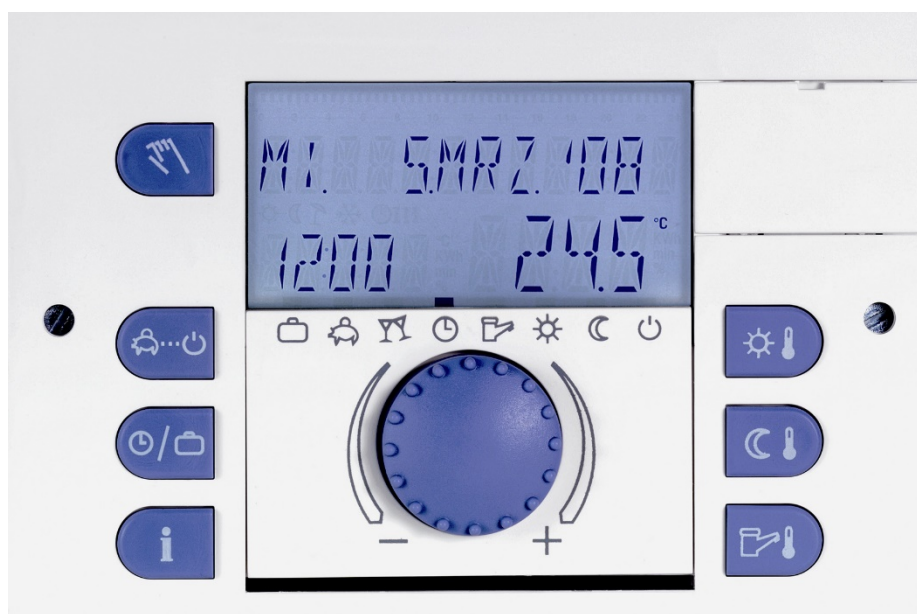




Heating Controller SDC Remote

Heating Controller DHC

PARAMETER LIST



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1 Software version


This documentation is valid for software version **V 3.2** of your control device. The software version is displayed after switch-on for approx. 8 s. If you are using an older software version, please contact your heating technician.


2 Access to the technician / OEM area

Entering a technician or OEM code enables additional setting options in the parameter menu. The technician code is: 1234. For access to the OEM area, please ask your field-service contact partner.

Procedure:

- ▶ Press the  and  buttons simultaneously. The first number of the 4-digit code flashes.
- ▶ Set the first code number by turning the input button.
- ▶ Press the input button. The second number flashes.
- ▶ Enter all remaining code numbers as described in Steps 2 and 3. After entering the last code number, the controller is enabled for the respective area (technician or OEM).
- ▶ Press and hold the rotary button longer than 3 seconds. You reach the menu-selection level and can enter / modify parameters.

Pressing the  button jumps back to the previous selection.

Pressing the  button, pressing and holding the input button longer than 3 seconds or waiting until the set info time expires causes a jump back to the basic display.

3 "Hydraulics" menu (HYDRAULIC)

The parameters in this menu refer to the general system hydraulics and the functions and configuration of the programmable inputs and outputs for the respective system components. Representative of many individual settings, the applications are **only** defined by the **1st parameter** of this setting table.

