Programming Instructions

EAS 3

BRUNNER®

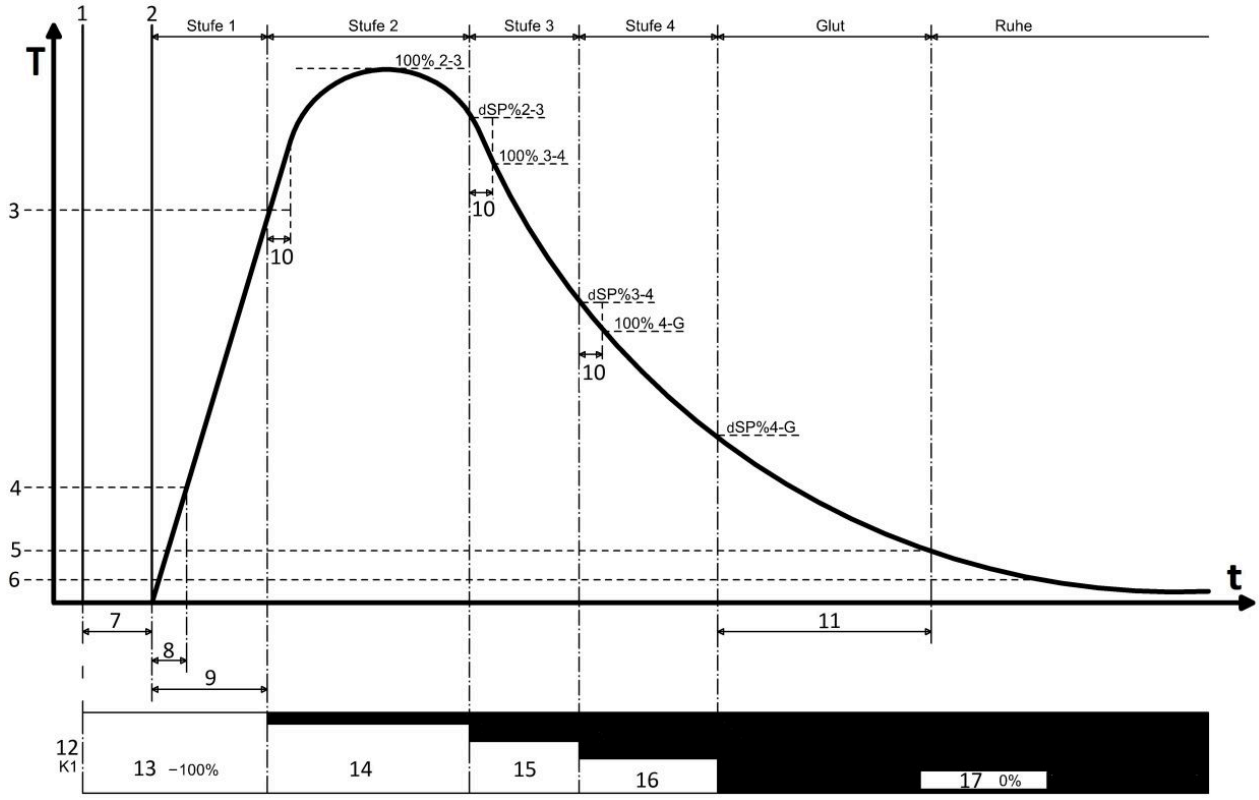
made in germany.

CONTENTS

1 INTRODUCTION

These Programming Instructions for EAS complement the information given in Installation & Operating Instructions. They are provided for use by trained technicians only.
Information which is already a part of the Installation & Operating Instructions, is not repeated here again. If these instructions are not available, you can always download them in their latest version from our website at www.brunner.de.
Older versions can be ordered directly from Ulrich Brunner GmbH.

CAUTION
Any changes in parameters have direct influence on EAS behaviour. It is necessary to perform a combustion test with the changes, before the system will be handed over to the user for operation.



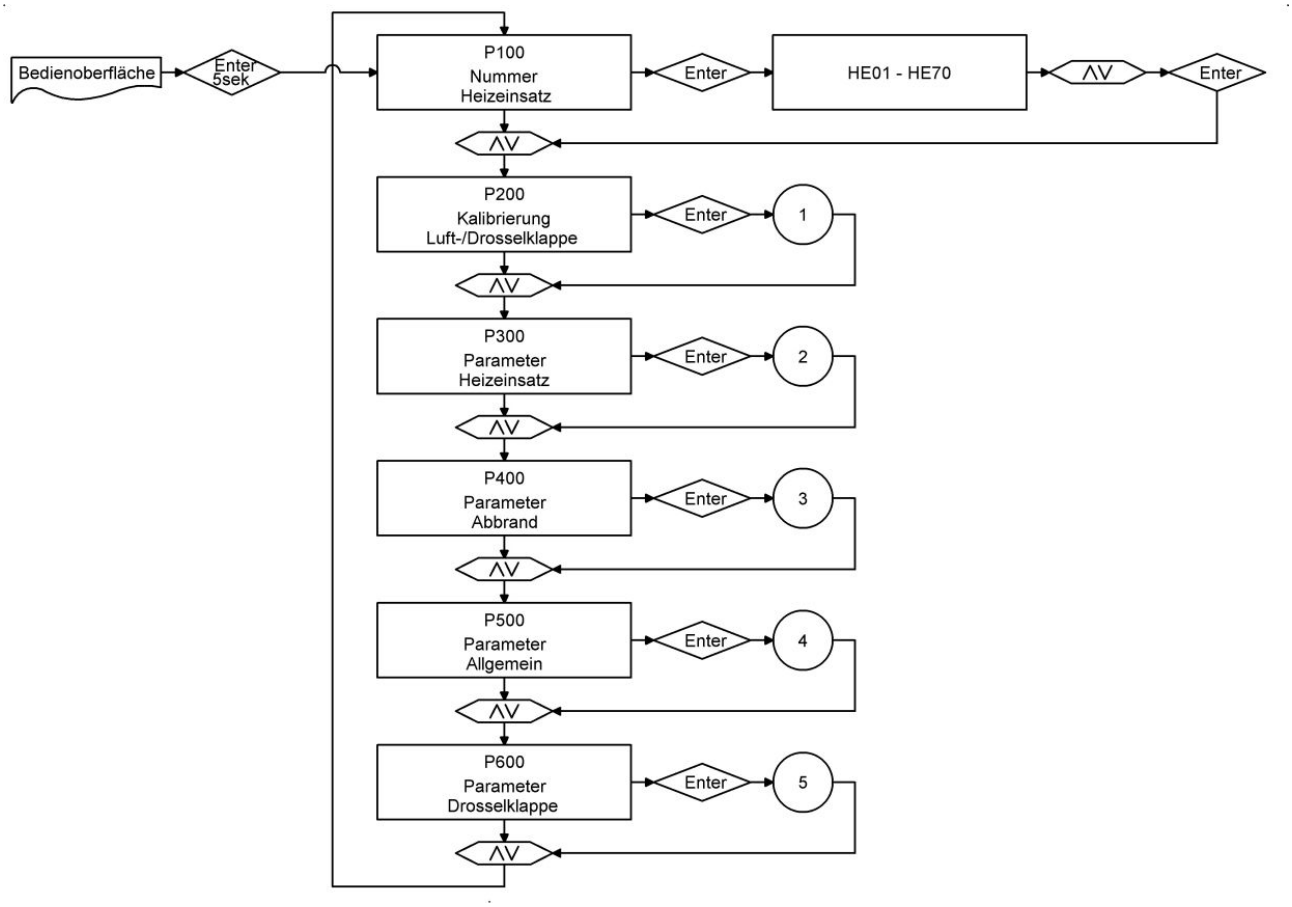
T	Combustion temperature		9	Combustion error time
t	Time		10	Combustion settlement time
1	Door open		11	Embers end time
2	Door closed		12	Air supply flap
3	Combustion error temp.		13	Air supply flap 100% open
4	Fire starting temperature		14	Air supply flap pos. % Stage 2
5	Embers end temp.		15	Air supply flap pos. % Stage 3
6	Stove cold temperature		16	Air supply flap pos. % Stage 4
7	Door open time		17	Air supply flap 0% closed
8	Fire starting time		dSP	Switching threshold

2 EAS 3 WITH DISPLAY

2.1 PARAMETERS MENU (SOFTWARE ≤ 321)

The EAS parameters can be changed directly on the display. The following graphic shows the different parameter blocks, which are available for selection.

You can always leave the menu by pressing the ESC button.



Im. 1: Overview of parameter blocks

Calibration of flaps.

A manual adjustment of the automatic calibration for the parameters P201 and P203 can be done only in flap “Closed” position (0%), by using the arrow buttons UP (to open) and DOWN (to close).

The changed value is confirmed with the Enter button and then it is shown again as 0% on display.

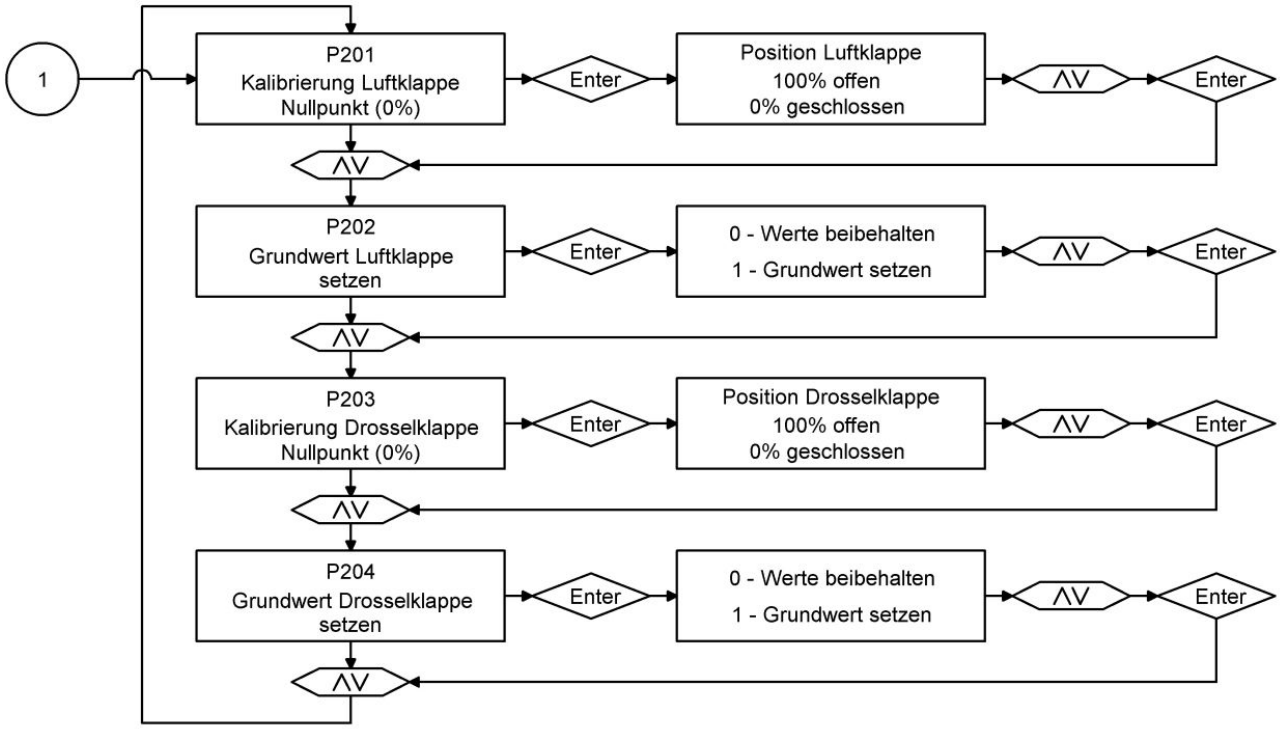
The flap “Open” position (100%) is generally static and cannot be changed.

Do not press any buttons during calibration, otherwise a calibration error could occur!

Calibration is possible with open stove door only!

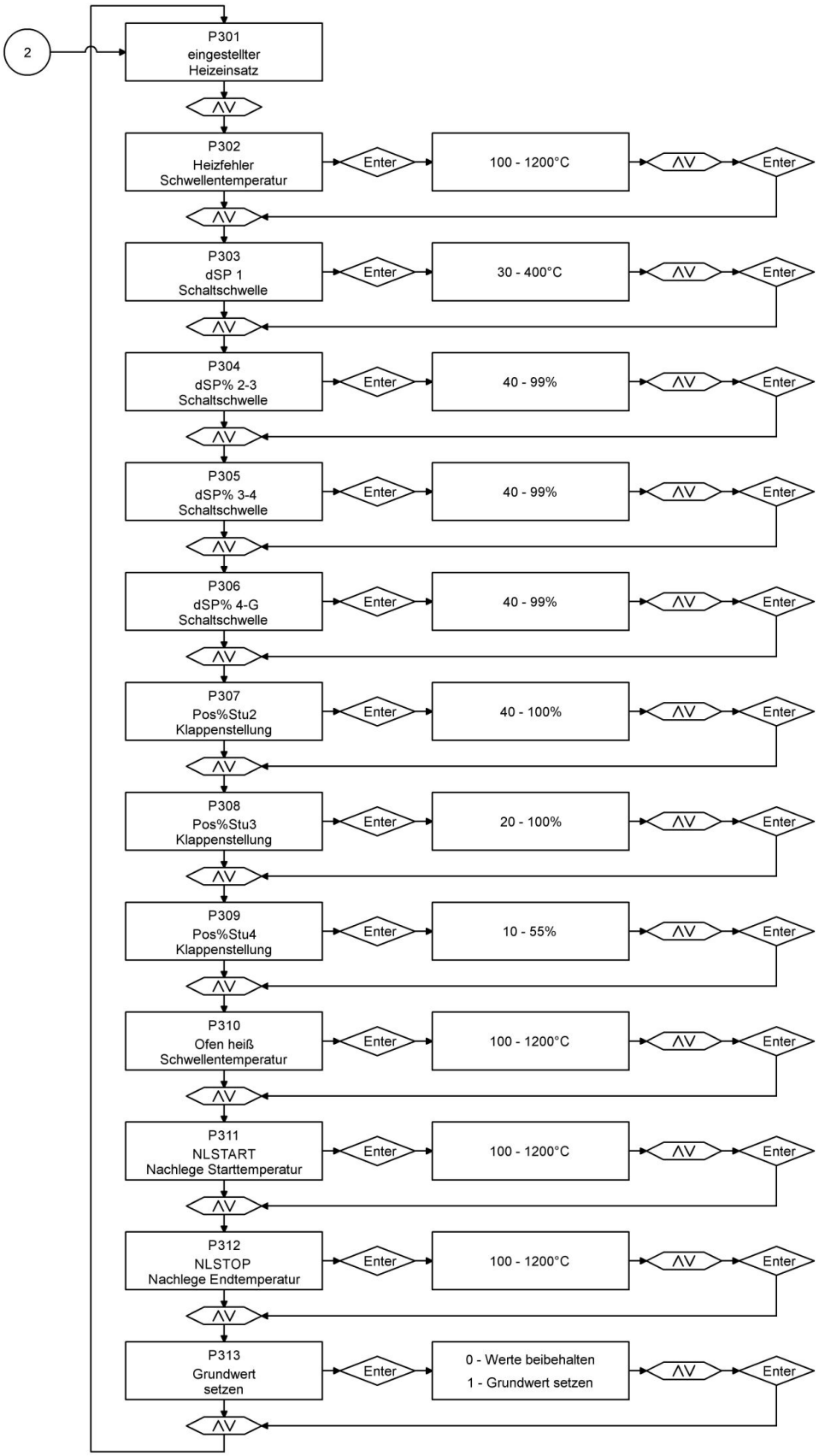
Calibration is not possible, when the stove type ‘KSO’ is selected.

