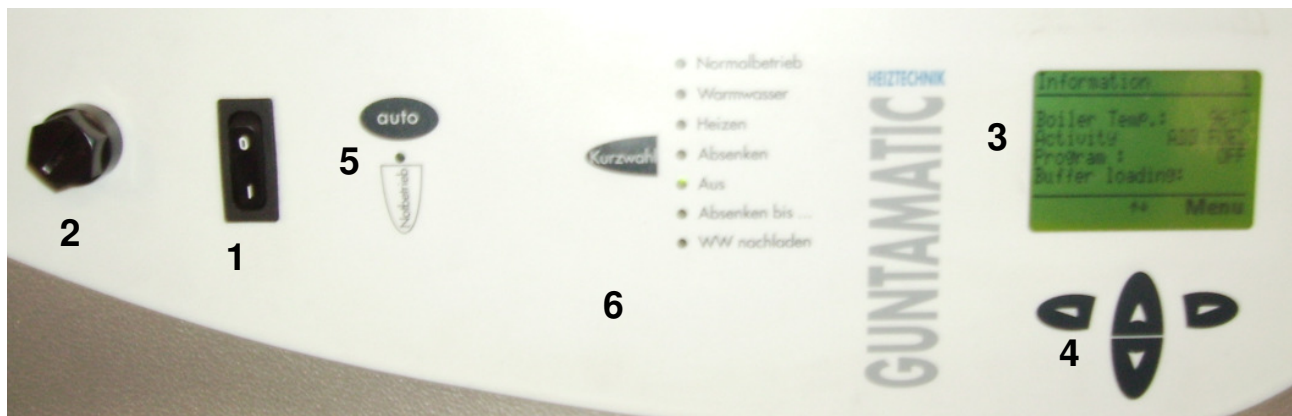


1 Description of the switch panel

1.1 Control panel



1. Mains network switch

The mains network switch usually remains on permanently.

Note: The mains power plug must be unplugged when changing a fuse on the main board the network

2. Safety temperature limiter

In the case of excess temperatures (above approx. 100°C) the button beneath the cover pops out and operation is interrupted. Following an excess temperature incident the button must be pushed in again using an object with a tip (e.g. a ball point pen).

Note: The system may only be reactivated once all faults have been rectified and the boiler has been checked. An engineer must be consulted where necessary!

3. Display

Top line = Displays the selected menu window

Bottom line = Shows the button functions (Programme – up/down – Menu)

4. Control keys

The standard display shows the following key functions:

Programme – up/down – Menu

The menu shows the following key functions:

Back (exit, cancel) – up/down – save (OK, select).