Example: The controller is to cover system No 0202. Provided that the controller features enough relays, parameter 01 must be set to value 0202.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Hydraulic schematic	0, 0101, 0102, ... n	0	
02	Hot-water charging pump output	OFF No function 1 Hot-water charging pump 4 Circulating pump 5 Electric heating rod	1	
03	Mixed heating circuit 1 output	OFF No function 2 Direct heating circuit controlled by weather conditions 3 Mixed heating circuit controlled by weather conditions 6 Constant regulator 7 Fixed-value regulator 8 Return maintenance 30 Mixed heating circuit as continuous hot-water pre-regulator (district heating) 39 Hot-water pre-regulator (district heating)	3	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
04	Mixed heating circuit 2 output	For setting values, see parameter 03	3	
05	Direct heating circuit pump output	OFF No function 2 Direct heating circuit pump 4 Circulating pump 5 Electric heating element 6 Constant regulation 10 Feeder pump 11 Boiler circuit pump 1 12 Boiler circuit pump 2 13 Group alarm 14 Time switch 15 Solar charging pump 25 Cooling switchover 27 Hydraulic buffer relief 47 Electric water heater 50 Output for legionella protection	2	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
06	Variable output 1	OFF No function 4 Circulating pump 5 Electrical heating circuit 9 Bypass pump 10 Feeder pump 11 Boiler circuit pump 1 12 Boiler circuit pump 2 13 Group error message 15 Solar charging pump 16 Buffer charging pump 17 Solid fuel charging pump 18 Stratified tank charging pump (DHC) 19 Solar charging switchover 25 Cooling switchover 26 Primary pump 27 Hydraulic buffer relief 47 Electrical water heater 50 Output for legionella protection	OFF	
07	Variable output 2	For setting values, see parameter 06	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
08	Variable input 1	OFF No function 1 Outside sensor 2 2 Heat generator sensor 2 3 Tank sensor 2 4 Buffer sensor 2 5 Request contact 6 External error message input 7 Return maximum limit of mixed heating circuit 1 8 Return maximum limit of mixed heating circuit 2 9 Return temperature sensor 10 External heat generator cutoff 11 External switching modem 12 External information 13 Total flow sensor 14 Collector return sensor 15 District hot-water stratified tank charge sensor 16 Exhaust gas sensor 18 Solids buffer sensor 19 Buffer sensor 1 29 Hygrostatic switch-off 30 Room sensor NTC 20 of direct heating circuit 31 Room sensor NTC 20 of mixed heating circuit 1 32 Room sensor NTC 20 of mixed heating circuit 2	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
08	Variable input 1	50 Remote control TF22 for DK1 51 Remote control TF22 for MK1 52 Remote control TF22 for MK2	OFF	
09	Variable input 2	For setting values, see parameter 08; does not include setting value 16 (exhaust gas sensor), however	OFF	
10	Variable input 3	For setting values, see parameter 08; does not include setting value 16 (exhaust gas sensor), limit sensor of district heating VFB, however	OFF	
11	Indirect return lifting via mixed heating circuit	OFF, ON	OFF	

4 "System parameters" menu (SYSTEM)

The parameters in this menu refer to general limit parameters and specification values in the heating system used.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
Language selection**	Language selection	DE German GB English FR French IT Italian NL Dutch ES Spanish PT Portuguese HU Hungarian CZ Czech PL Polish RO Romanian RU Russian TR Turkish SE Swedish NO Norwegian GR Greek	DE	
Time program	Time program	P1 Only one switching time program enabled P1 to P3 Three switching time programs enabled	P1	
Operating mode	Operating mode	1 Common adjustment for all heating circuits 2 Separate adjustment for the individual heating circuits	1	
Summer 05	Summer switch-off	OFF, setting value of parameter 05 to 30°C	20	
05	System frost protection	OFF, -20°C to Setting value of summer parameter	3	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
06	Request contact module for variable input 1	1 Direct heating circuit 2 Mixed heating circuit 1 3 Mixed heating circuit 2 4 Hot-water circuit ALL All controllers	1	
07	Request contact module for variable input 2	For setting values, see parameter 06	1	
08	Request contact module for variable input 3	For setting values, see parameter 06	1	
09	Climate zone	-50 ... 0°C	-12	
10	Building type	1 Light construction 2 Medium construction 3 Heavy construction	2	
11	Automatic exit time	OFF No automatic exit 0,5 ... 5 min Automatic jump back to the basic display occurs after the set time	2	
12	Anti-blocking protection	ON Anti-blocking protection active OFF Anti-blocking protection not active	ON	
13	Logical fault messages	OFF, ON	OFF	
14	Automatic set function	OFF, ON	OFF	
15*	Locking code for heating technician	OFF, 0001 to 9999	1234	
16*	Type code	Controller type corresponding to type code table	Type	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
18	Cycle temperature enable	OFF Cycle temperature disabled ON Cycle temperatures enabled	ON	
19	Frost-protection mode	OFF Continuous frost protection as per parameter 05 0.5 to 60 min Cyclic operation	OFF	
21*	Adjustment of the real time clock (RTC)	-10 ... 10 s	0	
23	Locking code for operating level	OFF, 0000 ... 9999	OFF	
25	Cooling switch-on temperature	2 ... 10 K	6	
28	Error memory 2	OFF, ON	OFF	
29*	Characteristic curve for emergency operation without outside sensor	-50 to 30°C	0	
Selection of SDC / DHC	Selection of SDC/DHC	SDC, DHC	SDC	
Parameter reset	Parameter reset	SET by pressing the input button	-	

