User Manual
for the operator

AQUATOP T/ AEROTOP T/ AEROTOP G/ HIDRON HT
Heat Pump Controller LOGON B WP61 B

05.2011 Art. No. 12 096 697 GB

Table of Contents

Basic Information

Brief Description/Features/Functions

Brief Description
The heat pump controller LOGON B WP61 is a climate-based digital heating control unit for a mixed heating circuit, sliding heating circuit, as well as for potable water preparation. The heat pump is controlled at the same time as well. Various additional functions can be activated.
The control unit calculates based on the outside temperature sensor the necessary set-point temperatures for the heat pump and heating circuits and controls the potable water preparation. Optimization functions that can be additionally activated allow for optional energy savings.

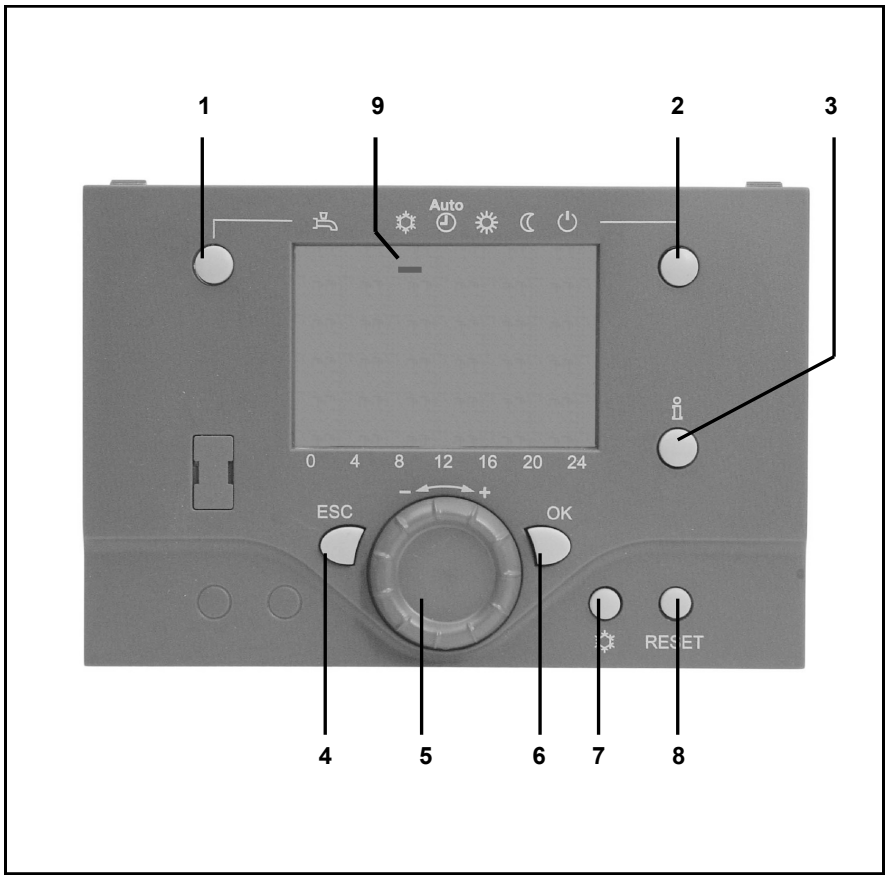
Features
The heat pump controller has the following functions:

- Operating mode heating, potable water
- Set-point setting for heater, potable water
- Info key
- Cooling function

Functions:
Climate-based heat pump controller for max. one sliding and one mixed circuit. Potable water control with release and set-point setting.

- Addable time controlled circulation pump
- Potable water solar control with collector protection function and heat exchanger option (recooling)
- Relay and sensor test for initial startup
- Illuminated display for status and function displays in plain text, 6 languages
- Automatic daylight savings switching
- Preset standard timed programs for heating and potable water preparation
- Customized switching program with max. 84 free switching times based on the controller and system configuration
- Vacation program for each heating circuit
- Buffer storage management
- Generator block
- Solar heating support
- Room temperature control with add-on equipment
- QAA 75 with 2-wire bus
- Setting of radiator or floor heating circuits with program adjustments
- Addable automatic heating curve adaptation
- Heating optimization with rapid heating, addable
- Demand-based heating switch off
- Adjustable min. and max. flow temperatures
- Pump overrun
- Integrated operating hours counter
- Energie meter
- Thermal disinfection of potable water, addable (Legionella mode)
- 2-wire bus interface for additional controller equipment
- Compatible with LPB bus

Control Elements



Operating Mode Key Potable Water (1)
To switch potable water preparation on and off. (Bar in display below water faucet.)

Operating Mode Key Heating Circuit(s) (2)
Sets 4 different heating operating modes:
Auto time: Automatic operating mode acc. to timer program
Sun 24-hr: Heating to comfort set-point
Moon 24-hr: Heating to reduced comfort set-point protect. mode: Heater is off, frost protection function activated

Info Key (3)
Displays the following information without affecting control: Temperatures, operating mode heating/potable water, error messages

Room Temperature Control Knob (5)
- To change the room comfort temperature
- Use this rotary knob to select and change settings during the programming step.