5. Auto-Emergency button

Auto = standard ; Emergency = permanent running of all pumps and suction fan

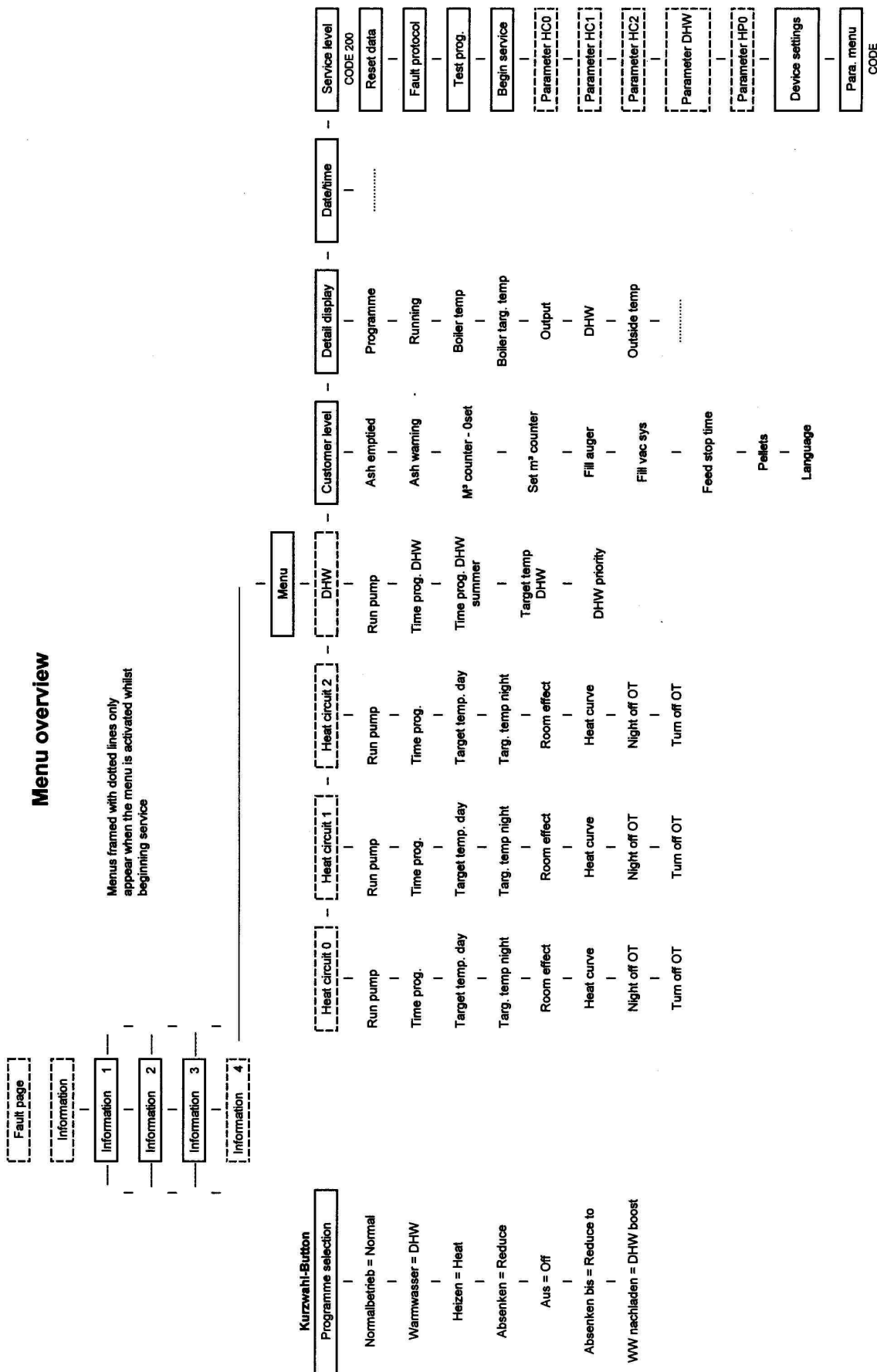
6. Programm selection “Kurzwahl”

heating programm selection via button „Kurzwahl“

2 Control programme
2.1 Menu overview

Menu overview

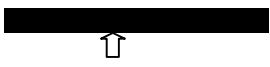
Menus framed with dotted lines only appear when the menu is activated whilst beginning service



2.2 “Kurzwahl” - Button

Normalbetrieb	=	Normal	Heating and water heating as per timer programme
Warmwasser	=	DHW	Only water heating as per timer programme DHW summer
Heizen	=	Heat	Heating system active irrespective of timer programme
Absenken	=	Reduce	Switch off heating system irrespective of timer programme
Aus	=	Off	Heating and water heating switched off
Absenken bis	=	Reduce by.	Deactivate heating system by a certain time
WW nachladen	=	Boost DHW	DHW boost for 90 min irrespective WW timer programme

2.3 Information menu

Info boiler /buffer
78 °C

↓↑ Menu

Boiler temperature
 buffer loading %
 don't fill the boiler if the mark is exceeded

Information	1
Boiler temp.:	72°C
Activity:	ADD fuel
Program:	NORMAL
Buffer loading	50%
↓ Menu	

Current boiler temperature
 Operational info for boiler: add fuel, regulation, pause
 Program (time program)
 Buffer loading %

Information	2
Buffer top:	80°C
Buffer mid:	60°C
Buffer Btm:	55°C
Boil.shunt pump	100%
↑ Menü	

Buffer temperature top
 Buffer temperature middl
 Buffer temperature bottom

Information	3
DHW:	50°C ON
HC0: *	72°C OFF
HC1: *	46°C OFF
HC2: *	34°C OFF
↓↑ Menu	