* OEM

** Other controllers also allow other language variants.

5 "Hot-water circuit" menu (DHW)

This menu contains all parameters required to program the hot-water circuit, except the switch time programs.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
Hot water	Hot water at night	10°C to normal hot-water temperature	40	
Legionella protection day	Legionella protection day	OFF No legionella protection Mon to Sun Legionella protection on specified day of week ALL Legionella protection every day	OFF	
03	Legionella protection time	00:00 ... 23:00 hours	02:00	
04	Legionella protection temperature	10 °C to setting value of parameter 06	65	
05	Transducer for hot-water circuit	1 Hot-water circuit temperature sensor 2 Hot-water circuit temperature controller (thermostat)	1	
06	Maximum temperature limit for hot water circuit	20°C to heat generator maximum temperature If parameter 07 = 7: 20 to 90°C. In automatic mode, from hot-water circuit minimum temperature.	65	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
07	Hot-water circuit operating mode	1 Parallel operation 2 Priority operation 3 Conditional priority 4 Parallel operation based on weather conditions 5 Priority operation with intermediate heating 6 Priority isolating circuit 7 External operation 8 Conditional parallel operation for mixed heating circuit (DHC only)	2	
08	Tank discharge protection	OFF No discharge protection Switching differential 5 ... 30 K	5	
09	Temperature increase of heat generator with hot-water circuit charging	0 ... 50 K Difference between hot-water circuit charging temperature and hot-water circuit setpoint temperature	15	
10	Switching differential of hot-water circuit	2 ... 20 K Value of hot-water circuit switching differential. Symmetrical effect around the hot-water circuit setpoint	5	
11	Hot-water charging pump follow-up time	0 ... 60 min	5	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
12	Circulation pump switching time program	AUTO Active hot-water circuit time program 1 P1, direct heating circuit 2 P2, direct heating circuit 3 P3, direct heating circuit 4 P1, mixed heating circuit 1 5 P2, mixed heating circuit 1 6 P3, mixed heating circuit 1 7 P1, mixed heating circuit 2 8 P2, mixed heating circuit 2 9 P3, mixed heating circuit 2 10 P1, hot-water circuit 11 P2, hot-water circuit 12 P3, hot-water circuit	AUTO	
13	Economy interval pause of circulating pump	0 ... setting value of parameter 14 Switch-on interval while the circulating pump is running	5	
14	Economy interval cycle (period duration)	1 ... 60 min	20	
15	Switching differential for storage charge	POS, NEG, SYM	SYM	
16	Circulating pump	1 Normal operation 2 Switched off during hot-water circuit charging	1	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
17	Behaviour of heat generator during follow-up time	AUTO Setpoint at heat generator depending on demand OFF Heat generator off during follow-up time of solar charging pump	AUTO	
28	Switch-on delay electrical water heater	0 ... 600 min	60 min	
29	Offset electrical water heater	-1 ... -99 K	-5	

6 "Direct heating circuit" menu (UNMIXED CIRC)

