

Manual

**PELLEMATIC®
PE(K) 10 – 32 B**

WITH HOPPER FOR HAND FILLING

ENGLISH





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Author

ÖkoFEN Forschungs- &
EntwicklungsgesmbH
A-4133 Niederkappel, Gewerbepark 1
Tel.: +43 (0) 72 86 / 74 50
Fax.: +43 (0) 72 86 / 74 50 - 10
E-Mail: oekofen@pelletsheizung.at
www.oekofen.com

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Subject to modifications

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1 Dear Customer

ÖkoFEN is Europe's leading specialist in pellet heating.

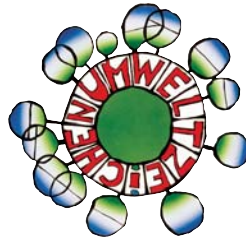
Proficiency, innovation and quality combined. This is the tradition on which ÖkoFEN shapes the future. We are very pleased that you too have decided to purchase a product from ÖkoFEN.

- This manual is intended to help you operate the product safely, properly and economically.
- Please read this manual right through and take note of the safety warnings.
- Keep all documentation supplied with this unit in a safe place for future reference.
Please pass on the documentation to the new user if you decide to part with the unit at a later date.
- Please contact your authorised dealer if you have any questions.



ÖkoFEN attaches great importance to the development of new products. Our R&D Department repeatedly challenges the effectiveness of tried-and-tested systems and works continuously on improvements. In this way, we secure our technological advantage. We have already received many national and international awards for our products.

All our products comply with European standards in respect of quality, efficiency and emissions.



2 Use only for the purpose intended

The pellet heating system is designed to heat water for central or other indirect heating systems and hot water supply for buildings. It is not permissible to use the pellet heating system for any other purpose. Reasonable foreseeable inadvertent uses for the heating system are not known.

EG – KONFORMITÄTSERKLÄRUNG

Im Sinne der EG-Maschinenrichtlinie 2006/42/EG, Anhang II A

Der Hersteller erklärt, dass die/der in dieser Dokumentation beschriebene neu Maschinenteil/ Maschinenkomponente aufgrund ihrer Konzipierung und Bauart, sowie in der von uns in Verkehr gebrachten Ausführung mit den Bestimmungen der Maschinen - Sicherheitsverordnung – MSV2010, BGBl. Nr.282/2008 und damit der durch sie umgesetzten EG-Maschinenrichtlinie 89/392/EWG, zuletzt geändert durch 2006/42/EG in der geltenden Verfassung übereinstimmt.

Hersteller / Firma

Ökofen Forschungs- und Entwicklungsgesellschaft. m.b.H.
Gewerbepark 1
A-4133 Niederkappel

Bezeichnung:

PELLEMATIC PE(S) 08, 10, 12, 15, 20, 25, 32, 36, 48 und 56 kW

PELLEMATIC PE(S)K 10, 12, 15, 20, 25 und 32 kW

Bei der Auslegung und dem Bau der Maschine wurden folgende Bestimmungen, Normen und Richtlinien berücksichtigt:

Einschlägige Bestimmungen:

2006/42EG	Maschinenrichtlinie in der geltenden Fassung
2006/95EG	Niederspannungsrichtlinie
2004/108/EG	EMV- Richtlinie elektromagnetische Verträglichkeit

Angewandte europäische/ nationale Normen und Richtlinien:

EN 292-1 und EN292-2	Sicherheit von Maschinen
EN 303-5	Heizkessel für feste Brennstoffe
EN 50081-1 und EN 50082-1	elektromagnetische Verträglichkeit
ISO 9001,	
ÖNORM M7550, B8130 und B8131	
sowie die technischen Richtlinien TRVB H 118 vorbeugender Brandschutz	

Niederkappel, am 12.09.2013



Ing. Herbert Ortner
Geschäftsführer

3 Types of safety warning sign

The warning signs use the following symbols and texts.

Types of safety warning sign

1. Risk of injury
2. Consequences of risk
3. Avoiding risk



1. Risk of injury:

Danger - indicates a situation that could lead to death or life-threatening injury.



Warning - indicates a situation that could lead life-threatening or serious injury.



Caution - indicates a situation that could lead to injury.



Note - indicates a situation that could lead to property damage.



2. Consequences of risk

Effects and consequences resulting from incorrect operation.

3. Avoiding risk

Observing safety instructions ensures that the heating system is operated safely

4 Prerequisites for installing a pellet boiler

You must fulfill the following conditions before operating a fully automatic pellet boiler.

4.1 Flue gas system

The flue gas system consists of a chimney and a flue gas tube. The flue gas tube connects the pellet heating system to the chimney. The chimney leads the flue gas from the pellet heating system out into the open.

Design of the chimney and flue gas temperature

for PE 10-32 B see Installation Manual PE 10-32, chapter 4.3

for PEK 10-32 B see Manual Pellematic Plus PE(S)K 10-32, chapter 5.1

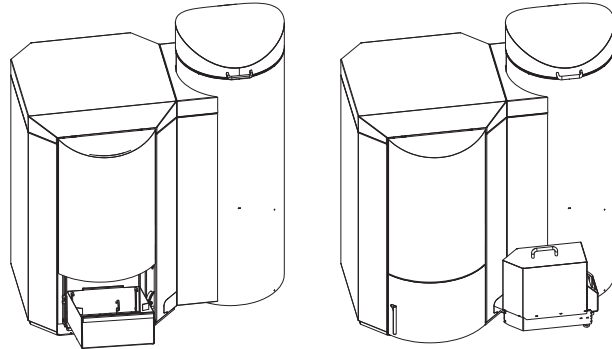
5 Pellematic Heating boiler with hopper for hand filling

The Pellematic is equipped with an automatic cleaning system, an ash box with ash compression system and an integrated return water temperature control. The installed programmable logic controller system enables fully automatic operation and highest efficiency. ÖkoFEN also offers an optional automatic de-ashing system for the highest level of cleanliness and comfort.

Pellematic types and power ratings

ÖkoFEN offers the Pellematic with the following power ratings: 10, 12, 15, 20, 25 and 32 kW;

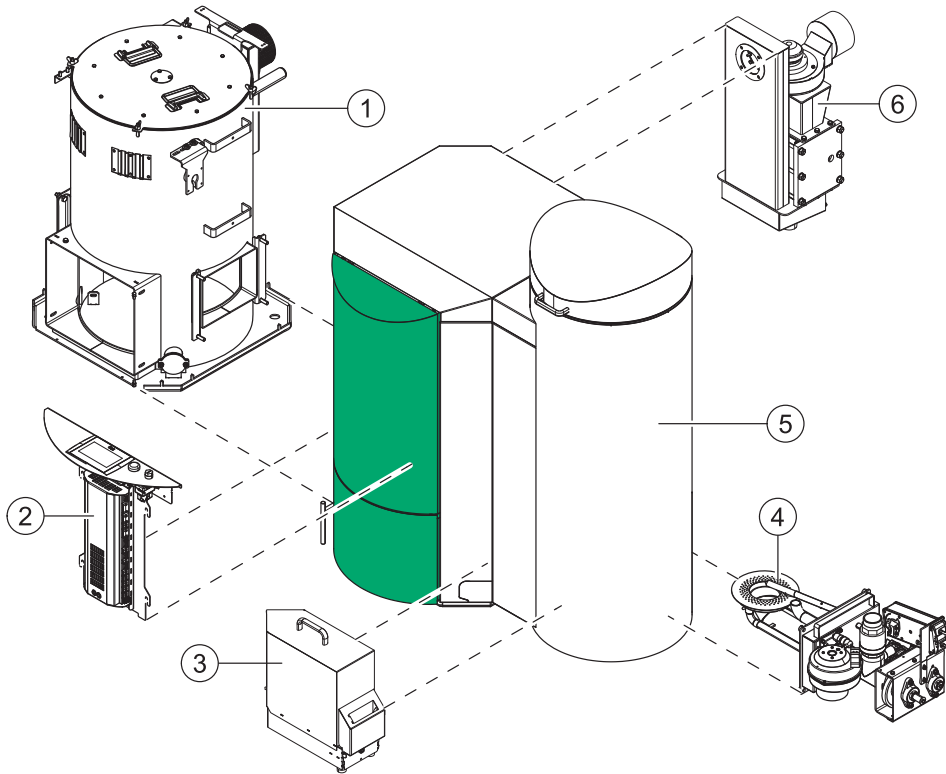
All power rating types are available with an integrated ash box or with an external ash box with automatic de-ashing system.



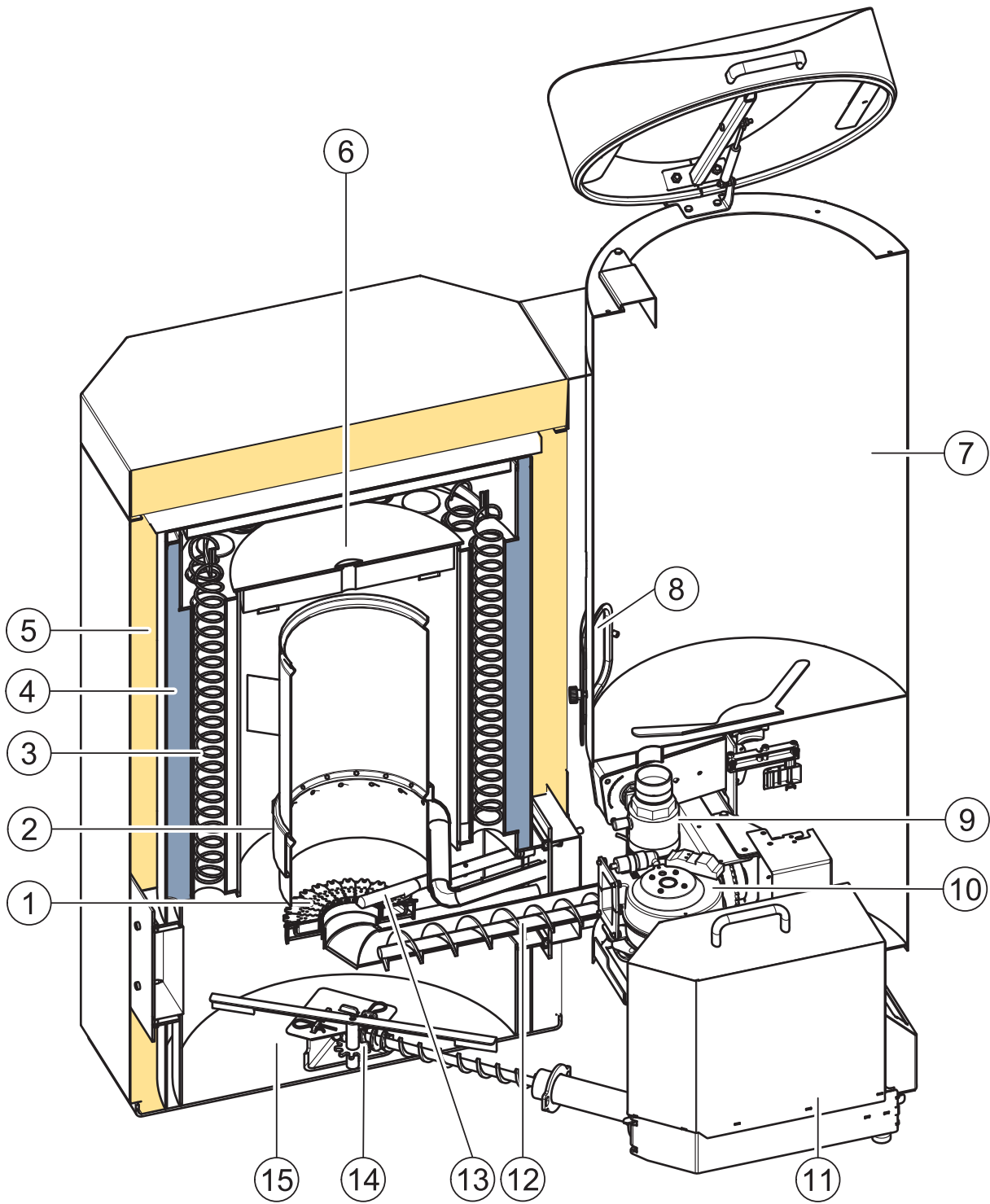
Note:

Refer to the data plate for the power rating of your Pellematic. The data plate is located on the rear side of the Pellematic. Here you will find the type designation, manufacturer's serial number and year of build.

