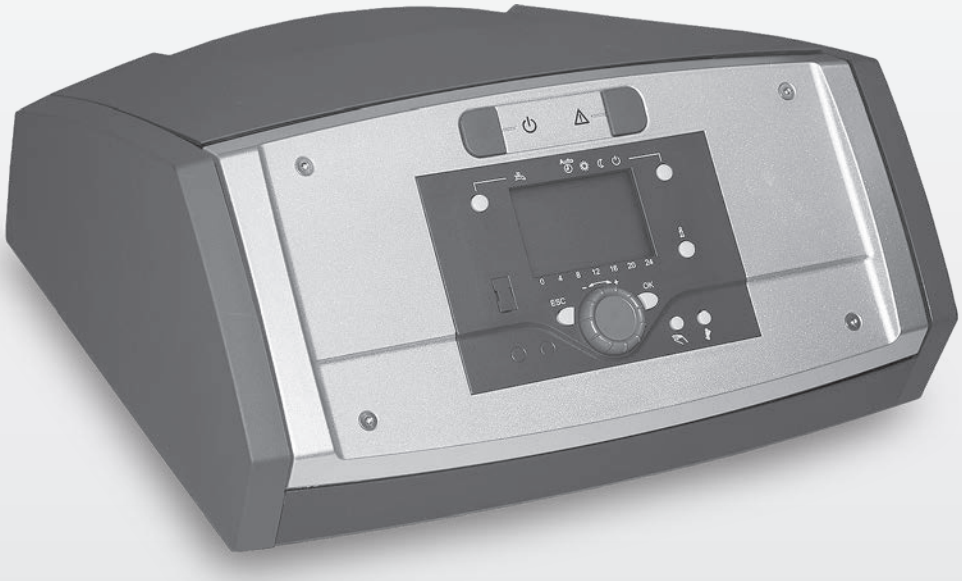
cod. 20091381 rev. 5 10/2024



RIELLOtech CLIMA COMFORT

EN INSTALLATION, OPERATION AND MAINTENANCE MANUAL

RIELLO

Dear heating engineer,
Congratulations on having chosen a **RIELLOtech** control panel. You have selected a modern, quality product that is designed to give dependable, efficient and safe service and to provide comfort in the home for many years to come.
This manual provides information that is essential to the installation of the appliance. Used in conjunction with your own knowledge and expertise it will enable you to install the appliance quickly, easily, and correctly.

Please accept our thanks and our congratulations on your choice of product.
Riello S.p.A.

CONFORMITY

Low Voltage Directive 2014/35/EU
Electromagnetic Compatibility Directive 2014/30/EU

RANGE

MODEL	CODE
RIELLOtech CLIMA COMFORT (horizontal installation)	4031064
RIELLOtech CLIMA COMFORT (vertical installation)	4031069

ACCESSORIES
For a complete list of accessories and details of their compatibility, refer to the Catalogue.

CONTENTS

At the end of its life, the product should be not be disposed of as solid urban waste, but rather it should be handed over to a differentiated waste collection centre.

The following symbols are used in this manual:

CAUTION! = Identifies actions that require caution and adequate preparation.

STOP! = Identifies actions that you MUST NOT do.

This manual, Code 20091381 - Rev. 5 (10/2024)
comprises 60 pages.

1 GENERAL SAFETY INFORMATION

⚠ As soon as you open the packaging, check immediately that the contents are all present and undamaged. Contact the **RIELLO** reseller from whom you purchased the product if you notice any problems.

⚠ This product must be installed by a legally qualified heating engineer. On completion of the installation, the installer must issue the owner with a declaration of conformity confirming that the installation has been completed to the highest standards in compliance with the instructions provided by **RIELLO** in this instruction manual, and that it conforms to all applicable laws and standards.

⚠ This control panel is designed and made for use with boilers generating hot water up to 110°C, and must be used exclusively for this purpose and within its specified performance limits.

⚠ This product must only be used for the purpose for which it is designed and made, as specified by **RIELLO**. **RIELLO** declines all responsibility, contractual or other, for damage to property or injury to persons or animals caused by improper installation, adjustment, maintenance or use.

⚠ This manual is an integral part of the equipment and therefore must be stored carefully and must ALWAYS accompany the control panel even if it is sold to another Owner or User or transferred to another plant. If it is damaged or lost, request another copy from your local Technical Assistance Service **RIELLO**.

2 PRECAUTIONS

⊖ Never clean the boiler without first disconnecting it from the mains electricity supply by turning the mains power switch and the control panel switch OFF.

⊖ Do not tamper with or adjust the safety or control devices without prior authorisation and instructions from the manufacturer.

⊖ Never pull, disconnect, or twist the electrical cables coming from the appliance even if it is disconnected from the mains electricity supply.

⊖ Dispose of packaging materials in compliance with applicable standards and legislation governing the disposal of urban, domestic and industrial waste.

⊖ Never switch the control panel on even for a short period if the safety devices are not functioning correctly or have been tampered with.

⊖ All maintenance and repairs must be carried out by a legally qualified heating engineer.

⊖ Do not use water to extinguish fire in the control panel. Switch power OFF at the mains power switch to isolate the control panel electrically first. Then use a class E fire extinguisher (marked "SUITABLE FOR LIVE ELECTRICAL ITEMS") to extinguish the flames.

3 DESCRIPTION OF THE APPLIANCE

RIELLOtech CLIMA COMFORT control panels are designed to perform indoor climate control functions. They combine in the same physical unit an electronic controller and a manual reset safety thermostat for monitoring maximum boiler temperature in the event of a controller malfunction.

The **RIELLOtech CLIMA COMFORT** is designed for use in complex systems and single-apartment installations. It is capable of controlling modulating burners, single and two stage burners, cascaded boilers and solar water heating systems, and can integrate a number of different heat sources. It can manage 1 direct and 1 mixed central heating zone (or 2 mixed zones with the addition of an accessory kit), as well as domestic hot water production.

The microprocessor technology of the electronic controller makes these control panels ideal for use with various types of boiler, even with different minimum and maximum temperatures, and also enables them to meet the needs of various types of central heating and domestic hot water production systems. The units are programmed by means of parameter settings on the built-in display that are only accessible to trained and authorised personnel.
All thermostatic/electric/electronic control devices comply with applicable technical and safety standards, and are housed in an ABS box.
All the control and safety devices in **RIELLOtech CLIMA COMFORT** control panels are factory tested in compliance with applicable technical standards. Both types of control panel are available in two versions for horizontal installation (e.g. in the top panel of a floor standing boiler) or vertical installation (e.g. in the side panel of a wall mounted boiler).

A kit for separate wall mounting is also available on request.

4 SAFETY DEVICES

RIELLOtech CLIMA COMFORT control panels are fitted with the following safety devices:

Safety thermostat: that forces the boiler to perform a safety shutdown if temperature rises above the safety threshold (110°C). Fuel supply to the burner is shut off under these conditions.

⚠ The operation of a safety device indicates a potentially dangerous malfunction in the system, and means that you must contact **RIELLO**'s Technical Assistance Service immediately.

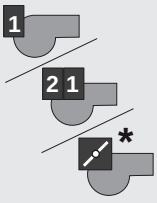
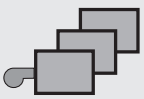
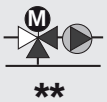
You may nevertheless attempt to restart the boiler after a short delay (see the boiler's own instruction manual).

⛔ Never start the boiler up even for a short period if the safety devices are not functioning correctly or have been tampered with.

⚠ Safety devices must only be replaced by **RIELLO**'s Technical Assistance Service using original spare parts. Refer to the spare parts catalogue supplied with the control panel.

Always check that the control panel and the boiler it is associated with are functioning correctly after any repairs.

5 **RIELLOTECH** APPLICATION CHART

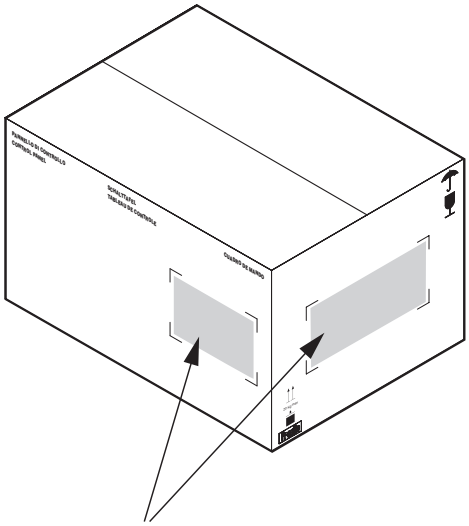
Burner type	Cascaded boilers	Biomass fuelled boilers	Solar water heating systems	DHW storage cylinders	Direct zone	1st mixed zone	2nd mixed zone
							With additional mixed zone kit

(*) Three position modulating burner with dedicated control kit or 0-10V modulating burner with additional modulating mixed zone control kit.
(**) If the three position modulating burner kit is already installed, the corresponding additional mixed zone control kit is needed.

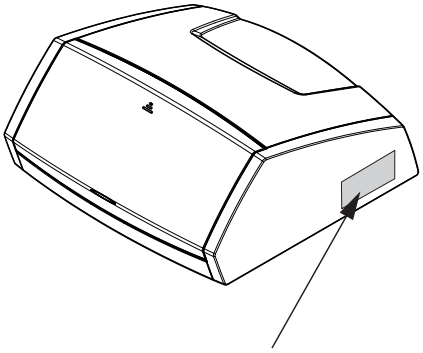
⚠ To make the electrical connections to the various system components and to the burner, refer to the instructions on pages 14, 15, 16 as well as to the specific instructions supplied with each item and with the burner.

6 IDENTIFICATION

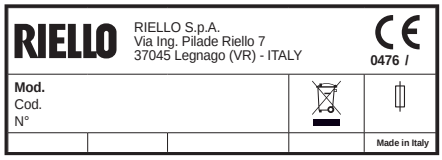
RIELLOtech control panels are identified by:



– the **code number** on the box



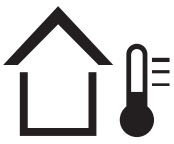
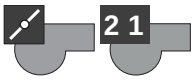
– the **technical data label**



7 TECHNICAL SPECIFICATIONS

DESCRIPTION	RIELLOtech CLIMA COMFORT	
Power supply	230 (+/-10%) - 50	V - Hz
Main power switch (two pole)	250 - 10(4)	V - A
Burner reset button	250 - 10(4)	V - A
Fuse (on internal terminal block)	250 - 6,3 T	V - A
Max power input (electronic controller)	9	VA
Electronic controller relay contacts for burner and pumps	250 - 2(2)	V - A
Manual reset safety thermostat (TS1)	110 (+0/-6)	°C
Electric degree of protection	20	IP
Length of safety thermostat cable	3	m

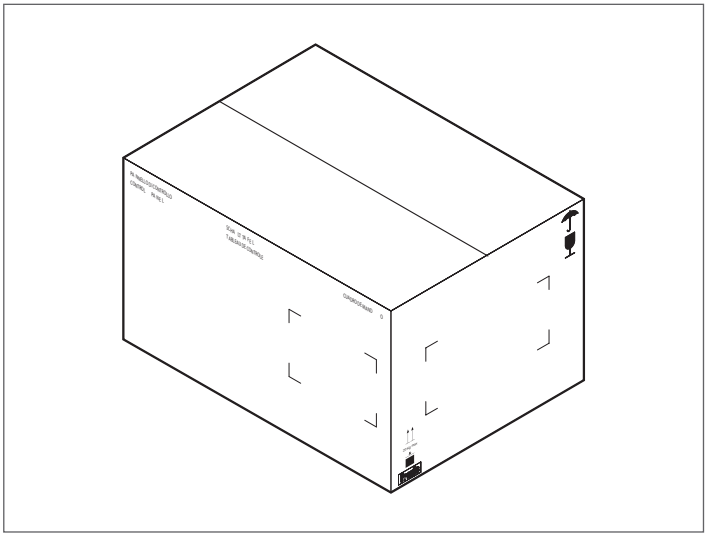
CONTROLLER TEMPERATURE CLASS

	Outdoor sensor	Burner	Class
CLIMA COMFORT			II
			III

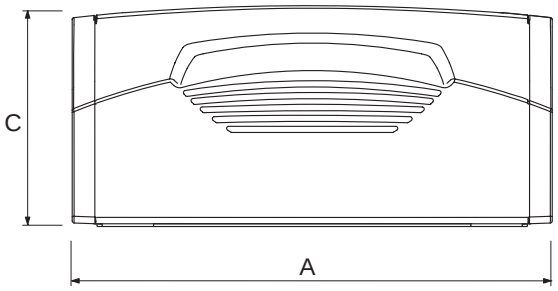
8 UNPACKING THE PRODUCT

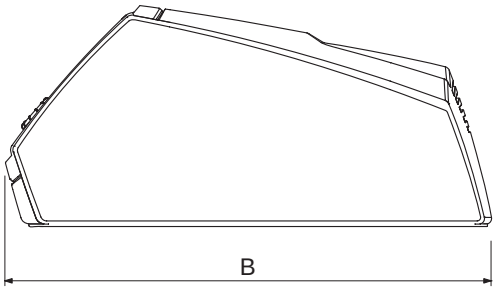
RIELLOtech control panels come in a cardboard box that also contains the following accessories:

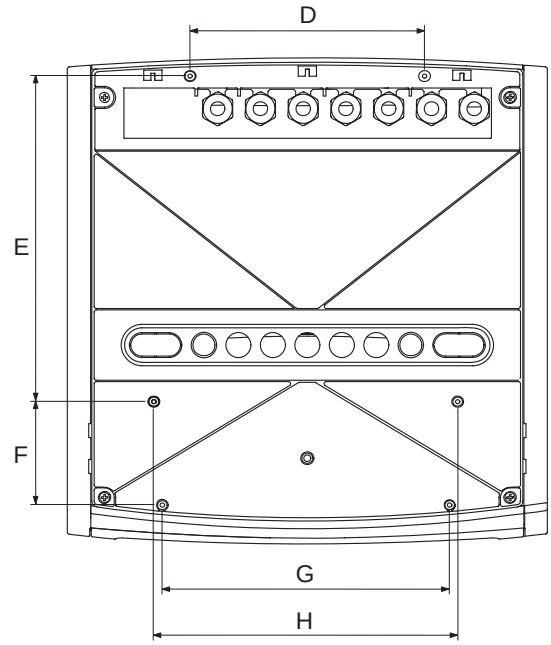
- Self-tapping fixing screws
- instruction manual
- outdoor sensor.



9 DIMENSIONS AND WEIGHT







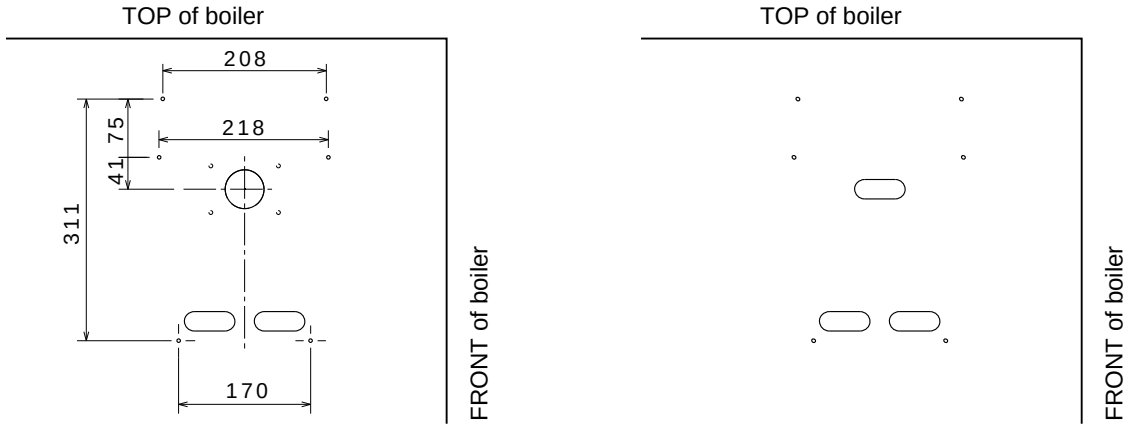
DESCRIPTION		
A	348	mm
B	356	mm
C	161	mm
D	170	mm
E	236	mm
F	75	mm
G	208	mm
H	218	mm
Weight	3	kg

10 ASSEMBLY

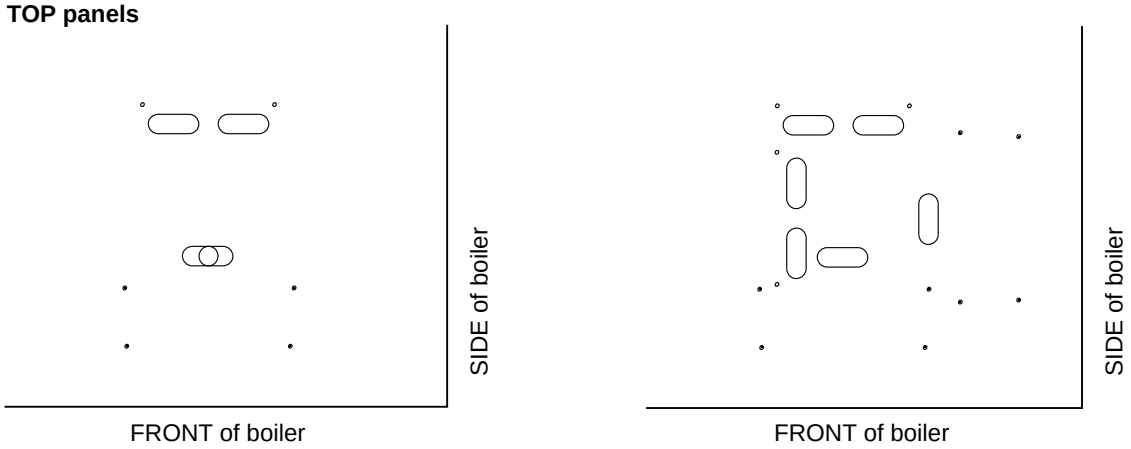
RIELLOtech control panels can be installed either on the top of the boiler or on one of its side panels.

Before commencing installation, check the arrangement of the holes on the top panel or side panel of the boiler.

SIDE panels



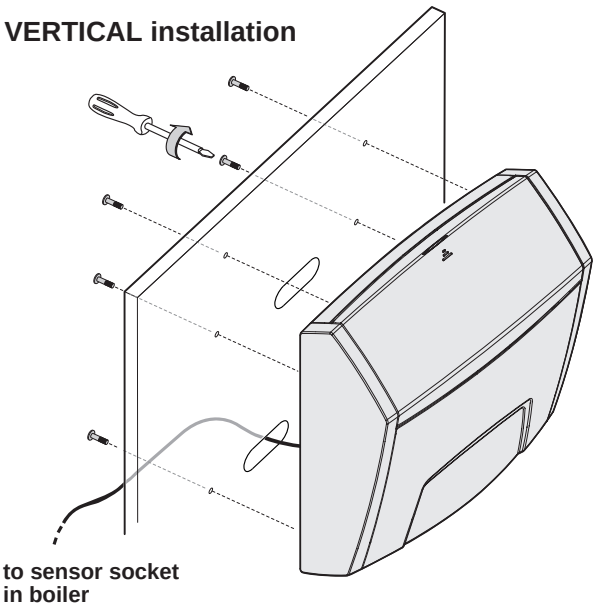
TOP panels



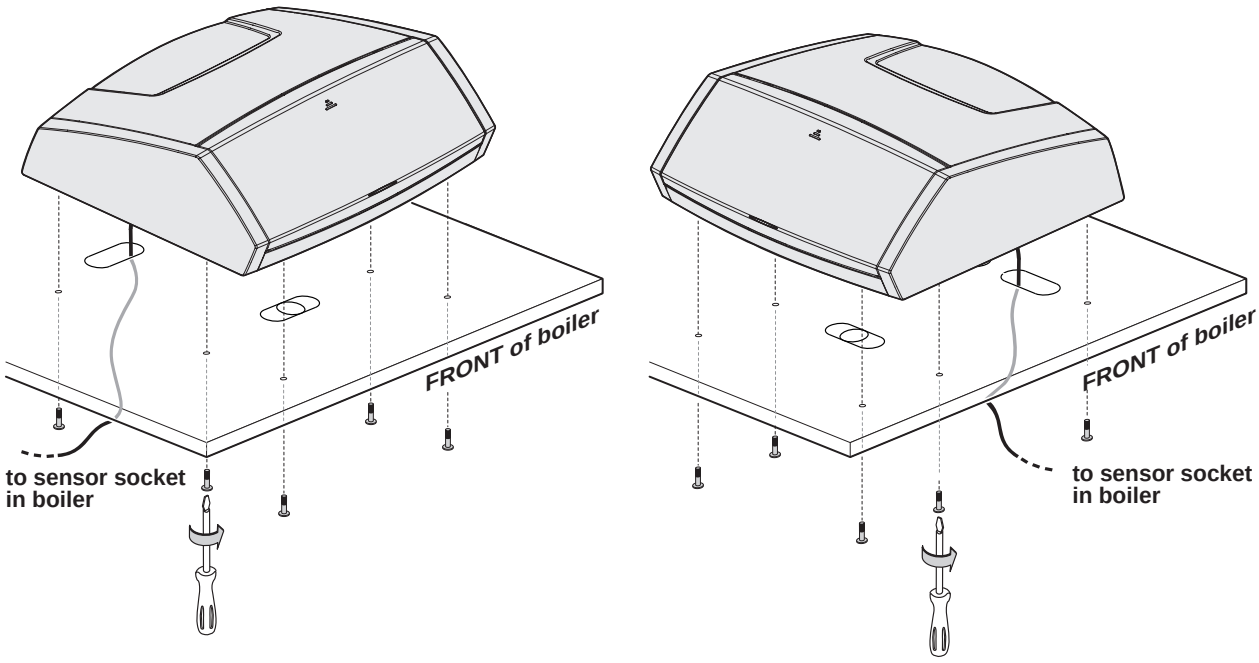
Once you have identified the right holes for the type of installation required, proceed as follows.

- Push out the pre-formed slots on the boiler casing corresponding to the oval cable grommets in the control panel
- Perforate the membranes of the control panel cable grommets. Pull out the thermostat cable and route it through the slot in the top panel
- Fix the control panel to the boiler casing using the screws provided

VERTICAL installation

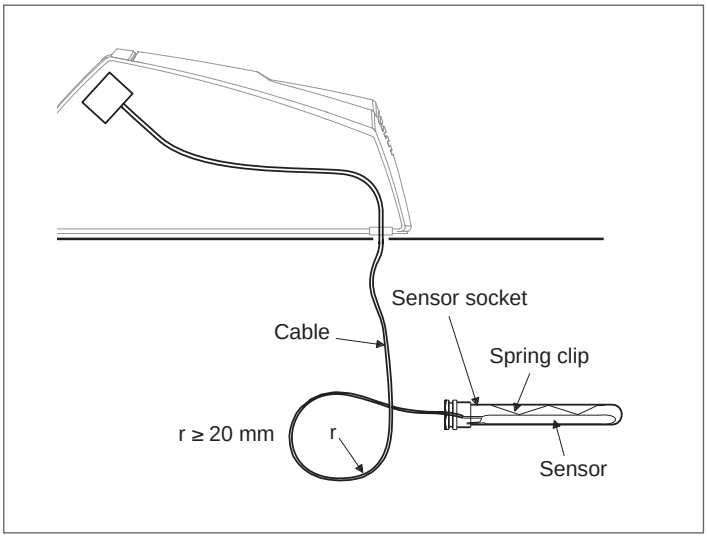


HORIZONTAL installation



A dedicated kit is available for wall mounting. Refer to the instructions provided with the kit for details on installation.