This menu contains all parameters required to program the un-mixed heating circuits, except the switching time programs.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
Heat- ing curve	Slope	OFF, 0.02 to 3.50	1.5	
Re- duced	Reduced operation	ECO Switch-off operation RED Lowering operation	ECO	
Heat- ing system	Heating system	UFH Under floor heating RAD Radiator CONV Convector heater	RAD	
03	Room connection (in conjunction with room sensor)	OFF Display of heat generator temperature, room sensor off, operation active 1 Display of room temperature, room sensor active, operation active 2 Display of room temperature, room sensor active, operation disabled 3 Display of room temperature, room sensor off, operation active	OFF	
04	Room factor	OFF 10 ... Influence active 500 % RC Room controller active	OFF	
07	Heating limit	OFF, 0.5 to 40 K	OFF	
08	Room frost- protection limit	5 ... 30°C	10	
09	Room thermostat function	OFF, 0.5 to 5 K	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
10	Assignment of outside sensor	0 Regulation to average value (outside sensor 1 + outside sensor 2) 1 Regulation to outside sensor 1 2 Regulation to outside sensor 2	0	
11	Constant temperature setpoint (day)	10 ... 95°C	20	
12	Minimum temperature limit	10°C to setting value of parameter 13	20	
13	Maximum temperature limit	Setting value of parameter 12 to Setting value of parameter 30 in "Heat generator" menu (OEM maximum limit)	75	
14	Temperature increase of heating circuit	-5 ... 20 K	Direct heating circuit = 0	
15	Extended pump over-run	0 ... 60 min	5	
16	Screed function	OFF 1 Functional heating 2 Screed-drying heating	OFF	
23	Room control C-factor (SDW 30 only)	1 ... 100	8	
24	Room control T _n (SDW 30 only)	5 ... 240 min	35	
25	Holiday operating mode	STBY Standby RED Lowering operation	STBY	
26	Room setpoint ramp	OFF, 0.5 to 60 K/h	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
41	Switch-on optimisation	OFF 1 Adaption off 2 Adaption on 3 Adaption restart	OFF	
42	Min. pre-heat time	0 ... setting value of parameter 43	0,5	
43	Max. pre-heat time	Setting value of parameter 42 to 30 h	5	
44	Min. jump back temperature	0 ... 30°C	5	
45	Without room sensor	0 ... 10°C	1	
46	Pre-heat time at 0°C	0 ... 30 h	1	
47	Lowering ramp	0 ... 500 %	100	
Heating circuit name	Heating circuit name	00000 ... ZZZZZ	–	
48	Constant temperature setpoint (night)	10 ... 95 °C (only for reduced operation = RED)	20	

7 "Mixed heating circuit 1 / 2" (MIX.VALVE - 1 / MIX.VALVE - 2) menus

These menus contain all parameters required to program the mixed heating circuit, except the switching time programs.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
Heat- ing curve	Slope	OFF, 0.02 to 3.50	1	
Re- duced	Reduced operation	ECO Switch-off operation RED Lowering operation	ECO	
Heat- ing system	Heating system	UFH Floor heating RAD Radiator CONV Convector heater	RAD	
03	Room connection (in conjunction with room sensor)	OFF Display of heat generator temperature, room sensor off, operation active 1 Display of room temperature, room sensor active, operation active 2 Display of room temperature, room sensor active, operation disabled 3 Display of room temperature, room sensor off, operation active	OFF	
04	Room factor	OFF 10 ... Influence active 500 % RC Room controller active	OFF	
07	Heating limit	OFF, 0.5 to 40 K	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
08	Room frost-protection limit	5 ... 30 °C	10	
09	Room thermostat function	OFF, 0.5 to 5 K	OFF	
10	Assignment of outside sensor	0 Regulation to average value (outside sensor 1 + outside sensor 2) 1 Regulation to outside sensor 1 2 Regulation to outside sensor 2	0	
11	Constant temperature setpoint (only if output was set to constant regulator)	10 ... 95°C	20	
12	Minimum temperature limit	10°C to setting value of parameter 13	20	
13	Maximum temperature limit	Setting value of parameter 12 to Setting value of parameter 30 in "Heat generator" menu (OEM maximum limit)	75	
14	Temperature increase of heating circuit	-5 ... 20 K	Mixed heating circuit = 4	
15	Follow-up time of pump	0 ... 60 min	5	
16	Screed function	OFF 1 Functional heating 2 Screed-drying heating	OFF	
17	Return maximum temperature limit	10 ... 90 °C	90	
18	P part X_P	1 ... 50 %/K	2	
19*	Sampling time T_s	1 ... 600 s	20	
20	I part T_n	1 ... 600 s	270	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
21	Actuator runtime	10 ... 600 s	120	
22*	Actuator end position function	1 Continuous control signal in end position 2 Control signal suppressed at end position (actuator de-energised)	1	
23	Room control C-factor (SDW 30 only)	1 ... 100	8	
24	Room control T _n (SDW 30 only)	5 ... 240 min	35	
25	Holiday operating mode	STBY Standby RED Lowering operation	STBY	
26	Room setpoint ramp	OFF, 0.5 ... 60 K/h	OFF	
28	Cooling temperature of mixed heating circuit	OFF, 5 ... 24	OFF	
39	Spread of hot-water circuit pre-regulator	2 ... 20 K	5	
40	Offset valve position of hot-water circuit pre-regulator	0 ... 100 %	0	
41	Switch-on optimisation	OFF 1 Adaptation off 2 Adaptation on 3 Adaptation restart	OFF	
42	Minimum pre-heat time	0 ... setting value of parameter 43	0.5	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
43	Maximum pre-heat time	Setting value of parameter 42 to 30 h	5	
44	Min. jump back temperature	0 ... 30 °C	5	
45	Without room sensor	0 ... 10 °C	1	
46	Pre-heat time at 0 °C	0 ... 30 h	1	
47	Lowering ramp	0 ... 500 %	100	
Heat- ing circuit name	Heating circuit name	00000 ... ZZZZZ	–	
48	Constant temperature setpoint (night)	10 ... 95 °C (only for reduced operation = RED)	20	