Key components of the Pellematic with hopper for hand filling



1	Boiler	4	Burner
2	Boiler controller	5	Hopper
3	External ash box (optional)	6	Condensing boiler (only for PEK10-32 B)



1	Burner plate	9	Anti-blowback system
2	Flame tube	10	Burner fan
3	Heat exchanger	11	External ash box (optional)
4	Boiler water	12	Burner auger
5	Boiler insulation	13	Electronic ignition
6	Combustion chamber cover	14	De-ashing system (optional)
7	Hopper	15	Ash chamber
8	Revision lid		

6 Installation and connection of Pellematic with hopper for hand filling

The assembly and connection of the Pellematic boiler must be made by an authorised ÖkoFEN service technician.

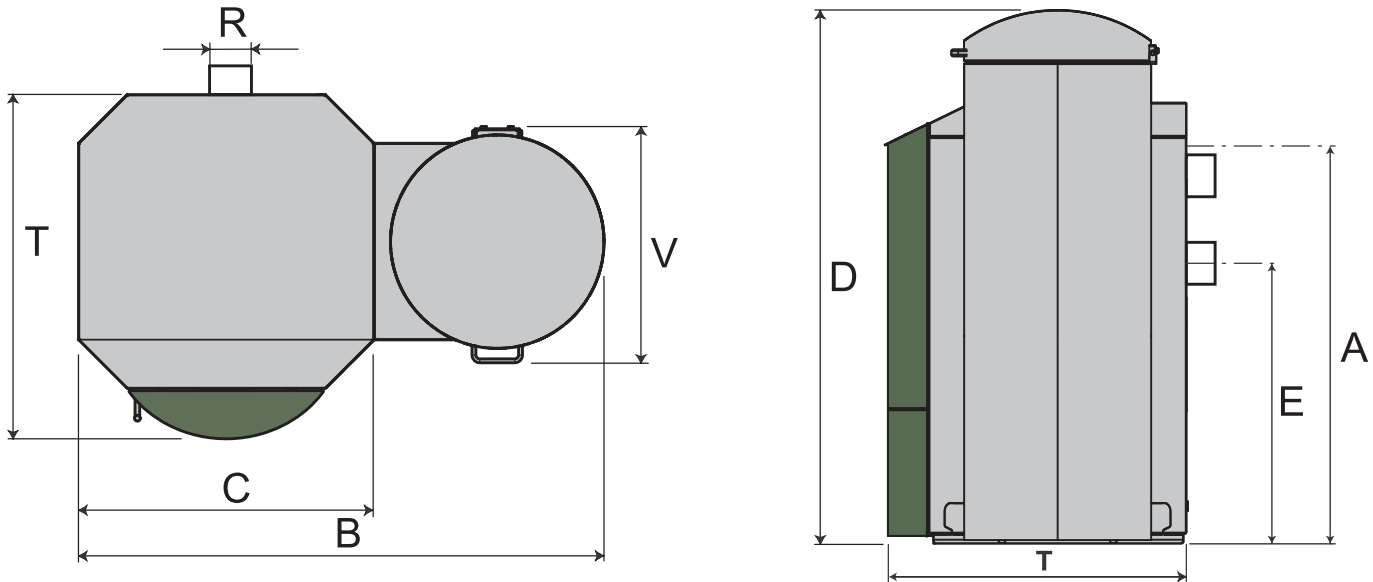
6.1 Notes on bringing the unit into the building

Before bringing the unit into the building, check the dimensions of all doors to ensure that the boiler has sufficient clearance and can be set up properly.

Minimum door width – max. unit dimension

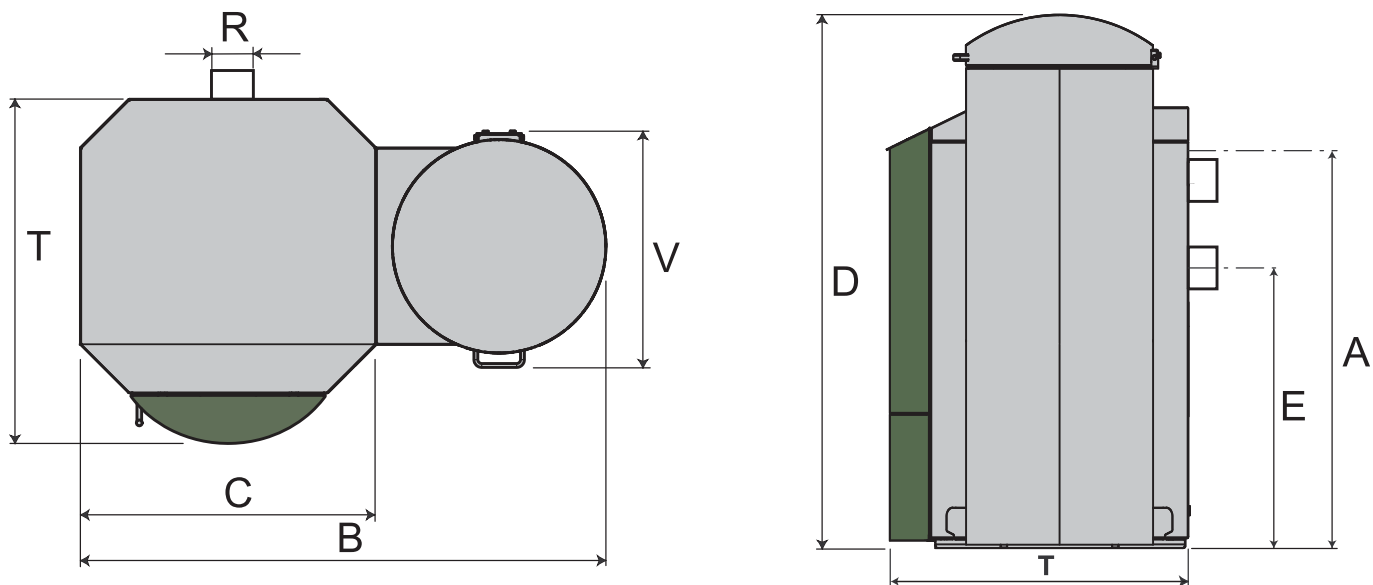
PE (K) 12-20 B	690 mm
PE (K) 25-32 B	750 mm

Boiler dimensions PE B



Boiler size		PE 10B	PE 12B	PE 15B	PE 20B	PE 25B	PE 32B
B - overall width of pellet boiler	mm	1297	1297	1297	1297	1354	1354
C - width of boiler casing	mm	700	700	700	700	756	756
D - height hopper	mm	1571	1571	1571	1571	1571	1571
T - depth of boiler casing	mm	814	814	814	814	870	870
V - width hopper	mm	640	640	640	640	640	640
E - flue gas tube connection height	mm	645	645	645	645	844	844
R - diameter of flue gas tube	mm	130	130	130	130	150	150
A - height of inlet/return	mm	905	905	905	905	1110	1110

Boiler dimensions PEK B



Boiler size		PEK 10B	PEK 12B	PEK 15B	PEK 20B	PEK 25B	PEK 32B
B - overall width of pellet boiler	mm	1297	1297	1297	1297	1354	1354
C - width of boiler casing	mm	700	700	700	700	756	756
D - height hopper	mm	1571	1571	1571	1571	1571	1571
T - depth of boiler casing	mm	1080	1080	1080	1080	1135	1135
V - width hopper	mm	640	640	640	640	640	640
E - flue gas tube connection height	mm	800	800	800	800	100-0	100-0
R - diameter of flue gas tube	mm	130	130	130	130	130	130
A - height of return	mm	468	468	468	468	668	668
A2 - height of feed pipe	mm	905	905	905	905	1100	1100

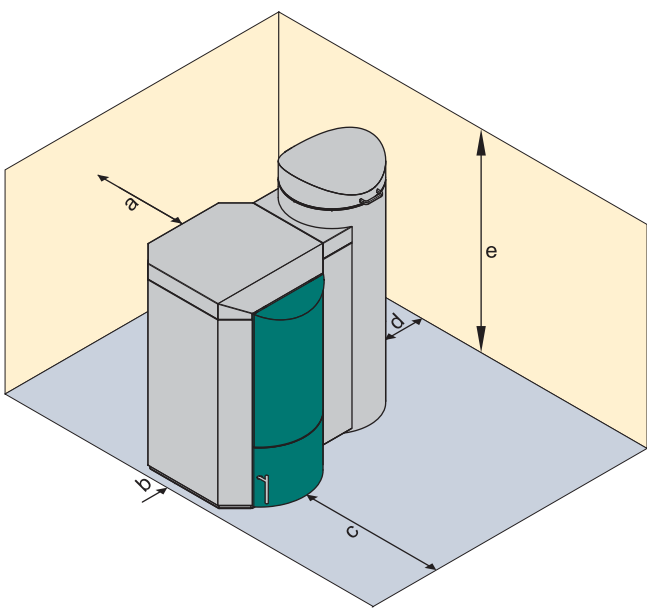
Boiler weight

Boiler size		PE 10B	PE 12B	PE 15B	PE 20B	PE 25B	PE 32B	PEK 10B	PEK 12B	PEK 15B	PEK 20B	PEK 25B	PEK 32B
Weight of boiler packaged on pallet with wooden frame	kg	405	405	405	405	490	490	455	455	455	455	540	540
Weight of boiler with casing, hopper, burner and condensing heat exchanger	kg	370	370	370	370	450	450	420	420	420	420	500	500
Weight of boiler without casing, hopper, burner and condensing heat exchanger	kg	230	230	230	230	300	300	230	230	230	230	300	300

