ACV

EXCELLENCE IN HOT WATER

WaterMaster

25 - 35 - 45 - 70 - 85 - 120 Evo

25 - 45 - 70 X Evo

Installation, Operation & Maintenance

Instructions for the User and the Installer

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We accept no liability should any damage result from the failure to comply with the instructions contained in this technical manual.

This manual contains important information with respect to the installation, the starting up and the maintenance of the appliance.

This manual must be provided to the user, who will read it carefully and keep it in a safe place.

Essential instructions for safety

- It is prohibited to carry out any modifications to the appliance without the manufacturer's prior and written agreement.
- The product must be installed by a qualified engineer, in accordance with applicable local standards and regulations.
- The installation must comply with the instructions contained in this manual and with the standards and regulations applicable to heating systems.
- Failure to comply with the instructions in this manual could result in personal injury or a risk of environmental pollution.
- The manufacturer declines all liability for any damage caused as a result of incorrect installation or in the event of the use of appliances or accessories that are not specified by the manufacturer.

Essential instructions for the correct operation of the appliance

- In order to ensure that the appliance operates correctly, it is essential to have it serviced by a certified installer or maintenance contractor every year.
- In case of anomaly, please call your service engineer.
- Faulty parts may only be replaced by genuine factory parts.

General remarks

- The availability of certain models as well as their accessories may vary according to markets.
- The manufacturer reserves the right to change the technical characteristics and features of its products without prior notice. Please check for an updated version of this manual in the documentation page on the website www.acv.com.
- In spite of the strict quality standards that ACV applies to its appliances during production, inspection and transport, faults may occur. Please immediately notify your approved installer of any faults.

GENERAL SAFETY INSTRUCTIONS FOR GAS APPLIANCES

If you smell gas:
- Immediately isolate the gas supply.
- Open windows and doors to ventilate the area.
- Do not use any electrical appliances and do not operate any switches.
- Immediately notify your gas supplier and/or your installer.

DO NOT STORE ANY FLAMMABLE OR CORROSIVE PRODUCTS, PAINT, SOLVENTS, SALTS, CHLORIDE PRODUCTS AND OTHER DETERGENT PRODUCTS NEAR THE APPLIANCE.

THIS APPLIANCE CAN BE USED BY CHILDREN AGED FROM 8 YEARS OLD AND ABOVE AND PERSONS WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES OR LACK OF EXPERIENCE AND KNOWLEDGE, IF THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING THE USE OF THE APPLIANCE IN A SAFE WAY AND UNDERSTAND THE HAZARDS INVOLVED.

CLEANING AND USER MAINTENANCE SHALL NOT BE PERFORMED BY CHILDREN WITHOUT SUPERVISION.

CHILDREN SHALL NOT PLAY WITH THE APPLIANCE.

A BYPRODUCT OF ANY GAS FIRED APPLIANCE IS CARBON MONOXIDE. ACV RECOMMENDS THE INSTALLATION OF A MINIMUM OF TWO (2) HARD-WIRED CARBON MONOXIDE DETECTORS WITH AN ALARM AND BATTERY BACK-UP; ONE IN THE MECHANICAL ROOM WHERE THE BOILER IS LOCATED AND ANOTHER INSTALLED IN THE LIVING AREA OUTSIDE THE BEDROOM(S) FOR ALL INSTALLATIONS.

MEANING OF SYMBOLS

Symbols on the packaging

	Fragile
	Keep dry
	Keep standing, up
	Danger of tipping over
	Hand truck or pallet truck required for transport

Symbols on the appliance

	Domestic Hot Water (DHW) circuit
	Primary circuit
	Electricity

Symbols in the manual

	Essential instruction for safety (of persons and equipment)
	Essential instruction for electrical safety (electrical hazard)
	Essential instruction for the correct operation of the appliance or the system
	General remark
	Safety valve connected to the sewage system
	Connection to the sewage system

WHAT TO CHECK ON A REGULAR BASIS

ACV recommends to check the system at least every 6 months as follows:

- Check that the system water pressure is at least 0.1 MPa (1 bar) when cold. If the pressure drops below 0.07 MPa (0.7 bar), the built-in pressure sensor blocks the appliance until the pressure exceeds 0.12 MPa (1.2 bar).
- If it is required to top up the system to maintain the minimum recommended water pressure, always turn the appliance off and only add small amounts of water at a time. If a large amount of cold water is added in a hot appliance, the appliance can be damaged definitively.
- If the system needs to be refilled repeatedly with water, please contact your installer.
- Check that there is no water on the floor under the appliance. If there is, please call your installer.
- If a condensate neutralisation system is installed, check it and have it cleaned regularly.
- Check regularly that there is no error message (lockout) on the screen. Refer also to the Troubleshooting table in *"In case of Problem..." on page 8* or call your installer as required.

General remarks

- The end user is only allowed to carry out the basic set-up operations mentioned in *"Controller Set-up Guide" on page 9*, after he has received all relevant instructions from the installer. Any other set-up must be carried out by an approved installer.
- If the end user misuses the installer code to access installer-specific parameters and makes changes that cause a system failure, any warranty claim will be void.
- To get additional information on how to use the ACVMax Touch interface, refer to the Installer's Handbook available at www.acv.com.

END OF THE PRODUCT LIFE

At the end of the service life of the product, do not dispose of the product as solid urban waste. Hand it over to a differentiated waste collection centre.

Please contact your installer or your ACV representative for more information on the removal and disposal of your appliance.

MODELS - WATERMASTER® 25 (X) - 35 - 45 (X) - 70 (X) - 85 - 120 EVO

The **WaterMaster®** and **WaterMaster® X Evo** series is a range of condensing water heaters designed for the exclusive production of Domestic Hot Water. The water heaters combine ACV's "Tank-in-Tank" concept with a double primary circuit to reach the high performance of a TOTAL CONDENSATION, double-circuit water heater. Please also consult the detail of components in the **"ML" booklet.**

The **WaterMaster® X Evo** models are equipped with a tank of bigger capacity. This series is especially designed for the production of large volumes of hot water and meets high DHW demands at peak moments. The DHW circuit recirculation connection also guarantees faster delivery of hot water to the whole facility. This series is particularly suitable for places where numerous DHW demands occur simultaneously, such as hotels, sport centers or hospitals.

All the **WaterMaster® Evo** models are equipped with a high efficiency charging pump and with an ACV air/gas premix burner with low NOx emissions. During operation, the burner starts automatically as soon as the water heater temperature gets lower than the preset temperature and stops as soon as the preset temperature is reached.

The **WaterMaster® Evo** series features a built-in frost protection mechanism: as soon as the flow temperature [NTC1 probe] drops below 7°C, the primary pumps are activated. As soon as the flow temperature is at 5°C, the burner starts up until the flow temperature rises above 15°C. The pumps continue to run for around 10 minutes. The function can be enabled or disabled through the installer menu. When the frost protection is disabled, only the pumps operate.

WaterMaster
25 - 35 - 45 Evo

WaterMaster
70 - 85 - 120 Evo

WaterMaster
70 X Evo

WaterMaster
25 X - 45 X Evo

USING THE CONTROL PANEL

1 - **ACVMax Touch control panel** - It is comprised of an LCD display and soft keys reacting to the touch

2 - **ACVMax LCD Display** - It is the setup interface of the appliance and indicates the parameter values, the error codes and the set-up status of the parameters. It displays a series of screens, each showing information and/or icons. The main icons are detailed on the following page.

3 - **Installer function -** By touching simultaneously the up and down arrow keys for 3 seconds, the installer can open the access code window of the ACVMax Touch controller and set up the system once the code has been filled in.

4- **Arrow touch keys and OK/Reset touch key** - To browse through the screens and menus of the ACVMax controller, set up the appliance, increase and decrease the displayed values and validate the selections. The OK/Reset key is also used to RESET the appliance after a blocking (following the instructions on the screen).

5- **Sleeping mode soft key** - To put the unit in a sleeping mode.

When touching the soft key, the unit is in a sleeping mode but is not isolated from power supply. Therefore, live current is still present in the unit. For your safety, disconnect electrical power supply to the unit before maintenance or making any electrical connections to avoid possible electric shock hazard. Failure to do so can cause serious injury, or death.

- **When putting in sleeping mode using the soft key, the appliance will not react to any heat demand. However, the basic appliance protection functions (such as frost protection, etc.) remain active.**
- **In addition, the arrow soft keys are no longer illuminated, and the soft key lighting is dimmed.**

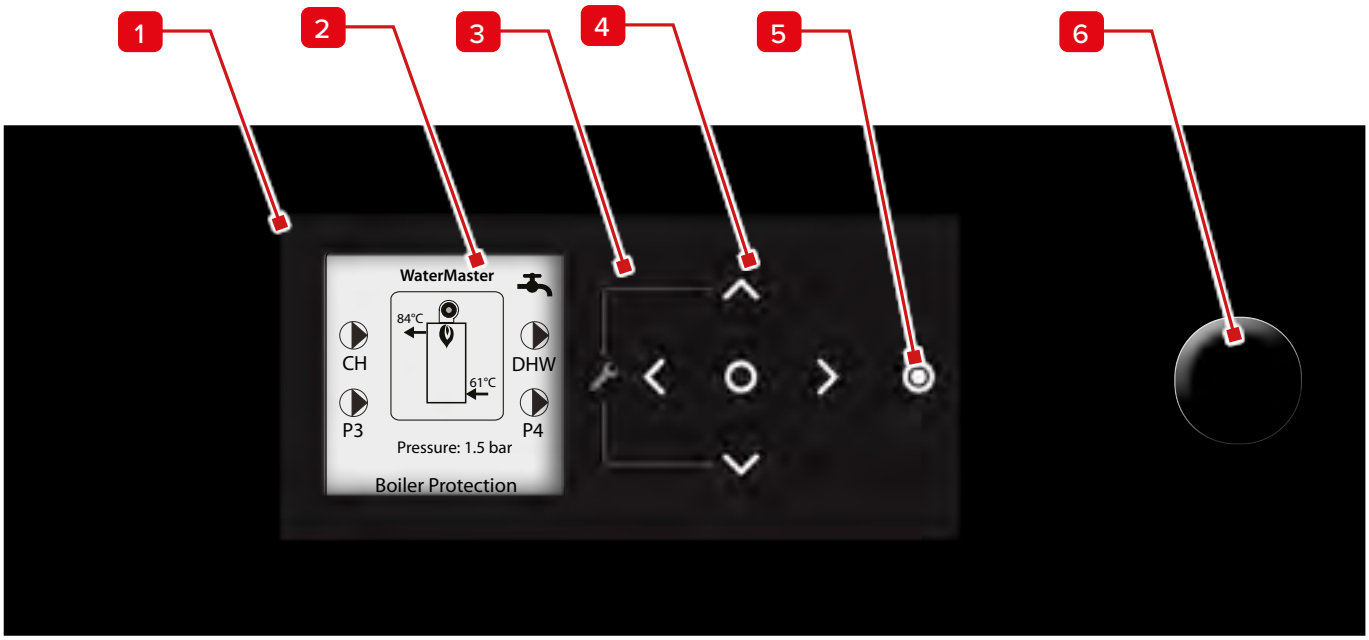
6- **ON/OFF Master switch** - To turn the appliance ON and OFF. When in OFF position, no power is supplied to the appliance.

The ACVMax navigation is performed through soft keys that react to the touch and emit a short beep when tapped.

Exert a light and short touch (tap) on the soft keys to activate their function. Holding the touch too long will not generate any reaction from the ACVMax Touch, unless it is a combination of soft keys meant to be touched simultaneously for a determined duration, as instructed in this manual. The arrow keys can also be held longer to increase or decrease values faster.

Navigation through the menus and selection of items/ modification of values is performed through four arrow soft keys , , , . The center soft key is used for validation (and for Reset in some cases).

The installer is provided with full access to all available features after simultaneously touching the and soft keys for 3 seconds and entering a code.



HOME SCREEN

The Home Screen presents status information in a very user-friendly way so that the current state of the appliance can be quickly accessed.

- **Screen backlight** - it will illuminate when any soft key is touched, and remain illuminated for five minutes.
- **Screen brightness** - it can be adjusted at the Home screen by touching and holding simultaneously the and soft keys for 2 seconds. Touch the and soft key to increase or decrease the contrast. Touch to end the process.

Main Icons of the ACVMAX Touch display

DHW - indicates information related to Domestic Hot Water.

Home - to go back to the home screen.

Back - to go back to the previous screen.

Warm Weather Shutdown - displays on the home screen when the outdoor temperature reaches the Warm Weather Shutdown temperature.

Reset - to reset the system to the factory settings.

Settings - to access controller settings (languages, units, etc.).

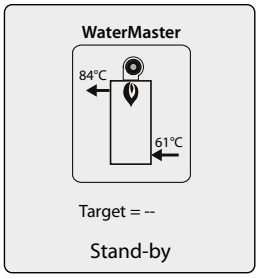
Easy Setup - to quickly adjust the most common settings.

CH/DHW operation - to enable/disable the Domestic Hot Water function

Information - to get information on the appliance.

STAND-BY SCREEN

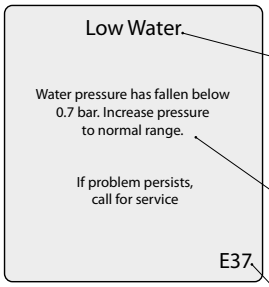
This screen is displayed at start-up. It indicates that the WaterMaster is ready to respond when a demand is received.



LOCKOUT SCREEN

If a problem occurs, the Lockout screen replaces the Home screen. The backlight also remains on as long as the problem is not solved. Pressing any arrow button will return to the Home screen.

Using the code located in the right bottom corner of the screen, troubleshoot the problem, either with the table located in paragraph ***"In case of Problem..." on page 8***, or with the Lockout code table in the Installer's Handbook (for the installer only).

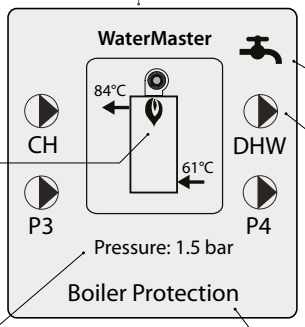


Lockout message. Refer to ***"In case of Problem..." on page 8*** for more information.

Body text. The first sentence describes the lockout, the second sentence gives a possible cure, and the third tells how to reset the lockout.

Lockout reference code. Refer to ***"In case of Problem..." on page 8*** for more information.

The appliance is represented in the center of the Home Screen. Basic operating information such as supply and return temperatures are displayed as well as current burner status.



Tap icon: indicates that a DHW call has been received.

Circulator icons: indicate which circulators are currently powered.

A ***flame symbol*** is displayed when the unit is fired. The flame size changes to indicate the current firing rate.

Basic information: The user can toggle through items using the and soft keys to view Target, Supply, Return, Domestic, Outdoor and System temperatures, and primary pressure.

Status line: displays the current operating state of the appliance. See next page.

STATUS MESSAGES

- **Stand-by** - Indicates that the WaterMaster is ready to respond when a demand is received.
- **DHW Demand** - A domestic hot water call has been received.
- **Manual Operation** - The burner or circulators have manually been enabled in the Installer Menu.
- **DHW Burner Delay** - The burner will not fire until the call blocking time has elapsed.
- **DHW Setpoint Reached** - The burner is not fired because the supply/system water temperature exceeds the setpoint. The built-in domestic circulator continues to operate and the burner will fire again once the supply/system water temperature drops below the setpoint.
- **DHW Post Pump** - The domestic hot water circulator is running to remove heat from the WaterMaster at the completion of a call.
- **Freeze Protection** - The burner is fired because the freeze protection feature has been activated. Freeze protection will end once the supply/system water temperature is raised to 15°C.
- **Boiler Protection** - The burner firing rate is being reduced because of an excessive difference between the water heater supply and return temperatures. The firing rate will begin increasing once the temperature difference is less than 25°C.
- **Lockout Description** - The lockout which currently has the WaterMaster shut down is displayed

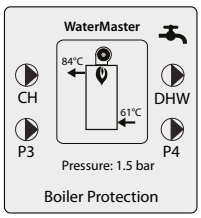
IN CASE OF PROBLEM...

Check the list of faults and corresponding codes below to get the solution(s). If no solution is provided here, please contact your installer who will determine the correct solution by referring to*"Troubleshooting" on page 44*.