⚠ Take care when unwinding thermostat cables. Insert the thermostat sensors in the corresponding sockets in the boiler and storage cylinder. Fix the sensors in place with the spring clips provided. Use the cable straps provided to secure the sensor cables.

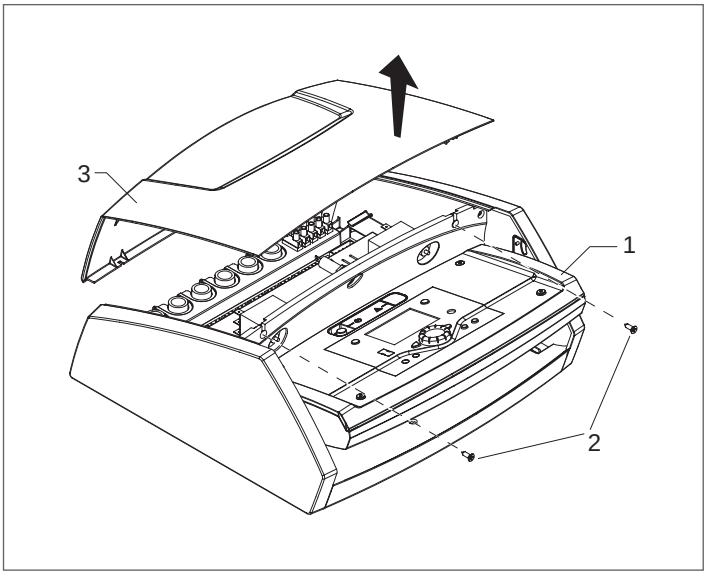


11 ACCESSING INTERNAL COMPONENTS

Only personnel from **RIELLO**'s Technical Assistance Service or professionally qualified heating engineers are allowed to access components inside the control panel.

Proceed as follows if you need to access components inside the control panel:

- Turn the system OFF at the mains power switch
- Tilt the panel (1) forwards. Remove the 2 fixing screws (2) and remove the top cover (3).



12 ELECTRICAL CONNECTIONS

All electrical connections must be made by a legally qualified heating engineer according to the following instructions.

⚠ The following is mandatory:
- The use of an omnipolar magnetothermic switch, line disconnecting switch in compliance with CEI-EN standards (contact opening of at least 3 mm)
- Respect the connection L (line) - N (neutral). Keep the earth conductor 2 cm longer than the power supply conductors
- Use cables with a section greater than or equal to 1.5 mm^2, complete with cable terminal caps
- Refer to the wiring diagrams in this manual for all electric operations
- Connect the equipment to an effective earthing system.

Proceed as instructed in the previous section to access the terminals "Accessing internal components".

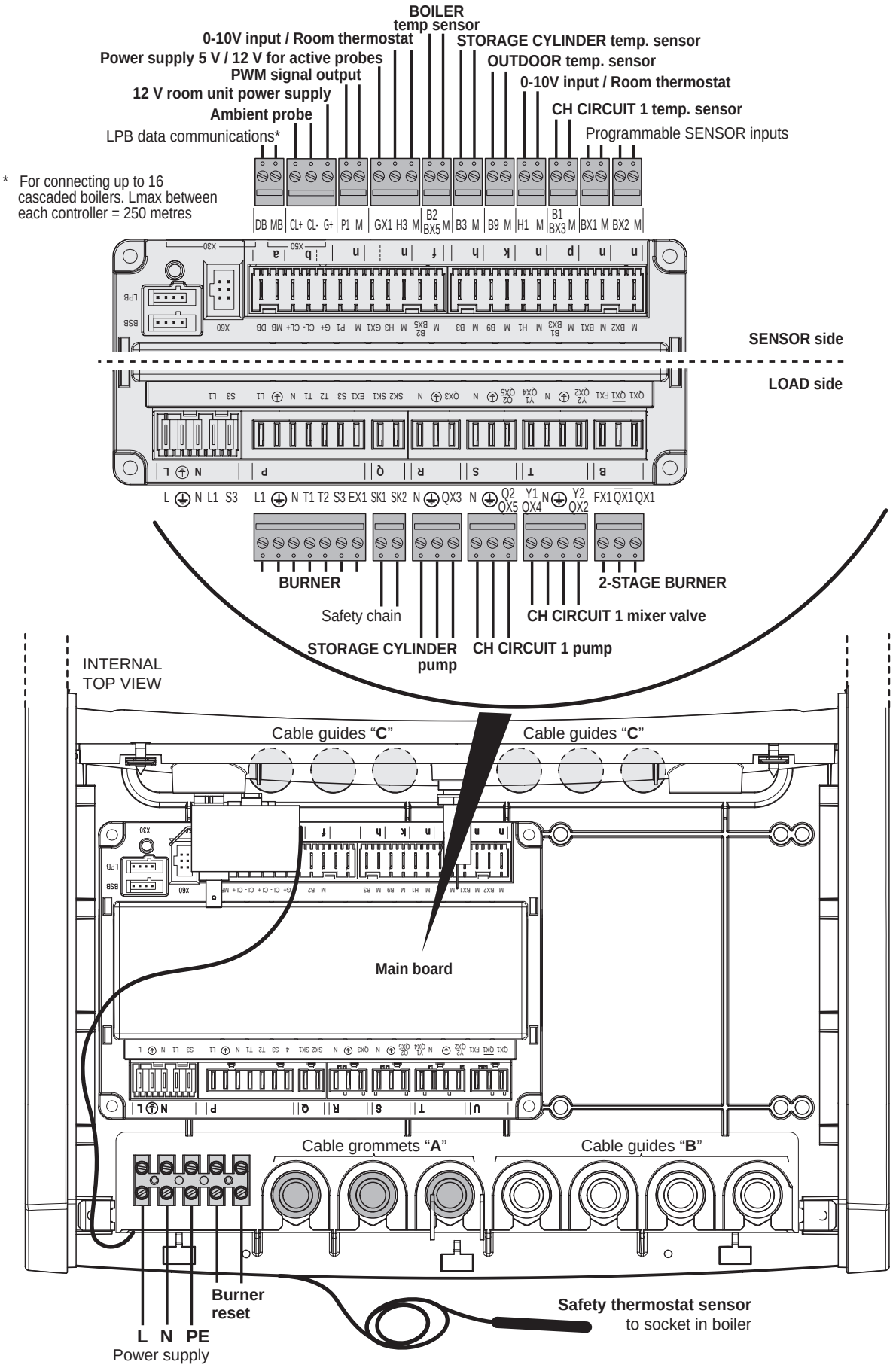
- Route the control panel power cables and all the cables to be connected to the 'load side' of the main board through the cable grommets (A) in the bottom of the control panel.
- Route the cables to be connected to the 'sensor side' of the main board through the cable grommets (B) and (C) in the bottom of the control panel.
- Route all these cables through the cable grommets in the casing of the boiler, or use the cable holes for PG type cable clamps or spiral cable duct fittings.
- Connect up the 230V mains power, using the fixed 'Mamut' terminals, referring to the wiring diagrams on the next pages and to the WIRING DIAGRAMS chapter.
- Connect up the individual 230V and +12Vdc devices, referring to the mounting diagrams on the next pages and to the WIRING DIAGRAMS chapter.
- Secure the cables to the casing of the boiler so that they cannot be accidentally pulled out.

⛔ It is strictly forbidden to use pipes of any kind to ground the appliance.

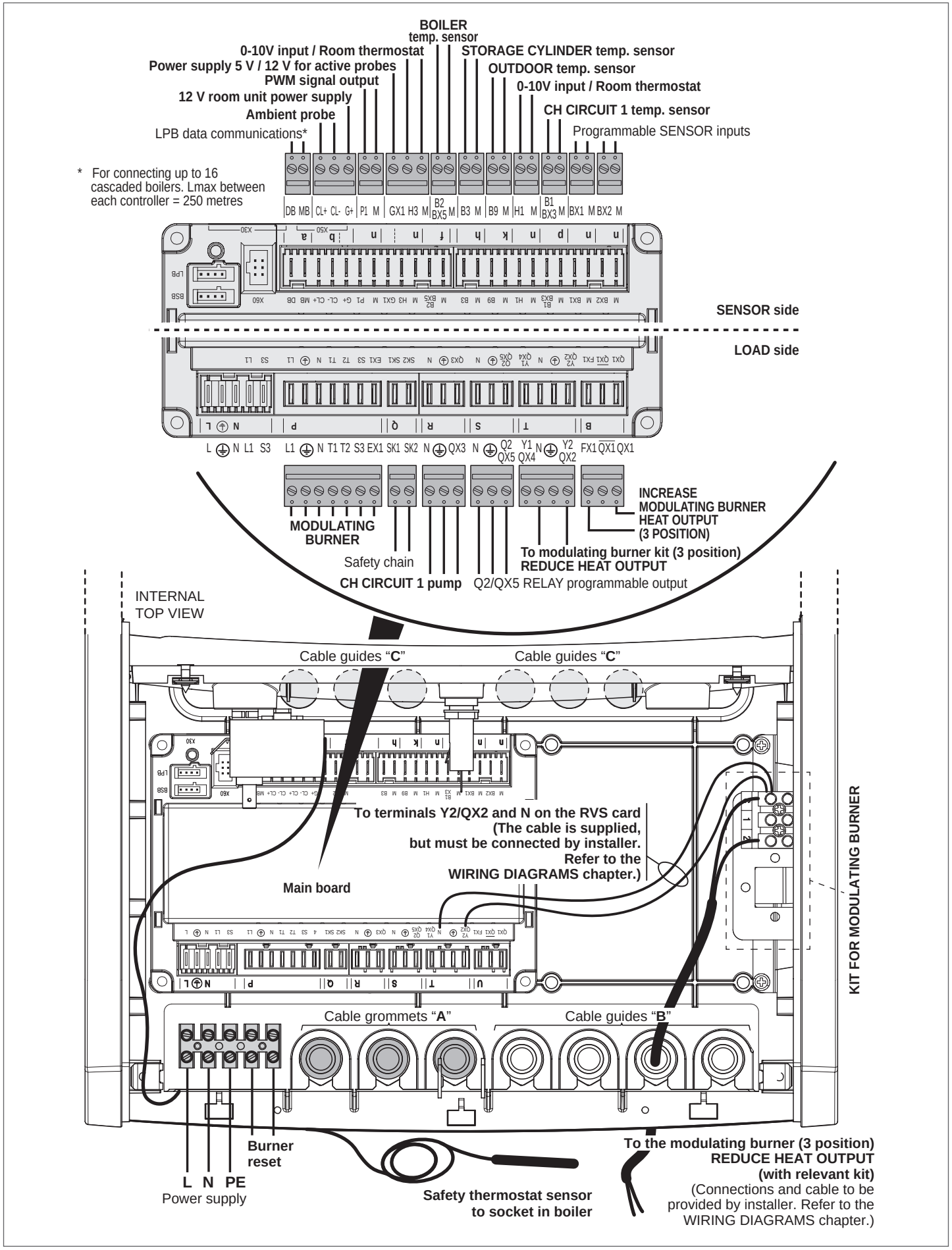
⛔ It is prohibited to lay power supply and room/heat demand thermostat cables near hot surfaces (delivery pipes). If they may come into contact with parts that have a temperature of over 50°C, use a suitable type of cable.

The manufacturer is not responsible for any damage caused by failure to earth connect the device and failure to comply with what is indicated in the wiring diagrams.

RIELLOtech CLIMA COMFORT (used with a single stage or two-stage burner)



RIELLOtech CLIMA COMFORT (using a three position modulating burner)



13 LOCATION OF SENSORS

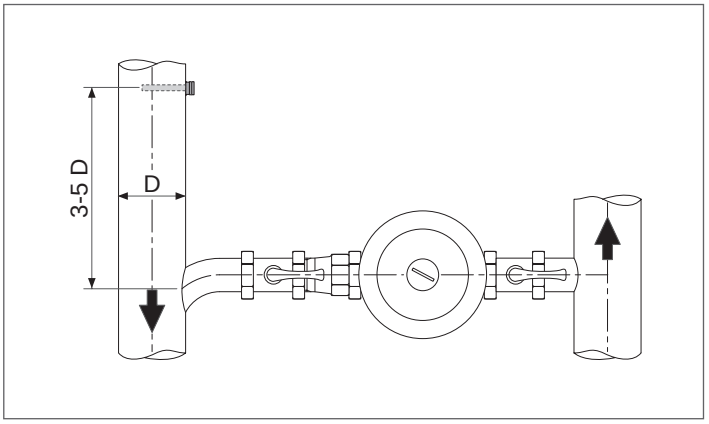
Correct positioning of the temperature sensors is essential to proper indoor climate control.

⚠ To ensure correct functioning, use separate cable ducts for the power cables (230 Vac) and for the non-polarised terminals.

SM (flow temperature sensor)Insert in the socket above the flow pipe outlet from the boiler.
SB (storage cylinder temperature sensor)Insert in the top socket on the storage cylinder.
SR (return temperature sensor)Insert in the socket to be provided on the boiler return pipe.

Maximum permitted sensor cable lengths (copper)						
Cable size	0,25	0,50	0,75	1,0	1,5	mm^2
Max. length	20	40	60	80	120	m

To measure effective water return temperature and to control the temperature stabilisation function, the socket for the return temperature sensor must be positioned at a distance of 3 to 5 times the diameter of the water return pipe upstream from any water fittings (condensate prevention pump or recirculation pump).



Correspondence table
FLOW TEMP. SENSOR – STORAGE CYLINDER TEMP. SENSOR – RETURN TEMP. SENSOR
(Available as accessories, to be ordered separately)

Measured temperature (°C) – Resistance of temperature sensor (Ω).

T (°C)	R (Ω)	T (°C)	R (Ω)	T (°C)	R (Ω)	T (°C)	R (Ω)
- 30	175203	30	8059	90	915	150	183
- 25	129289	35	6535	95	786	155	163
- 20	96360	40	5330	100	677	160	145
- 15	72502	45	4372	105	586	165	130
- 10	55047	50	3605	110	508	170	117
- 5	42158	55	2989	115	443	175	105
0	32555	60	2490	120	387	180	95
5	25339	65	2084	125	339	185	85
10	19873	70	1753	130	298	190	77
15	15699	75	1481	135	262	195	70
20	12488	80	1256	140	232	200	64
25	10000	85	1070	145	206		

14 CONNECTING THE OUTDOOR TEMPERATURE SENSOR

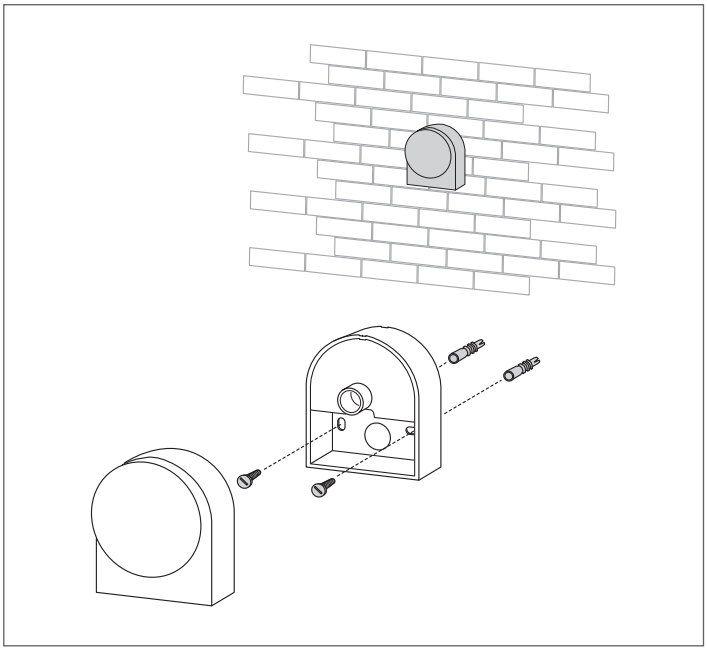
The correct positioning of the outdoor sensor is of fundamental importance for proper climate control operation.
The sensor must be installed outside the building to be heated, at approx. 2/3 the height of the NORTH or NORTH WEST façade and far from flues, doors, windows and sunny areas.

Fastening the outdoor sensor to the wall

- Unscrew the sensor protection box cover, turning it anticlockwise to access the terminal board and fastening holes
- Trace the fastening points using the box as a template
- Remove the box and drill the holes for the 5x25 expansion plugs
- Fasten the box to the wall, using the two supplied dowels
- Route a two-core cable from the sensor to the boiler

Maximum permitted sensor cable lengths (copper)						
Cable size	0,25	0,50	0,75	1,0	1,5	mm^2
Max. length	20	40	60	80	120	m

- Fit the cover on the sensor casing
- Open the control panel and connect the sensor up as instructed in the "Electrical connections" section. Polarity is irrelevant
- Once you have made all the necessary connections, close the control panel, reversing the steps followed to open it.



⚠ The sensor must be positioned on a smooth wall section. If there are exposed bricks or irregular walls, an area with a smooth contact must be prepared.

⚠ The connection cable between the outdoor sensor and the control panel must not have couplings. If these are necessary, they must be watertight and suitably protected.

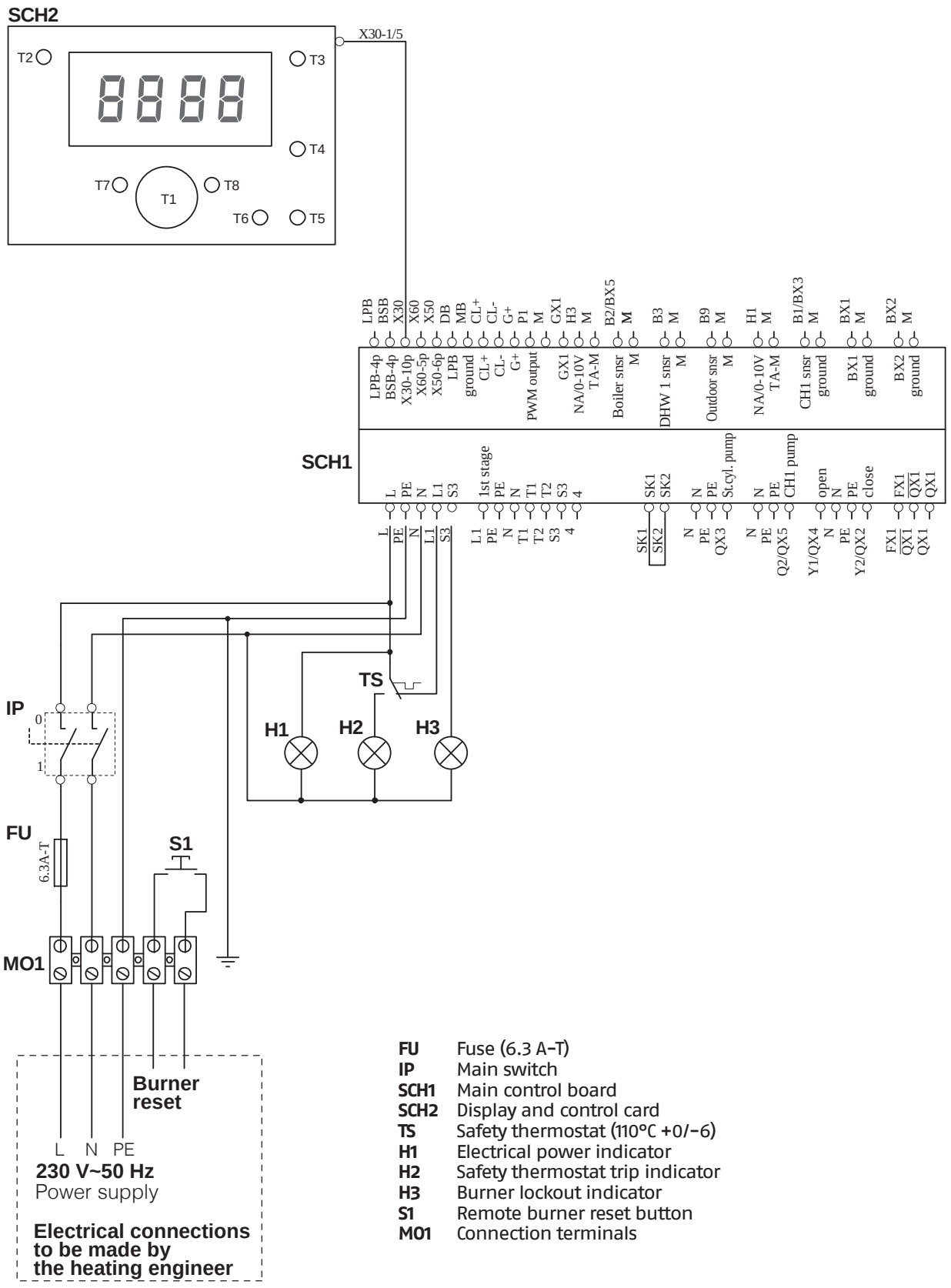
⚠ Any channelisation of the connection cable must be separated by live cables (230Vac).

Correspondence table
Measured temperature (°C) - Resistance of outdoor temperature sensor (Ω).