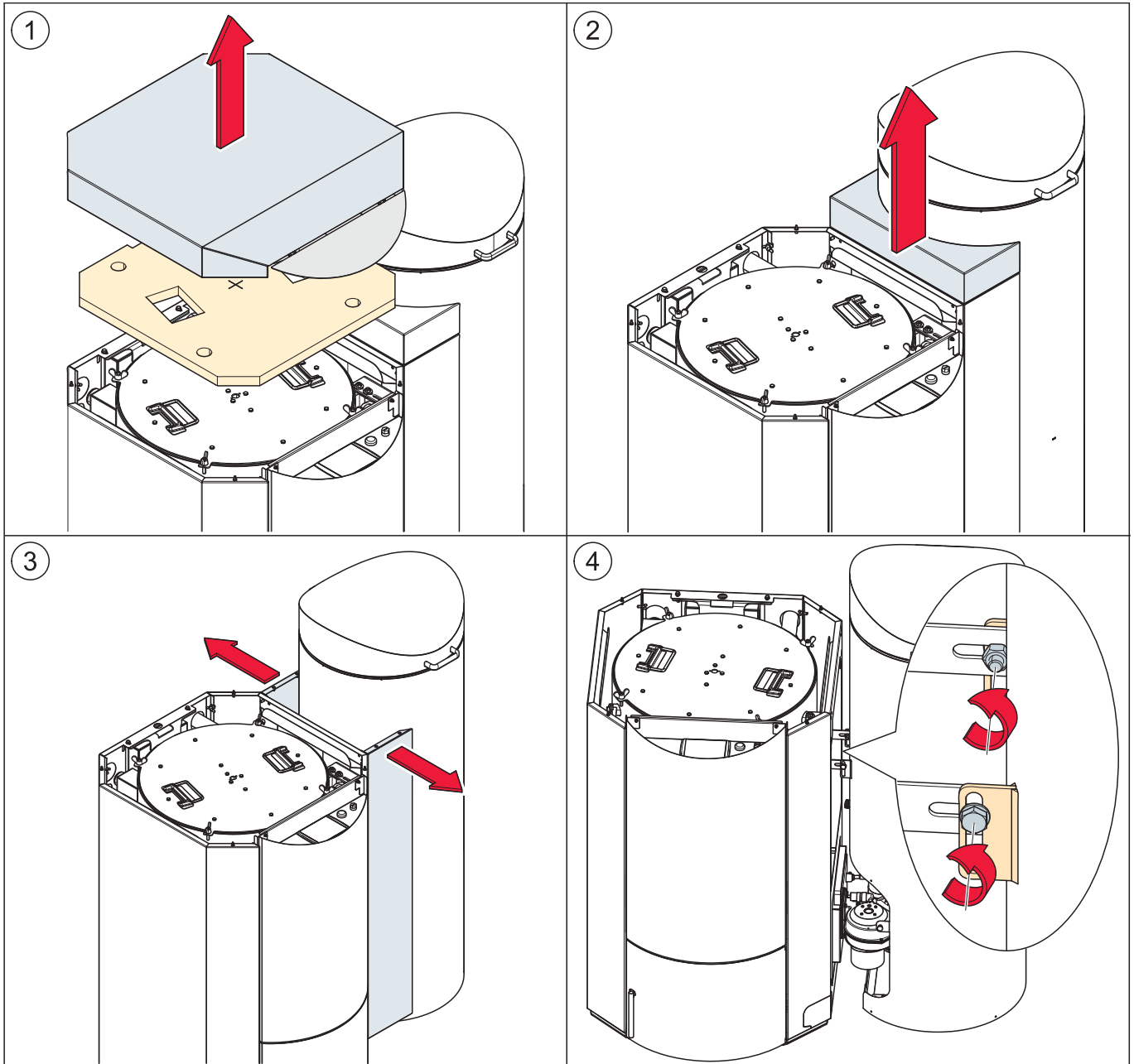
Minimum clearance dimensions required

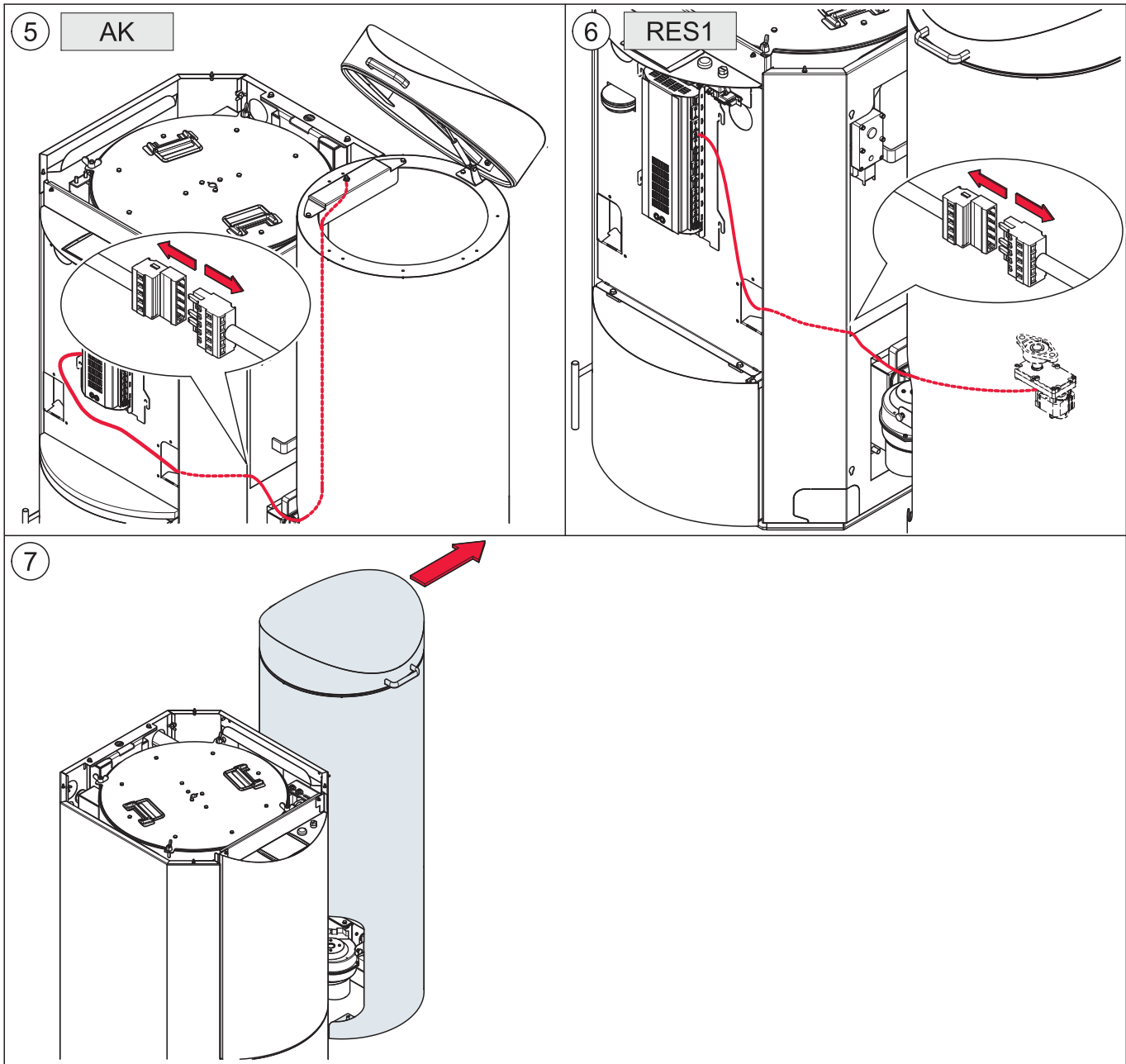
Note:

To install the heating system properly and ensure economical operation, you need to make sure that minimum clearance dimensions indicated below are observed when setting up the boiler. **In addition, make sure that legislation in your country is complied with relating to the minimum clearance of the flue gas tube.**

	a	Min. clearance of flue gas connection from wall or part of building	450 mm
	b	Min. clearance of side of boiler from wall or part of building	50 mm
	c	Min. clearance of front of boiler from wall or part of building	700 mm
	d	Min. clearance of side of burner from wall or part of building	300 mm
	d	Min. ceiling height	2 m
<p>Note: Legislation in your country must be observed!</p>			

6.1.1 Removing the casing





6.1.2 Connecting up the hydraulics

! **DANGER**

Risk of explosion
 You may connect up the pellet boiler only after an authorised plumber has installed the hydraulic system completely with all safety devices.

NOTICE

Water damage, damage to pellet boiler
 Only an authorised plumber may connect up hydraulics on the pellet boiler. Check the hydraulic system for leaks before starting up.

1. Return water temperature control

The return water temperature control is already integrated into the boiler. You do not need to make any adjustments to this.

2. Hydraulic schematics

Always refer to the ÖkoFEN hydraulic schematics when connecting up the pellet boiler. The ÖkoFEN hydraulic schematics are available from your ÖkoFEN sales partner or from the ÖkoFEN website.

3. Connections

The connections between the pellet boiler and the hydraulic system must be disconnectable.

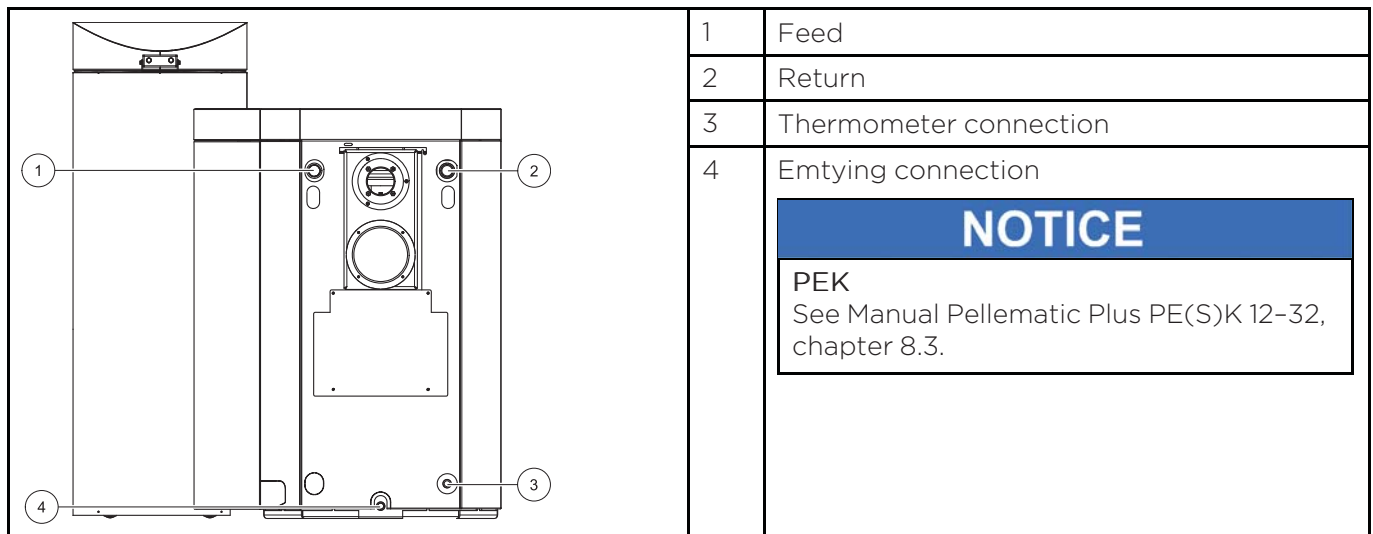
4. Drain connection

When you install the pellet boiler, remove the plug from the ENTLEERUNG connection and fit a 1/2" diameter shut-off valve.

5. Thermometer connection

Installing a thermometer (submersion sleeve 100mm long) enables you to measure the temperature of the return water after the return water temperature control.

Whether this is installed or not, after setting up the pellet boiler you need to remove the cap and fit a 1/2" diameter closure plug.



6.1.3 Cable routing

Reroute cables after dismantling the casing or other system components.

	DANGER
Electric shock Isolate the entire heating system from the power supply before starting work on the pellet boiler.	


Note the following points to ensure the cables are routed securely:

Cables must not be routed:

- over moving parts,
- over hot parts,
- or over sharp edges.

Cables must be:

- routed in the cable ducts provided and
- through cable leadthroughs,
- tied together,
- and secured with cable ties at the points provided.
- Power cables must be routed in the right-hand duct and sensor cables must be routed in the left-hand duct.

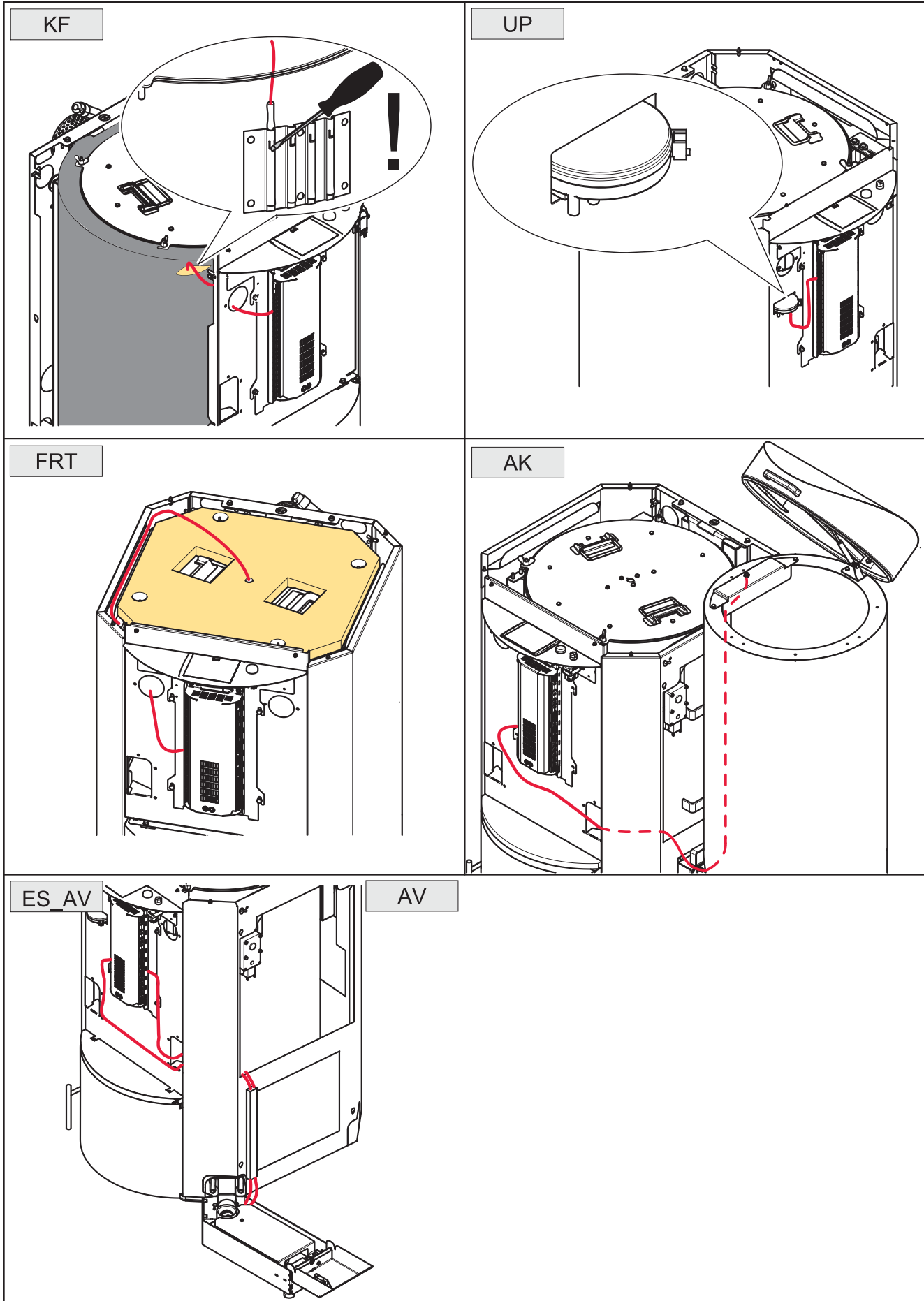
	DANGER
Electric shock Check cables for damage. Replace any cables that are damaged.	