* OEM

8 "Heat generator" menu (HEAT GENER.)

The parameters in this menu refer to the type of the respective heat generator and the associated specific control functions.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Design	OFF Without heat generator 1 Oil/gas - one stage 2 Oil/gas - two stages 3 Oil/gas - 2 x one stage 4 Modulating burner 5 Open Therm	1	
02	Start-up protection (not if parameter 01 = OFF)	OFF No start-up protection 1 Unlimited start-up protection 2 Start-up protection controlled by weather conditions 3 Start-up protection disconnected	1	
03	Minimum temperature limit (not if parameter 01 = OFF)	5°C to setting value of parameter 04	38 (5 with automatic operation)	
04	Maximal temperature limit (not if parameter 01 = OFF)	Setting value of parameter 03 to setting value of parameter 30 (OEM maximum limit)	80	
06	Sensor operating mode	1 Burner switch-off in case of defect 2 External burner switch-off 3 Burner enable in case of defect	1	
07	Minimum burner runtime	0 ... 20 min	2	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
08	Burner switching differential I	One stage: 2 ... 30 K Two stages: 2 ... (setting value of parameter 09 – 0.5 K)	6	
09	Burner switching differential II (not if parameter 01 = 2)	(setting value of parameter 08 + 0.5) to 30 K	8	
10	Connection delay stage II	0 ... 60 min (0 = 10 s)	0	
11	Boiler start-up relief stage II	1 Unlimited enable during start-up relief 2 Time-out during start-up relief	2	
13	Lead time of boiler circuit pump or parallel heat generator enable (only with appropriate configuration in the "Hydraulics" menu)	0 ... 10 min	0	
14	Follow-up time of boiler circuit pump (only with appropriate configuration in the "Hydraulics" menu)	0 ... 60 min	2	
15	Follow-up time of feeder pump (only with appropriate configuration in the "Hydraulics" menu)	0 ... 60 min	2	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
16	Exhaust gas temperature monitoring (only with appropriate configuration in the "Hydraulics" menu)	OFF Display of exhaust gas temperature only 0 ... Heat generator lock if 60 min limit value is exceeded for set time SLT Heat generator lock if limit value is exceeded	OFF	
17	Exhaust gas limit value (only with appropriate configuration in the "Hydraulics" menu)	50 ... 500°C	200	
19	Modulation of proportional range X_P	0.1 ... 50 %/K	5	
20	Modulation of sampling time T_s	1 ... 600 s	20	
21	Modulation of adjustment time T_n	1 ... 600 s	180	
22	Modulation of runtime	5 ... 600 s	12	
23	Modulation of start time	0 ... 900 s	60	
24	Modulation of start power	0 ... 100 %	70	
25	Outside temperature lock (not if parameter 01 = OFF)	OFF, -20 to +30 °C	OFF	
26	Base load increase	0 ... 60 K	30	
27	Minimum temperature limit of heating circuits (only if parameter 02 = 3)	5 °C to setting value of parameter 03	36	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
28	Switching differential of minimum temperature limit of heating circuits (only if parameter 02 = 3)	2 ... 20 K	4	
29	Heat generator forced discharge	OFF 1 Discharge to process water tank 2 Discharge to heating circuits 3 Discharge to buffer tank	OFF	
30*	OEM maximum limit	Setting value of parameter 03 to 130 °C	110	
31*	Full-load regulation	OFF, 0.5 to 10	OFF	
34	Power limit for heating	50 ... 100 %	100	
35	Power limit for hot water	50 ... 100 %	100	
37	Burner counter mode (counter of operating hours)	AUTO 1 Feedback only 2 Free counter	AUTO	
38	Outside temperature lock, inverse	OFF, -20 to +30 °C	OFF	
39	Fixed delay (cascade)	OFF, 1 ... 300 min	OFF	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
RESET ST-1	Resetting of burner start counter and operating hours of stage 1 (not if parameter 01 = OFF)	SET by pressing the input button	–	
RESET ST-2	Resetting of burner start counter and operating hours of stage 2 (not if parameter 01 = 2 or 01 = OFF)	SET by pressing the input button	–	

