

Instructions for use

Extension board EWP Basis

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made in germany.



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1 About this document

1.1 Target group of the instructions

These instructions for Extension board 'Basic' (EWP Basis) are intended for the operator of the system.

The **PIN** code for the operator is **9999**.

1.2 Validity of the instructions

The documentation for the product Extension board 'Basic' (EWP Basis) is valid from November 2015.

Ulrich Brunner GmbH reserves the right to make technical changes insofar as they serve technical progress or are required by safety regulations.

1.3 Storage of the documents

These instructions for Extension board 'Basic' (EWP Basis) are kept by the operator of Extension board 'Basic' (EWP Basis) after use **for future reference**.

IMPORTANT

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

The operator is responsible for keeping these operating instructions and all other applicable documents.

1.4 Symbols used

A **hazard** is a potential source of injury or damage to health.

A **risk** is the combination of a probability and the severity of injury or damage to health that can occur in a hazardous situation.

The **danger zone** is the area and radius in which the boiler with/without the heating system is located, in which the safety or health of a person could be at risk.

A **person at risk** is a person who is wholly or partially located in a danger zone.

The **operating personnel** are the persons responsible for installing, operating, setting up, maintaining, cleaning, repairing or transporting the system.

In this documentation, a distinction is made between:

Operating personnel as the **operator of the system**, i.e. the end customer who has been instructed by the specialist personnel and does not need to have any additional qualifications.

Operating personnel as a **specialist company** are the qualified specialists who are authorized to carry out the specified specialist work.

The following symbols are used in this document:



DANGER

There is a high-risk hazard that will result in serious injury or death if this hazard is not avoided.

WARNING

There is a possible medium-risk hazard that can lead to serious injury or death if this hazard is not avoided.

CAUTION

There is a low-risk hazard that can lead to minor or moderate injury if this hazard is not avoided.

**NOTE**

Additional helpful information

1.5 Presentation rules

The following presentation rules apply in this document for Extension board 'Basic' (EWP Basis):

Action instruction with several action steps

Used for activities or actions that contain several steps and where the chronological order of the individual action steps must be adhered to.

1. first action step;
 2. second action step;
 3. third action step, etc.
- Final result.

Presentation of the display texts in the instructions

The display texts are shown in bold for descriptions of the settings on the BRUNNER touch display.

2 For your safety

2.1 Dangers and safety measures

The assembly, installation, maintenance and servicing of Extension board 'Basic' (EWP Basis) may only be carried out by a specialist company.

- Only carry out activities that are described in these instructions.



Electric shock

Work on the electrical installation may only be carried out by a qualified specialist company.



Avoid damage to the appliance and resulting hazards

Sprays, solvents or chlorinated cleaning agents, paints, adhesives etc. can, under unfavorable circumstances, cause damage to the appliance.

- Do not use sprays, solvents or cleaning agents, paints, adhesives, etc. containing chlorine in the vicinity of the appliance.
- Do not under any circumstances make any changes to parts or equipment of the heating system if these changes could impair operational safety.

Operate the Extension board 'Basic' (EWP Basis) safely.

Only use the expansion board if it is in perfect technical condition and in accordance with its intended use and in compliance with the operating instructions.

Look out for visible damage and contact a specialist company if necessary.



- Never remove or cover the stickers with the safety instructions on the product.
- The stickers must remain legible for the entire service life of the Extension board 'Basic' (EWP Basis).
- Replace the stickers with the safety instructions immediately if they are damaged or illegible.
- Do not store any highly flammable materials (e.g. solvents, petrol cans) near the Extension board 'Basic' (EWP Basis).
- This appliance is not intended for use or maintenance by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.

2.2 Warnings

Warnings in this document are emphasized by pictograms and signal words.

The pictogram and the signal word indicate the type, the source or causes of a certain action. The necessary precautions or instructions to be followed are indicated.

The same applies to results or desired effect of an action.

These warnings refer to possible misuse of the system, which seems likely based on our experience.

Certain residual risks are also indicated.

The residual risks are inevitable:

- despite the safety measures considered in product design,
- despite the safety precautions,
- despite the complementary protective measures.

For certain points we have provided recommendations and instructions on how to use protective measures, including personal protective equipment.

Special safety instructions and recommendations are applied for transport, handling and storage.

Instructions for safe set up and maintenance include separate protective measures too.

Structure of warnings

The warnings that precede each assembly step, are shown as follows:



Danger

Type, source and causes of danger

Measures

Call for action

→ Result or safe use

2.3 Regulations

Standards and guidelines

the relevant safety requirements of DIN, EN, DVGW, TRGI and VDE

- EN 12828 Heating systems in buildings - Design of hot water heating systems
- EN 12831 Heating systems in buildings - Method for calculating the standard heating load
- DIN 4753 Water heating systems for drinking and process water
- DIN 1988 Technical rules for drinking water installations (TRWI)
- VDI 2035 Prevention of damage in hot water heating systems
- DIN VDE 0100 Part 540 2007-06 DIN VDE 0100-540 Installation of low-voltage systems
- DIN VDE 0100 Part 701 2008-10 DIN VDE 0100-701 Installation of low-voltage systems

3 Product description

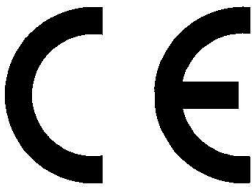
3.1 Intended use

The Extension board 'Basic' (EWP Basis) can only be used in conjunction with other BRUNNER units. For example, with BRUNNER log boilers (Scheitini, Scheitikus or Scheitikum), BRUNNER pellet boilers (Pelletini, Pelletikum, Pelletikus) or the electronic stove control (EOS).

Intended use also includes observing all information on personal and material hazards in these operating instructions. Also comply with all country-specific standards and safety regulations.

Read and observe all information and recommendations on installation, operation and maintenance for the Extension board 'Basic' (EWP Basis) from this documentation.

3.2 Conformity



We, the manufacturer, hereby declare that Extension board 'Basic' (EWP Basis) complies with the basic directives concerning the placing on the market in the EU.

3.3 Functional description

The Basic expansion board is responsible for the heat management of the heating system.

It controls the heat generation according to the operator's requirements. The heat generators can be: log boilers, pellet boilers, wood chip boilers, but also wood-burning stoves, connected to an EOS (electronic stove control). All BRUNNER natural energy boilers and stoves can be operated with or without solar systems, oil or gas boilers. The heat consumers can include Radiators, convectors, wall heating, underfloor heating.

The heating circuit is equipped with an outdoor temperature control. In heating mode, the flow temperature for the controlled heating circuit is determined from the outside temperature and the set heating curve. The base point and the design point can be entered separately for each heating circuit. The user can choose individually from different heating systems for each heating circuit or make an individual setting.

When using the expansion board, the software version on the system must be Rel. 5.0 or higher.

3.4 Special adjustable functions

Disinfection of the hot water tank

The thermal disinfection of the hot water storage tank serves to prevent the formation of legionella. This disinfection takes place automatically at the time and temperature you set.

Frost protection

The Extension board 'Basic' (EWP Basis) is equipped with heating circuit frost protection. This has priority over all selected settings. As soon as the specified outside temperature (frost protection) is reached, the inactive circulation pumps of the heating circuits are automatically switched on. If the circulation pumps are already active, this function is omitted.

Summer/winter changeover

If the outdoor temperature exceeds the **summer** switchover threshold, the heating circuit pumps are **deactivated**. An individual summer/winter switchover value can be set for the heating circuit. There is also the option of setting summer or winter permanently. If the outside temperature falls below the **summer off** switchover threshold by more than 1°C, winter mode is started automatically.

Standard programs for the heating circuits

The 3 standard programs can be used separately for each individual heating circuit. Three time intervals can be selected for each day of the week. You can easily enter the standard programs on the display, in the home view, without a PIN code and also name them individually. The switching times of a standard program can be changed or added to. Three further program levels are available for other individual program requests (New 1, 2 or 3).

Dry screed

If a heating circuit is equipped with underfloor heating, a special drying program can be set. As soon as the drying process is complete, the setting is automatically reset to "No". The active drying program for the relevant heating circuit is shown on the display. The necessary parameters are preset at the factory, but can be changed.

Continuous operation

In this setting, the system automatically switches to day mode for an adjustable period of time (hours). The continuous operation function starts immediately and is automatically deactivated after the preset time period has elapsed. The day/night changeover takes place automatically.

Absence

With the absence program, the desired heating circuit or an existing external hot water cylinder can be operated in frost protection mode for an adjustable period of time (days) during absence. This means that the relevant heating circuit is switched off, but frost protection is active as it has the highest priority. The absence function starts immediately and is automatically deactivated after the preset period of time has elapsed. The system switches to automatic heating mode. The absence program can be interrupted/cancelled or resumed. An active vacation program is shown on the display. The vacation days or absence time are displayed and counted down.

Calibration offsets

Carry out a calibration to guarantee a match between the measured values recorded and the measured values output by the sensors. If there is a temperature deviation of the sensor, a change in degree Celsius increments is possible under Settings.

Corrosion protection

Corrosion protection of all pumps and mixers is very important to ensure a long service life for the entire heating system.

When corrosion protection is active, all pumps and mixers are monitored by the function modules for a short time. During corrosion protection, the mixers and pumps are briefly activated and realigned on the first Monday of each month at 1:01.

4 Operation basics

The images shown in the installation and operating instructions (including display views) do not claim to be an exact representation of the displays on your system. These depend on the installed system components, their measurement functions, control variants and set parameters. In some cases, these system parts are not part of the standard versions, but are provided as optional accessories.

4.1 Licenses

For the visualization of our user interface we use an open source operating system, which is subject to different license models.



You can see the licenses used in the software under the menu:
„**Settings**“ → “**Display**“ → “**Licenses/Contact**“

Written Offer (open source software)

Our product contains software and sourcecode whose rightholders license it under the terms of the GNU General Public License, version 2 (GPLv2), version 3 (GPLv3), the GNU Lesser General Public License, version 2.1 (LGPLv2.1), version 3 (LGPLv3) and other open source software licenses.

If you send us a request for oversending the licensed source code of the software, please use the following address:

Ulrich Brunner GmbH
Zellhuber Ring 17-18
84307 Eggenfelden
info@brunner.de

Upon request, we will send you a CD-ROM with the provided source codes. You have to pay the costs for material, packaging and delivery.

The offer is valid for at least three years from the date of delivery of the product on which the software is installed, and as long as we can offer spare parts and customer service for this product, or from the time of downloading the software from our homepage.

Please include the type of product for which you want to receive the source code in your request.

4.2 Data protection declaration of Ulrich Brunner GmbH

Notes on protecting your personal data

Ulrich Brunner GmbH always endeavors to save and process only the personal data that are necessary and indispensable or that are required to be stored and processed by law.

We strictly adhere to the requirements of the General Data Protection Regulation (GDPR) and the Federal Data Protection Act (BDSG and BDSG new).

We do not pass on personal data to third parties; unless we are required to do so by law or by court order.

Persons under the age of 18 should only transfer personal data to us with the consent of their legal guardians. If there is reason for a complaint, it can be addressed to the responsible state authority.

The required contact details can be found on the website: <https://www.lida.bayern.de>. If other sources of information or services (websites, apps, etc.) from Ulrich Brunner GmbH are used, the data protection declarations listed also apply.

Purpose of data processing

We only collect, store and process personal data for the express or implicitly agreed purpose. These are e.g. Address data for processing an information request, or for making offers, invoicing etc. or bank data for processing payment transactions. Without an independent declaration of consent, this data is not e.g. used to send as newsletter or similar purpose.

Saving and deleting

We only store personal data for as long as is necessary to fulfill the agreed purpose or as required by law. If the agreed purpose is fulfilled or there is no longer a legal basis for storage, this data will be deleted as far as possible. If deletion is not technically possible, the data will be marked in such a way that further processing is impossible.

Deletion requests, requests for information, requests for changes or revocation of a declaration of consent can be directed at any time to the data protection officer of Ulrich Brunner GmbH.

Responsible for data processing

Ulrich Brunner GmbH
Zellhuber Ring 17-18
D-84307 Eggenfelden
E-Mail: info@brunner.de
Tel.: 08721/771-0

You can contact the data protection officer under: datenschutzbeauftragter@brunner.de.

4.3 Display views

The Home view appears differently depending on the connected heat generator and heat consumer. In general, however, the heat generators are arranged on the left-hand side of the display view and the heat consumers on the right-hand side.