Shows DHW current temperature, pumps ON/OFF
 Shows boiler temperature, pumps ON/OFF (reduce heating circuit)
 Shows flow temperature 1, pumps ON/OFF (heat heating circuit)
 Shows flow temperature 2, pumps ON/OFF (heat heating circuit)

* **BOIL** = Boiler priority, HC OFF until required DHW temp achieved
RESID= HC ON until parameter 'Resid.ht.use' is undercut

SYNCHRO

Information	6	
Smoke gas:	165°C	Shows the actual exhaust gas and CO ₂ values
Burntime:	2h	Burn time
1) Outside temp (+5)	-3°C	Outside temperature
↓↑		Menü

1) Display only when heating circuit regulator available

Menu menu

Menu		
1)	Heating circuit 0	Customer setting for HC0 (heating circuit 0 – sliding service)
1)	Heating circuit 1	Customer setting for HC1 (heating circuit 1 – regulated service)
1)	Heating circuit 2	Customer setting for HC2 (heating circuit 0 - regulated service)
1)	DWH	Customer setting for DHW supply
	Customer lev.	Customer setting - boiler
	Detail display	All relevant boiler data and pump status shown
	Date/time	Setting the date/time
	Service lev.	Entry to the service level only with code (200)
Back ↓ Select		

Heating circuit menu 0–2

Heating circuit 0 1			
	Operation pump	Auto	Run the pumps: Auto (standard), off, duration
	Time programme	0	Time programme for HC0: Setting of 3 heating times poss.
	Trgt temp. day	22.0°C	Target room temperature during set heating times
	Trgt temp.night	16.0°C	Target room temperature outside of set heating times
4)	Room effect	T 3°C	Thermostat function selection options 1-3 °C, or room effect 0-100 %
	Heat curve 0	1.3	See heat curve diagram
	Night off OT	-3°C	Change from OFF to the target night time temperature.
	Turn off OT	18°C	The boiler is not commanded in 'turn of OT'
Back ↓ Select			

Heating circuit 1 2			
	Operation pump	Auto	Operation pumps: Auto (standard), off, duration
	Time programme	1	Time programme for HC1: Setting of 3 heating times poss.

Back ↓ Select			

Heating circuit 2 3			
	Operation pump	Auto	Operation pumps: Auto (standard), off, duration
	Time programme	2	Time programme for HC2: Setting of 3 heating times poss.

Back ↓ Select			

SYNCHRO

DHW Menu

DHW	4
Operation pump	Auto
Time programme	WW
Time prg. DHW	summer
Trgt DHW	55°C
DHW priority	No
Back	↓
	Select

Run the pumps: Auto (standard), off, duration
 Option of setting 3 boiler times during programme 'Normal'.
 Option of setting 3 boiler times during programme DHW.
 Set DHW target value
 NO: parallel service(standard) ; YES : DHW priority

Key

- 1) Display only when heating circuit regulator available
- 4) Display only when room stat (RFF25 or RS100) available.

Possible settings

- T 1°C** If target room temperature exceeded by 1 °C the heating circuit pump is switched off
- T 2°C** If target room temperature exceeded by 2 °C the heating circuit pump is switched off
- T 3°C** If target room temperature exceeded by 3 °C the heating circuit pump is switched off
- 0 %** 0 % room effect – regulation 100% by outside temperature
- 25 %** 25 % room effect – regulation 25% by room effect and 75% by outside temperature
- 50 %** 50 % room effect – regulation 50% by room effect and 50% by outside temperature
- 75 %** 75 % room effect – regulation 75% by room effect and 25% by outside temperature
- 100 %** 100 % room effect – regulation 100% by room effect

Customer level menu

Customer level	
Activity type	Modlati
Boiler target	82°C
Operation SZ	Auto
Settings KLP	Auto
Noise level	Perfect
RGT max	240°C
Residual heat	No
Language	English
Back	↓
	Select

Modulation (standard) ; Emergency (if the control has a defect)
 Standard 80°C
 Auto; Off ; Duration
 Auto; Off ; Duration
 Perfect , Quieter (=70% exhaust fan)
 (adjustable between 220 and 240°C)
 No, Yes (Heat withdrawal to 55°C)
 Select Language and switch control off / on