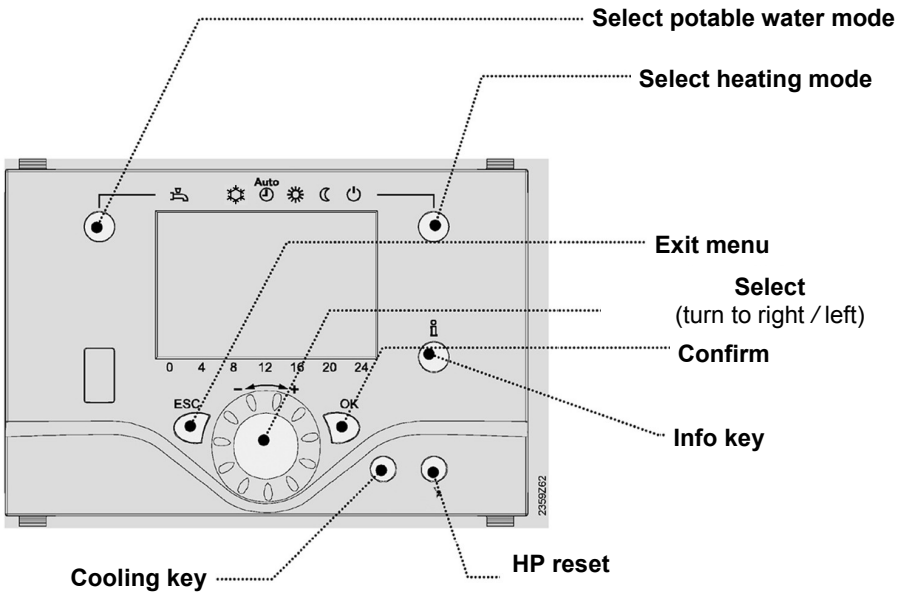
Confirmation Key OK (6)
BACK Key ESC (4)
These two keys are needed together with the large rotary knob -/+ for programming and configuring the controller. Settings not adjustable with the control elements are changed through programming.
Press the ESC key to jump one step back. Set or adjusted values are not applied with this action.
To open the next control level or to save changed values, press the OK key.

Cooling Key (7)
Use the cooling key to select the "Cooling" operating mode. Cooling is based on the timer program and the cooling temperature set-point.

Heat Pump Reset Key
Heat Pump Defrost Function (8)
Briefly press this key to rest the heat pump error messages. Press this key longer than 3 seconds to trigger manually the defrost function for air/water heat pumps.

Cooling Operation Display (9)
The bar underneath this icon indicates whether cooling mode is released.

Programming Display Description



Heating to comfort set-point

Heating to reduced comfort set-point

Heating to frost protection set-point

Process running – please wait

Error messages

INFO Info level activated

PROG Programming active

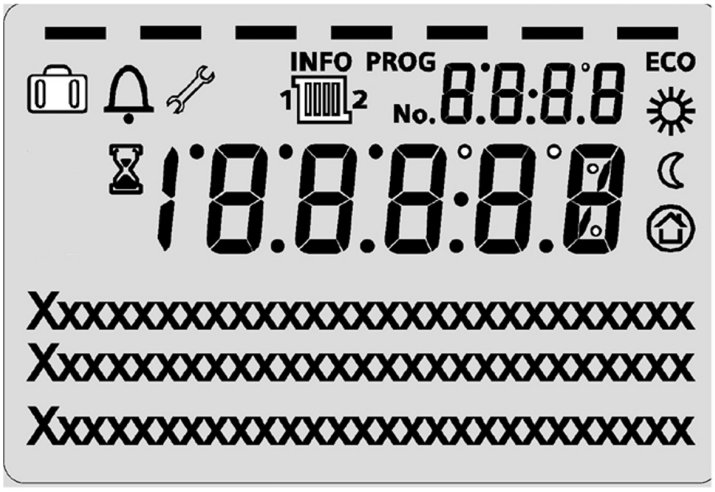
ECO Heater temporarily switched off
ECO function active

Vacation function active

Refers to heating circuit

Maintenance/special function

No. Number of command line
(parameter number)



Parameterization

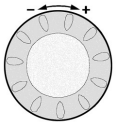
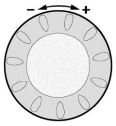
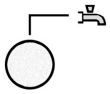
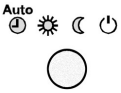
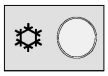
Basic Display
(Key Level)

Press ***OK*** key (1x)

End user

- Select desired setting
- Confirm with ***OK*** key
- Use ***ESC*** key to return to basic display