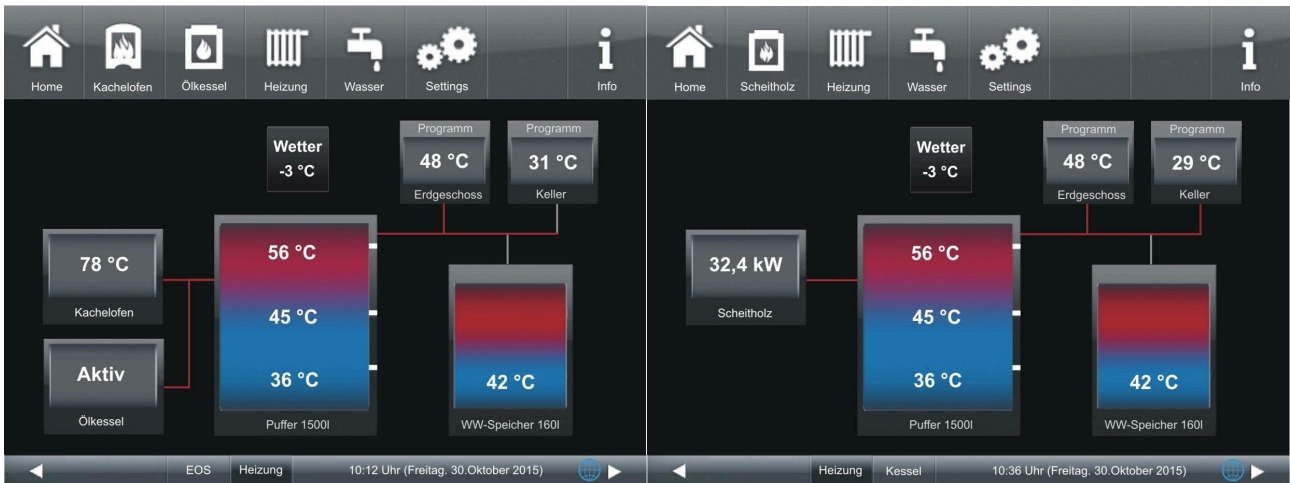


Illustration 1: EWP basis with tiled stove + EOS and auxiliary heating 1 (oil boiler)

Illustration 2: Home view with EWP Basis with Brunner log boiler, without auxiliary heating

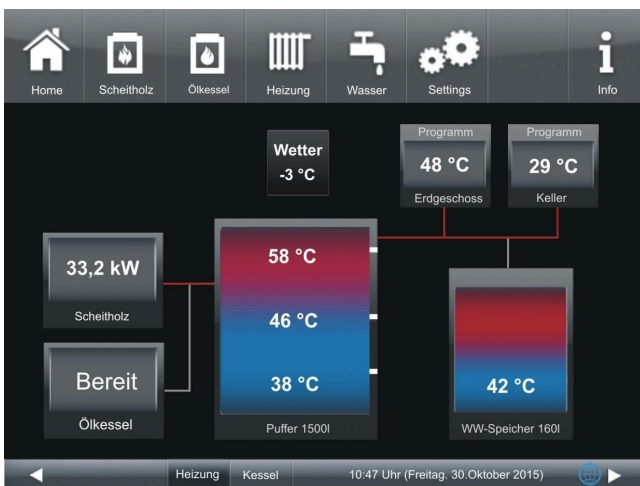
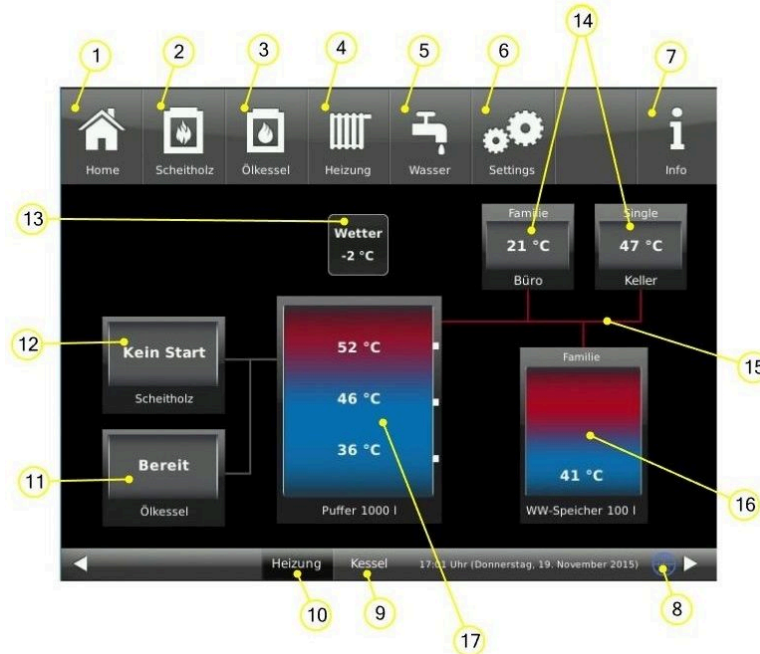


Illustration 3: EWP basis with Brunner log boiler and auxiliary heating 1 (oil boiler)

4.4 Home view overview

Example (with black display design): Connection of a Basic expansion board to two heat generators (log boiler and oil boiler), two heating circuits and hot water supply;



Menu bar buttons:	
1	Start page; Home view; button for starting all applications;
2	Log boiler (= Scheitholzkessel) - heat generator; Button for the customer parameters of the log boiler;
3	Oil boiler (= Ölkessel) - alternative heat generator (auxiliary heating 1); Button for the customer parameters of the oil boiler
4	Heating (=Heizung) - heat consumer; Button for the customer parameters of the heating, incl. programs of the heating circuits
5	Hot water (= Warmwasser) - heat consumer; Button for the customer parameters of the hot water supply; incl. programs for hot water
6	Settings; Access is with a PIN (different for the operator or specialist); Enables access to various parameter levels for configuration and parameterization;
7	Info; If error messages are present, the Info button is highlighted in orange.
8	Network and mybrunner status: no symbol = no network; gray globe = in network, but offline with mybrunner; blue globe = online with mybrunner
9	Button for the home view of the BRUNNER boiler, the entire boiler control system
10	Button for the home view of the heating system; the entire control of the heat consumers and heat generators;
Graphics of the Home view :	
11	Oil boiler + current operating status
12	Log boiler + boiler output
13	Outdoor temperature display

14	Heating circuits + program used + current temperature
15	Supply lines; the coloring shows their operating status (red=active; grey=inactive)
16	Hot water tank (= Warmwasserspeicher) + temperature display
17	System storage tank (=Systemspeicher); buffer + temperature display

4.5 Displays and setting options under Home

4.5.1 Auxiliary heater 1

EWP base

By clicking on the symbol in the top menu bar or the graphic from the Home view for the auxiliary heating, you can view and make certain settings for the auxiliary heating:

Short text	ME / Selection	Explanation
<i>Example: Gas boiler (= Gastherme)</i>		
Gas boiler	On / Off	Setting option of the system: On/Off
Flue gas test	On / Off	Whether the flue gas test is activated or not
Activated for:		Full load (=Vollladung)/ DHW(=WW; Warmwasser)/heating (Heizung) / frost protection(=Frostschutz) / hot water (=Warmwasser) / heating (=Heizung) or summer / winter operation (=Sommer- / Winterbetrieb)
Program		Selection of the program set in the time periods for the operational readiness of the existing additional heating "GAS" for automatic reheating: Day / Night / New 1/ New 2/ New 3 (=Tag / Nacht / Neu 1/ Neu 2 / Neu 3)
Status	Display	Current operating status of the gas system
Periods	Button	See section "Defining time periods"
<i>Example Electricity</i>		
Current	On / Off	Switching the system on/off
Activated for:		Full charge / DHW/heating / frost protection / hot water / heating or summer / winter mode
Program		Selection of the program set in the time periods for the operational readiness of the existing additional heating "Electricity" for automatic reheating: Day / Night / New 1/ New 2/ New 3 (=Tag / Nacht / Neu 1/ Neu 2 / Neu 3)
Status	Display	Current operating status of the system based on electricity (electric heating element)
Time periods	Button	see chapter "Defining time periods"
<i>Example: Oil boiler</i>		
Oil boiler		Option to select whether the oil boiler is switched on or off .
Flue gas test		Selection of whether the flue gas test is switched on or off .
Activated for:		Full load (=Vollladung) / DHW (WW; Warmwasser)/heating (=Heizung) / frost protection (=Frostschutz) / hot water (=Warmwasser) / heating (=Heizung)

Short text	ME / Selection	Explanation
Program		Selection of the program set in the time periods for the operational readiness of the existing auxiliary heating "Electricity" for automatic reheating: Day / Night / New 1/ New 2/ New 3
Status		Display: Operating status of the auxiliary heating
Periods	Button	see chapter "Defining time periods"

The displays and buttons depend on the type of auxiliary heating.

4.5.2 Auxiliary heating 1 and auxiliary heating 2

Auxiliary heaters can be different: e.g. gas boilers, based on electricity, heat pumps, oil boilers, etc. The setting is made in the configuration.

Auxiliary heating 1 or 2 is defined during commissioning. The icon for additional heating 1 is displayed in the top menu bar, additional heating 2 is not displayed as an icon.

The parameters for additional heating 1 appear on the first page of the additional heating and additional heating 2 on the second page.

Example: Additional heating 1: gas boiler and additional heating 2: electric immersion heater:

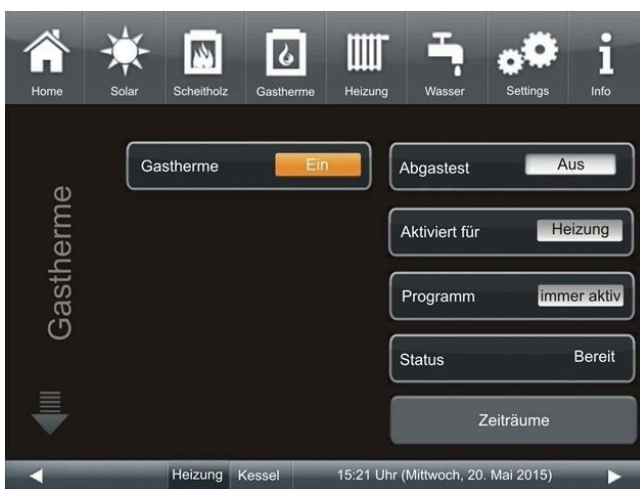


Illustration 4: Auxiliary heater 1 page 1: with gas boiler (=Gastehrme)



Illustration 5: Auxiliary heater 2 side 2: with electricity (= Strom) (electric heating element without power measurement option)

Display	M.E. / Option	Explanations
Designation of the additional heating (=Benennung der Zusatzheizung)	Off /On	Switching the auxiliary heating off/on 1
Exhaust gas test (=Abgastest)	Off / On	Function not applicable for auxiliary heating: Electricity, heat pump
Activated for: (=Aktiviert für:)	DHW/heating / full charge / heating / hot water / frost protection (=WW/Heizung / Vollladung / Heizung / Warmwasser / Frostschutz)	

Display	M.E. / Option	Explanations
Program (=Programm)	Always active / Day / Night / New 1/ New 2/ New 3 (=immer aktiv / Tag / Nacht / Neu 1/ Neu 2/ Neu 3)	
Status	Off/ Ready / Active (= Aus/ Bereit / Aktiv)	
Time periods (=Zeiträume)	Setting option for the periods during which the additional heating can be activated (see also chapter "Defining periods")	

4.5.3 Defining periods

To define the availability of heat sources (boiler types and additional heatings), you can use the softkey **Periods**. You can use it to select the time program for automatic reheating.

After clicking the **Periods** softkey you have the possibility to select a factory defined program or to create a program on your own.

Program name	Hours of automatic reheating activity:
always active (= immer aktiv)	active at all times
Day (=Tag)	from 7am to 10pm
Night (=Nacht)	from 0am to 6am and from 11pm to 0am
New 1 (=Neu 1) New 2 (=Neu 2) New 3 (=Neu 3)	These slots are available for your own program settings. The entered programs can be renamed. These programs can be overwritten.

To enter a program, please follow the path for the given heat generator (see relevant chapter).

To create a new individual program



Illustration 6: Periods Pop-up

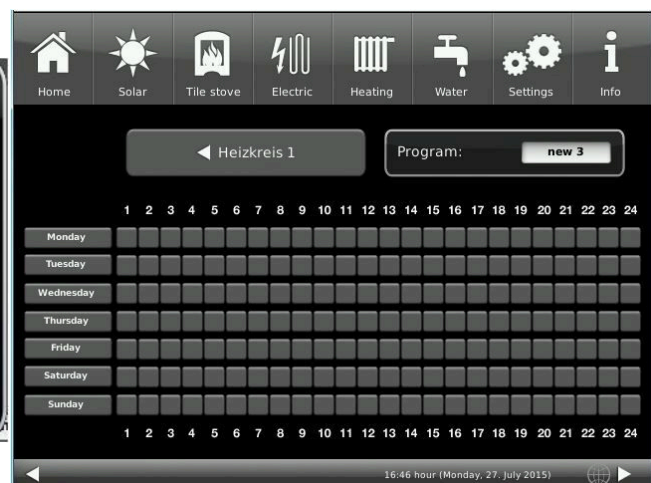


Illustration 7: Periods setup page

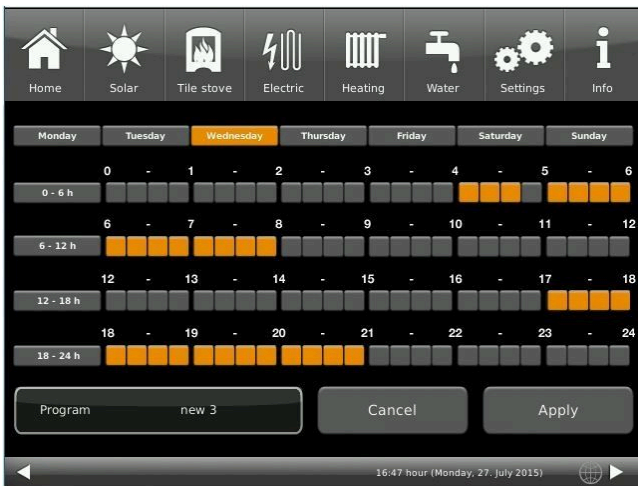


Illustration 8: Hourly schedule



Illustration 9: Keyboard

Tap to select the periods. Tap the softkey **Program** and a pop-up will show up. Tap **New 1** (=Neu 1) and the setup page appears. By clicking the days of week, you can view the schedule for the particular day. By clicking the periods 0-6, 6-12, 12-18 and 18-24 you can highlight the whole section, but there is also an option to mark only individual squares.