* OEM

9 "District hot water" menu (DIST.HEATING)

The parameters in this menu refer to the type of the respective district hot-water station and the associated specific control functions.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Increase	OFF, -10 to 50 K	0	
02	Maximum limit of flow temperature setpoint	10 ... 130 °C	90	
03*	Minimum district heating valve stroke	0 ... 50 %	10	
04	Secondary flow boost	0,1 ... 30 %/K	5	
05	Adjustment time	0 ... 60 min	3	
06	Runtime of district heating valve 1	10 ... 1800 s	120	
07*	Runtime of district heating valve 2	10 ... 1800 s	30	
08*	Maximum return temperature setpoint	0 ... 100 °C	90	
09*	Application point variable district heating return temperature	OFF, -20 to 10 °C	OFF	
10*	Maximum return temperature setpoint with hot water circuit charge	0 ... 100 °C	90	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
11*	Return limit of district heating valve	0 Temperature (parameters 12 through 15 are not displayed) 1 Volume flow and temperature (parameters 12 through 14 are not displayed) 2 Heat output and temperature (parameters 13 through 15 are not displayed)	0	
12*	Calibration of heat output	1 ... 9999	1	
13*	Calibration of volume flow	1 ... 9999	1	
14*	Maximum heat output	1 ... 9999 kW	9999	
15*	Maximum volume flow	0,01 99.99 m ³ /h	99.99	
16	Increase in return temperature at legionella function	OFF, 0,5 ... 20 K	OFF	

* OEM

10 "Return increase" menu (RETURN CONTR)

The parameters in this menu refer to special settings with regard to the increase in return temperature with heat generators.

Enabling occurs only with corresponding activation in the "Hydraulics" menu.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Return temperature setpoint	10 ... 95°C	20	
02	Switch-off differential	1 ... 20 K	2	
03	Follow-up time of pump	0 ... 60 min	1	

11 "Solar" menu (SOLAR)

The parameters in this menu refer to special settings with regard to the solar applications.