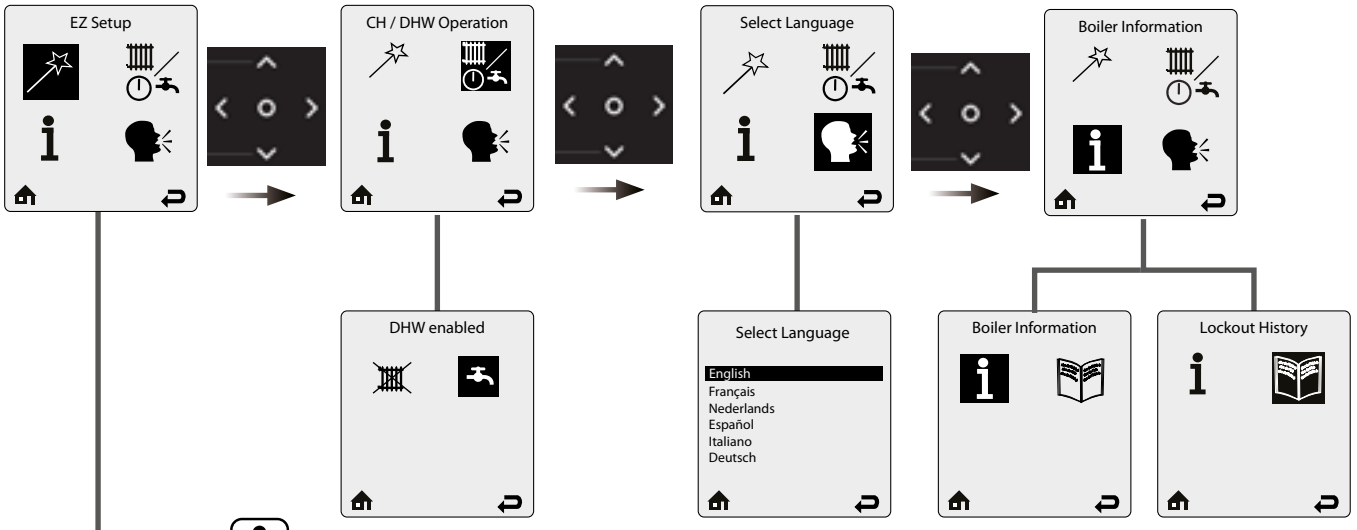
Fault code	Problem	Possible Cause(s)	Solution
-	The appliance does not turn on when pressing the ON/OFF Master switch	No power supply	Check the power supply and that the appliance power plug is connected to the network.
E 01	Failed ignition	The burner failed to light after 5 ignition attempts	Check gas supply to the appliance.
E 13	Reset limit reached	Resets are limited to 5 every 15 minutes	Turn unit OFF and ON to resume normal operation.
E 34	Low voltage	Line voltage has fallen below an acceptable operating level	The appliance will automatically reset once line voltage returns to normal.
E 37	Low Water	Water pressure has fallen below an acceptable operating level (0.07 MPa [0.7 bar])	Refill the system to reach a normal range pressure. The appliance will automatically reset once water pressure returns to normal.
E 94	Internal Display Fault	Display memory error	Turn appliance off and on to resume normal operation.

CONTROLLER SET-UP GUIDE

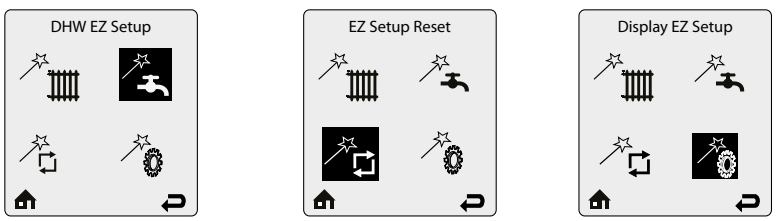
Starting from the Home screen :



- To navigate on the screen, use the **UP**, **DOWN**, **LEFT** and **RIGHT** soft keys  ,
- Use the **OK** key to validate a selection.
- To increase/decrease values, use the **UP** and **DOWN** keys, or **LEFT** and **RIGHT**, according to the situation



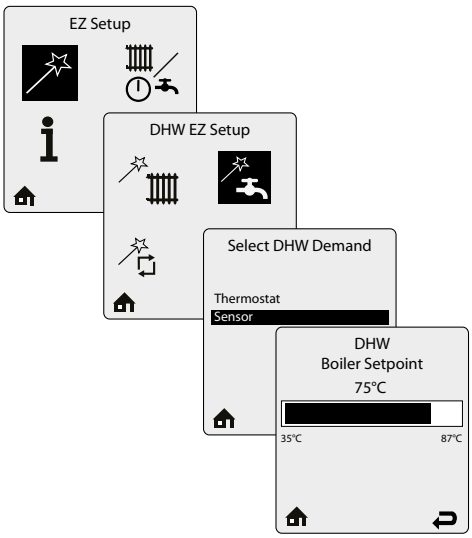
Although the menu and functions are accessible, the heating circuit cannot be enabled on the WaterMaster.



HEATING EZ SETUP

As the WaterMaster appliance has the sole purpose of producing Domestic Hot Water, the CH circuit is internal only (primary circuit) and the heating function is therefore disabled (default setting).
It cannot be adjusted through the EZ Setup, even though the menus and functions can be accessed. Therefore, any change made through the EZ Setup will not be taken into account by the ACVMax and will have no influence whatsoever on the appliance performances.
In the Installer menu, the CH function is also deactivated even though the menus are visible. Please refer to the Installer's Handbook for more details.

DHW EZ SETUP



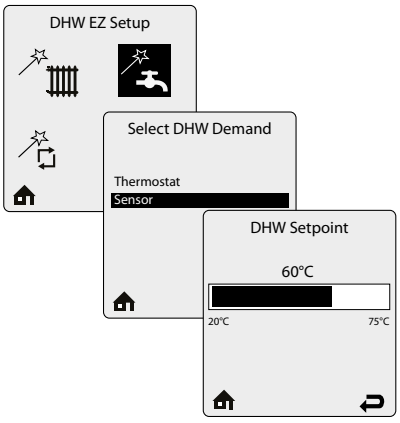
Select DHW Demand prompts the user to select how a DHW Demand is generated. There are two Select DHW Demand options.

Thermostat should not be used with Evo models.

Default : Sensor (see below)

DHW Boiler Setpoint should not be used with Evo models **(Default: 75°C)**.

Touch the or soft keys to adjust the required temperature setpoint then touch to store the setting.

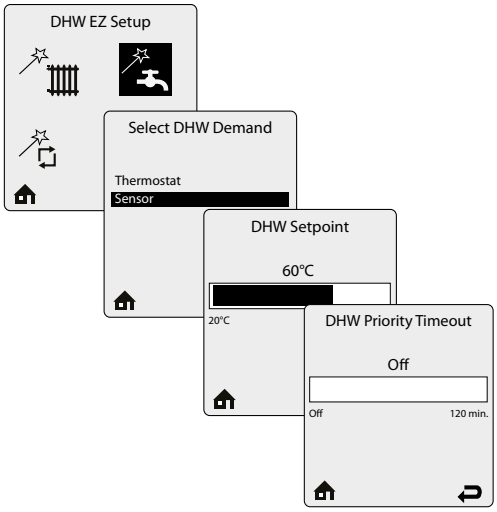


When **Sensor** is selected in **Select DHW Demand**, it operates with the Indirect Water Heater Sensor. The appliance monitors the DHW storage temperature and generates a DHW call whenever the temperature drops below the DHW storage setpoint by 3°C.

DHW Setpoint prompts to enter the DHW storage setpoint temperature.

Touch the or soft keys to adjust the required temperature setpoint then touch store the setting.

Default: 60°C.

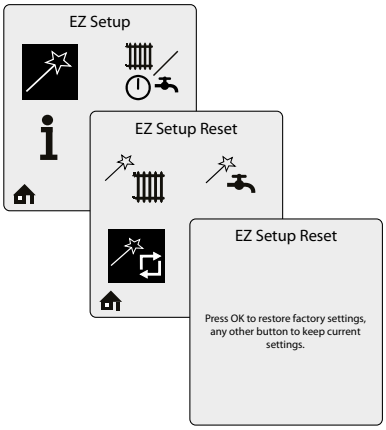


DHW Priority Timeout prompts to enter an optional time limit that a domestic hot water call has priority.

Touch the or soft keys to adjust the required timeout value, if required, then touch to store the setting and complete the DHW setting.

Default: Off

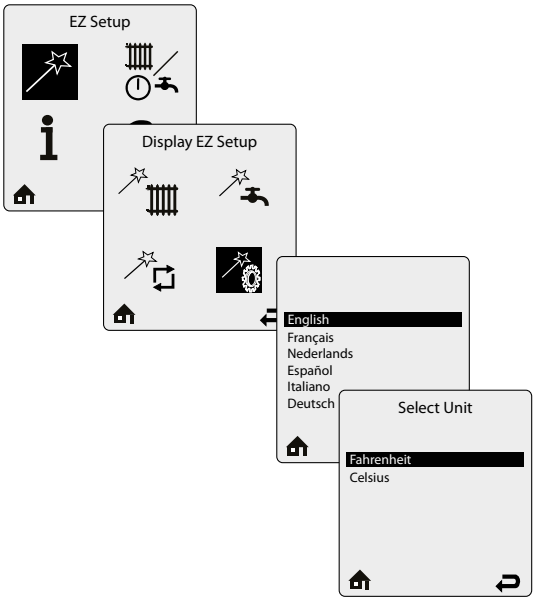
EASY SETUP RESET



EZ Setup Reset allows to reset all EZ setup settings back to the original factory defaults.

Follow the on-screen instructions to reset all EZ setup settings.

DISPLAY EASY SETUP



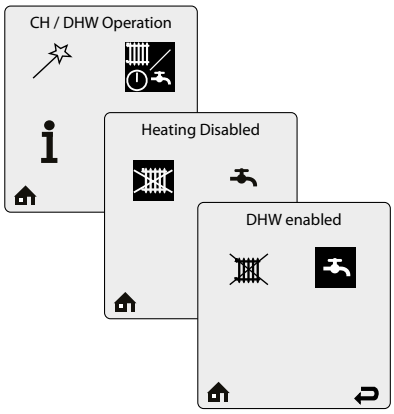
Display EZ Setup allows to select the interface language (Nine different languages: English, French, Dutch, Spanish, Italian, German, Czech, Polish and Russian).

Touch the or soft keys to select the required language then touch to store the setting.

Display EZ Setup allows to select the interface temperature unit.

Touch the or soft keys to select the required unit then touch to store the setting.

CH/DHW OPERATION



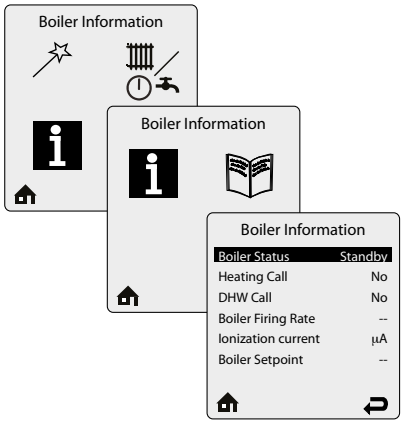
CH/DHW Operation provides a simple way to enable/disable the DHW function of the WaterMaster.

Touch the or soft keys to select the object (CH or DHW icon), then touch to toggle between the enabled/disabled status. The status of the circuit is displayed at the top of the screen. Please note that the CH circuit cannot be enabled in a WaterMaster appliance.

Using the arrow keys, select the **HOME** or **RETURN** icon at the bottom of the screen to go back either to the home page or to the previous screen respectively.

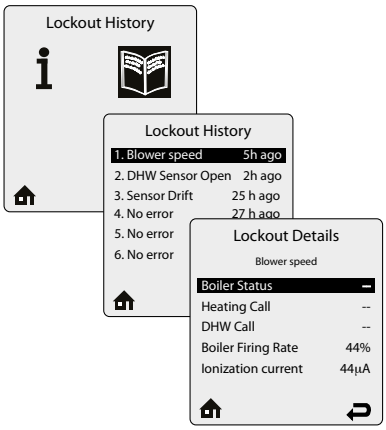
Default:

BOILER INFORMATION



Boiler Information screen provides real time operating information of the WaterMaster. Each line contains an information item followed by its current value. Six lines are displayed on the screen at one time.

Touch the or soft keys to scroll through the items. For more information, refer to the Installer's Handbook of the WaterMaster appliances.



Lockout History records the last eight lockouts. Six lines are displayed on the Lockout History screen at one time. Each line contains a lockout description followed by how long ago the lockout occurred.

Touch the or soft keys to scroll through the items then touch to select any of them and get more details through the **Lockout Details** screen. For more information, refer to the Installer's Handbook of the WaterMaster appliances.

COMBUSTION CHARACTERISTICS

Main Characteristics			WaterMaster Evo					
			25 25 X		35		45 45 X	
			G20/G25	G31	G20/G25	G31	G20/G25	G31
Input (PCI)	max	kW	25.0	25.0	35.0	35.0	45.0	45.0
	min	kW	5.0	5.0	7.0	7.0	9.0	9.0
DHW efficiency (EN89)		%	108.7	108.7	108.5	108.5	108.5	108.5
Combustion efficiency	at 100%	%	98.2	98.2	98.2	98.2	97.9	97.9
NOx (Class 6)	Max. output	mg/kWh	64	—	55	—	53	—
	Min. output	mg/kWh	12	—	12	—	21	—
	Weighted	mg/kWh	21.5	—	26.7	—	30.2	—
CO	Max. output	ppm	27	—	48	—	63	—
	Min. output	ppm	6	—	4	—	4	—
CO_2	Max. output	$\%CO_2$	8.8	10.1	9.2/8.9	10.7	9.0	10.7
	Min. output	$\%CO_2$	8.3	9.3	8.8/8.4	10.2	8.4	10.1
Max gas flow rate G20/G25	20 mbar	m^3/h	2.66	—	3.64	—	4.67	—
	25 mbar	m^3/h	2.96	—	4.23	—	5.6	—
Max. gas flow rate G31	30/37/50 mbar	m^3/h	—	0.98	—	1.4	—	1.77
		Kg/h	—	1.9	—	2.7	—	3.5
Temp of flue gases	Normal	°C	60.0	60.0	58.0	58.0	64.0	64.0
	Max.	°C	120	120	120	120	120	120
	Min.	°C	32.9	32.9	29.2	29.2	30.1	30.1
Average temp. of combustion products	DHW mode	°C	52.6	52.6	52.6	52.6	52.6	52.6
Mass flow rate* of flue gases	Normal	g/s	11.6	11.6	15.5	15.5	21.1	20.1
	Min. output	g/s	2.45	2.54	3.26	3.28	4.36	4.25

* Mass flow rate values were calculated for G20 and G31 with an air factor of 1.3.

Main Characteristics			WaterMaster Evo 70 70 X		85		120	
			G20/G25	G31	G20/G25	G31	G20/G25	G31
Input (PCI)	max	kW	69.9	69.9	85.9	85.9	115.0	115.0
	min	kW	21.5	23.0	21.0	23.0	23.2	23.2
DHW efficiency (EN89)		%	107.7	107.7	107.7	107.7	107.7	107.7
Combustion efficiency	at 100%	%	98.1	98.1	98.0	98.0	97.5	97.5
NOx (Class 6)	Max. output	mg/kWh	52	—	72	—	58.3	—
	Min. output	mg/kWh	27	—	27	—	23.1	—
	Weighted	mg/kWh	30.3	—	27.0	—	37.4	—
CO	Max. output	ppm	56	—	75	—	50	—
	Min. output	ppm	2	—	6	—	8	—
CO_2	Max. output	$\%CO_2$	9.1	10.6	9.3	10.8	9.2	10.6
	Min. output	$\%CO_2$	8.6	10.0	8.6	10.0	8.6	10.0
Max gas flow rate G20/G25	20 mbar	m^3/h	7.4	—	9.0	—	12.2	—
	25 mbar	m^3/h	8.6	—	10.5	—	14.0	—
Max. gas flow rate G31	30/37/50 mbar	m^3/h	—	2.77	—	3.37	—	4.6
		Kg/h	—	4.2	—	5.1	—	6.9
Temp of flue gases	Normal	°C	59.0	59.0	62	62	65	65
	Max.	°C	120	120	120	120	120	120
	Min.	°C	29.0	29.0	28.7	28.7	28.7	28.7
Average temp. of combustion products	DHW mode	°C	51.0	51.0	51.0	51.0	51.0	51.0
Mass flow rate* of flue gases	Normal	g/s	31.6	31.6	37.8	37.8	50.8	49.8
	Min. output	g/s	10.19	9.98	10.19	9.98	12.14	11.5

* Mass flow rate values were calculated for G20 and G31 with an air factor of 1.3.

ELECTRICAL CHARACTERISTICS

Also refer to "ML" Booklet for Wiring Diagrams.