Detail display menu

Detail display	
Programme:	OFF
Activity	ADD Fuel
Boiler Temp	96°C
RGT target	90°C
Outside temp:	(+10)+5
Buffer loading:	60%
Buffer top:	76%
Buffer mid:	56%
.....	
Back	↓
	Select

Program (OFF, normal, reduce,..)
 Heating cycle (Ign probe, ignition, regulation, idle, pause)

6)

Key

- 6) Display only when heating circuit regulator available (outdoor temperature control)

Service level menu

CODE 200

Service level	Only for trained technicians
Reset data	
Fault Protocol	Access only possible when service "OFF"
Test programme	Menu for system configuration
Commisssionng	Is only displayed when HC0 is activated in the 'begin service' menu
6) Parameter HC0	Is only displayed when HC1 is activated in the 'begin service' menu
6) Parameter HC1	Is only displayed when HC2 is activated in the 'begin service' menu
6) Parameter HC2	Is only displayed when DHW is activated in the 'begin service' menu
6) Param. DHW	Is only displayed when HP0 is activated in the 'begin service' menu
6) Parameter HP0	
Device settings	
Parameter menu	Access only with CODE
Back ↓ Select	

Reset data menu

Reset data	Saved customer data can be loaded if required
Load customer data	Save customer data once settings are input (in service, ...)
Save customer data	Factory settings (Eprom) are loaded
Load factory settings!	Runtime counter reset to 0
Operating hours Reset	Following boiler service counter can be reset to 0
Reset service time	Factory settings (Eprom) are loaded, all counters are reset to 0
Control Reset	
Back ↓ Select	

Fault Protocol

Fault list	Error messages are allocated an error number saved with time data
Reset the software (power ON)	
10.22 17:02 No.:1	
Back ↓ Select	

SYNCHRO

Commissioning

Commissioning		
Type: Synchro	31KW	31 kW, 34 kW, 44 kW
Pump Revs.	BSP	BSP(standard) ; OFF, BSP+CCP
Buffer	Yes	Yes(buffer must be);
Ignition avail.	No	No
HCP 0 avail.	Yes	Yes(with outdoor temperature control), NO
DHW avail 0	Yes	
Time programme DHW		DHW times with programme "Normal"
Time prog. DHW summer		DHW times with programme "DHW"
DHW trgt value	55°C	Set DHW target values
DHW priority	Yes	Yes (standard): DHW priority / No: parallel run
Time programme 0		Time programme for HC0: Possible to set 3 heating times
Room stat HC0	none	Room stat for HC0: None, RFF25, RS100
Settings HC1	mixer	Activation of the pump HC1: Pump, mixer, none
HCP1 release	38°C	Release HCP1: Note: Do not set release at less than 38 °C
Flow temp.1 max	50°C	Maximum flow temperature HC1
Heating curve 1	0.6	Heating curve HC1 – see characteristic heating curve diagram
Time programme 1		Time programme for HC1: Possible to set 3 heating times
Room stat HC1	none	Room stat for HC1: None, RFF25, RS100
Settings HC2	none	Activation of the pump HC2: Pump, mixer, none
HCP2 release	38°C	Release HCP2: Note: Do not set release at less than 38 °C
Flow temp.2 max	75°C	Maximum flow temperature HC2
Heating curve 2	1.3	Heating curve HC2 – see characteristic heating curve diagram
Time programme 2		Time programme for HC2: Possible to set 3 heating times
Room stat HC2	none	Room stat for HC2: None, RFF25, RS100
HCP 1 Avail.	No	If control panel for Mixer 3-4 is available
HCP 2 Avail.	No	If control panel for Mixer 5-6 is available
8) Run HP0	none	Special output HP0: None, Z-pump, NFA, burner, verblock
Save customer data		To finish, save customer data
Back	↓	Select

Parameter menu HC0–2

Parameter HC0		
Run HC0	pump	Activate the pumps HC0: Pump, mixer (only with HC1 and HC2), none
Room stat HC0	none	Room stat for HC0: None, RFF25, RS100
Flow temp.0 min	38°C	Minimum flow temperature HC0
Flow temp.0 max	75°C	Maximum flow temperature HC0
Blr overheat.	5°C	Boiler overheating is added to required temperature = boiler target value
HCP0 release	38°C	Release HCP0: Note: Do not set release at less than 38 °C
Move parallel	5°C	Heating curve is shifted with an offset to reflect the value setting
Back	↓	Select