NOTES

Orange square = active, automatic time; gray square = inactive time.

It is not possible to select more than one day of week at a time.

Factory-defined programs cannot be overwritten. The new entered programs can be overwritten.

To rename a new program, click on the setup page on Program in the lower left corner and a keyboard will show up to enter the desired name for the new program.

4.6 Individual settings

4.6.1 Individualization of the display

The touch display of the BRUNNER systems can be customized with various display options.

This chapter describes all the setting options for the display presentation.

Touch the **Settings** button and enter your PIN code.

Follow the path: **Settings** (PIN code 9999) / **Control panel** / **Settings** and the following window will appear:



Illustration 10: Display-> Example: Setting options

Your settings window for setting the time period for the screen saver to appear appears:

Screensaver appears automatically after minutes

1. follow the path in the display:

Settings / Control panel / Settings / Standby to

2. a new window appears when you press the white area next to **Standby after**....:

3. set the desired time - in minutes: a) by tapping **+** or **-** or

b) by sliding the slider to the right or left

4. press **O.K.** to confirm;

→ The setting is accepted.



Illustration 11: Display customization - screen saver

This setting activates the screen saver after the desired time.

The brightness of the display

You can adjust the brightness of the touch display to adapt it to the local conditions.

To set the brightness, proceed as follows:

1. Follow the path: Settings / Control panel / Settings / **Brightness**
2. A new window appears by pressing on the white highlighted area under **Brightness**. 3:
3. set the desired brightness:
 - a) by tapping **+** or **-**
 - or
 - b) by sliding the slider to the right or left
4. press **O.K.** to confirm.
→ The setting is accepted.



Illustration 12: Display customization - Brightness

You can set **the length of the long signal tone** that sounds in the event of a fault (error message) or information message.

To set the duration of the long tone,

1. Follow the path in the control structure:
Settings / Control panel / Settings / **Long tone**
2. a new window appears when you press the white area next to **Long tone**:
3. set the desired time - in seconds:
 - a) by tapping **+** or **-**
 - or
 - b) by sliding the slider to the right or left;
4. press **O.K.** to confirm.
→ The setting is accepted.



Illustration 13: Display customization - Long tone

You can set **the duration of the short signal tone** that sounds in the event of a fault (error message) or information message.

To set the duration of the short tone,

1. Follow the path in the control structure:
Settings / Control panel / Settings / **Short tone**
2. a new window appears when you press the white area next to **Short tone**:
3. set the desired time - in seconds:
 - a) by tapping **+** or **-**
 - or
 - b) by sliding the slider to the right or left
4. press **O.K.** to confirm.
→ The setting is accepted.

You can set **the time interval for the repetition of the signal tone** that sounds in the event of a fault (error message) or information message.

To set the duration of the long tone,

1. Follow the path in the control structure:

Settings / Control panel / Settings / **t Sound repetition**

2. a new window opens by pressing on the white area next to “**t Tone repetition**”:

3. set the desired time - in seconds:

a) by tapping + or -

or b) by sliding the slider to the right or left

4. press **O.K.** to confirm.

→ The setting is accepted.

Log out after function

You can set the waiting time after which the touch display should automatically exit the Settings function area if no input is made (Settings log-out).

To set the waiting time, proceed as follows:

1. Follow the path:

Settings / Settings / Control panel / Log out **to**

2. a dialog window appears with the bar display; by tapping + or - you can navigate through the area

3. tap **O.K.** to confirm the selection.

→ The setting is accepted.

Automatic changeover between summer and winter time

For an automatic changeover between summer and winter time, you can set the time zone in which the installation location of the boiler is located.

To set the **time zone**:

1. Follow the path:

Settings (with PIN code) / Control panel / Settings / **Time zone**

2. a window for selecting the desired time zone appears

3. select the time zone;

4. select **O.K.** to confirm;

→ The setting is accepted.



Illustration 14: Display Individualizing time zones

Screensaver

You can change the appearance of the screensaver. You have several options.

To change the screensaver, proceed as follows:

1. Follow the path:

Settings / Control panel / Settings / **Screensaver**

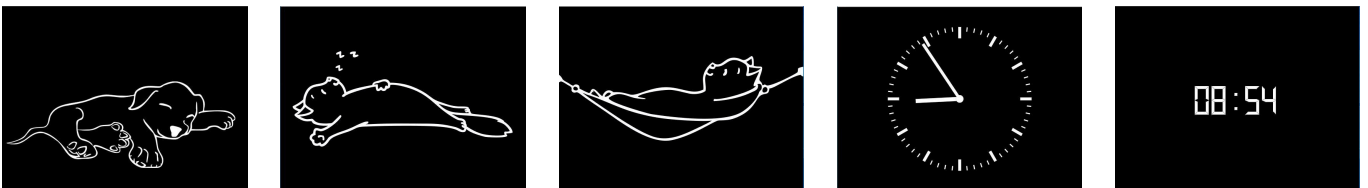
2. a dialog window appears with the options listed. Touch the desired screen saver.

3. press **O.K.** to confirm;

→ The setting is accepted and the desired screen appears.



Examples of screensavers:



Language

You can also change the desired boiler control language after the boiler has been configured. The languages that are not available are displayed darkened.

To change the language setting, proceed as follows:

1. Follow the path:

Settings / Control panel / Settings / Language

2. A dialog window appears with the flags of the respective countries;

3. Press the flag of the desired language;

→ The language setting is applied

4. if the language setting has been changed, the control panel is automatically restarted;

5. press **O.K.** to confirm the restart of the control panel;

→ The control panel is restarted and the language is adopted after the restart.



Illustration 15: Display Customization Language

Design

You can change the appearance of the touch display to adapt it to the local conditions. You can select the background color of the display: white / black.

This process takes approx. 1 minute.

To change the appearance, proceed as follows:

1. Follow the path:
Settings / Control panel / Settings / **Design**
2. A selection window appears in which you can select the desired setting (**white** or **black**) by touching it.
3. Tap **O.K.** to confirm
4. please wait until the control unit switches off automatically and then switches on again (approx. 1 minute)
→ The setting is accepted.



Illustration 16: Display design selection

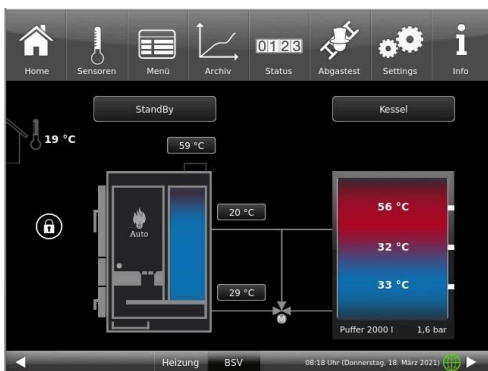


Illustration 17: Black display design

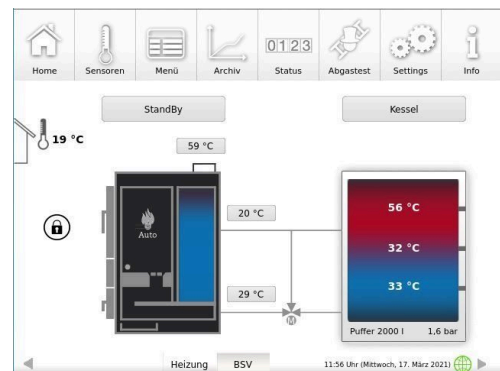


Illustration 18: White display design

4.6.2 Select or create new heating programs

		Daytime 1		Daytime 2		Daytime 3	
Program name	Day	On	Off	On	Off	On	Off
Family	Mo-Th	5:30 AM	10:00 PM				
	Fr	5:30 AM	11:00 PM				
	Sa	6:30 AM	11:00 PM				
	Su	7:00 AM	10:00 PM				
Single	Mo-Th	6:00 AM	8:00 AM				
	Fr	6:00 AM	8:00 AM				
	Sa	7:00 AM	11:30 PM				
	Su	8:00 AM	10:30 PM				
Seniors	Mo-Su	5:30 AM	11:00 PM				
New 1							
New 2							
New 3							
off	The selected heating circuit is deactivated! Frost protection is active.						

Individual program settings:

Für jeden Heizkreislauf und für jedes Warmwasserprogramm können von Ihnen gewünschte Uhrzeiten und Namen eingegeben werden.

Define heating program

On the display, you can enter your own programs for existing heating circuits.

1. Open the menu **Heating circuit** :
by clicking the graphic symbol of the selected heating circuit in Home view
or by clicking the “Heating” symbol from the upper menu bar, and then by selecting the relevant heating circuit;

Page 1 for the heating circuit is displayed:

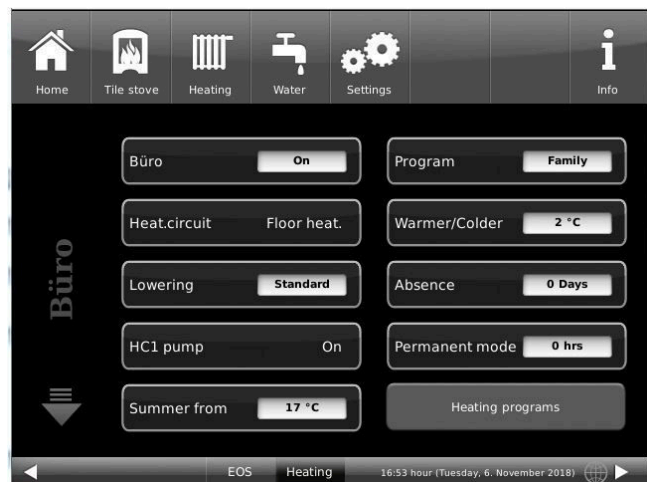


Illustration 19: Displayansicht am Beispiel für Heizkreis 1

2. Tap the field **Heating programs**;

A window with days of week will appear:

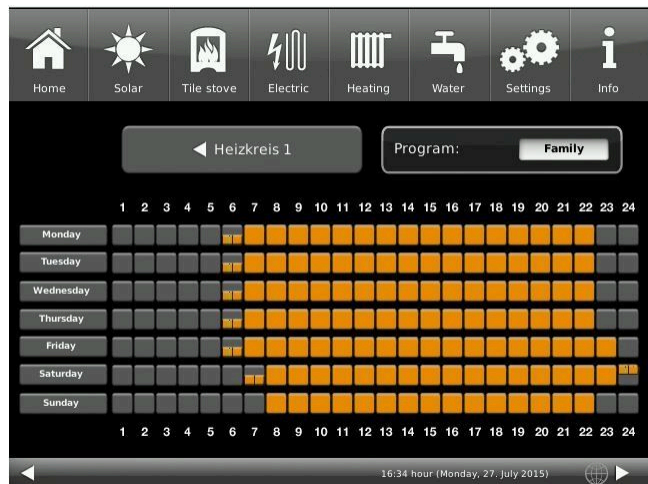


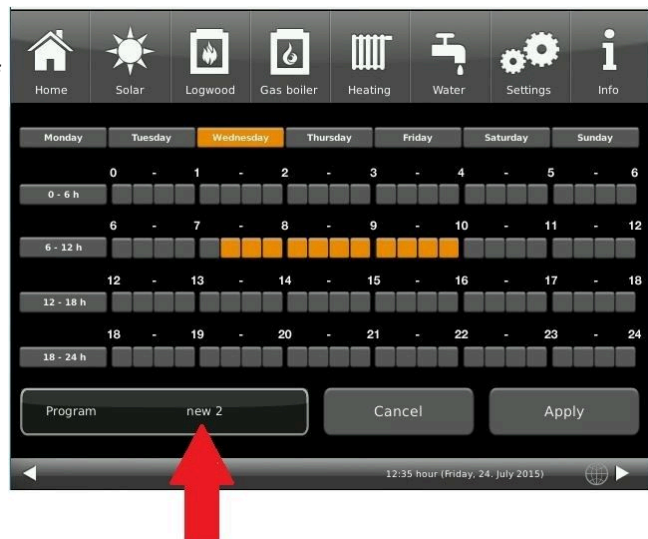
Illustration 20: Displayansicht am Beispiel für Heizkreis 1

3. Tap the box for a desired day of week;

4. Another window will appear for the selected day of week. The selected day of week is marked orange in the upper line.

The days of week can be changed individually, after they are selected. It is not possible to select more than one day of week at a time.

By tapping the periods 0-6, 6-12, 12-18 and 18-24 you can mark the whole row in orange (= heating is active) or gray color (= heating is not active). The single squares can be marked orange or gray by touching too.



Factory-defined programs cannot be overwritten.