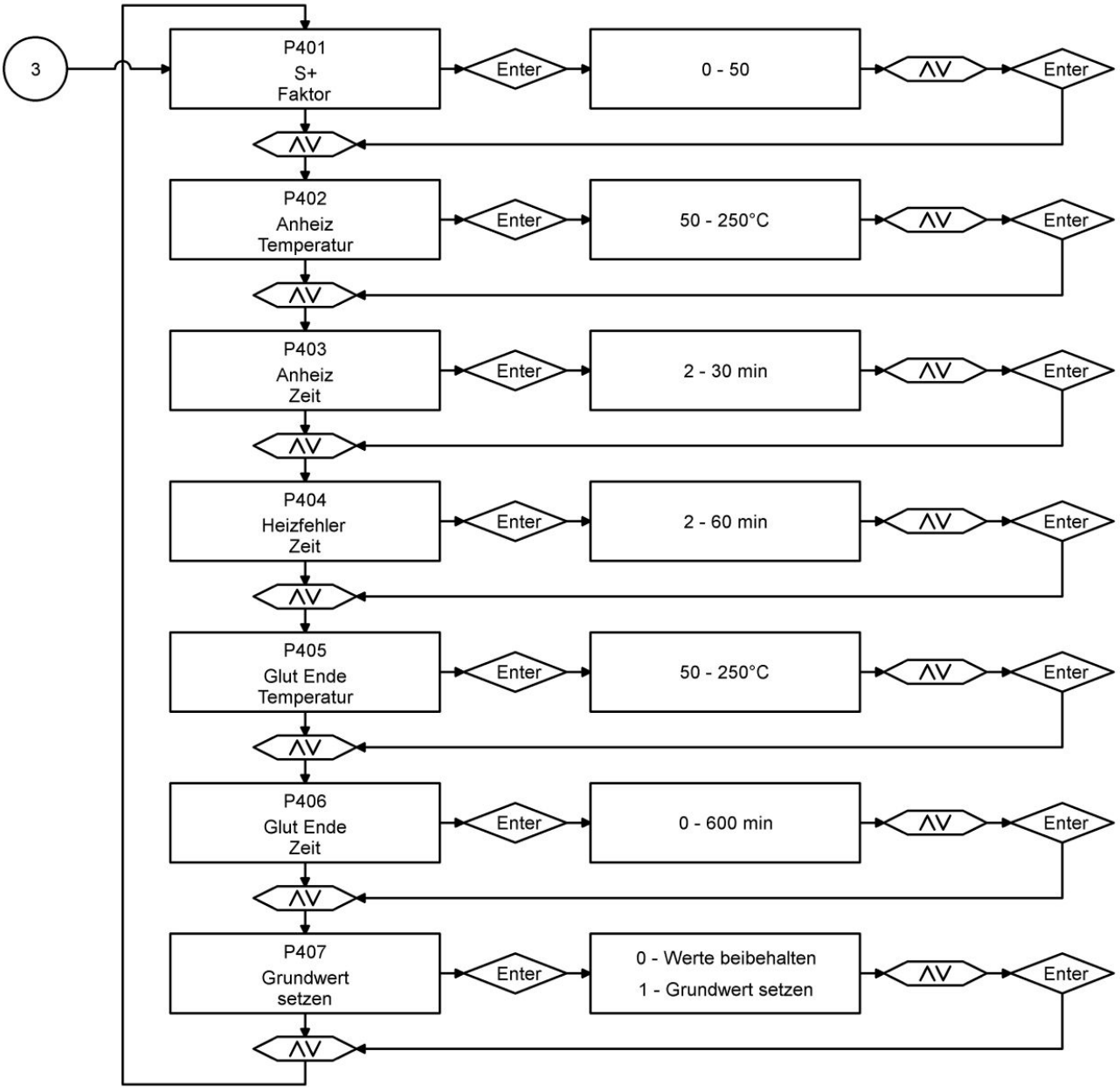
The parameters P202 and P204 restore the settings to factory default.

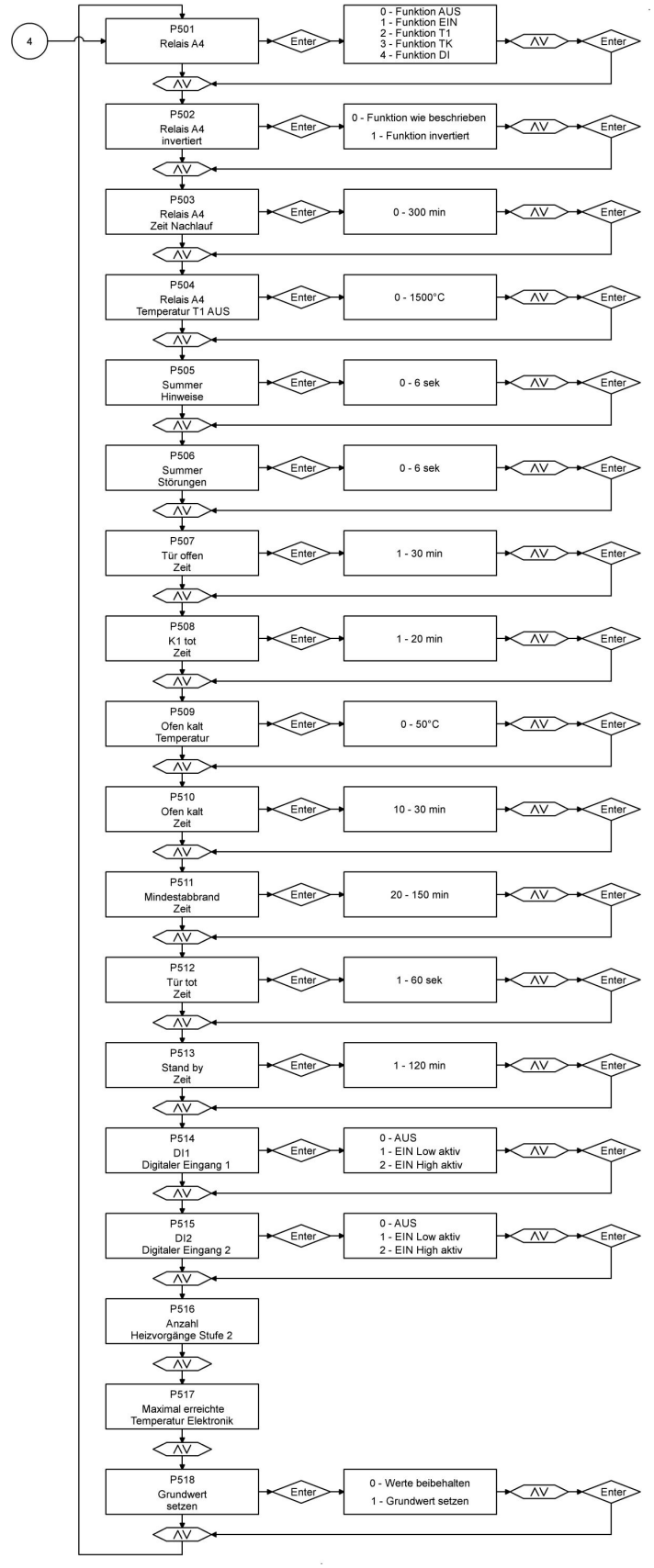


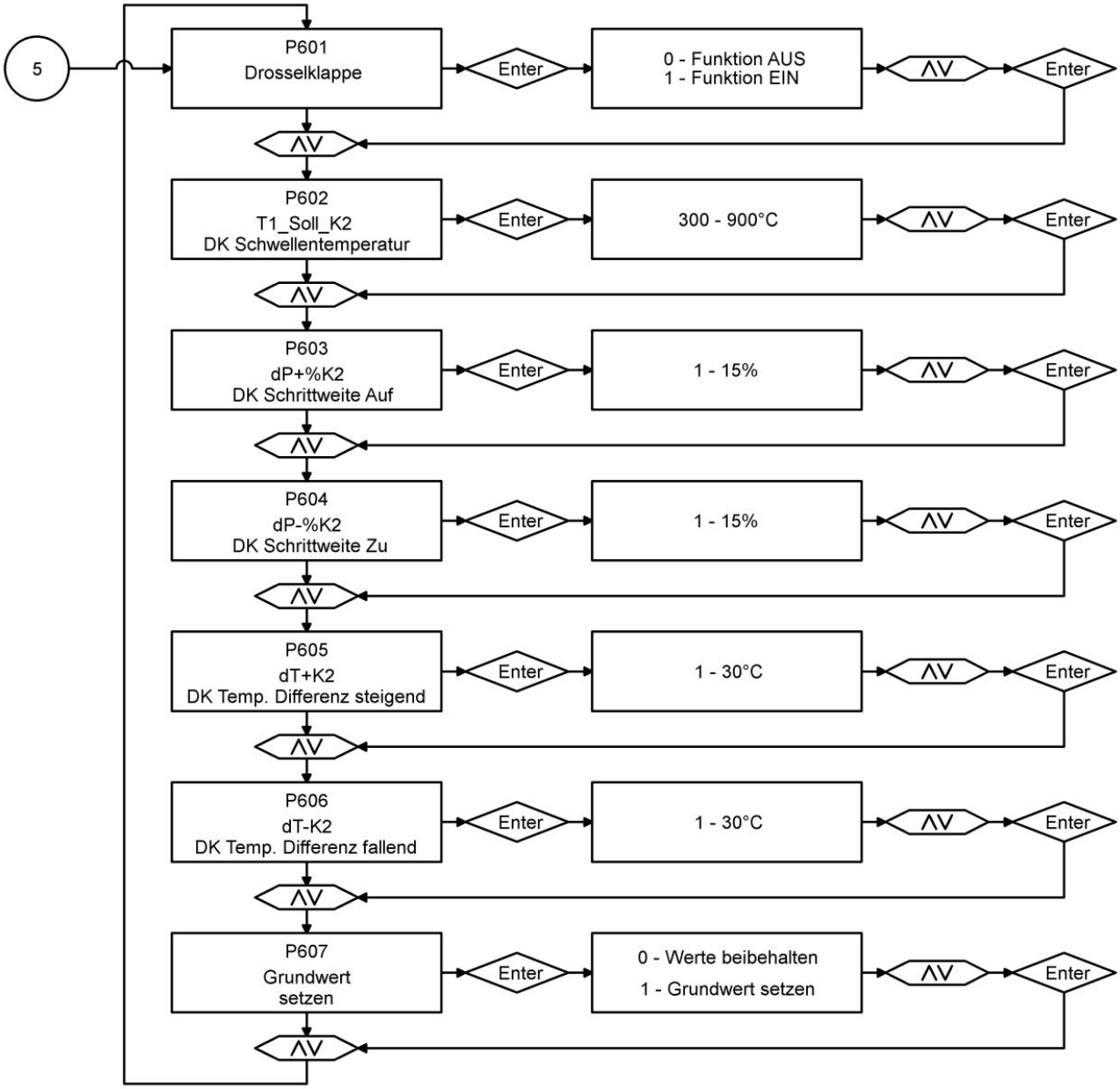
Im. 2: Einstellen des Nullpunktes

In the following parameter blocks you can find the parameters related to combustion, to A4 relay and general EAS performance.




3
P401
S+
Faktor
Enter
0 - 50
∧V
Enter
∧V
P402
Anheiz
Temperatur
Enter
50 - 250°C
∧V
Enter
∧V
P403
Anheiz
Zeit
Enter
2 - 30 min
∧V
Enter
∧V
P404
Heizfehler
Zeit
Enter
2 - 60 min
∧V
Enter
∧V
P405
Glut Ende
Temperatur
Enter
50 - 250°C
∧V
Enter
∧V
P406
Glut Ende
Zeit
Enter
0 - 600 min
∧V
Enter
∧V
P407
Grundwert
setzen
Enter
0 - Werte beibehalten
1 - Grundwert setzen
∧V
Enter
∧V




5
P601
Drosselklappe
Enter
0 - Funktion AUS
1 - Funktion EIN
ΛV
Enter
ΛV
P602
T1_Soll_K2
DK Schwellentemperatur
Enter
300 - 900°C
ΛV
Enter
ΛV
P603
dP+%K2
DK Schrittweite Auf
Enter
1 - 15%
ΛV
Enter
ΛV
P604
dP-%K2
DK Schrittweite Zu
Enter
1 - 15%
ΛV
Enter
ΛV
P605
dT+K2
DK Temp. Differenz steigend
Enter
1 - 30°C
ΛV
Enter
ΛV
P606
dT-K2
DK Temp. Differenz fallend
Enter
1 - 30°C
ΛV
Enter
ΛV
P607
Grundwert
setzen
Enter
0 - Werte beibehalten
1 - Grundwert setzen
ΛV
Enter
ΛV