T (°C)	R (Ω)	T (°C)	R (Ω)	T (°C)	R (Ω)	T (°C)	R (Ω)
- 30	13034	- 9	4358	12	1690	33	740
- 29	12324	- 8	4152	13	1621	34	713
- 28	11657	- 7	3958	14	1555	35	687
- 27	11031	- 6	3774	15	1492	36	663
- 26	10442	- 5	3600	16	1433	37	640
- 25	9889	- 4	3435	17	1375	38	617
- 24	9369	- 3	3279	18	1320	39	595
- 23	8880	- 2	3131	19	1268	40	575
- 22	8420	- 1	2990	20	1218	41	555
- 21	7986	0	2857	21	1170	42	536
- 20	7578	1	2730	22	1125	43	517
- 19	7193	2	2610	23	1081	44	500
- 18	6831	3	2496	24	1040	45	483
- 17	6489	4	2387	25	1000	46	466
- 16	6166	5	2284	26	962	47	451
- 15	5861	6	2186	27	926	48	436
- 14	5574	7	2093	28	892	49	421
- 13	5303	8	2004	29	859	50	407
- 12	5046	9	1920	30	827		
- 11	4804	10	1840	31	796		
- 10	4574	11	1763	32	767		

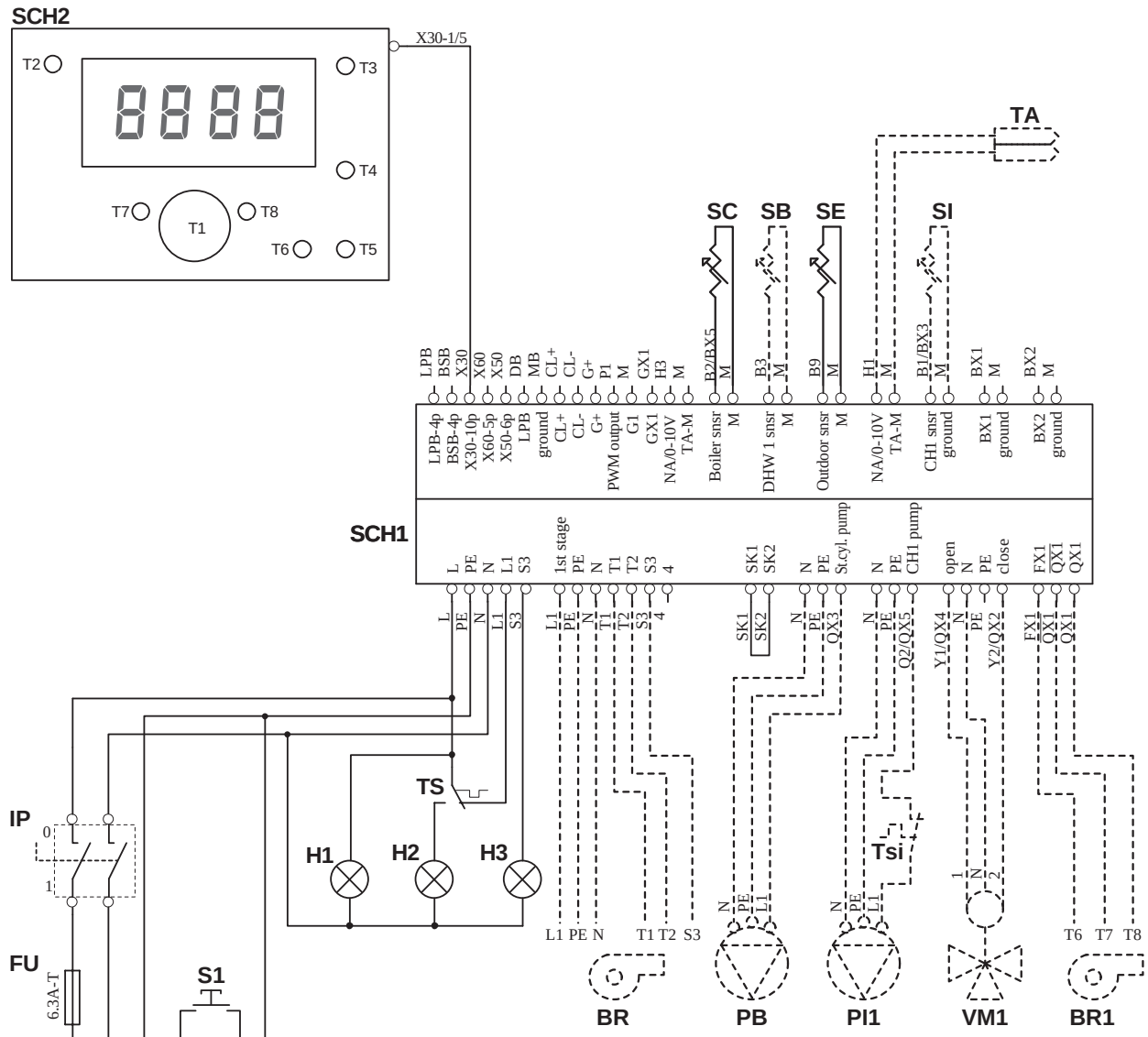
15 WIRING DIAGRAMS

Functional electrical diagram for RIELLOtech CLIMA COMFORT panel



FU	Fuse (6.3 A-T)
IP	Main switch
SCH1	Main control board
SCH2	Display and control card
TS	Safety thermostat (110°C +0/-6)
H1	Electrical power indicator
H2	Safety thermostat trip indicator
H3	Burner lockout indicator
S1	Remote burner reset button
M01	Connection terminals

Typical component connection diagram for system with RIELLOtech CLIMA COMFORT panel and two stage burner

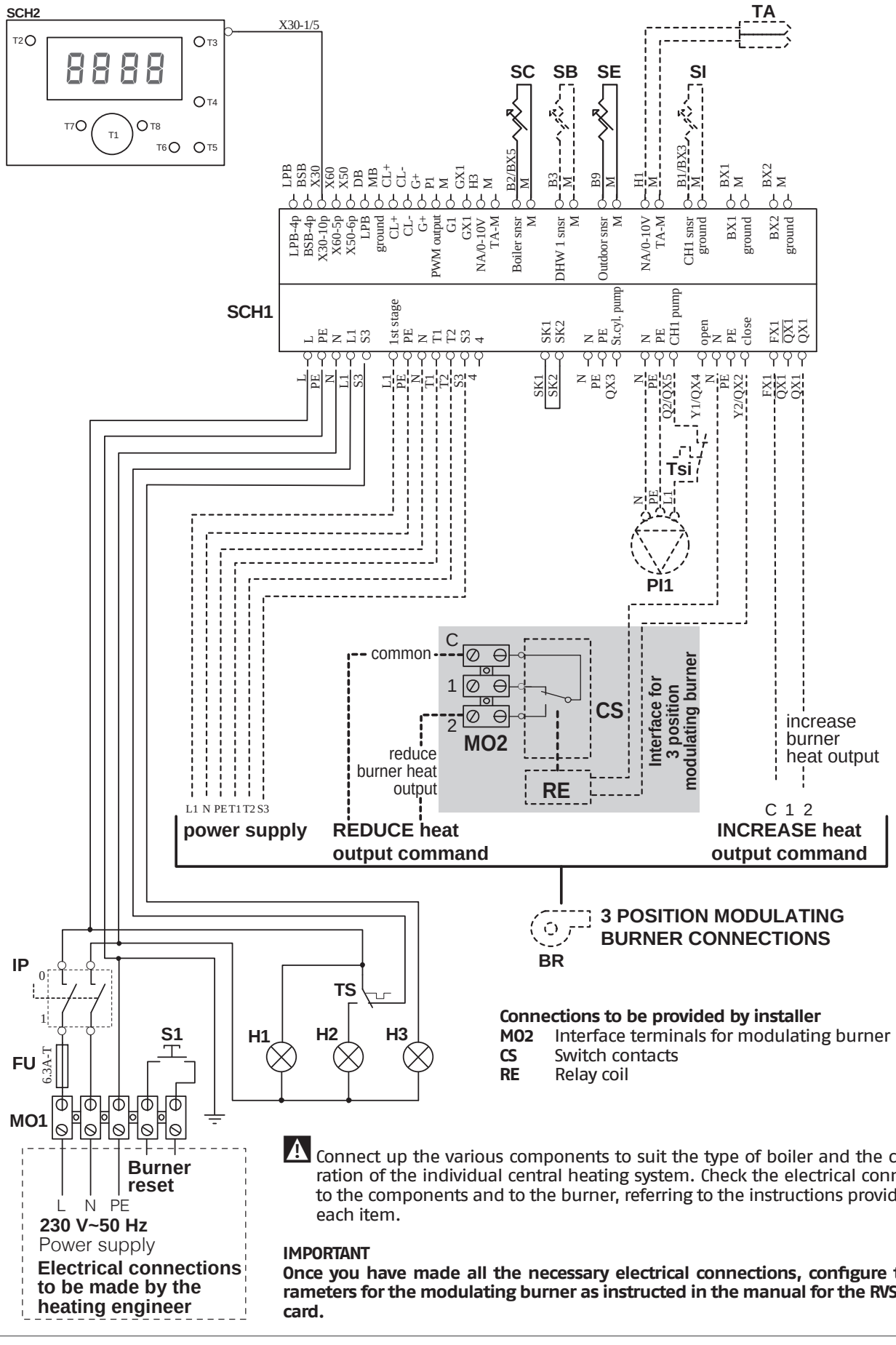


Components to be provided by the installer

TA	Room thermostat
SC	Boiler temperature sensor
SB	Boiler sensor
SE	Outdoor sensor
SI1	CH circuit 1 temperature sensor
BR	Burner
PB	Storage cylinder pump
PI1	CH circuit 1 pump
VM1	CH circuit 1 mixer valve
Tsi	CH system safety thermostat
BR1	Second burner stage

⚠ Connect up the various components to suit the type of boiler and the configuration of the individual central heating system. Check the electrical connections to the components and to the burner, referring to the instructions provided with each item.

Typical component connection diagram for system with RIELLOtech CLIMA COMFORT panel and modulating burner



Connections to be provided by installer

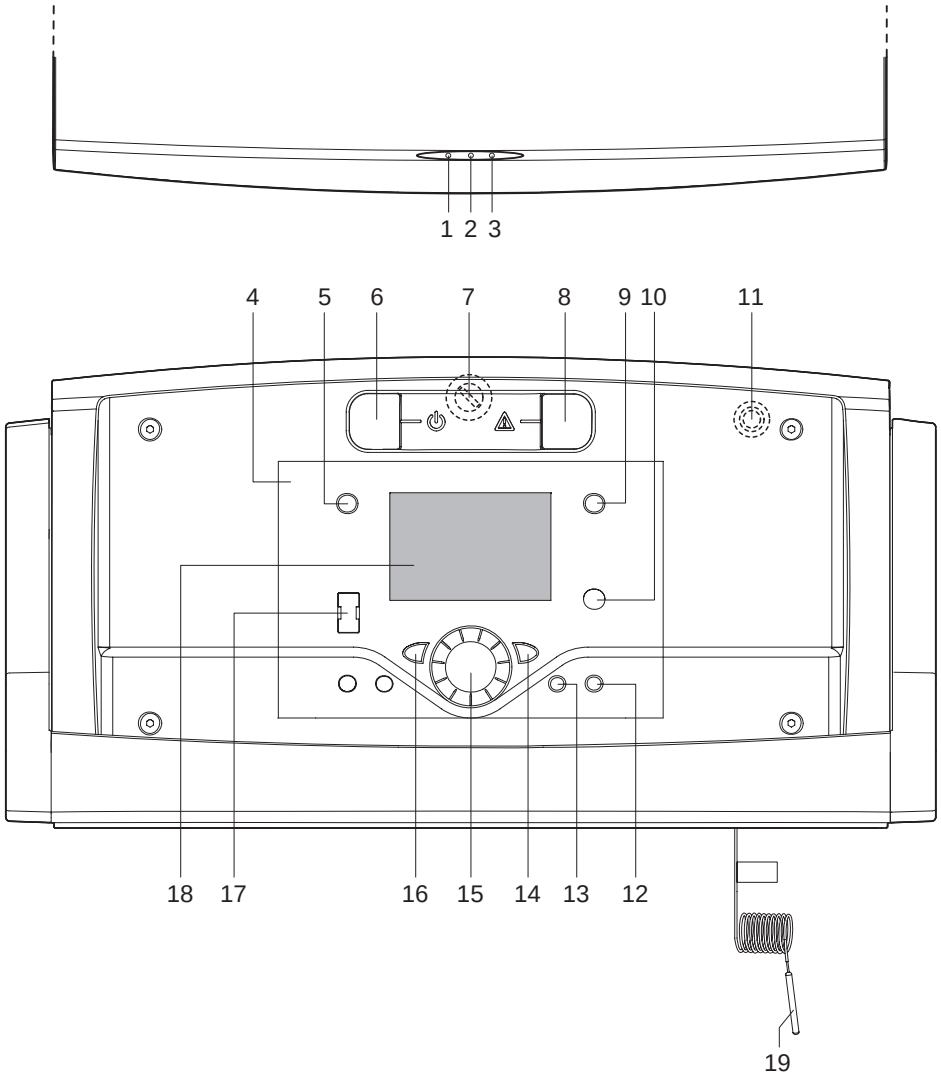
MO2	Interface terminals for modulating burner
CS	Switch contacts
RE	Relay coil

Connect up the various components to suit the type of boiler and the configuration of the individual central heating system. Check the electrical connections to the components and to the burner, referring to the instructions provided with each item.

IMPORTANT

Once you have made all the necessary electrical connections, configure the parameters for the modulating burner as instructed in the manual for the RVS control card.

16 SYSTEM LAYOUT

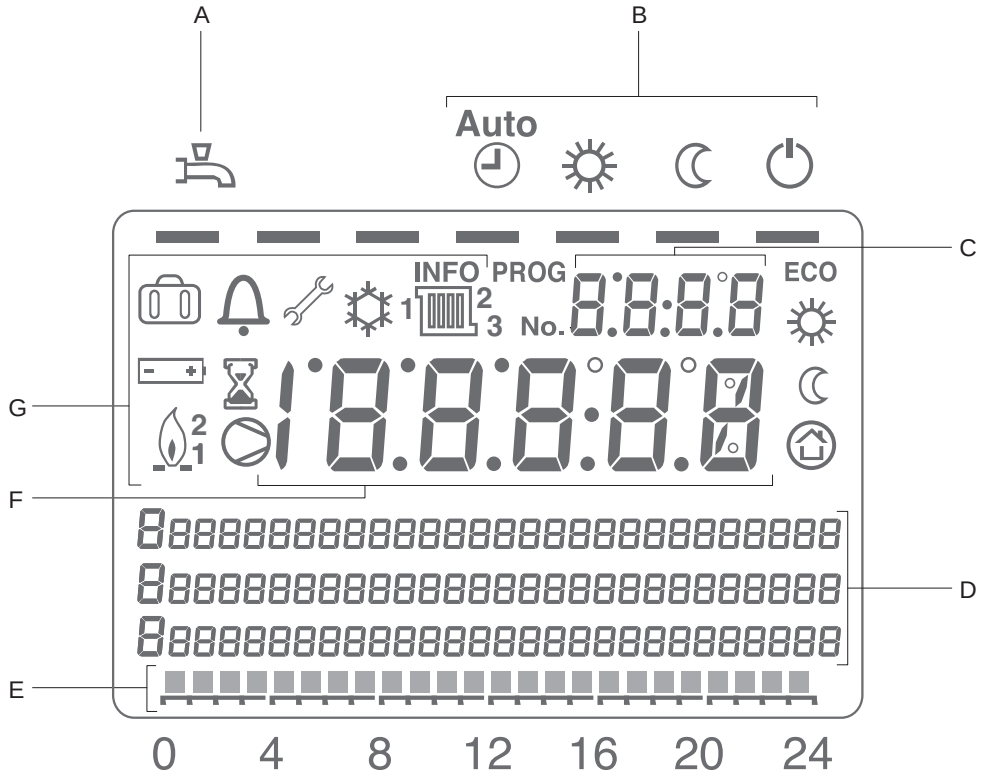


1 Electrical power indicator (green). Lights to show that the system is receiving electrical power
2 Safety thermostat trip indicator (red). Lights if temperature inside the boiler exceeds 110°C
3 Burner lockout indicator (red). Lights to show that a burner lockout has occurred.
4 Electronic controller
5 DHW production on/off button. When active, the symbol appears on the display
6 Main switch
7 Fuse (accessible by tilting the control panel)
8 Burner reset button
9 Functioning mode selection button. A line appears under the symbols:
- Automatic: the boiler functions according to the set program
- Daytime: the boiler operates at daytime (comfort) setpoint
- Night-time: the boiler operates at night-time (reduced) setpoint
- Stand-by

10 Information button
11 Manual reset for safety thermostat (accessible by tilting the control panel)
12 Button for chimney sweep/safety thermostat test functions
13 Button for manual mode
14 Value confirm (OK) button
15 Value change knob
16 ESCape (exit) button
17 PC BUS connector
18 Display
19 Safety thermostat sensor and cable

17 USER INTERFACE

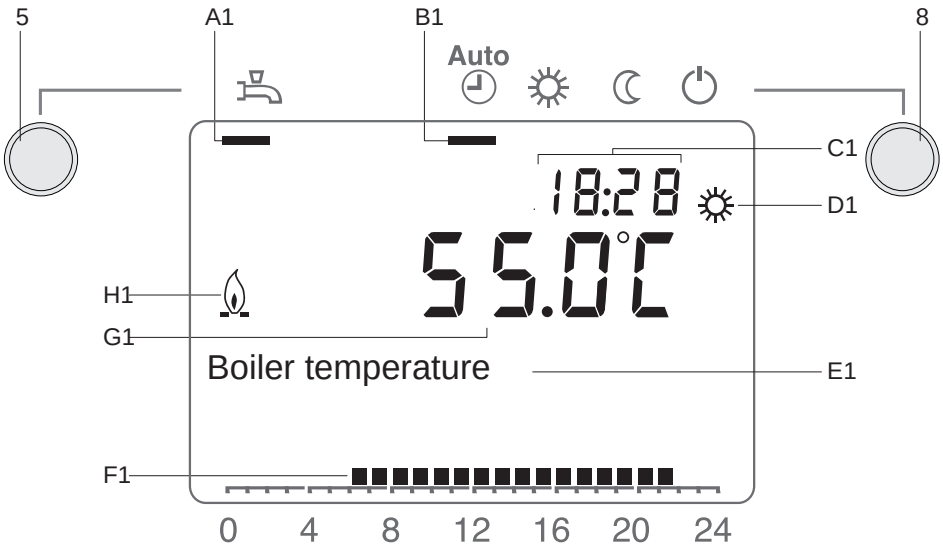
SECONDARY INFORMATION/DISPLAY VISUALISATION



A DHW mode: ON or OFF
B Central heating modes:
- AUTOMATIC
- Continuous COMFORT
- Continuous REDUCED
- Frost protection. The display shows the ⌂ symbol

C Small numeric display. time
D Message area
E Daily heating program indicator
F Large numeric display: current value
G Display symbols:
- Burner running
- Change battery (room unit only, not supplied)
- Holiday mode active
- Error. Press **i** to display the error message. Press **ESC** to return to the main screen
- Wait: process running
- Maintenance – manual or chimney sweep mode
- Reference to heating circuit
- **ECO** Heating temporarily OFF – ECO mode active

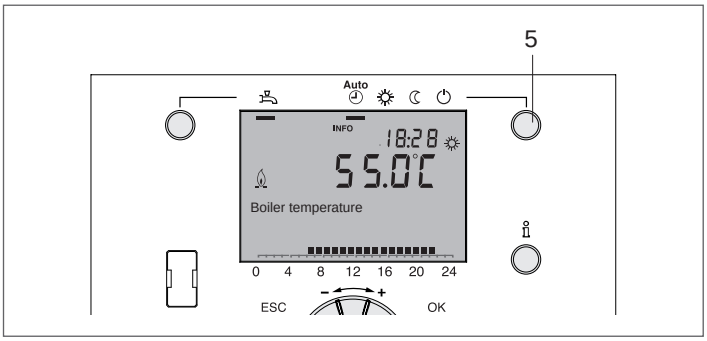
MAIN SCREEN



A1 DHW mode: ON or OFF. Press the DHW button (5) to switch DHW on or off (as shown by the line under the symbol)
B1 Central heating modes. Press the central heating mode button (8) to activate the various modes as shown by the line under the corresponding symbol
C1 Current time
D1 COMFORT heating mode
E1 Message area
F1 Daily heating program indicator
G1 Current boiler temperature
H1 Burner running

18 MODE SELECTION

Press the central heating mode button (5) to select the various modes. The active mode is shown by a line under the corresponding symbol.



Automatic
In automatic mode, room temperature is controlled by the timer program:

Characteristics:
- Central heating operates according to the timer program
- The temperature setpoint is set to comfort "☀" or reduced "☾"
- All protection functions are active
- Summer/winter switching is automatic (ECO functions). Continuous operation of central heating is limited to 24h

Continuous ☀ o ☾
In continuous mode, room temperature is controlled on the basis of the comfort/reduced setting:

☀ Central heating set to comfort setpoint
☾ Central heating set to reduced setpoint

Characteristics:
- Central heating is continuously on with no time program
- All protection functions are active
- Summer/winter switching is automatic (ECO functions). Continuous central heating idle time is limited to 24h (see parameter 730).

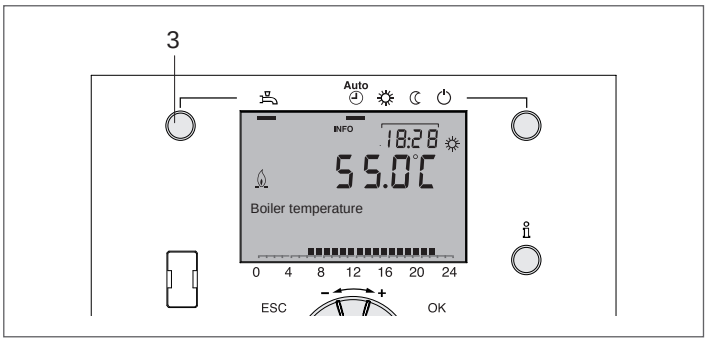
Protection
In protection mode the central heating is switched off, but the system remains protected against frost (provided the electrical supply remains switched on).

Characteristics:
- Central heating is switched off
- Temperature is set to the frost protection setpoint
- All protection functions are active
- Summer/winter switching is automatic (ECO functions). Continuous operation of central heating is limited to 24h

Cooling mode (if relevant)
The "cooling" function controls room temperature on the basis of the timer program.

Characteristics:
- Manual mode
- Cooling according to timer program
- Temperature setpoint according to "cooling to comfort setpoint"
- All protection functions are active
- Limitation of cooling on the basis of outdoor temperature
- Summer compensation

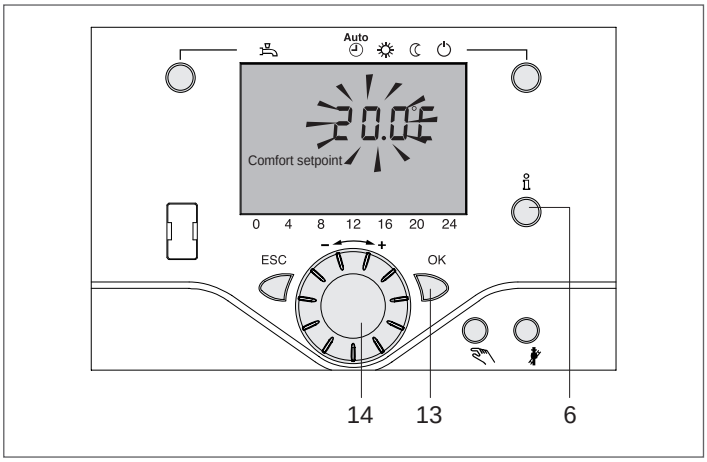
Domestic Hot Water (DHW)
Press the central heating mode button (3) to activate DHW production.
A line appears under the corresponding symbol.



ON DHW is generated according to the timer program (params. 560 to 566)
OFF DHW production is switched off but the protection functions remain active

⚠ You can force DHW production (PUSH function) by pressing and holding the DHW button (3) for at least 3 seconds.

Setting the room temperature setpoint
Turn the knob (14) to set the desired room temperature comfort setpoint.



To set reduced room temperature:
- Press "**OK**" (13)
- Select "Heating circuit 1"
- Set the room temperature reduced setpoint.

⚠ After changing a setpoint, you need to wait about 2 hours for the new setting to have any effect on room temperature.

⚠ If no room unit is installed, changing the room temperature setpoint simply shifts the heating curve.

Information i

Press the information button (6) to display:

- Errors or maintenance codes (see the section "Error/ maintenance codes")
- Special messages

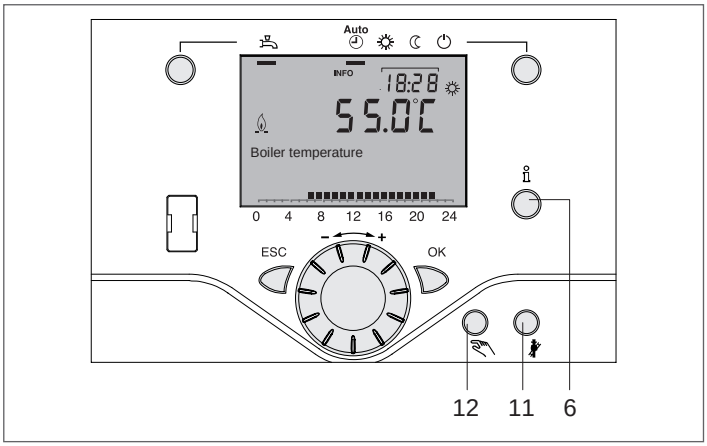
Other screens:

⚠ Other displays depend on the system configuration and operational status. Some of the display lines shown below may not therefore appear.