Brief Overview - Electronic Controller
Main Functions

Key	Action	Steps	Display/Function
	Set desired room temperature	**HC2 together with HC1** Use left/right rotary knob Turn rotary knob again Save with OK key or wait 5 seconds or press ESC key ESC or	Comfort set-point with flashing temperature display Flashing temperature display in steps of 0.5°C from 10.0 to 30°C **Comfort set-point applied** **Comfort set-point not applied** - Basic display is depicted after 3 seconds
	Set room temperature for HC1 or HC2	**HC2 independent from HC1** Use left/right rotary knob OK key Use left/right rotary knob Save with OK key or wait 5 seconds or press ESC key ESC	Select heating circuit Heating circuit is applied Flashing temperature display in steps of 0.5°C from 10.0 to 30°C **Comfort set-point applied** **Comfort set-point not applied** - basic display is depicted after 3 seconds
	Switch potable water mode ON or Off	Press key	**Drinking water mode ON/OFF** (Segment bar under potable water icon visible/hidden) - ON: Drinking water prep. acc. to switching program - OFF: No potable water prep. - Protective functions active
	Change operating mode or cycle	Factory setting Press key 1x Press key again Press key again	**Automatic mode ON**, with: - Heating operation acc. to timer program - Temperature set-point acc. to heating program - Protective functions active - Automatic daylight savings time switching active - ECO functions active (Segment bar under corresponding icon visible) **Cont. heat COMFORT ON**, with: - Heating operation without timer program to comfort set-point - Protective functions active **Cont. heat REDUCED ON**, with: - Heating operation without timer program to reduced set-point - Protective functions active - Automatic daylight savings time switching active - ECO functions active **Protective mode ON**, with: - Heating switched off - Temperature acc. to frost protection - Protective functions active - Automatic daylight savings time switching active - ECO functions active
	Display of var. information	Press key 1x Press key again Press key again ….. Press Esc key ESC	INFO segment is displayed - Boiler status - Room temperature - Solar status - Min. room temperature - Drinking water status - Max. room temperature - Heating circuit 1 status - Outside temp. - Heating circuit 2 status - Min. outside temperature - Heating circuit P status - Max. outside temperature - Time / date - Drinking water temperature 1/2 - Error message - Maintenance message - Flow (supply) temperature - Special operating mode - Customer service phone (Info line display depends on controller type) Return to basic display; INFO segment is hidden
	Activate cooling mode	Press key briefly	In cooling mode, the room temperature is controlled in dependence the timer program and the temperature set-point. In the display, the bar is depicted underneath the ice crystal icon.
	Reset / restart of the heat pump after error messages	Press key briefly	Pending error messages are reset. The switch-on delay is bridged. In normal operation mode, do not press key. Display depicts “Reset heat pump Yes”
	Defrosting the Air heat exchanger	Press key at least 3 seconds	In case of an air/water heat pump, manual air heat exchanger defrosting is possible. After successful defrosting, the heat pump is automatically released.

OK = Confirmation ESC = Cancel or return to basic display

End User - Parameterization

- Basic display "Heat Pump Status"
- Press 1 x OK key
- Use +/- rotary knob to select "Potable Water Menu"
- Press 1 x OK key
- Use +/- rotary knob to select "Parameter No. 1612 Reduced Set-Point," for example from potable water menu
- Press 1 x OK key
- Use +/- rotary knob to change current value
- Press 1 x OK -> value is saved
- Press 2 x ESC key to return to basic display "Heat Pump Status"