2.2 PARAMETERS MENU (SOFTWARE > 321)

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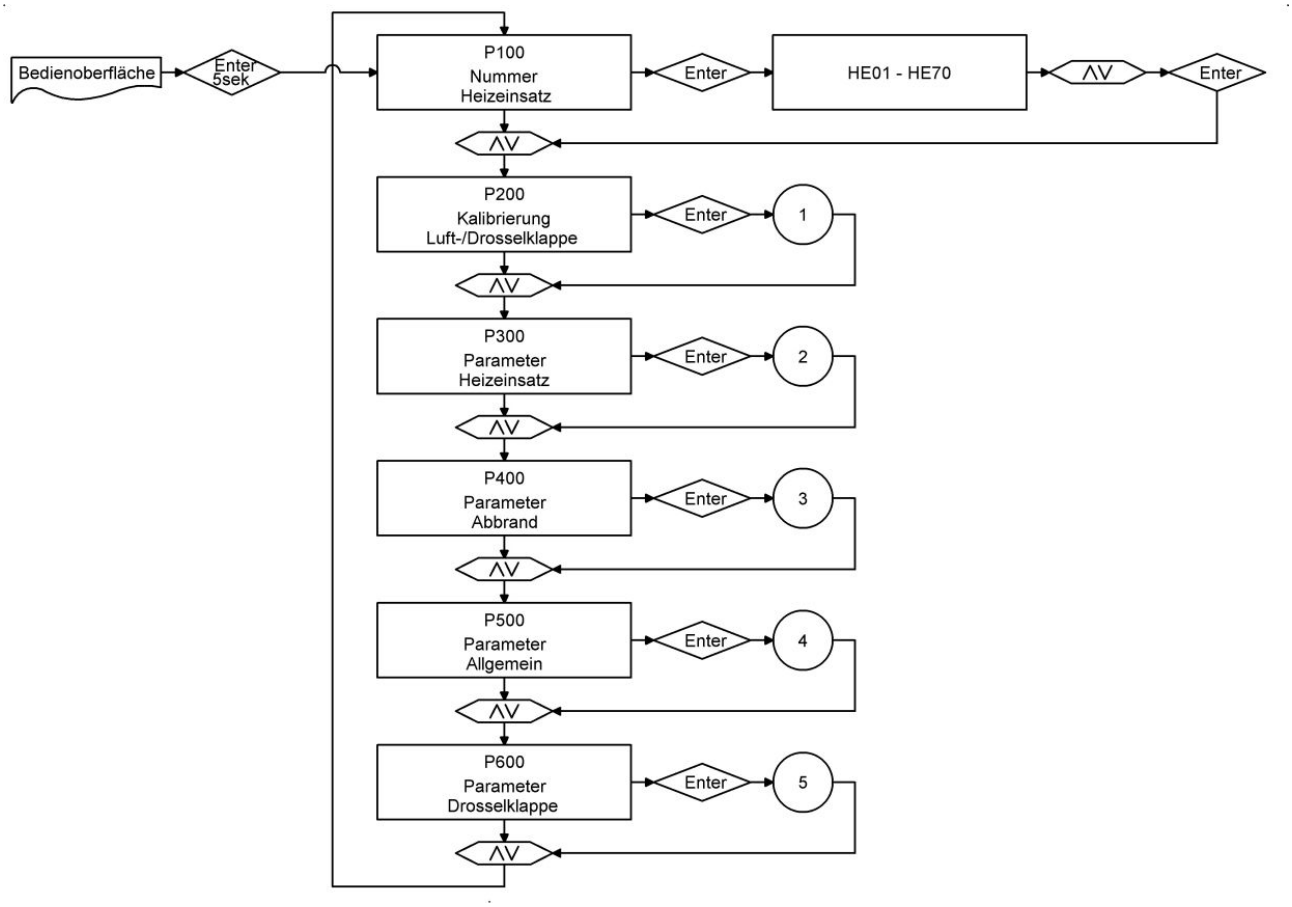

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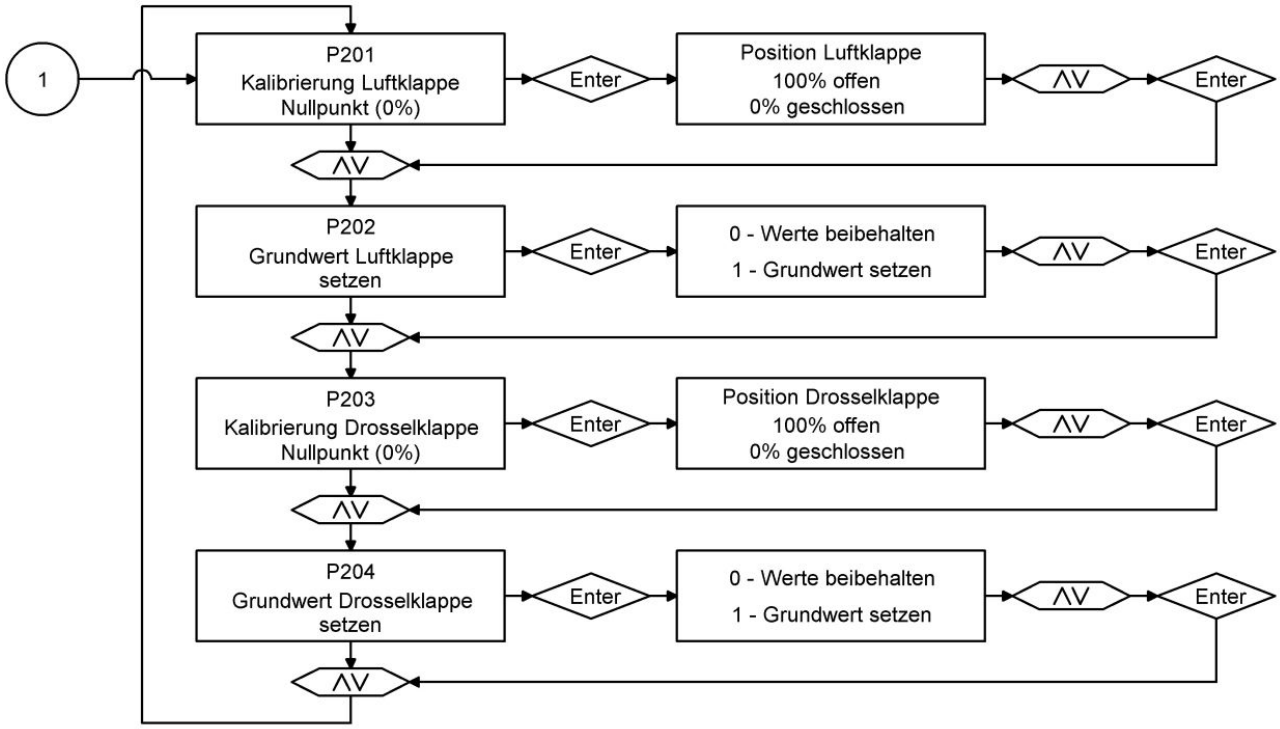

Im. 4: Einstellen des Nullpunktes

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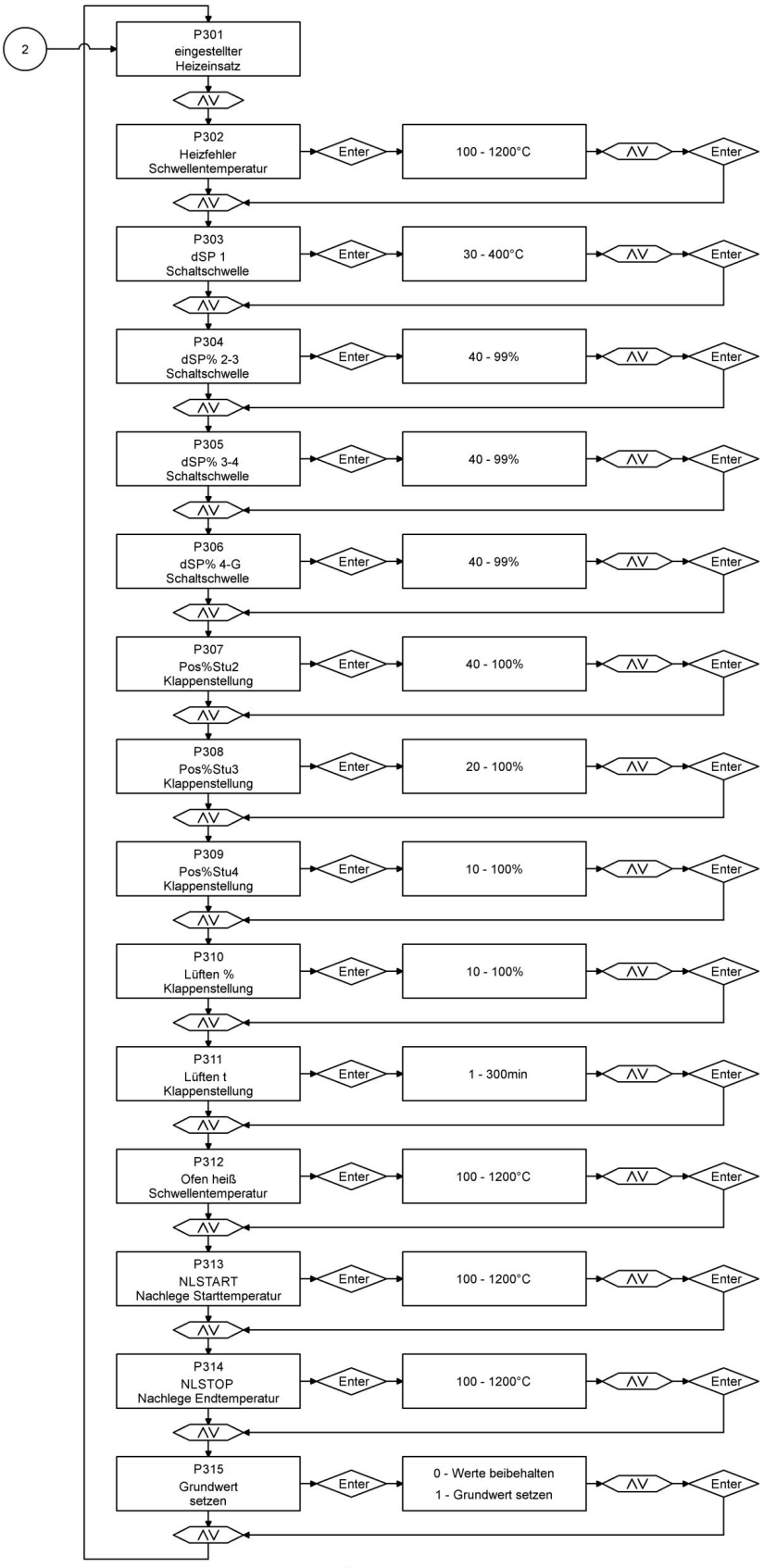
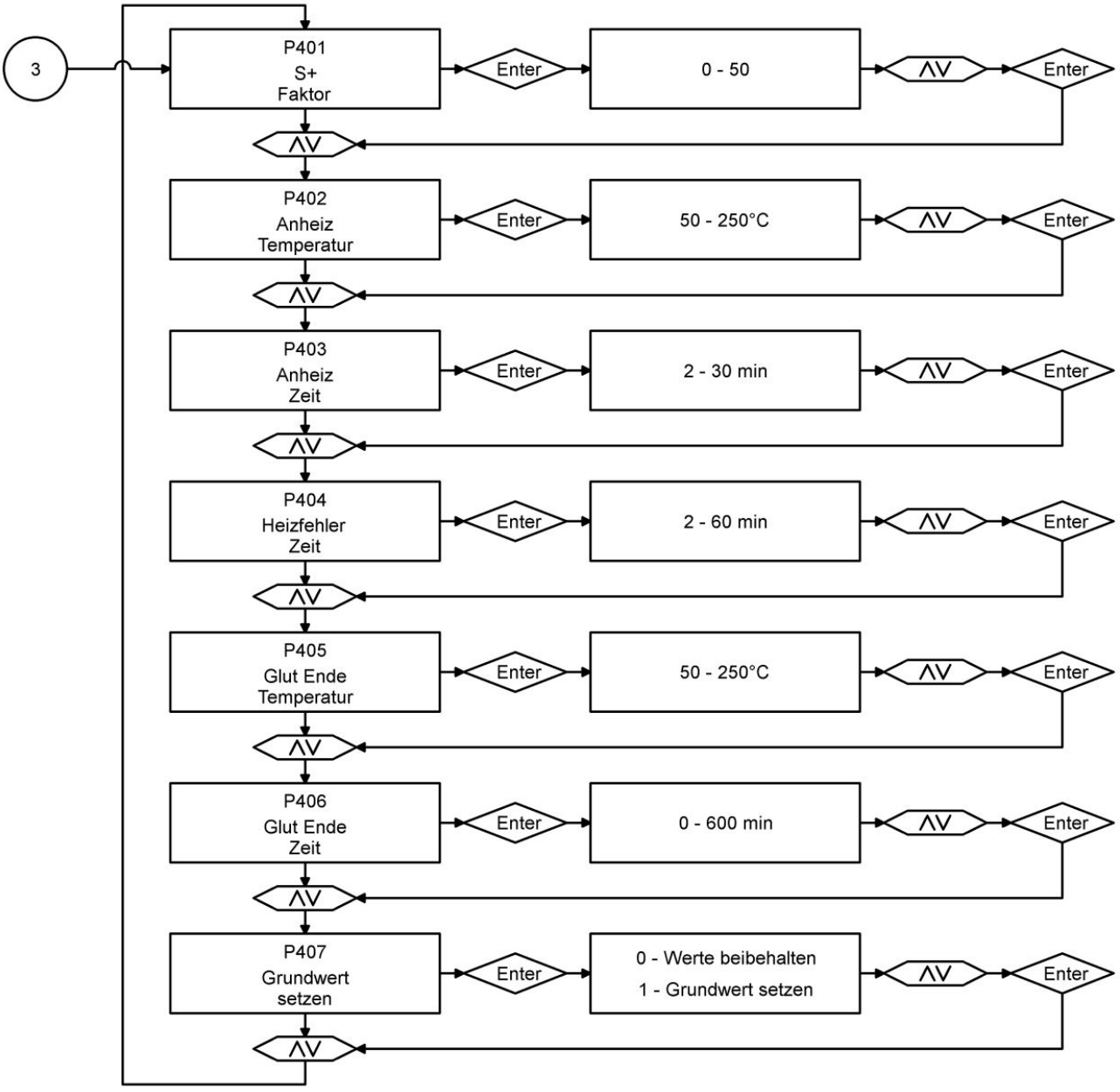
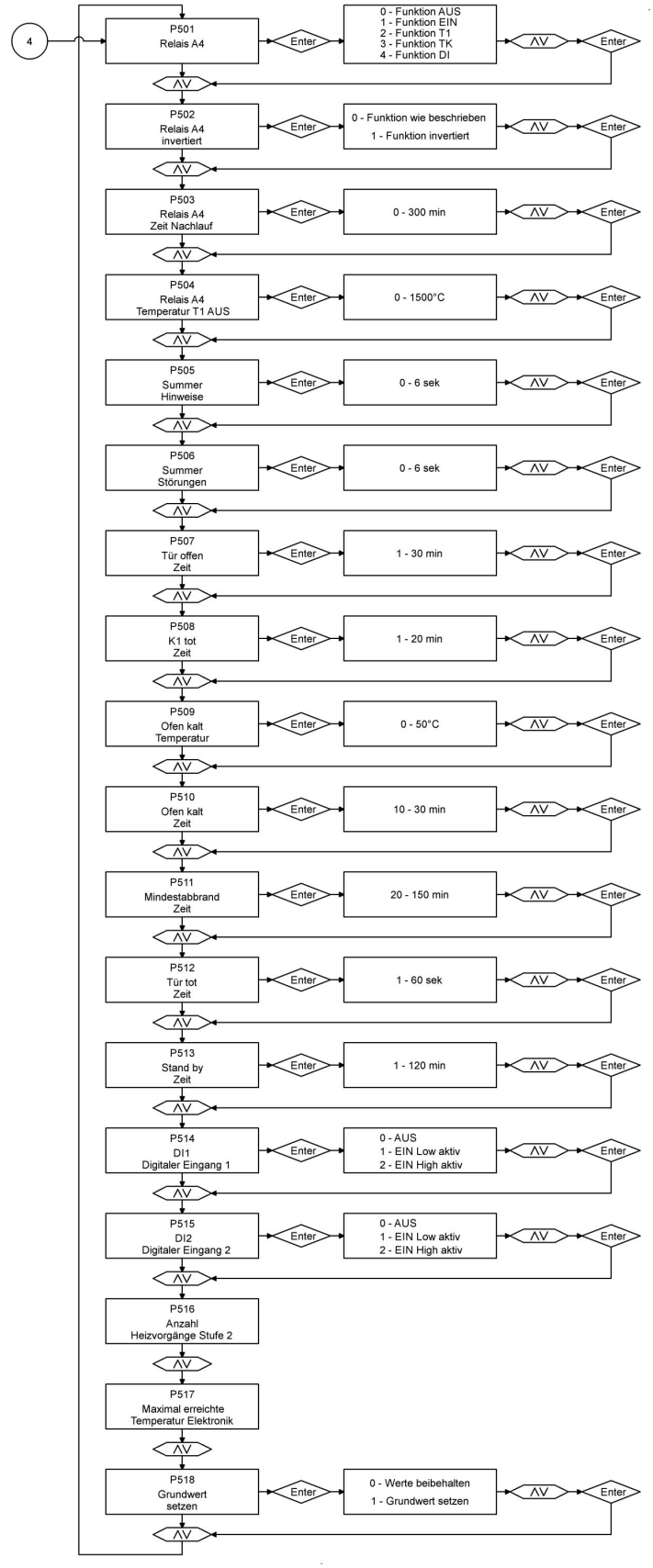
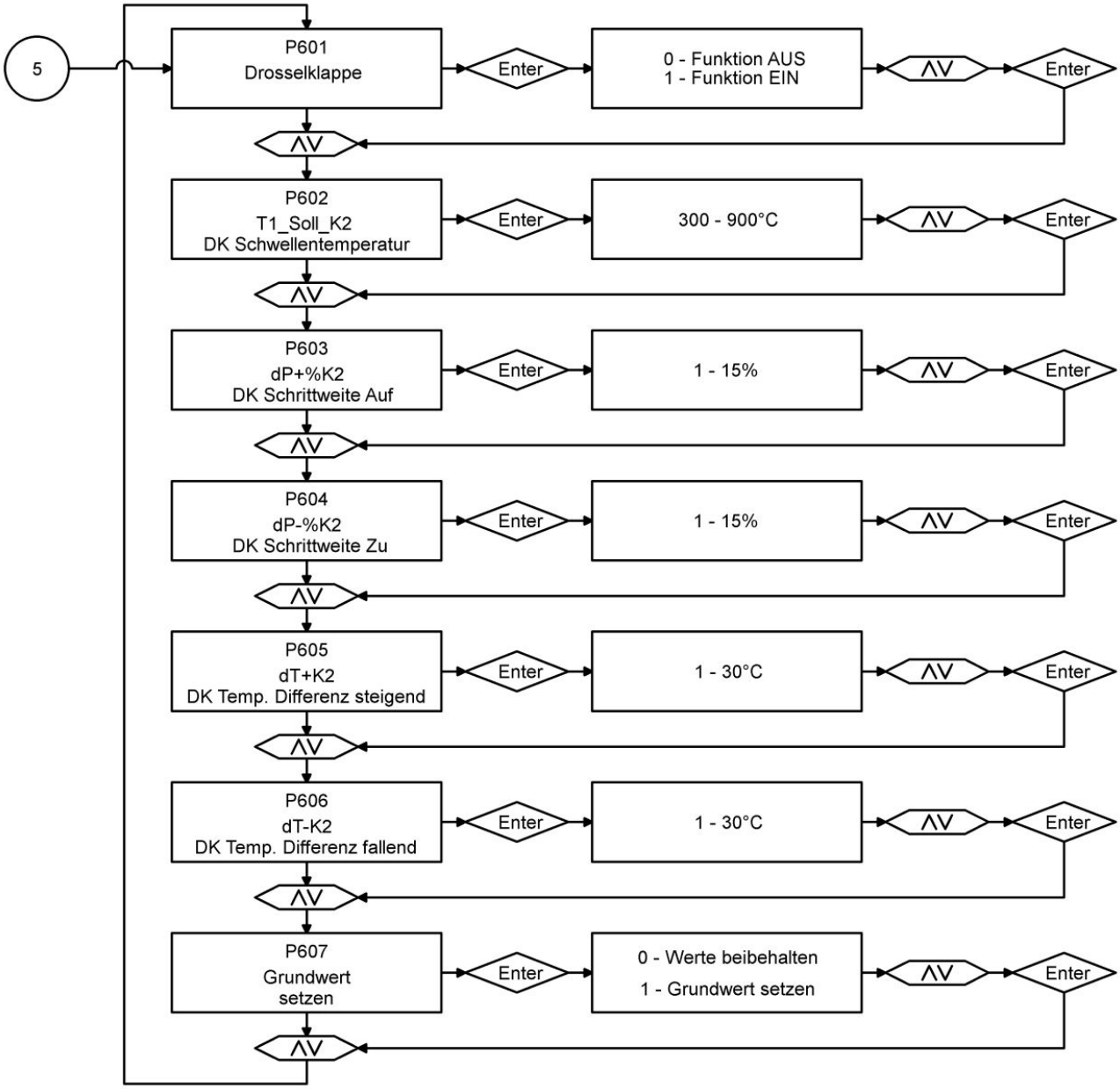