Main Characteristics			WaterMaster Evo 25 25 X	35	45 45 X	70 70 X	85	120
Rated voltage		V~	230	230	230	230	230	230
Rated frequency		Hz	50	50	50	50	50	50
Electrical consumption	Max.	W	95	110	126	280	270	380
	Min.	W	19	30	40	50	46	70
Electrical consumption at 30% load		W	24	34	45	55	51	74
Electrical consumption in standby		W	3	3	3	3	3	4
Rated current (Fuse)		A	16	16	16	16	16	16
Class			IP 20	IP 20	IP 20	IP 20	IP 20	IP 20

PRODUCT FICHE DATA

(i.a.w. Commission Delegated Regulation 812/2013)

		WaterMaster Evo					
		25	**35**	**45**	**70**	**85**	**120**
Declared load profile for water heating		L	L	L	XXL	XXL	XXL
Water heating efficiency class		A	A	A	A	—	—
Water heating efficiency	**%**	87.2	87.2	87.2	85.0	85.0	85.0
Annual electricity consumption	**kWh**	6	6	6	61	—	—
Annual energy consumption for water heating	**GJ**	10	10	10	25	25	25
Working temperature	**°C**	60	60	60	60	60	60
Sound power level indoors LWA	**dB**	60	60	59	60	61	62
Able to work only during off-peak hours	**Y/N**	N	N	N	N	N	N
Storage volume	**l**	96	96	96	190	190	190

		WaterMaster Evo		
		25 X	**45 X**	**70 X**
Declared load profile for water heating		XXL	XXL	XXL
Water heating efficiency class		A	A	A
Water heating efficiency	**%**	87.5	87.9	85.0
Annual electricity consumption	**kWh**	74.8	68.4	65.3
Annual energy consumption for water heating	**GJ**	21.4	21.4	22.1
Working temperature	**°C**	60	60	60
Sound power level indoors LWA	**dB**	60	59	60
Able to work only during off- peak hours	**Y/N**	N	N	N
Storage volume	l	220	220	300

HYDRAULIC CHARACTERISTICS

		WaterMaster Evo					
Main Characteristics		**25**	**35**	**45**	**70**	**85**	**120**
Capacity (primary)	L	100	100	100	125	125	125
Capacity (DHW)	L	96	96	96	190	190	190

		WaterMaster Evo		
Main Characteristics		**25 X**	**45 X**	**70 X**
Capacity (primary)	L	180	180	205
Capacity (DHW)	L	220	220	300

OPERATING CONDITIONS

***Nominal Service Pressure (tank full of water)** **
- Primary circuit : ..... 0.25 MPa (2.5 bar)
- DHW circuit : ..... 0.81 MPa (8.1 bar)

***Maximum Service Pressure (tank full of water)** **
- Primary circuit : ..... 0.3 MPa (3 bar)
- DHW circuit : ..... 0.86 MPa (8.6 bar)

Maximum Operating Temperatures
- Maximum temperature (primary) : ..... 87°C
- Maximum temperature (DHW) : ..... 75°C

Water Quality

See *"Recommendations for the prevention of corrosion and scaling in Heating Systems" on page 18*.

* The hydraulics of the water heater have been tested according to EN 89:2015, and the water heater is classified as a pressure class 3 appliance.

DHW PERFORMANCE

Domestic hot water performance* (cold drink water at 10°C)

			WaterMaster Evo					
Operating conditions at 80°C			**25**	**35**	**45**	**70**	**85**	**120**
Constant flow at	40 °C [ΔT = 30 K]	L/h	788	1 104	1 390	2 087	2 534	3 402
	45 °C [ΔT = 35 K]	L/h	676	946	1 192	1 789	2 172	2 928
	60 °C [ΔT = 50 K]	L/h	473	662	820	1 252	1 520	1 754
Peak flow at	40 °C [ΔT = 30 K]	L/10’	361	408	451	716	783	900
	45 °C [ΔT = 35 K]	L/10’	301	339	373	592	646	676
	60 °C [ΔT = 50 K]	L/10’	183	197	224	348	371	440
Peak flow 1st hour at	40 °C [ΔT = 30 K]	L/60’	1 018	1 328	1 610	2 455	2 895	3 620
	45 °C [ΔT = 35 K]	L/60’	865	1 127	1 366	2 083	2 456	3 098
	60 °C [ΔT = 50 K]	L/60’	577	749	894	1 391	1 638	1 847
Reheat time from 10°C to 80°C		min.	35	26	23	27	24	23
DHW efficiency at ΔT = 30 K		%	105.4	105.4	103.1	103.9	103.9	102.2

			WaterMaster Evo		
Operating conditions at 80°C			**25 X**	**45 X**	**70 X**
Constant flow at	40 °C [ΔT = 30 K]	L/h	788	1 390	2 087
	45 °C [ΔT = 35 K]	L/h	676	1 192	1 789
	60 °C [ΔT = 50 K]	L/h	473	820	1 252
Peak flow at	40 °C [ΔT = 30 K]	L/10’	568	617	951
	45 °C [ΔT = 35 K]	L/10’	477	501	816
	60 °C [ΔT = 50 K]	L/10’	327	332	610
Peak flow 1st hour at	40 °C [ΔT = 30 K]	L/60’	1 207	1 793	2 578
	45 °C [ΔT = 35 K]	L/60’	1 035	1 537	2 210
	60 °C [ΔT = 50 K]	L/60’	724	1 076	1 547
Reheat time from 10°C to 80°C		min.	61	40	43
DHW efficiency at ΔT = 30 K		%	105.4	103.1	103.9

RECOMMENDATIONS FOR THE PREVENTION OF CORROSION AND SCALING IN HEATING SYSTEMS

How oxygen and carbonates can affect the heating system

Oxygen and dissolved gasses in the water of the primary circuit contribute to the oxidation and the corrosion of the system components that are made of ordinary steel (radiators, ...). The resulting sludge is then deposited in the appliance exchanger.

The combination of carbonates and carbon dioxide in the water results in the formation of scale on the hot surfaces of the installation, including those of the appliance exchanger.

These deposits in the heat exchanger reduce the water flow rate and thermally insulate the exchange surfaces, which is likely to damage them.

Sources of oxygen and carbonates in the heating circuit

The primary circuit is a closed circuit; the water it contains is therefore isolated from the mains water. When maintaining the system or filling up the circuit, water renewal results in the addition of oxygen and carbonates in the primary circuit. The larger the water volume in the system, the larger the addition.

Hydraulic components without an oxygen barrier (PE pipes and connections) admit oxygen into the system.

Prevention Principles

1. Clean the existing system before installing a new appliance

Before the system is filled, it must be cleaned in accordance with standard EN14336. Chemical cleaning agents can be used.

If the circuit is in bad condition, or the cleaning operation was not efficient, or the volume of water in the installation is substantial (e.g. cascade system), it is recommended to separate the appliance from the heating circuit using a plate-to-plate exchanger or equivalent. In that case, it is recommended to install a hydrocyclone or magnetic filter on the installation side.

2. Limit the fill frequency

Limit fill operations. In order to check the quantity of water that has been added into the system, a water meter can be installed on the filling line of the primary circuit.

Automatic filling systems are not recommended unless the fill frequency is monitored and the scale and corrosion inhibitor remain at the correct levels.

If your installation requires frequent water refilling, make sure your system is free of water leaks.

Inhibitors may be used in accordance with standard EN 14868.

3. Limit the presence of oxygen and sludge in the water

A deaerator (on the appliance flow line) combined with a dirt separator (upstream of the appliance) must be installed according to the manufacturer's instructions.

ACV recommends using additives that keep the oxygen in solution in the water, such as Fernox (www.fernox.com) and Sentinel (www.sentinel-solutions.net) products.

The additives must be used in accordance with the instructions issued by the manufacturer of the water treatment product.

4. Limit the carbonate concentration in the water

The fill water must be softened if its hardness is higher than 20° fH (11,2° dH).

Check regularly the water hardness and enter the values in the service log.

Water hardness table :

Water hardness	°fH	°dH	mmolCa(HCO3)2 / l
Very soft	0 - 7	0 - 3.9	0 - 0.7
Soft	7 - 15	3.9 - 8.4	0.7 - 1.5
Fairly hard	15 - 25	8.4 - 14	1.5 - 2.5
Hard	25 - 42	14 - 23.5	2.5 - 4.2
Very hard	> 42	> 23.5	> 4.2

5. Control the water parameters

In addition to the oxygen and the water hardness, other parameters of the water must be checked.

Treat the water if the measured values are outside the range.

Acidity	6,6 < pH < 8,5
Conductivity	< 400 µS/cm (at 25°C)
Chlorides	< 125 mg/l
Iron	< 0,5 mg/l
Copper	< 0,1 mg/l

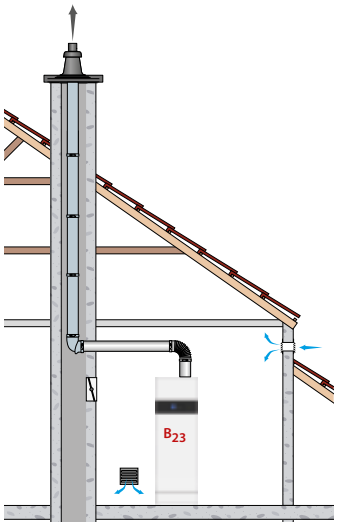
CHIMNEY CHARACTERISTICS

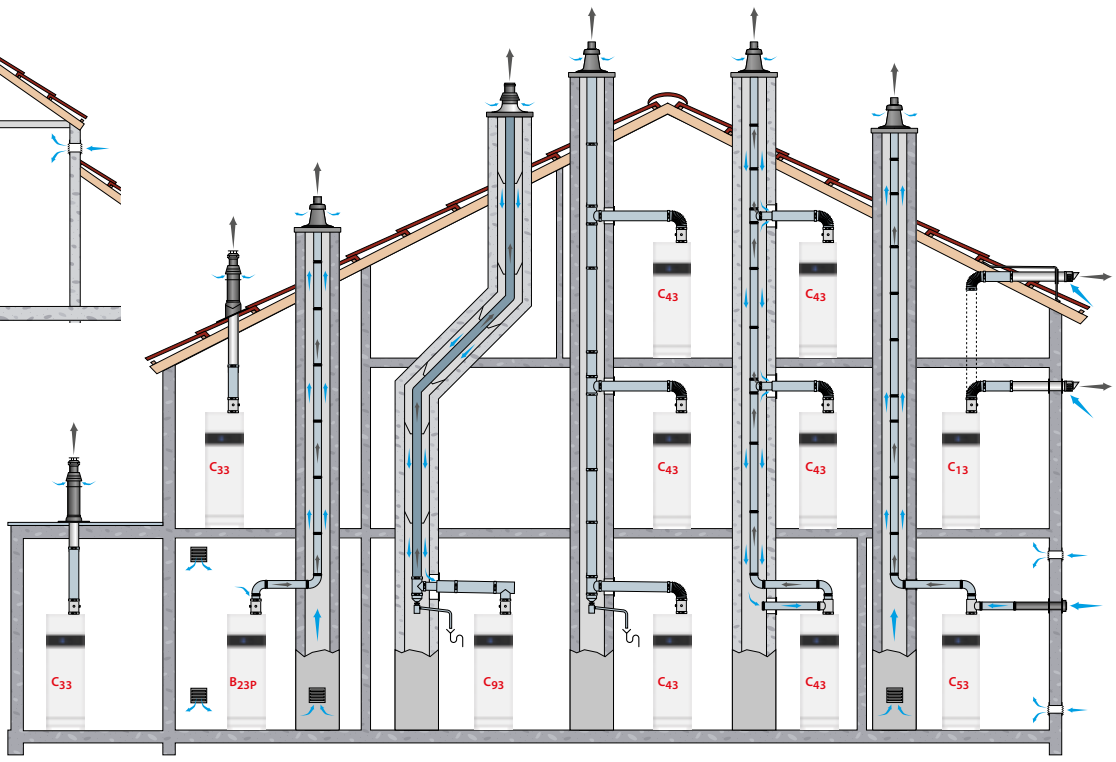
Main Characteristics			WaterMaster Evo											
			25 25 X		35		45 45 X				70 70 X		85		120	
Air/flue pipe Ø	concentric	mm	80/125		80/125		80/125				100/150		100/150		100/150	
	parallel	mm	80/80		80/80		80/80				100/100		100/100		100/100	
Max. allowed flue pipe pressure drop		Pa	95		130		130				110		160		170	
Max recommended length of concentric flue pipe (corresponding length in meters of straight pipes) * Ø 80/125, terminal included			60		39		22				—		—		—	
Max recommended length of concentric flue pipe (corresponding length in meters of straight pipes) * Ø 100/150, terminal included			130***		90***		53***				20		19		18	
Max recommended length of dual flow (corresponding length in meters of straight pipes) *			Rigid Ø 80	Flex. Ø 80	Rigid Ø 80	Flex. Ø 80	Rigid Ø 80	Flex. Ø 80	Rigid Ø 100	Flex. Ø 100	Rigid Ø 100	Flex. Ø 100	Rigid Ø 100	Flex. Ø 100	Rigid Ø 100	Flex. Ø 100
			56	26	37	17	19	9	76	34	17	8	17	8	9	4
Available connection types			B23 - B23P - C13(x) - C33(x) - C43(x) - C53(x)** - C63(x) - C83(x), C93(x)											

* See page 21 to calculate the flue pipe length.
** A C53 connection of the WaterMaster Evo appliances requires an optional accessory.
*** Not recommended - For more information, please contact your ACV representative.

It is mandatory to ventilate the boiler room. The high or low air vent opening dimensions depend on the appliance power and the boiler room size. Refer to the local regulations in force.

Make sure that the air inlet openings remain unobstructed at all times and that air and flue pipe connections are tight and secure.





FLUE PIPE CONNECTION TYPES

It is mandatory to use ACV flue systems to connect the appliance.

B23p Connection to a combustion product exhaust system designed to operate with positive pressure.

B23 Connection to an exhaust duct that discharges the combustion products outside the room where it is installed, with the combustion air being drawn directly from the boiler room.

C13(x) Connection using pipes fitted with a horizontal terminal that simultaneously takes in combustion air for the burner and discharges combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions, i.e. openings shall fit inside a square of 50 cm for appliances up to 70 kW and inside a square of 100 cm for appliances above 70 kW.

C33(x) Connection using pipes fitted with a vertical terminal that simultaneously takes in fresh air for the burner and discharges combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions , i.e. openings shall fit inside a square of 50 cm for appliances up to 70 kW and inside a square of 100 cm for appliances above 70 kW.

C43(x) Connection using two pipes to a collective duct system serving more than one appliance; this system of collective ducts features two pipes connected to a terminal unit that simultaneously takes in fresh air for the burner and discharges the combustion products outside through openings that are either concentric or close enough together to be subjected to similar wind conditions. C43(x) appliances are suitable for a connection to a natural draught chimney only.

C53(x) Connection to separate ducts for supplying combustion air and discharging combustion products; these ducts may end in zones with different pressure levels, but are not allowed to be installed on opposite walls of the building.

C63(x) Type C appliance meant to be connected to a system for supplying combustion air and discharging combustion products, that is approved and sold separately **(Prohibited in some countries (e.g. Belgium) - refer to local regulations and standards in force)**. Terminals for the supply of combustion air and for the evacuation of combustion products are not allowed to be installed on opposite walls of the building. See also the following additional specifications:

- Maximum allowable draught is 200 Pa.
- Maximum allowable pressure difference between combustion air inlet and flue gas outlet (including wind pressures) is as follows: 95 Pa (WM 25 (X) Evo), 130 Pa (WM 35-45 (X) Evo), 110 Pa (WM 70 (X) Evo), 160 Pa (WM 85 Evo) and 170 Pa (WM 120 Evo).
- Condensate flow is allowed into the appliance.
- Maximum allowable recirculation rate of 10% under wind conditions.

C83(x) Connection using a single or double duct system. The system is made of a normal exhaust flue duct that discharges the combustion products. The appliance is also connected through a second duct fitted with a terminal, that supplies the burner with fresh outdoor air. Please contact your ACV representative for the meters of flue pipes that can be used to connect the appliance(s).

C93(x) Connection using an individual system whose combustion product exhaust duct is installed in an exhaust duct that is integral with the building. The appliance, the exhaust duct and the terminal units are certified as an inseparable assembly. Minimum usable diameter for the vertical duct supplying the combustion air is 100 mm.

The C93 configuration enables airtight operation in a pre-existing chimney. The combustion air crosses the space between the tubing and the pre-existing chimney. Make sure to clean the pre-existing chimney thoroughly prior to installation, especially if there is soot or tar residue. Make sure that there is a clearance area for the combustion air at least equivalent to the area that would have been provided by separate concentric ducts or air intake ducts.