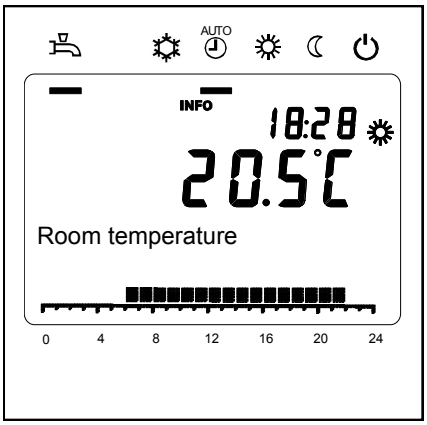
Menu Selection	Command Line	Selection Option	Unit	Min.	Max	Factory Settings
Time and date	1	Hours/minutes	hh:mm	00:00	23.59	`--.--
	2	Day/month	dd:MM	01.01	31.12.	`--.--
	3	Year	yyyy	2004	2099	`--.--
Operator section	20	Language selection	-	English, German, Francais, Italiano, Nederlands, Polski		German
	29	Units	_	°C/bar, °F/PSI		°C/bar
Timer program heating circuit 1	500	Preset value	-	Mon-Sun, Mon-Fri, Sat-Sun	Mon, Tue, Wed, Thu, Fri, Sat, Sun	Mon-Sun
	501	Mon-Sun: Phase 1 ON	hh:mm	00:00	24:00	06:00
	502	Mon-Sun: Phase 1 OFF	hh:mm	00:00	24:00	22:00
	503	Mon-Sun: Phase 2 ON	hh:mm	00:00	24:00	`--.--
	504	Mon-Sun: Phase 2 OFF	hh:mm	00:00	24:00	`--.--
	505	Mon-Sun: Phase 3 ON	hh:mm	00:00	24:00	`--.--
	506	Mon-Sun: Phase 3 OFF	hh:mm	00:00	24:00	`--.--
	515	Copy day	-	Mon, Tue, Wed, Thu, Fri, Sat, Sun		-
	516	Default values	-	Yes	No	No
Timer program heating circuit 2 (only if active)	520	Preset value	-	Mon-Sun, Mon-Fri, Sat-Sun	Mon, Tue, Wed, Thu, Fri, Sat, Sun	Mon-Sun
	521	Mon-Sun: Phase 1 ON	hh:mm	00:00	24:00	06:00
	522	Mon-Sun: Phase 1 OFF	hh:mm	00:00	24:00	22:00
	523	Mon-Sun: Phase 2 ON	hh:mm	00:00	24:00	`--.--
	524	Mon-Sun: Phase 2 OFF	hh:mm	00:00	24:00	`--.--
	525	Mon-Sun: Phase 3 ON	hh:mm	00:00	24:00	`--.--
	526	Mon-Sun: Phase 3 OFF	hh:mm	00:00	24:00	`--.--
	535	Copy day	-	Mon, Tue, Wed, Thu, Fri, Sat, Sun		-
	536	Default values	-	Yes	No	No
Timer program 3 HCP	540	Preset value	-	Mon-Sun, Mon-Fri, Sat-Sun	Mon, Tue, Wed, Thu, Fri, Sat, Sun	Mon-Sun
	541	Mon-Sun: Phase 1 ON	hh:mm	00:00	24:00	06:00
	542	Mon-Sun: Phase 1 OFF	hh:mm	00:00	24:00	22:00
	543	Mon-Sun: Phase 2 ON	hh:mm	00:00	24:00	`--.--
	544	Mon-Sun: Phase 2 OFF	hh:mm	00:00	24:00	`--.--
	545	Mon-Sun: Phase 3 ON	hh:mm	00:00	24:00	`--.--
	546	Mon-Sun: Phase 3 OFF	hh:mm	00:00	24:00	`--.--
	555	Copy day	-	Mon, Tue, Wed, Thu, Fri, Sat, Sun		-
	556	Default values	-	Yes	No	No
Timer program 4 DHW	560	Preset value	-	Mon-Sun, Mon-Fri, Sat-Sun	Mon, Tue, Wed, Thu, Fri, Sat, Sun	Mon-Sun
	561	Mon-Sun: Phase 1 ON	hh:mm	00:00	24:00	00:00
	562	Mon-Sun: Phase 1 OFF	hh:mm	00:00	24:00	06:00
	563	Mon-Sun: Phase 2 ON	hh:mm	00:00	24:00	`--.--
	564	Mon-Sun: Phase 2 OFF	hh:mm	00:00	24:00	`--.--
	565	Mon-Sun: Phase 3 ON	hh:mm	00:00	24:00	`--.--
	566	Mon-Sun: Phase 3 OFF	hh:mm	00:00	24:00	`--.--
	575	Copy day	-	Mon, Tue, Wed, Thu, Fri, Sat, Sun		-
	576	Default values	-	Yes	No	No

End User - Parameterization

Menu Selection	Command Line	Selection Option	Unit	Min.	Max	Factory Settings
Holidays heating circuit 1	641	Preset value	-	Period 1	Period 8	Period 1
	642	Start day/month	dd.MM	01.01	31.12	`--.--
	643	End day/month	dd.MM	01.01	31.12	`--.--
	648	Operating level	-	Frost protection	Reduced	Frost protection
Holidays heating circuit 2 (only if active)	651	Preset value	-	Period 1	Period 8	Period 1
	652	Start day/month	dd.MM	01.01	31.12	`--.--
	653	End day/month	dd.MM	01.01	31.12	`--.--
	658	Operating level	-	Frost protection	Reduced	Frost protection
Holidays heating P (only if active)	661	Preset value	-	Period 1	Period 8	Period 1
	662	Start day/month	dd.MM	01.01	31.12	`--.--
	663	End day/month	dd.MM	01.01	31.12	`--.--
	668	Operating level	-	Frost protection	Reduced	Frost protection
Heating circuit 1	710	Comfort set-point	°C	Value from command line 712	35	20.0
	712	Reduced set-point	°C	Value from command line 714	Value from command line 710	16.0
	714	Frost protection set-point	°C	4	Value from command line 712	10.0
	720	Slope of characteristic curve	-	0.10	4.00	0.8
	730	Summer/winter heating limit	°C	---/8	30	20
Cooling circuit (only if active)	901	Operating mode	-	Off	Automatic	Automatic
	902	Comfort set-point	°C	15	40	24
	907	Release	-	24-hrs/day, timer program HC, timer program 5		24 hrs
Heating circuit 2 (only if active)	1010	Comfort set-point	°C	Value from command line 1012	35	20.0
	1012	Reduced set-point	°C	Value from command line 1014	Value from command line 1010	16.0
	1014	Frost protection set-point	°C	4	Value from command line 1012	10.0
	1020	Slope of characteristic curve	-	0.10	4.00	0.8
	1030	Summer/winter heating limit	°C	---/8	30	20
Heating circuit P (only if active)	1300	Operating mode	-	Protective mode, automatic, reduced, comfort		Automatic
	1310	Comfort set-point	°C	Value from command line 1312	35	20.0
	1312	Reduced set-point	°C	Value from command line 1314	Value from command line 71310	16.0
	1314	Frost protection set-point	°C	4	Value from command line 1312	10.0
	1320	Slope of characteristic curve	-	0.10	4.00	1.50
	1330	Summer/winter heating limit	°C	---/8	30	20
Domestic hot water	1610	Set-point	°C	Value from command line 1612	65	50
	1612	Reduced set-point	°C	8	Value from command line 1610	45
Pool (only if active)	2055	Solar heating set-point	°C	8	80	26
	2056	Generator heating set-point	°C	8	80	22
Energie meter	3110	Heat delivered	kWh	0	9999999	—-
	3121 3128 3135 3142 3149 3156 3163 3170 3177 3184	Heat delivered heating 1 Heat delivered heating 2 Heat delivered heating 3 Heat delivered heating 4 Heat delivered heating 5 Heat delivered heating 6 Heat delivered heating 7 Heat delivered heating 8 Heat delivered heating 9 Heat delivered heating 10	kWh	0	9999999	—-
	3122 3129 3136 3143 3150 3157 3164 3171 3178 3185	Heat delivered DHW 1 Heat delivered DHW 2 Heat delivered DHW 3 Heat delivered DHW 4 Heat delivered DHW 5 Heat delivered DHW 6 Heat delivered DHW 7 Heat delivered DHW 8 Heat delivered DHW 9 Heat delivered DHW 10	kWh	0	9999999	—-