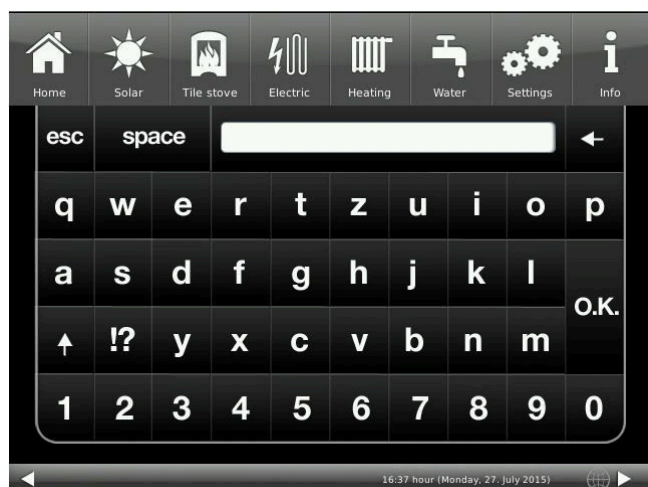
If you want to change the name of the entered program, tap the softkey **Program**.

Another window with keyboard will appear:

Using the displayed keypad, enter a new name for the program.

To confirm and apply the new program, tap **O.K.**

→ The new program for heating circuit 1 is saved under a new name.

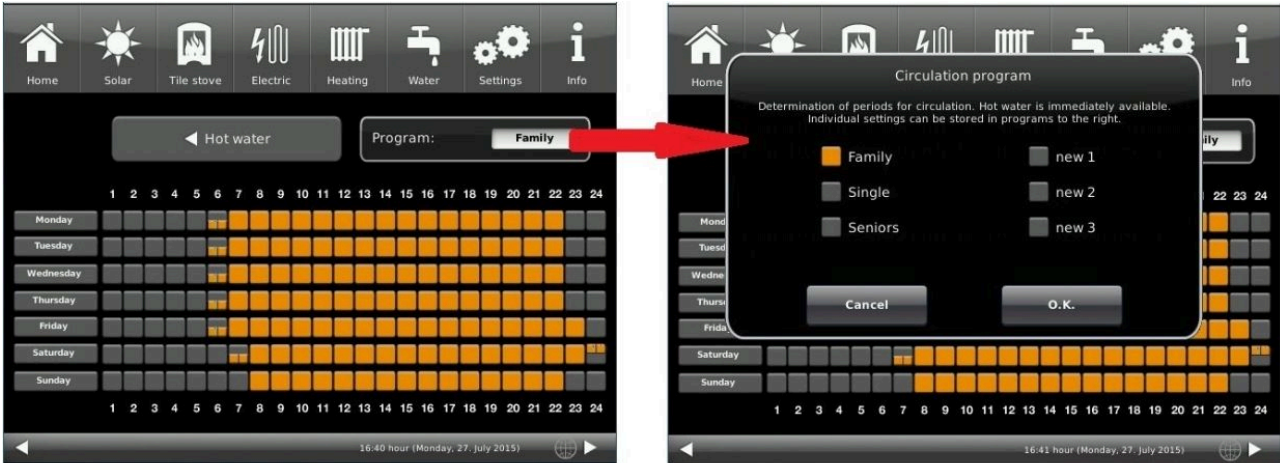


4.6.3 Hot water program settings

Hot water program

When a hot water storage tank is installed, it is possible to select a program for hot water supply: Please select the following path:

Tap the softkey **Water** / Hot water programs / and a window will show up:



You can select from already defined programs or create your own program (as described in chapter “Heating programs setting or modification”)

4.6.4 Absence periods - Energy saving

Absence setting for Heating

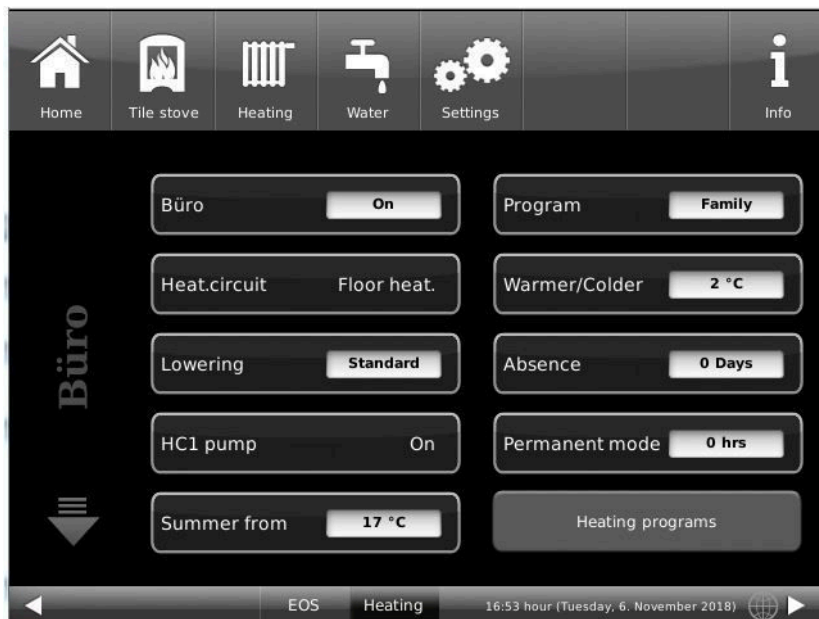


Illustration 21: Display for absence period setting

Entering of absence period:

If you are not at home for a longer time, i.e. you do not need heating or hot water supply, you can select the settings for this period to save energy.

In this period, the selected heating circuits or hot water storage will be operated in frost protection mode only. You can save some energy and protect your heating system from freezing at the same time.

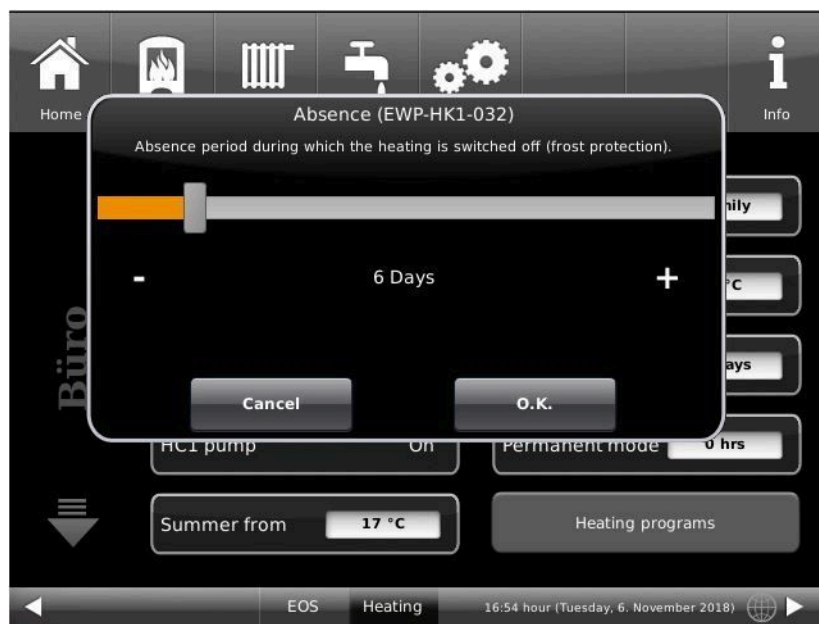
The absence program can be interrupted or canceled, or activated again and continued.

Holiday program is shown in display. Holidays are indicated and counted down at the same time.

After the absence period has passed, the system will return automatically to your program.

1. For this setting, please select the following: softkeys Heating / **Heating circuit 1** (or the corresponding circuit) / **Absence**

2. Tap the field **Absencet**, and enter the number of days, when you are not at home.



→ The absence period is stored and it is activated and later deactivated at given times.

Absence setting for Hot water

If you have a storage tank for hot water supply installed, it is possible to set the absence period for this function only.

For this enter the path: in Home view, click on the Boiler softkey or the **Water**-symbol from the upper menu bar / softkey **Absence**. A sliding bar will show up, which is used to select the number of absence days.

In consequence, during the absence period, the upper line of the hot water storage field shows the status **Off**. The yet remaining absence period is shown in menu **Water** on the **Absence** softkey (countdown).

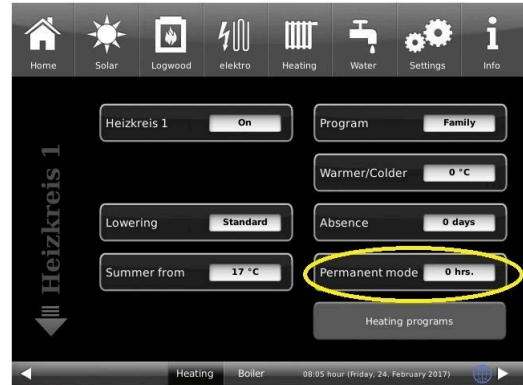
4.6.5 Permanent

If you want to switch the heating circuit to permanent operation for a desired time:

1. In Home view, tap on the graphic of a **Heating circuit (= Heizkreis)**;
2. A window with settings for **Permanent (= Dauerbetrieb)** operation will appear. Using the sliding bar, you can set the hours.

In this time the heating will be active.

After these hours will pass, the heating returns to the existing heating program.



4.6.6 Screed drying

If a new floor heating was installed, a drying program can be defined and activated. Please select: Settings / **Heating circuit 1** (or a specified circuit) / **Screed drying** /

Short name	Unit	Explanations	Setting range	De-fault
Drying	%	Start or end of drying program;	0-100	Off
T Start drying	°C	Start temperature for drying program;	10-50	20
T increase dry	°C	Temperature increase during drying program;	1-50	2
t increase dry	Days	Time for temperature increase;	0-10	1
Tmax Drying	°C	Target temperature for drying program;	20-70	40
t Hold drying	Days	Holding time for target temperature in drying program;	0-21	3
T lowering dry	°C	Temperature lowering during drying program;	1-50	2
t lowering dry	Days	Time for temperature decrease	0-10	1
Status	%	Percentage rate of drying	0-100	

When the drying program is started, in the Home view for the relevant heating circuit appears **Screed drying**.

4.6.7 Selection of lowering mode

Selection of lowering mode - Reduced mode/Night lowering

For each heating circuit you can choose individual lowering types for reduced mode or night lowering mode:

Cooldown protection	Selection of 'T_outdoor' limit for outdoor temperature, where the mode will change between "Disabled" and "Reduced". This is some kind of Winter/Summer mode switching during night! If this limit is exceeded, the heating circuit will be disabled. Below this limit, the flow temperature is reduced to Night mode level.
---------------------	--

Standard	Flow temperature is reduced for Night mode operation. Heating circuit pumps are still running. Parameter: Lowering
Frost protection	The heating circuit is generally disabled at night. Heating circuit pumps are deactivated (Pump 3 (A9) or 4 (A12) off).
Off	No temperature lowering in Night mode

When in Home view, tap on the heating circuit graphic or select the softkey **Heating** and then select the softkey of the relevant heating circuit.

Lowering type is used to determine the behavior of heating circuits during defined “inactive” periods. *Standard* lowering type is used to decrease the normal supply temperature of heating circuits during defined “inactive” periods by 'T_lowering' parameter value.

If **Frost protection** is selected, the heating circuit pumps are switched off during “inactive” periods. Just when **Frost protection from** value is exceeded, the pumps are activated again. Heating circuit flow temperature is now controlled without individual heating characteristics. If the temperature exceeds **Frost protection from + dT frost prot.** value, the pumps are switched off

Die Absenkart Auskühlschutz verhält sich eigentlich wie der Frostschutz, mit dem Unterschied, dass hier als Temperaturschwelle 5°C gilt und die Heizkreisvorlauftemperaturen entsprechend der Heizkennlinien geregelt werden.

Parameter	Value (min, max, default)	Description
Lowering mode	Cooldown protection, Frost protection, Standard	Determines the type of flow temperature reduction.
Heating system		Determines the choice of heating curve.
T_lowering	0°C, 100°C, 5°C	FL temperature is reduced by this value during “inactive” periods.
T_outdoor	-20°C, 50°C, 5°C	Threshold value to change between “reduced” mode and “disabled” mode.

4.6.8 Communication of the system

The control can send you the information and messages of the system at the current time by e-mail. Therefore: **Settings** / Pin entry (9999) / System (**Anlage**) and switch by arrow to site 2 (Anlage 2). The E-Mail Notification (**E-Mail Benachrichtigung**) button is located here.



Illustration 22: System/Anlage site 1



Illustration 23: System/Anlage site 2



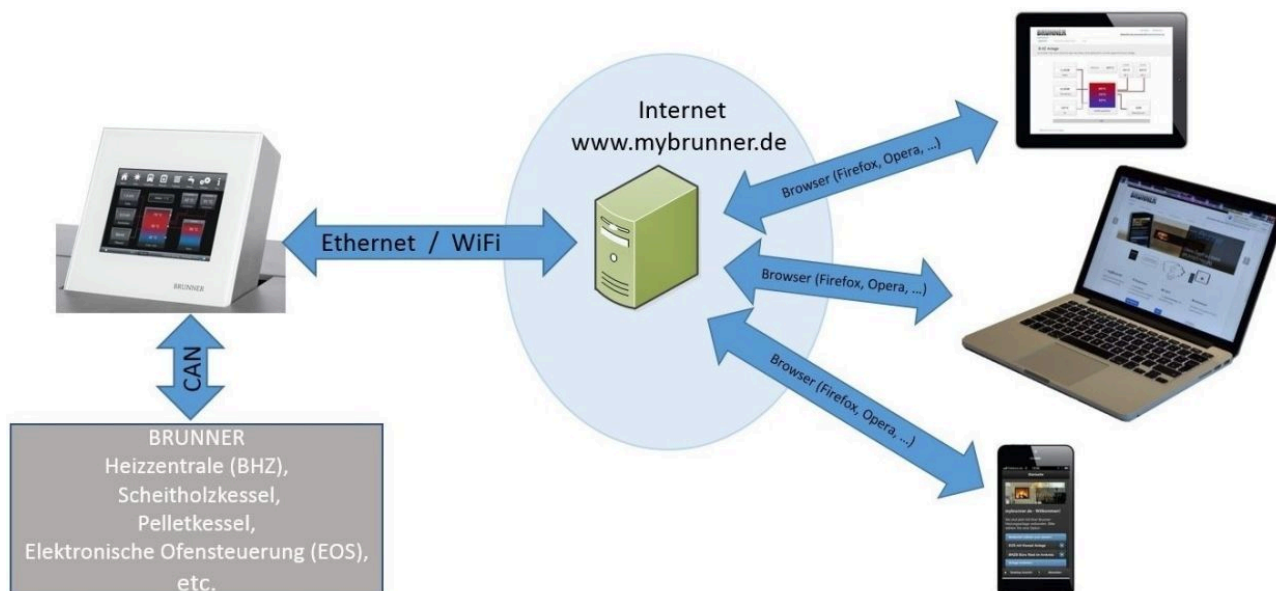
If you are the operator (end customer) of the BRUNNER system click on the gray button next to "Kunde".