- Room temperature
- Room temperature minimum
- Room temperature maximum
- Room setpoint 1
- Room setpoint 2
- Room setpoint 3
- Cascade flow temperature
- Boiler temperature
- Outside temperature
- Outside temperature min
- Outside temperature max
- DHW temp 1
- DHW temp 2
- Temperature buffer 1
- Temperature buffer 2
- Buffer tank temperature setpoint
- Flow temperature 1
- Flow temperature setpoint 1
- Flow temperature 2
- Flow temperature setpoint 2
- Flow temperature 3
- Flow temperature setpoint 3
- Collector temp 1
- Wood fuelled boiler temperature
- Solar flow temperature
- Solar return temp
- 24 hours solar energy yield
- Total solar energy yield
- Swimming pool temp
- Swimming pool setpoint
- State of heating circuit 1
- State of heating circuit 2 (not active)
- State of heating circuit
- Cooling circuit state
- State of DHW
- State of boiler
- State of solar
- State solid fuel boiler
- State buffer storage tank
- State swimming pool
- Sensor error message
- Maintenance message
- Floor curing function
- Date and time of day
- Telephone customer service

Manual mode

When you select manual mode, the "🔧" symbol appears and relays are energised/de-energised not according to any heating program but according to a default manual setting that can be set by pressing the information button (6).



Chimney sweep mode selection

To select chimney sweep mode, press the chimney sweep button (11) briefly (max. 3 seconds). The "🔧" symbol appears. Chimney sweep mode prepares the boiler for combustion analysis. To exit chimney sweep mode, press the button (11) again. The system exits chimney sweep mode automatically after 1 hour.

Safety thermostat test

To test the safety thermostat, press and hold the chimney sweep button (11) for longer than 3 seconds.

Hold the button down for the duration of the test.

The test terminates as soon as you release the button.

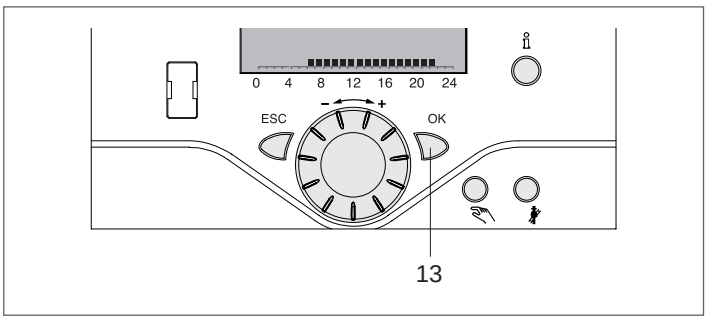
⚠ This test must only be performed by the Technical Assistance Service **RIELLO**, since it raises boiler temperature over the normal permitted limits.

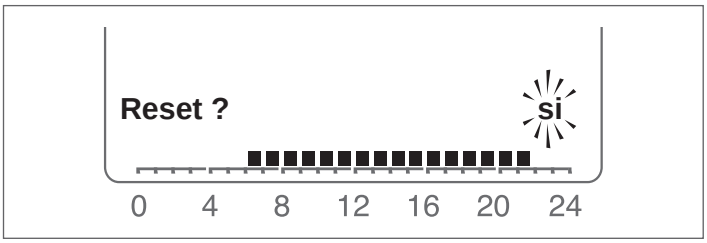
RESET function

The meters and parameter table RESET icon only appears in the bottom line of the display if it is possible to perform a reset in the current user level (End user, Commissioning, Heating engineer).

⚠ This operation must only be performed by the **RIELLO**'s Technical Assistance Service.

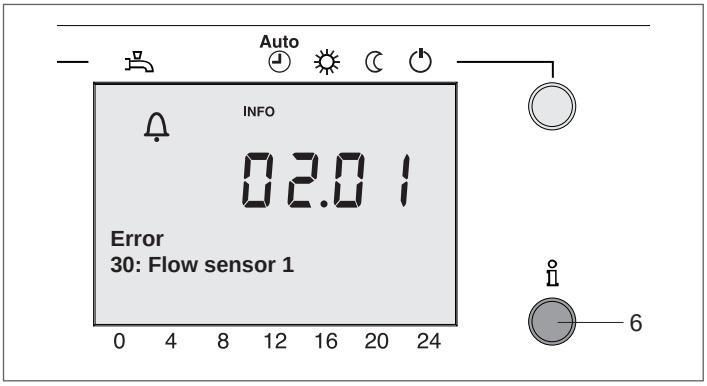
Press "**OK**" (13) when the "**Yes**" prompt flashes on the display.



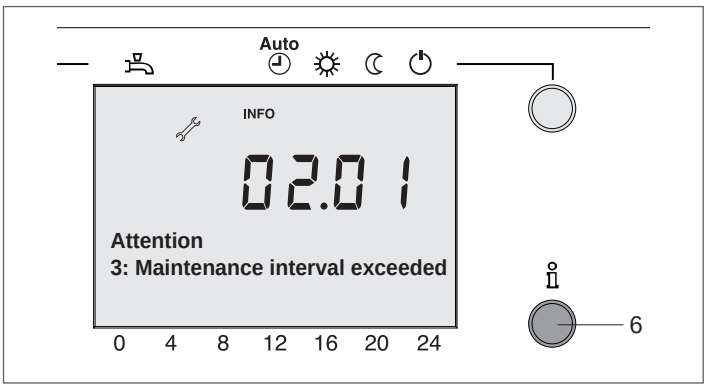


Special conditions
The following symbols can be displayed under certain conditions:

This symbol appears if a system error has occurred
Press button (6) for further information.



This symbol appears if a maintenance alarm is present or if the boiler has entered a special functioning mode.
Press button (6) for further information.



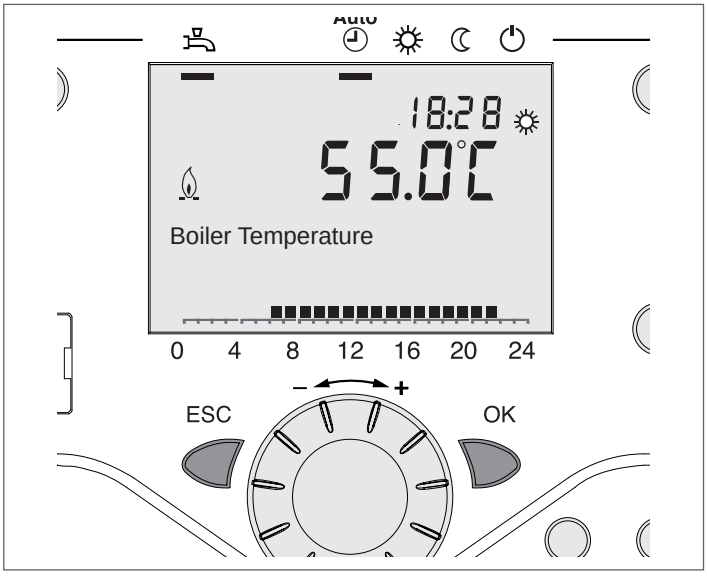
If a system error or maintenance alarm occurs, contact Technical Assistance Service RIELLO.

19 USER LEVELS

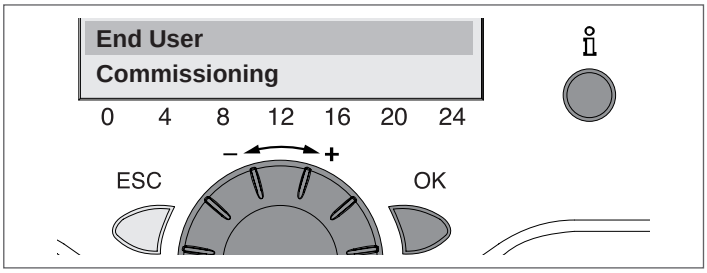
There are 4 different user levels:
- End user
- Putting into service
- Heating engineer
- OEM (Manufacturer)

The following parameters refer EXCLUSIVELY to the end user level.

Proceed as follows to access the user level you require:
- Go to the main screen. If not displayed, press **ESC** one or more times
- Press "**OK**".
- Press and hold the information button "**i**" for 3 seconds.



- End user level. Turn the knob to scroll through the menu until you reach the desired user level, then press "**OK**"".



To enter the OEM level, you need to enter the **Password (12434)**. Press "**OK**" to confirm each digit. Press "**ESC**" to cancel the entry.

Pressing "**ESC**" takes you just one step back. The value entered is not saved

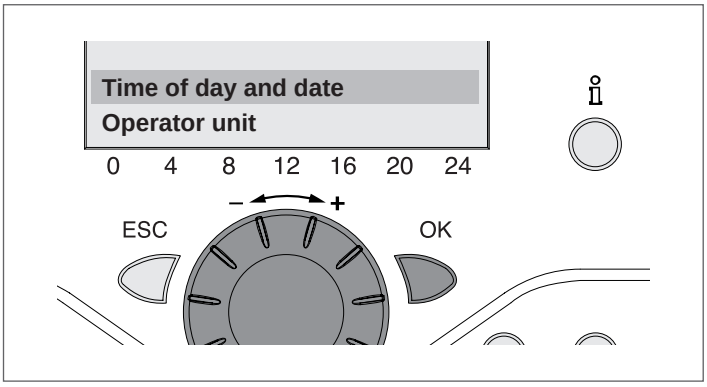
If no change is made for 8 minutes, the system returns to the main screen

Programming lines are displayed or hidden according to the system configuration and the user level (End user, Commissioning, etc.).

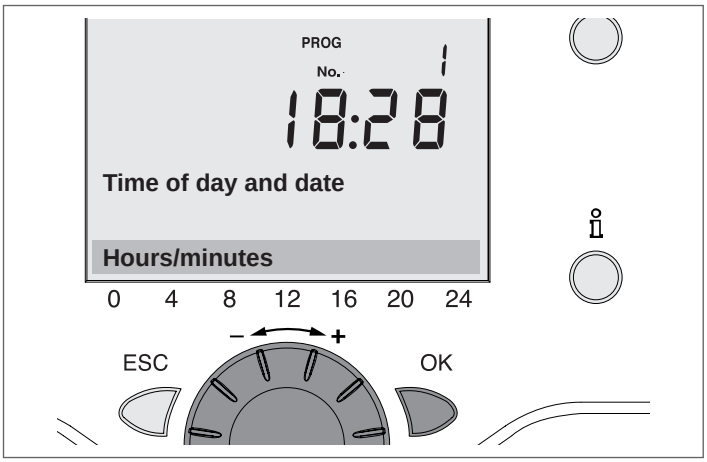
Parameters on the Initial start-up, Specialist (Installer) and OEM access levels must only be changed by RIELLO's Technical Assistance Service.

Example: setting the current time

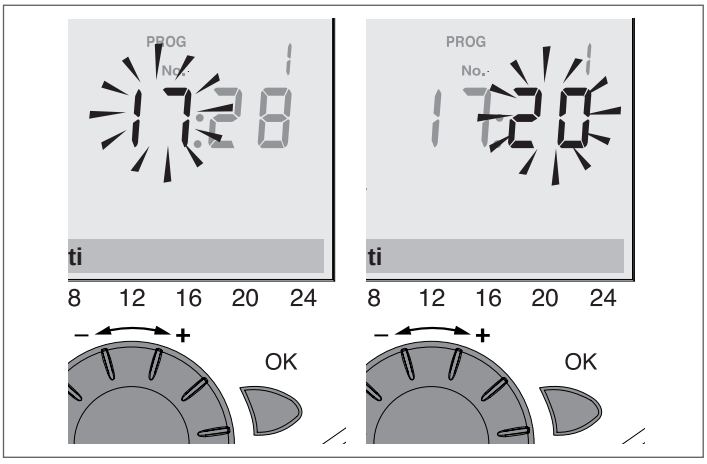
- Go to the main screen and press "**OK**".
- The message area displays a number of setting pages. Turn the knob until you reach the "Time of day and date" line.
- Press "**OK**" to confirm



- The message area shows the current hour. Press "**OK**"

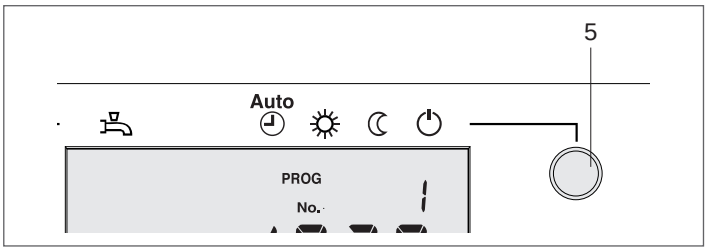


- The display flashes the current minutes. Turn the knob to go on or back to the correct value.
- Press "**OK**" to confirm.

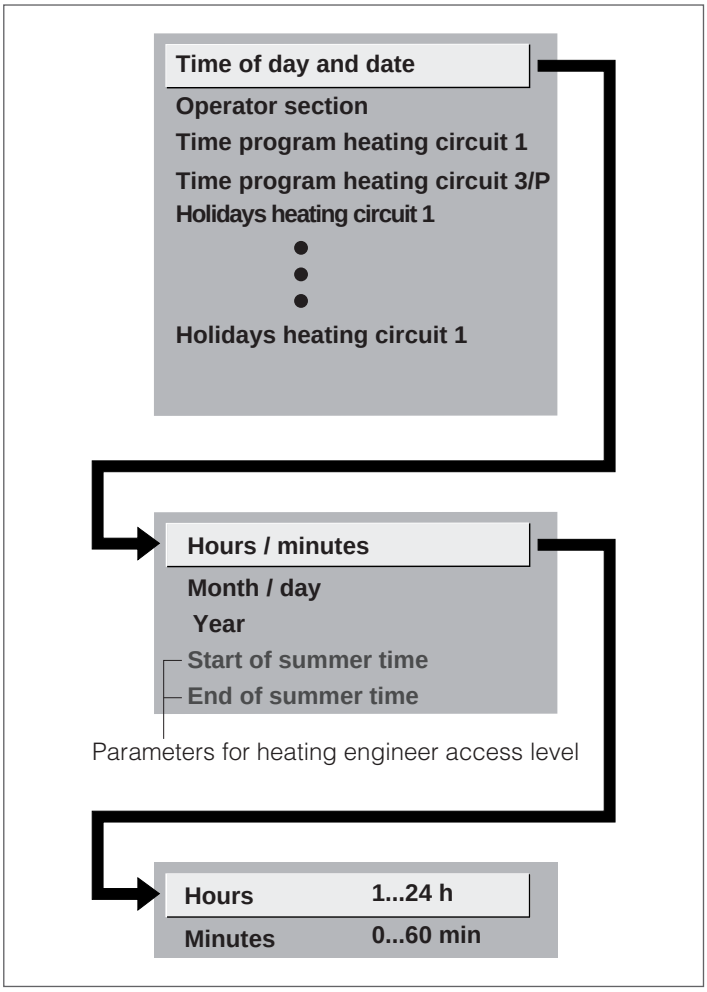


- The display flashes the current minutes. Turn the knob to go on or back to the correct value.
- Press "**OK**" to confirm.

The new time setting is saved and the display starts to flash. At this stage you can continue programming or press the central heating mode button (5) to return to the main screen.

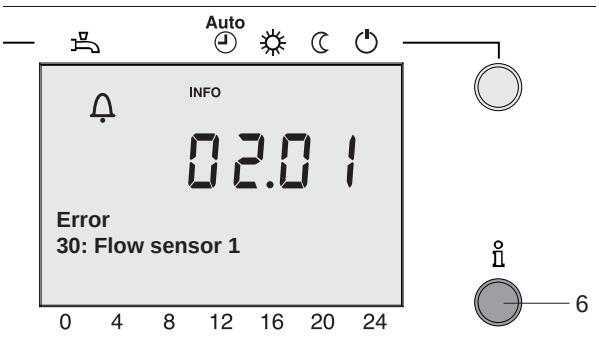


Example of the menu structure



20 ERROR/MAINTENANCE CODES

When the alarm symbol warns of an error, press the button (6) to display a description. The message on the display describes the cause of the error.



Error list

Error code	Description
0	No error
10	Outdoor temperature sensor
20	Boiler 1 temperature sensor
25	Solid fuel boiler temperature sensor
26	Common flow temperature sensor
28	Flue gas temperature sensor
30	Flow 1 temperature sensor
31	Flow temperature 1 cooling, sensor error
32	Flow 2 temperature sensor
38	Flow temperature primary controller sensor error
40	Return temperature 1 sensor error
43	Solid fuel boiler return temperature sensor
46	Return temperature cascade sensor error
47	Common return temperature sensor error
50	DHW temperature 1 sensor error
52	DHW temperature 2 sensor error
54	DHW primary controller sensor error
57	DHW circulation temperature sensor error
60	Unit room 1
65	Unit room 2
68	Unit room 3
70	Buffer storage tank temperature 1 sensor error
71	Buffer storage tank temperature 2 sensor error
72	Buffer storage tank temperature 3 sensor error
73	Collector temperature 1 sensor error
74	Collector temperature 2 sensor error
76	Special sensor
81	Short-circuit LPB
82	LPB address collision
83	BSB wire short-circuit
84	BSB address collision
85	BSB radio communication fault
98	Extension module 1 fault (common fault status message)
99	Extension module 2 fault (common fault status message)

Error code	Description
100	2 clock time masters (LPB)
102	Clock time master without backup (LPB)
103	Communication failure
105	Maintenance message
109	Boiler temperature supervision
110	Lockout by SLT
117	Upper pressure limit (crossed)
118	Critical lower pressure limit (crossed)
121	Flow temperature 1 (HC1) supervision
122	Flow temperature 2 (HC2) supervision
123	DHW temperature supervision
126	DHW charging supervision
127	Legionella temperature not reached
131	Burner fault
140	Invalid LPB address
141	LPB not configured
142	LPB device not found
146	Configuration error common message
171	Alarm contact 1 active
172	Alarm contact 2 active
174	Alarm contact 4 active
176	Upper pressure limit 2 (crossed)
177	Critical lower pressure limit 2 (crossed)
178	Temperature limiter heating circuit 1
179	Temperature limiter heating circuit 2
207	Error, cooling circuit
209	Heating circuit error
217	Sensor error common message
218	Pressure supervision common message
219	DHW circuit error
241	Flow sensor, solar sensor error
242	Return sensor, solar sensor error
243	Swimming pool temperature sensor error
260	CR3 delivery sensor
320	DHW charging temperature sensor error
321	Instantaneous DHW heater outlet temperature sensor error
322	Upper pressure limit 3 (crossed)
323	Critical lower pressure limit 3 (crossed)
324	BX same sensors
325	BX/extension module same sensors
326	BX/mixing valve group same sensors
327	Extension module same function
328	Mixing valve group same function
329	Extension module / mixing valve group same function
330	Sensor BX1 no function
331	Sensor BX2 no function
332	Sensor BX3 no function
333	Sensor BX4 no function
334	Sensor BX5 no function
335	Sensor BX21 no function

Error code	Description
336	Sensor BX22 no function
337	Sensor B1 no function
338	Sensor B12 no function
339	Collector pump Q5 missing
340	Collector pump Q16 missing
341	Collector sensor B6 missing
342	Solar DHW sensor B31 missing
343	Solar integration missing
344	Solar controlling element buffer K8 missing
345	Solar controlling element swimming pool K18 missing
346	Solid fuel boiler pump Q10 missing
347	Solid fuel boiler comparison sensor missing
348	Solid fuel boiler address error
349	Buffer return valve Y15 missing
350	Buffer storage tank address error
351	Primary controller / system pump address error
352	Pressureless header address error
353	Cascade sensor B10 missing
354	Special sensor 2
357	Flow temperature cooling circuit 1 monitoring
359	Y21 diverter valve not connected
365	Q34 instant heater not found
366	Room temperature Hx sensor error
367	Relative room humidity Hx sensor error
371	CR3 flow temperature
372	CR3 delivery temperature limit thermostat
373	Extension module 3 fault (common fault status message)
388	No DHW temperature sensor function
452	HX1 no function
453	HX3 no function
511	Thermal safety pipe
517	Humidity sensor room 1

Maintenance code

Maintenance code	Description
1	Burner hours run
2	Burner starts
3	Maintenance interval
5	Water pressure heating circuit too low (dropped below lower pressure limit 1)
18	Water pressure heating circuit too low (dropped below lower pressure limit 2)
10	Replace battery of outside sensor
21	Maximum flue gas temperature exceeded
22	Water pressure heating circuit too low (dropped below lower pressure limit 3)
23	Risk of scalding from DHW

Special operation code

Operation code	Description
301	Manual operation
302	SLT test
303	Chimney sweep function
309	Simulation outside temperature
310	Alternative energy operation
314	Economy mode

21 LIST OF PARAMETERS

⚠ IMPORTANT! The following parameter descriptions may differ from those on the controller for reasons of abbreviation or program version.