3
P401
S+
Faktor
Enter
0 - 50
∧V
Enter
∧V
P402
Anheiz
Temperatur
Enter
50 - 250°C
∧V
Enter
∧V
P403
Anheiz
Zeit
Enter
2 - 30 min
∧V
Enter
∧V
P404
Heizfehler
Zeit
Enter
2 - 60 min
∧V
Enter
∧V
P405
Glut Ende
Temperatur
Enter
50 - 250°C
∧V
Enter
∧V
P406
Glut Ende
Zeit
Enter
0 - 600 min
∧V
Enter
∧V
P407
Grundwert
setzen
Enter
0 - Werte beibehalten
1 - Grundwert setzen
∧V
Enter
∧V




5
P601
Drosselklappe
Enter
0 - Funktion AUS
1 - Funktion EIN
ΛV
Enter
ΛV
P602
T1_Soll_K2
DK Schwellentemperatur
Enter
300 - 900°C
ΛV
Enter
ΛV
P603
dP+%K2
DK Schrittweite Auf
Enter
1 - 15%
ΛV
Enter
ΛV
P604
dP-%K2
DK Schrittweite Zu
Enter
1 - 15%
ΛV
Enter
ΛV
P605
dT+K2
DK Temp. Differenz steigend
Enter
1 - 30°C
ΛV
Enter
ΛV
P606
dT-K2
DK Temp. Differenz fallend
Enter
1 - 30°C
ΛV
Enter
ΛV
P607
Grundwert
setzen
Enter
0 - Werte beibehalten
1 - Grundwert setzen
ΛV
Enter
ΛV

3 EAS 3 APP

3.1 PARAMETER MENU IN THE EAS 3 APP

With the display variant, the parameters of the EAS3 can be changed directly on the display or via the EAS 3 app. In the variant without a display, configuration is carried out exclusively via the app.

In order to enable the usability of the EAS 3 configuration in the usual form, the control surfaces have been provided with known parameter abbreviations (Pxxx).

If settings on the device are changed via app, the oven door must be open during this time.

Settings on the EAS 3 may only be made when the furnace control is in idle mode. There must be no burning.

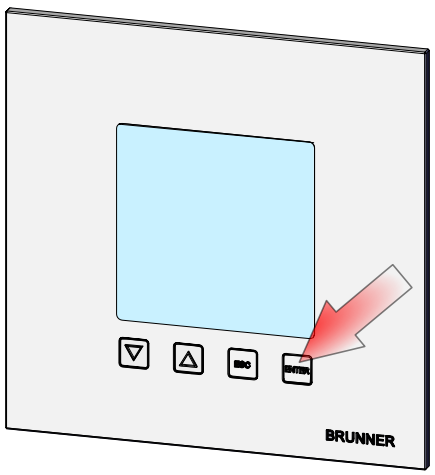
3.2 CONTRACTOR LOGIN IN CASE OF SERVICE WORKS

The stove door must be open

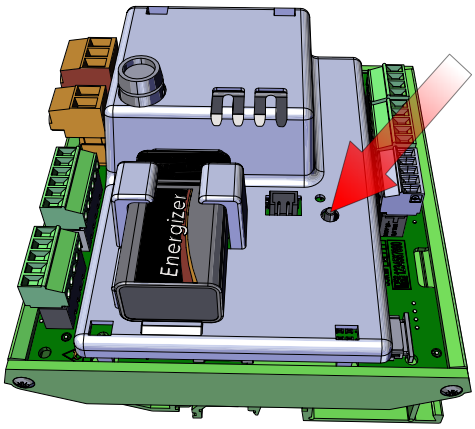
IMPORTANT
Login is possible ONLY, when the fireplace door is open!
→ Open the door while the fireplace is cold. Any combustion process must be finished and no hot embers may be present.

- In case of variants without display, press the red button for ***five seconds***.

- When a variant with display is used, press the “Enter” button on the screen for ***five seconds***.
In the case of EAS 3 with display, the WiFi menu option must be activated!

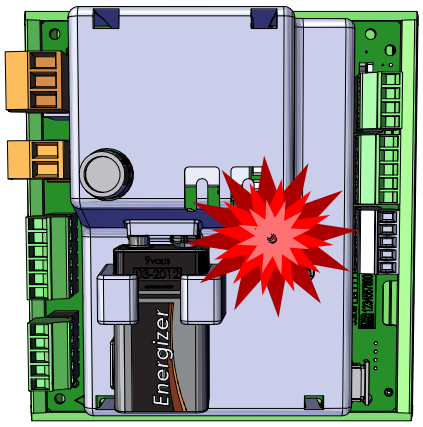


Im. 5: EAS 3 with display



Im. 6: EAS 3 without display

- The “red” LED on device is lit:



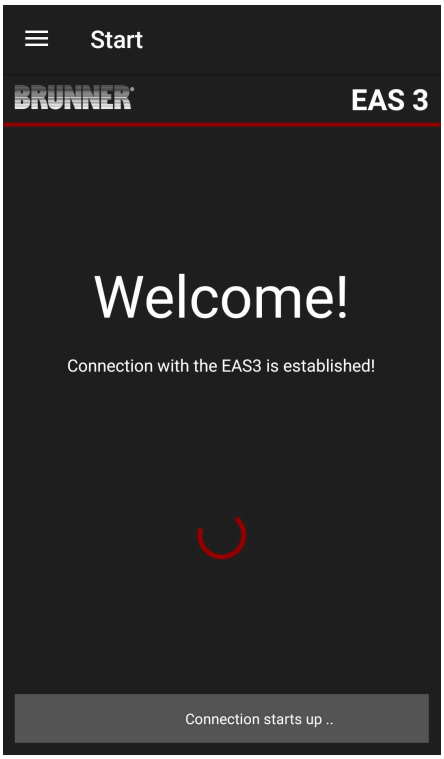
- Connect the end device with the Service access point:

WLAN name: EAS3SERVICE

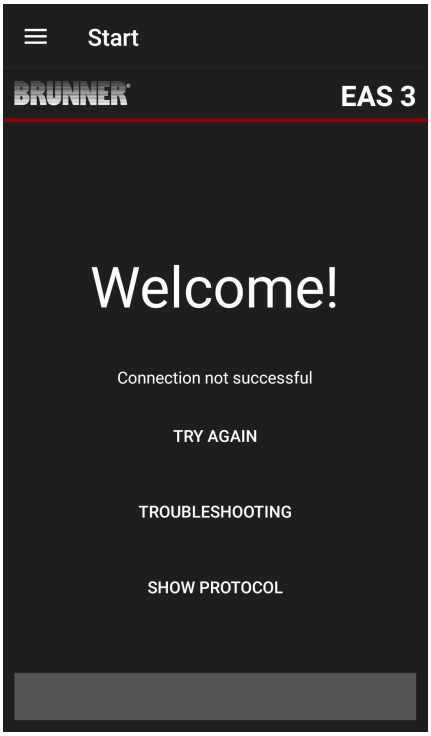
Password: BR987654321

Open the application;

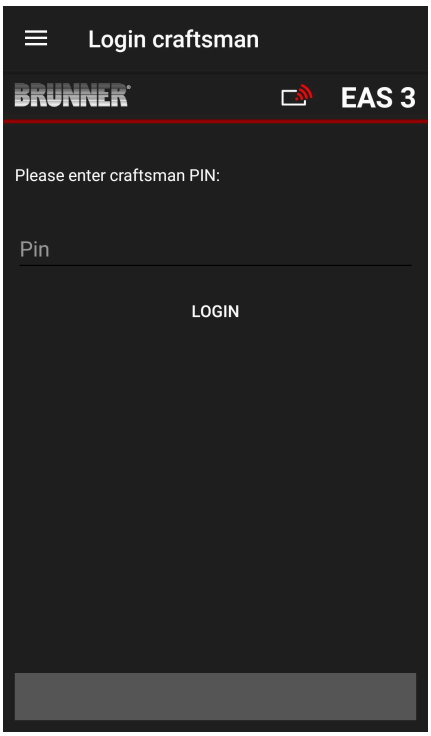
Connection set-up:



No successful connection:



→ Click on
TRY AGAIN



The page “**Login craftsman**” appears automatically after successful connection.
Please enter the PIN No.
84307
and confirm by pressing **LOGIN** to activate the Service access.

After successful login (authentication), the application will automatically switch to the **Craftsman menu**; more details in section *Parameters menu for craftsmen.*

3.3 CRAFTSMAN LOGOUT

When all parameter settings in Craftsman menu are completed, you ***must*** exit the Craftsman Programming Mode.

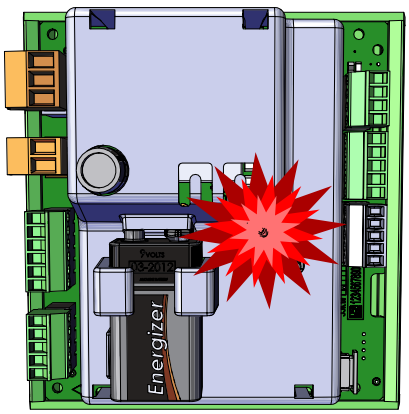
Menu → Start →
LOGOUT CRAFTSMAN

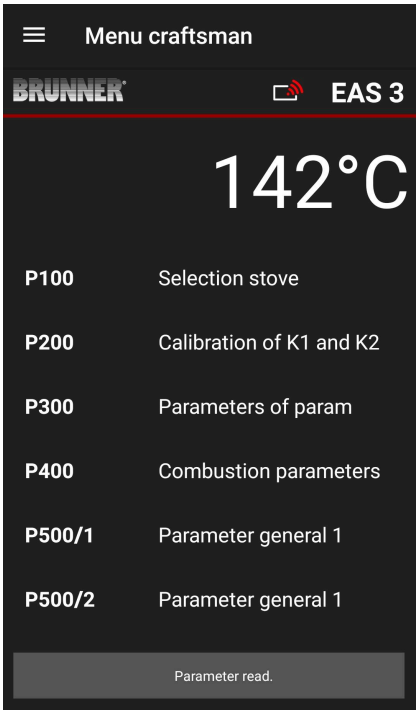
→ The LED on device must have the same colour as before (blue or green).