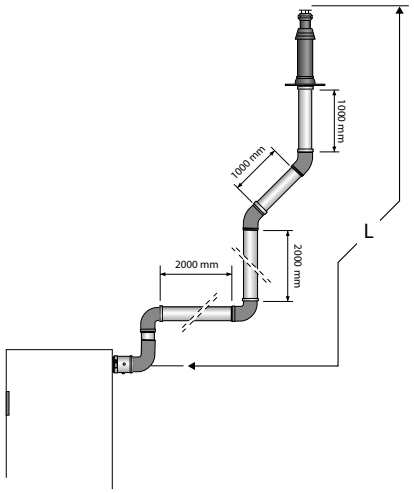
CALCULATION OF THE FLUE PIPE LENGTH

When connecting the flue pipes, make sure not to exceed the maximum flue pipe length, recommended for the product, or the system pressure might decrease.

The flue pipe length can be calculated using the method shown below. Please refer to the tables below indicating the values in meters, applied to each of the connection components. Then compare the calculation result to the recommended maximum flue pipe length indicated in the table on previous page.

The equivalent length for pipes equipped with a measuring unit is equal to a 1 meter straight pipe

	Flue pipe length (L) (corresponding length in meters of straight pipe)			
	WaterMaster Evo			
	25 (X) - 35 - 45 (X)		25 (X) - 35 - 45 (X) - 70 (X) - 85 - 120	
	Concentric flue pipe Ø 80/125 mm (Terminal incl.)	Parallel flue pipe Ø 80 mm (Terminal incl.)	Concentric flue pipe Ø 100/150 mm (Terminal incl.)	Parallel flue pipe Ø 100 mm (Terminal incl.)
1 m straight pipe	1 m	1 m	1 m	1 m
90° elbow	2 m	2.3 m	2.2 m	3.7 m
45° elbow	1 m	1 m	1.3 m	2.3 m



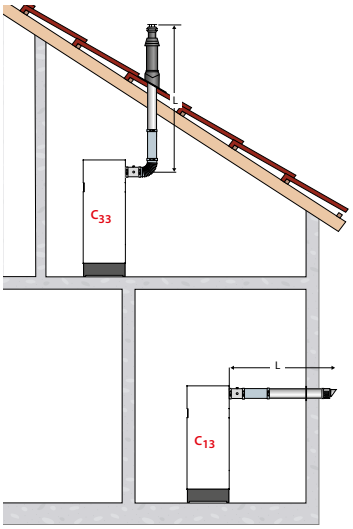
Example of verification of the flue pipe length (L) in a concentric flue pipe system for WaterMaster 35 Evo (80/125):

The figure above shows an assembly is comprised of: 1 pipe with a measurement unit + 3 x 90° elbows + 6 meters of straight pipes + 2 x 45° elbows

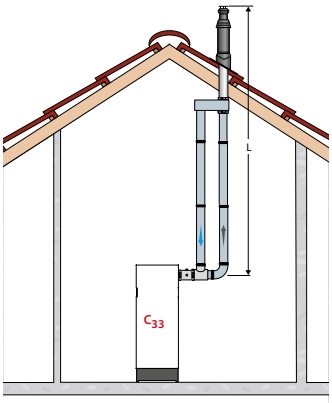
a) Using the above table, calculate the length in meters of the whole flue pipe assembly:
1 + (3 x 2) + (6 x 1) + (2 x 1) = 15 m

b) Compare the resulting value with the maximum length (39 m).

This flue pipe length is within the recommended range.

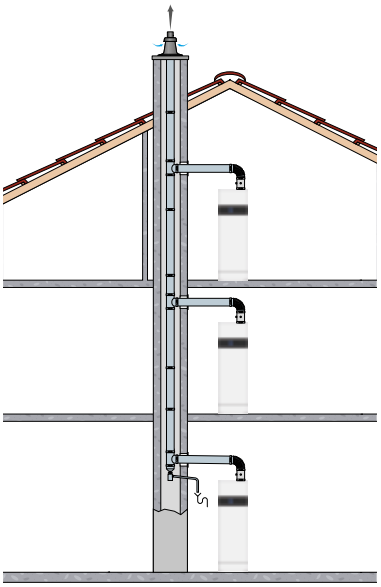


Concentric connection

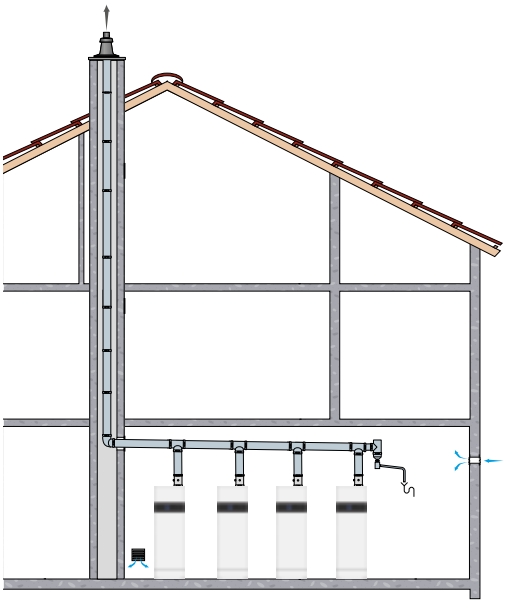


Parallel connection

CASCADE : CALCULATION OF THE MAXIMUM LENGTH OF FLUE PIPES



WaterMaster 25 (X) - 35 Evo cascade in a C43 chimney connection configuration



WaterMaster Evo cascade in a B23 chimney connection configuration

Make sure to install an external non-return valve on the flue connection and/or an approved flue cascade kit, as required. Please contact your ACV representative for the correct accessory.

Qty	WaterMaster Evo	Maximum length in M.		
		Dn 150	Dn 150/200**	Dn 200
2	25 (X) - 35 - 45 (X) - 70 (X) - 85	30	30	30
	120	—	30	30
3	25 (X) - 35 - 45 (X)	30	30	30
	70 (X)	25	30	30
	85	26	30	30
	120	—	—	—
4	25 (X) - 35 - 45 (X)	30	30	30
	70 (X)	—	30	30
	85	—	30	30
	120	—	—	—
5	25 (X) - 35 - 45 (X)	30	30	30
	70 (X)	—	30	30
	85	—	6	30
	120	—	—	—
6	25 (X) - 35	30	30	30
	45 (X)	16	30	30
	70 (X)	—	—	30
	85	—	—	13
	120	—	—	—

Elbow type	150	200
	Equivalent Length	
45° [M]	1.7m	3.8m
90° [M]	4.0m	5.8m

* This table is for systems built with appliances of identical power. For any other configuration, please contact your ACV representative.

**Dn 150/200 : Hor. = 150 mm, Vert.=200 mm

APPROVED CHIMNEY COMPONENTS

Appliance Models	Connection type	Material / Ø mm	Components *						
			Terminals	Pipes	Extensions	Bends	Measurement and condensate recovery	Accessories	Adapters
WaterMaster 25 (X) - 35 - 45 (X) Evo	C93	PP Flex Ø 80	1. Set C93 Ø 80/125	13. Flexible PP PP Ø 80, 25 m	—	—		50. Connection sheath for Ø 80/125, Ø 80 51. Connector Flex-Flex PP Ø 80	—
WaterMaster 25 (X) - 35 - 45 (X) Evo	C13 C33	PP - Galva Ø 80/125	2. Roof Terminal 3. Wall terminal kit 4. Wall terminal Kit	14. Length 250 mm 15. Length 500 mm 16. Length 1000 mm 17. Length 2000 mm	30. Sliding extension, straight + 50 to 130 mm	34. 43° - 45° 35. 87° - 90°	44. Measuring tube 45. Measuring T-piece with inspection	52. Weather Slate Steep 53. Bracket Ø 125 mm 54. Weather salte, flat roof Ø 390 mm	60. Expander SST/Alu Ø 80/125 mm - 2 x Ø 80 mm 61. Expander PP/ALU, Ø 60/100 mm - Ø 80/125 mm
WaterMaster 70 (X) - 85 - 120 Evo	C93	PP Flex Ø 100	5. Set C93 Ø 100/150	18. Flexible PP Ø 100, 25 m	—	—	—	55. Connection sheath Alu for Ø 100/150 56. Adapter Flex-Flex PP Ø 100	—

*** ACV/Groupe Atlantic references are provided in a separate crossreference table attached to this manual. Also refer to the latest ACV/Groupe Atlantic Price list for more information and the correct references.**

Appliance Models	Connection type	Material / Ø mm	Components *						
			Terminals	Pipes	Extensions	Bends	Measurement and condensate recovery	Accessories	Adapters
WaterMaster 70 (X) - 85 - 120 Evo	C13 C33	PP - Galva Ø 100/150	6. Roof terminal 7. Wall terminal kit	19. Length 250 mm 20. Length 500 mm 21. Length 1000 mm 22. Length 2000 mm	31. Sliding extension, straight + 50 to 130 mm	36.43° - 45° 37. 87° - 90°	46.Measuring tube 47.Measuring T-piece with inspection	57. Weather Slate Steep 25°-45° 58. Bracket Ø 150 mm 59. Weather Slate, Flat roof Ø 430 mm	62. Concentric to parallel Ø 100/150 mm - 2 x Ø 100 mm
WaterMaster 70 (X) - 85 - 120 Evo	B23P C53	SST Ø 150	8. Roof terminal, flue Ø 150 9. Wall terminal kit, flue, Ø 150 10. Wall terminal kit, air, Ø 100	23. Length, flue, Ø 150, 250 mm 24. Length, flue, Ø 150, 500 mm 25. Length, flue, Ø 150, 1000 mm 26. Length, air, PVC Ø 100, 500 mm	32. Sliding extension, flue, Ø 150	38.Flue, Ø 150, 45° 39.Flue, Ø 150, 90° 40.Air, Ø 100, 45° 41. Air, Ø 100, 90°	48.Element for measurement and recovery of condensates, flue, Ø 150	57. Weather Slate Steep 25°-45° 58. Bracket Ø 150 mm 59. Weather Slate, Flat roof Ø 430 mm	63. Expander Ø 100 - Ø 150 mm man-datory 62. Concentric to parallel adapter Ø 100/150 mm - 2 x Ø 100 mm 64. Adapter Ø 80 - Ø 100 mm, air
WaterMaster 70 (X) - 85 - 120 Evo	C13 C33	SST - SST Ø 100/150	11. Roof terminal 12. Wall terminal	27. Length, 250 mm 28. Length, 500 mm 29. Length, 1000 mm	33. Sliding extension 280 to 395 mm	42.43° - 45° 43.87° - 90°	49.Element for measurement and recovery of condensates, flue	57. Weather Slate Steep 25°-45° 58. Bracket Ø 150 mm 59. Weather Slate, Flat roof Ø 430 mm	62. Concentric to parallel adapter Ø 100/150 mm - 2 x Ø 100 mm

*** ACV/Groupe Atlantic references are provided in a separate crossreference table attached to this manual. Also refer to the latest ACV/Groupe Atlantic Price list for more information and the correct references.**

SAFETY INSTRUCTIONS FOR THE INSTALLATION

Essential instructions for safety

- The connections (electrical, flue pipe, hydraulic) must be carried out in accordance with local standards and regulations in force.
- Install the appliance on level base or vertically plumb support made of non-combustible materials and of sufficient strength to support its weight.
- Use extreme care not to drop the appliance or cause bodily injury while lifting or mounting the appliance onto the wall bracket or base. Once mounted, verify that the appliance is securely attached to the bracket and wall or safely set on its base.
- Do not use or store any flammable or corrosive products, such as paint, solvents, salts, chloride products and other detergent products near the appliance.
- Make sure that the condensate outlet is never obstructed and that a condensate neutralisation system is installed if required.
- Make sure that all air vents are unobstructed at all times.

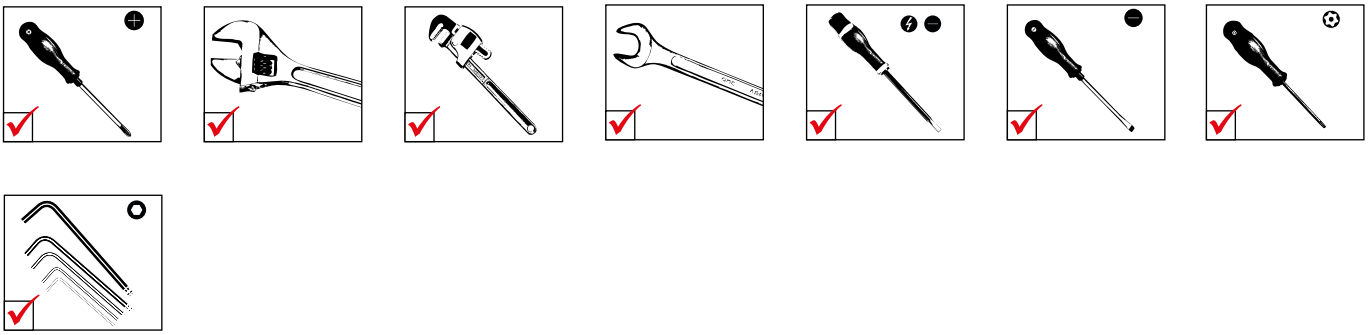
Essential instructions for the electrical safety

- Only an approved installer is authorized to carry out the electrical connections.
- Make sure that the appliance is connected to the earth.
- Install a 2-way switch and a fuse or circuit breaker of the recommended rating outside the appliance, so as to be able to shut power down when servicing the appliance or before performing any operation on it.
- Isolate the external electrical supply of the appliance before performing any operation on the electrical circuit.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless supervised or unless they have been given instruction concerning the use of the appliance by a person responsible for their safety.

Essential instructions for the correct operation of the appliance

- The appliance must be installed in a dry and protected area, with an ambient temperature comprised between 0 and 45°C.
- Install the appliance to ensure easy access at all times.
- If the appliance contains a stainless steel DHW production tank, connect it directly to the earth to prevent corrosion.
- If works need to be performed (in the boiler room or close to the air vents), make sure to turn off the appliance to prevent dust from entering and accumulating in the appliance heating system.

TOOLS REQUIRED FOR THE INSTALLATION



PACKAGE CONTENTS

At product reception and after removal of packaging, check the package contents and that the appliance is free of damages.

- WaterMaster Evo water heater
- Installation, Operation and Maintenance Instructions
- Orifice for the natural gas to propane conversion + stickers (Except in Belgium)
- Ball condensate trap to be installed.
- A primary safety valve Ø 1/2" (F) to be installed

HANDLING INSTRUCTIONS

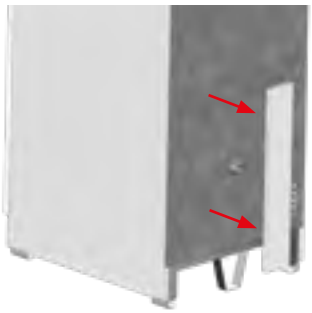
- The appliance weighs more than 180 kg, which could present a risk of injury. Ask for help to handle it and use an appropriate lifting means.
- If using a pallet truck to transport the appliance, remove the bottom front panel (see ML booklet for instructions).
- Bring the appliance as close as possible to the installation location before removing the packaging.
- If necessary and to make transport easier, the appliance casing can be removed for transportation to the final installation location. Refer to ML booklet for the correct procedure.
- Before removing the packaging, ensure that the installation area is clear and that there are no obstacles making the handling and installation difficult or unsafe.

REMOVING THE PACKAGING

1. Remove the plastic wrapping.
2. Remove the protection pieces and discard in accordance with applicable local regulations.

APPLIANCE PREPARATION

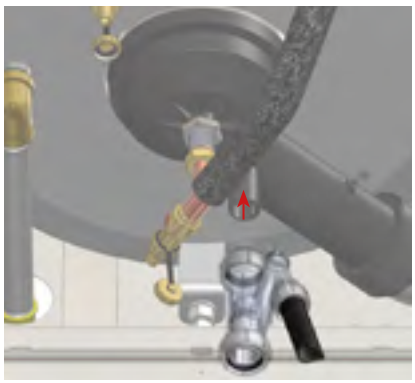
- Remove the bottom panel stored at the back of the appliance for transport. Install on the appliance when it is in its final position. Refer to the ML Booklet for the correct installation procedure.