The highlighted field turns orange. When clicked the Subject button or Max@mustermann. de a keyboard field appears, using where you can enter your email address.



4.7 Remote access via myBRUNNER

4.7.1 Preconditions and instructions



Preconditions for on-line access to your BRUNNER heating

1. You have a BRUNNER heating system with Touch Display;
2. The Touch Display software update status must be Release 4.0 (from December 2013) or higher;
3. A connection between Touch Display and Internet access point (a router) in the building is required. A flat rate (broadband) Internet connection is recommended for reasonable operation.
4. PC/Tablet/Smartphone with access to your personal e-mail account.
5. PC/Tablet/Smartphone with Internet access via web browser to **www.mybrunner.de**

Instructions for registration

Each control panel (Touch Display) can be registered once. You can assign only one e-mail address for a control panel. If the user wants to use a different e-mail address, he/she must delete the registration entry and perform the complete registration process once again (for this, use the **Delete registration** button). The same process, as in the case of changing user.

If a user has many Touch Displays for a heating system, every Touch Display can be connected with myBRUNNER. Every control panel can have a different e-mail address assigned.

With mobile devices such as tablets or smartphones, the embedded browser cannot be used with older Android variants; therefore you should load a current browser like Firefox, Opera, Chrome.

If it is not possible to log in, please check:

1. if the control panel is in Setup mode (Login active)? Before you log in, perform Settings logout function. (Softkeys: **Settings / Control panel / Settings logout**).
2. if the system clock of the control panel is set? The setting must be exact as possible. The same applies to days of week, time zones and year (see: User Guide / sect. "Individual settings" / sect. "Display customization")
3. if the system or control panel is now running an update sequence? Please wait until finished and try again.

Instructions for enabling Service access

The access to service functions can be enabled exclusively for heating contractors or BRUNNER service technicians. Mutual access for both categories of servicemen is not possible.

4.7.2 Connect keypads to the Internet

Operating principle myBRUNNER:

For remote access to the personal heating system via the internet (myBRUNNER), the BRUNNER touch display must be connected to the internet access of the building. There are different options and a wide range of peripheral devices for this purpose.



Network cable (Touch 2.0 and 3.0)

The easiest and most safe solution. A connection between the touch display and internet access in the building (router) via a network cable (terms: patch cable, Ethernet, LAN).



4.7.3 Set up myBRUNNER

4.7.3.1 Registration

1. Start the first registration



- 1.1. Go to www.mybrunner.de;
- 1.2. Click the button **Register now**;

This window/box appears:



- 1.3. Enter your contact details (Name, Address); the fields with * are mandatory fields;
- 1.4. When finished, click **next**;



1.5 Enter a valid e-mail address;



The e-mail address is at the same time your login name!!!

1.6 Optionally - for increased security - you can enter your mobile phone number.

1.7. Click **next** to complete your entries on this page.

1.8 Enter a password;



The password must be at least 8 characters long!!
Please remember this password, as it is used to access your system.
All fields are mandatory!

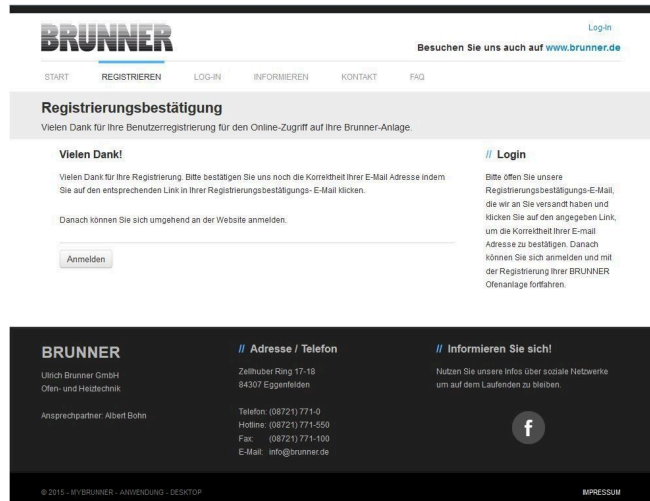
1.9 Select a security question. You can choose between: Your favorite football team? Your favorite travel destination? Your Mother's maiden name? Your favorite movie? Your favorite book? Your favorite pet? Name of your first girlfriend (or boyfriend)? Name of your first pet? Your meaningful year number? Your favorite restaurant?

Please enter a valid answer, which will be used later for confirmation.

1.10 Click the button **Register now** when finished.



1.11 The details of your registration will be shown:

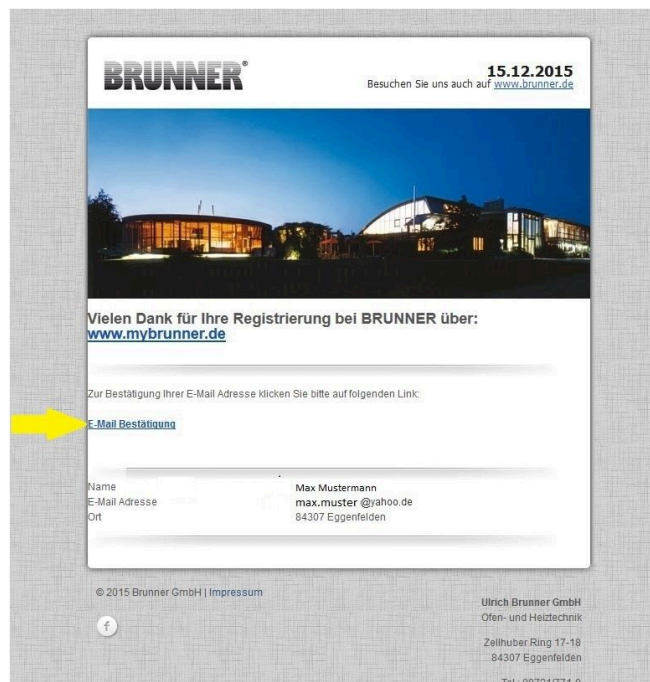


2. E-mail box - Confirmation of registration



2.1 Open the e-mail from “**websystem**” and subject line: “**Brunner Zentrale Benutzerverwaltung: Registrierungsbestätigung**” (Brunner Central User Administration: Confirmation of registration)

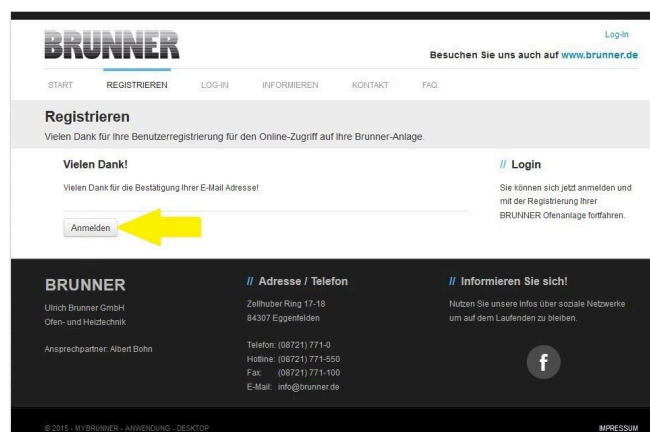
2.2 Click on the link;



3. Login



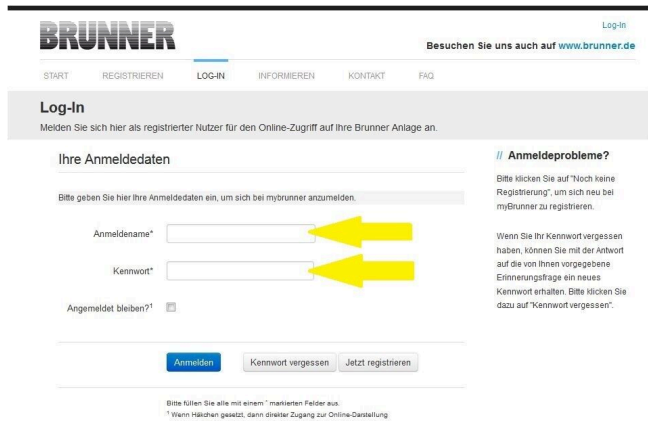
3.1 Click Login



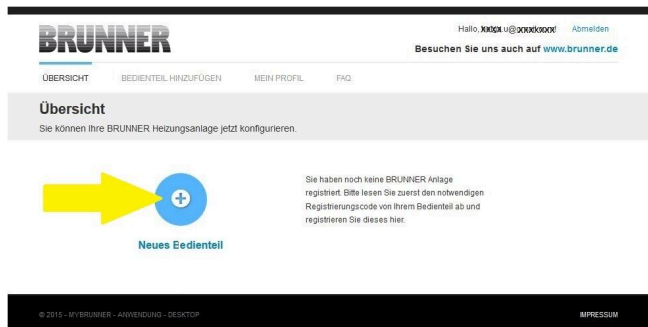


3.2. At Login name enter your email address

3.3 Enter your **password** (entered beforehand and repeat - see 1.8)

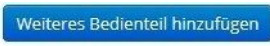


3.4 The control unit (touch display) of the Brunner system must be registered. To do this, click the New Control **Neues Bedienteil**.



NOTE:

If you had previously registered a different control unit, click the Add another control unit button **Weiteres Bedienteil hinzufügen**.



4. Activate the network

4.A. Connected via network cable (Touchdisplay 2.0 and/or Touchdisplay 3.0)

To see if the Internet connection is available on the Touch Display, look at the icon (globe) in the lower right corner of the Touch Display. If the Internet connection is available (network active), the globe color is gray.

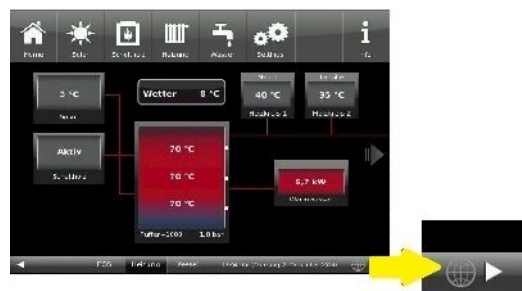


Illustration 24: Internet connection available (gray globe)



- 4.1 Click in the upper menu bar on **Settings**
- 4.2 Enter the PIN Code **9999**
- 4.3 Click on the control display button **Bedienteil**
- 4.4 Click on the **myBrunner** button



- 4.5 Navigate down with the arrow key:



4.B. Connected via WLAN (Touchdisplay 3.0)

To see whether you have an internet connection on the touch display, look at the graphic (globe) at the bottom right of the touch display. If there is an internet connection (network active) the globe is gray.