3.4 PARAMETERS MENU FOR CRAFTSMEN

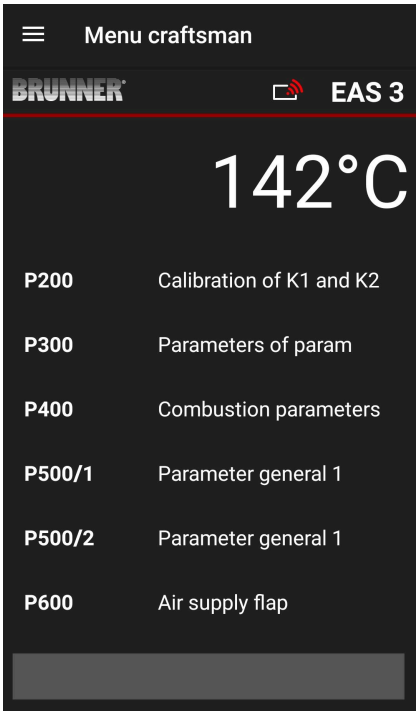
Sign-in as contractor (Craftsman) (see chapter *Login for craftsman*).

When you have successfully switched into Contractor Programming Mode (LED is red), and the EAS 3 application is open, the Craftsman menu will be opened automatically when the sign-in (authentication) process is completed.

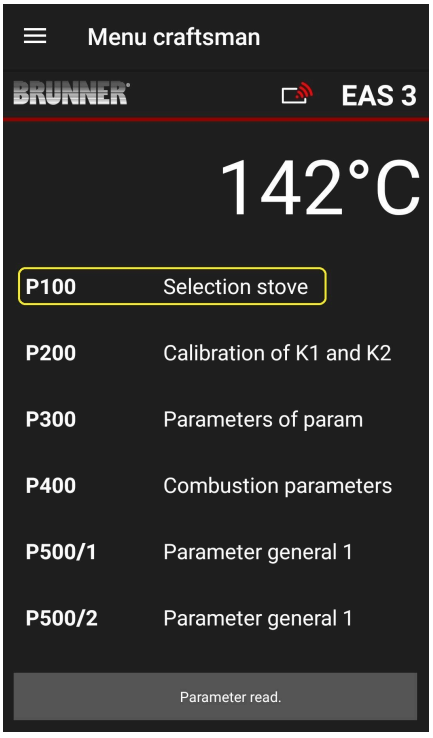




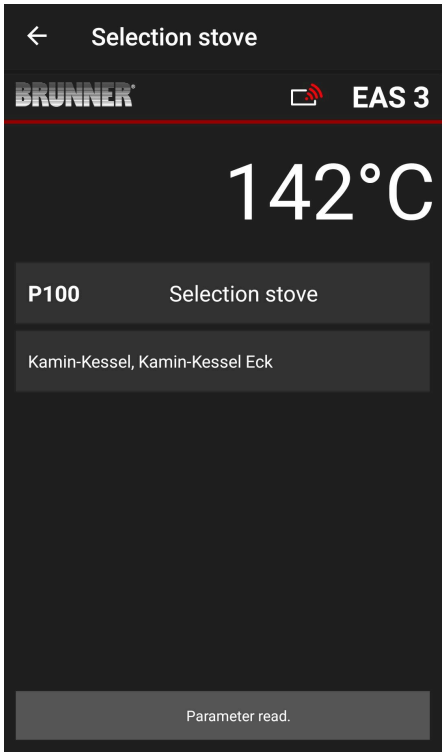
You can go to different menu levels by scrolling:



3.4.1 SELECTION OF HEATER TYPE (P100)

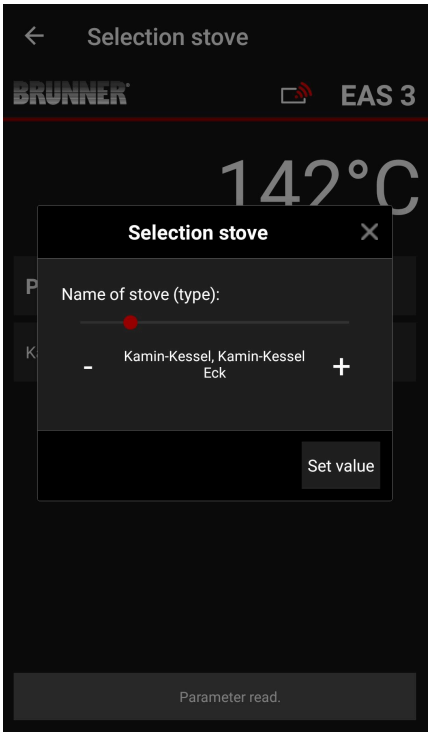


Press the **Select heater** button to open the P100 menu. Click on the row with the **heater type** indication (e.g. HKD 5, HKD 5.1) to open a pop-up menu.

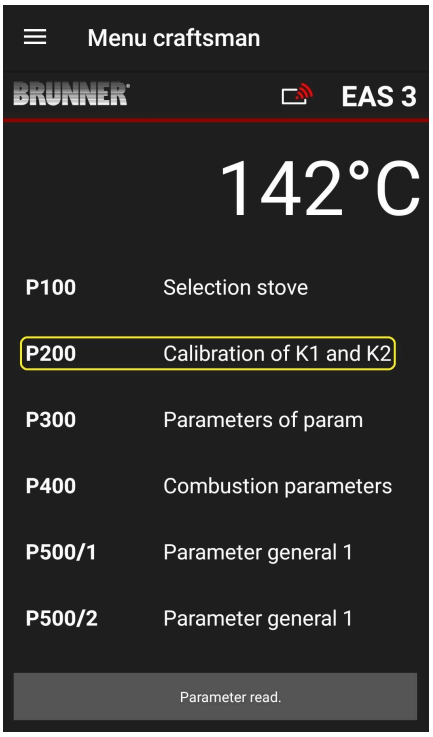


Now you can select a heater type number between 01 and 070. The number associated with the heater type can be found in the *programming instructions* or in the *installation instructions* (chapter *Commissioning of EAS 3*).

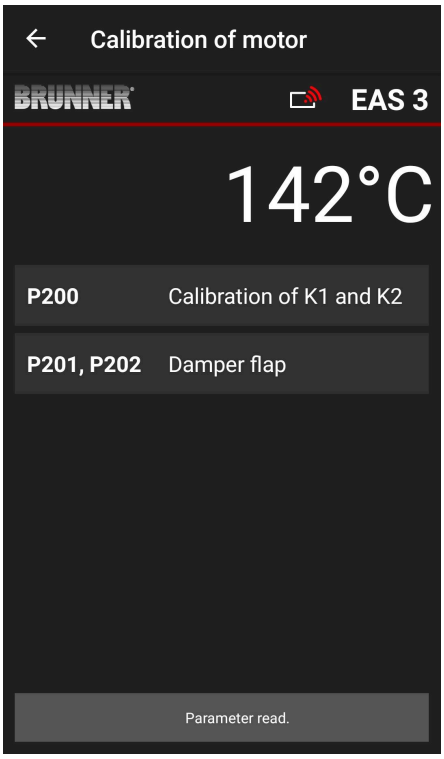
The value must be confirmed after selection by clicking the **Set value** button.

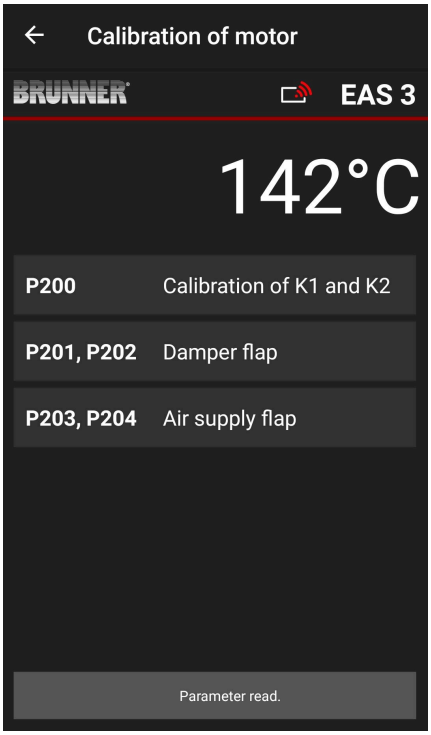


3.4.2 CALIBRATION OF MOTOR (P200)

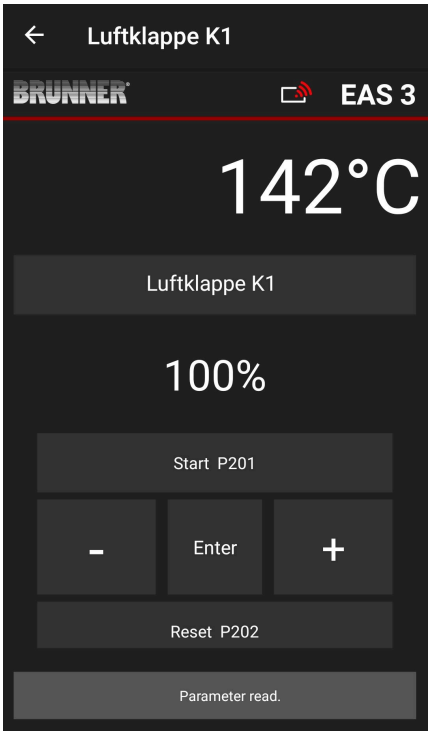


Press the button **Calibration of K1 and K2** to open the ***P200 Menu*** allowing for the calibration of motors.





NOTE: **P203, P204 Damper flap**
will be shown only, when damper flap installed.



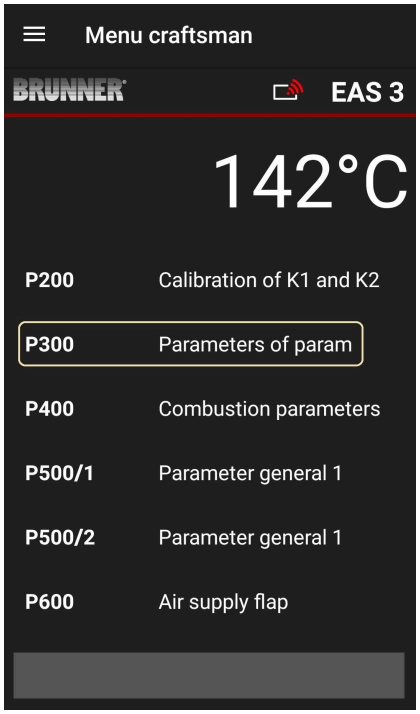
Click on **Start P201**→ motor opens to 100%, if not open yet, then moves back to 0%. Now it is possible to start the manual calibration. Press **+** or **–**.

By pressing the **Reset P202** button, the motor will be set to 0 and the previous calibration will be deleted.

Click **Enter**, to save the new motor setting.

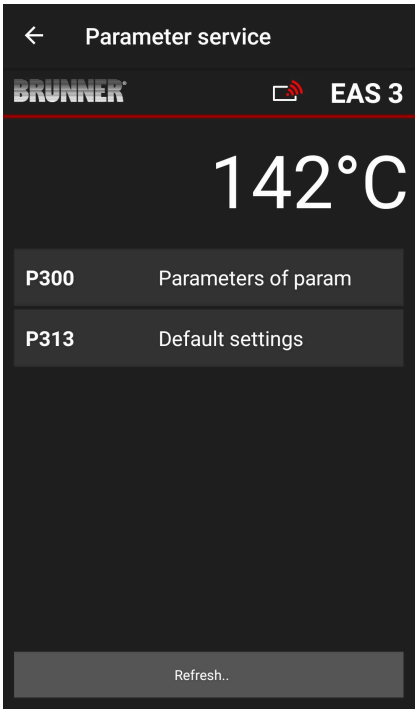
Note:
The motor calibration in case of damper flap is analogical to the air supply calibration

3.4.3 HEATER PARAMETERS (P300)



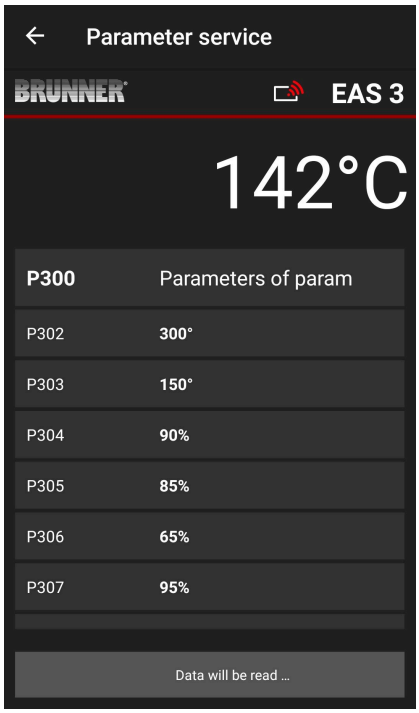
In this menu, you can set the parameters for the heating device.

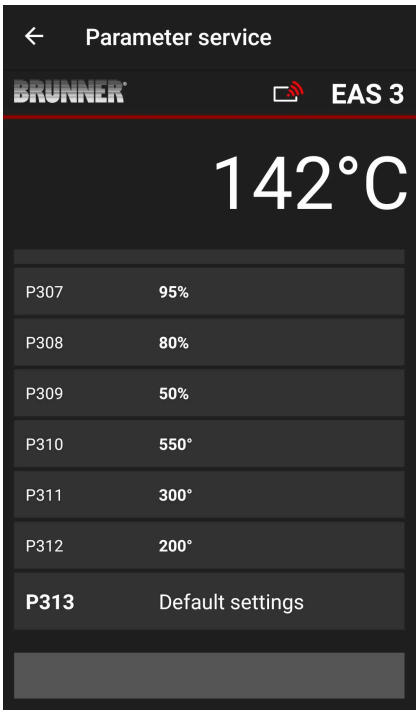
The value ranges are shown in the *programming instructions* (chapter *Stove parameters*).



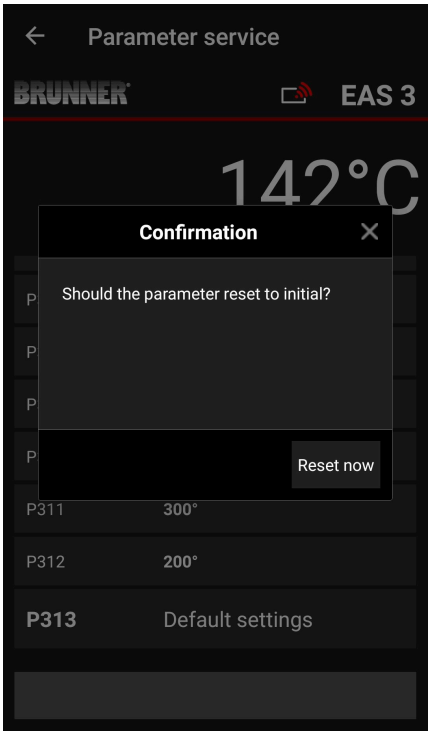
Under **P300 Heater parameters**, after automatic transmission of data, the current values for each parameter of the selected heater type are shown.

If the values cannot be shown on a single page, you can scroll down to see the remaining part.

