDJ100 RF/SET	RDD100.1 RFS	RDE100.1 RFS	REV24RF/ SET	RDD100.1 RF	RDE100.1	RDE50.1 RF/SET
Combination Boilers								
Underfloor heating								
24-250V volt free contacts								
Large digital display								
Backlit display								
Setback facility								
Changeover contacts								
Advance								
Daily programming								
Weekday/weekend programming								
7 day programming								
Large control dial								
TPI (PID) control								
433MHz								
868MHz								
Double Insulated								
Holiday programming								
Frost protection								
Override								
Manual override switch (on receiver)								
Party mode (up to 9 hour boost)								
RF signal strength indicator								

Wireless Room Thermostats

RDH100RF/SET • RDJ100RF/SET

RDH100RF/SET Wireless Digital Room Thermostat and Receiver



- Large, easy to read LCD display
- PI control with ON/OFF output
- Double insulated (no earth required)
- Large dial for settings
- Manual override
- Battery powered
- Volt free contacts
- Range 20 metres line of sight between transmitter and receiver

RDH100RF

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Dimensions: 90mm x 120mm x 35mm

RCR10/433

Operating voltage: AC 230V \pm 10%-15% Contact rating: 8A Resistive 3A Inductive Dimensions: 84mm \times 104mm \times 32mm

RDJ100RF/SET Wireless Programmable Room Thermostat and Receiver



- Large, easy to read LCD display
- PI control with ON/OFF output
- Double insulated (no earth required)
- Large dial for settings
- Manual override
- Daily programming
- Battery powered
- Volt free contacts
- Range 20 metres line of sight between transmitter and receiver

RDJ100RF

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Dimensions: 90mm x 120mm x 35mm

RCR10/433

Operating voltage: AC 230V \pm 10%-15% Contact rating: 8A Resistive 3A Inductive Dimensions: 84mm x 104mm x 32mm

Wireless Room Thermostats

RDD100.1RFS • RDE100.1RFS

RDD100.1RFS Wireless Digital Room Thermostat and Receiver



- Room temperature control
- Double insulated (no earth required)
- Comfort, economy and frost protection mode
- Battery powered
- Volt free contacts
- Unique RF signal
- Range 20 metres line of sight between transmitter and receiver

RDD100.1RFS

Operating voltage: DC 3V $(2 \times 1.5 \text{V AA batteries})$

Dimensions: 85mm x 106mm x 21.5mm

RCR100RF

Operating voltage: AC 230V \pm 10%-15% Contact rating: 8A Resistive 3A Inductive Dimensions: 84mm \times 104mm \times 27.5mm

RDE100.1RFS Wireless Digital Room Thermostat and Receiver



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output
- Holiday programming
- Battery powered
- Volt free contacts
- Unique RF signal
- Ideal for combination boilers
- Range 20 metres line of sight between transmitter and receiver

RDE100.1RFS

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Dimensions: 85mm x 106mm x 21.5mm

RCR100RF

Operating voltage: AC 230V ± 10%-15% Contact rating: 8A Resistive 3A Inductive Dimensions: 84mm x 104mm x 27.5mm

For technical specifications and further information please refer to our website www.siemens.co.uk/residential-controls

Wireless Room Thermostats

REV24RF/SET • RDE50.1RF/SET

REV24RF/SET Wireless Programmable Room Thermostat and Receiver



- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Slider settings and text instructions
- Signal strength indicator
- PID control with ON/OFF output
- Comfort, economy and frost protection mode
- Automatic summer/winter changeover
- Up to 9 hour boost
- Holiday programming
- Battery powered
- Volt free contacts
- Ideal for combination boilers
- Range 20 metres line of sight between transmitter and receiver

REV24RF

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Dimensions: 134.5mm x 94mm x 30mm

RCR10/868

Operating voltage: AC 230V \pm 10%-15% Contact rating: 8A Resistive 3A Inductive Dimensions: 114mm x 88mm x 31.5mm

RDE50.1RF/SET Wireless Programmable room thermostat



- Room temperature control
- Double insulated (no earth required)
- Daily, weekday/weekend or 7 day programming
- Manual operation
- Comfort, economy and frost protection mode
- 2-position control with ON/OFF control output for heating
- Holiday programming
- Battery powered
- Volt free contacts
- Unique RF signal
- Ideal for combination boilers
- Range 20 metres line of sight between transmitter and receiver

RDE50.1RF/SET

Operating voltage: DC 3V (2 x 1.5V AA batteries)

Dimensions: 84mm x 129mm x 20mm

RCR50RF

Operating voltage: AC 230V \pm 10%-15% Contact rating: 5A Resistive 2A Inductive Dimensions: 84mm \times 100mm \times 30.5mm

Cylinder, Pipe and Frost Thermostats at-a-glance

FEATURES	RAM-TR.2000M	RAM-TW.2000M	RAA11
Bi-metallic sensor			
Gas bellows sensor			
20°C - 90°C			
8°C - 30°C			
SPDT contacts			
Suitable for pipes up to 115 mm diameter			
Tamperproof cover			
Can be used as a frost thermostat			