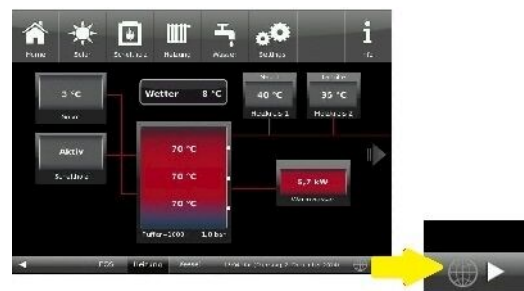


Illustration 25: Internet connection (gray earth globe)

4.1 Click in the upper menu bar on **Settings**

4.2 Enter the PIN-Code **9999**

4.3 Click on the display button **Bedienteil**

4.4 Click on the display button **myBrunner**



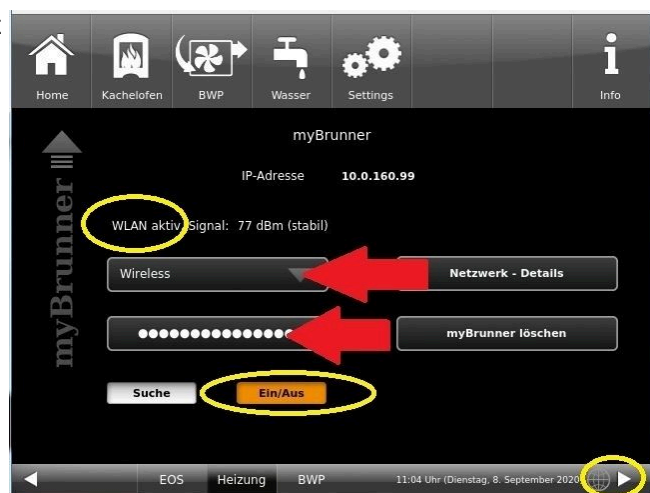
4.5 Navigate down with the arrow key:





4.6 Set up WLAN:
- Select WLAN name.

if the name you are looking for is not available for the WLAN name, click on search **Suche**



4.7 Enter WLAN-Pass-
word and click O.K.



4.8 Navigate up with the arrow key





4.9 Click:



5. Set up mybrunner on Touch Display



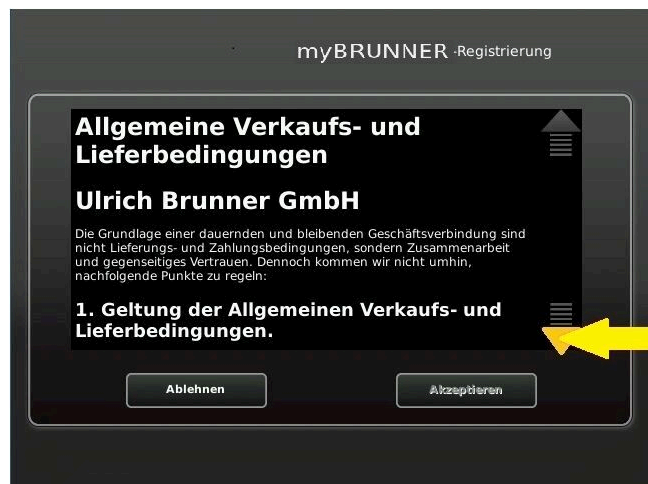
5.1 Click:



5.2 Terms and conditions appear.

5.3 Read the terms and conditions. Please keep the arrow pressed to scroll. When the arrow is pressed, it turns orange.

5.4 Accept the terms and conditions at the end of the text by accepting **Akzeptieren**. (To do this, scroll the entire text to the end. Only then is the Accept button active).



6. Establish registration code



6. The following screen will appear automatically to establish the registration code of the Touch Display (control panel). This number is displayed for 2 hours.

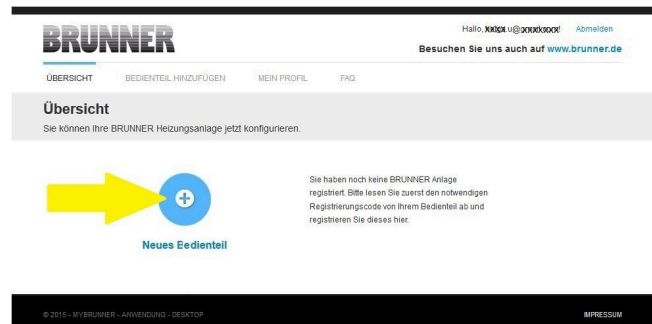
You should use this registration code for your control unit to continue the registration on the PC.



7. Registration of your Brunner system



7.1 The control unit (touch display) of the Brunner system must be registered. To do this, click the New Control Unit button **Neues Bedienteil**.



NOTE:

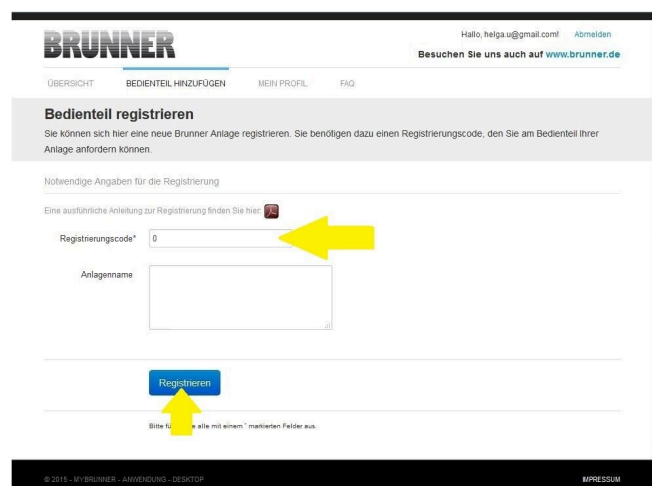
If you had previously registered a different control unit, click the Add another control unit button here. **Weiteres Bedienteil hinzufügen**.



7.2 Im Feld **Registrierungscode** die Registrierungsnummer vom Touchdisplay eingeben

7.3 In the system name field **Anlagenname**, enter your preferred designation for the system.

7.4 Finally click on registration **Registrieren**.



8. Complete registration on Touch Display



8.1 Confirm the message about successful registration with **O.K.**



8.2 Exit settings (with OK)

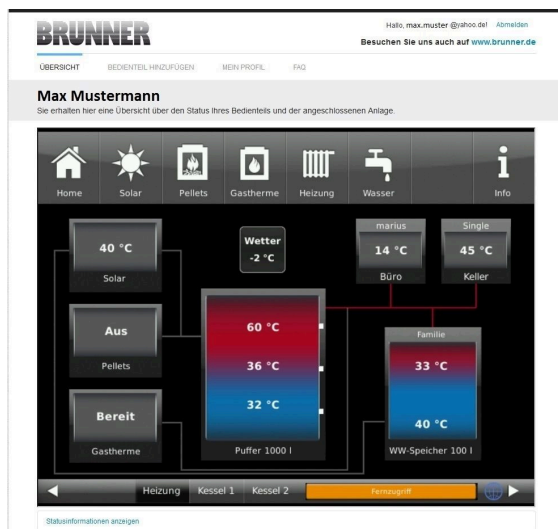


9. On-line access to the control panel from your PC, tablet or smartphone



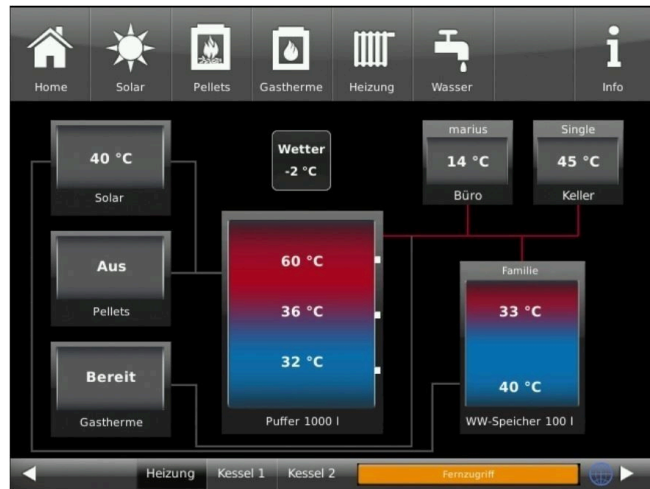
On your mobile device (notebook, tablet, smartphone etc.) you will see the system overview:

Now you can control all the functions of your system from your mobile device via mybrunner.de. The Parameter sections under Settings are excluded.





During remote access you will see the following identical screen on the Touch Display:



→ The registration process is complete.

4.7.3.2 Logging in

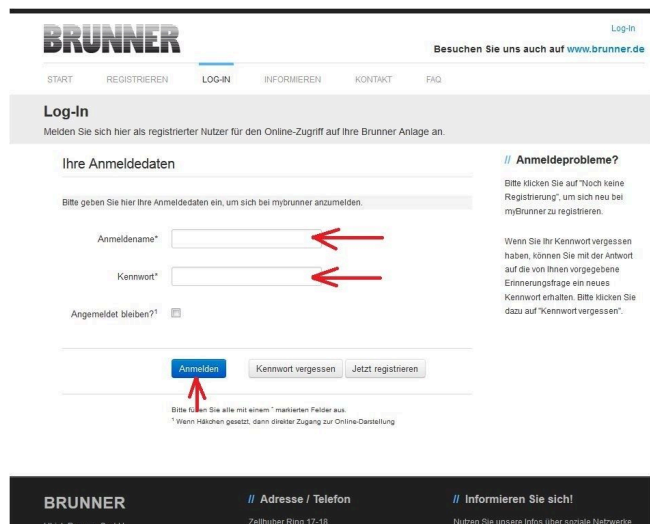
On your PC, tablet or smartphone:



1.1 Open **www.mybrunner.de** in your browser

1.2 Enter your valid login name (= your e-mail address entered during registration)

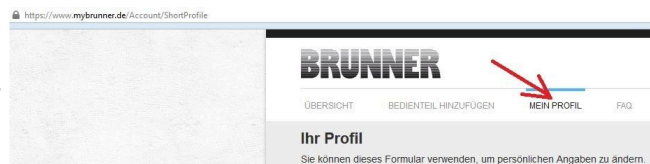
1.3 Enter your password/**Kennwort** (as entered during registration)



If you have forgotten your password, you can use the **Kennwort vergessen** (forgotten password) button. Here you will be asked to enter your e-mail address and the answer to your selected security question (as displayed above the answer field); Click on **Kennwort anfordern** (request new password) and you will receive an e-mail with a new password, which must be entered on the Login page at mybrunner.de, in the "Kennwort" field.

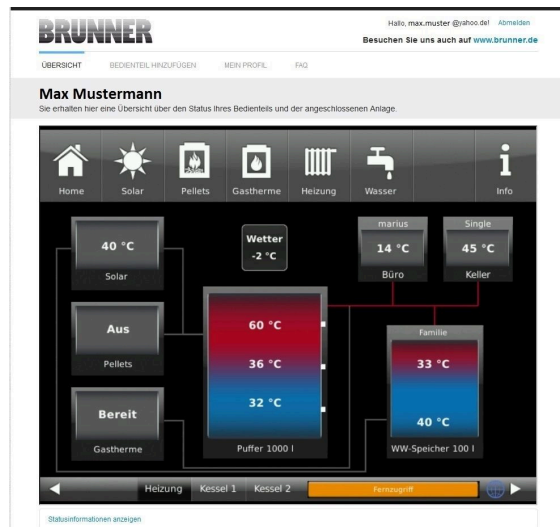


If you want to change your password again, or change your contact data, or apply extended security settings, please go to **Mein Profil** (My Profile).





The current overview of your system will appear on the screen of your PC, notebook, tablet or smartphone.



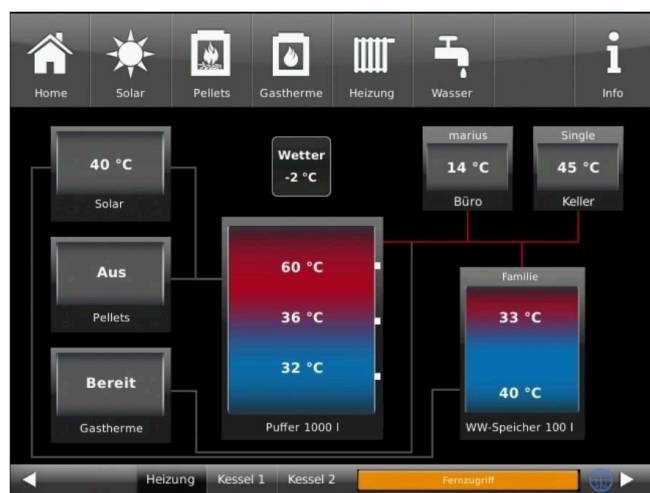
On the Touch Display of your BRUNNER system



To see the myBRUNNER status click: **Settings** + PIN-Code (9999) / **Bedienteil**(=control panel)/ **my-BRUNNER**



When the control panel is in remote control mode, the following will be shown on the Touch Display of your system: orange bar with text **Fernzugriff** (*Remote access*).





NOTE

The heating system can be controlled only from one device! You can use alternatively: the Touch Display on the system or the overview on your mobile device.

NOTE:

Setting or modification of parameters under **Settings** is not possible via remote access. Exception from this rule is the enabled access for the heating contractor or BRUNNER technicians.

4.7.3.3 Enabling for Service access

To enable Service access for BRUNNER technicians or a heating contractor, the owner of the system must approve it first. This is done using a fixed Service PIN Code, which is defined in the User account.