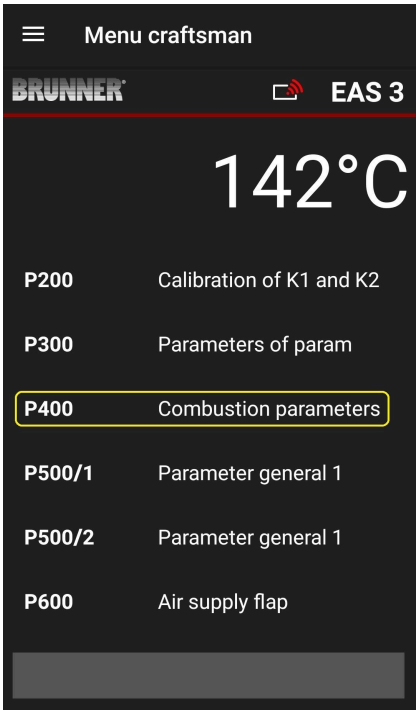




The heater parameters can be reset to initial values by clicking **P313 Factory defaults**. The pop-up menu must be confirmed by selecting **Reset now**.

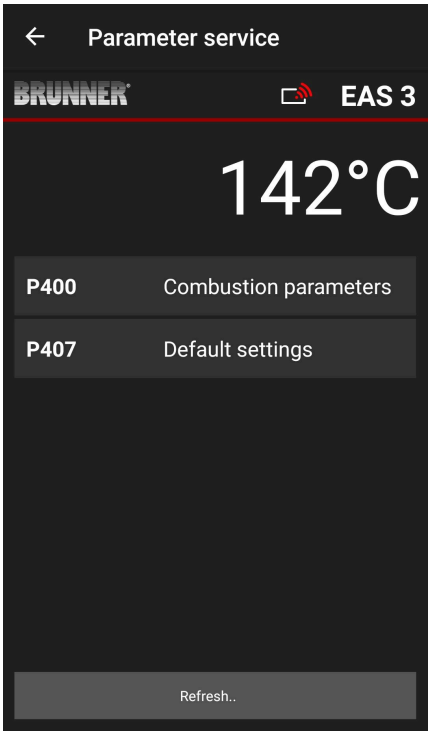


3.4.4 COMBUSTION PARAMETERS (P400)



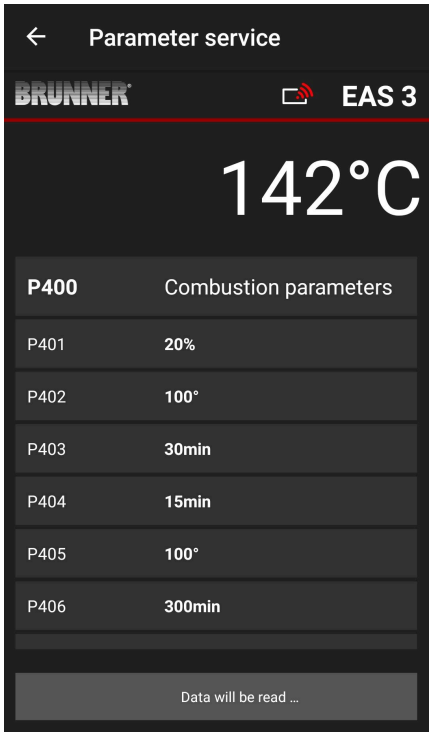
In this menu, you can set the parameters for the combustion process.

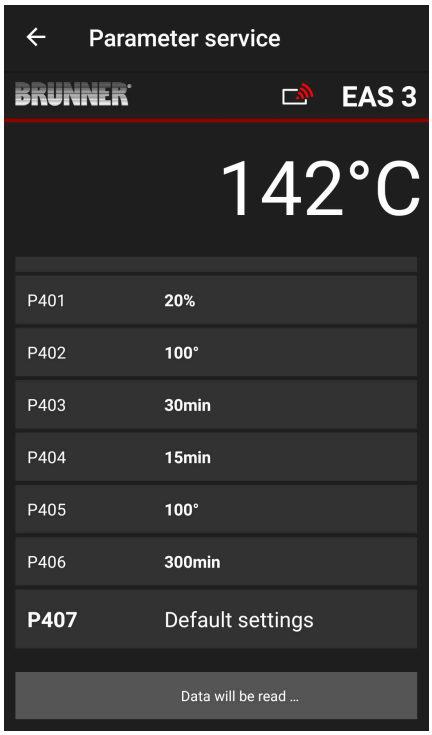
The value ranges are shown in the *programming instructions* (chapter *General parameters*).



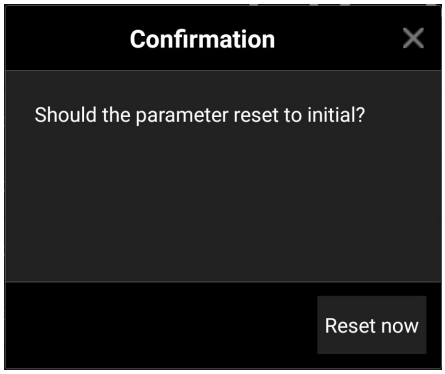
Under **P400 Combustion parameters**, after automatic transmission of data, the current values for each
parameter of the selected heater type are shown.

If the values cannot be shown on a single page, you can scroll down to see the remaining part.

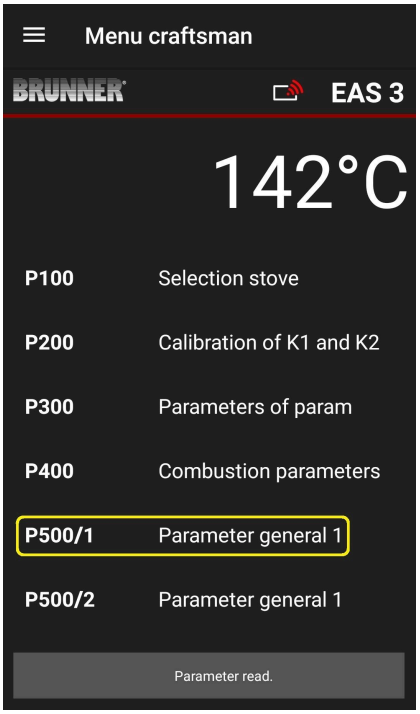




The parameters of combustion process can be reset to initial values by clicking **P407 Default settings**.
The pop-up menu must be confirmed by selecting **Reset now**.



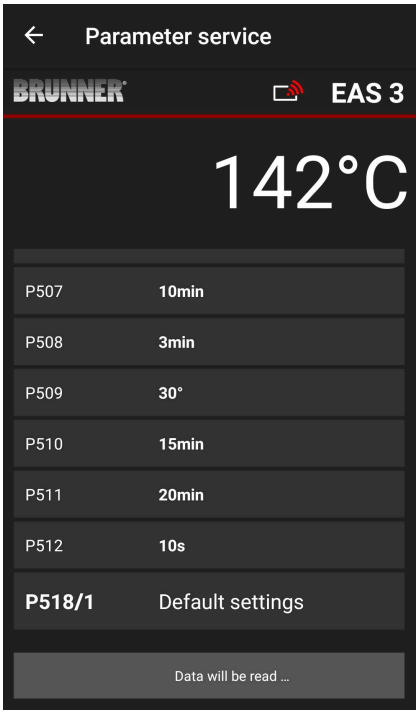
3.4.5 GENERAL PARAMETERS I (P500/1)



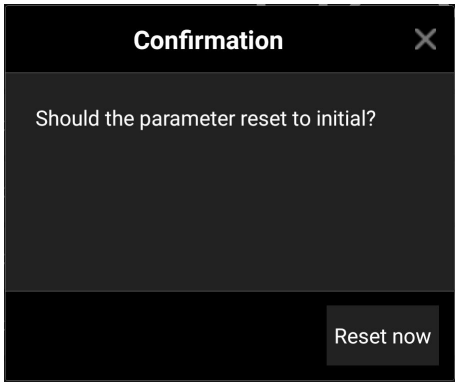
In this menu you can set the General parameters' part 1 (P501 – P512). The value ranges are shown in the *programming instructions* (chapter *General parameters*).

Under **P500/1 General parameters 1**, after automatic transmission of data, the current values for each parameter are shown.

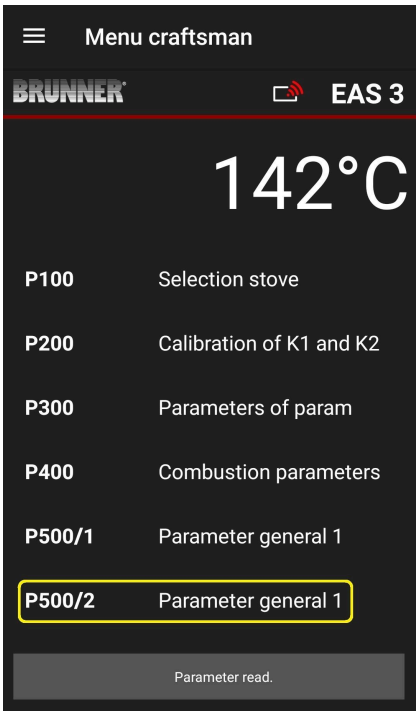
If the values cannot be shown on a single page, you can scroll down to see the remaining part.



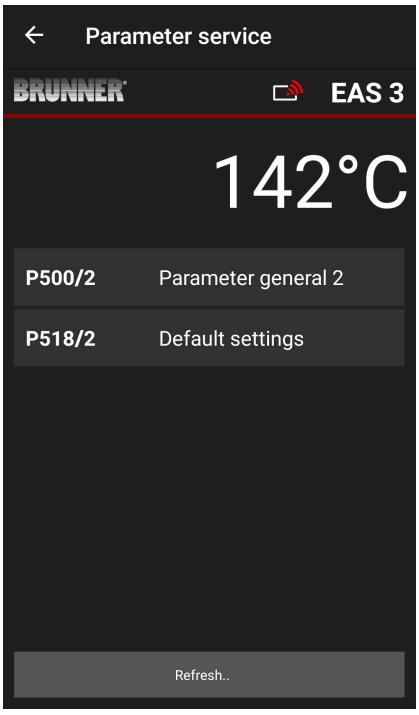
The parameters of combustion process can be reset to initial values by clicking **P518/1 Default settings**. The pop-up menu must be confirmed by selecting **Reset now**.



3.4.6 GENERAL PARAMETERS 2 (P500/2)



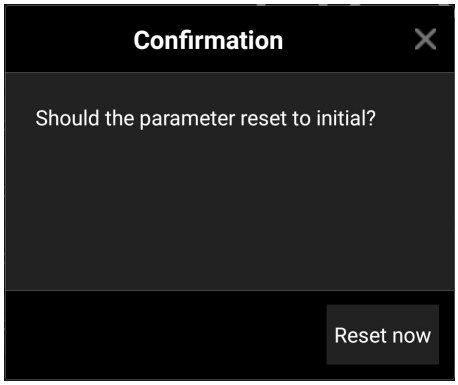
In this menu you can set the General parameters' part 2 (P513 – P517). The value ranges are shown in the *programming instructions* (chapter *General parameters*).



Under **P500/2 General parameters 2**, after automatic transmission of data, the current values for each parameter are shown.

The parameters P516 and P517 are only shown and cannot be set; they are not changed by reverting to default settings.

If the values cannot be shown on a single page, you can scroll down to see the remaining part.



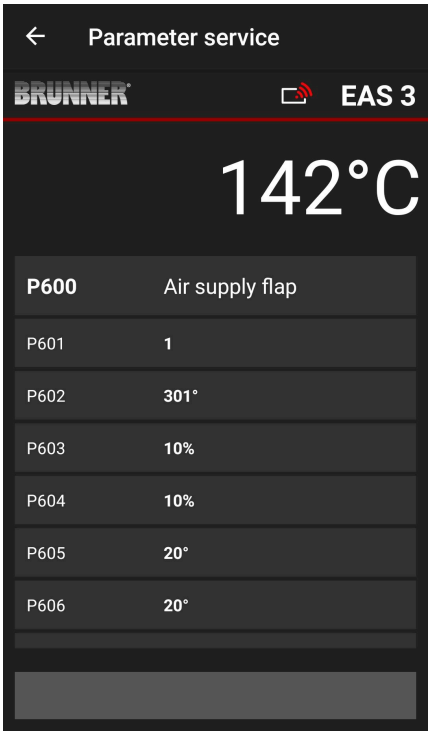
The parameters of combustion process can be reset to initial values by clicking **P518/2 Default settings**. The pop-up menu must be confirmed by selecting **Reset now**.

3.4.7 DAMPER FLAP PARAMETERS (P600)

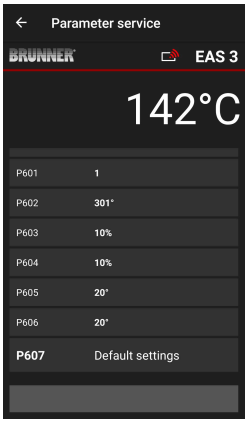
The damper flap function can be configured in the P600 menu.

Under **P600 Damper flap K2**, after automatic transmission of data, the current values for each parameter are shown:

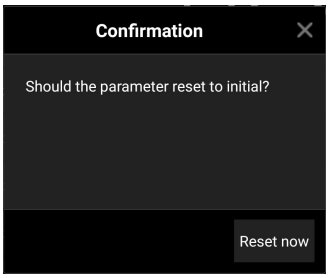
P602 to P606 are shown, when P601 is set to „**1**”, i.e. the damper flap is present:



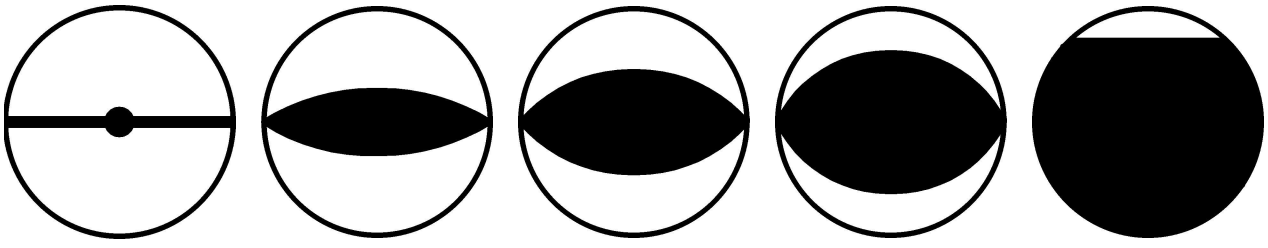
If the values cannot be shown on a single page, you can scroll down to see the remaining part.



The parameters of combustion process can be reset to initial values by clicking **P607 Default settings**. The pop-up menu must be confirmed by selecting **Reset now**.