User legend:
E: End user
0: OEM
I: Start-up technician
F: Installer
OL: Parameter number

Operating line	User level	Function	Default value	Min	Max	Unit
Time of day and date						
1	E	Hours/minutes	-	00:00	23:59	hh:mm
2	E	Day / month	-	1.01	31.12	dd.MM
3	E	Year	-	2004	2099	yyyy
5	F	Start of summertime	25.03	1.01	31.12	dd.MM
6	F	End of summertime	25.10	1.01	31.12	dd.MM
Operator unit						
20	E	Language German ¦ ...	German	-	-	-
21	0	Display of special operation Off ¦ On	On	-	-	-
22	F	Info Temporarily ¦ Permanently	Temporary	-	-	-
26	F	Operation lock Off ¦ On	Off	-	-	-
27	F	Programming lock Off ¦ On	Off	-	-	-
29	E	Units (°C,bar ¦ °F,PSI)	°C,bar	-	-	-
30	0	Save basic settings No ¦ Yes	No	-	-	-
31	0	Activate basic settings No ¦ Yes	No	-	-	-
32	0	Basic setting Compatible ¦ Compatibility restricted ¦ Incompatible ¦ Incompatible operator unit	Compatible	-	-	-
39	E	Commissionig menù (On¦Off)	Off	-	-	-
40	I	Used as Room unit 1 ¦ Room unit 2 ¦ Room unit 3 ¦ Operator unit 1 ¦ Operator unit 2 ¦ Operator unit 3 ¦ Service unit	Room unit 1	-	-	-
42	I	Assignment device 1 Heating circuit 1 ¦ Heating circuit 1 and 2 ¦ Heating circuit 1 and 3 ¦ All heating circuits	Heating circuit 1	-	-	-
44	I	Operation HC2 Commonly with HC1 ¦ Independently	Commonly with HC1	-	-	-
46	I	Operation HC3 Commonly with HC1 ¦ Independently	Commonly with HC1	-	-	-
47	E	Room values device 1 Zone 1 only ¦ For all assigned zones	For all assigned zones	-	-	-
48	I	Action occupancy button None ¦ Heating circuit 1 ¦ Heating circuit 2 ¦ Commonly	Heating circuit 1	-	-	-
50	E	Display room temperature -	-	-	-	-
51	E	Display minimum detected room temperature Reset	-	-	-	-
52	E	Display maximum detected room temperature Reset	-	-	-	-
54	F	Readjustment Room unit	0,0	-3	3	°C
70	F	Software version	-	0	99,9	-
Time prog heating circuit 1						
500	E	Preselection Mo - Su ¦ Mo - Fr ¦ Sa - Su ¦ Mo ¦ Tu ¦ We ¦ Th ¦ Fr ¦ Sa ¦Su	Mo - Su	-	-	-
501	E	1st phase on	6:00	00:00	24:00	hh:mm
502	E	1st phase off	22:00	00:00	24:00	hh:mm
503	E	2nd phase on	24:00	00:00	24:00	hh:mm
504	E	2nd phase off	24:00	00:00	24:00	hh:mm
505	E	3rd phase on	24:00	00:00	24:00	hh:mm

Operating line	User level	Function	Default value	Min	Max	Unit
506	E	3rd phase off	24:00	00:00	24:00	hh:mm
516	E	Default values No ¦ Yes	No	–	–	–
Time prog heating circuit 2						
520	E	Preselection Mo – Su ¦ Mo – Fr ¦ Sa – Su ¦ Mo ¦ Tu ¦ We ¦ Th ¦ Fr ¦ Sa ¦Su	Mo – Su	–	–	–
521	E	1st phase on	6:00	00:00	24:00	hh:mm
522	E	1st phase off	22:00	00:00	24:00	hh:mm
523	E	2nd phase on	24:00	00:00	24:00	hh:mm
524	E	2nd phase off	24:00	00:00	24:00	hh:mm
525	E	3rd phase on	24:00	00:00	24:00	hh:mm
526	E	3rd phase off	24:00	00:00	24:00	hh:mm
536	E	Default values No ¦ Yes	No	–	–	–
Time program 3/HC3						
540	E	Preselection Mo – Su ¦ Mo – Fr ¦ Sa – Su ¦ Mo ¦ Tu ¦ We ¦ Th ¦ Fr ¦ Sa ¦Su	Mo – Su	–	–	–
541	E	1st phase on	6:00	00:00	24:00	hh:mm
542	E	1st phase off	22:00	00:00	24:00	hh:mm
543	E	2nd phase on	24:00	00:00	24:00	hh:mm
544	E	2nd phase off	24:00	00:00	24:00	hh:mm
545	E	3rd phase on	24:00	00:00	24:00	hh:mm
546	E	3rd phase off	24:00	00:00	24:00	hh:mm
556	E	Default values No ¦ Yes	No	–	–	–
Time program 4/DHW						
560	E	Preselection Mo – Su ¦ Mo – Fr ¦ Sa – Su ¦ Mo ¦ Tu ¦ We ¦ Th ¦ Fr ¦ Sa ¦Su	Mo – Su	–	–	–
561	E	1st phase on	6:00	00:00	24:00	hh:mm
562	E	1st phase off	22:00	00:00	24:00	hh:mm
563	E	2nd phase on	24:00	00:00	24:00	hh:mm
564	E	2nd phase off	24:00	00:00	24:00	hh:mm
565	E	3rd phase on	24:00	00:00	24:00	hh:mm
566	E	3rd phase off	24:00	00:00	24:00	hh:mm
576	E	Default values No ¦ Yes	No	–	–	–
Time program 5						
600	E	Preselection Mo – Su ¦ Mo – Fr ¦ Sa – Su ¦ Mo ¦ Tu ¦ We ¦ Th ¦ Fr ¦ Sa ¦Su	Mo – Su	–	–	–
601	E	1st phase on	6:00	00:00	24:00	hh:mm
602	E	1st phase off	22:00	00:00	24:00	hh:mm
603	E	2nd phase on	24:00	00:00	24:00	hh:mm
604	E	2nd phase off	24:00	00:00	24:00	hh:mm
605	E	3rd phase on	24:00	00:00	24:00	hh:mm
606	E	3rd phase off	24:00	00:00	24:00	hh:mm
616	E	Default values No ¦ Yes	No	–	–	–
Holidays heating circuit 1						
641	E	Preselection Period 1 ... Period 8	Period 1	1	8	–
642	E	Start	--.--	01.01	31,1	dd.MM
643	E	End	--.--	01.01	31,1	dd.MM
648	E	Operating level Frost protection ¦ Reduced	Frost protection	–	–	–
Holidays heating circuit 2						
651	E	Preselection Period 1 ... Period 8	Period 1	1	8	–
652	E	Start	--.--	1,0	31,1	dd.MM
653	E	End	--.--	1,0	31,1	dd.MM
658	E	Operating level Frost protection ¦ Reduced	Frost protection	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
Holidays heating circuit 3						
661	E	Preselection Period 1 ... Period 8	Period 1	1	8	–
662	E	Start	--.--	1,0	31,1	dd.MM
663	E	End	--.--	1,0	31,1	dd.MM
668	E	Operating level Frost protection ¦ Reduced	Frost protection	–	–	–
Heating circuit 1						
700	E	Operating mode Protection ¦ Automatic ¦ Reduced ¦ Comfort	Automatically	–	–	–
710	E	Comfort setpoint	20,0	0L 712	0L 716	°C
712	E	Reduced setpoint	16	0L 714	0L 710	°C
714	E	Frost protection setpoint	10,0	4	0L 712	°C
716	F	Comfort setpoint max	35,0	0L 710	35	°C
720	E	Heating curve slope	1,5	0,1	4,0	–
721	F	Heating curve displacement	0,0	-4,5	4,5	°C
726	F	Heating curve adaption Off ¦ On	Off	–	–	–
730	E	Summer/winter heating limit	18	- - - / 8	30	°C
732	F	24-hour heating limit	-3	- - - / -10	10	°C
733	0	Ext'n 24-hour heating limit No ¦ Yes	Yes	–	–	–
740	I	Flow temp setpoint min	8	8	0L 741	°C
741	I	Flow temp setpoint max	80	0L 740	95	°C
742	F	Flow temp setpoint room stat	65	0L 740	0L 741	°C
744	0	Swi-on ratio room stat	- - -	- - - / 1	99	%
750	F	Room influence	20	- - - / 1	100	%
760	F	Room temp limitation	1	- - - / 0.5	4	°C
766	0	SD room temp limitation	100	0	100	%
770	F	Boost heating	3	- - - / 0	20	°C
780	F	Quick setback Off ¦ Down to reduced setpoint ¦ Down to frost prot setpoint	Down to reduced set point	–	–	–
790	F	Optimum start control max	0	0	360	min
791	F	Optimum stop control max	0	0	360	min
794	F	Heat up gradient	60	0	600	Min/K
800	F	Reduced setp increase start	- - -	- - - / -30	10	°C
801	F	Reduced setp increase end	-15	-30	0L 800	°C
810	F	Frost prot plant HC pump Off ¦ On	On	–	–	–
820	F	Overtemp prot pump circuit Off ¦ On	On	–	–	–
830	F	Mixing valve boost	5	0	50	°C
832	F	Actuator type 2-position ¦ 3-position	3-position	–	–	–
833	F	Switching differential 2-pos	2	0	20	°C
834	F	Actuator running time	120	30	873	s
835	0	Mixing valve Xp	32	1	100	°C
836	0	Mixing valve Tn	120	10	873	s
850	I	Floor curing function Off ¦ Functional heating ¦ Curing heating ¦ Functional/curing heating ¦ Curing/functional heating ¦ Manually	Off	–	–	–
851	I	Floor curing setp manually	25	0	95	°C
856	I	Floor curing day current	0	0	32	–
857	I	Floor curing days completed	0	0	32	–
861	F	Excess heat draw Off ¦ Heating mode ¦ Always	Always	–	–	–
870	F	With buffer No ¦ Yes	Yes	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
872	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–
880	F	Pump speed reduction Operating level ¦ Characteristic	Characteristic	–	–	–
882	F	Pump speed min	40	0	0L 883	%
883	F	Pump speed max	100	0L 882	100	%
888	0	Curve readj at 50% speed	33	0	100	%
890	0	Flow setp readj speed ctrl No ¦ Yes	Yes	–	–	–
900	F	Optg mode changeover None ¦ Protection ¦ Reduced ¦ Comfort ¦ Automatic	Protection mode	–	–	–
		Cooling circuit 1				
901	E	Operating mode Off ¦ Automatic	Automatically	–	–	–
902	E	Comfort setpoint	24,0	0L 905	0L 903	°C
903	E	Reduced setpoint	26	0L 902	0L 904	°C
904	E	Protection setpoint	35	0L 903	40	°C
905	E	Comfort setpoint min	5	5	0L 902	°C
907	E	Activation 24h/day¦ Heating circuit timer programme ¦ Timer programme 5	24h/day	–	–	–
908	I	Flow temp setp at 0T 25°C	20	8	35	°C
909	I	Flow temp setp at 0T 35°C	16	8	35	°C
912	I	Cooling limit at 0T	20	– – – / 8	355	°C
913	F	Lock time at end of heating	24	– – – / 8	100	h
914	F	24-hour cooling limit	3	-10	10	°C
915	0	Ext'n 24-hour cooling limit No ¦ Yes	Yes			–
918	F	Summer comp start at 0T	26	20	35	°C
919	F	Summer comp end at 0T	35	20	35	°C
920	F	Summer comp setp increase	4	– – – / 1	10	°C
923	F	Flow temp setp min 0T 25°C	18	8	35	°C
924	F	Flow temp setp min 0T 35°C	18	8	35	°C
928	F	Room influence	80	– – – / 1	10	%
932	F	Room temp limitation	0,5	– – – / 0.5	4	°C
935	F	Quick increase Off ¦ To Reduced setpoint ¦ To Protection setpoint	To Reduced setpoint			–
937	F	Frost prot plant CC pump Off ¦ On	Off	–	–	–
938	F	Mixing valve decrease	0	0	20	°C
939	F	Actuator type 2-position ¦ 3-position	3-position	–	–	–
940	F	Switching differential 2-pos	2	0	20	°C
941	F	Actuator running time	120	30	873	s
942	0	Mixing valve Xp	12	1	100	°C
943	0	Mixing valve Tn	90	10	873	s
945	F	Mixing valve in heating mode Control ¦ Open	Controls	–	–	–
946	F	Lock time dewpoint monitor	60	– – – / 10	600	min
947	F	Flow temp setp incr hygro	10	– – – / 1	10	°C
948	F	Flow setp incr start at r.h.	60	0	100	%
950	I	Flow temp diff dewpoint	2	– – – / 0	10	°C
962	F	With buffer No ¦ Yes	No	–	–	–
963	F	With prim contr/system pump No ¦ Yes	No	–	–	–
969	I	Optg mode changeover None ¦ Off ¦ Automatic	Off	–	–	–
		Heating circuit 2				
1000	E	Operating mode Protection ¦ Automatic ¦ Reduced ¦ Comfort	Automatically	–	–	–
1010	E	Comfort setpoint	20,0	0L 1012	0L 1016	°C

Operating line	User level	Function	Default value	Min	Max	Unit
1012	E	Reduced setpoint	16	OL 1014	OL 1010	°C
1014	E	Frost protection setpoint	10,0	4	OL 1012	°C
1016	F	Comfort setpoint max	35,0	OL 1010	35	°C
1020	E	Heating curve slope	1,5	0,1	4,0	–
1021	F	Heating curve displacement	0,0	-4,5	4,5	°C
1026	F	Heating curve adaption Off ¦ On	Off	–	–	–
1030	E	Summer/winter heating limit	18	- - - / 8	30	°C
1032	F	24-hour heating limit	-3	- - - / -10	10	°C
1033	0	Ext'n 24-hour heating limit No ¦ Yes	Yes	–	–	–
1040	I	Flow temp setpoint min	8	8	OL 1041	°C
1041	I	Flow temp setpoint max	80	OL 1040	95	°C
1042	F	Flow temp setpoint room stat	65	OL 1040	OL 1041	°C
1044	0	Swi-on ratio room stat	- - -	- - - / 1	99	%
1050	F	Room influence	20	- - - / 1	100	%
1060	F	Room temp limitation	1	- - - / 0.5	4	°C
1070	F	Boost heating	3	- - - / 0	20	°C
1080	F	Quick setback Off ¦ Down to reduced setpoint ¦ Down to frost prot	Down to reduced set point	–	–	–
1090	F	Optimum start control max	0	0	360	min
1091	F	Optimum stop control max	0	0	360	min
1094	F	Heat up gradient	60	0	600	Min/K
1100	F	Reduced setp increase start	- - -	- - - / -30	10	°C
1101	F	Reduced setp increase end	-15	-30	OL 1100	°C
1110	F	Frost prot plant HC pump Off ¦ On	On	–	–	–
1120	F	Overtemp prot pump circuit Off ¦ On	On	–	–	–
1130	F	Mixing valve boost	5	0	50	°C
1132	F	Actuator type 2-position ¦ 3-position	3-position	–	–	–
1133	F	Switching differential 2-pos	2	0	20	°C
1134	F	Actuator running time	120	30	873	s
1135	0	Mixing valve Xp	24	1	100	°C
1136	0	Mixing valve Tn	90	10	873	s
1150	F	Floor curing function Off ¦ Functional heating ¦ Curing heating ¦ Functional/curing heating ¦ Curing/functional heating ¦ Manually	Off	–	–	–
1151	F	Floor curing setp manually	25	0	95	°C
1156	I	Floor curing day current	0	0	32	–
1157	I	Floor curing days completed	0	0	32	–
1161	F	Excess heat draw Off ¦ Heating mode ¦ Always	Always	–	–	–
1170	F	With buffer No ¦ Yes	Yes	–	–	–
1172	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–
1180	F	Pump speed reduction Operating level ¦ Characteristic	Characteristic	–	–	–
1182	F	Pump speed min	40	0	OL 1183	%
1183	F	Pump speed max	100	OL 1182	100	%
1188	0	Curve readj at 50% speed	33	0	100	%
1190	0	Flow setp readj speed ctrl No ¦ Yes	Yes	–	–	–
1200	F	Optg mode changeover None ¦ Protection ¦ Reduced ¦ Comfort ¦ Automatic	Protection mode	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
		Heating circuit 3				
1300	E	Operating mode Protection ¦ Automatic ¦ Reduced ¦ Comfort	Automatically	–	–	–
1310	E	Comfort setpoint	20,0	0L 1312	0L 1316	°C
1312	E	Reduced setpoint	16	0L 1314	0L 1310	°C
1314	E	Frost protection setpoint	10,0	4	0L 1312	°C
1316	F	Comfort setpoint max	35,0	0L 1310	35	°C
1320	E	Heating curve slope	1,5	0,1	4,0	–
1321	F	Heating curve displacement	0,0	-4,5	4,5	°C
1326	F	Heating curve adaption Off ¦ On	Off	–	–	–
1330	E	Summer/winter heating limit	18	– – – / 8	30	°C
1332	F	24-hour heating limit	-3	– – – / -10	10	°C
1333	0	Ext'n 24-hour heating limit No ¦ Yes	Yes	–	–	–
1340	F	Flow temp setpoint min	8	8	0L 1341	°C
1341	F	Flow temp setpoint max	80	0L 1340	95	°C
1342	F	Flow temp setpoint room stat	65	0L 1340	0L 1341	°C
1344	0	Swi-on ratio room stat	– – –	– – – / 1	99	%
1350	F	Room influence	20	– – – / 1	100	%
1360	F	Room temp limitation	1	– – – / 0.5	4	°C
1370	F	Boost heating	3	– – – / 0	20	°C
1380	F	Quick setback Off ¦ Down to reduced setpoint ¦ Down to frost prot setpoint	Down to reduced set point	–	–	–
1390	F	Optimum start control max	0	0	360	min
1391	F	Optimum stop control max	0	0	360	min
1394	F	Heat up gradient	60	0	600	Min/K
1400	F	Reduced setp increase start	– – –	– – – / -30	10	°C
1401	F	Reduced setp increase end	-15	-30	0L 1400	°C
1410	F	Frost prot plant HC pump Off ¦ On	On	–	–	–
1420	F	Overtemp prot pump circuit Off ¦ On	On	–	–	–
1430	F	Mixing valve boost	5	0	50	°C
1432	F	Actuator type 2-position ¦ 3-position	3-position	–	–	–
1433	F	Switching differential 2-pos	2	0	20	°C
1434	F	Actuator running time	120	30	873	s
1435	0	Mixing valve Xp	24	1	100	°C
1436	0	Mixing valve Tn	90	10	873	s
1450	I	Floor curing function Off ¦ Functional heating ¦ Curing heating ¦ Functional/curing heating ¦ Curing/functional heating ¦ Manually	Off	–	–	–
1451	I	Floor curing setp manually	25	0	95	°C
1456	I	Floor curing day current	0	0	32	–
1457	I	Floor curing days completed	0	0	32	–
1461	F	Excess heat draw Off ¦ Heating mode ¦ Always	Always	–	–	–
1470	F	With buffer No ¦ Yes	Yes	–	–	–
1472	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–
1480	F	Pump speed reduction Operating level ¦ Characteristic	Characteristic	–	–	–
1482	F	Pump speed min	40	0	0L 1483	%
1483	F	Pump speed max	100	0L 1482	100	%
1488	0	Curve readj at 50% speed	33	0	100	%
1490	0	Flow setp readj speed ctrl No ¦ Yes	Yes	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
1500	F	Optg mode changeover None ¦ Protection ¦ Reduced ¦ Comfort ¦ Automatic	Protection mode	–	–	–
Domestic hot water DHW						
1600	E	DHW operating mode Off ¦ On	On	–	–	–
1601	0	Optg mode selection Eco None ¦ Instantaneous water heater ¦ DHW storage tank ¦ Inst water heater + st tank	None	–	–	–
1610	E	Nominal setpoint	55	OL 1612	OL 1614 OEM	°C
1612	F	Reduced setpoint	40	8	OL 1610	°C
1614	0	Nominal setpoint max	65	8	80	°C
1616	F	Photovoltaic Setpoint	60	8	OL 1614 OEM	°C
1620	I	Release 24h/day ¦ Time programs HCs ¦ Time program 4/DHW	Time programs HCs	–	–	–
1630	I	Charging priority Absolute ¦ Shifting ¦ None ¦ MC shifting, PC absolute	MC shifting, PC absolute	–	–	–
1640	F	Legionella function Off ¦ Periodically ¦ Fixed weekday	Fixed weekday	–	–	–
1641	F	Legionella funct periodically	3	1	7	Days
1642	F	Legionella funct weekday Monday ¦ Tuesday ¦ Wednesday ¦ Thursday ¦ Friday ¦ Saturday ¦ Sunday	Monday	–	–	–
1644	F	Legionella funct time	– – –	– – – / 00:00	23:50	hh:mm
1645	F	Legionella funct setpoint	65	55	95	°C
1646	F	Legionella funct duration	30	– – – / 10	360	min
1647	F	Legionella funct circ pump Off ¦ On	On	–	–	–
1648	F	Legio funct circ temp diff	– – –	– – – / 0	20	°C
1660	F	Circulating pump release Time program 3/HCP ¦ DHW release ¦ Time program 4/DHW¦ Time program 5	DHW release	–	–	–
1661	F	Circulating pump cycling Off ¦ On	On	–	–	–
1663	F	Circulation setpoint	45	8	80	°C
1680	F	Optg mode changeover None ¦ Off ¦ On	Off	–	–	–
Pumps H						
Consumer circuit 1						
1859	I	Flow temp setp cons request	70	8	120	°C
1860	F	Frost prot plant CC pump Off ¦ On	On	–	–	–
1874	0	DHW charging priority No ¦ Yes	Yes	–	–	–
1875	F	Excess heat draw Off ¦ On	On	–	–	–
1878	F	With buffer No ¦ Yes	Yes	–	–	–
1880	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–
Consumer circuit 2						
1909	I	Flow temp setp cons request	70	8	120	°C
1910	F	Frost prot plant CC pump Off ¦ On	On	–	–	–
1924	0	DHW charging priority No ¦ Yes	Yes	–	–	–
1925	F	Excess heat draw Off ¦ On	On	–	–	–
1928	F	With buffer No ¦ Yes	Yes	–	–	–
1930	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
Swimming pool circuit						
1959	I	Flow temp setpoint	70	8	120	°C
1960	F	Frost prot plant pool pump Off ¦ On	Off	–	–	–
1974	0	DHW charging priority No ¦ Yes	Yes	–	–	–
1975	F	Excess heat draw Off ¦ On	On	–	–	–
1978	F	With buffer No ¦ Yes	Yes	–	–	–
1980	F	With prim contr/system pump No ¦ Yes	Yes	–	–	–
Swimming pool						
2055	F	Setpoint solar heating	26	8	80	°C
2056	F	Setpoint source heating	22	8	80	°C
2065	F	Charging priority solar Priority 1 ¦ Priority 2 ¦ Priority 3	priority 3	–	–	–
2070	0	Swimming pool temp max	32	8	95	°C
2080	F	With solar integration No ¦ Yes	Yes	–	–	–
Primary controller / system pump						
2110	0	Flow temp setpoint min	8	8	95	°C
2111	0	Flow temp setpoint max	80	8	95	°C
2112	0	Flow temp setp cooling min	8	8	20	°C
2120	F	Frost prot plant syst pump Off ¦ On	On	–	–	–
2130	0	Mixing valve boost	10	0	50	°C
2131	0	Mixing valve decrease	0	0	20	°C
2132	0	Actuator type 2-position ¦ 3-position	3-position	–	–	–
2133	0	Switching differential 2-pos	2	0	20	°C
2134	0	Actuator running time	120	30	873	s
2135	0	Mixing valve Xp	24	1	100	°C
2136	0	Mixing valve Tn	90	10	873	s
2145	0	DHW charging priority No ¦ Yes	Yes	–	–	–
2150	I	Primary contr/system pump Before buffer ¦ After buffer	After buffer	–	–	–
2151	F	Pump modulation None ¦ Setpoint ¦ Source output ¦ Temp diff return	None			
2153	F	Pump speed min	40	0	100	%
2154	F	Pump speed max	100	0	100	%
Boiler						
2200	0	Operating mode Continuous operation ¦ Automatic ¦ Auto, extended running time	Automatic	–	–	–
2203	F	Release below outside temp	- - -	- - - / -50	50	°C
2204	F	Release above outside temp	- - -	- - - / -50	50	°C
2205	F	With Economy mode Off ¦ On DHW ¦ On	Off	–	–	–
2208	F	Full charging buffer Off ¦ On	Off	–	–	–
2210	F	Setpoint min	40	0L 2211 0EM	Setpoint manual control	°C
2211	0	Setpoint min 0EM	40	8	95	°C
2212	F	Setpoint max	80	Setpoint manual control	0L 2213 0EM	°C
2213	0	Setpoint max 0EM	82	8	120	°C
2220	0	Release integral stage2/mod	50	0	500	°C min
2221	0	Reset integral stage2/mod	10	0	500	°C min

Operating line	User level	Function	Default value	Min	Max	Unit
2232	0	Damper actuator run time	60	7,5	480	s
2233	0	Modulating Xp	20	1	200	°C
2234	0	Modulating Tn	150	10	873	s
2235	0	Modulating Tv	4,5	0	30	s
2240	0	Switching differential boiler	1	0	20	°C
2241	0	Burner running time min	2	0	20	min
2250	0	Pump overrun time	5	0	20	min
2260	0	Prot boil startup consumers Off ¦ On	Off	–	–	–
2261	0	Prot boil startup boil pump Off ¦ On	Off	–	–	–
2262	0	Optimum start control Off ¦ On	Off	–	–	–
2270	F	Return setpoint min	8	8	95	°C
2271	0	Return setpoint min OEM	30	8	95	°C
2272	0	Return influence consumers Off ¦ On	On	–	–	–
2282	0	Actuator running time	120	30	873	s
2283	0	Mixing valve Xp	32	1	100	°C
2284	0	Mixing valve Tn	120	10	873	s
2285	0	Mixing valve Tv	10	0	60	s
2290	0	Switching diff bypass pump	6	0	20	°C
2291	0	Control bypass pump Parallel burner operation ¦ Return temp	Return temperature	–	–	–
2300	0	Frost prot plant boiler pump Off ¦ On	Off	–	–	–
2310	0	Limit thermostat function Off ¦ On	On	–	–	–
2316	0	Temp differential max	–	0	80	°C
2317	0	Temp differential nominal	10	0	80	°C
2320	0	Pump modulation None ¦ Demand ¦ Boiler setpoint ¦ Temp differential nominal ¦ Burner output	Burner output	–	–	–
2322	F	Pump speed min	40	0	100	%
2323	F	Pump speed max	100	0	100	%
2330	F	Output nominal	50	0	1000	kW
2331	F	Output basic stage	30	0	1000	kW
		Cascade				
3510	0	Lead strategy Late on, early off ¦ Late on, late off ¦ Early on, late off	Late on, late off	–	–	–
3511	0	Output band min	40	0	100	%
3512	0	Output band max	90	0	100	%
3530	0	Release integral source seq	50	0	500	°C min
3531	0	Reset integral source seq	20	0	500	°C min
3532	F	Restart lock	300	0	1800	s
3533	F	Switch on delay	5	0	120	min
3534	0	Forced time basic stage	0	0	1200	s
3540	F	Auto source seq ch'over	500	– – – / 10	990	h
3541	F	Auto source seq exclusion None ¦ First ¦ Last ¦ First and last	None	–	–	–
3544	F	Leading source Heat source 1 ¦ Heat source 2 ¦ ... ¦ Heat source 16	Heat source 1	–	–	–
3550	0	Prot startup cascade pump Off ¦ On	Off	–	–	–
3560	F	Return setpoint min	8	8	95	°C
3561	0	Return setpoint min OEM	8	8	95	°C
3562	0	Return influence consumers Off ¦ On	On	–	–	–
3570	F	Actuator running time	120	30	873	s
3571	0	Mixing valve Xp	24	1	100	°C
3572	0	Mixing valve Tn	90	10	873	s
3590	0	Temp differential min	4	– – – / 0	20	°C