- Perform the gas conversion to propane as required. Refer to *"Conversion to Propane" on page 32.*
- Install the **optional filling kit** (accessory). Please contact your ACV representative for more information.
- **Close the circulation tube end tap (1)** (access from the bottom of the appliance)

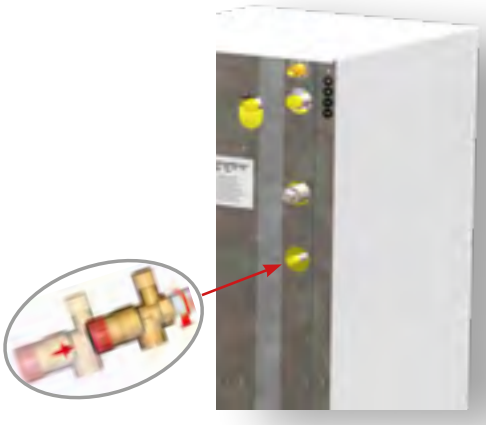
The circulation tube is equipped with an end tap that is open when the appliance is delivered (to prevent test water from being stuck in the circuit and freezing during transport). Make sure that you close the tap before filling the system with water.

- **Install the ball condensate trap**, then the bottom front panel (to be clipped in)



Fit the condensate trap, complete with the ball, making sure to install the items in the correct sequence and connect the hose to the drain using a connection that can be inspected. Fill the trap with clean water. Make sure to prevent the condensates from freezing. Refer to the procedure provided with the condensate trap, or get it from www.acv.com (See *page 4* for an access with QR code)

- **Install the safety valve kit :** primary circuit safety valve at the back of the appliance



SAFETY INSTRUCTIONS - HYDRAULIC CIRCUITS

Essential instructions for safety

- If the appliance is not equipped with one, the heating circuit of the system must be fitted with an approved safety pressure relief valve, according to the pressure mentioned on the type plate.
- Please refer to the applicable local regulations for the installation of the required safety accessories in the hydraulic circuits. Please contact your ACV representative for more information.
- Use a two-wrench method when tightening field piping onto the appliance piping connections. Use one wrench to prevent the appliance connections from turning and the second to tighten field piping. Failure to support the appliance piping connections could damage piping or cause a leak.
- In the event of small amounts of hot water repeatedly being drawn off, a stratification effect can develop in the tank. The upper hot water layer may then reach very high temperatures.
- Hot water can cause scalding! The temperature of the domestic hot water can be adjusted up to 75 °C in the appliance. However, the temperature of the domestic hot water at the drawing off point must comply with local regulations.
- ACV recommends therefore the installation of a pre-set thermostatic mixing valve in order to provide hot water at a maximum of 60°C.
- The risk of developing bacteria exists, including “Legionella pneumophila”, if a minimum temperature of 60°C is not maintained in both the DHW tank and the hot water distribution network.
- In order to avoid exposure to extremely hot water that can cause serious burns, never leave children, old people, disabled or handicapped people in the bath or shower alone. Never allow young children to turn on the hot water or fill their own bath.

Essential instructions for the correct operation of the appliance

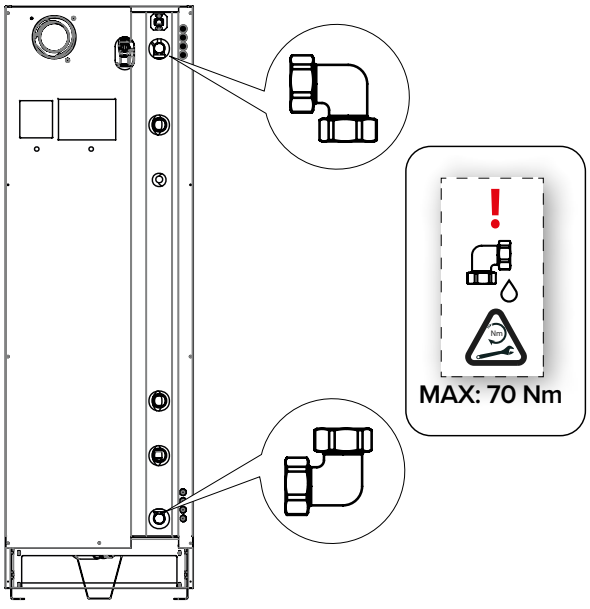
- Make sure that the mains water used to fill the appliance has a minimum pressure of 0.12 MPa (1.2 bar).
- Make sure to install a pressure reducing valve set at 0.45 MPa (4.5 bar) if the mains supply pressure is in excess of 0.6 MPa (6 bar).
- Flush the system before connecting the domestic hot water circuit. Refer to the installation instructions.
- If the appliance is not equipped with one, make sure to install an expansion vessel in the primary circuit, which is adapted to the appliance power/size and the type of system.
- It is recommended to install an expansion vessel in the DHW circuit to prevent the safety valve from opening constantly and reduce the water hammer effect in the system.
- If the appliance is used as a domestic hot water preparation tank, a primary expansion vessel adapted to the boiler power/size and to the type of system must be fitted in the heating circuit (if there is no built-in expansion vessel, or if the built-in expansion vessel size is not sufficient).

General remark

- If the water drawing off point is far from the tank, installing an auxiliary DHW loop can allow to get hot water more quickly at all times.
- The circuit illustrations are basic principle diagrams only.

General remark

At installation of domestic piping, ensure that the appliance connection elbow is correctly tightened before installing the pipes. Retighten as required.



G3 REQUIREMENTS AND GUIDANCE - UK ONLY

In the UK, for installation of Evo model appliances directly onto the mains supply of water, ACV offer bespoke unvented kits which have been sized to the requirements of each individual appliance, and contain all of the mandatory components you need to comply with Building Regulations.

Unvented kits provided for ACV Evo models include:

- **a 25L expansion vessel & mounting bracket,**
- **a 28mm combined pressure reducing valve (0.35 MPa [3.5 bar]) & expansion relief valve (0.6 MPa [6 bar]),**
- **a tundish,**
- **a flexi hose.**

Discharge pipe from safety valves

The *Building Regulation G3* requires that any discharge from an unvented system is conveyed to where it is visible, but will not cause danger to persons in or about the building.

The tundish and discharge pipes should be fitted in accordance with the requirements and guidance notes of Building Regulation G3.

For discharge pipe arrangements not covered by G3 Guidance advice should be sought from your local Building Control Officer.

Main characteristics :

- Any discharge pipe connected to the pressure relief devices (Expansion Valve and Temperature/Pressure Relief Valve) must be installed in a continuously downward direction and in a frost free environment.
- Water may drip from the discharge pipe of the pressure relief device.
- This pipe must be left open to the atmosphere.
- The pressure relief device is to be operated regularly to remove lime deposits and to verify that it is not blocked.

Essential instructions for safety

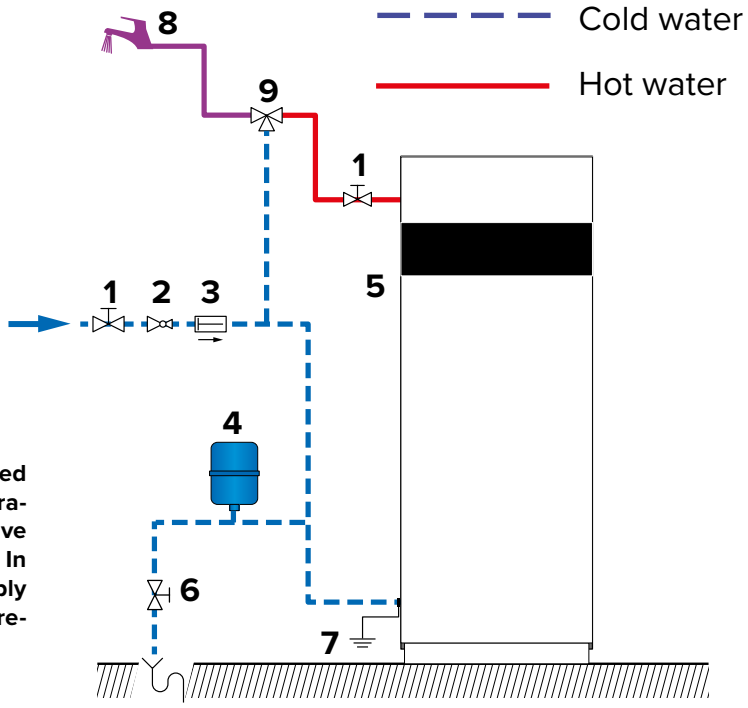
- **The temperature/pressure relief valve should only be replaced by a competent person.**
- **No control or safety valves should be tampered with or used for any other purpose.**
- **The discharge pipe should not be blocked or used for any other purpose.**
- **The tundish should not be located adjacent to any electrical components.**

CONNECTION OF THE DHW CIRCUIT

Description

1. Isolating valve
2. Pressure reducing valve
3. Check valve
4. DHW expansion vessel
5. Safety valve (internal)
6. Drain valve
7. Grounding
8. Draw-off tap
9. Thermostatic mixing valve

* **This appliance is equipped from factory with a Temperature and Pressure safety valve installed on the DHW circuit. In the UK, make sure to comply with G3 requirements. Also refer to information above.**



Applications with Water Hammer Effect (e.g. car wash)

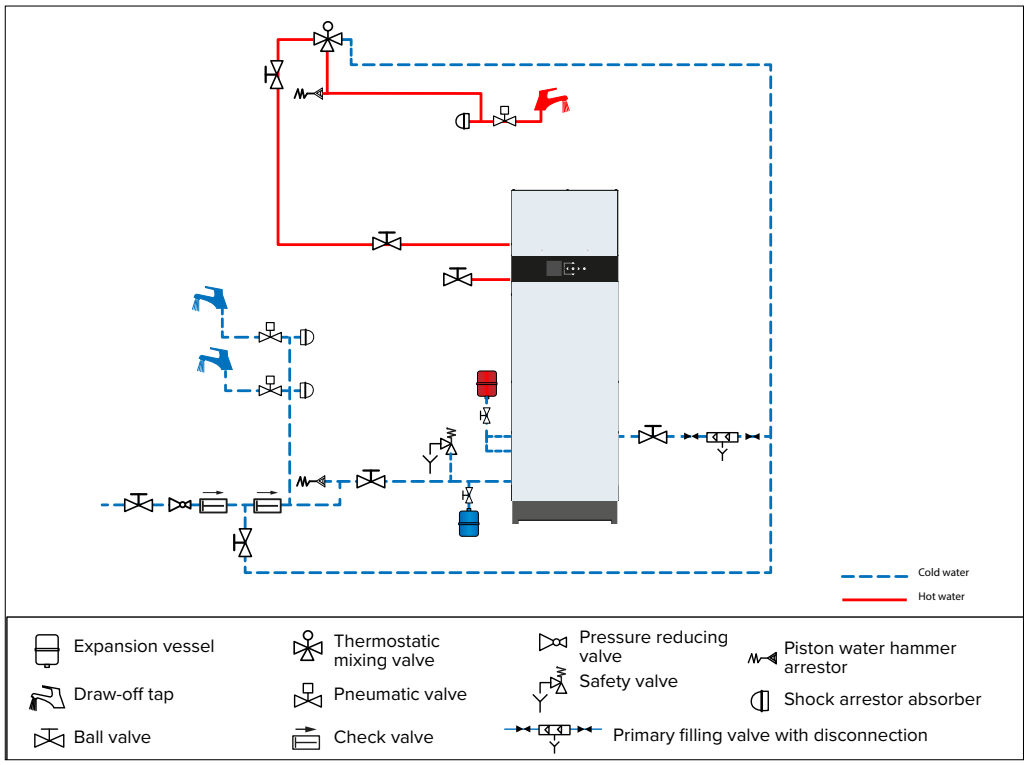
When the appliance is used in applications where water hammer effect can be severe due to the frequent and sudden opening/closing of valves, (e.g. car wash systems, etc.), devices should be installed in the system to counter this effect and prevent damage from occurring to the piping/appliance.

The water hammer effect is caused by shock waves running through the system when the flow rate is changed suddenly (e.g. when a valve is closed/opened suddenly). This induces a surge/sudden fall in pressure, which creates noise and sometimes movement in the system piping.

The pressure wave created in these circumstances can be up to three times greater than the standing system pressure. This can damage the piping and the appliance.

It is therefore strongly recommended to install shock arrestor absorber and/or water hammer arrestor devices in the hydraulic system.

To determine the correct devices to be installed in the system for your application type and size, please contact your ACV representative.

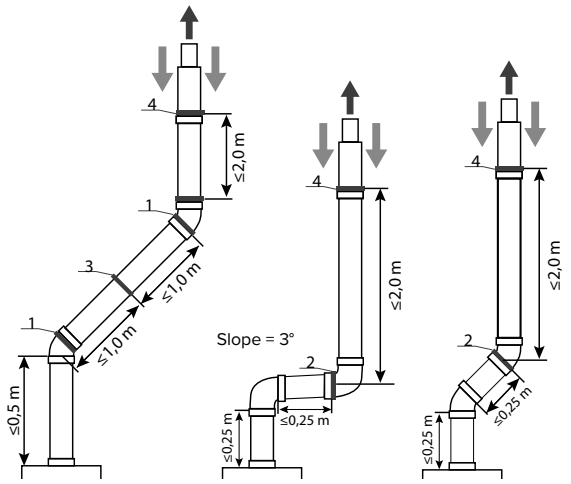


ACV/Groupe Atlantic shall not be liable for any special, indirect, incidental or consequential damages if the recommendations herein are not complied with at installation of the appliance in such systems.

GENERAL RECOMMENDATIONS AND SAFETY INSTRUCTIONS FOR THE CHIMNEY CONNECTION

Essential instructions for safety

- Do not install the boiler into a common flue piping with any other gas or oil appliances. This will cause flue gas spillage or appliance malfunction.
- Verify installed combustion air and flue piping are sealed gas tight and meet all provided instructions and applicable codes and standards.
- Failure to properly support the flue system can cause the flue system to fail, resulting in substantial property damage, serious injury, or death.
- A byproduct of any gas/oil fired appliance is carbon monoxide. Failure to install carbon monoxide detectors with alarms can result in serious injury, or death. Refer to applicable local regulations.



1. Each elbow and straight element will be secured at the sleeve.
2. In case the straight element before or after the first elbow is shorter than 25 cm, secure the straight element after the elbow using a bracket.
3. In case a straight (horizontal or sloped) element is longer than 1 m, support the element in its center using a clamp, making sure to allow free movement of the pipe.
4. Secure with a clamp every 2 meters in vertical piping/1 meter in horizontal/sloped piping, making sure to distribute the clamps evenly on the length of piping.

Essential instructions for the correct operation of the appliance

- A condensation outlet connected to the sewer must be fitted close to the boiler to prevent the condensation products from the flue pipe from running into the boiler.
- Install a condensate neutralisation system if required by national and/or local regulations and have it cleaned regularly.
- Only use flue system components from the same manufacturer to connect this appliance and ensure that the pipe and connection diameters all match.
- Make sure to secure the flue piping to a solid structure.
- Exclusively use provided brackets to support the flue system.
- Install the horizontal flue pipes with a slight slope of 5 cm per meter (3°), so that the acid condensation water flows to a condensate recovery container and does not damage the heating body.
- If the appliance is provided with a condensate drain assembly, make sure to install the complete assembly on the boiler. If the assembly is incomplete, replace the entire assembly.
- Make sure that the condensate drain assembly is filled with water before starting up the boiler and check regularly the water level. Fill with water as necessary.
- It is mandatory to ventilate the boiler room. The high or low air vent opening dimensions depend on the boiler power and the boiler room size. Refer to the local regulations in force.
- If the combustion air inlet is located in an area likely to cause or contain contamination, or if products which could contaminate the air cannot be removed, the combustion air must be repiped and terminated at another location.
- Pool, laundry, common household, and hobby products often contain fluorine or chlorine compounds, which can form strong acids and corrode the internal components and flue system.
- In the case of parallel flue systems, make sure to maintain sufficient distance (at least 40 mm) between the boiler flue piping and combustible materials, and between the flue pipe and air inlet pipe if the latter is made of plastic material.
- Do not use screws to fasten together any flue pipe elements or any PP air inlet elements.
- Do not bond piping elements together using glue (e.g. silicone) or foam (e.g. PUR).

General remark

- For safety reasons and to make assembly easier, it is recommended to prefer the use of concentric flue pipes when possible.
- It is recommended to isolate the flue piping in damp rooms to prevent condensation water from forming on the piping and drip.
- When cutting the pipes to dimension, make sure to cut squarely and deburr the edges to prevent seals from being incorrect or damaged.
- To make piping assembly easier, exclusively use a mixture of water and soap (1%) on the extremity of the pipe to be fit in.
- When fitting metal flue pipes, make sure to always fit the pipe into the sleeve to the end stop.
- When fitting plastic flue pipes, make sure to allow material expansion by leaving about 10 mm between the pipe end and the sleeve end stop.
- Make sure to install the piping without any strain.
- Make sure to install an inspection opening in the flue system.
- When connecting the flue pipes, make sure not to exceed the maximum length recommended for the product, otherwise the system power might decrease.
- ACV-approved components will be used for the chimney connection. Failure to do so will make any warranty claim void.
- For C63 connection type (not allowed in Belgium), make sure to use the correct piping material according to the resistance to temperature, pressure, chemical composition of flue, condensation and soot. A code (as explained in EN 1443), marked on the pipe, allows to determine if the material complies with the flue system requirements.