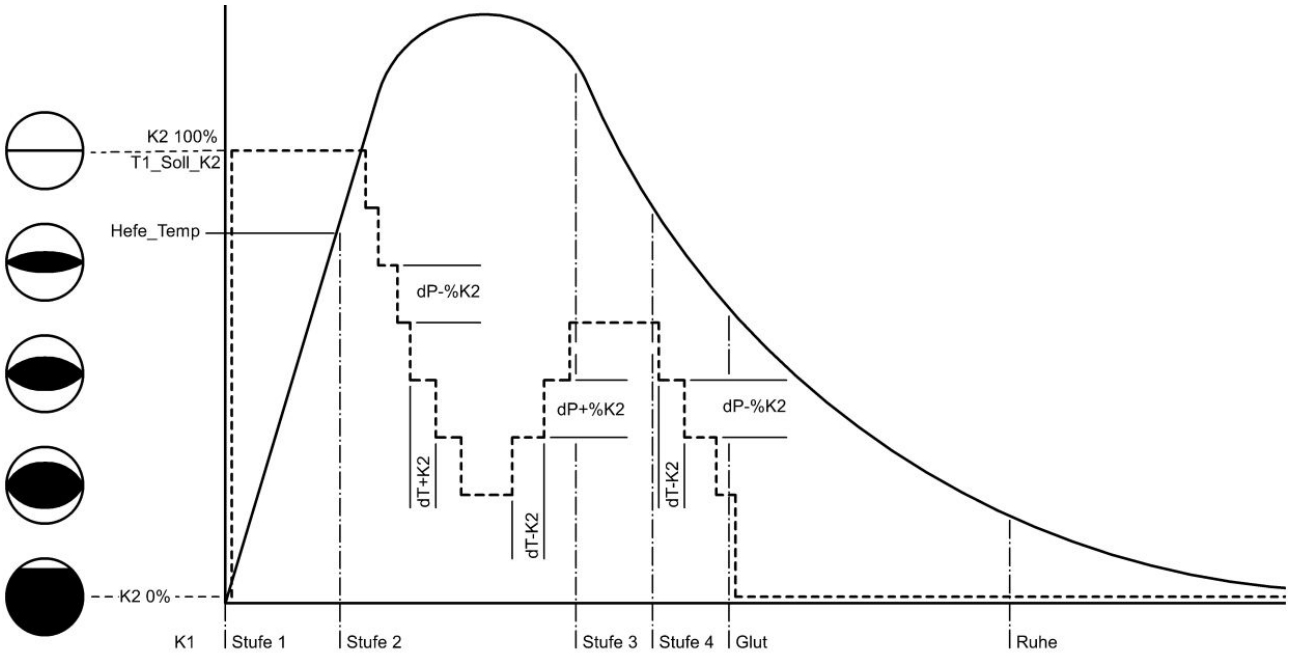
When P601 is set to „1”, the damper flap is present and the damper flap symbol is visible too. This symbol changes during heater operation, depending on its current status:



3.4.7.1 FOR THE DAMPER FLAP PARAMETERS

Parameter No.	Description	Value range [unit]
P601	Damper flap function	0 – Function OFF 1 – Function ON
P602	DF threshold temp.	300 – 900 °C
P603	DF opening step width	1 – 15 %
P604	DF closing step width	1 – 15 %
P605	DF temp. difference rising	1 – 30 °C
P606	DF temp. difference falling	1 – 30 °C
P607	Set basic value	0 – keep values 1 – set values

4 DAMPER FLAP FUNCTION



T1_Soll_K2	Threshold temperature on T1 / Start damper flap function
dPplus%K2	Step width for flap movement in flap OPEN direction
dPminus% K2	Step width for flap movement in flap CLOSED direction
dT plus K2	Temperature difference for temperature rise on T1
dT minus K2	Temperature difference for temperature drop on T1

5 STOVE PARAMETERS (SOFTWARE ≤ 321)

Menu item	Designation	Description	Unit	Settings
P302	Comb. error temp.	Combustion error threshold temp.:	°C	100...1200
P303	dSP1	Temperature difference 1-2:	°C	30...400
P304	dSP% 2-3	Temperature drop to a certain % of initial temp. 2-3	%	40...99
P305	dSP% 3-4	Temperature drop to a certain % of initial temp. 3-4:	%	40...99
P306	dSP% 4-G	Temperature drop to a certain % of initial temp. 4-G:	%	40...99
P307	Pos% Stu2	Position 2 of the air supply flap:	%	40...100
P308	Pos% Stu3	Position 3 of the air supply flap:	%	20...100
P309	Pos% Stu4	Position 4 of the air supply flap:	%	10...100
P310	T1 hot	T1 max. limit value:	°C	100...1200
P311	Nachlege Start	Threshold value note reload- start	°C	100...1200
P312	Nachlege Ende	Threshold value note reload- end	°C	100...1200
Preset parameter values: see *Preset parameter values for stove types*				

6 STOVE PARAMETERS (SOFTWARE > 321)

Menu item	Designation	Description	Unit	Settings
P302	Comb. error temp.	Combustion error threshold temp.:	°C	100...1200
P303	dSP1	Temperature difference 1-2:	°C	30...400
P304	dSP% 2-3	Temperature drop to a certain % of initial temp. 2-3	%	40...99
P305	dSP% 3-4	Temperature drop to a certain % of initial temp. 3-4:	%	40...99
P306	dSP% 4-G	Temperature drop to a certain % of initial temp. 4-G:	%	40...99
P307	Pos% Stu2	Position 2 of the air supply flap:	%	40...100
P308	Pos% Stu3	Position 3 of the air supply flap:	%	20...100
P309	Pos% Stu4	Position 4 of the air supply flap:	%	10...100
P310	airing %	flap position	%	10...100
P311	airing t	flap position	min	1...300
P312	T1 hot	T1 max. limit value:	°C	100...1200
P313	Nachlege Start	Threshold value note reload- start	°C	100...1200
P314	Nachlege Ende	Threshold value note reload- end	°C	100...1200
Preset parameter values: see *Preset parameter values for stove types*				

7 GENERAL PARAMETERS

Menu item	Designation	Description	Unit	De-fault value	Possible settings
S+	S+	Prolonged combustion mode S+		0	0/1
ÖKO	ÖKO	Eco combustion mode ON		1	0/1
DISP	DISP	Background illumination	%	80	0...100
SUM	SUM	Intensity (frequency or loudness) of buzzer sound		2	0/1/2
NLH	NLH	Display of indication for reload with wood logs		0	0/1/2
VERS	VERS	only software version (no parameter version)		-	
VERP	VERP	Parameter version		-	
P100	Heizeinsatz	Act. stove insert number		1	1-70
P401	Faktor S+	Factor:	%	20	0...50
P402	Anheiz Temp.	Temperature of fire starting monitoring	°C	100	50...250
P403	Anheiz Zeit	Time of fire starting monitoring	Min	15	2...30
P404	HefeZeit	Time of threshold temp. monitoring	Min	30	2...60
P405	Glut Ende Temp.	Temp. for hiding ‘Glut’ (Embers) display info	°C	100	50...250
P406	Glut Ende Zeit	Duration of ‘Glut’ (Embers) info display	Min	300	0...600
P501	Relais A4	Function of A4 relay		1	0 (OFF), 1 (ON), 2 (T1), 3 (TK) 4 (DI)
P502	Relais A4 invers	Relay A4 function inverted		0	0 (not inv), 1 (invert)
P503	A4Nachlauf	Run-off time after A4 relay switching	Min	0	0...300
P504	A4T1AUS	Threshold temperature for switching relay A4 when PS01=2 (T1)	°C	500	0...1500
P505	Summer Hinweis	Short buzzer sound duration	Sec	1	0...6
P506	Summer Störung	Long buzzer sound duration	Sec	3	0...6
P507	Tür offen	Open door monitoring time	Min	10	1...30
P508	K1 tot Zeit	Combustion settlement time	Min	3	1...20
P509	Ofen kalt Temp.	Temp. for monitoring, if stove cold	°C	30	0...50
P510	Ofen kalt Zeit	Time for monitoring, if stove cold	Min	15	10...30
P511	Min.Abbrand	Minimal combustion time	Min	30	20...150

Menu item	Designation	Description	Unit	De-fault value	Possible settings
P512	Tür tot Z	Door switch monitoring time	Sec	10	1...60
P513	Standby-Zeit	Time between Stage0/Rest until Standby	Min	10	1...120
P514	DI1 Konfig.	Configuration of input DI 1		0	0 (OFF) 1 (ON with 0 V) 2 (ON with 12 V)
P515	DI2 Konfig.	Configuration of input DI 2		0	0 (OFF) 1 (ON with 0 V) 2 (ON with 12 V)
P516	Anz. Heizvorgänge	Number of started combustion cycles (Stage2)		0	
P517	Max E-Temp.	Maximal temperature of electronics	°C	0	-

8 PRESET PARAMETER VALUES FOR STOVE TYPES WITHOUT DAMPER FLAP (SOFTWARE ≤ 321)

Item	Name	HefeTemp °C	dSP1 °C	dSP %2-3 %	dSP %3-4 %	dSP %4-G %	Pos %Stu2 %	Pos %Stu3 %	Pos %Stu4 %	Stove hot °C	NL Start °C	NL Stop °C
1	HKD2	450	150	90	85	65	75	60	50	800	350	250
2	HKD4	600	150	90	85	65	75	60	50	850	400	300
3	HKD5	550	150	90	85	65	75	55	45	850	350	250
4	HKD6	500	150	90	85	65	80	65	55	850	350	250
5	B4	600	150	90	85	65	75	60	50	850	350	250
6	B5 - B6	500	150	90	85	65	80	65	55	850	350	250
7	HWM	600	150	90	85	65	75	60	50	850	400	300
8	HKD4SK	550	150	90	85	65	75	60	50	900	400	300
9	KamKe	300	150	90	85	65	95	80	50	550	300	200
10	RF55	300	150	90	85	65	75	60	50	600	280	180
11	RF66	300	150	90	85	65	75	60	50	600	280	180
12	KOPA	300	150	90	85	65	75	60	50	500	280	180
13	STIL	200	150	90	85	65	95	80	50	450	250	150
14	EckKa	200	150	90	85	65	95	80	50	400	250	150
15	180Ka	200	150	90	85	65	95	80	50	450	250	150
16	*Grun-dO*	600	150	90	75	65	90	60	45	800	400	300
17	HF5	600	150	90	85	65	80	60	45	850	400	300
18	HF7	580	150	90	85	65	77	50	35	850	400	300
19	HF10	600	150	90	85	65	60	40	30	900	400	300
20	HF15	600	150	90	85	65	60	45	30	900	400	300
21	HFSK	520	150	90	85	65	60	45	30	900	380	280
22	SF7	600	150	90	85	65	70	55	40	900	400	300
23	SF10	600	150	90	85	65	70	55	40	900	400	300
24	SFSK	520	150	90	85	65	70	55	40	900	350	250
25	B7 - B8	500	150	90	85	65	80	65	55	850	350	250
26	HerdKe	500	150	90	85	65	80	65	55	850	350	250
27	KKE33	500	150	90	85	65	80	65	55	850	320	220

Item	Name	HefeTemp °C	dSP1 °C	dSP %2-3 %	dSP %3-4 %	dSP %4-G %	Pos %Stu2 %	Pos %Stu3 %	Pos %Stu4 %	Stove hot °C	NL Start °C	NL Stop °C
28	HKD2.2XL	600	150	90	85	65	75	60	50	900	400	300
29	HKD2.2XL SK	550	150	90	85	65	75	60	50	900	400	300
30	KSO	450	150	80	85	85	95	85	75	900	350	250
31	WF 33	450	150	90	85	65	80	55	45	800	320	220
32	WF 50	500	150	90	85	65	80	60	50	850	350	250
33	Pano-rama	150	60	80	80	50	95	90	85	400	250	150
34	GOT / GOT +GOF Flat	550	150	90	75	65	90	55	40	800	350	250
35	GOT / GOT +GOF Corner	500	150	90	80	65	90	55	40	800	350	250
36	GOT / GOT +GOF Tunnel	500	150	90	80	65	90	50	40	800	350	250
37	WF 25	400	150	90	85	65	75	50	40	800	300	200
38	Ar-chitek-tur	200	150	90	85	65	95	80	50	500	250	150
39	KFR	500	150	80	85	85	90	50	40	800	350	250
40	HKD 7-12	450	150	90	85	70	85	60	50	800	350	250
41	DF 33	400	150	90	85	60	80	50	40	800	350	250
42	HKD3	400	150	90	85	65	75	45	25	800	350	250
43	Ar-chitek-tur boiler	300	150	90	85	65	95	80	50	800	300	200
44	Scandi-navian	250	150	90	85	65	75	60	50	800	250	150

* The parameter set 16 concerns exclusively handcrafted masonry heaters. The parameter values must be adapted to the circumstances!

HefeTemp. = Combustion error temp.

9 PRESET PARAMETER VALUES FOR STOVE TYPES WITHOUT DAMPER FLAP (SOFTWARE > 321)

I. Nr.	Name	HefeTem °C	dSP1 °C	dSP %2-3 %	dSP %3-4 %	dSP %4-G %	Pos %Stu2 %	Pos %Stu3 %	Pos %Stu4 %	Ofen heiß °C	NL Start °C	NL Stop °C	Lüften %	Lüften t
1	HKD2	450	150	90	85	65	75	60	50	800	350	250	-	-
2	HKD4	600	150	90	85	65	75	60	50	850	400	300	-	-
3	HKD5	550	150	90	85	65	75	55	45	850	350	250	-	-
4	HKD6	500	150	90	85	65	80	65	55	850	350	250	-	-
5	B4	600	150	90	85	65	75	60	50	850	350	250	-	-
6	B5 - B6	500	150	90	85	65	80	65	55	850	350	250	-	-
7	HWM	600	150	90	85	65	75	60	50	850	400	300	-	-
8	HKD4SK	550	150	90	85	65	75	60	50	900	400	300	-	-
9	KamKe	300	150	90	85	65	95	80	50	550	300	200	-	-
10	RF55	300	150	90	85	65	75	60	50	600	280	180	-	-
11	RF66	300	150	90	85	65	75	60	50	600	280	180	-	-
12	KOPA	300	150	90	85	65	75	60	50	500	280	180	-	-
13	STIL	200	150	90	85	65	95	80	50	450	250	150	-	-
14	EckKa	200	150	90	85	65	95	80	50	400	250	150	-	-
15	180Ka	200	150	90	85	65	95	80	50	450	250	150	-	-
16	*Grun-dO*	600	150	90	75	65	90	60	45	800	400	300	-	-
17	HF5	600	150	90	85	65	80	60	45	850	400	300	-	-
18	HF7	580	150	90	85	65	77	50	35	850	400	300	-	-
19	HF10	600	150	90	85	65	60	40	30	900	400	300	-	--
20	HF15	600	150	90	85	65	60	45	30	900	400	300	-	-
21	HFSK	520	150	90	85	65	60	45	30	900	380	280	-	-
22	SF7	600	150	90	85	65	70	55	40	900	400	300	-	-
23	SF10	600	150	90	85	65	70	55	40	900	400	300	-	-
24	SFSK	520	150	90	85	65	70	55	40	900	350	250	-	-
25	B7 - B8	500	150	90	85	65	80	65	55	850	350	250	-	-
26	HerdKe	500	150	90	85	65	80	65	55	850	350	250	-	-
27	KKE33	500	150	90	85	65	80	65	55	850	320	220	-	-

I. Nr.	Name	HefeTem °C	dSP1 °C	dSP %2-3 %	dSP %3-4 %	dSP %4-G %	Pos %Stu2 %	Pos %Stu3 %	Pos %Stu4 %	Ofen heiß °C	NL Start °C	NL Stop °C	Lüften %	Lüften t
28	HKD2.2XL	600	150	90	85	65	75	60	50	900	400	300	-	-
29	HKD2.2XL SK	550	150	90	85	65	75	60	50	900	400	300	-	-
30	KSO	450	150	80	85	85	95	85	75	900	350	250	-	-
31	WF 33	450	150	90	85	65	80	55	45	800	320	220	-	-
32	WF 50	500	150	90	85	65	80	60	50	850	350	250	-	-
33	Pano-rama	150	60	80	80	50	95	90	85	400	250	150	-	-
34	GOT / GOT +GOF Flach	550	150	90	75	65	90	55	40	800	350	250	-	-
35	GOT / GOT +GOF Eck	500	150	90	80	65	90	55	40	800	350	250	-	-
36	GOT / GOT +GOF Tunnel	500	150	90	80	65	90	50	40	800	350	250	-	-
37	WF 25	400	150	90	85	65	75	50	40	800	300	200	-	-
38	Architek-tur	200	150	90	85	65	95	80	50	500	250	150	-	-
39	KFR	500	150	80	85	85	90	50	40	800	350	250	-	-
40	HKD 7-12	450	150	90	85	70	85	60	50	800	350	250	-	-
41	DF 33	400	150	90	85	60	80	50	40	800	350	250	-	-
42	HKD3	400	150	90	85	65	75	45	25	800	350	250	-	-
43	Architek-tur Kessel	300	150	90	85	65	95	80	50	800	300	200	-	-
44	Scandi-navian	250	150	90	85	65	75	60	50	800	250	150	-	-
45	BKH	360	150	85	70	60	70	50	35	600	300	250	25	180

* The parameter set 16 concerns exclusively handcrafted masonry heaters. The parameter values must be adapted to the circumstances!