Key

- 8) Special output HP0. Possible settings:
Z pump The Z pump is activated as soon as one of the heating pumps or the storage tank pump begins to run
NFA add fuel Announcement

SYNCHRO

Burner Release output HP0 if: Buffer top is lower than needed
Verblock Release output HP0 if: Buffer top is lower than needed , additionally a mixing valve for operating with Synchro or oil-gas boiler

DHW parameter menu

DHW parameter		
DHW circuit avail.	YES	DHW charging circuit available: Yes/No
DHW hysteresis	10°C	Activation of DHW preparation to this value, if lower than DHW target value
DHWP release	45°C	Minimum boiler temperature for release of DHW pump
Boil. overheat	8°C	Where DHW necessary value is added to DHW target value=boiler target
Back	↓	Select

HP0 parameter menu

Customer level		
8) Settings HP0	ZUP	Special output HP0: None, Z-pump, NFA, burner, verblock
Back	↓	Select

Device settings menu

Device settings		
Type:	Synchro 31KW	31 kW, 34 kW, 44 kW
Pump Revs.	BSP	BSP(standard) ; OFF, BSP+CCP
Buffer	Yes	Yes(buffer must be);
Ignition avail.	No	No
HCP 0 avail.	Yes	Yes (with outdoor temperature control Mixer 1-2)
HCP 1 avail.	No	If control panel for Mixer 3-4 is available
HCP 2 avail.	No	If control panel for Mixer 5-6 is available
Outside temp	Yes	Yes, No
Lambda present	No	No(standard), Yes (option)
PC-monitoring	0	HCP1-4, 4=GSM-Modul
Time ABS pump	60sec	Pumps activated for 60 seconds one time each week
HCP cutin	100°C	All HCPs are activated above this boiler temperature, open mixer to VLtemp. max.
T1Resid head	55°C	Res.heat use: Active HC runs on, until beneath " Res.ht .use "
HCP frost TA	-3°C	If drops below outside temperature "HCP Frost TA" then the HCP start to run
HKP Frost TV	3°C	HCP Frost TV is the preset flow target value (function only with programme OFF)
TÜV Function		In "Regulation" service the boiler temperature is raised until interruption from STB.
Back	↓	Select

3 Example customer settings

3.1 Setting the time programme

Information	1
Boiler temp.:	72°C
Service:	REGULATION
Programme:	NORMAL
Outside temp: (-10)	5°C
Prog.	↓ Menu

Press the **menu** button

Menu	
Heating circuit 0	
Heating circuit 1	
Heating circuit 2	
DHW	
Customer level	
Detail display	
Date/time	
Service level	
Back	↓ Select

Select the required heating circuit (example here is heating circuit 0) and then press the **select** button

Heating circuit 0	1
Run pump	Auto
Time programme	0
Trgt temp. day	22.0°C
Trgt tem.night	16.0°C
Room effect	T 3°C
Heating curve 0	1.3
Night out AT	-3°C
Turn off OT	18°C
Back	↓ Select

Select time programme 0 and then press the **select** button

Heating circuit 0	1
Mo Tu We Th Fr Sa Su	
1:On05:00 Off22:00	
2:On05:00 Off22:00	
3:On05:00 Off22:00	
Back	↔ Change

Select the relevant day and press the **change** button to alter the first start time.