Perform Chimney installation according to the data available in section *"Chimney Characteristics" on page 19*

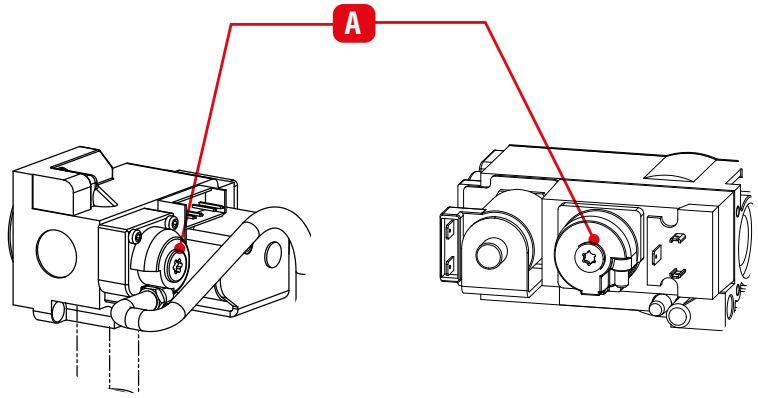
GENERAL RECOMMENDATIONS AND SAFETY INSTRUCTIONS FOR THE GAS CONNECTION

Essential recommendations for safety

- The gas connection must comply with all applicable local standards and regulations, and the circuit will be equipped with a gas pressure regulator as required.
- Do not check for gas leaks with an open flame. Use a gas detection device or bubble test.
- The gas burners are factory preset for use with natural gas [equivalent to G20]. Do not adjust or attempt to measure gas valve outlet pressure. The gas valve is factory-set for the correct outlet pressure and requires no field adjustment.
- The natural gas to propane conversion or the reverse is not authorized in certain countries such as Belgium. Refer to the table of gas categories in the technical characteristics of this manual.
- In Belgium, a conversion kit is available as a separate accessory and the conversion process must be carried out by Groupe Atlantic Belgium. Please contact Groupe Atlantic Belgium for gas conversion.
- The gas orifice installed on the boiler must never be modified or replaced with a different size orifice, except in the case of a gas conversion process, which shall be performed by a qualified professional according to the provided procedure
- The CO_2, gas flow rate, air flow rate and air/gas supply parameters are factory-preset and may not be modified in Belgium, except for type I 2E(R) boilers.
- Do not change the OFFSET (A) setting of the gas valve: it is factory-preset and sealed.

Essential recommendations for the correct operation of the appliance

- Refer to the technical characteristics of this manual or to the burner documentation to know the connection diameters.
- Bleed the gas duct and check thoroughly if all the boiler tubes, both internal and external, are tight.
- Check that the gas type and pressure from the distribution network are compatible with the appliance settings. Refer to the product type plate.
- Check the boiler electrical connection, the boiler room air vent system, the tightness of flue gas outlet pipes and of the burner chamber plate.
- Control the gas pressure and consumption at appliance start up.
- Check the boiler CO_2 adjustment (refer to the adjustment procedure and the technical data).



WaterMaster®
25 (X) - 35 - 45 (X) - 70 (X) - 85 Evo

WaterMaster® 120 Evo

CONVERSION TO PROPANE

General remark

According to the indication on the type plate, the appliance is factory preset to operate with natural gas (G20/G25). Converting the appliance to propane is done through the installation of an orifice and adjustments, carried our by a professional. In Belgium, this conversion procedure can only be carried out by Groupe Atlantic Belgium personnel. Please contact Groupe Atlantic Belgium for further information.

Set-up conditions

- External power supply isolated
- Gas supply closed
- Upper front panel and top cover of the appliance open, refer to **ML booklet**.

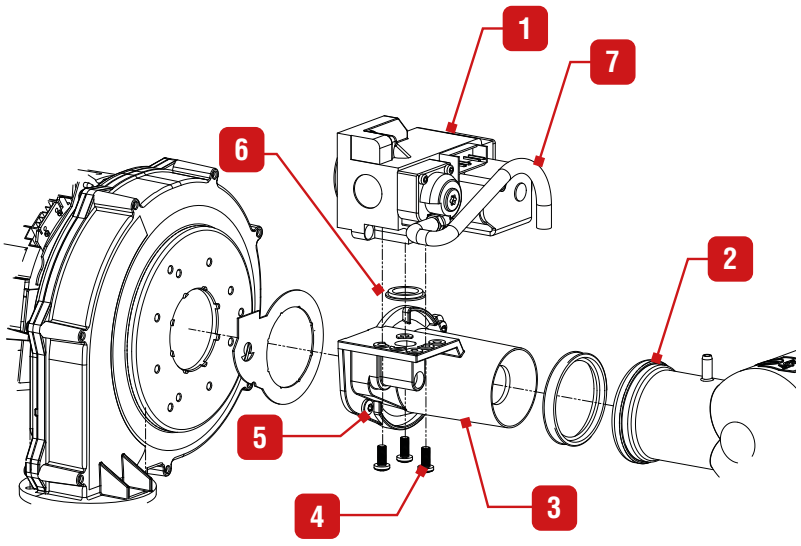
Evo Models	Gas nat. orifice dia. (mm)	Propane orifice dia. (mm)
25 - 35 kW	—	5.2
45 kW	—	6.0
70 - 85 kW	—	6.8

Procedure of orifice installation (25 to 85 kW models)

1. Release the gas pipe.
2. Remove the power supply plug from the gas valve (**1**).
3. Disconnect the compensation hose (**7**) from the gas valve and air inlet. Retain for reinstallation.
4. Disconnect the air inlet (**2**) from the venturi (**3**).
5. Remove the gas valve/venturi assembly from the fan by releasing two screws (**5**). Retain the screws for re-installation.
6. Remove the gas valve (**1**) from the venturi (**3**) by releasing three screws (**4**). Retain the screws for reinstallation.
7. Install the orifice in the center of the O-ring (**6**).

Make sure you position the O-ring correctly.

8. Reassemble the gas valve/venturi assembly, following the same procedure in reverse order, and torque the three gas valve screws (**4**) and the 2 venturi screws (**5**) at 3.5 to 4 Nm.
9. Reinstall the air inlet (**2**).
10. Reconnect the compensation hose (**7**) to the gas valve and air inlet.
11. Reconnect the gas pipe connection.
12. Reconnect the power supply plug(s) to the gas valve.
13. Install the conversion stickers, see next page.



WM 25 (X) - 35 - 45 (X) - 70 (X) - 85 Evo

Procedure of orifice replacement (120 kW models)

1. Release the gas pipe.
2. Remove the power supply plug(s) from the gas valve (**10**).
3. Disconnect the compensation hose (**9**) from the gas valve (**10**) and air inlet (**8**). Retain for reinstallation.
1. Disconnect air inlet pipe (**8**) from bracket (**3**).
2. Release two screws (**7**) securing the air inlet bracket (**3**) to the venturi (**6**) and fan (**5**).
3. Release four screws to disconnect the gas pipe flange (**11**) from the gas valve (**10**). Retain hardware and O-ring for reinstallation.
4. Release one remaining screw from venturi (**6**) and remove gas valve assembly (gas valve, elbow and venturi) from fan (**5**). Retain hardware and O-ring for reinstallation.
5. Release four screws (**4**) to disconnect the elbow flange (**1**) from the venturi (**6**). Retain for reinstallation.
6. Replace the orifice (**2**) with the new one in the center of the O-ring.

☞ **Make sure you position the orifice correctly (shouldered face turned towards the venturi, flat face turned towards the gas valve).**

7. Maintaining the O-ring and orifice in position in the venturi (**6**), install the elbow flange (**1**) on the venturi (**6**) using four retained screws (**4**). Torque at 3.5 to 4 Nm.
8. Install gas valve assembly on fan (**5**) with O-ring, using one retained screw.
9. Install gas pipe flange (**11**) on gas valve (**10**) using four retained screws. Torque at 3.5 to 4 Nm.
10. Install air inlet bracket (**3**) on venturi (**6**) using two retained screws (**7**).
11. Torque the three screws maintaining the venturi to the fan at 3.5 to 4 Nm.
12. Install air inlet (**8**) on bracket (**3**).
13. Reconnect compensation hose (**9**) to gas valve and air inlet (**8**).
14. Reconnect the gas pipe connection.
15. Reconnect the power supply plug(s) to the gas valve.

Sticker Placement

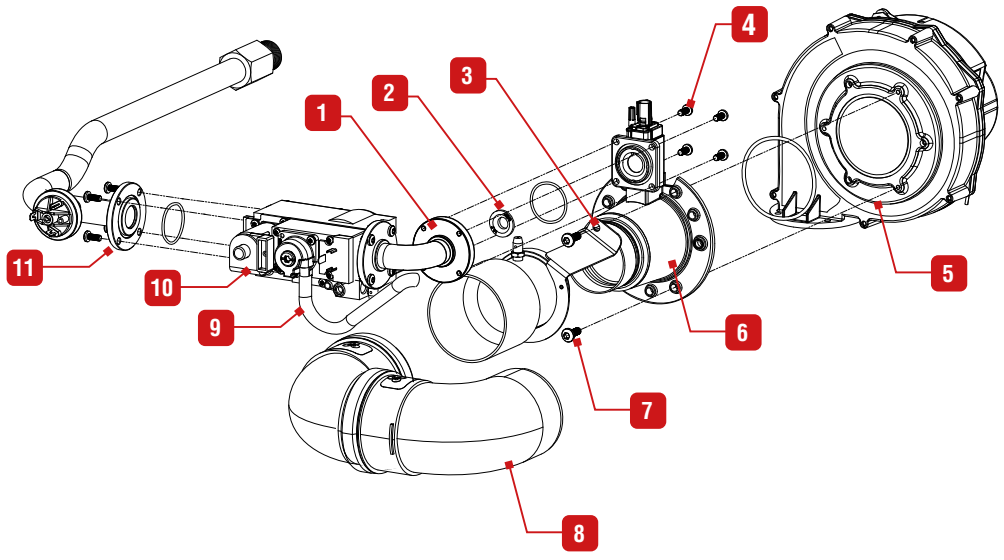
☞ **Make sure to place the stickers as requested. Failure to comply can cause injuries or damage to the equipment.**

- Stick the yellow sticker at the back of the appliance and check the box to indicate the type of gas now used with the appliance.
- Stick the provided G31 data plate on the existing data plate (back of the appliance), or the corrective stickers (Belgium only).

Follow-on tasks

1. Start the appliance. Refer to *"Starting up the Appliance" on page 36*.
2. Change the appliance code through the Installer menu, refer to the “Installer’s handbook”
3. Carry out the CO_2 adjustment, See *"Checking and Adjusting the Burner" on page 36.*
4. Reseal the offset and the throttle on the gas valve, as required.
5. Close all open panels, see the ***ML Booklet.***

Evo Models	Gas nat. orifice dia. (mm)	Propane orifice dia. (mm)
120 kW	10.7	7.8



WM 120 Evo

SAFETY INSTRUCTIONS FOR STARTING UP

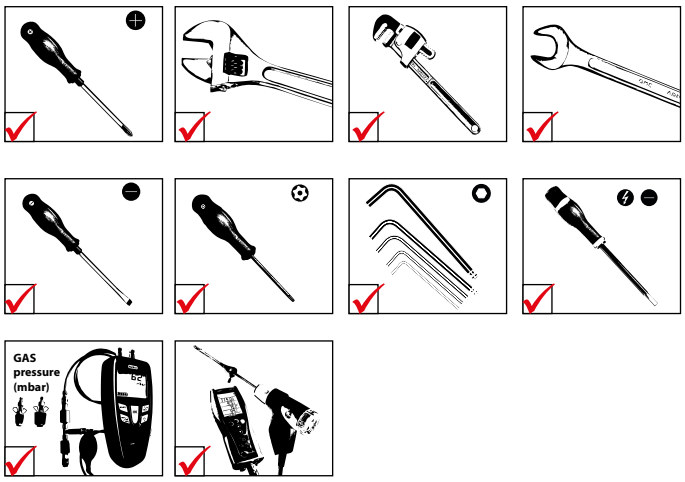
Essential instructions for safety

- The components inside the control panel may only be accessed by an approved installer.
- Set the water temperature in accordance with usage and local plumbing codes.
- Make sure that the heating circuit filling valve is closed once the starting up process is complete.
- If there is a drain assembly, make sure that the condensate drain assembly is filled with water before starting up the boiler. Fill with water as necessary.
- Make sure that all connections are made and tight.

General remark

In normal operation, the burner starts automatically as soon as the boiler temperature drops below the preset temperature.

TOOLS REQUIRED FOR STARTING UP



CHECKS BEFORE STARTING UP

Essential recommendation for safety

- Check the tightness of the flue pipe connections.

Essential recommendation for the correct operation of the appliance

- Control the tightness of the hydraulic circuit connections.

FILLING THE SYSTEM

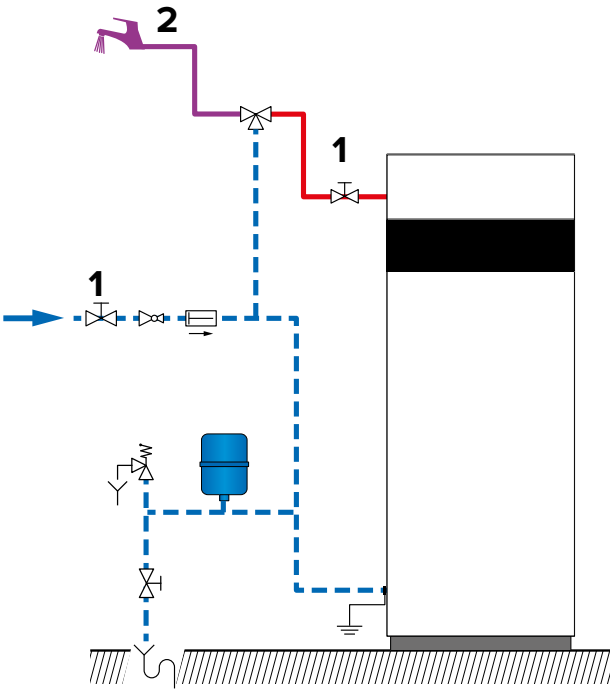
Put the DHW tank under pressure before pressurizing the heating (primary) circuit.

Set-up conditions

- External power supply isolated

DHW circuit filling procedure

1. Open the isolating valves (**1**) and the draw-off tap (**2**).
2. Once the water flow rate has stabilized and the air is totally evacuated from the system, close the draw-off tap (**2**).
3. Check all the connections for leaks.



Cold water

Hot water

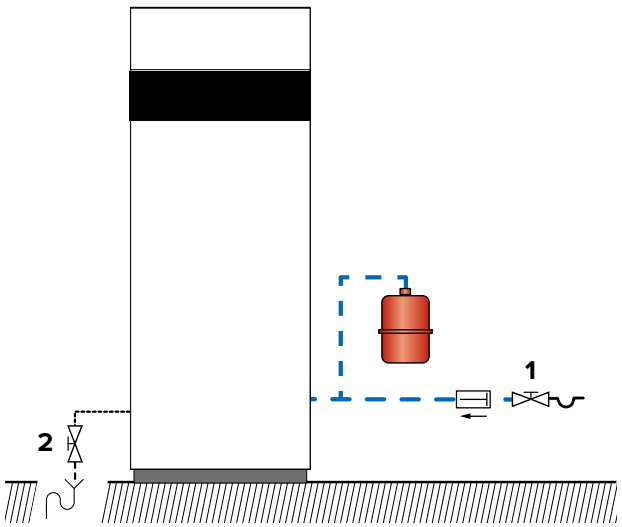
Primary circuit filling procedure

1. Make sure that the drain valve (**2**) is tightly closed.
2. Open the isolating/filling valve (**1**).
3. Once the system is bled from air, bring the pressure to the static pressure between 0.15 MPa (1.5 bar) and 0.2 MPa (2 bar).
4. Close the isolating/filling valve (**1**).
5. Disconnect filling device from water supply.*

Follow-on tasks

1. Check there is no leak.

The drain valve is located underneath and the front cover of the base needs to be removed to get access to it.



* UK specific reference G24.1 & G24.2 of the Water Regulations Guide.