HefeTemp. = Combustion error temp.

10 PRESET PARAMETER VALUES FOR STOVE TYPES WITH DAMPER FLAP (SOFTWARE ≤ 321)

Item	Name	T1_Soll_K2 °C	dPplus%K2 %	dPminus% K2 %	dT plus K2 °C	dT minus K2 °C
1	HKD2	550	10	10	20	20
2	HKD4	650	10	10	20	20
3	HKD5	650	10	10	20	20
4	HKD6	600	10	10	20	20
5	B4	650	10	10	20	20
6	B5 - B6	600	10	10	20	20
7	HWM	650	10	10	20	20
8	HKD4SK	650	10	10	20	20
9	KamKe	450	10	10	20	20
10	RF55	500	10	10	20	20
11	RF66	500	10	10	20	20
12	KOPA	450	10	10	20	20
13	STIL	400	10	10	20	20
14	EckKa	300	10	10	20	20
15	180Ka	400	10	10	20	20
16	GrundO	650	10	10	20	20
17	HF5	650	10	10	20	20
18	HF7	650	10	10	20	20
19	HF10	650	10	10	20	20
20	HF15	650	10	10	20	20
21	HFSK	600	10	10	20	20
22	SF7	650	10	10	20	20
23	SF10	650	10	10	20	20
24	SFSK	650	10	10	20	20
25	B7 - B8	600	10	10	20	20
26	HerdKe	600	10	10	20	20
27	KKE33	600	10	10	20	20
28	HKD2.2XL	650	10	10	20	20
29	HKD2.2XLSK	650	10	10	20	20

Item	Name	T1_Soll_K2 °C	dPplus%K2 %	dPminus% K2 %	dT plus K2 °C	dT minus K2 °C
30	KSO	550	10	10	20	20
31	WF 33	600	10	10	20	20
32	WF 50	650	10	10	20	20
33	Panorama	300	10	10	20	20
34	GOT / GOT+GOF flat	650	10	10	20	20
35	GOT / GOT +GOF corner	650	10	10	20	20
36	GOT / GOT +GOF Tunnel	650	10	10	20	20
37	WF 25	600	10	10	20	20
38	Architektur	400	10	10	20	20
39	KFR	650	10	10	20	20
40	HKD 7-12	600	10	10	20	20
41	DF 33	550	10	10	20	20
42	HKD3	550	10	10	20	20
43	Architektur Kessel (boiler)	500	10	10	20	20
44	Scandinavian	300	10	10	20	20

11 PRESET PARAMETER VALUES FOR STOVE TYPES WITH DAMPER FLAP (SOFTWARE > 321)

Item	Name	T1_Soll_K2 °C	dPplus%K2 %	dPminus% K2 %	dT plus K2 °C	dT minus K2 °C
1	HKD2	550	10	10	20	20
2	HKD4	650	10	10	20	20
3	HKD5	650	10	10	20	20
4	HKD6	600	10	10	20	20
5	B4	650	10	10	20	20
6	B5 - B6	600	10	10	20	20
7	HWM	650	10	10	20	20
8	HKD4SK	650	10	10	20	20
9	KamKe	450	10	10	20	20

Item	Name	T1_Soll_K2 °C	dPplus%K2 %	dPminus% K2 %	dT plus K2 °C	dT minus K2 °C
10	RF55	500	10	10	20	20
11	RF66	500	10	10	20	20
12	KOPA	450	10	10	20	20
13	STIL	400	10	10	20	20
14	EckKa	300	10	10	20	20
15	180Ka	400	10	10	20	20
16	GrundO	650	10	10	20	20
17	HF5	650	10	10	20	20
18	HF7	650	10	10	20	20
19	HF10	650	10	10	20	20
20	HF15	650	10	10	20	20
21	HFSK	600	10	10	20	20
22	SF7	650	10	10	20	20
23	SF10	650	10	10	20	20
24	SFSK	650	10	10	20	20
25	B7 - B8	600	10	10	20	20
26	HerdKe	600	10	10	20	20
27	KKE33	600	10	10	20	20
28	HKD2.2XL	650	10	10	20	20
29	HKD2.2XLSK	650	10	10	20	20
30	KSO	550	10	10	20	20
31	WF 33	600	10	10	20	20
32	WF 50	650	10	10	20	20
33	Panorama	300	10	10	20	20
34	GOT / GOT+GOF flat	650	10	10	20	20
35	GOT / GOT +GOF corner	650	10	10	20	20
36	GOT / GOT +GOF Tunnel	650	10	10	20	20
37	WF 25	600	10	10	20	20
38	Architektur	400	10	10	20	20
39	KFR	650	10	10	20	20
40	HKD 7-12	600	10	10	20	20

Item	Name	T1_Soll_K2 °C	dPplus%K2 %	dPminus% K2 %	dT plus K2 °C	dT minus K2 °C
41	DF 33	550	10	10	20	20
42	HKD3	550	10	10	20	20
43	Architektur Kessel (boiler)	500	10	10	20	20
44	Scandinavian	300	10	10	20	20
45	BKH	450	10	10	20	20

12 SWITCHING BEHAVIOUR OF RELAY A4 DEPENDING ON DIGITAL INPUTS DI 1 AND DI 2

P501	P502	P514	P515		DI 1	DI 2	Relay A4
4	0	0	0		0VDC	0VDC	open
4	0	0	0		12VDC	0VDC	open
4	0	0	0		0VDC	12VDC	open
4	0	0	0		12VDC	12VDC	open
4	0	1	0		0VDC	0VDC	closed
4	0	1	0		12VDC	0VDC	open
4	0	1	0		0VDC	12VDC	closed
4	0	1	0		12VDC	12VDC	open
4	0	0	1		0VDC	0VDC	closed
4	0	0	1		12VDC	0VDC	closed
4	0	0	1		0VDC	12VDC	open
4	0	0	1		12VDC	12VDC	open

P501	P502	P514	P515		DI 1	DI 2	Relais A4
4	0	1	1		0VDC	0VDC	closed
4	0	1	1		12VDC	0VDC	closed
4	0	1	1		0VDC	12VDC	closed
4	0	1	1		12VDC	12VDC	open

4	0	2	0		0VDC	0VDC	open
4	0	2	0		12VDC	0VDC	closed
4	0	2	0		0VDC	12VDC	open
4	0	2	0		12VDC	12VDC	closed

4	0	0	2		0VDC	0VDC	open
4	0	0	2		12VDC	0VDC	open
4	0	0	2		0VDC	12VDC	closed
4	0	0	2		12VDC	12VDC	closed

P501	P502	P514	P515		DI 1	DI 2	Relais A4
4	0	2	1		0VDC	0VDC	geschlossen
4	0	2	1		12VDC	0VDC	geschlossen
4	0	2	1		0VDC	12VDC	open
4	0	2	1		12VDC	12VDC	geschlossen

4	0	1	2		0VDC	0VDC	closed
4	0	1	2		12VDC	0VDC	open
4	0	1	2		0VDC	12VDC	closed
4	0	1	2		12VDC	12VDC	closed

4	0	2	2		0VDC	0VDC	open
4	0	2	2		12VDC	0VDC	closed
4	0	2	2		0VDC	12VDC	closed
4	0	2	2		12VDC	12VDC	closed

P501	P502	P514	P515		DI 1	DI 2	Relais A4
4	1	0	0		0VDC	0VDC	closed
4	1	0	0		12VDC	0VDC	closed
4	1	0	0		0VDC	12VDC	closed
4	1	0	0		12VDC	12VDC	closed

4	1	1	0		0VDC	0VDC	open

4	1	1	0		12VDC	0VDC	closed
4	1	1	0		0VDC	12VDC	open
4	1	1	0		12VDC	12VDC	closed

4	1	0	1		0VDC	0VDC	offen
4	1	0	1		12VDC	0VDC	offen
4	1	0	1		0VDC	12VDC	closed
4	1	0	1		12VDC	12VDC	closed

P501	P502	P514	P515		DI 1	DI 2	Relais A4
4	1	1	1		0VDC	0VDC	open
4	1	1	1		12VDC	0VDC	open
4	1	1	1		0VDC	12VDC	open
4	1	1	1		12VDC	12VDC	closed

4	1	2	0		0VDC	0VDC	closed
4	1	2	0		12VDC	0VDC	open
4	1	2	0		0VDC	12VDC	closed
4	1	2	0		12VDC	12VDC	open

4	1	0	2		0VDC	0VDC	closed
4	1	0	2		12VDC	0VDC	closed
4	1	0	2		0VDC	12VDC	open
4	1	0	2		12VDC	12VDC	open

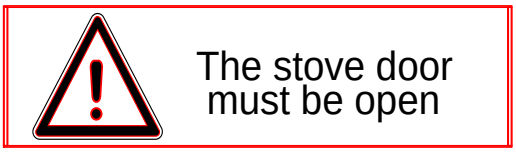
P501	P502	P514	P515		DI 1	DI 2	Relais A4
4	1	2	1		0VDC	0VDC	open
4	1	2	1		12VDC	0VDC	open
4	1	2	1		0VDC	12VDC	closed
4	1	2	1		12VDC	12VDC	open

4	1	1	2		0VDC	0VDC	offen
4	1	1	2		12VDC	0VDC	closed

4	1	1	2		0VDC	12VDC	open
4	1	1	2		12VDC	12VDC	open

4	1	2	2		0VDC	0VDC	closed
4	1	2	2		12VDC	0VDC	open
4	1	2	2		0VDC	12VDC	open
4	1	2	2		12VDC	12VDC	open

13 UPDATING VIA EAS3

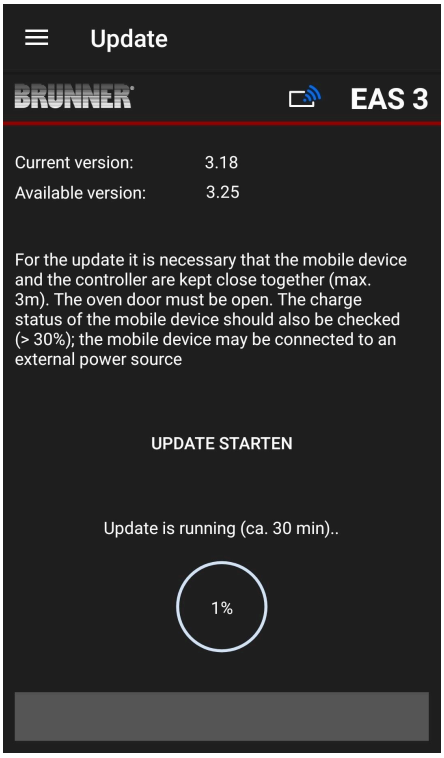


IMPORTANT: During the update, please ***REMEMBER*:**

1. The stove door must be open
2. Distance between mobile device and the EAS 3: max. 3m
3. Mobile device battery status at least 30%

The EAS3 controller software is integrated with the application and is updated together with the application software.

While starting the application, the current software version of the EAS3 control system is checked (refer to displayed version number). If the current version is not up-to-date and there is a new version available, the following update notification is automatically displayed:

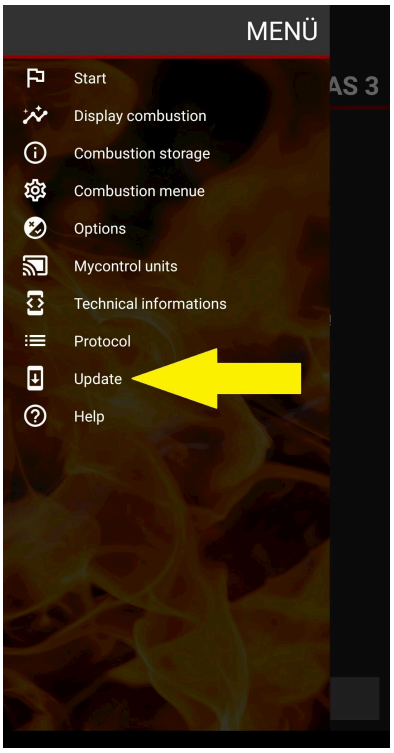


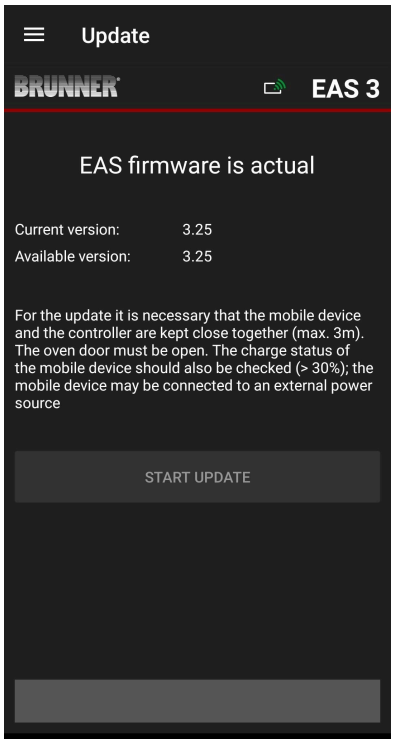
Update is necessary to ensure proper function of the application together with the
EAS3 control unit →
Click on **UPDATE STARTEN (=START UPDATE)**.

After a short break, a progress counter will be shown to indicate that the update process has started.

If you click on the menu **without** starting the update, ***it cannot be ensured that the application will function properly.***
When the update is completed successfully (= 100%), the application will be completely functional.

Information about the current version and available updates can be checked under **Menu** / **Update**:





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