Heating circuit 0	1
Mo Tu We Th Fr Sa Su	
1:On 05:00 Off22:00	
2:On05:00 Off22:00	
3:On05:00 Off22:00	
Back	+ - →

1. use + - to change the start time
2. use → to move across to the off time and change with+ -
3. use → to move down to the next start time or **back** to exit
4. select the **back** option 3 more times to return to information

3.2 Changing the heating curve

Information	1
Boiler temp.:	72°C
Service:	REGULATION
Programme:	NORMAL
Outside temp: (-10)	5°C
Prog.	↓ Menu

Press the **menu** button

Menu		
Heating circuit 0		
Heating circuit 1		
Heating circuit 2		
..		
Back	↓	Select

Select the required heating circuit (example here is heating circuit 0) and then press the **select** button

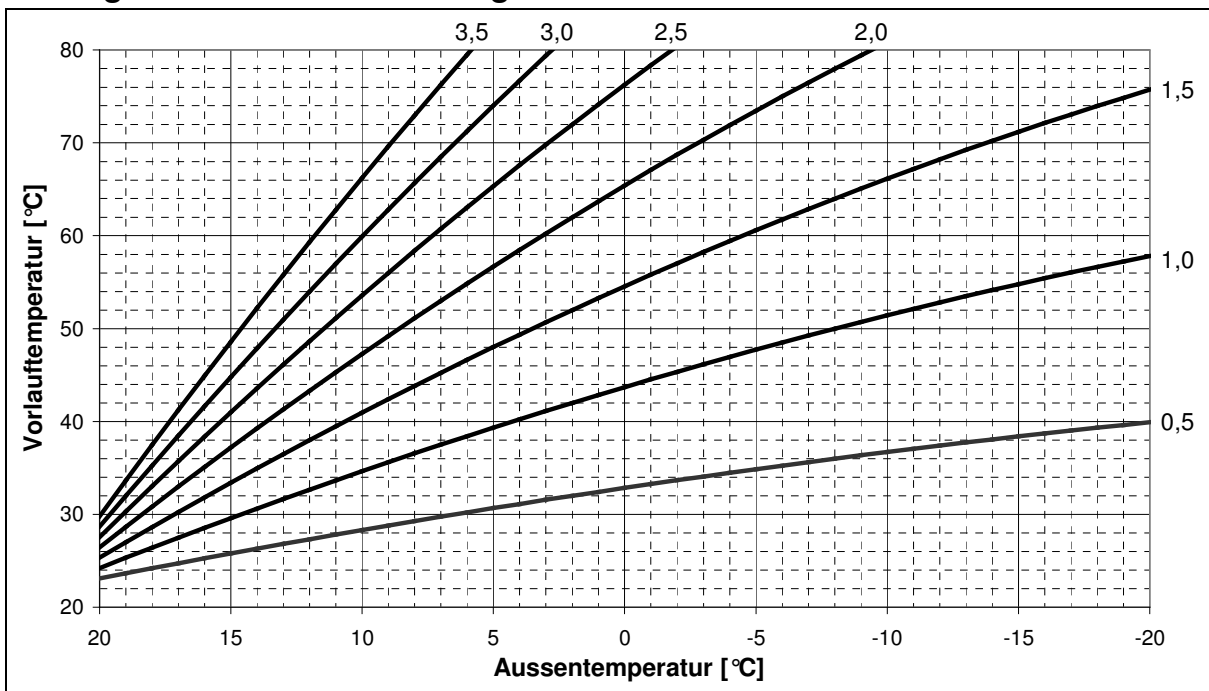
Heating circuit 0	1	
Run pump	Auto	
Time programme	0	
Trgt temp. day	22.0°C	
Trgt te. night	16.0°C	
Room effect	T 3°C	
Heating curve 0	1.3	
..		
Back	↓	Select

Select heating circuit 0 and then press the **select** button

Heating circuit 0	1-6	
Heating circuit 0		
1.2-1.4 > Radiator		
0.5-0.7 > Underfl. H.		
(1.3)	1.4	
Back	+ -	Save

1. Change the values with the + -
2. Finish by selecting **save**,
3. Select the **back** option 2 more times to return to information

3.3 Heating characteristic curve diagram



3.4 Setting the date/time

Information	1
Boiler temp.:	72°C
Service:	REGULATION
Programme:	NORMAL
Outside temp: (-10)	5°C
Prog.	↓
	Menu

Press the **menu** button

Menu		
Heating circuit 0		
Heating circuit 1		
Heating circuit 2		
DHW		
Customer level		
Detail display		
Date/Time		
Service level		
Back	↓	Select