STARTING UP THE APPLIANCE

Set-up conditions

- All connections made
- Gas conversion carried out as required
- Condensate trap full of water
- Electrical power supply on
- Gas supply open
- Hydraulic circuit(s) full of water

Procedure

1. Check that there is no gas leak.
2. Depress the ON/OFF master switch (⏻).
3. Check the gas pressure and allow the appliance to heat up for a few minutes
4. Check and adjust the burner according to local standards and regulations, refer to the procedure on the right.
5. Set the Domestic Hot Water temperature to the required value using the control panel. Refer to ***"Controller Set-up Guide" on page 9*** and to the Installer's Handbook.
6. After 5 minutes of operation, bleed the primary circuit until all air is evacuated and restore a 0.15 MPa (1.5 bar) pressure.
7. If required, top it up with water to get the required pressure.

Follow-on tasks

1. Close the primary circuit filling valve and disconnect the filling connection as required.
2. Check that there are no leaks.
3. Check that the flow rate in the appliance is sufficient as follows :
   - Operate the appliance at maximum power
   - Once the temperatures are stable, read out the supply and return temperatures
   - Check that the difference between the supply and return temperature is equal or less than 20k.
   - If the Delta T is higher than 20k, check the pump settings/specifications.

CHECKING AND ADJUSTING THE BURNER

When the burner operates at full power, the CO_2 rate must be within the limits mentioned in the technical characteristics, (see *"Combustion characteristics" on page 13*).

Set-up conditions

- Front top panel and top panel removed. See ML Booklet.
- Operating appliance

Procedure

1. Check if the ACVMAX parameters are set to meet the user's requirements (refer to ***"Controller Set-up Guide" on page 9***), and change them if required.
2. Put the appliance to maximum power mode (Refer to the Installer's Handbook).
3. Using a pressure tester, check that the dynamic gas pressure at the gas valve is at least 18 mbar.
4. Allow the appliance to heat for a few minutes until it reaches at least 60°C.
5. Measure the burner combustion by placing the flue gas analyzer probe in the measurement unit port on the flue pipe and compare the CO and CO_2 values displayed with those indicated in the combustion characteristics table.
6. If the CO_2 value differs by more than 0.3% (WM 25 (X) to 85 Evo) or 0.2% (WM 120 Evo), carry out the adjustment mentioned in the procedure below.
7. Then put the appliance to the minimum power mode (Refer to the Installer's Handbook). Allow the appliance to stabilize for a few minutes.
8. Measure the burner combustion and compare the CO and CO_2 values displayed with those indicated in the combustion characteristics table.
9. If the CO_2 value differs by more than 0.3% (WM 25 (X) to 85 Evo) or 0.2% (WM 120 Evo), contact ACV's customer's support.

CO_2 Adjustment Procedure

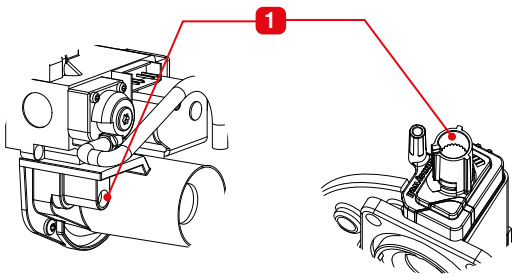
To adjust the CO_2 rate, rotate the throttle screw (**1**) in small steps :

on the WM 25 (X) to 85 :

- to the left (counterclockwise) **to increase the** CO_2 rate.
- to the right (clockwise) **to decrease the** CO_2 rate.

On the WM 120 :

- to the right (clockwise) **to increase the** CO_2 rate.
- to the left (counterclockwise) **to decrease the** CO_2 rate.



WaterMaster®
25 (X) - 35 - 45 (X) - 70 (X) - 85 Evo

WaterMaster®
120 Evo

Follow-on tasks

Reinstall all removed access panels. See *ML booklet*

SAFETY INSTRUCTIONS FOR MAINTENANCE

Essential instructions for the electrical safety

- Before opening the boiler for maintenance, turn off the boiler by pushing on the ON/OFF master switch.
- Isolate the external power supply of the appliance before performing any operation, unless it is required to take measurements or perform system setup.

Essential instructions for safety

- Water flowing out of the drain valve may be extremely hot and could cause severe scalding.
- Do not use solvents to clean any of the burner components. The components could be damaged, resulting in unreliable or unsafe operation.
- Check the tightness of the flue pipe connections.

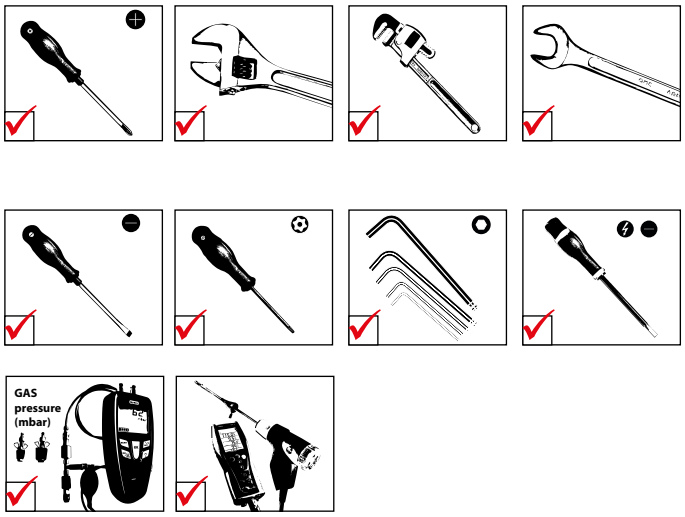
Essential instructions for the correct operation of the appliance

- It is recommended to have the boiler and the burner serviced at least once a year or every 1,500 hours by a qualified technician, preferably at the start of the heating season. More frequent servicing may be required depending on boiler use. Please consult your installer for advice.
- The boiler and burner maintenance will be carried out by a qualified engineer, and the defective parts may only be replaced by genuine factory parts.
- Make sure to replace any gaskets or seals on the removed components before reinstalling them.
- To ensure maximum efficiency and reliability of the unit, it is recommended that the end-user perform the periodic checks mentioned in the Safety section of this manual.
- Control the tightness of the hydraulic circuit connections.
- Make sure to apply the correct torque value when tightening components, according to the table below.

TORQUE VALUES

	Tightening torque (Nm)	
Description	Min.	Max
Burner flange screws	5	6
Electrode screws	3	3.5
Venturi screws	3.5	4
Gas valve screws	3.5	4

TOOLS REQUIRED FOR MAINTENANCE



APPLIANCE SHUT DOWN FOR MAINTENANCE

1. Switch the appliance off using the ON/OFF master switch and isolate the external power supply.
2. Close the gas supply valve of the appliance.

PERIODIC APPLIANCE MAINTENANCE TASKS

	Tasks	Frequency		
		Periodic inspection	1 year	2 years
		End-user	Professional	
1.	Make sure that the system water pressure is at least 0.1 MPa (1 bar) when cold. Top up the system if necessary, adding small quantities of water at a time. In case of repeated fills, call your installer.	X	X	
2.	Check that there is no water on the floor under the appliance. Call your installer if there is.	X	X	
3.	Check that no error code is displayed on the control panel. Call your installer if necessary.	X	X	
4.	Check that all gas, hydraulic and electrical connections are correctly fastened and tight.		X	
5.	Check the flue gas exhaust: correct fastening, correct installation, no leaks or clogging.		X	
6.	Check that there is no discoloured or cracked area on the burner chamber plate .		X	
7.	Check the combustion parameters (CO and CO_2), see *"Checking and Adjusting the Burner" on page 36*.		X	
8.	Check visually the heating body: no evidence of corrosion, soot deposits or damages. Carry out all required cleaning tasks, repairs and replacements that might be required.		X	
9.	Check the electrode, see *"Removal, Check and Installation of the Burner Electrode" on page 40*.			X
10.	Remove the burner and clean the exchanger, see *"Removal and Installation of the Burner - WM 25 (X) to 85 Evo" on page 41* or *or "Removal and Installation of the Burner - WM 120 Evo" on page 42* and *"Cleaning the Exchanger" on page 43*.			X
11.	Check that the condensate trap is not clogged. If it is, remove it, clean it, and reinstall it i.a.w. *"appliance Preparation" on page 26*.		X	
12.	If a condensate neutralisation system is installed, check it and have it cleaned.	X	X	

DRAINING THE APPLIANCE

Essential recommendations for safety

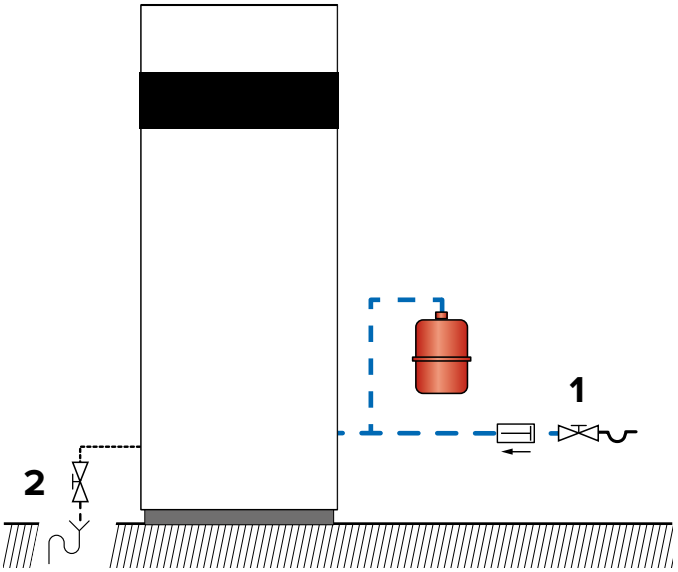
- Before draining the DHW tank, drain the primary circuit or bring its pressure to 0 MPa (0 bar).
- Water flowing out of the drain valve may be extremely hot and could cause severe scalding. Keep people away from the hot water discharge.

Set-up conditions

- Water heater switched off using the ON/OFF master switch
- External power supply isolated
- Gas supply closed

Primary circuit draining procedure

1. Make sure the isolating valve (**1**) is closed.
2. Connect the drain valve (**2**) to the sewer with a hose.
3. Open the drain valve (**2**) to empty the primary circuit of the water heater.
4. Close the drain valve (**2**) once the primary circuit of the water heater is empty.

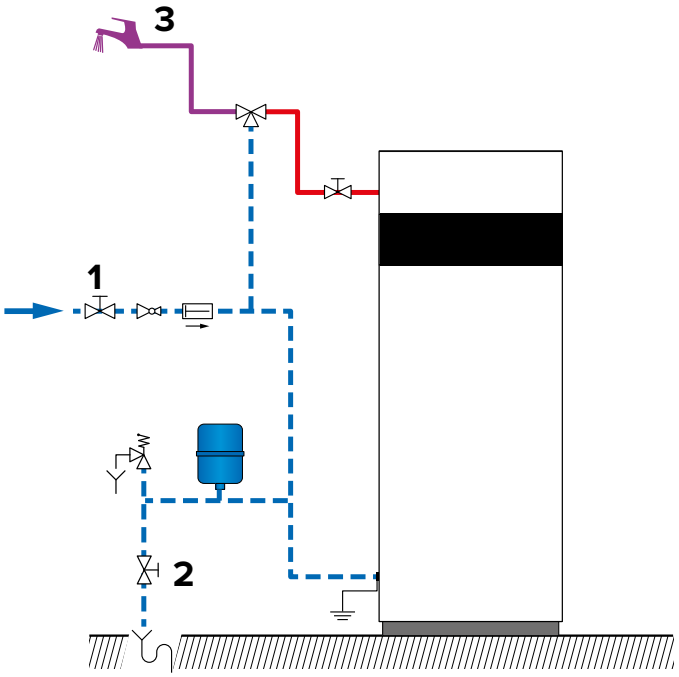


The drain valve is located underneath and the front cover of the base needs to be removed to get access to it.

DHW circuit draining procedure

Before draining the DHW tank, make sure that the heating (primary) circuit pressure is null.

1. Open fully a draw-off tap (**3**) for about 60 minutes to make sure that the DHW tank has cooled down.
2. Close the isolating valves (**1**).
3. Connect the drain valve (**2**) to the sewer with a hose.
4. Open the drain valve (**2**) and drain the DHW tank water to the sewer.
5. Open the draw-off tap (**3**) to accelerate the draining process. If it is located lower than the tank connection, open a draw-off tap located higher in the system.
6. Close the drain valve (**2**) and the draw-off tap (**3**) once the DHW tank of the boiler is empty.



REMOVAL, CHECK AND INSTALLATION OF THE BURNER ELECTRODE

Remove the electrode to control it in case of ignition problems.

Set-up conditions

- Appliance shut down
- External power supply isolated
- Gas supply closed
- Top panel open, refer to ML booklet.

Removal procedure

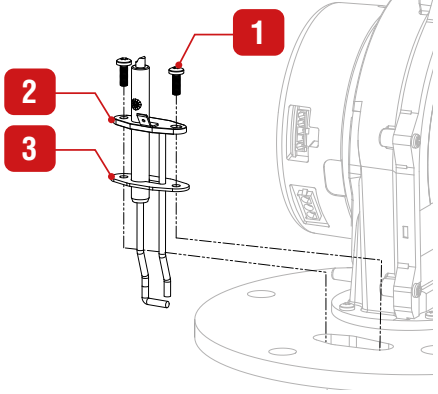
1. Disconnect the electrode grounding cable from the electrode.
2. Disconnect the electrode ignition cable from the electrical box.
3. Remove two mounting screws (**1**) and retain them for reinstallation.
4. Remove the electrode (**2**) and the gasket (**3**).
5. Check the correct alignment of the electrode ends and that the gap corresponds to the values indicated on the figure below.
6. If the electrode is in bad condition, replace it.

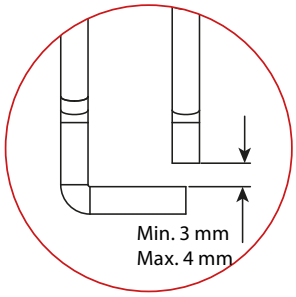
Installation procedure

1. Install a new gasket (**3**).
2. Install the electrode (**2**) using the two screws (**1**), torque i.a.w. *"Torque Values" on page 37*.

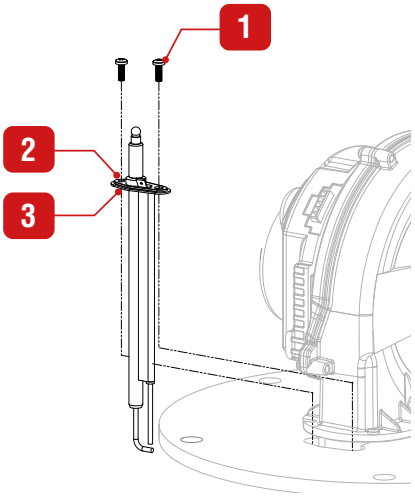
Follow-on tasks

1. Reconnect the grounding cable to the electrode.
2. Reconnect the ignition cable to the electrical box.

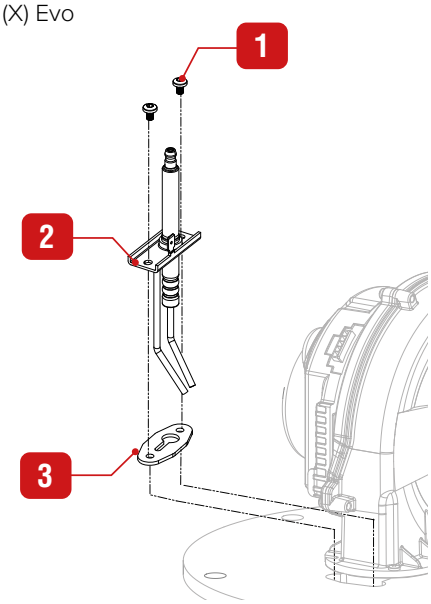


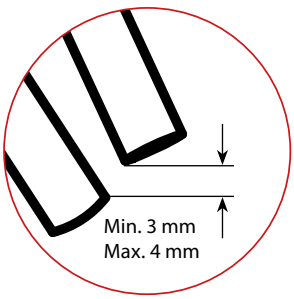


WaterMaster® 25 (X) - 35 - 45 (X) Evo



WaterMaster® 70 (X) - 85 Evo





WaterMaster® 120 Evo

REMOVAL AND INSTALLATION OF THE BURNER - WM 25 (X) TO 85 EVO

Set-up conditions

- Appliance shut down
- External power supply isolated
- Gas supply closed
- Front and top panels removed (refer to ML booklet).
- Electrode removed or electrode grounding cable and ignition cable disconnected (refer to *"Removal, Check and Installation of the Burner Electrode" on page 40*) .