Cylinder, Pipe and Frost Thermostats

RAM1 • RAM1.T • RAA11

RAM-TR.2000M Cylinder/Pipe Thermostat



- Bi-metallic sensor
- Suitable for pipes up to 115mm diameter
- Temperature setting range 20°C 90°C

Contact rating: 16A SPDT

Dimensions: 38mm x 105mm x 42mm

RAM-TW.2000M Cylinder/Pipe Thermostat



- Bi-metallic sensor
- Tamperproof
- Suitable for pipes up to 115mm diameter
- Temperature setting range 20°C 90°C

Contact rating: 16A SPDT

Dimensions: 38mm x 105mm x 42mm

RAA11 Tamperproof Room Thermostat



- Double insulated (no earth required)
- Gas bellows type operation (no neutral required)
- Tamperproof
- Volt free contacts
- Temperature setting range 8°C 30°C

Switching voltage: AC 24 - 250V

Contact rating: 8A Resistive 3A Inductive, SPDT

Dimensions: 96mm x 97mm x 35mm

For technical specifications and further information please refer to our website www.siemens.co.uk/residential-controls

THERMOSTATIC RADIATOR VALVES

VPD • VPE • VDN • VEN

Dynamic Pressure Independent Control Valve (PICV)



The Siemens ACVATIX™ Dynamic Pressure Independent Control Valves (PICV) VPD/VPE series are designed for use in 2-pipe heating systems (radiators). Key features of these valves are:

- Integrated Differential Pressure Control
- Energy Efficiency: By optimising flow to each radiator, the PICV minimises energy
- Automatic Dynamic Balancing
- Simple Installation: Only the PICV is required, eliminating the need for additional flow balancing valves
- No Flow Noise
- Integrated Presetting
- Internally and Externally Threaded (Rp/R) $^{3}/_{8}$ ", $^{1}/_{2}$ " and $^{3}/_{4}$ ".
- Straight connection VPD, Angle connection VPE

Adjustable Kv TRV valve



The Siemens ACVATIX™ Radiator Valves VDN series offer the following key features:

- Integrated Preadjustment of kv-values
- Internally and Externally Threaded (Rp/R) ³/₈", ¹/₂" and ³/₄"
- Manual Knob and Protective Cover Included: Convenient for adjustments and protection
- Compatibility with various Actuators: Can be combined with RTN... thermostatic actuators, STA...40... electrothermal actuators
- Straight connection VDN, Angle connection VEN

THERMOSTATIC RADIATOR VALVES

ADN • AEN

	Dynamic PICV		Variable Kv		Lockshield	
Connec	tion (Rp)	Flow (l/h)	Rp			
31 //	Straight		VPD110A-135	0.00 0.63	VDN110	ADN110
³ /8″	Angle		VPE110A-135	0.09 - 0.63	VEN110	AEN110
¹ /2"	Straight	20135	VPD115A-135	0.1- 0.89	VDN115	ADN115
12	Angle	20133	VPE115A-135	0.1-0.69	VEN115	AEN115
³ / ₄ "	Straight		VPD120A-135	0.31 - 1.41	VDN120	ADN120
14	Angle		VPE120A-135	0.51 1.71	VEN120	AEN120

Lockshield valve



The Siemens ACVATIX™ Radiator Lockshield Valves (ADN series) offer the following key features:

- Internally and Externally Threaded (Rp/R) ³/₈", ¹/₂" and ³/₄"
- Allen Key Isolator and Cover Cap: Prevent unauthorised tampering after installation
- Combination FBSP and Compression Inlet Connections: Suitable for various pipe connection systems
- Straight connection ADN, Angle connection AEN

THERMOSTATIC RADIATOR VALVE HEADS RTN51 • RTN

RTN51 • RTN71 • RTN81 • STA...

Thermostatic Radiator Valve Head



The Siemens Thermostatic Radiator Valve (TRV) offers the following key features:

- Liquid sensor
- Robust Construction: Maintenance-free and noiseless operation
- Setpoint Range: Adjustable from 8°C to 28°C, with frost protection settings
- Reverse Flow Fitting:Can be fitted on either the flow or return pipes
- Temperature limiters
- Frost protection setting

Electric Radiator Valve Head



The Siemens Electric Radiator Valve offers the following key features:

- Robust Construction:Maintenance-free and noiseless operation
- Various voltages 24V, 230V or 24V with DC0...10V signal

Part Number	Product description
RTN51	TRV Head
RTN71	Thermostatic actuator with remote sensor
RTN81	Thermostatic actuator with remote sensor
STA121.40L10	Electric Head 24V
STA321.40L10	Electric Head 230V
STA161.40L10	Electric Head DC 010V

Siemens plc Building Products Division Pinehurst II 2 Pinehurst Road Farnborough GU14 7BF

Telephone: +44 (0)330 403 5107

e-mail: bpsales.gb@siemens.com

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.





5-year warranty applies to all residential controls.