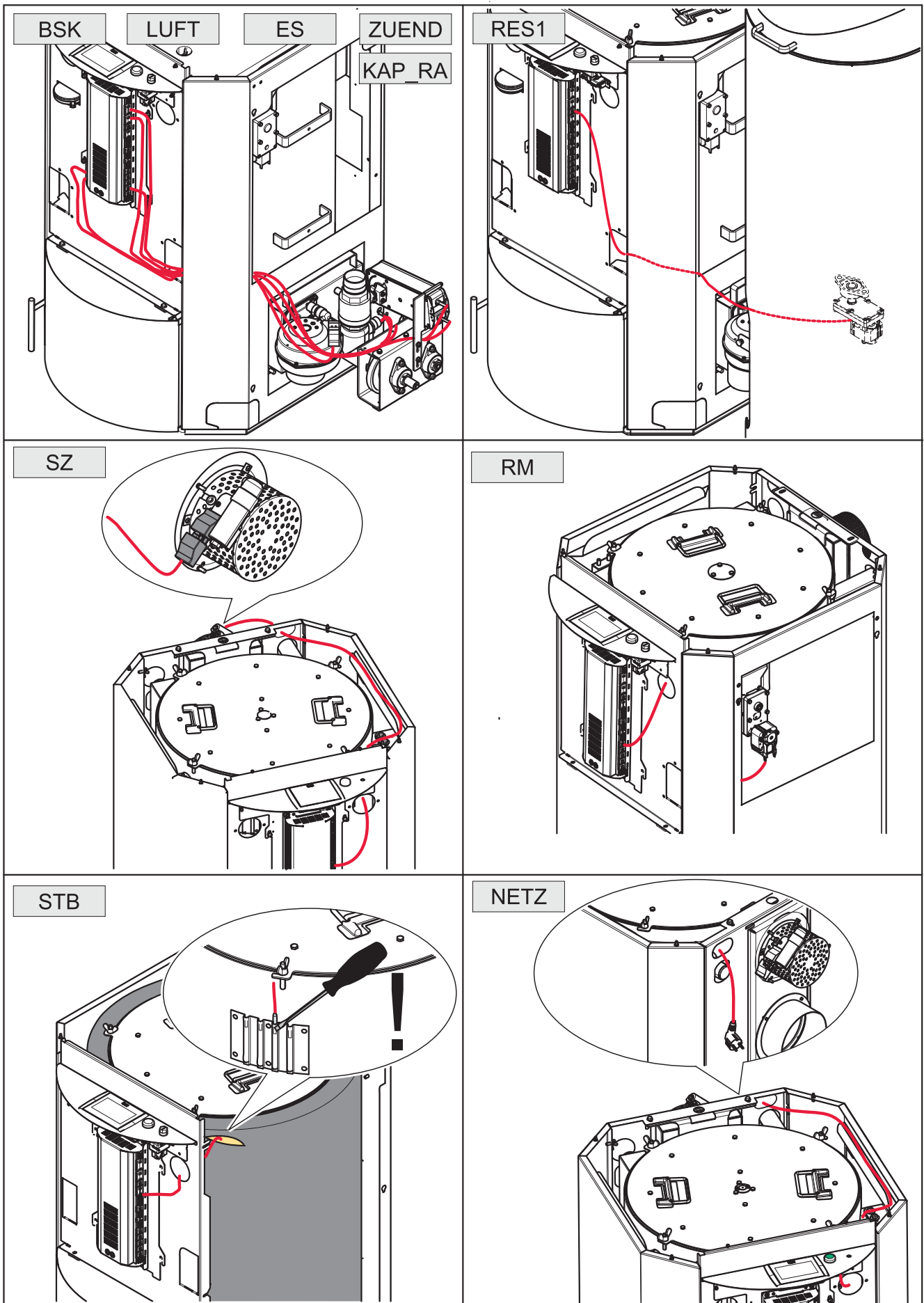
NOTICE	
Damage to the boiler controller Before fitting the casing components, make sure that the cable plug connector codes match the socket codes.	

6.1.3.1 FA

Designation of the plug-in position		Voltage	Name of sensors, motors and pumps
X1A	3 2 GND 1	24 Volt	Operating display
X1B	3 2 GND 1	24 Volt	Heating controller
X2	5 4	24 Volt	Power supply Display
R1	46 45	24 Volt	Not used
R2	44 43	24 Volt	Not used
AF	42 41	24 Volt	Not used
KF	8 9	24 Volt	Boiler sensor
UP	2 3 4	24 Volt	Negative draft measuring
AE2	5 6 7	24 Volt	Analog-input 2
AE1	10 9 8	24 Volt	Analog-input 1
FRT	12 13	24 Volt	Combustion chamber sensor
RGF	14 15	24 Volt	Flue gas sensor
LAM	19 18 17 16	24 Volt	Not used
BR1	7 8	24 Volt	Burner contact
AK	11 12	24 Volt	Micro switch hopper (cover)
ESAV	32 33 34	24 Volt	End switch ash box
DE 1	37 36 35	24 Volt	Not used
DE 2	40 39 38	24 Volt	Not used
KAPZW	26 25 24	24 Volt	Capacitive sensor - hopper
KAPRA	5 4 3	24 Volt	Capacitive sensor - burner
BSK	6 5 4 3 2 1	24 Volt	Flame return gate
X21	PE L N	230 Volt	Power supply
VAK	56 PE 55	230 Volt	Vacuum turbine
ZUEND	N PE 22	230 Volt	Ignition
AV	52 PE 51	230 Volt	Motor ashbox
RES 2	54 PE 53	230 Volt	Not used
MA	48 PE 47	230 Volt	Magnetic valve
RM	15 PE N	230 Volt	Motor boiler cleaning device
SM	19 20	230 Volt	Relay fault signal
SZ	17 PE N	230 Volt	Flue gas fan
UW	13 PE N	230 Volt	Boiler controlled pump
STB	17 PE 19	230 Volt	Safety temperature sensor
NOT	41 43	230 Volt	Emergency stop heating
RA1	N PE 14 15 16	230 Volt	Fuel transport system
RES1	50 PE 49	230 Volt	Stirring motor
ZW	N PE 26 25 24	230 Volt	Vibration motor
ES	1 2 3 N PE 6	230 Volt	Burner motor
LUFT	N PE 11	230 Volt	Burner fan

Cable Routing – FA





6.1.4 Malfunctions

Table 6.1 Stirring motor RES1

Display:	Motorsteuerung RES1		
	C 26.12.11 10:35		
Description:	fault on stirring motor		
Cause and Remedy:	motor unplugged	▶	plug in motor, check cable connections
	motor defect	▶	replace motor
	motor is jammed	▶	check stirrer (revision lid)
	no pellets	▶	check filling level
	fuse defective	▶	replace fuse

6.1.5 Technical data Pellematic with hopper for hand filling

Boiler - Type		PE B 10	PE B 12	PE B 15	PE B 20	PE B 25	PE B 32
Boiler-rated power	kW	10	12	15	20	25	32
Boiler-partial load	kW	3,0	3,4	5	6	8	10
Boiler efficiency rated power	%	92 - 93					
Boiler efficiency partial power	%	91- 93					
Water area							
Water capacity	l	64	64	64	64	104	104
Water supply/return - dimensions	inch	1	1	1	1	5/4	5/4
Water supply/return - dimensions	DN	25	25	25	25	32	32
Water resistance at 10K	mBar	54,7	95,2	150	220	284	376
Water resistance at 20K	mBar	14,0	24,2	38	55	72	95
Boiler temperature	°C	65-90					
Boiler input temperature minimum	°C	55					
Operating pressure maximum	Bar	3,5					
Test pressure	Bar	4,6					
Flue gas area (Flue gas = F.g.)							
Fire vault temperature	°C	800-1100					
Need of draught rated power	mBar	0,08					
Need of draught partial load	mBar	0,03					
Flue gas temperature rated power	°C	160					
Flue gas temperature partial load	°C	100					
F.g. volume rated power at f.g.tem.	kg/h	18,9	24,2	30,4	40,6	51,1	65,8
F.g. volume partial load at f.g. tem.	kg/h	5,5	7,4	10,3	12,2	16,4	20,4
F.g. volume rated power at AGT	m ³ /h	21,9	28,6	37,6	50,2	63,2	81,4
F.g. volume partial load at AGT	m ³ /h	5,8	6,9	10,9	13	17,4	21,8
Flue gas tube diameter	mm	130	130	130	130	150	150
Chimney diameter	as per chimney calculation						

Boiler - Type		PE B 10	PE B 12	PE B 15	PE B 20	PE B 25	PE B 32
Chimney construction	Steel or ceramic lined, damp resistant						
Fuel	Pellets made of 100% natural wood according to EN 14961-2, class A1						
Colorific value		4,6 – 5,3 kWh/kg or 16,5 –19 MJ/kg					
Bulk density	kg/m³	min. 600					
Water content	%	max. 10					
Ash parts	%	max. 0,7					
Length	mm	max. 40					
Diameter	mm	6					
Weight							
Overall Weight packing included	kg	405				490	
Overall Weight	kg	370				450	
Boiler Body Weight	kg	230				300	
Internal ash pan volume	l	25				30	
External ash box volume	kg	25					
Electrical Components							
Connection value	230 VAC, 50Hz, 16A						
Main Drive	W	40					
Drive Motor	W	250/370					
Suction Turbine	W	1400					
Combustion Air Blower	W	62					
Flue gas fan	W	25					
Electrical Ignition	W	250					
Cleaning Motor	W	40					
Motor External Ash Box	W	40					
Motor burner plate cleaning system	W	–	–	–	–	–	–
Flame Return Gate	W	5					
Emissions acc. to test reports							
O2-contents rated power	Vol.%	8,1	8	7,8	7,6	7,5	7,3
O2-contents partial load	Vol.%	10,9	11,4	12,4	12,2	11,5	10,5
Reference 10% O2 dry (EN303-5)							
CO rated power	mg/m³	80	95	118	104	76	37
CO partial load	mg/m³	196	170	132	125	134	146
OGC rated power	mg/m³	2	2,5	3	3	2	<1
OGC partial load	mg/m³	7	5	3	2	2	2
Dust rated power	mg/m³	16	16	17	17	17	17
Reference 13% O2 dry							
CO rated power	mg/m³	48	69	86	76	56	27

Boiler - Type		PE B 10	PE B 12	PE B 15	PE B 20	PE B 25	PE B 32
CO partial load	mg/m³	142	123,5	95	91	97	106
OGC rated power	mg/m³	2	2	3	2	2	<1
OGC partial load	mg/m³	5	4	2	2	1	1
Dust rated power	mg/m³	11	11,5	12	12	12	12
Accord. to § 15a BVG Austria							
CO rated power	mg/MJ	37	45,5	59	49	36	17
CO partial load	mg/MJ	94	81	62	59	63	69
NOX rated power	mg/MJ	72	71,5	69	71	73	77
NOX partial load	mg/MJ	61	65,5	70	69	66	62
HC rated power	mg/MJ	1,2	1,5	2	2	1	<1
HC partial load	mg/MJ	2,8	2,5	1	1	1	<1
Dust rated power	mg/MJ	7	7,5	8	8	8	8