1. Log in at **www.mybrunner.de**
(see Logging in section above)



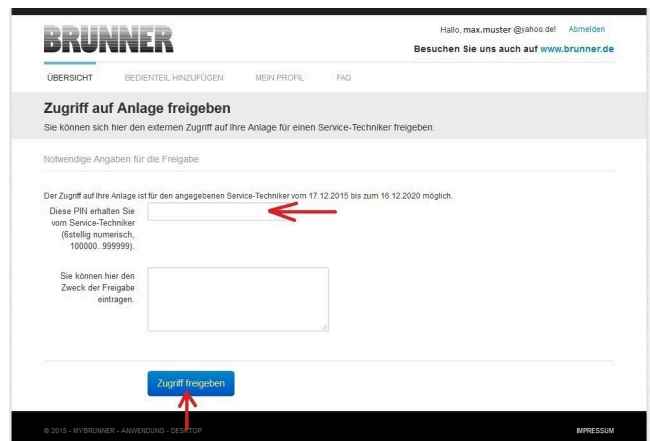
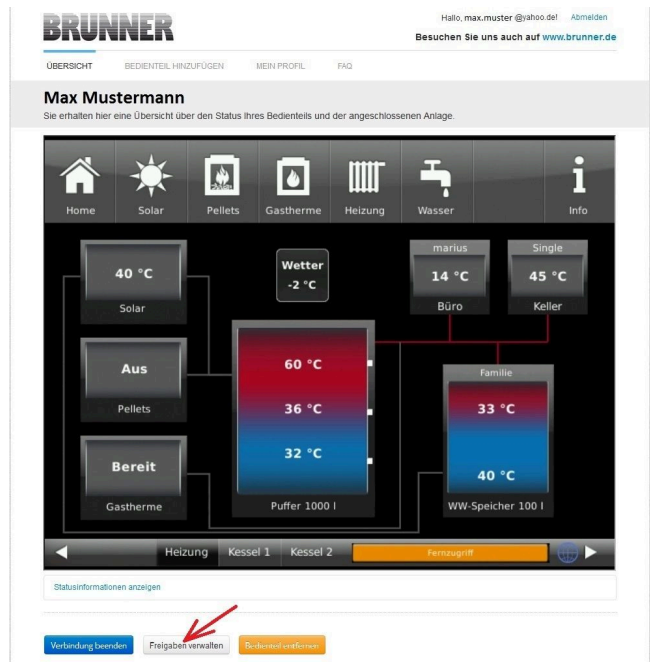
2. Click onto **Grant access to control panel**



3. You can enter the BRUNNER service code or the code of your tradesman.
The BRUNNER service code = 293068.

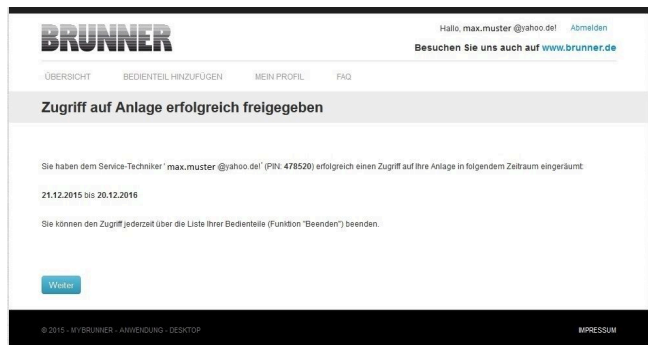
Enter this 6-digit numeric PIN code in the first field (PIN) and in the second field (purpose of release) please write your family name and location of the system.

The system operator can revoke the tradesman or BRUNNER service's access to the system at any time.

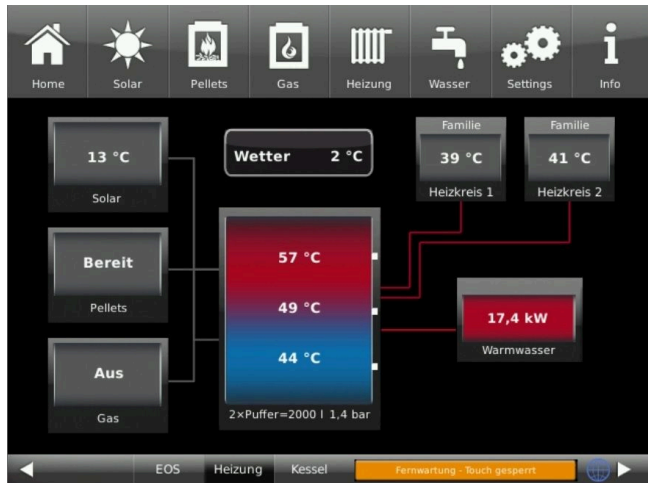




When access is granted, the following message is displayed:



When a contractor has access to your system via myBRUNNER link, you'll see the following on the Touch Display:



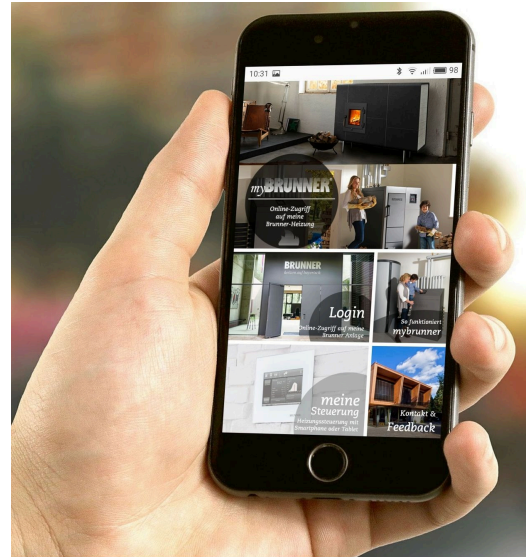
4.7.3.4 Brunner App

The myBRUNNER App makes it easier to access the heating system with smartphones or tablets.

Operation is very easy and self-explanatory. The orientation on the home screen is vertical. The presentation does not go along - but that is set intentionally.

The user can choose from three buttons
-“Login” for login and logout,
- a brief introduction to the functionality of the application software and a contact,
- support- interface for all questions and suggestions about the app.

The fourth button is initially gray when you start the software. Only after entering the user name and the password, it is activated and allows access to the heating control. The customer selects the registered operating unit and makes the desired settings. To leave the view, just click on the “back” button on the mobile device or on the “operating control unit ” on the top left.



Account settings or registration of control panels can not be done with the app. Account settings or registration of control panels can not be done with the app. Both activities are only possible via a browser via my-brunner.de.

4.7.3.5 Network adverts



Display with a myBRUNNER connection



Display for an existing network connection, whether WLAN or LAN.



Display with a myBRUNNER-local connection

No globe

No network

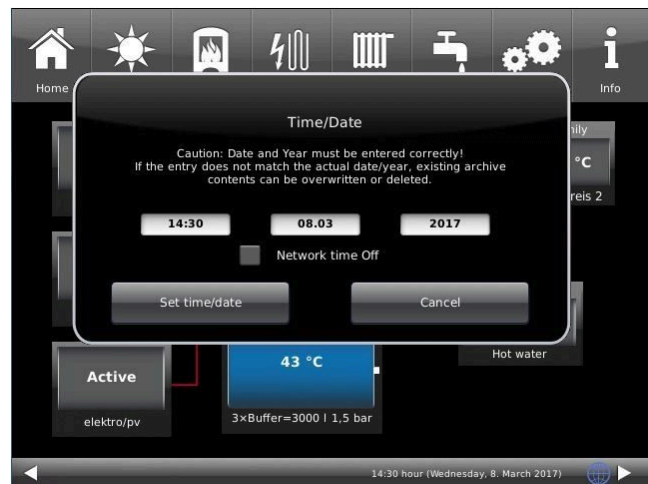
4.7.3.6 Synchronisation with network

Wenn myBRUNNER eingerichtet ist, wird die Uhrzeit mit dem Netzwerk automatisch abgeglichen.

If you do not want to have the time synchronization with the network, deactivation is possible. For this:

1. Click on the time in the lower bar
 2. A dialog box appears where you click **Network time- synchronization**;
 3. the network time synchronization is deactivated;
 4. You can now enter the desired time;
 5. then click on **Time / Date**;
- the time and date are displayed in the lower bar according to your setting or on the clock (digital or analog clock) selected as the screen saver.

The disabled time alignment is displayed with a gray box.



The adjustment of the time or date with the BRUNNER network can be activated at any time.

4.7.4 Set up WLAN

4.7.4.1 Set up WLAN - during commissioning

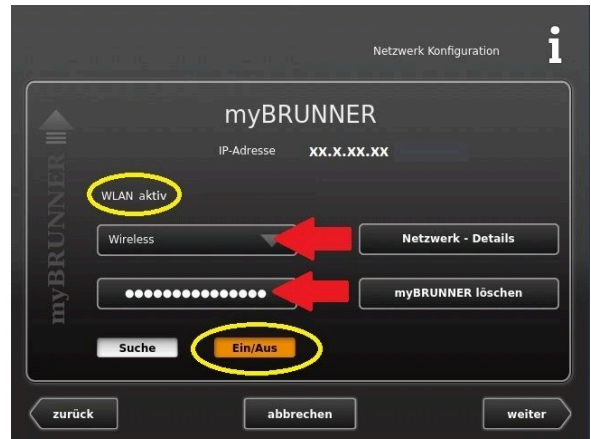
Commissioning is user-defined. This initial process includes the entire BRUNNER network environment and all control boards of the connected devices.

Automatically starting commissioning

1. Initialization
2. Set language
3. Check BRUNNER network connections
4. Set time and date
5. Set myBRUNNER
6. Specify heat generator
7. Specify heat consumer
8. Enter craftsman data
9. End of commissioning

Set up WLAN

During the work steps for phase 5 of commissioning “Set up myBRUNNER”, the following steps are necessary to set up the WLAN:



1. Choose WLAN-Name*
2. Enter WLAN-Password

Attention:

- **Ein/Aus** must be orange
- Check upper left side display indication:

“WLAN aktiv”

*if the name you are looking for is not available for the WLAN name, click on search **Suche**

4.7.4.2 Activate WLAN

1. Click in the upper menu bar on **Settings**
2. Enter the PIN-Code **9999**
3. Click on the display button **Bedienteil**
4. Click on the display button **myBRUNNER**



5. A dialog window/box appears:



6. Set up WLAN :

6.1. Choose WLAN-Name *

Attention:

- **Ein/Aus** On/Off must be orange
- Check display indication "**WLAN aktiv**"
- Earth globe: gray

*if the name you are looking for is not available for the WLAN name, click on search **Suche**

6.2. Enter WLAN-pasword



5 Information and error messages

Based on the highest industry standards, all BRUNNER expansion boards have a detailed safety concept. The controller not only regulates and monitors the current operating status, but also independently and continuously checks the function of all connected sensors, motors and mixers.

The safety concept

- Continuous electronic monitoring of all connected sensors, such as boiler and flue gas sensors, as well as monitoring of connected electrical components;
- Automatic and permanent archiving of sensor values and error messages.
- Visual display of error messages.

Display of an information or error message

If a message or error message occurs, a corresponding message window appears on each existing operating display within the BRUNNER network environment, as well as a short signal tone.

To confirm the message, proceed as follows:

- Tap **O.K.** to confirm
→ The message is deleted from the operating display and, in the event of an error message, permanently saved in the history.

Display error messages

If there are active error messages, the **Info** button is highlighted in orange.

To display error messages, proceed as follows:

- tap **Info** in the top menu bar of the Home view
→ Error messages are displayed.

Error messages can only be acknowledged in the top menu bar of the Home view in the Info submenu.

5.1 Acknowledging error messages

To acknowledge an **error message**, proceed as follows:

1. tap the **Info** button;
2. in the lower half of the display, press **Reset**
→ The error message has been acknowledged.

If the error is still present, the error message appears again.

Error messages can only be acknowledged in the top menu bar of the Home view in the Info submenu.



Illustration 26: Note/error message

5.2 List of error codes

The following is a list of error codes that can appear at Extension board 'Basic' (EWP Basis) and are shown on the display:

Error text	Error text Description	Note to the operator
Sensor defective B-E06 (=Sensor defekt B-E06)	Temperature sensor B-E06 Heating circuit 1 is defective or not connected. In the radiator graphic, the display shows instead of the temperature display: Error (= Fehler) . B-E1 Pump off, B-E4 Mixer HK1 closes.	Contact a specialist company
Sensor defective B-E07 (= Sensor defekt B-E07)	Temperature sensor B-E07 Heating circuit 2 is defective or not connected. The display is in the radiator graphic instead of the temperature display: Error (= Fehler) . B-E2 Pump off, B-E5 Mixer HK1 closes.	Contact a specialist company
Sensor defective B-E21 (= Sensor defekt B-E21)	Top buffer temperature sensor B-E21 is defective or not connected! Start emergency program ? Hot water reheating (switch-on criteria with B-E21). No hot water charging when configuring an external hot water storage tank (functions with B-E10).	Contact a specialist company
Sensor defective B-E08 (=Sensor defekt B-E08)	Temperature sensor buffer middle B-E08 is defective or not connected! Temperature sensor buffer middle B-E08 is defined as setpoint temperature buffer top . Additional heaters maintain the setpoint buffer temperature at the bottom B-E09. Background: warm radiators as long as possible as long as the fault is present. The system display shows if additional heaters are present: Emergency program . Can be ended here or under Info.	Contact a specialist company
Sensor defective E09 (=Sensor defekt E09)	Temperature sensor B-E09 Buffer bottom is defective or not connected. Auxiliary heating is running on DHW/heating if full charge was stored. Emergency program is shown in the system display if additional heating is present. Can be ended here or under Info.	Contact a specialist company
Sensor defective B-E10 (=Sensor defekt B-E10)	The hot water temperature sensor B-E10 is defective or not connected. Charging pump running continuously B-E03. Emergency program is displayed in the hot water menu for the water program. Can be terminated here or under Info.	Contact a specialist company
Sensor B-E11 defective (=Sensor defekt B-E11)	Outdoor temperature sensor B-E11 is defective or not connected. Sensor error display. A constant outdoor temperature of 0°C is assumed.	Contact a specialist company

5.3 Troubleshooting

Switch emergency program

In the event of faults during the heating period, the query appears on the display:

Switch emergency program (= Notprogramm schalten) with the selection options: **Yes/No (= Ja/Nein)**

In this case, contact a specialist immediately.

The radiators should also heat up in winter if sensors are faulty. However, there is a protective function for the underfloor heating.

The system display is in the heating circuit **emergency program (= Notprogramm)**.

The **reset** for the error can be ended here or under **Info**.

5.4 Update of the control unit

With the Software Update function it is possible to update the control unit.



INFO

During an update, the parameter settings from configuration and the later modified values are not getting lost.



ATTENTION

- **Only carry out the update when the fireplace is cold (stand by)!**
- **Updates must be carried out on every control display on the system!**

The update is made available as a zip file (* bin files).