Select the date/time and then press the **select** button

Date/time	7	
Th, 31.10.2002 09:15:10		
Back	↓	Change

Select the **change** button

Date/time	7	
Th, 31.10.2002 09:15:10		
Back	+-	→

1. use **→** to select the required value
2. use **+ -** to change the value
3. use **→** to continue until **save** appears in the bottom right corner

Date/time	7
Th, 31.10.2002 09:15:10	
Back	Save

1. Finish by selecting **save**,
2. Select the **back** option 2 more times to return to information

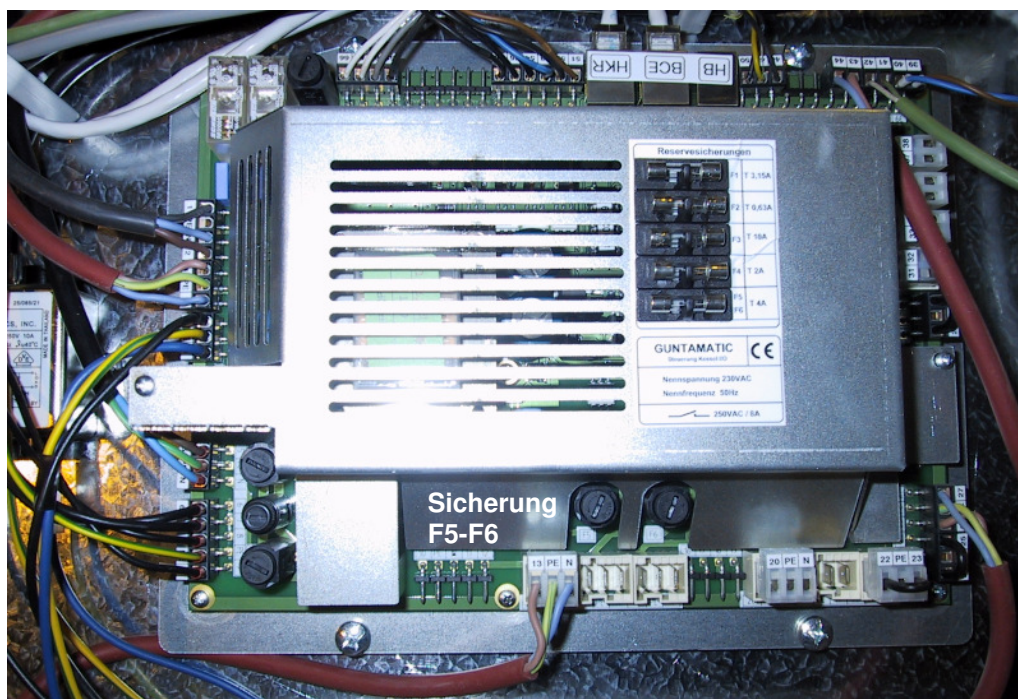
4 Changing the fuse



Danger: Electric shock due to contact with electrical parts!
Contact with live parts is life endangering!
 Only authorised engineers are permitted to remove the regulator cover and carry out work on the regulator.

Procedure

1. Select the system “OFF” programme
2. Leave the system to cool down for a minimum 10 minutes
3. Before handling, turn the mains switch to “OFF” and remove the external network mains plug from the socket (disconnect power supply to the switch panel)!
4. Lift the front panel (curved silver part above the black ash cover) and draw it towards you
5. The circuit boards (boiler-I/O; HC-regulator I/O) and their connectors and fuses are now visible (see electrical wiring diagrams)



- The circuit board boiler-I/O is protected by 6 fuses (F1-F6).
- The HC-regulator I/O is protected by 2 fuses (F1-F2).

(The position and component protection provided is shown on the electrical diagrams).

6. Press the fuse socket in by 2-3 mm and rotate one half turn to the left. The fuse socket and fuse will now stick out a few mm.
7. Remove the faulty fuse and place a new fuse in the fuse socket.
8. Push the fuse socket back into place and use the screwdriver to ensure that it is firmly and correctly in place. Now rotate one half turn to the right.

GUNTAMATIC

GUNTAMATIC Heiztechnik GmbH

A – 4722 PEUERBACH Bruck 7

Tel: 0043 (0)7276 / 2441-0

Fax: 0043 (0)7276 / 3031

Email: info@guntamatic.com

Homepage: www.guntamatic.com