Enabling occurs only with corresponding activation in the "Hydraulics" menu.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Switch-on differential	(Setting value of parameter 02 + 3 K) to 30 K	10	
02	Switch-off differential	2 K to (setting value of parameter 01 – 3 K)	5	
03	Minimum runtime of solar charging pump	0 ... 60 min	3	
05	Buffer maximum temperature limit	20 ... 110°C	75	
06	Operating mode	1 Priority operation 2 Parallel operation 3 Priority operation of hot-water circuit 4 Priority operation of buffer	2	
07	Heat generator cycle inhibitor (only if parameter 06 = 1)	OFF, 0.5 to 24 h	OFF	
08	Solar priority parallel switchover	OFF, 1 to 30 K	OFF	
09	Heat balance	OFF No heat balancing 1 Heat balancing via flow-through calculation 2 Heat balancing via pulse input	OFF	
10	Reset heat balance	SET by pressing the input button	–	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
11	Volume flow	0 ... 30 L/min or L/pulse	0	
12	Density of medium	0.8 1.2 kg/L	1.05	
13	Heat capacity of medium	2 ... 5 KJ/kgK	3.6	
14	Final switch-off temperature	OFF, 90 to 210 °C	210	
15	Test cycle of solar charging switchover	1 ... 60 min	10	
16	Switchover temperature	20 ... 110 °C	75	

12 "Solid" menu (SOLID FUEL)

The parameters in this menu refer to special settings with regard to solids regulation.

Enabling occurs only with corresponding activation in the "Hydraulics" menu.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Minimum temperature	20 ... 80 °C	60	
02	Maximum temperature	30 ... 100 °C	90	
03	Switch-on differential	(Setting value of parameter 04 + 3 K) to 20 K	10	
04	Switch-off differential	2 K to (setting value of parameter 03 – 3 K)	5	
05	Heat generator cycle inhibitor	OFF, 2 to 180 min	OFF	

13 "Buffer" menu (BUFFER)

The parameters in this menu refer to special settings with regard to solids regulation.

Enabling occurs only with corresponding activation in the "Hydraulics" menu.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Minimum temperature	5 °C to setting value of parameter 02	20	
02	Maximum temperature	Setting value of parameter 01 to 95 °C	80	
03	Boiler temperature increase	-10 to 80 K	0	
04	Buffer switching differential	1 to 70 K	2	
05	Forced discharge	OFF 1 In process water tank 2 In heating circuits	OFF	
06	Follow-up switch-on differential	OFF, (setting value of parameter 07 + 2 K) to 50 K	10	
07	Follow-up switch-off differential	1 K to (setting value of parameter 06 – 2 K)	5	
08	Buffer start-up protection	OFF No start-up protection ON Discharge protection active	ON	
09	Buffer discharge protection	OFF No discharge protection Switching differential 5 ... 20 K	5	

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
10	Buffer operating mode	1 Heating circuit charge regulation and hot-water circuit 2 Heating circuit charge regulation without hot-water circuit 3 Heating circuit and hot-water circuit discharge regulation 4 Heating circuit discharge regulation without hot-water circuit 5 Charge regulation with hot-water circuit switchover 6 Discharge regulation for heat generator	1	
11	Follow-up time of buffer charging pump	0 ... 60 min	3	

14 "Total flow regulation" menu (MAIN SUPPLY)

The parameters in this module refer to special settings with regard to total flow regulation.

This selection is only available if a total flow sensor is configured on one of the variable inputs (see the "Hydraulics" menu, parameters 08, 09 or 10).

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Regulation	0 ... 50 %/K	5	
03	Regulation	1 ... 600 s	180	

15 "Cascading" menu (CASCADE)

The parameters in this menu refer solely to the parameters that are associated with the cascading of multiple heat generators.

This selection is only available if multiple heat generators exist in the control system.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Switching differential	0.5... 30 K	4	
02	Connection delay	0 ... 200 min	0	
03	Switch-off delay	0 ... 60 min	0	
04	Switchover power of stage sequence	10 ... 100 %	65	
05	Stage reversal	OFF, 1 to 250 h	OFF	
06	Guidance stage	1 ... maximum number of stages	1	
07	Peak-load stage	OFF, 2 ... maximum number of stages All heat generators are numbered consecutively within the cascade. The total quantity determines the maximum number of stages.	OFF	
08	Switchover of base load with grouping	OFF, ON	OFF	
09*	Quick hot-water connection	OFF, 1 ... maximum number of stages	OFF	

* OEM

16 "Data bus" menu (BUS)