Info Display
Cooling Mode
Reset

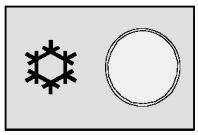
Display Information
Use the info key to query and display various information.



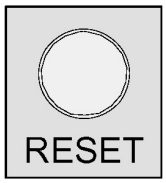
Possible Info Values
Depending on unit type, configuration, and operating state, individual info lines are hidden.

- Fault message
- Maintenance message
- Special operating mode
- Room temperature
- Min. room temperature
- Max. room temperature
- Outside temperature
- Min. outside temperature
- Max. outside temperature
- Potable water temperature 1/2
- Heat pump status
- Solar status
- Potable water status
- Status heating circuit 1/2
- Status heating circuit P
- Solar energy yield
- Time / date
- Customer service phone

Cooling Mode
Use the cooling key to select the cooling mode. Cooling is carried out based on the timer program and acc. to the temperature set-points.



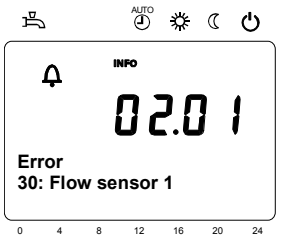
HP Reset Key/ (HP Defrost Function)
Briefly press the reset key to reset the error and fault messages. The switch-on delay is bridged. The reset is applied two seconds after releasing the reset key. Do not use this function during normal operation!



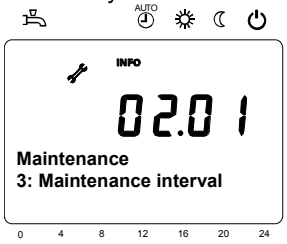
Error Message / Maintenance

Error Message / Maintenance
In rare cases, the basic display depicts one of the following icons:

Error messages
If this symbol is depicted, a system malfunction has occurred. Press the info key for additional information.



Maintenance or special op
If this symbol is depicted, a service message has been issued or a special operating mode applies. Press the info key for additional



Display Lists

Error Code

Error Code	Error Description
10	Outside sensor
30	Flow sensor 1
31	Flow sensor cooling 1
32	Flow sensor 2
33	Flow sensor HP
35	Source inlet sensor
36	Hot gas sensor 1
44	HP return flow sensor
45	Source outlet sensor
50	Potable water sensor 1
52	Potable water sensor 2
60	Room sensor 1
65	Room sensor 2
68	Room sensor P
70	Buffer storage sensor 1
71	Buffer storage sensor 2
72	Buffer storage sensor 3
73	Collector sensor 1
74	Collector sensor 2
76	Special sensor 1
81	LPB short-circuit/comm
82	LPB address collision
83	BSB short-circuit
84	BSB address collision
98	Expansion module 1
99	Expansion module 2
100	Two time source masters
102	Clock power reserve missing
105	Maintenance message
121	Flow temp. HC1 too low

Error Code	Error Description
122	Flow temp. HC2 too low
126	Potable water charge monitoring
127	Legionella temp.
134	Accum. fault HP
138	Control sensor HP missing
146	Sensor/actuator config
201	Frost alarm
204	Fan overload
222	High pressure with HP operating
225	Low pressure
226	Compressor 1 K1 overload
228	Flow mon. heat source
229	Heat source pressure monitor
230	Source pump overload
247	Defrosting fault
324	BX same sensors
325	BX/E. mod. same sensors
327	E. module same function
329	E. mod./M. group same function
330	BX1 no function
331	BX2 no function
332	BX3 no function
333	BX4 no function
334	BX5 no function
335	BX21 no function
336	BX22 no function
339	Collector pump Q5 missing
340	Collect. pump Q16 missing
341	Collect. sensor B6 missing

Error Code	Error Description
343	Solar integration missing
344	Solar buffer K8 missing
353	Casc. sensor B10 missing
355	Asymmetrical three-phase current
356	Flow mon. cons.
358	Soft-starter
359	Cooling valve Y21 missing
360	Process valve Y22 missing
361	Source inlet B91 missing
362	Source outlet B92 missing
363	Evap. sensor B84 missing
364	Cooling HP incorrect
365	DHW rotary pump Q34 missing
367	Room humidity sensor Hx

Maintenance code

Maintenance Code	Maintenance Description
10	Battery replacement outside sensor

Settings Details

Menu: Time / Date / Control Unit

Time and Date
The controller is equipped with an internal clock keeping track of the time, day of the week, and the date. To ensure the functionality of the clock, the time and date must be set correctly.