The data are values of the test measurement and can vary from locally measured values

WB Federal Institute of Agricultural Engineering Wieselburg

Adress: A-3250 Wieselburg, Rottenhauserstraße 1; Tel.: +43-7416-52175-0

Note:

Test reports are available at ÖkoFEN

6.1.6 Technical data Pellematic Plus

Designation		PEK B 12	PEK B 15	PEK B 20	PEK B 25	PEK B 32
Boiler-rated power	kW	12	15	20	25	32
Boiler-partial load	kW	3,4	5	6	8	10
Boiler efficiency rated power	%	100	100,2	101,3	102	102,8
Boiler efficiency partial power	%	98	98,2	99,3	100,5	102,3
Water area						
Water capacity	l	66	66	66	104	104
Water supply/return - dimensions	inch	1	1	1	5/4	5/4
Water supply/return - dimensions	DN	25	25	25	32	32
Water resistance at 10K	mBar	98	156	224	287	376,4
Water resistance at 20K	mBar	25	40	57	72	95
Boiler temperature	°C	65-90				
Boiler input temperature minimum	°C	55				
Operating pressure maximum	Bar	3,5				
Test pressure	Bar	4,6				
Flue gas area (=F.g.)						
Fire vault temperature	°C	900 - 1100				
Need of draught ra pow/pa load	mBar	0,0				
Flue gas temp ra pow/pa load	°C	30 - 40				
F.g. volume rated power at f.g.tem.	kg/h	22,5	28	37	46,1	58,4
F.g. volume partial load at f.g. tem.	kg/h	6,5	9,6	11,1	15	18,4
F.g. volume rated power at AGT	m³/h	19,8	24,7	32,6	40,5	51,5
F.g. volume partial load at AGT	m³/h	5,7	8,4	9,8	13,2	16,2
Flue gas tube diameter	mm	130	130	130	130	130
Chimney diameter	as per chimney calculation, EN 13384-1					
Chimney construction	qualified for condensing - solid fuel - damp resistant-qualified for negative draft (N1), pressure tight up to 0,2mbar					
Fuel	Pellets made of 100% natural wood as per EN 14961-2, class A1					
Colorific value		16,5 – 19 MJ/kg or 4,6 – 5,3 kWh/kg				
Bulk density	kg/m³	min. 600				
Water content	Wei.%	max. 10				
Ash parts	Wei.%	max. 0,7				
Length	mm	max. 40				
Diameter	mm	6				
Weight						
Overall Weight packing included	kg	455			540	
Overall Weight	kg	420			500	

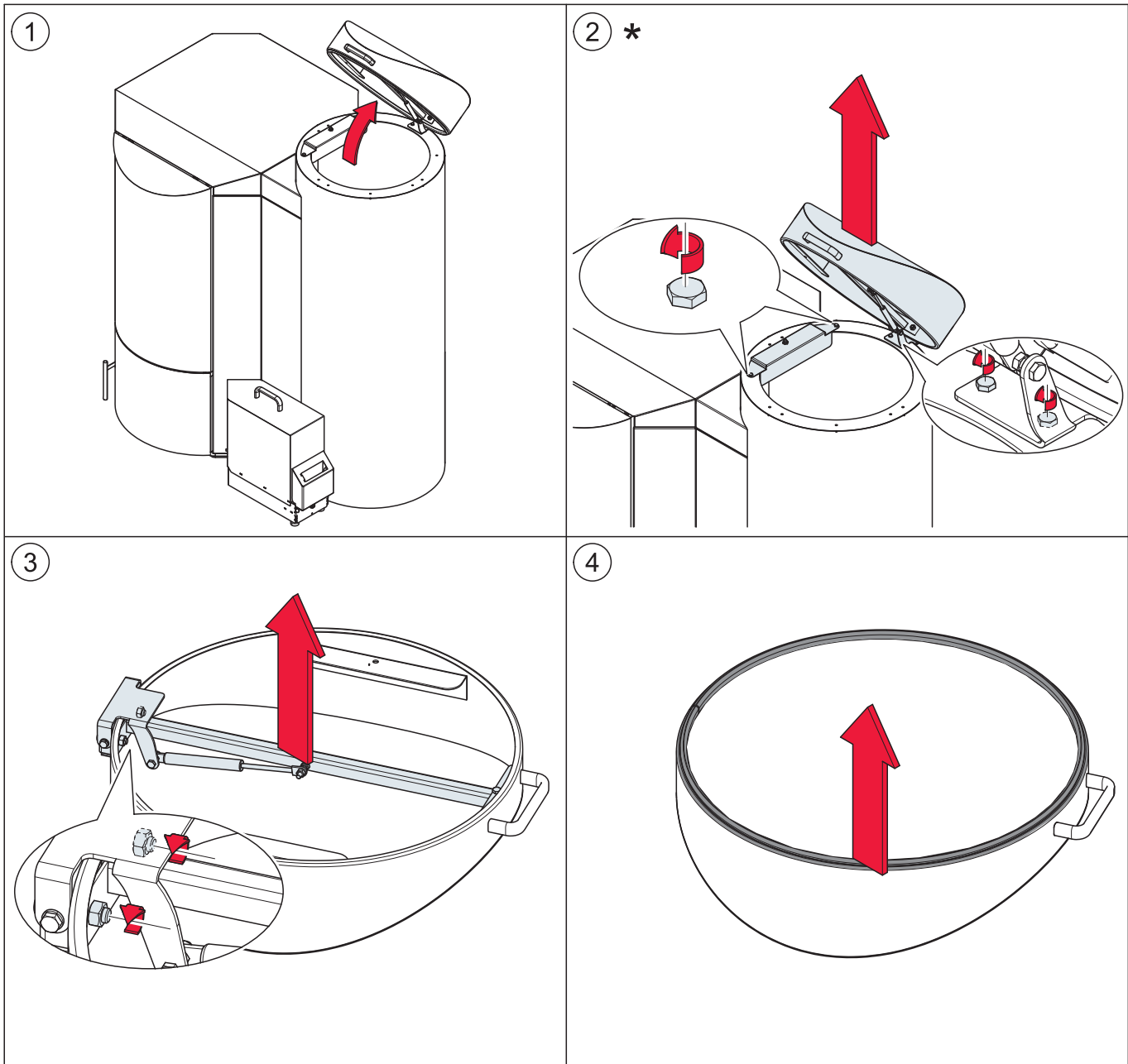
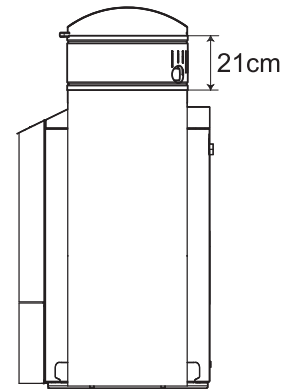
Designation		PEK B 12	PEK B 15	PEK B 20	PEK B 25	PEK B 32
Boiler Body Weight	kg	230			300	
Internal ash pan volume	l	25	25	25	30	30
External ash box volume	kg	25				
Electrical Components						
Connection value	230 VAC, 50Hz, 16A					
Main Drive	W	40				
Drive Motor	W	250 / 370				
Suction Turbine	W	1400				
Combustion Air Blower	W	62				
Flue gas fan	W	25				
Electrical Ignition	W	250				
Cleaning Motor	W	40				
Motor External Ash Box	W	40				
Motor Burner plate cleaning system	W	40				
Flame Return Gate	W	5				
Emissions acc. to test reports		*)	WB 2)	*)	*)	WB 3)
O2-contents rated power	Vol.%	9,7	9,2	8,3	7,3	5,9
O2-contents partial load	Vol.%	11,7	11,5	11,8	12,2	12,7
Reference 10% O2 dry (EN303-5)						
CO rated power	mg/m ³	37	45	53	60	70
CO partial load	mg/m ³	196	147	152	172	202
OGC rated power	mg/m ³	2,5	3	3	2	2
OGC partial load	mg/m ³	2,5	2	2	2	2
Dust rated power	mg/m ³	10	13	13	12	11
Reference 13% O2 dry						
CO rated power	mg/m ³	27	33	38	44	51
CO partial load	mg/m ³	143	107	110	125	147
OGC rated power	mg/m ³	2	2,8	2	1	1
OGC partial load	mg/m ³	1	1	1	1	1
Dust rated power	mg/m ³	8	9	9	9	8
Accord. to § 15a BVG Austria						
CO rated power	mg/MJ	18	21	25	28	33
CO partial load	mg/MJ	93	70	72	82	96
NOX rated power	mg/MJ	72	71	69	68	65
NOX partial load	mg/MJ	62	64	62	59	55
HC rated power	mg/MJ	1	2	2	1	<1

Designation		PEK B 12	PEK B 15	PEK B 20	PEK B 25	PEK B 32
HC partial load	mg/MJ	1,5	1	1	1	<1
Dust rated power	mg/MJ	5	6	6	6	5

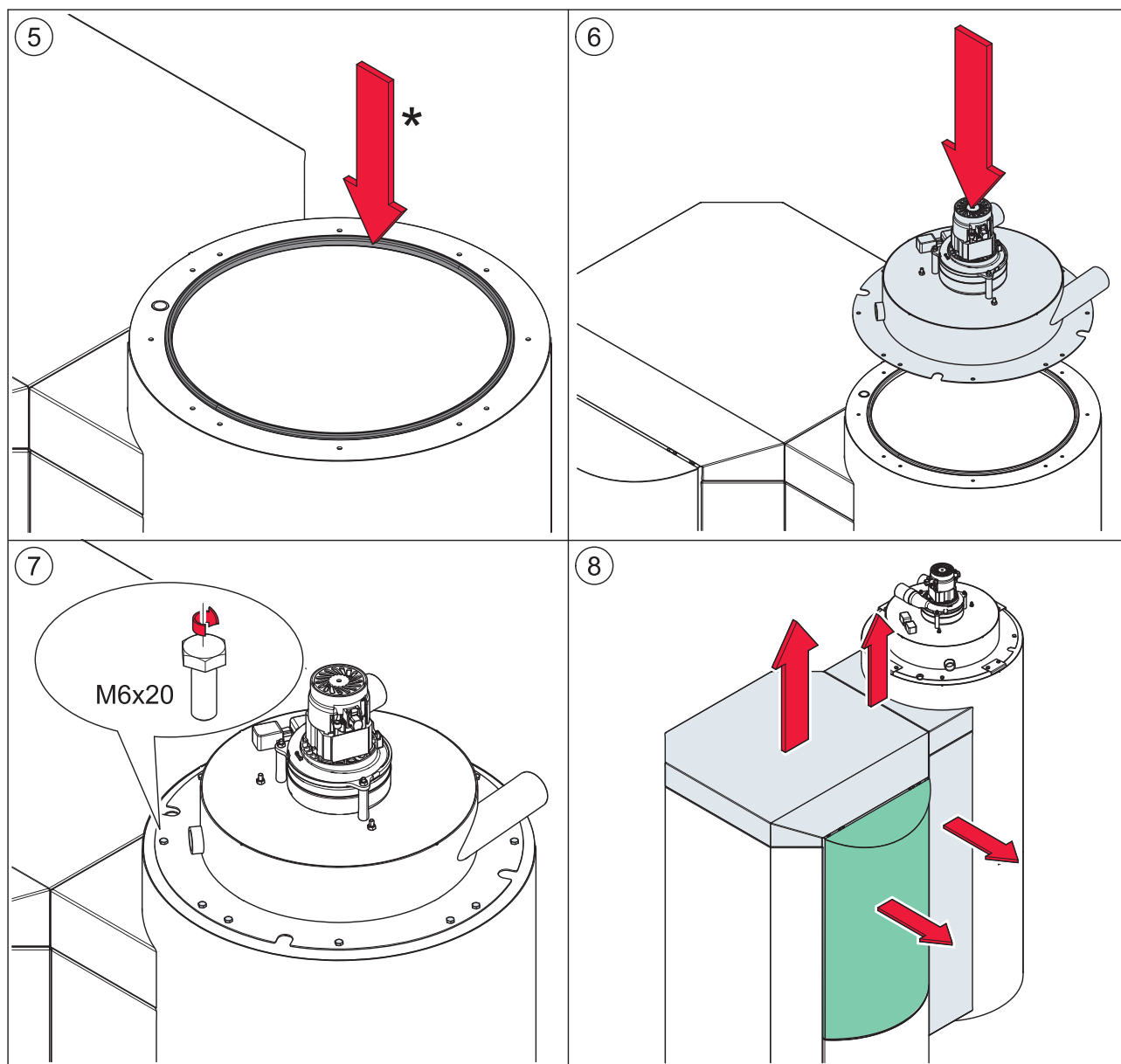
The data are values of the test measurement and can vary from locally measured values.
WB Federal Institute of Agricultural Engineering Wieselburg, A-3250 Wieselburg, Rottenhauserstraße 1;
Test reports are available at ÖkoFEN

7 Conversion to Pellets Suction System

The Pellematic with hopper for hand filling can be converted into a Pellematic with suction system. For this you need the conversion kit with the item number PE510.