Operating line	User level	Function	Default value	Min	Max	Unit
Supplementary source						
3690	F	Setpoint incr main source	0	0	10	°C
3691	F	Output limit main source	- - -	- - - / 1	100	%
3692	F	With DHW charging Locked ¦ Substitute ¦ Complement ¦ Instantly	Substitute	-	-	-
3694	F	OT limit with DHW charging Ignore ¦ Note	Note	-	-	-
3700	F	Release below outside temp	- - -	-50	50	°C
3701	F	Release above outside temp	- - -	-50	50	°C
3702	F	With Economy mode Off ¦ On DHW ¦ On	Off	-	-	-
3703	F	Full charging buffer Off ¦ On	Off	-	-	-
3704	F	With heat generation lock Off ¦ On DHW ¦ On	Off			-
3705	F	Overrun time	5	0	120	min
3710	F	Setpoint min	- - -	- - - / 0	80	°C
3720	F	Switching integral	50	0	500	°C*min
3722	F	Switching diff off	15	0	20	°C
3723	F	Locking time	5	0	120	min
3725	F	Control sensor Common flow temp ¦ Buffer sensor B4	Common flow temp	-	-	-
3750	F	Source type Other ¦ Solid fuel boiler ¦ Heat pump ¦ Oil/gas boiler	Other	-	-	-
3755	F	Delay lockout position	1	1	40	min
Solar						
3810	F	Temp diff on	8	0	40	°C
3811	F	Temp diff off	4	0	40	°C
3812	F	Charg temp min DHW st tank	20	- - - / 8	95	°C
3813	0	Temp diff on buffer	- - -	- - - / 0	40	°C
3814	0	Temp diff off buffer	- - -	- - - / 0	40	°C
3815	F	Charging temp min buffer	20	- - - / 8	95	°C
3816	0	Temp diff on swi pool	- - -	- - - / 0	40	°C
3817	0	Temp diff off swi pool	- - -	- - - / 0	40	°C
3818	F	Charging temp min swi pool	20	- - - / 8	95	°C
3822	F	Charging prio storage tank None ¦ DHW storage tank ¦ Buffer storage tank	DHW storage tank	-	-	-
3825	F	Charging time relative prio	- - -	- - - / 2	60	min
3826	F	Waiting time relative prio	5	1	40	min
3827	F	Waiting time parallel op	- - -	- - - / 0	40	min
3828	F	Delay secondary pump	60	0	600	s
3830	F	Collector start function	- - -	- - - / 5	60	min
3831	F	Min run time collector pump	20	5	120	s
3832	0	Collector start function on	07:00	00:00	23:50	hh:mm
3833	0	Collector start function off	19:00	00:00	23:50	hh:mm
3834	F	Collector start funct grad	- - -	- - - / 1	20	Min/°C
3835	F	Min collector temp start fct	5	10	100	-
3840	F	Collector frost protection	- - -	- - - / -20	5	°C
3850	F	Collector overtemp prot	- - -	- - - / 30	350	°C
3860	F	Evaporation heat carrier	- - -	- - - / 60	350	°C
3862	F	Impact evaporation superv On own collector pump ¦ On both collector pumps	On own collector pump	-	-	-
3870	F	Pump speed min	40	0	OL 3871	%
3871	F	Pump speed max	100	OL 3870	100	%
3880	F	Antifreeze None ¦ Ethylene glycol ¦ Propylene glycol ¦ Ethyl and propyl glycol	None	-	-	-
3881	F	Antifreeze concentration	30	1	100	%
3884	F	Pump capacity	- - -	10	1500	l/h

Operating line	User level	Function	Default value	Min	Max	Unit
3886	F	Pulse count yield None ¦ With input H1 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	None	–	–	–
3887	F	Pulse unit yield None ¦ kWh ¦ Liter	None	–	–	–
3888	F	Pulse value yield numer	10	1	1000	–
3889	F	Pulse value yield denom	10	1	1000	–
3891	F	Flow measurement yield None ¦ With input H1 ¦ With input H31 Module 1 ¦ With input H31 Module 2 ¦ With input H31 Module 3 ¦ With input H31 Module 1 ¦ With input H31 Module 2 ¦ With input H31 Module 3 ¦ With input H32 Module 1 ¦ With input H32 Module 2 ¦ With input H32 Module 3 ¦ With input H3	None	–	–	–
3896	F	Readj solar flow sensor	0	-20	20	°C
3897	F	Readj solar return sensor	0	-20	20	°C
		Solid fuel boiler				
4102	F	Locks other heat sources Off ¦ On	On	–	–	–
4103	F	Charg prio DHW stor tank Off ¦ On	Off	–	–	–
4110	F	Setpoint min	40	8	120	°C
4114	F	Temp differential min	4	0	40	°C
4130	F	Temp diff on	4	1	40	°C
4134	F	Connection DHW stor tank With B3 ¦ With B31 ¦ With B3 and B31	With B3	–	–	–
4135	F	Boiler temp setp DHW charg Storage tank temp ¦ Storage tank setpoint ¦ Boiler temp setpoint min	Storage tank temperature	–	–	–
4136	F	DHW charging with Q3 No ¦ Yes	Yes	–	–	–
4137	F	Connection buffer With B4 ¦ With B42/B41 ¦ With B4 and B42/B41	With B4	–	–	–
4138	F	Boil temp setp buffer charg Storage tank temp ¦ Storage tank setpoint ¦ Boiler temp setpoint min	Storage tank temperature	–	–	–
4140	F	Pump overrun time	20	0	120	min
4141	0	Excess heat discharge	90	60	140	°C
4153	F	Return setpoint min	8	8	95	°C
4154	0	Return setpoint min OEM	8	8	95	°C
4158	F	Flow influence return ctrl Off ¦ On	Off	–	–	–
4163	0	Actuator running time	120	30	873	s
4164	0	Mixing valve Xp	24	1	100	°C
4165	0	Mixing valve Tn	90	10	873	s
4170	0	Frost prot plant boiler pump Off ¦ On	Off	–	–	–
4190	F	Residual heat fct dur max	- - -	5	60	min
4192	F	Residual heat fct trigg Once / Several times	Once	–	–	–
4200	0	Solid fuel boiler Starting speed	---	---/0	100	%
4201	F	Pump speed min	40	0	OL 4202	%
4202	F	Pump speed max	100	OL 4201	100	%
		Buffer storage tank				
4720	F	Auto generation lock None ¦ With B4 ¦ With B4 and B42/B41	With B4	–	–	–
4721	0	Auto heat gen lock SD	2	0	20	°C
4722	F	Temp diff buffer/HC	-5	-20	20	°C
4723	0	Temp diff buffer/CC	0	-20	20	°C
4724	0	Min st tank temp heat mode	- - -	- - - / 8	95	°C
4726	0	Max st tank temp cool mode	25	- - - / 10	40	°C
4728	F	Rel temp diff buffer/HC	0	-50	50	%
4739	F	Stratification protection Off ¦ Always ¦ With solid fuel boiler	Off	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
4740	0	Strat prot temp diff max	5	0	20	°C
4743	0	Strat prot anticipation time	60	0	240	s
4744	0	Strat protection Tn	120	10	200	s
4746	0	DHW prot combi st tank Off ¦ On	Off	–	–	–
4749	F	Min charging setpoint solar	8	8	94	°C
4750	F	Charging temp max	80	8	95	°C
4751	0	Storage tank temp max	90	8	95	°C
4755	F	Recooling temp	70	8	95	°C
4756	F	Recooling DHW/HCs Off ¦ On	Off	–	–	–
4757	F	Recooling collector Off ¦ Summer ¦ Always	Off	–	–	–
4783	F	With solar integration No ¦ Yes	No	–	–	–
4790	F	Temp diff on return div	10	0	40	°C
4791	F	Temp diff off return div	5	0	40	°C
4795	F	Compar temp return div B4 ¦ B41 ¦ B42	B42	–	–	–
4796	F	Optg action return diversion Temp decrease ¦ Temp increase	Temp Increase	–	–	–
4800	F	Partial charging setpoint	– – –	– – – / 8	95	°C
4810	F	Full charging Off ¦ Current heat request ¦ Buffer setpoint	Buffer setpoint	–	–	–
4811	F	Full charge temperature min.	8	8	80	°C
4813	F	Full charging With B4 ¦ With B42/B41	With B42/B41	–	–	–
DHW storage tank						
5007	0	Charging request Setpoint ¦ With B3 ¦ With B31	Setpoint			–
5010	0	Charging Once/day ¦ Several times/day	Several times/day	–	–	–
5020	F	Flow setpoint boost	16	0	30	°C
5021	F	Transfer boost	8	0	30	°C
5022	F	Type of charging Recharging ¦ Full charging ¦ Full charging legio ¦ Full charg 1st time day ¦ Full charg 1st time legio	Full charge	–	–	–
5024	0	Switching diff	3	0	20	°C
5030	0	Charging time limitation	– – –	– – – / 10	600	min
5031	0	Heating time limitation	---	– – – / 10	600	min
5032	F	Max charg abortion temp	---	---/8	80	°C
5033	0	Dynamic switching diff Off ¦ On	Off			–
5040	0	Discharging protection Off ¦ Always ¦ Automatically	Automatically	–	–	–
5042	0	Discharg protec after charg Off ¦ On	Off			–
5050	F	Charging temp max	80	8	OL 5051 OEM	°C
5051	0	Storage tank temp max	80	8	95	°C
5055	F	Recooling temp	70	8	95	°C
5056	F	Recooling heat gen/HCs Off ¦ On	Off	–	–	–
5057	F	Recooling collector Off ¦ Summer ¦ Always	Off	–	–	–
5060	F	El imm heater optg mode Substitute ¦ Summer ¦ Always	Substitute	–	–	–
5061	F	El immersion heater release 24h/day ¦ DHW release ¦ Time program 4/DHW	DHW release	–	–	–
5062	F	El immersion heater control External thermostat ¦ DHW sensor	DHW sensor	–	–	–
5063	F	El immersion heater control For Eco mode On ¦ Off	On	–	–	–
5070	0	Automatic push Off ¦ On	On	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
5071	0	Charging prio time push	0	0	120	min
5085	F	Excess heat draw Off ¦ On	On	–	–	–
5090	F	With buffer No ¦ Yes	No	–	–	–
5092	F	With prim contr/system pump No ¦ Yes	No	–	–	–
5093	F	With solar integration No ¦ Yes	Yes	–	–	–
5101	F	Pump speed min	40	0	100	%
5102	F	Pump speed max	100	0	100	%
5120	0	Mixing valve boost	0	0	50	°C
5124	F	Actuator running time	120	30	873	S
5125	0	Mixing valve Xp	24	1	100	°C
5126	0	Mixing valve Tn	90	10	873	S
5130	F	Transfer strategy Off ¦ Always ¦ DHW release	Always	–	–	–
5131	F	Comparison temp transfer With B3 ¦ With B31 ¦ With B3 and B31	With B3	–	–	–
5140	F	Intermediate circuit boost	2	0	10	°C
5142	0	Flow setp compensation delay	30	0	60	s
5143	0	Flow setp compensation Xp	24	1	100	°C
5144	0	Flow setp compensation Tn	120	10	873	s
5145	0	Flow setp compensation Tv	0	0	60	s
5146	F	Full charging with B36 No ¦ Yes	No	–	–	–
5148	F	Min start temp diff Q33	-5	-20	20	°C
5149	F	Start delay Q33	10	0	255	s
5160	F	Legionella funct mixing pump Off ¦ With charging ¦ With charging and duration	With charging and duration	–	–	–
5165	F	Restratification Off ¦ On	Off	–	–	–
5166	F	Restrat temp min	8	8	95	°C
5167	F	Restrat temp diff min	8	0	40	°C
5180	F	Photovoltaic sensor DHW sensor B3 ¦ DHW sensor B31 ¦ Special temp sensor 1	DHW sensor B3	–	–	–
5181	F	Charging by photovoltaic Released ¦ Recharging ¦ Locked	Recharging	–	–	–
5182	F	Output stage 1	---	0	20000	W
5183	F	Output stage 2	10000	0	20000	W
5184	F	Output stage 3	10000	0	20000	W
5185	F	Output el imm heater	10000	0	20000	W
5186	F	ACS: Max output photovoltaic Hx 10V	2000	0	20000	W
5187	F	Output el imm heater norm Stage 1 ¦ Stage 2 ¦ Stage 3	Stage 3	–	–	–
5188	F	Min swi-on time	300	0	600	s
5189	F	Min swi-off time	300	0	600	s
Instantaneous DHW heater						
5406	F	Min setp diff to tank temp	4	0	20	°C
5407	F	Storage tank setpoint incr	0	0	20	°C
5420	F	Flow setpoint boost	6	0	30	°C
5429	0	Switching diff	1	0	20	°C
5455	F	Setp readj cons 40°C	0	-20	20	°C
5456	F	Setp readj cons 60°C	0	-20	20	°C
5460	F	Setpoint keep hot	50	10	60	°C
5461	F	Readj setp keep hot 40°C	4	-20	20	°C
5462	F	Readj setp keep hot 60°C	4	-20	20	°C
5464	F	Keep hot release None ¦ 24h/day ¦ DHW release ¦ Time program 3/HC3 ¦ Time program 4/DHW ¦ Time program 5	24h / day	–	–	–
5470	F	Keep hot time wo heating	2	0	1440	min

Operating line	User level	Function	Default value	Min	Max	Unit
5471	F	Keep hot time with heating	0	0	30	min
5472	F	Pump overrun time keep hot	0	0	255	min
5473	F	Pump overrun time keep hot	20	0	59	s
5475	F	Control sensor keep hot Boiler sensor B2 ¦ Return sensor B7 ¦ DHW outlet sensor B38	Boiler sensor B2	–	–	–
5476	F	Keep hot periodically	1	1	255	Min
5477	F	Min keep hot time	0	0	255	s
5478	F	Keep hot in heating mode Off ¦ On	Off	–	–	–
5489	F	Overrun via inst WH No ¦ Yes	No	–	–	–
5530	0	Pump speed min	0	0	Line 5531	%
5531	0	Pump speed max	100	Line 5530	100	%
5544	F	Actuator running time DHW instantaneous heater	15	7,5	480	s
5545	0	P-band (Xp) DHW instantaneous heater	20	1	200	°C
5546	0	Integral action time (Tn) DHW instan heater	150	10	873	s
5547	0	Derivative action time (Tv) instantaneous heater	4,5	0	30	s
General functions						
–		**Delta-T-controller 1**				
5570	F	Temp diff on dT contr 1	20	0	40	°C
5571	F	Temp diff off dT contr 1	10	0	40	°C
5572	F	On temp min dT contr 1	0	-30	120	°C
5573	F	Sensor 1 dT controller 1 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer sensor B4 ¦ Buffer sensor B41 ¦ Flue gas temp sensor B8 ¦ Common flow sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel boil ret sens B72 ¦ Boiler sensor B2 ¦ DHW sensor B3 ¦ Outside sensor B9 ¦ Primary contr sensor B15 ¦ Flow sensor HC1 B1 ¦ Flow sensor HC2 B12 ¦ Flow sensor HC3 B14 ¦ Special temp sensor 1 ¦ Special temp sensor 2				
5574	F	Sensor 2 dT controller 1 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer sensor B4 ¦ Buffer sensor B41 ¦ Flue gas temp sensor B8 ¦ Common flow sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel boil ret sens B72 ¦ Boiler sensor B2 ¦ DHW sensor B3 ¦ Outside sensor B9 ¦ Primary contr sensor B15 ¦ Flow sensor HC1 B1 ¦ Flow sensor HC2 B12 ¦ Flow sensor HC3 B14 ¦ Special temp sensor 1 ¦ Special temp sensor 2				
5575	F	On time min dT contr 1	0	0	250	s
5577	F	Pump/valve kick K21 Off ¦ On	On			–
5578	F	Off temp max dT contr 1	---	---/-30	120	°C
–		**Delta-T-controller 2**				
5580	F	Temp diff on dT contr 2	20	0	40	°C
5581	F	Temp diff off dT contr 2	10	0	40	°C
5582	F	On temp min dT contr 2	0	-30	120	°C
5583	F	Sensor 1 dT controller 2 dito 5573				
5584	F	Sensor 2 dT controller 2 dito 5574				
5585	F	On time min dT contr 2	0	0	250	s
5587	F	Pump/valve kick K22 Off ¦ On	On			–
5588	F	Off temp max dT contr 2	---	---/-30	120	°C