The parameters in this menu refer solely to the parameters that are associated with the data bus.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Central device address	10, 20, 30, 40, 50	10	
02	Bus authorisation SDW 30 of direct heating circuit	1 Expanded access authorisation	1	
		2 Simple access authorisation		
03	Bus authorisation SDW 30 of mixed heating circuit 1	1 Expanded access authorisation	1	
		2 Simple access authorisation		
04	Bus authorisation SDW 30 of mixed heating circuit 2	1 Expanded access authorisation	1	
		2 Simple access authorisation		
05	Cascading operation	OFF, ON	ON	

17 "Relay test" menu (RELAY TEST)

In this menu, the relays contained within the central device can be selected via the input button and checked for operation.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Heat generator test	Different relay switching sequence depending on the set heat generator	–	
02	Direct heating circuit pump test	OFF-ON-OFF	OFF	
03	Mixed heating circuit pump 1 test	OFF-ON-OFF	OFF	
04	Mixer motor 1 test	STOP-OPEN-CLOS	STOP	
05	Mixed heating circuit pump 2 test	OFF-ON-OFF	OFF	
06	Mixer motor 2 test	STOP-OPEN-CLOS	STOP	
07	Storage charging pump test	OFF-ON-OFF	OFF	
08	Variable output 1 test	OFF-ON-OFF	OFF	
09	Variable output 2 test	OFF-ON-OFF	OFF	
10	System	Display of sensor value by pressing the input button	–	

18 "Error messages" menu (ALARM)

Error messages that occur are displayed in this menu. The fault memory can hold max. 20 messages, which can be displayed individually.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Error message 1	Last error message	"Display"	
02	Error message 2	Last error message but one	"Display"	
03	Error message 3	Last error message but two	"Display"	
04	Error message 4	Last error message but three	"Display"	
05	Error message 5	Last error message but four	"Display"	
...				
20	Error message 20	First error message	"Display"	
21*	Reset error messages	SET by pressing the input button	–	

* OEM

19 "Error messages 2" menu (ALARM 2)

Only in conjunction with heat generator interface

Error messages triggered by an automatic stoker are displayed in this menu. The fault memory can hold max. 20 messages, which can be displayed individually.

For this purpose, parameter 28 in the "System parameters" menu must be set to ON.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Error message 1	Last error message	"Display"	
02	Error message 2	Last error message but one	"Display"	
03	Error message 3	Last error message but two	"Display"	
04	Error message 4	Last error message but three	"Display"	
...				
20	Error message 20	First error message	"Display"	
21*	Reset error messages	SET by pressing the input button	–	

* OEM

20 "Service" menu (SERVICE)

Para- meter	Designation	Setting range / Setting values	Factory setting	Setting
01	Outside temperature specification	OFF, -50 ... 30 °C	OFF	

21 "Sensor calibration" menu (SENSOR ADJ.)

In this menu, all sensors connected to the central device can be corrected by ± 5 K based on the factory calibration value.

Parameter	Designation	Setting range / Setting values	Factory setting	Setting
01	Outside sensor	-5 ... +5 K	0	
02	Heat generator sensor	-5 ... +5 K	0	
03	Hot-water sensor	-5 ... +5 K	0	
04	Flow sensor of mixed heating circuit 1	-5 ... +5 K	0	
05	Flow sensor of mixed heating circuit 2	-5 ... +5 K	0	
06	Collector flow sensor	-5 ... +5 K	0	
07	Buffer sensor of collector	-5 ... +5 K	0	
08	Sensor of variable input 1	-5 ... +5 K	0	
09	Sensor of variable input 2	-5 ... +5 K	0	
10	Sensor of variable input 3	-5 ... +5 K	0	
11	Room sensor SDW 10 of direct heating circuit	-5 ... +5 K	0	
12	Room sensor SDW 10 of mixed heating circuit 1	-5 ... +5 K	0	
13	Room sensor SDW 10 of mixed heating circuit 2	-5 ... +5 K	0	

22 Log

Weekly switching program

Object:		Set by:					On:		
Mon (1)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Tue (2)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Wed (3)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Thu (4)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Fri (5)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Sat (6)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								
Sun (7)	Cont. circuit								
	Time								
	Setpoint								
	Opt.								