Line No.	Command Line	Factory Setting
1	Hours/minutes	
2	Day/month	
3	Year	

Control and Display

Language
The following display languages are available: German, English, Italian, French, Dutch or Polski.

Line No.	Command Line	Factory Setting
20	Language	German
22	Info, temporary, permanent	Temporary
26	Operating lock	OFF
27	Programming lock	OFF

Units

The display can be switched between the SI units (° C, bar) and U.S. units (° F, PSI).

Line No.	Command Line	Factory Setting
29	Units °C / bar °F/PSI	°C / bar

Menu: Timer Programs
Menu: Vacation

Various switching programs are available for the heating circuits and the heating/preparation of potable water. With operating mode "Automatic" switched on, use the set switching times to control the change of the temperature level (and the associated set-points).

Entering Switching Times
Switching times can be combined, i.e. for several days together or for individual days or times. By preselecting day groups such as Mon ... Fri. and Sat...Sun that are to have the same switching times, setting up the switching times will be significantly quicker.

Switching Points

Line No.				Command Line	Factory Setting	
HC1	HC2	3/HCP	4/DHW		HC1, HC2, 3/HCP	4/DHW
500	520	540	560	Preselected Mon-Sun Mon-Fri Sat-Sun Mon…Sun	Mon-Sun	Mon-Sun
501	521	541	561	Phase 1 ON	06 : 00	00:00
502	522	542	562	Phase 1 OFF	22 : 00	06:00
503	523	543	563	Phase 2 ON	- - : - -	- - : - -
504	524	544	564	Phase 2 OFF	- - : - -	- - : - -
505	525	545	565	Phase 3 OFF	- - : - -	- - : - -
506	526	546	566	Phase 3 OFF	- - : - -	- - : - -

Copy day

Line No.	Command Line
515, 535, 555, 575	Copy day

Default Program

Line No.	Command Line
516, 536, 556, 576	Default values

All timed switching programs can be reset to the default factory settings. Each timed switching program has its own command line for resetting.

Note
All customized settings are lost with a reset!

Vacation

Line No.			Command Line	Factory Setting
HC1	HC2	HCP		
642	652	662	Start	- - : - -
643	653	663	End	- - : - -
648	658	668	Operating level Frost protection Reduced	Frost protection

Use the vacation program to switch the heating circuits to a selectable operating level based on a specific date (by calendar).

- The vacation program can be used only while the system is in automatic operating mode.

Menu: Heater Circuits

Various switching programs are available for the heating circuits, which can be set individually for each heating circuit. Use the configuration menu to activate HC2 (mixed circuit 2) and/or HCP (sliding pump circuit).

Operating Mode
The operating mode of heating circuits 1 and 2 can be controlled directly with the operating mode key while the heating circuit P operating mode is set with the programming function (command line 1300).
The setting is used to toggle between the individual operating modes. The functionality corresponds with the operating mode selection with the operating mode key.

Line No.	Command Line	Factory Setting
1300	Operating mode Automatic Comfort Reduced Protective mode	Automatic

Room Set-Points

Room Temperature
The room temperature can be adjusted based on different set-points. Depending on the selected operating mode, these set-points are applied and thereby result in different temperature levels in the temperature-controlled rooms.
The range of the adjustable set-points is based on their mutual interdependency as depicted in the chart.

Line No.			Command Line	Factory Setting
HC1	HC2	HCP		
710	1010	1310	Comfort set-point	20°C
712	1012	1312	Reduced set-point	16°C
714	1014	1314	Frost protection set-point	10°C

TRKmax comfort set-point max.
TRK Comfort set-point
TRR Reduced set-point
TRF Frost protection set-point

Frost Protection
While in protection mode, room temperatures are automatically prevented from dropping too low. Temperatures are in this case based on the room temperature frost protection set-point.

Characteristic Heating Curve
The characteristic heating curve is used to define the flow temperature set-point, which in turn is used to control temperatures to a corresponding flow temperature based on the current climate conditions. The characteristic heating curve can be adjusted here so that the heat output and with that the room temperature is in accordance with personal needs.