Operating line	User level	Function	Default value	Min	Max	Unit
–		**Air dehumidifier**				
5600	F	Air dehumidifier Off ¦ On	Off			–
5602	F	Air dehumidifier r.h. on	55	2	50	%
5603	F	Air dehumidifier r.h. SD	5	2	50	%
5606	F	Release air dehumidifier 24h/day ¦ Time program HC ¦ Time program 5	24h/giorno			–
5608	F	Acquisition rel air humidity None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	None			–
		Configuration				
5710	I	Heating circuit 1 Off ¦ On	On	–	–	–
5711	I	Cooling circuit 1 Off ¦ 4-pipe system ¦ 2-pipe system	Off	–	–	–
5712	I	Use of mixing valve 1 None ¦ Heating ¦ Cooling ¦ Heating and Cooling	Heating and cooling	–	–	–
5713	F	Room controller HC1 Internally ¦ Externally	Internally	–	–	–
5714	F	Room controller CC1 Internally ¦ Externally	Internally	–	–	–
5715	I	Heating circuit 2 Off ¦ On	Off	–	–	–
5718	F	Room controller HC2 Internally ¦ Externally	Internally	–	–	–
5721	I	Heating circuit 3 Off ¦ On	Off	–	–	–
5724	F	Room controller HC3 Internally ¦ Externally	Internally	–	–	–
5730	I	DHW sensor B3 Sensor ¦ Thermostat	Sensor	–	–	–
5731	I	DHW ctrl elem Q3 None ¦ Charging pump ¦ Diverting valve	Charging pump	–	–	–
5734	F	Basic pos DHW div valve Last demand ¦ Heating circuit ¦ DHW	Heating circuit	–	–	–
5736	I	DHW separate circuit Off ¦ On	Off	–	–	–
5750	I	Consumer circuit 1 Heating ¦ 4-pipe system cooling ¦ 2-pipe system cooling	Heating	–	–	–
5751	I	Consumer circuit 2 Heating ¦ 4-pipe system cooling ¦ 2-pipe system cooling	Heating	–	–	–
5770	I	Source type 1-stage ¦ 2-stage ¦ Modulating 3-position ¦ Modulating UX ¦ Without boiler sensor ¦ 2x1 cascade (***)	1-stage	–	–	–
5772	0	Burner prerun time	- - -	- - - / 0	255	s
5840	I	Solar controlling element Charging pump ¦ Diverting valve	Charging pump	–	–	–
5841	I	External solar exchanger Jointly ¦ DHW storage tank ¦ Buffer storage tank	Jointly	–	–	–
5890	I	Relay output QX1 None ¦ Circulation pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circ pump CC1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump stage HC1 Q21 ¦ 2nd pump stage HC2 Q22 ¦ 2nd pump stage HC3 Q23 ¦ Heating circuit pump HC3 Q20 ¦ Cons circ pump CC2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Scheduler 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext. Exch K9 ¦ Solar ctrl element buffer K8 ¦ Solar cntrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swim pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW iterm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Aid dehumidifier K29 ¦ Diverting valve cooling Y21 ¦ Heating circuit pump HC1 Q2 ¦ Heating circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Supplementary source control K32 ¦ Overtemperature protection K11.	None	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
5891	I	Relay output QX2 None ¦ Circulation pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circ pump CC1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump stage HC1 Q21 ¦ 2nd pump stage HC2 Q22 ¦ 2nd pump stage HC3 Q23 ¦ Heating circuit pump HC3 Q20 ¦ Cons circ pump CC2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Scheduler 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext. Exch K9 ¦ Solar ctrl element buffer K8 ¦ Solar cntrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swim pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW iterm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Aid dehumidifier K29 ¦ Diverting valve cooling Y21 ¦ Heating circuit pump HC1 Q2 ¦ Heating circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Supplementary source control K32 ¦ Overtemperature protection K11.	None	–	–	–
5892	I	Relay output QX3 None ¦ Circulation pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circ pump CC1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump stage HC1 Q21 ¦ 2nd pump stage HC2 Q22 ¦ 2nd pump stage HC3 Q23 ¦ Heating circuit pump HC3 Q20 ¦ Cons circ pump CC2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Scheduler 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext. Exch K9 ¦ Solar ctrl element buffer K8 ¦ Solar cntrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swim pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW iterm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Aid dehumidifier K29 ¦ Diverting valve cooling Y21 ¦ Heating circuit pump HC1 Q2 ¦ Heating circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Supplementary source control K32 ¦ Overtemperature protection K11.	DHW controlling element Q3	–	–	–
5894	I	Relay output QX4 None ¦ Circulation pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circ pump CC1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump stage HC1 Q21 ¦ 2nd pump stage HC2 Q22 ¦ 2nd pump stage HC3 Q23 ¦ Heating circuit pump HC3 Q20 ¦ Cons circ pump CC2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Scheduler 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext. Exch K9 ¦ Solar ctrl element buffer K8 ¦ Solar cntrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swim pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW iterm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Aid dehumidifier K29 ¦ Diverting valve cooling Y21 ¦ Heating circuit pump HC1 Q2 ¦ Heating circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Supplementary source control K32 ¦ Overtemperature protection K11.	None	–	–	–
5895	I	Relay output QX5 None ¦ Circulation pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circ pump CC1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump stage HC1 Q21 ¦ 2nd pump stage HC2 Q22 ¦ 2nd pump stage HC3 Q23 ¦ Heating circuit pump HC3 Q20 ¦ Cons circ pump CC2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Scheduler 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext. Exch K9 ¦ Solar ctrl element buffer K8 ¦ Solar cntrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swim pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW iterm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Aid dehumidifier K29 ¦ Diverting valve cooling Y21 ¦ Heating circuit pump HC1 Q2 ¦ Heating circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Supplementary source control K32 ¦ Overtemperature protection K11.	None	–	–	–
5930	I	Sensor input BX1 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer st tank sensor B4 ¦ Buffer st tank sensor B41 ¦ Flue gas sensor B8 ¦ Common flow temperature sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer st tank sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel return sensor B72 ¦ Boiler sensor B2 ¦ Special temp sensor 1 ¦ Special temp sensor 2.	None	–	–	–
5931	I	Sensor input BX2 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer st tank sensor B4 ¦ Buffer st tank sensor B41 ¦ Flue gas sensor B8 ¦ Common flow temperature sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer st tank sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel return sensor B72 ¦ Boiler sensor B2 ¦ Special temp sensor 1 ¦ Special temp sensor 2.	None	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
5932	I	Sensor input BX3 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer st tank sensor B4 ¦ Buffer st tank sensor B41 ¦ Flue gas sensor B8 ¦ Common flow temperature sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer st tank sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel return sensor B72 ¦ Boiler sensor B2 ¦ Special temp sensor 1 ¦ Special temp sensor 2.	None	–	–	–
5934	I	Sensor input BX5 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer st tank sensor B4 ¦ Buffer st tank sensor B41 ¦ Flue gas sensor B8 ¦ Common flow temperature sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer st tank sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel return sensor B72 ¦ Boiler sensor B2 ¦ Special temp sensor 1 ¦ Special temp sensor 2.	Boiler sensor B2	–	–	–
5950	I	Function input H1 Optg mode changeover HCs +DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode change HC3 ¦ Error /alarm message ¦ Cons request CC1 ¦ Cons request CC2 ¦ Release swim pool source ¦ Release swim pool solar ¦ Operational level DHW ¦ Operational level HC1 ¦ Operational level HC2 ¦ Operational level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ circ pump thermostat ¦ Pulse count ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Operational signal supplementary source ¦ Flow measurement Hz ¦ Cons request CC1 10V ¦ Cons request CC2 10V ¦ Pressure measurement 10V ¦ Relative room humidity 10V ¦ Room temperature 10V ¦ Flow measurement 10V ¦ Temperature measurement 10V.	Optg mode changeover HCs+DHW	–	–	–
5951	I	Contact type H1 NC ¦ NO	Make contact (NO)	–	–	–
5953	I	Input value 1 H1	0	0	1000	–
5954	I	Function value 1 H1	0	–100	500	–
5955	I	Input value 2 H1	10	0	1000	–
5956	I	Function value 2 H1	100	–100	500	–
5957	I	Temperature sensor H1 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	–	–	–
5960	I	Function input H3 Optg mode changeover HCs +DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode change HC3 ¦ Error /alarm message ¦ Cons request CC1 ¦ Cons request CC2 ¦ Release swim pool source ¦ Release swim pool solar ¦ Operational level DHW ¦ Operational level HC1 ¦ Operational level HC2 ¦ Operational level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ circ pump thermostat ¦ Pulse count ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Operational signal supplementary source ¦ Flow measurement Hz ¦ Cons request CC1 10V ¦ Cons request CC2 10V ¦ Pressure measurement 10V ¦ Relative room humidity 10V ¦ Room temperature 10V ¦ Flow measurement 10V ¦ Temperature measurement 10V.	Optg mode changeover HCs+DHW	–	–	–
5961	I	Contact type H3 NC ¦ NO	Make contact (NO)	–	–	–
5963	I	Input value 1 H3	0	0	1000	–
5964	I	Function value 1 H3	0	–100	500	–
5965	I	Input value 2 H3	10	0	1000	–
5966	I	Function value 2 H3	100	–100	500	–
5967	I	Temperature sensor H3 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	–	–	–
5980	F	Function input EX1 None ¦ Counter 1st burner stage ¦ Heat gen lock ¦ Error/alarm message ¦ Excess heat discharge	Counter 1st burner stage	–	–	–
5981	F	Cont type input EX1 NC ¦ NO	Make contact (NO)	–	–	–
5986	F	SLT error message input L1 Off ¦ Always ¦ Automatically	Automatically	–	–	–
6014	I	Function mixing group 1 Multifunctional ¦ Heating circuit 1 ¦ Return controller ¦ Prim cntr/system pump ¦ DHW primary controller ¦ Instantaneous DHW heater ¦ Return temp controller cascade ¦ Cooling circuit ¦ Heating circuit/Cooling circuit 1 ¦ Return controller solid fuel boiler.	Heating circuit 1	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
6085	I	Function output P1 None ¦ Boiler pump Q1 ¦ DHW pump Q3 ¦ DHW interm circ pump Q33 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ Heat circuit pump HC3 Q20 ¦ Collector pump Q5 ¦ Solar pump ext exch K9 ¦ Solar pump buffer K8 ¦ Solar pump swi pool K18 ¦ Collector pump 2 Q16 ¦ Instant WH pump Q34 ¦ Solid fuel boiler pump Q10 ¦ System pump Q14 ¦ Boiler setpoint ¦ Output request ¦ Heat request ¦ Refrigeration request ¦ Burner modulation ¦ El imm heater DHW	None	-	-	-
6086	I	Signal logic output P1 Standard ¦ Inverted	Standard			-
6097	F	Sensor type collector NTC ¦ Pt 1000	NTC	-	-	-
6098	F	Readjustm collector sensor	0	-20	20	°C
6099	F	Readjustm coll sensor 2	0	-20	20	°C
6100	F	Readjustm outside sensor	0	-3,0	3,0	°C
6101	F	Sensor type flue gas temp NTC ¦ Pt 1000	NTC	-	-	-
6102	F	Readjustm flue gas sensor	0	-20	20	°C
6110	F	Time constant building	10	0	50	h
6116	0	Time constant setp compens	0	0	14	min
6117	0	Central setp compensation	10	- - - / 1	100	°C
6118	0	Setpoint drop delay	10	- - - / 1	200	K/min
6120	F	Frost protection plant Off ¦ On	On	-	-	-
6135	F	Air dehumidifier Off ¦ On	Off	-	-	-
6136	F	Release air dehumidifier 24h/day ¦ Time progr HC ¦ Time program 5	24h / day	-	-	-
6137	F	Air dehumidifier r.h. on	55	0	100	%
6138	F	Air dehumidifier r.h. SD	5	2	50	%
6140	0	Water pressure max	3	- - - / 0.0	10,0	bar
6141	0	Water pressure min	0,8	- - - / 0.0	10,0	bar
6142	0	Water pressure critical min	0,5	- - - / 0.0	10,0	bar
6148	F	Static press supervision 1 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	None	-	-	-
6150	0	Water pressure 2 max	3	- - - / 0.0	10,0	bar
6151	0	Water pressure 2 min	0,8	- - - / 0.0	10,0	bar
6152	0	Water press 2 critical min	0,5	- - - / 0.0	10,0	bar
6154	F	Static press supervision 2 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	None	-	-	-
6180	0	Water pressure 3 max	3	- - - / 0.0	10,0	bar
6181	0	Water pressure 3 min	0,8	- - - / 0.0	10,0	bar
6182	0	Water press 3 critical min	0,5	- - - / 0.0	10,0	bar
6184	F	Static press supervision 3 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	None	-	-	-
6200	I	Save sensors No ¦ Yes	No	-	-	-

Operating line	User level	Function	Default value	Min	Max	Unit
6204	F	Save parameters No ¦ Yes	No	–	–	–
6205	F	Reset to default parameters No ¦ Yes	No	–	–	–
6212	I	Check no. heat source 1	–	0	199999	–
6213	I	Check no. heat source 2	–	0	199999	–
6215	I	Check no. storage tank	–	0	199999	–
6217	I	Check no. heating circuits	–	0	199999	–
6220	I	Software version	–	0	99,9	–
6222	0	Device hours run	0	0	65535	h
6270	F	Excess heat discharge temp	95	20	350	°C
6271	F	SD excess heat discharge	4	0	50	°C
6272	F	Excess heat discharge sens None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ Buffer st tank sensor B4 ¦ Buffer st tank sensor B41 ¦ Flue gas sensor B8 ¦ Common flow temperature sensor B10 ¦ Solid fuel boiler sensor B22 ¦ Buffer st tank sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solid fuel return sensor B72 ¦ Boiler sensor B2 ¦ DHW sensor B3.	None	–	–	–
6273	F	Excess heat dischar dur min	0	0	42	min
6275	F	Pump/valve kick K11 Off ¦ On	On	–	–	–
		Room sensors 10V at Hx				
6290	I	Acquisition room temp 1 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3				
6291	I	Acquisition room temp 2 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	Nessuna	–	–	–
6292	I	Acquisition room temp 3 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	Nessuna	–	–	–
6293	I	Acquisition room rh 1 None ¦ With input H1 ¦ With input H2 module 1 ¦ With input H2 module 2 ¦ With input H2 module 3 ¦ With input H21 module 1 ¦ With input H21 module 2 ¦ With input H21 module 3 ¦ With input H22 module 1 ¦ With input H22 module 2 ¦ With input H22 module 3 ¦ With input H3	Nessuna	–	–	–
		Constant values /P				
6311	I	PWM signal constant value P1	---	---/0	100	%
6345	0	Code commissioning	0	0	99999	–
6346	0	Code engineer	0	0	99999	–
6358	F	Voltage output GX1 5 Volt ¦ 12 Volt	5 Volt	–	–	–
6570	F	Part diagram heating circ 1	–		–	
6571	F	Part diagram cooling circ 1	–		–	
6572	F	Part diagram heating circ 2	–		–	
6574	F	Part diagram heating circ 3	–		–	
6579	F	Part diagram consum circ 1	–		–	
6580	F	Part diagram consum circ 2	–		–	
6581	F	Part diagram swimm pool circ	–		–	
6582	F	Partial diagram swimming pool	–		–	
6583	F	Part diagram prim contr/pu	–		–	
6585	F	Partial diagram boiler	–		–	
6587	F	Part diagram suppl source	–		–	
6588	F	Part diagram pr'less header	–		–	
6598	F	Cascade state Inactive ¦ Active	Active		–	

Operating line	User level	Function	Default value	Min	Max	Unit
6590	F	Partial diagram solar	–		–	
6591	F	Part diagram solid fuel boil	–		–	
6592	F	Part diagram buffer tank	–		–	
6593	F	Part diagram DHW tank	–		–	
6594	F	Part diagram instant WH	–		–	
		LPB system				
6600	I	Device address	1	0	16	–
6601	F	Segment address	0	0	14	–
6604	F	Bus power supply function Off ¦ Automatically	Automatically	–	–	–
6605	F	Bus power supply state Off ¦ On	On	–	–	–
6610	0	Display system messages No ¦ Yes	Yes	–	–	–
6612	0	Alarm delay	– – –	– – – / 2	60	min
6620	F	Action changeover functions Segment ¦ System	System	–	–	–
6621	F	Summer changeover Locally¦ Centrally	Local	–	–	–
6623	F	Optg mode changeover Locally ¦ Centrally	Centrally	–	–	–
6624	F	Manual source lock Lokal ¦ Segment	Local	–	–	–
6625	F	DHW assignment Local HCs ¦ All HCs in segment ¦ All HCs in system	All HCs in system	–	–	–
6627	F	Refrigeration request Locally¦ Centrally	Local	–	–	–
6630	F	Cascade master Always ¦ Automatically	Automatically	–	–	–
6631	F	Ext source in Eco mode Off ¦ On DHW ¦ On	On	–	–	–
6632	F	Note OT limit ext source No ¦ Yes	No	–	–	–
6640	I	Clock mode Autonomously ¦ Slave without remote setting ¦ Slave with remote setting ¦ Master	Autonomously	–	–	–
6650	F	Outside temp source	0	0	239	–
		Fault				
6710	I	Reset alarm relay No ¦ Yes	No	–	–	–
6740	F	Flow temp 1 alarm	– – –	– – – / 10	240	min
6741	F	Flow temp 2 alarm	– – –	– – – / 10	240	min
6742	F	Flow temp 3 alarm	– – –	– – – / 10	240	min
6743	F	Boiler temp alarm	– – –	– – – / 10	240	min
6745	F	DHW charging alarm	– – –	– – – / 1	48	h
6746	F	Flow temp cooling 1 alarm	– – –	– – – / 10	240	min
6800	F	History 1	–	–	–	–
6801	F	Error code 1	–	0	255	–
6802	F	History 2	–	–	–	–
6803	F	Error code 2	–	0	255	–
6804	F	History 3	–	–	–	–
6805	F	Error code 3	–	0	255	–
6806	F	History 4	–	–	–	–
6807	F	Error code 4	–	0	255	–
6808	F	History 5	–	–	–	–
6809	F	Error code 5	–	0	255	–
6810	F	History 6	–	–	–	–
6811	F	Error code 6	–	0	255	–
6812	F	History 7	–	–	–	–
6813	F	Error code 7	–	0	255	–
6814	F	History 8	–	–	–	–
6815	F	Error code 8	–	0	255	–

Operating line	User level	Function	Default value	Min	Max	Unit
6816	F	History 9	–	–	–	–
6817	F	Error code 9	–	0	255	–
6818	F	History 10	–	–	–	–
6819	F	Error code 10	–	0	255	–
6820	0	Reset history No ¦ Yes	No	–	–	–
		Service / special operation				
7040	F	Burner hours interval	– – –	– – – / 10 / 100	10000	h
7041	F	Burn hrs since maintenance	0	0	10000	h
7042	F	Burner start interval	– – –	– – – / 60 / 100	65535	–
7043	F	Burn starts since maint	0	0	65535	–
7044	F	Maintenance interval	– – –	– – – / 1	240	months
7045	F	Time since maintenance	0	0	240	months
7053	F	Flue gas temp limit	– – –	– – – / 0	350	°C
7054	F	Delay flue gas message	0	0	120	min
7056	F	DHW scalding risk	70	40	80	°C
7119	F	Economy function Locked ¦ Released	Locked	–	–	–
7120	E	Economy mode Off ¦ On	Off	–	–	–
7130	E	Chimney sweep function Off ¦ On	Off	–	–	–
7140	E	Manual control Off ¦ On	Off	–	–	–
7150	I	Simulation outside temp	–	-50,0	50	°C
7167	F	Commissioning wizard Off ¦ On	Off	–	–	–
7170	I	Telephone customer service	–	–	–	–
		Config extension module				
–		**Module 1**				
7300	F	Function extension module 1 None ¦ Multifunctional ¦ Heating circuit 1 ¦ Heating circuit 2 ¦ Heating circuit 3 ¦ Return temp controller ¦ Solar DHW ¦ Primary contr/ system pump ¦ DHW primary controller ¦ Instantaneous water heater ¦ Return temp contr cascade ¦ Cooling circuit 1 ¦ Heating circ/cooling circ 1 ¦ Solid fuel boiler	–	–	–	–
7301	F	Relay output QX21 module 1 None ¦ Circulating pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circuit pump VK1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump speed HC1 Q21 ¦ 2nd pump speed HC2 Q22 ¦ 2nd pump speed HC3 Q23 ¦ Heat circuit pump HC3 Q20 ¦ Cons circuit pump VK2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Time program 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext exch K9 ¦ Solar ctrl elem buffer K8 ¦ Solar ctrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swimming pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW interm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Air dehumidifier K29 ¦ Div valve HC/CC1 Y21 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Instant WH ctrl elem Q34 ¦ Suppl source control K32 ¦ Overtemperature protection K11	–	–	–	–
7302	F	Relay output QX22 module 1 0L 7301	–	–	–	–
7303	F	Relay output QX23 module 1 0L 7301	–	–	–	–
7307	F	Sensor input BX21 module 1 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer sensor B4 ¦ Buffer sensor B41 ¦ Flue gas temp sensor B8 ¦ Common flow sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel boil ret sens B72	–	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
7308	F	Sensor input BX22 module 1 OL 7307	-	-	-	-
7311	F	Function input H2 module 1 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Heat gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ'pump thermostat ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measure-ment 10V	Optg mode change HCs+DHW	-	-	-
7312	F	Contact type H2 module 1 NC ¦ NO	NO	-	-	-
7314	F	Voltage value 1 H2 module 1	0	0	10	V
7315	F	Funct value 1 H2 module 1	0	-100	500	-
7316	F	Voltage value 2 H2 module 1	10	0	10	V
7317	F	Funct value 2 H2 module 1	100	-100	500	-
7318	F	Temp sensor H2 module 1 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7321	F	Function input H21 module 1 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Het gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ pump thermostat ¦ Pulse count ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Flow measurement Hz ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measurement 10V	-	-	-	-
7322	F	Contact type H21 module 1 NC ¦ NO	NO	-	-	-
7324	F	Input value 1 H21 module 1	0	0	1000	-
7325	F	Funct value 1 H21 module 1	0	-100	500	-
7326	F	Input value 2 H21 module 1	10	0	1000	-
7327	F	Funct value 2 H21 module 1	100	-100	500	-
7328	F	Temp sensor H21 module 1 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7331	F	Function input H22 module 1 OL 7321	-	-	-	-
7332	F	Contact type H22 module 1 NC ¦ NO	NO	-	-	-
7334	F	Input value 1 H22 module 1	0	0	1000	-
7335	F	Funct value 1 H22 module 1	0	-100	500	-
7336	F	Input value 2 H22 module 1	10	0	1000	-
7337	F	Funct value 2 H22 module 1	100	-100	500	-
7338	F	Temp sensor H22 module 1 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7341	F	Voltage out GX21 module 1 5 Volt ¦ 12 Volt	5 Volt	-	-	-
7342	I	Funct input EX21 module 1 None ¦ Counter 1st burner stage ¦ Heat gen lock ¦ Error/alarm mes-sage ¦ Excess heat discharge	-	-	-	-
7343	0	Cont type inp EX21 module 1 NC ¦ NO	NO	-	-	-

Operating line	User level	Function	Default value	Min	Max	Unit
7348	F	Funct output UX21 module 1 None ¦ Boiler pump Q1 ¦ DHW pump Q3 ¦ DHW interm circ pump Q33 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ Heat circuit pump HC3 Q20 ¦ Collector pump Q5 ¦ Solar pump ext exch K9 ¦ Solar pump buffer K8 ¦ Solar pump swi pool K18 ¦ Collector pump 2 Q16 ¦ Instant WH pump Q34 ¦ Solid fuel boiler pump Q10 ¦ Boiler setpoint ¦ Output request ¦ Heat request ¦ Refrigeration request ¦ Burner modulation	–	–	–	–
7349	F	Sign logic out UX21 module1 Standard ¦ Inverted	Standard	–	–	–
7350	F	Signal output UX21 module 1 0..10V ¦ PWM	0,,10V	–	–	–
7351	F	Funct val 1 UX21 module 1	0	0	100	–
7352	F	Output val 1 UX21 module 1	0	0	10	V
7353	F	Funct val 2 UX21 module 1	100	0	100	–
7354	F	Temp val 10V UX21 module1	100	5	130	°C
7369	F	Const value UX21 Modul 1	---	---/0	100	%
7355	F	Funct output UX22 module 1 OL 7348	–	–	–	–
7356	F	Sign logic out UX22 module1 Standard ¦ Inverted	Standard	–	–	–
7357	F	Signal output UX22 module 1 0..10V ¦ PWM	0,,10V	–	–	–
7358	F	Funct val 1 UX22 module 1	0	0	100	–
7359	F	Output val 1 UX22 module 1	0	0	10	V
7360	F	Funct val 2 UX22 module 1	100	0	100	–
7361	F	Temp val 10V UX22 module1	100	5	130	°C
7373	F	Const value UX22 Modul 1	---	---/0	100	%
–		**Module 2**				
7375	F	Function extension module 2 None ¦ Multifunctional ¦ Heating circuit 1 ¦ Heating circuit 2 ¦ Heating circuit 3 ¦ Return temp controller ¦ Solar DHW ¦ Primary contr/system pump ¦ DHW primary controller ¦ Instantaneous water heater ¦ Return temp contr cascade ¦ Cooling circuit 1 ¦ Heating circ/cooling circ 1 ¦ Solid fuel boiler	–	–	–	–
7376	F	Relay output QX21 module 2 None ¦ Circulating pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circuit pump VK1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump speed HC1 Q21 ¦ 2nd pump speed HC2 Q22 ¦ 2nd pump speed HC3 Q23 ¦ Heat circuit pump HC3 Q20 ¦ Cons circuit pump VK2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Time program 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext exch K9 ¦ Solar ctrl elem buffer K8 ¦ Solar ctrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swimming pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW interm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Air dehumidifier K29 ¦ Div valve HC/CC1 Y21 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Instant WH ctrl elem Q34 ¦ Suppl source control K32 ¦ Overtemperature protection K11	–	–	–	–
7377	F	Relay output QX22 module 2 OL 7376	–	–	–	–
7378	F	Relay output QX23 module 2 OL 7376	–	–	–	–
7382	F	Sensor input BX21 module 2 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer sensor B4 ¦ Buffer sensor B41 ¦ Flue gas temp sensor B8 ¦ Common flow sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel boil ret sens B72	–	–	–	–
7383	F	Sensor input BX22 module 2 OL 7382	–	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
7386	F	Function input H2 module 2 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Heat gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ'pump thermostat ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measurement 10V	-	-	-	-
7387	F	Contact type H2 module 2 NC ¦ NO	NO	-	-	-
7389	F	Voltage value 1 H2 module 2	0	0	10	V
7390	F	Funct value 1 H2 module 2	0	-100	500	-
7391	F	Voltage value 2 H2 module 2	10	0	10	V
7392	F	Funct value 2 H2 module 2	100	-100	500	-
7393	F	Temp sensor H2 module 2 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7396	F	Function input H21 module 2 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Het gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ pump thermostat ¦ Pulse count ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Flow measurement Hz ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measurement 10V	-	-	-	-
7397	F	Contact type H21 module 2 NC ¦ NO	NO	-	-	-
7399	F	Input value 1 H21 module 2	0	0	1000	-
7400	F	Funct value 1 H21 module 2	0	-100	500	-
7401	F	Input value 2 H21 module 2	10	0	1000	-
7402	F	Funct value 2 H21 module 2	100	-100	500	-
7403	F	Temp sensor H21 module 2 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7406	F	Function input H22 module 2 OL 7396	-	-	-	-
7407	F	Contact type H22 module 2 NC ¦ NO	NO	-	-	-
7409	F	Input value 1 H22 module 2	0	0	1000	-
7410	F	Funct value 1 H22 module 2	0	-100	500	-
7411	F	Input value 2 H22 module 2	10	0	1000	-
7412	F	Funct value 2 H22 module 2	100	-100	500	-
7413	F	Temp sensor H22 module 2 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	-	-	-
7416	F	Voltage out GX21 module 2 5 Volt ¦ 12 Volt	5 Volt	-	-	-
7417	I	Funct input EX21 module 2 None ¦ Counter 1st burner stage ¦ Heat gen lock ¦ Error/alarm message ¦ Excess heat discharge	-	-	-	-
7418	0	Cont type inp EX21 module 2 NC ¦ NO	NO	-	-	-
7423	F	Funct output UX21 module 2 None ¦ Boiler pump Q1 ¦ DHW pump Q3 ¦ DHW interm circ pump Q33 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ Heat circuit pump HC3 Q20 ¦ Collector pump Q5 ¦ Solar pump ext exch K9 ¦ Solar pump buffer K8 ¦ Solar pump swi pool K18 ¦ Collector pump 2 Q16 ¦ Instant WH pump Q34 ¦ Solid fuel boiler pump Q10 ¦ Boiler setpoint ¦ Output request ¦ Heat request ¦ Refrigeration request ¦ Burner modulation	-	-	-	-