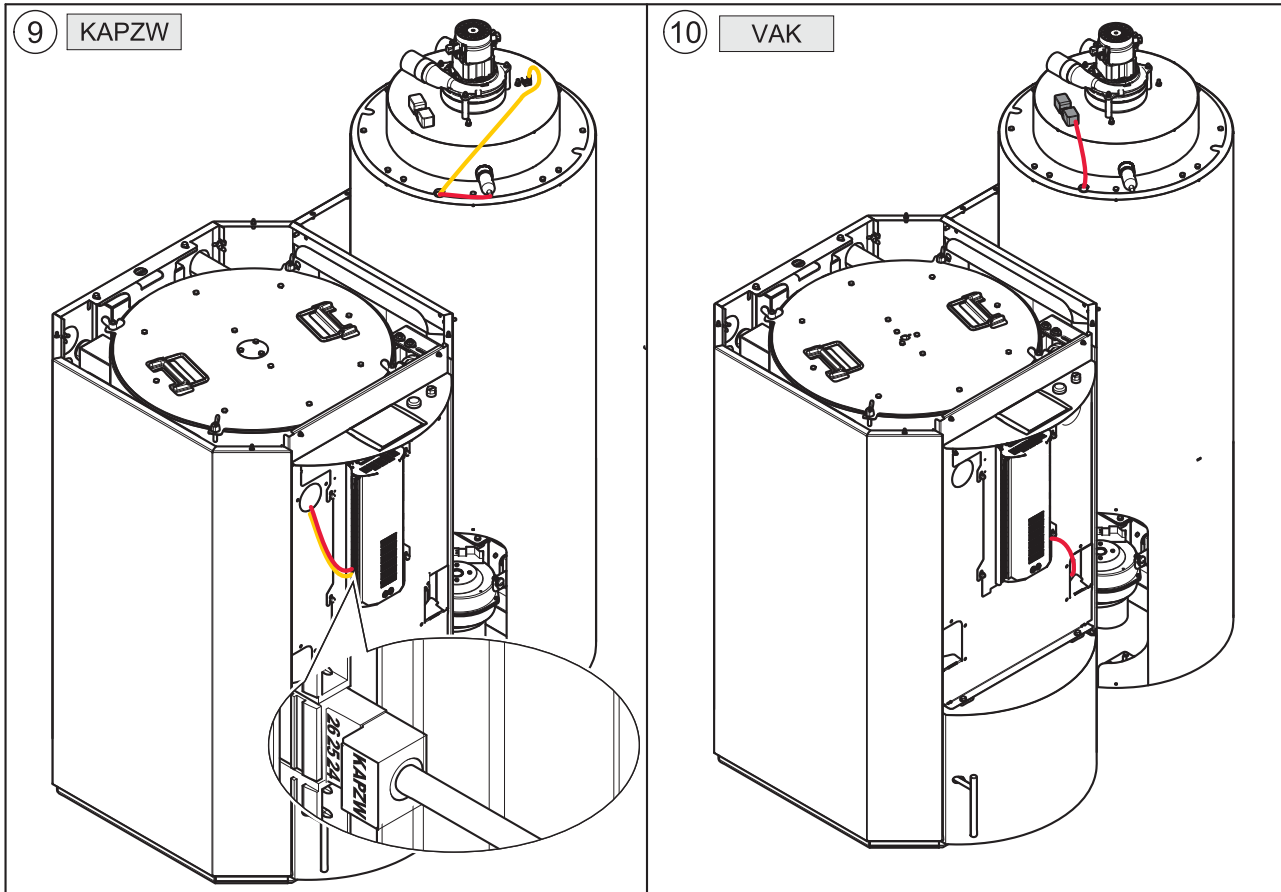
* Remove cable AK and RES1



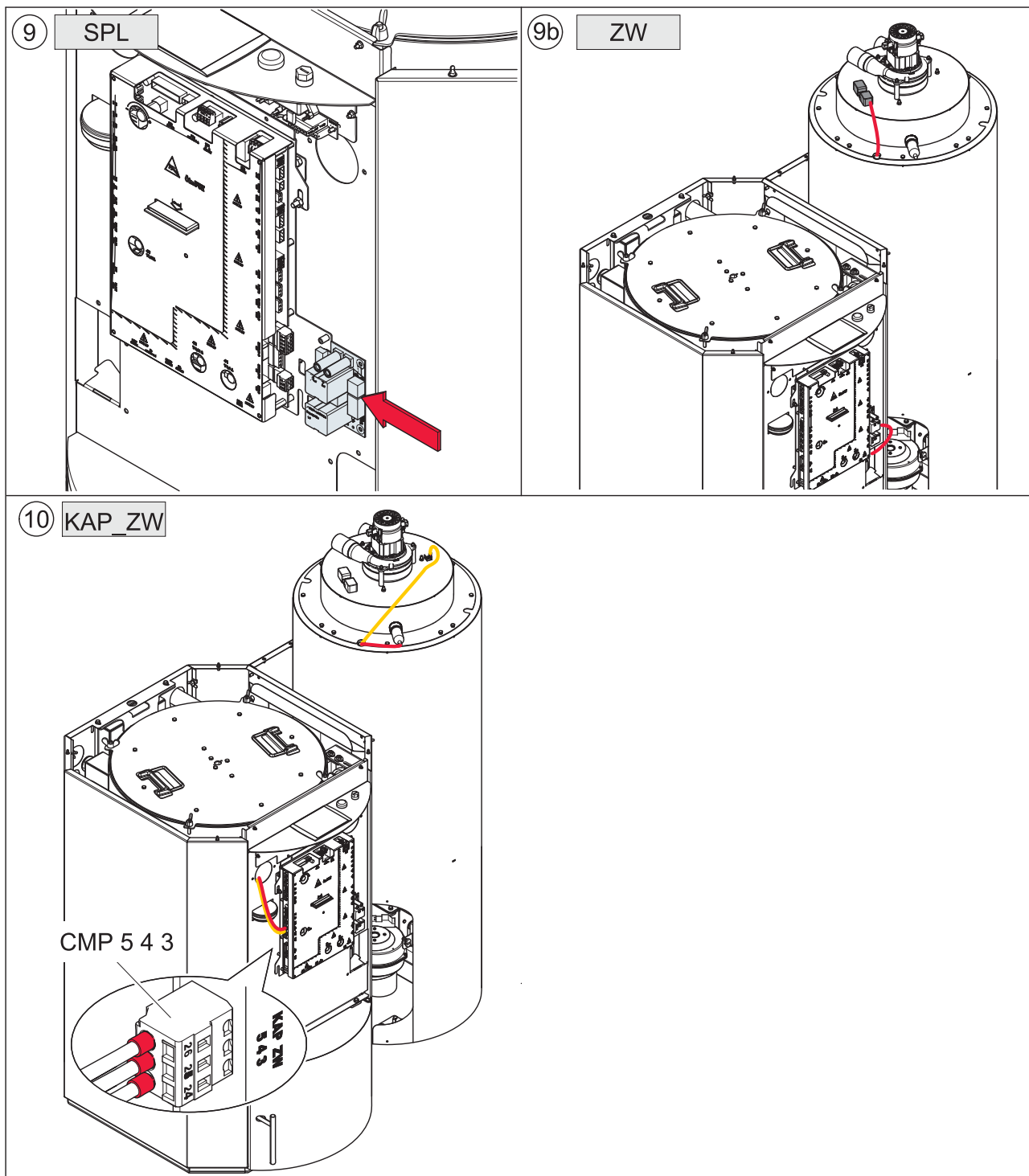
* Cut gasket to required length!

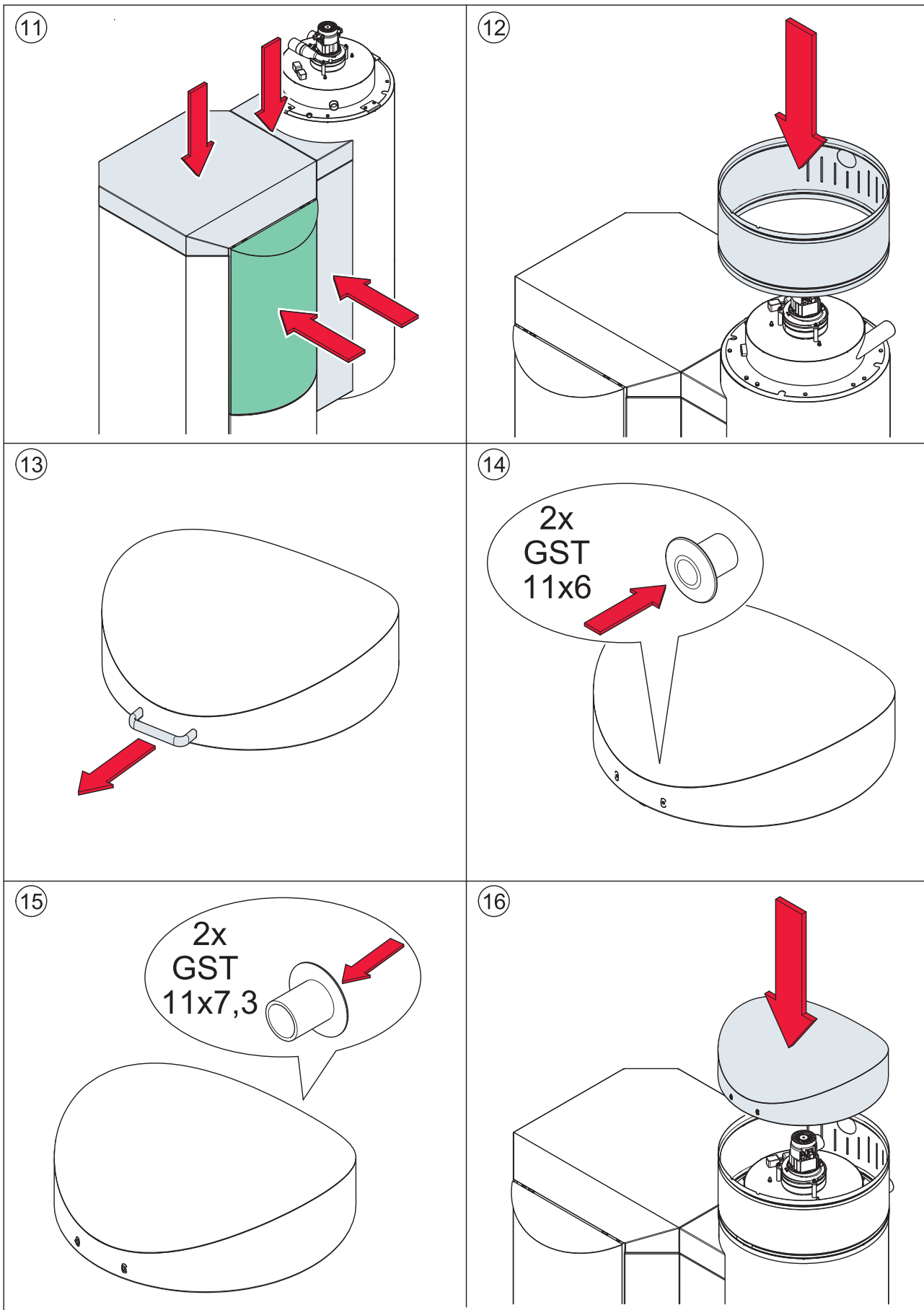
8) For removing the casing see chapter [6.1.1 Removing the casing, page 13](#)