During an update, both the values set during configuration and those set subsequently are adopted.



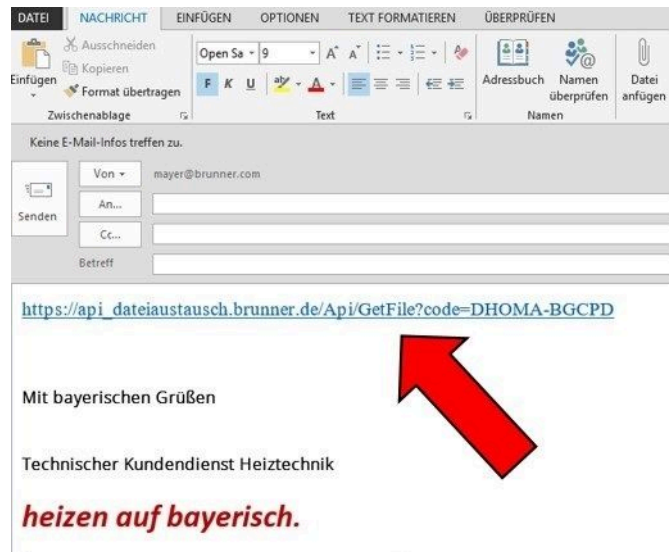
NOTE

The entire update process takes a few minutes (but can take up to 45 minutes with older display versions, so allow enough time).

The update process should not be interrupted. **DO NOT** touch the display (touch field) during the entire update process.

5.4.1 Software from PC on the USB-Stick

1. You will receive an email with a link -> click on the link:

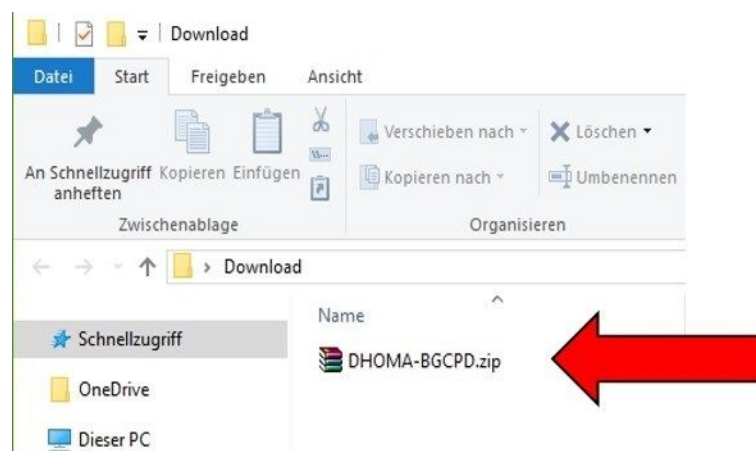


2. A dialog window opens in which you should click on **Datei speichern** (Save file)

3. Confirm with **OK**

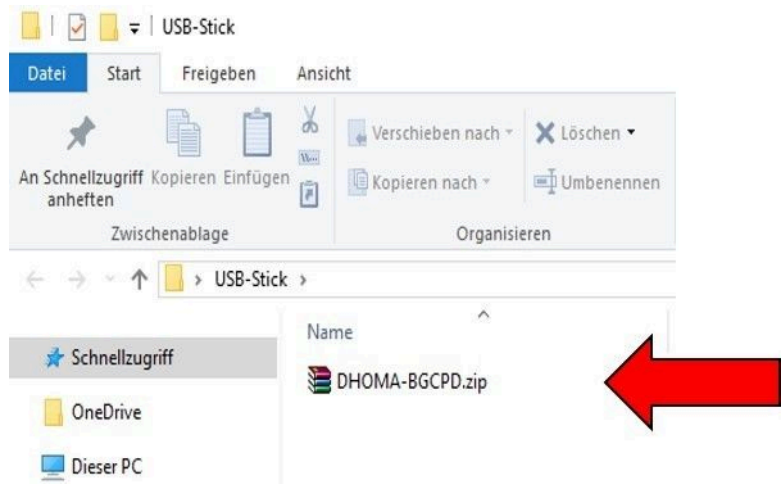


4. The zip file is saved in the download area. Another storage location can possibly also be specified.



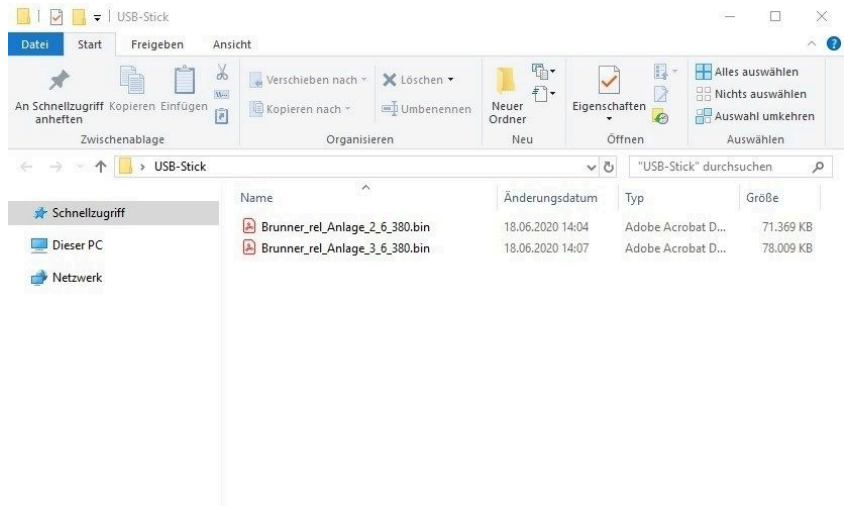
5. Copy the zip file to the USB stick

6. Now select the zip file with a right click and click on **Hier entpacken**



7. The unzipped files for updating the control are displayed:

8. Remove the USB stick from the PC (**Auswerfen**)



-> The USB-Stick is ready for Update

5.4.2 Software from USB-Stick on the control unit

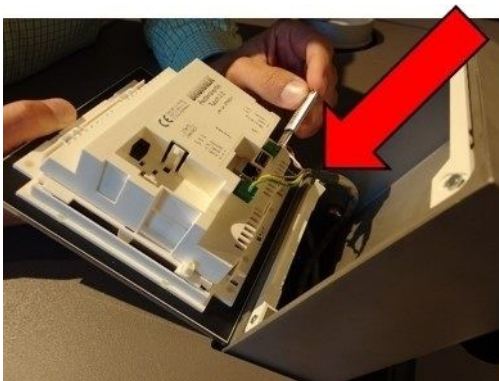
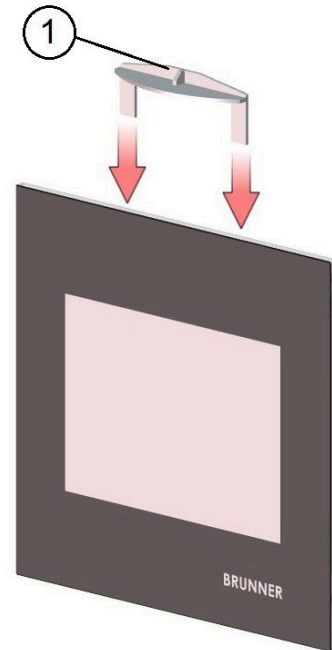
This process can be carried out in two different ways:

Variante 1 = During the entire update and the subsequent update process the control **is not** disconnected from the power supply

Variante 2 = The control is disconnected from the power supply

5.4.2.1 Variant 1

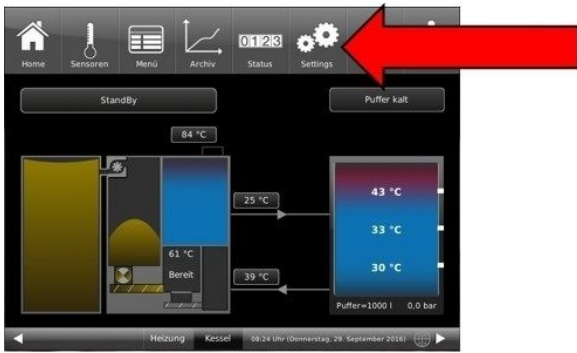
1. To remove the display unit, insert the supplied tool (1) at the top between the wall and the glass front and release the lock with light pressure.



2. Tilt the display forward out of the housing;
CAUTION: Do not pull out the cables



Insert the USB stick into the USB port of the display
IMPORTANT:
 Check that the USB stick is correctly inserted and seated!



Press the **Settings** button on the home screen



Enter the PIN code **9999**
confirm with **OK**



Press the button **Bedienteil** (control unit) under **Settings**



Press the **Update** button under **Bedienteil**

=> The control board and operating unit (display “red wave”) starts automatically with a restart. The text **Update fond...** appears => the Update loads the data.

Wait a few minutes until the text **Bitte USB-Stick entfernen** (Please remove USB stick) appears on the display.

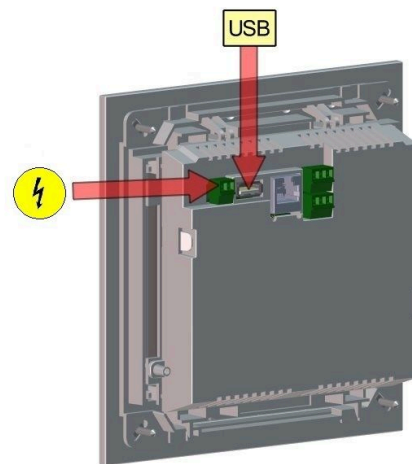
Then follow the indications on the display.



5.4.2.2 Variant 2

The main steps of update process are following:

1. The display must be removed from the mounting panel ;
2. Disconnect the power supply from display (2-pin connector);;
3. Install the USB key **correctly** in the control unit (it must be recognized as storage media: please observe the correct USB key orientation, or check, if the LED on the USB key is lit);
4. Reconnect the power supply cable;



5. The update will run automatically (for new displays, this process will take around 4 minutes, but with older versions it can take even 45 minutes);
 6. After the update is completed, a window will show up with the text **Entfernen Sie den USB-Stick (USB key can be removed)**;
 7. Disconnect the power supply from the complete system (control board of BHZ 3.0);
 8. Remove the USB key from display unit;
 9. Switch on the power supply for the complete system;
- As part of the update process, the system will reboot and the update is finished.

5.4.3 What to do if the update does not start ?

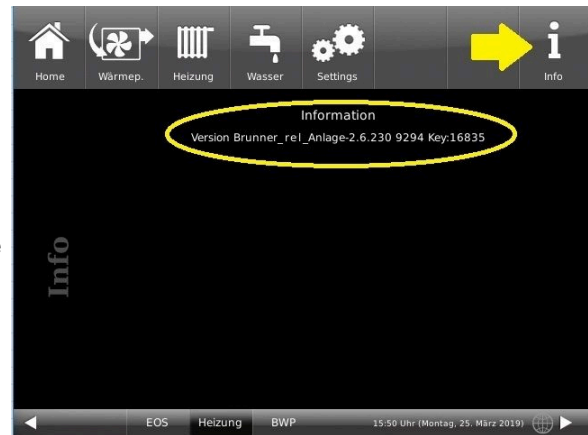
Check your USB-Stick

- Check whether the USB stick is correctly inserted in the display
- The zip file must be unpacked after the download. The software file with the ending Brunner_rel_An-lage_x_6_xxx.bin contained in the package must be on the top level of the data carrier.

- You may have already installed the latest software version.

How to find out which software version is running on your control unit: To do this, please press the “Info” button on the top right of the screen. -

If it still does not work, please check whether it is a “Display Touch 2.0” resp. 3.0 “acts. If you have an older version, please contact our customer service. Please indicate the item number of the display and the currently installed software version (see picture). The article number can be found on the back of the display printed on the sticker (article no.Exxxxxx).



6 Technical data

Surface-mounted box dimensions (H x W x D)	cm	24 x 29 x 12
Supply voltage	V / Hz	230VAC +/-10 % 50Hz
Outputs Voltage	V / Hz	AC 230V / 50 Hz
Outputs Power max.	W	100
Relay outputs Power max.	W	500
Temperature sensor inputs	Type	Pt1000
Ambient temperature	°C	0 - 50
Power consumption	W	6,5
Fine-wire fuse power supply unit	mA (T)	250
Microfuse for outputs	A (T)	6,3
Protection class	IP	20
Labeling		CE MARKING
Temperature controller class EWP basic and EWP heating circuits		II
Energy efficiency contribution EWP Basis and EWP heating circuits		2%
Stand-by	W	4

7 Declaration of conformity

	
<h3>EG-Konformitätserklärung</h3>	
Die:	Ulrich Brunner GmbH Zellhuber Ring 17-18 D-84307 Eggenfelden
erklärt hiermit, dass nachfolgend aufgeführtes Gerät zum Zeitpunkt der Auslieferung, in der gelieferten Ausführung:	
Erweiterungsplatine	
den Anforderungen der Normen:	Emission Standard, EN61000-6-3:2007 Residential, commercial and light industry Environments
	Immunity Standard EN61000-6-2:2005 + Berichtigung1:2011 Immunity for industrial environments
und der Richtlinie:	2004/108/EG
entsprechen.	
Diese EG-Konformitätserklärung verliert ihre Gültigkeit, wenn das Produkt ohne Zustimmung umgebaut oder verändert wird.	
Eggenfelden, den <u>20.8.17</u>	 Ulrich Brunner GmbH Dr.-Ing. Jürgen Vorwerk

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