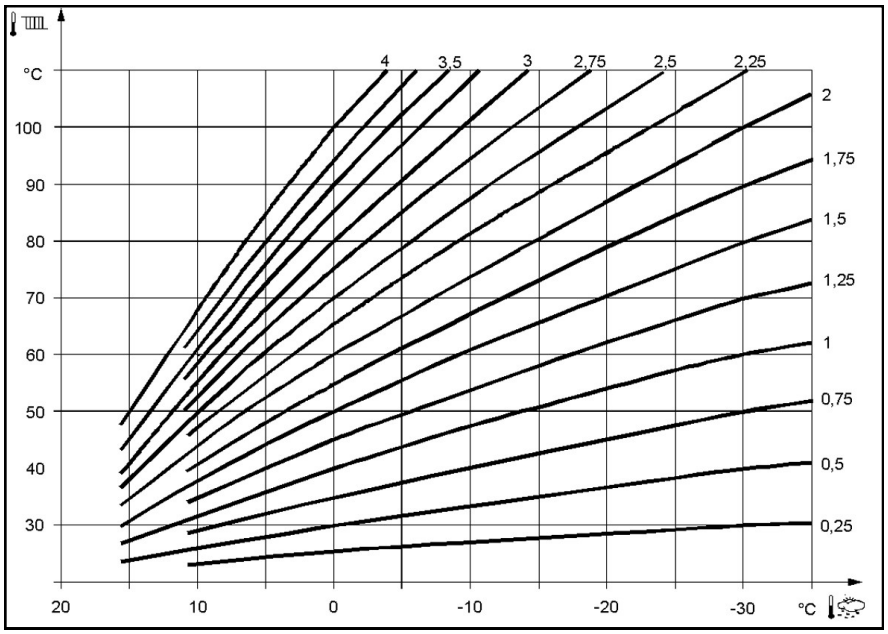
Line No.			Command Line	Factory Setting
HC1	HC2	HCP		
720	1020	1320	Slope of characteristic curve	0,80

Menu: Heating Circuits

Slope of Characteristic Curve
The steepness of the slope determines the flow temperature (higher the colder the outside temperature). This means that if the room temperature deviates with cold outside temperatures and not with warm outside temperatures, the steepness of the slope must be adjusted.

Increase setting:
Increases the flow temperature primarily with cold outside temperatures.

Decrease setting:
Decreases the flow temperature primarily with cold outside temperatures.



Menu: Cooling Circuit 1

To utilize the cooling circuit, the corresponding hydraulics options with heating/cooling must be set.

The cooling operating mode is automatically triggered when the room temperature rises above the comfort set-point defined for cooling (command line 902).

The cooling function must be switched on (command line 901 = auto) and released based on the timer switching program or activated for 24-hrs (command line 907).

The cooling mode is canceled if heating circuit 1 requires heat or if a heating request by the service water or another heating circuit is pending (only with active cooling).
With passive cooling, a service water charging and heating with a different heating circuit are possible during cooling mode.

Operating Mode
The operating mode is set with the operating mode key on the room or control unit, the controller, or with this command line.

Line No.	Command Line	Factory Setting
901	Operating mode Off: Automatic*	Automatic

OFF — The cooling function is switched off.

Automatic — The cooling function is automatically switched on based on the selected timer switching program (command line 907), the vacation program, the presence key, and when needed.

Set Point

Line No.	Command Line	Factory Setting
902	Comfort set-point	24°

Comfort Set-Point — While in cooling mode, the room temperature is adjusted to the comfort set-point specified here. The cooling comfort set-point can also be adjusted with the rotary knob on the room control unit.

During summer, comfort set-point is adjusted based on the outside temperature (sliding).

Release

Line No.	Command Line	Factory Setting
907	Release 24-hr/day: Timer program heating circuit: Timer program 5	24°

The parameter "Release" determines which timer switching program is used for releasing the cooling mode.

24-hr/Day — Cooling is released for 24-hr/day.

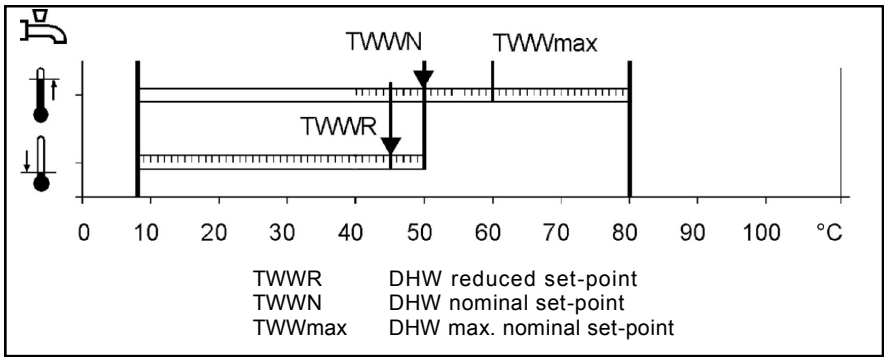
Heating Circuit Timer Program — The cooling release is based on the timer switching program of the heating circuit.

Timer Program 5 — The cooling release is based on timer switching program 5.

Menu: Domestic hot water

Set-Points
Domestic hot water can be adjusted based on different set-points. Depending on the selected operating mode, these set-points are applied and thereby result in different temperature levels in the DHW storage.

Line No.	Command Line	Factory Setting
1610	Set-point	50°C
1612	Reduced set-point	45°C



TWWR DHW reduced set-point
TWWN DHW nominal set-point
TWWmax DHW max. nominal set-point

Menu: Pool
Menu: Heat flow metering

If the pool control is enabled, the set-points for heating with solar energy or heat pump can be set.

Solar Heating Set-Point
The pool water temperature is charged up to this specified set-point when using solar energy.

Generator Heating Set-Point
The pool water temperature is charged up to this specified set-point when using the heat pump.