Wiring FA



Wiring CMP



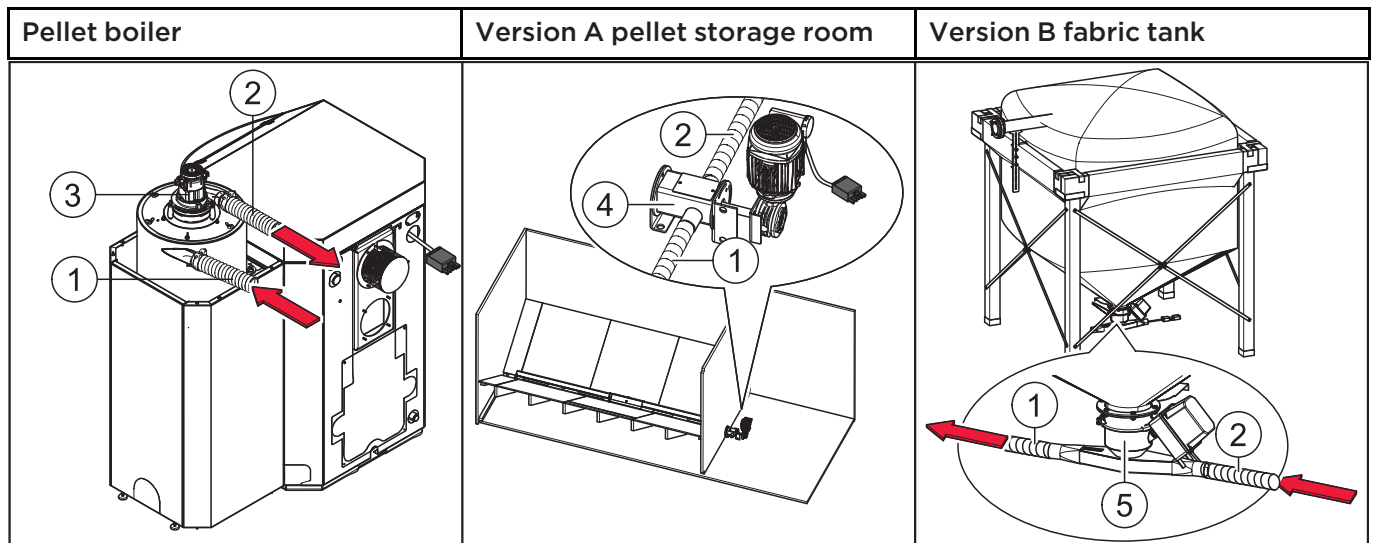


7.1 Pellet suction system

The pellet suction system consists of the pellet line, air line and a suction fan. The suction fan in the hopper conveys pellets in the pellet line from the storage room or fabric tank to the hopper.

Key components of pellet suction system

1	Pellet line	Line from the storage room auger or fabric tank to the hopper.
2	Air line	Line from the suction fan to the storage room auger or fabric tank.
3	Suction fan	Located above the hopper behind the Pellet boiler burner housing.
4	T-piece	Located at front end of the storage room auger, outside the storage room.
5	Suction flap	Located underneath the fabric tank.



7.1.1 Assembly of the vacuum system

The pellet and air hose are flexible spiral hoses made out of plastic. A copper braid avoids the static loading of the spiral hose.

To avoid damage to the spiral hose, you must observe the following assembly guidelines:

Bending radius	The hose should be led as briefly as possible and with as few curves as possible. Bending radius may never be smaller than 30cm .
Upward gradients	Max difference in height = 6m Note: A difference in height of up to 3m can be overcome at one time. Larger differences in height must be interrupted with a minimum 1m long crossbar.
Impact protection	The spiral hose can be mounted up to 4 meters exactly straight. Small bends particularly in front of curves reduces the abrasion of the spiral hose.
Installation in the soil and openings	When laying directly in the ground and through openings the spiral tube must be conducted in a drain pipe with at least 100mm diameter. This pipe must be sealed and may not make any larger arch than 15°.
Tightness	In order to keep problem-free a sucking of the pellets, an absolute tightness in the system must be respected. All connection points must be provided with a hose clip.
Potential-equalization	The hoses are provided with a copper braid, which keeps the hose antistatic. In order to ensure the function of the anti-statics, those copper braids must be attached at each end to the grounding connection.
Fire protection	At each wall break-through must be installed a fire protection seal in the pellet- and the air hose.

Crossing

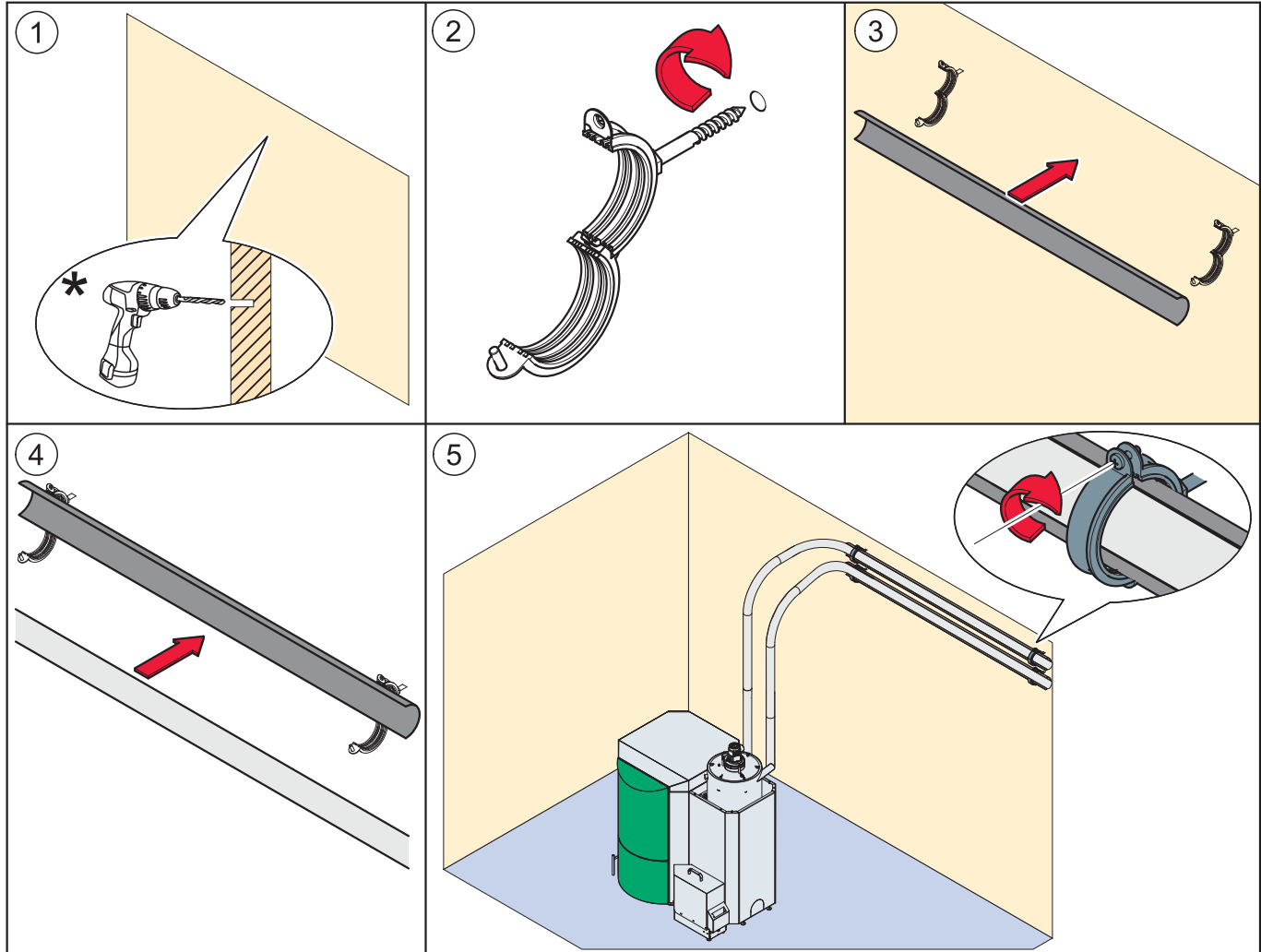
Please make sure that you cross the hoses as few as possible.

Length of the spiral hose

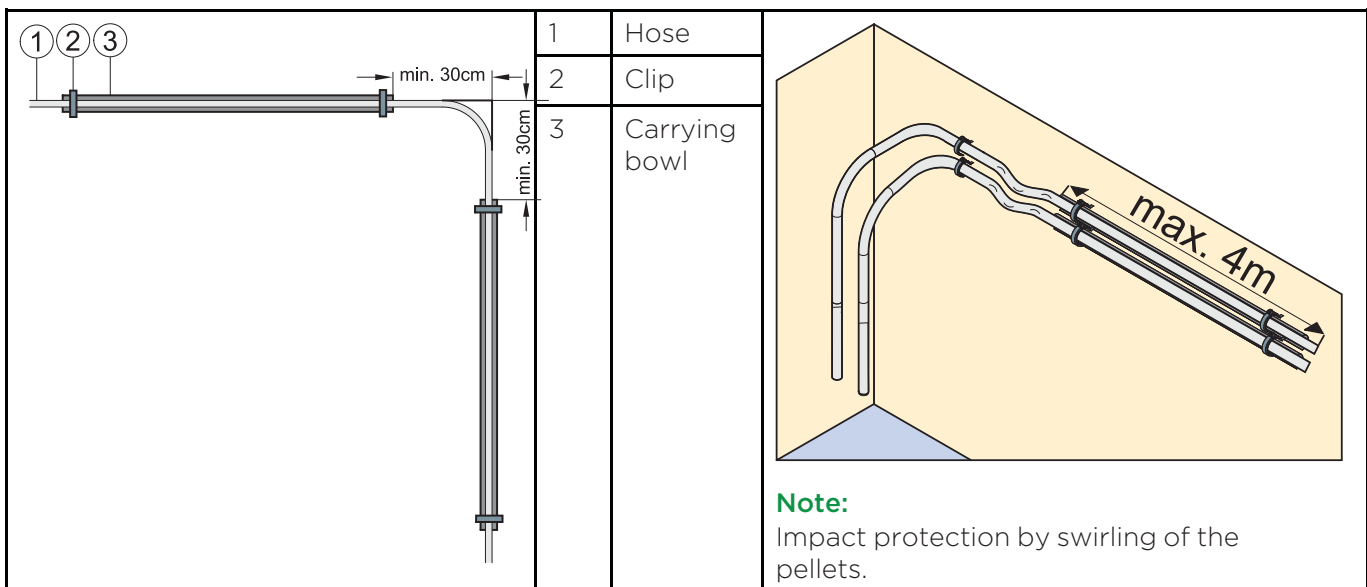
The maximum length for pellets hose and air hose are each 20m.