Operating line	User level	Function	Default value	Min	Max	Unit
7424	F	Sign logic out UX21 module2 Standard ¦ Inverted	Standard	–	–	–
7425	F	Signal output UX21 module 2 0..10V ¦ PWM	0,,10V	–	–	–
7426	F	Funct val 1 UX21 module 2	0	0	100	–
7427	F	Output val 1 UX21 module 2	0	0	10	V
7428	F	Funct val 2 UX21 module 2	100	0	100	–
7429	F	Temp val 10V UX21 module2	100	5	130	°C
7444	F	Const value UX21 Modul 2	---	---/0	100	%
7430	F	Funct output UX22 module 2 OL 7423	–	–	–	–
7431	F	Sign logic out UX22 module2 Standard ¦ Inverted	Standard	–	–	–
7432	F	Signal output UX22 module 2 0..10V ¦ PWM	0,,10V	–	–	–
7433	F	Funct val 1 UX22 module 2	0	0	100	–
7434	F	Output val 1 UX22 module 2	0	0	10	V
7435	F	Funct val 2 UX22 module 2	100	0	100	–
7436	F	Temp val 10V UX22 module2	100	5	130	°C
7448	F	Const value UX22 Modul 2	---	---/0	100	%
–		**Module 3**				
7450	F	Function extension module 3 None ¦ Multifunctional ¦ Heating circuit 1 ¦ Heating circuit 2 ¦ Heating circuit 3 ¦ Return temp controller ¦ Solar DHW ¦ Primary contr/system pump ¦ DHW primary controller ¦ Instantaneous water heater ¦ Return temp contr cascade ¦ Cooling circuit 1 ¦ Heating circ/cooling circ 1 ¦ Solid fuel boiler	–	–	–	–
7451	F	Relay output QX21 module 3 None ¦ Circulating pump Q4 ¦ El imm heater DHW K6 ¦ Collector pump Q5 ¦ Cons circuit pump VK1 Q15 ¦ Boiler pump Q1 ¦ Bypass pump Q12 ¦ Alarm output K10 ¦ 2nd pump speed HC1 Q21 ¦ 2nd pump speed HC2 Q22 ¦ 2nd pump speed HC3 Q23 ¦ Heat circuit pump HC3 Q20 ¦ Cons circuit pump VK2 Q18 ¦ System pump Q14 ¦ Heat gen shutoff valve Y4 ¦ Solid fuel boiler pump Q10 ¦ Time program 5 K13 ¦ Buffer return valve Y15 ¦ Solar pump ext exch K9 ¦ Solar ctrl elem buffer K8 ¦ Solar ctrl elem swi pool K18 ¦ Collector pump 2 Q16 ¦ Swimming pool pump Q19 ¦ Flue gas relay K17 ¦ Assisted firing fan K30 ¦ Cascade pump Q25 ¦ St tank transfer pump Q11 ¦ DHW mixing pump Q35 ¦ DHW interm circ pump Q33 ¦ Heat request K27 ¦ Refrigeration request K28 ¦ Air dehumidifier K29 ¦ Div valve HC/CC1 Y21 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ DHW ctrl elem Q3 ¦ Instant WH ctrl elem Q34 ¦ Suppl source control K32 ¦ Overtemperature protection K11	–	–	–	–
7452	F	Relay output QX22 module 3 OL 7451	–	–	–	–
7453	F	Relay output QX23 module 3 OL 7451	–	–	–	–
7457	F	Sensor input BX21 module 3 None ¦ DHW sensor B31 ¦ Collector sensor B6 ¦ Return sensor B7 ¦ DHW circulation sensor B39 ¦ Buffer sensor B4 ¦ Buffer sensor B41 ¦ Flue gas temp sensor B8 ¦ Common flow sensor B10 ¦ Solid fuel boiler sensor B22 ¦ DHW charging sensor B36 ¦ Buffer sensor B42 ¦ Common return sensor B73 ¦ Cascade return sensor B70 ¦ Swimming pool sensor B13 ¦ Collector sensor 2 B61 ¦ Solar flow sensor B63 ¦ Solar return sensor B64 ¦ DHW outlet sensor B38 ¦ Solid fuel boil ret sens B72	–	–	–	–
7458	F	Sensor input BX22 module 3 OL 7457	–	–	–	–
7461	F	Function input H2 module 3 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Heat gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ'pump thermostat ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measurement 10V	–	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
7462	F	Contact type H2 module 3 NC ¦ NO	NO	–	–	–
7464	F	Voltage value 1 H2 module 3	0	0	10	V
7465	F	Funct value 1 H2 module 3	0	–100	500	–
7466	F	Voltage value 2 H2 module 3	10	0	10	V
7467	F	Funct value 2 H2 module 3	100	–100	500	–
7468	F	Temp sensor H2 module 3 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	–	–	–
7471	F	Function input H21 module 3 None ¦ Optg mode change HCs+DHW ¦ Optg mode changeover DHW ¦ Optg mode changeover HCs ¦ Optg mode changeover HC1 ¦ Optg mode changeover HC2 ¦ Optg mode changeover HC3 ¦ Het gen lock ¦ Error/alarm message ¦ Consumer request VK1 ¦ Consumer request VK2 ¦ Release swi pool source heat ¦ Excess heat discharge ¦ Release swi pool solar ¦ Operating level DHW ¦ Operating level HC1 ¦ Operating level HC2 ¦ Operating level HC3 ¦ Room thermostat HC1 ¦ Room thermostat HC2 ¦ Room thermostat HC3 ¦ DHW flow switch ¦ Circ pump thermostat ¦ Pulse count ¦ Dewpoint monitor ¦ Flow temp setp incr hygro ¦ Boiler return thermostat ¦ Status info suppl source ¦ Charg prio DHW sol fuel boil ¦ Flow measurement Hz ¦ Consumer request VK1 10V ¦ Consumer request VK2 10V ¦ Pressure measurement 10V ¦ Rel room humidity 10V ¦ Room temp 10V ¦ Flow measurement 10V ¦ Temp measurement 10V	–	–	–	–
7472	F	Contact type H21 module 3 NC ¦ NO	NO	–	–	–
7474	F	Input value 1 H21 module 3	0	0	1000	–
7475	F	Funct value 1 H21 module 3	0	–100	500	–
7476	F	Input value 2 H21 module 3	10	0	1000	–
7477	F	Funct value 2 H21 module 3	100	–100	500	–
7478	F	Temp sensor H21 module 3 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	–	–	–
7481	F	Function input H22 module 3 OL 7471	–	–	–	–
7482	F	Contact type H22 module 3 NC ¦ NO	NO	–	–	–
7484	F	Input value 1 H22 module 3	0	0	1000	–
7485	F	Funct value 1 H22 module 3	0	–100	500	–
7486	F	Input value 2 H22 module 3	10	0	1000	–
7487	F	Funct value 2 H22 module 3	100	–100	500	–
7488	F	Temp sensor H22 module 3 None ¦ Solar flow sensor B63 ¦ Solar return sensor B64	None	–	–	–
7491	F	Voltage out GX21 module 3 5 Volt ¦ 12 Volt	5 Volt	–	–	–
7492	I	Funct input EX21 module 3 None ¦ Counter 1st burner stage ¦ Heat gen lock ¦ Error/alarm message ¦ Excess heat discharge	–	–	–	–
7493	0	Cont type EX21 module 3 NC ¦ NO	NO	–	–	–
7498	F	Funct output UX21 module 3 None ¦ Boiler pump Q1 ¦ DHW pump Q3 ¦ DHW interm circ pump Q33 ¦ Heat circuit pump HC1 Q2 ¦ Heat circuit pump HC2 Q6 ¦ Heat circuit pump HC3 Q20 ¦ Collector pump Q5 ¦ Solar pump ext exch K9 ¦ Solar pump buffer K8 ¦ Solar pump swi pool K18 ¦ Collector pump 2 Q16 ¦ Instant WH pump Q34 ¦ Solid fuel boiler pump Q10 ¦ Boiler setpoint ¦ Output request ¦ Heat request ¦ Refrigeration request ¦ Burner modulation	–	–	–	–
7499	F	Sign logic out UX21 module3 Standard ¦ Inverted	Standard	–	–	–
7500	F	Signal output UX21 module 3 0..10V ¦ PWM	0,,10V	–	–	–
7501	F	Funct val 1 UX21 module 3	0	0	100	–
7502	F	Output val 1 UX21 module 3	0	0	10	V
7503	F	Funct val 2 UX21 module 3	100	0	100	–
7504	F	Temp val 10V UX21 module3	100	5	130	°C
7519	F	Const value UX21 Modul 3	---	---/0	100	%
7505	F	Funct output UX22 module 3 OL 7498	–	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
7506	F	Sign logic out UX22 module3 Standard ¦ Inverted	Standard	–	–	–
7507	F	Signal output UX22 module 3 0..10V ¦ PWM	0,,10V	–	–	–
7508	F	Funct val 1 UX22 module 3	0	0	100	–
7509	F	Output val 1 UX22 module 3	0	0	10	V
7510	F	Funct val 2 UX22 module 3	100	0	100	–
7511	F	Temp val 10V UX22 module3	100	5	130	°C
7523	F	Const value UX22 Modul 3	---	---/0	100	%
		Input / output test				
7700	I	Relay test No test ¦ Everything off ¦ Burner stage T2 ¦ DHW pump Q3 ¦ Heating circuit pump Q2 ¦ Heating circ mix valve op Y1 ¦ Heat circ mix valve cl Y2 ¦ Relay output QX1 ¦ Relay output QX21 module 1 ¦ Relay output QX22 module 1 ¦ Relay output QX23 module 1 ¦ Relay output QX21 module 2 ¦ Relay output QX22 module 2 ¦ Relay output QX23 module 2 ¦ Relay output QX21 module 3 ¦ Relay output QX22 module 3 ¦ Relay output QX23 module 3.	No test	–	–	–
7713	I	Output test P1	---	---/0	100	%
7714	I	PWM signal output P1	0	0	100	%
7730	I	Outside temp B9	–	-50,0	50	°C
7732	I	Flow temp B1	–	0,0	140	°C
7750	I	DHW temp B3	–	0,0	140	°C
7760	I	Boiler temp B2	–	0,0	140	°C
7780	F	Output test UX21 module 1	- - -	- - -/ 0	100	%
7781	F	Output signal UX21 module 1	0	0	100	–
7781	F	[Output signal UX21 module 1] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7782	F	Output test UX22 module 1	- - -	- - -/ 0	100	%
7783	F	Output signal UX22 module 1	0	0	100	–
7783	F	[Output signal UX22 module 1] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7784	F	Output test UX21 module 2	- - -	- - -/ 0	100	%
7785	F	Output signal UX21 module 2	0	0	100	–
7785	F	[Output signal UX21 module 2] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7786	F	Output test UX22 module 2	- - -	- - -/ 0	100	%
7787	F	Output signal UX22 module 2	0	0	100	–
7787	F	[Output signal UX22 module 2] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7788	F	Output test UX21 module 3	- - -	- - -/ 0	100	%
7789	F	Output signal UX21 module 3	0	0	100	–
7789	F	[Output signal UX21 module 3] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7790	F	Output test UX22 module 3	- - -	- - -/ 0	100	%
7791	F	Output signal UX22 module 3	0	0	100	–
7791	F	[Output signal UX22 module 3] None ¦ Closed (ooo), Open (- - -) ¦ Pulse ¦ Frequency Hz ¦ Voltage V ¦ PWM %	None	–	–	–
7804	I	Sensor temp BX1	0	-28.0	350	°C
7805	I	Sensor temp BX2	0	-28.0	350	°C
7808	I	Sensor temp BX5	0	-28.0	350	°C
7830	I	Sensor temp BX21 module 1	0	-28	350	°C
7831	I	Sensor temp BX22 module 1	0	-28	350	°C
7832	I	Sensor temp BX21 module 2	0	-28	350	°C
7833	I	Sensor temp BX22 module 2	0	-28	350	°C
7834	I	Sensor temp BX21 module 3	0	-28	350	°C
7835	I	Sensor temp BX22 module 3	0	-28	350	°C
7844	F	Input signal H1	0	0	65535	–

Operating line	User level	Function	Default value	Min	Max	Unit
7844	F	[Output signal H1] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7845	F	Input signal H2 module 1	0	0	65535	–
7845	F	[Output signal H2 module 1] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7845	F	Input signal H21 module 1	0	0	65535	–
7845	F	[Output signal H21 module 1] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7846	F	Input signal H22 module 1	0	0	65535	–
7846	F	[Output signal H22 module 1] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7847	F	Input signal H2 module 2	0	0	65535	–
7847	F	[Output signal H2 module 2] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7847	F	Input signal H21 module 2	0	0	65535	–
7847	F	[Output signal H21 module 2] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7848	F	Input signal H22 module 2	0	0	65535	–
7848	F	[Output signal H22 module 2] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7849	F	Input signal H2 module 3	0	0	65535	–
7849	F	[Output signal H2 module 3] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7849	F	Input signal H21 module 3	0	0	65535	–
7849	F	[Output signal H21 module 3] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7850	F	Input signal H22 module 3	0	0	65535	–
7850	F	[Output signal H22 module 3] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7858	F	Input signal H3	0	0	65535	–
7858	F	[Output signal H3] None ¦ Closed (ooo), Open (– – –) ¦ Pulse ¦ Frequency Hz ¦ Voltage V	None	–	–	–
7870	I	Burner fault S3 0V ¦ 230V	–	–	–	–
7881	I	1st burner stage E1 0V ¦ 230V	–	–	–	–
7884	I	SLT error message L1 0V ¦ 230V		–	–	–
7950	I	Input EX21 module 1 0V ¦ 230V	0V	–	–	–
7951	I	Input EX21 module 2 0V ¦ 230V	0V	–	–	–
7952	I	Input EX21 module 3 0V ¦ 230V	0V	–	–	–
		State				
8000	I	State heating circuit 1	–	–	–	–
8001	I	State heating circuit 2	–	–	–	–
8002	I	State heating circuit 3	–	–	–	–
8003	I	State DHW	–	–	–	–
8004	I	State cooling circuit 1	–	–	–	–
8005	I	State boiler	–	–	–	–
8007	I	State solar	–	–	–	–
8008	I	State solid fuel boiler	–	–	–	–
8010	I	State buffer	–	–	–	–
8011	I	State swimming pool	–	–	–	–
8022	I	State supplementary source	–	–	–	–
8030	I	State consumer circuit 1	–			–
8031	I	State consumer circuit 2	–			–

Operating line	User level	Function	Default value	Min	Max	Unit
Diagnostics cascade						
8100 ÷ 8130	I	Priority/state source 1...16	–	–	–	–
8101 ÷ 8131	I	State source 1...16 Missing ¦ Faulty ¦ Manual control active ¦ Heat generation lock active ¦ Chimney sweep funct active ¦ DHW separate circuit active8) ¦ Temporarily unavailable7) ¦ Outside temp limit active ¦ Not released ¦ Released	–	–	–	–
8138	I	Cascade flow temp	0	0	140	°C
8139	I	Cascade flow temp setp	0	0	140	°C
8140	I	Cascade return temp	0	0	140	°C
8141	I	Cascade return temp setp	0	0	140	°C
8150	I	Source seq ch'over current	0	0	990	h
Diagnostics, heat generation						
8300	I	1st burner stage T2 Off ¦ On	–	–	–	–
8301	I	2nd burner stage Off ¦ On	–	–	–	–
8304	I	Boiler pump Q1 On ¦ Off	–	–	–	–
8308	I	Boiler pump speed	0	0	100	%
8310	I	Boiler temp	–	0,0	140,0	°C
8311	I	Boiler setpoint	–	0,0	140,0	°C
8312	I	Boiler switching point	0	0	140	°C
8314	I	Boiler return temp	–	0,0	140,0	°C
8315	I	Boiler return temp setpoint	0	0	140	°C
8316	I	Flue gas temp	0	0	350	°C
8318	I	Flue gas temp max	0	0	350	°C
8326	I	Burner modulation	0	0	100	%
8330	F	Hours run 1st stage	0	0	65535	h
8331	F	Start counter 1st stage	–	0	199'999	–
8332	F	Hours run 2nd stage	0	0	65535	h
8333	F	Start counter 2nd stage	0	0	199999	–
8499	F	Collector pump 1	–	Off	On	–
8510	I	Collector temp 1	–	-28,0	350	°C
8511	I	Collector temp 1 max	0	-28,0	350	°C
8512	I	Collector temp 1 min	0	-28,0	350	°C
8513	I	ΔT collector 1/DHW	–	-168,0	350	°C
8514	I	ΔT collector 1/buffer	–	-168,0	350	°C
8515	I	ΔT collector 1/swimming pool	0	-168,0	350	°C
8519	I	Solar flow temp	0	-28,0	350	°C
8520	I	Solar return temp	0	-28,0	350	°C
8521	I	Solar throughput	0	0	500	l/min
8526	E	24-hour yield solar energy	0	0	999,9	kWh
8527	E	Total yield solar energy	0	0	9999999.9	kWh
8530	F	Hours run solar yield	–	0	65535	h
8531	F	Hours run collect overtemp	–	0	65535	h
8542	F	Collector pump 2	–	Off	On	–
8547	I	Collector temp 2	0	-28	350	°C
8548	I	Collector temp 2 max	-28	-28	350	°C
8549	I	Collector temp 2 min	3500	-28	350	°C
8550	I	ΔT collector 2/DHW	0	-168	350	°C
8551	I	ΔT collector 2/buffer	0	-168	350	°C
8552	I	ΔT collector 2/swimming pool	0	-168	350	°C
8560	I	Solid fuel boiler temp	0	0	140	°C
8561	I	Solid fuel boiler setpoint	0	0	140	°C
8563	I	Solid fuel boiler return temp	0	0	140	°C
8564	I	Solid fuel boiler return setp	0	0	140	°C
8568	I	Speed solid fuel boiler pump	0	0	100	%

Operating line	User level	Function	Default value	Min	Max	Unit
8570	E	Hours run solid fuel boiler	0	0	65535	h
Diagnostics, consumers						
8700	I	Outside temp	–	-50,0	50,0	°C
8701	I	Minimum detected outside temperature	–	–	–	–
8702	I	Maximum detected outside temperature	–	–	–	–
8703	I	Outside temp attenuated	–	-50,0	50,0	°C
8704	I	Outside temp composite	–	-50,0	50,0	°C
8720	I	Rel room humidity	–	0	100	%
8721	I	Room temperature	–	0	50	°C
8722	I	Dewpoint temp 1	–	0	50	°C
8723	I	Relative air humidity	–	0	100	%
8730	I	Heating circuit pump 1 Off ¦ On	–	–	–	–
8731	I	Heat circ mix valve op Y1 Off ¦ On	–	–	–	–
8732	I	Heat circ mix valve cl Y2 Off ¦ On	–	–	–	–
8735	I	Speed heating circuit pump 1	0	0	100	%
8739	E	Relative room humidity 1	0	0	100	%
8740	I	Room temp 1	–	0,0	50,0	°C
8741	I	Room setpoint 1	–	4,0	35,0	°C
8742	0	Room temp 1 model	–	0,0	50,0	°C
8743	I	Flow temp 1	–	0,0	140,0	°C
8744	I	Flow temp setpoint 1	–	0,0	140,0	°C
8747	I	Dewpoint temp 1	–	0	50.0	°C
8749	I	Room thermostat 1 No demand ¦ Demand	No demand	–	–	–
8751	I	Cooling circuit pump 1 Off ¦ On	–	–	–	–
8752	I	Cool circ mix valve 1 open Off ¦ On	–	–	–	–
8753	I	Cool circ mix valve 1 close Off ¦ On	–	–	–	–
8754	I	Diverting valve cooling 1 Off ¦ On	–	–	–	–
8756	I	Flow temp cooling 1	–	0	140	°C
8757	I	Flow temp setp cooling 1	–	0	140	°C
8760	I	Heating circuit pump 2 Off ¦ On	–	–	–	–
8761	I	Heat circ mix valve 2 open Off ¦ On	–	–	–	–
8762	I	Heat circ mix valve 2 close Off ¦ On	–	–	–	–
8765	I	Speed heating circuit pump 2	0	0	100	%
8770	I	Room temp 2	–	0,0	50	°C
8771	I	Room setpoint 2	–	4,0	35	°C
8772	0	Room temp 2 model	–	0,0	50	°C
8773	I	Flow temp 2	–	0,0	140	°C
8774	I	Flow temp setpoint 2	–	0,0	140	°C
8779	I	Room thermostat 1 No demand ¦ Demand	No demand	–	–	–
8790	I	Heating circuit pump 3 Off ¦ On	–	–	–	–
8791	I	HC mixing valve 3 open	–	–	–	–
8792	I	HC mixing valve 3 closed	–	–	–	–
8795	I	Speed heating circuit pump 3	0	0	100	%
8800	I	Room temp 3	–	0,0	50	°C
8801	I	Room setpoint 3	–	4,0	35	°C
8802	0	Room temp 3 model	–	0,0	50	°C
8803	I	Flow temp setpoint 3	–	0,0	140	°C
8804	I	Flow temp 3	–	0,0	140	°C

Operating line	User level	Function	Default value	Min	Max	Unit
8809	I	Room thermostat 3 No demand ¦ Demand	No demand	–	–	–
8820	I	DHW pump Off ¦ On	–	–	–	–
8825	I	Speed DHW pump	0	0	100	%
8826	I	Speed DHW interm circ pump	0	0	100	%
8827	I	Speed inst DHW heater pump	0	0	100	%
8830	I	DHW temp 1	–	0,0	140	°C
8831	I	DHW temp setpoint	–	8,0	80	°C
8832	I	DHW temp 2	–	0,0	140	°C
8835	I	DHW circulation temp	–	0,0	140	°C
8836	I	DHW charging temp	0	0	140	°C
8850	I	DHW primary controller temp	0	0	140	°C
8851	I	DHW primary controller setp	0	0	140	°C
8852	I	DHW consumption temp	0	0	140	°C
8853	I	Instant WH setpoint	0	0	140	°C
8875	I	Flow temp setp VK1	5	5	130	°C
8885	I	Flow temp setp VK2	5	5	130	°C
8895	I	Flow temp setp swimming pool	5	5	130	°C
8900	I	Swimming pool temp	0	0	140	°C
8901	I	Swimming pool setpoint	24	8	80	°C
8921	I	System pump speed	0	0	100	%
8930	I	Primary controller temp	–	0,0	140,0	°C
8931	I	Primary controller setpoint	–	0,0	140,0	°C
8950	I	Common flow temp	–	0,0	140,0	°C
8951	I	Common flow temp setpoint	–	0,0	140,0	°C
8952	I	Common return temp	0	0	140	°C
8957	I	Common flow setp refrig	0	0	140	°C
8962	I	Common output setpoint	0	0	100	%
8980	I	Buffer temp 1	–	0,0	140,0	°C
8981	I	Buffer setpoint	0	0	140	°C
8982	I	Buffer temp 2	–	0,0	140,0	°C
8983	I	Buffer temp 3	0	0	140	°C
9005	I	Water pressure 1	–	0,0	10,0	bar
9006	I	Water pressure 2	–	0,0	10,0	bar
9009	I	Water pressure 3	0	0	10	bar
9010	I	Measurement room temp 1	0	0	50	°C
9011	I	Measurement room temp 2	0	0	50	°C
9012	I	Measurement room temp 3	0	0	50	°C
9016	I	Special temp 1	0	0	140	°C
9017	I	Special temp 2	0	0	140	°C
9031	I	Relay output QX1 Off ¦ On	–	–	–	–
9032	I	Relay output QX2 Off ¦ On	–	–	–	–
9033	I	Relay output QX3 Off ¦ On	–	–	–	–
9034	I	Relay output QX4 Off ¦ On	–	–	–	–
9035	I	Relay output QX5 Off ¦ On	–	–	–	–
9050	I	Relay output QX21 module 1 Off ¦ On	–	–	–	–
9051	I	Relay output QX22 module 1 Off ¦ On	–	–	–	–
9052	I	Relay output QX23 module 1 Off ¦ On	–	–	–	–
9053	I	Relay output QX21 module 2 Off ¦ On	–	–	–	–
9054	I	Relay output QX22 module 2 Off ¦ On	–	–	–	–

Operating line	User level	Function	Default value	Min	Max	Unit
9055	I	Relay output QX23 module 2 Off ¦ On	–	–	–	–
9056	I	Relay output QX21 module 3 Off ¦ On	–	–	–	–
9057	I	Relay output QX22 module 3 Off ¦ On	–	–	–	–
9058	I	Relay output QX23 module 3 Off ¦ On	–	–	–	–

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