Line No.	Command Line	Factory Setting
2055	Solar heating set-point	26 °C
2056	Generator heatingsSet-point	22 °C

Heat flow metering
Activated heat flow metering shows amount of energy during heating demand and DHW charge.

Heat delivered (3110)
Sum of heat pump output for heating demand and DHW charge since starting up. In case of inactive heat flow metering, display shows "----".

Heat delivered heating (3121 – 3184)
End of period is always 30.06. per year. The sum of the heat pump output for heating demand up to this date is saved in parameter 3121. Parameter 3128 saves the value of the previous year. Altogether the values of the last 10 periods are visible.

Heat delivered DHW (3122 – 3185)
End of period is always 30.06. per year. The sum of the heat pump output for DHW charge up to this date is saved in parameter 3122. Parameter 3129 saves the value of the previous year. Altogether the values of the last 10 periods are visible.

Line No.	Command Line	Factory Setting
3110	Heat delivered	Value in kWh
	Heat flow metering HC end of period	Value in kWh
3121	Heat delivered heating 1	
3128	Heat delivered heating 2	
3135	Heat delivered heating 3	
3142	Heat delivered heating 4	
3149	Heat delivered heating 5	
3156	Heat delivered heating 6	
3163	Heat delivered heating 7	
3170	Heat delivered heating 8	
3177	Heat delivered heating 9	
3184	Heat delivered heating 10	
	Heat flow metering DHW end of period	Value in kWh
3122	Heat delivered DHW 1	
3129	Heat delivered DHW 2	
3136	Heat delivered DHW 3	
3143	Heat delivered DHW 4	
3150	Heat delivered DHW 5	
3157	Heat delivered DHW 6	
3164	Heat delivered DHW 7	
3171	Heat delivered DHW 8	
3178	Heat delivered DHW 9	
3185	Heat delivered DHW 10	

Technical Data

Supply	Rated voltage	AC 230 V (± 10%)
	Rated frequency	50/60 Hz
	Maximum power consumption	LOGON B WP: 11 VA
Terminal wiring	(Supply and outputs)	Wire or stranded conductor (paired or with wire end ferrule): 1 wire: 0.5 mm^2 ... 2.5 mm^2 2 wires 0.5. mm^2 ... 1.5 mm^2
Function data	Software category	A
	Function acc. to EN 60730	1 b (automatic function)
Inputs	Digital inputs H1/ H3	Extra low voltage protection for potential-free contacts compatible with extra low voltage: Voltage with open contact: DC 12 V Current with closed contact: DC 3 mA
	Analog inputs H1/ H3	Protective extra low voltage Working range: DC (0 ... 10) V Interior resistance: > 100 kW
	Power input EX1-7, E9-11	AC 230 V (± 10 %) Interior resistance: > 100 kW
	Sensor input B9 outside sensor Sensor inputs B1, B2, B3, B12, BX1-5, B4, B41, B21, B71, B81, B91, and B92	NTC1k (QAC34) NTC10k (QAZ36, QAD36)
	Permiss. sensor wires (Cu) with wire cross section	0.25 0.5 0.75 1.0 1.5 (mm2)
	Maximum length	20 40 60 80 120 (m)
Outputs	Relay outputs Rated current range Max. starting current Max. total current (all relays) Rated voltage range	 AC 0.02...2 (2) A 15 A during ≤ 1 s AC 10 A AC (24...230) V (for potential-free outputs)
	Output Q4 mod. Rated current range ON/OFF mode Speed control Max. starting current	 AC 0.05 2 (2) A AC 0.05 1.4 (1.4) A 4 A during ≤ 1 s
	Analog output UX Output voltage Current loading Ripple Zero point accuracy Remaining range error	Output is short-circuit proof U_{out} = 0 ... 10.0 V ±2 mA RMS; ±2.7 mA peak ≤ 50 mVpp < ± 80 mV ≤ 130 mV
Interfaces	BSB Max. line length LOGON B HP peripheral device Max. line length Min. wire cross section	2 Wire connection not exchangeable 200 m 400 m max. cable capacity: 60 nF) 0.5 mm^2
IP and protection class	IP acc. to EN 60529	IP 00
	Protection class acc. to EN 60730	Extra low voltage components if properly installed meet requirements for protection class II
	Degree of pollution acc. to EN 60730	Normal pollution
Standards, safety, EMC, etc.	CE Conformity acc. to EMC Directive - Interference resistance - Emissions Low Voltage Directive Electrical Safety	 89/336/EWG - EN 61000-6-2 - EN 61000-6-3 73/23/EWG - EN 60730-1, EN 60730-2-9
Ambient environment conditions	Storage acc. to IEC721-3-1 Class 1K3	Temp. -20…65 °C
	Transport acc. to IEC721-3-2 Class 2K3	Temp. -25…70°C
	Operation acc. to IEC721-3-3 Class 3K5	Temp. 0...50 °C (without condensation)

Notes

Service:

ELCO GmbH
D - 64546 Mörfelden-Walldorf

ELCO Austria GmbH
A - 2544 Leobersdorf

ELCOTHERM AG
CH - 7324 Vilters

ELCO-Rendamax B.V.
NL - 1410 AB Naarden

ELCO Belgium n.v./s.a.
B - 1731 Zellik

ELCO
I - 31023 Resana