Assembly

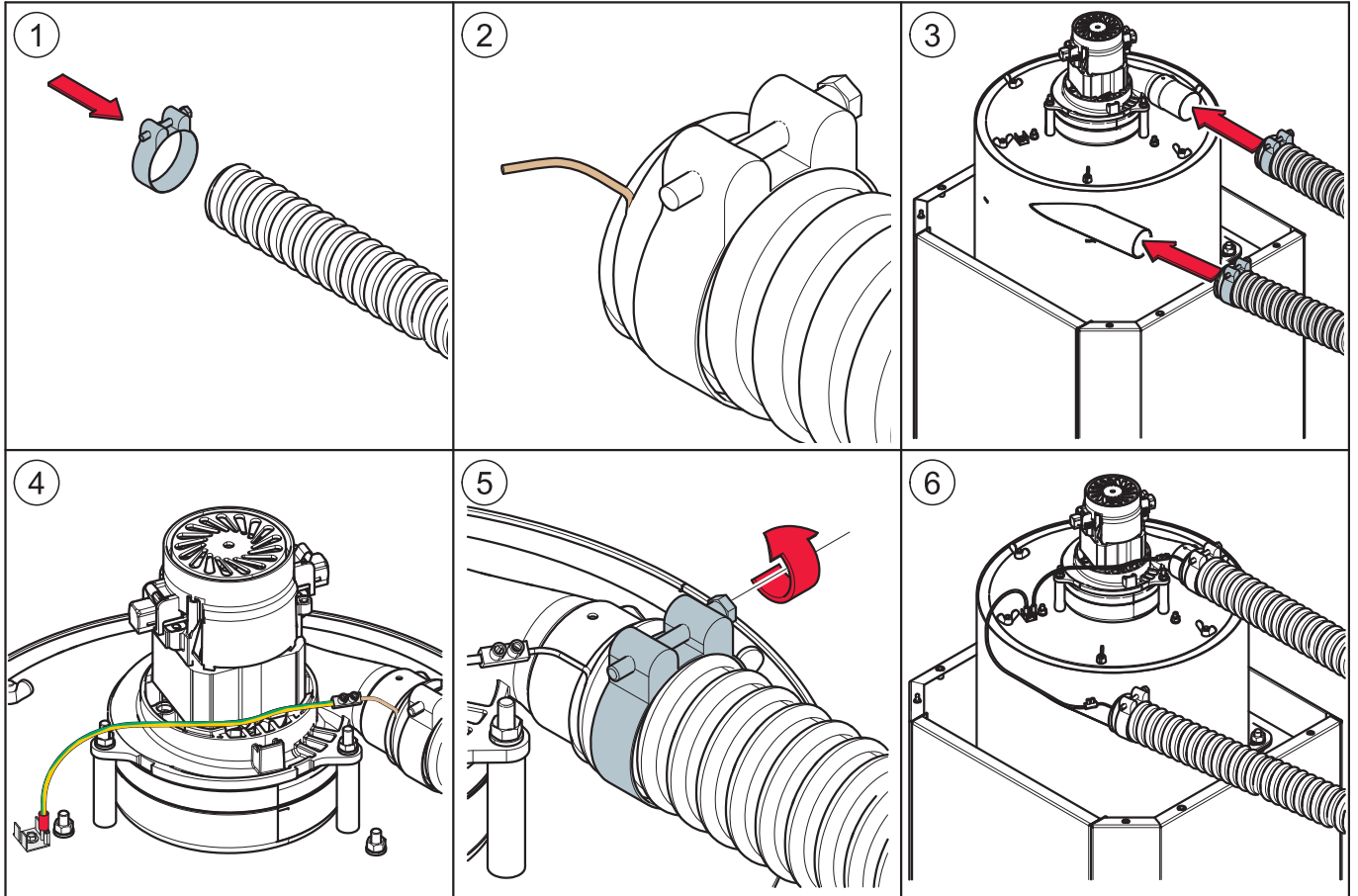
Use securing clips and carrying bowls.



*Pay attention to the defined distances!

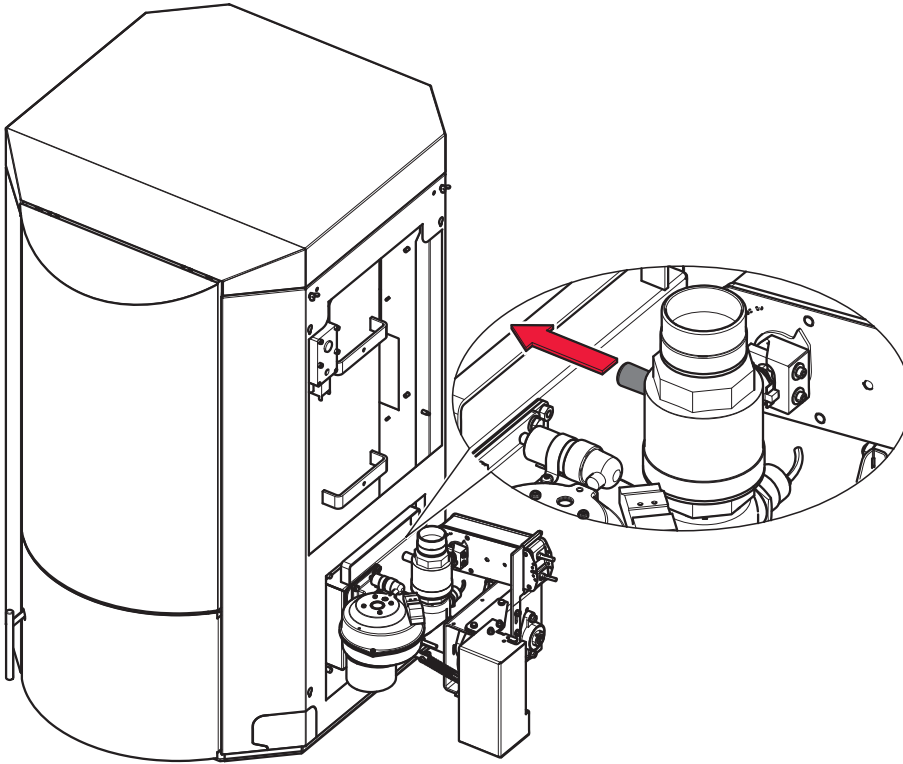


Connection of the pellet and air hose to the suction turbine



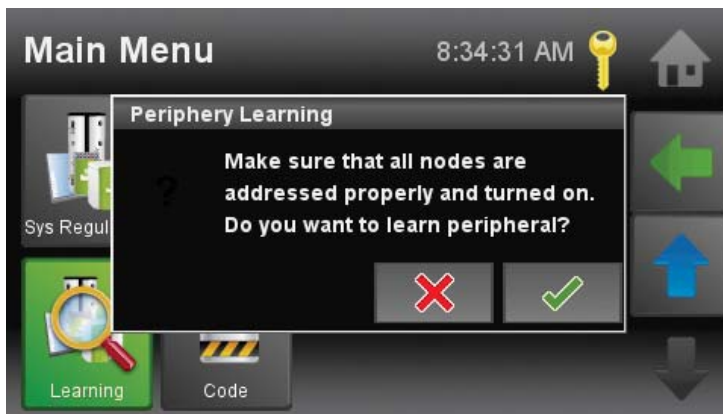
7.2 Remove protective cap from ball valve

Remove protective cap from ball valve before starting up.



7.3 Settings in software Pelletronic Touch

1. Periphery Learning

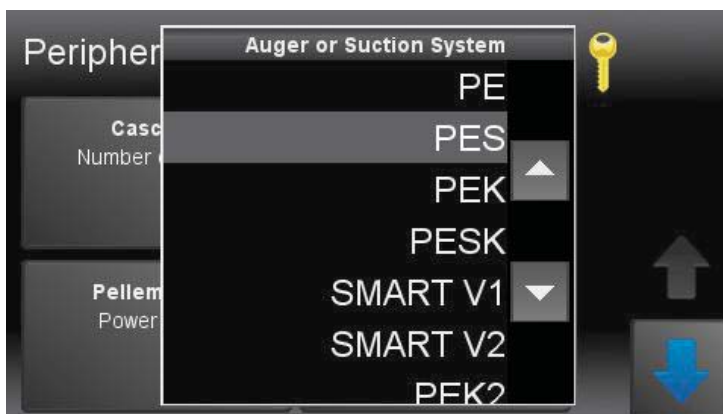


First opens a warning dialog box

Note:

After confirmation by pressing the button a return is no longer possible.

A finger pressure on the button  takes you to the input field Periphery Learning.



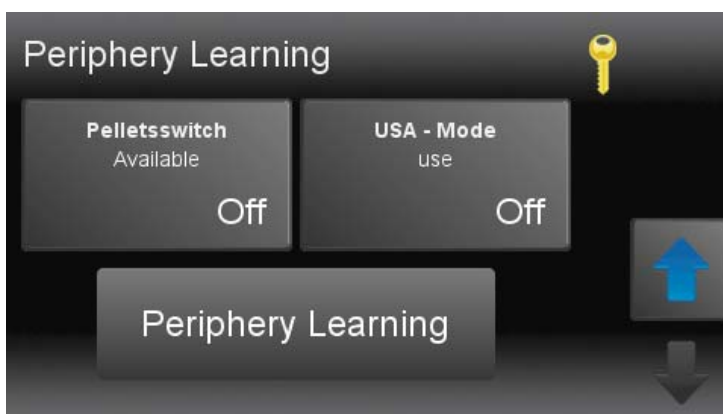
Choose Boiler Type

- **PES**= Suctionsysteem

or

- **PESK**= Suctionsysteem

A finger pressure on the appropriate button confirms the set value and takes you back to the input field Periphery Learning.



A finger pressure on the appropriate button confirms the selected data and takes you back to the main menu.

Note:

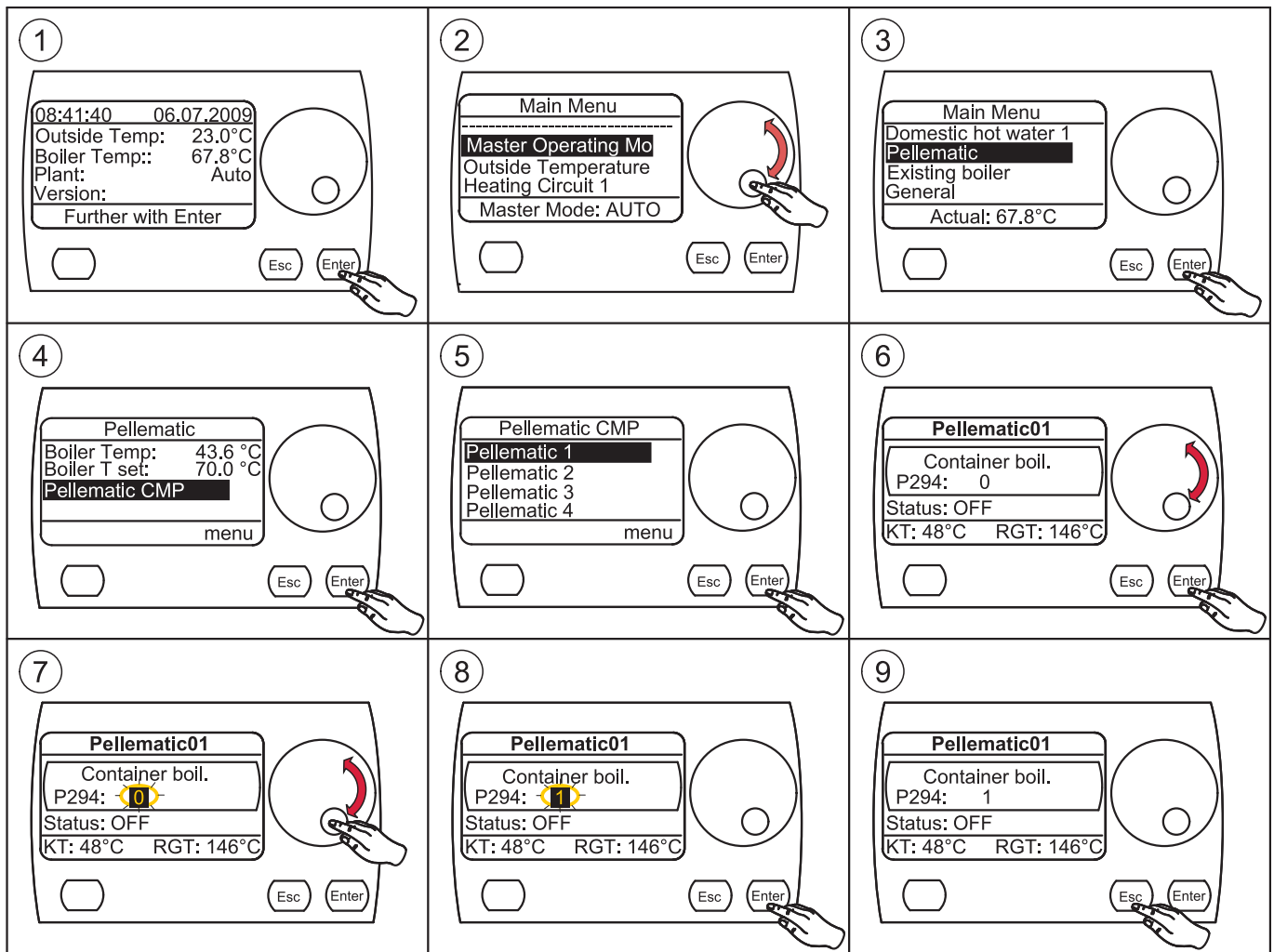
You have to set all parameter (boiler performance, cleaning, ...) according to your system, see Installation manual, chapter Periphery Learning

2. Activate Hand Filling Hopper in Pellematic



7.4 Settings in software Pelletronic Plus

- Install software for suction-feed systems (UW_V6.39To or higher)
- Activate container boiler in Pellematic





Author

ÖkoFEN Forschungs- &
EntwicklungsgesmbH
A-4133 Niederkappel, Gewerbepark 1
Tel.: +43 (0) 72 86 / 74 50
Fax.: +43 (0) 72 86 / 74 50 - 10
E-Mail: oekofen@pelletsheizung.at
www.oekofen.com

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