Removal procedure

1. Disconnect all plugs from the fan assembly (**11**) and the gas valve (**2**) and any grounding cable, as required.
2. Disconnect the air inlet elbow (**3**).
3. Release the gas connection (**1**).
4. Using a socket wrench, release the burner hood (**8**) attaching hex. screws and retain them for reinstallation.
5. Lift the burner assembly and pull it out of the exchanger.
6. If required, clean the exchanger, see *"Cleaning the Exchanger" on page 43*.
7. If not removed previously, remove, check and reinstall the electrode, refer to *"Removal, Check and Installation of the Burner Electrode" on page 40*.

Installation procedure

1. Reinstall the burner assembly with its insulation block into the exchanger.
2. Install the retaining screws of the burner hood (**8**) and fasten them in a crosswise pattern at the required tightening torque (refer to *"Torque Values" on page 37*).
3. Reconnect the gas connection (**1**).

When connecting the air inlet, make sure that the check valve (4) is correctly located at the elbow (3) end.

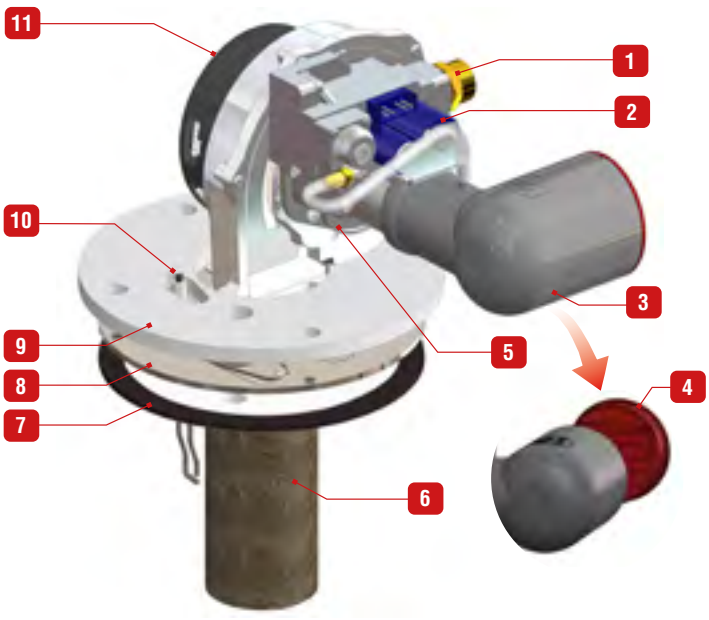
4. Reconnect the air inlet elbow (**3**).
5. Reconnect the plugs to the gas valve (**2**) and the fan assembly (**11**), and any disconnected grounding cable.

Follow-on tasks

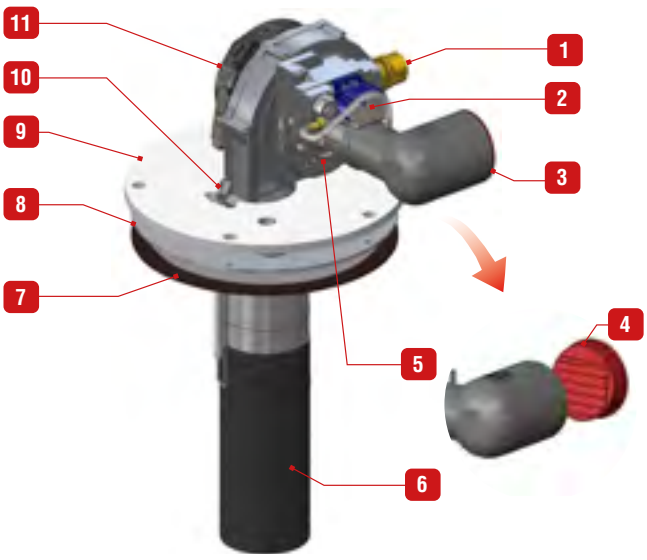
1. Install the electrode, or reconnect the electrode grounding cable and ignition cable, as required. Refer to *"Removal, Check and Installation of the Burner Electrode" on page 40*.

Detail of the burner components

1.	Gas connection
2.	Gas valve
3.	Air inlet elbow(s)
4.	Air inlet check valve
5.	Venturi
6.	Burner tube
7.	Insulation
8.	Burner hood
9.	Burner hood insulation
10.	Electrode
11.	Fan assembly



WaterMaster® 25 (X) - 35 - 45 (X) Evo



WaterMaster® 70 (X)-85 Evo

REMOVAL AND INSTALLATION OF THE BURNER - WM 120 EVO

Set-up conditions

- Appliance shut down
- External power supply isolated
- Gas supply closed
- Front and top panels removed (refer to ML booklet).
- Electrode removed (refer to *"Removal, Check and Installation of the Burner Electrode" on page 40*) .

Removal procedure

1. Disconnect all plugs from the fan assembly (**11**) and the gas valve (**2**) and any grounding cable, as required.
2. Release clamp and remove air inlet hose from elbow (**3**).
3. Disconnect the air inlet elbows (**3**) from the venturi (**5**).
4. Disconnect the gas connection (**1**) flange from the gas valve (**2**) by releasing four screws. Retain hardware for reinstallation.
5. Discard O-ring.
6. Using a socket wrench, release the burner hood (**8**) attaching hex. screws and retain them for reinstallation.
7. Lift the burner assembly and pull it out of the exchanger with its insulation.
8. If required, clean the exchanger, see *"Cleaning the Exchanger" on page 43*.

Installation procedure

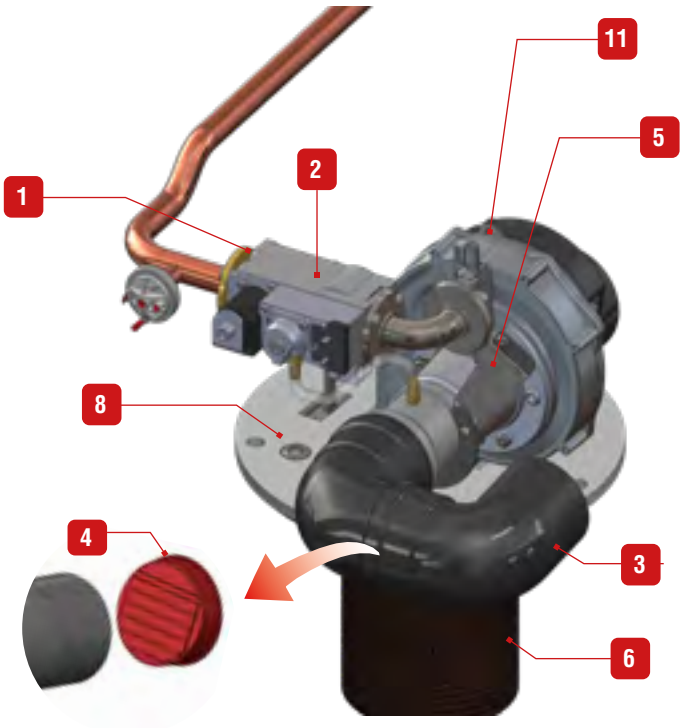
1. Reinstall the burner assembly with its insulation into the exchanger.
2. Install the retaining screws of the burner hood (**8**) and fasten them in a crosswise pattern at the required tightening torque (refer to *"Torque Values" on page 37*).
3. Install a new O-ring on the gas connection (**1**) flange.
4. Reconnect the gas connection (**1**) flange to the gas valve (**2**) using four retained screws.

When connecting the air inlet, make sure that the check valve (4) is correctly located at the elbow (3) end.

5. Reconnect the air inlet elbows (**3**).
6. Install the air inlet hose on the elbow (**3**) and secure with retained clamp.
7. Reconnect the plugs to the gas valve (**2**) and the fan assembly (**11**), and any disconnected grounding cable.

Follow-on tasks

1. Install the electrode. Refer to *"Removal, Check and Installation of the Burner Electrode" on page 40*.



WaterMaster® 120 Evo

CLEANING THE EXCHANGER

Set-up conditions

- Appliance shut down
- External power supply isolated
- Gas supply closed
- Burner removed i.a.w. procedure *"Removal and Installation of the Burner - WM 25 (X) to 85 Evo" on page 41, or "Removal and Installation of the Burner - WM 120 Evo" on page 42*.
- Front and top panels open, refer to ML Booklet.

Procedure

1. Brush and vacuum clean the chamber.
2. Pour some water in the chamber to flush away any foreign deposits that may be present in the heat exchanger.
3. Remove and clean the condensate trap.
4. Reinstall the condensate trap, refer to *"appliance Preparation" on page 26*.

Follow-on tasks

1. Reinstall the burner according to procedure *"Removal and Installation of the Burner - WM 25 (X) to 85 Evo" on page 41 or "Removal and Installation of the Burner - WM 120 Evo" on page 42*.
2. Restart the appliance in accordance with the next procedure *"Restarting after Maintenance"*.

RESTARTING AFTER MAINTENANCE

Set-up conditions

- All removed components reinstalled
- All connections made
- Power supply
- Gas supply open
- Hydraulic circuit(s) full of water

Procedure

1. Make sure there is no gas leak at the gas connections.
2. Switch the appliance on using the ON/OFF master switch.
3. Set the appliance at maximum power and check the absence of flue gas leaks.
4. Check the gas pressure and CO_2 adjustment in accordance with *"Checking and Adjusting the Burner" on page 36*.

Follow-on tasks

None

Codes	Description of the fault	Solution for the fault
E 01	**Failed ignition**: The burner failed to light after 5 ignition attempts.	1. Check gas supply to appliance. 2. Check Ignition cable connection in control box. 3. Check electrode for defects, and distance between the pins. 4. Check gas valve and electrical connections to gas valve.
E 02	**False flame:** Flame detected prior to ignition.	1. Check good electrical ground connection to unit. 2. Check electrode for pollution and deposition of dirt.
E 03	**High Boiler temp.** : The appliance temperature exceeds 105°C	Correct condition which caused high temperature or limit to open. 1. Check water flow in the system (radiator valves). 2. Check Pump and pump electrical connections.
E 05	**Blower speed**: Blower speed not correct or speed signal is not received by ACVMax.	1. Check blower and wiring harness. 2. Under normal condition if actual fan speed is 1000 rpm different from set fan speed an error is displayed (after 60sec in running and after 30 sec. at startup). 3. Only exception when actual fan speed > 3000 rpm at max. PWM.
E 07	**High Flue temp.**: Flue temperature exceeds high limit.	1. Heat exchanger may require cleaning. 2. Appliance will automatically reset once flue temperature returns to normal range.
E 08	**Flame Circuit Error**: Flame circuit test failed	1. Turn appliance off. 2. Check and clean the electrode. 3. Check ignition and grounding cables are firmly connected.
E 09	**Gas valve circuit error**: Gas valve circuit test failed.	1. Check the gas valve and wiring harness. 2. If the problem persists replace the "ACVMax" circuit board.
E 12	**Internal Fault**: EEPROM misconfiguration	1. Turn unit off and on to resume normal operation. 2. If the problem persists replace the "ACVMax" circuit board.
E 13	**Reset limit reached**: Resets are limited to 5 every 15 minutes.	1. Turn unit off and on to resume normal operation. 2. If the problem persists replace the "ACVMax" circuit board.
E 15	**Sensor Drift**: Supply or return sensor reading has drifted.	Check supply and return temperature sensors and wiring harness.
E 16	**Supply Sensor Stuck**: Supply sensor reading is not changing.	1. Check supply temperature sensor and wiring harness for shortcuts or other defects. 2. Check waterflow and the temperature balance in the system, because primary supply temperature does not change.
E 17	**Return Sensor Stuck**: Return sensor reading is not changing.	1. Check return temperature sensor and its position, check wiring harness for shortcuts or other defects. 2. Check waterflow and the temperature balance in the system, because primary return temperature does not change. 3. Failure may happen at low output capacity when supplying from a big tank !
E 18	**Sensor Failure**: Supply or return sensor reading changed very rapidly.	Check supply and return temperature sensors and wiring harness.
E19	**Flame Failure**: Flame failure during start up phase	Flame loss after start up of the appliance. 1. Check the flue system for blockage and check the adjustment of the appliance (CO2 high 8.8 +/-0.2%, CO2 low 8.6+/-0.2% measured with front casing open). 2. Also check the Ignition / Ionisation rod (distance to the burner / pollution)
E 21	**Internal Control Fault**: A / D conversion error.	Turn unit off and on then press OK to resume normal operation.
E 25	**Internal Control Fault**: CRC check error.	Turn unit off and on to resume normal operation.
E 30	**Supply Sensor Shorted**: A short circuit has been detected in the appliance supply temperature sensor circuit	1. Check supply temperature sensor and wiring harness for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem, reset the appliance and resume normal operation.
E 31	**Supply Sensor Open**: An open circuit has been detected in the appliance supply temperature sensor circuit	1. Check supply temperature sensor, connectors and wiring harness for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 32	**DHW Sensor Shorted:** A short circuit has been detected in the DHW temperature sensor circuit	1. Check DHW temperature sensor and wiring harness for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 33	**DHW Sensor Open**: An open circuit has been detected in the DHW temperature sensor circuit	1. Check DHW temperature sensor, connectors and wiring harness for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.

Codes	Description of the fault	Solution for the fault
E 34	**Low Voltage**: Line voltage has fallen below an acceptable operating level.	The appliance will automatically reset once line voltage returns to normal.
E 37	**Low Water:** Water level has fallen below 0.07 MPa (0.7 bar).	1. Increase pressure to normal range. 2. The appliance will automatically reset once water level returns to normal.
E 43	**Return Sensor Shorted**: A short circuit has been detected in the appliance return temperature sensor circuit.	1. Check return temperature sensor and wiring harness for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem, reset the appliance and resume normal operation.
E 44	**Return Sensor Open**: An open circuit has been detected in the appliance return temperature sensor circuit.	1. Check return temperature sensor, connectors and wiring harness for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem, reset the appliance and resume normal operation.
E 45	**Flue Sensor Shorted**: A short circuit has been detected in the appliance flue temperature sensor circuit	1. Check flue temperature sensor and wiring harness for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 46	**Flue Sensor Open**: An open circuit has been detected in the appliance flue temperature sensor circuit.	1. Check flue temperature sensor, connectors and wiring harness for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E47	**Water pressure sensor error**: Water pressure sensor is disconnected or broken	1. Check water pressure sensor, connectors and wiring harness. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 76	**Gas pressure switch open**	1. Check both the static and the dynamic gas pressures. 2. Correct condition which caused the pressure switch to open 3. Appliance will automatically reset once the pressure switch is closed.
	External Limit Open: An external automatic reset appliance limit has opened.	1. Correct condition which caused limit to open. 2. Appliance will automatically reset once external limit closes
E 77	**High temperature mixing circuit**	Check if the mixing valve functions correctly.
E 78	**Mix circuit sensor shorted**	1. Check Mix circuit temp. sensor and wiring harness for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 79	**Mix-circuit sensor Open**	1. Check Mix circuit temp. sensor and wiring harness for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 80	**Return > Supply**: Return temperature is higher than supply temperature.	Confirm water flows in appliance return and out appliance supply.
E 81	**Sensor Drift**: Supply and return temperatures are not equal.	1. Check water is flowing through appliance. 2. Wait a few minutes for the water to equalise the temperature, the appliance will automatically reset once temperatures become equal. 3. If appliance doesn't reset, check the NTC's and check the wire harness, replace if necessary.
E82	**Delta T protection blocking** - Delta T too high	1. Verify flow in the system. 2. Check pump for blockage and obstructions, unblock it as required. Replace if neccessary.
E83	**Delta T protection Lock-out** - Lock-out due to Delta T value.	1. Verify flow in the system. 2. Check pump for blockage and obstructions, unblock it as required. Replace if neccessary.
E 85	**Pump operation: warning** - Appliance pump is running out of limits.	Pump is running out of its limits. Check pump for blockage and obstructions, replace if neccessary
E 86	**Pump hard fault**: Pump Failure	Pump Failure, check if pump PWM-feedback wire is properly connected, replace pump when neccessary
E 87	**External Limit Open**: An external appliance limit has opened.	1. Correct condition which caused limit to open, then reset appliance. 2. The appliance needs to be reset once external limit closes.
E88	**Pump Blocking**: Pump attempts to restart.	Check pump for blockage and obstructions, unblock it as required. Replace if neccessary.
E 89	**Incorrect Setting**: A parameter setting is outside the settings range.	1. Review primary/CH & DHW settings and correct as necessary. 2. The appliance will automatically reset once corrected.

Codes	Description of the fault	Solution for the fault
E 90	**Firmware Mismatch**: Control module and display firmware versions are incompatible.	One or several components are not compatible with the system. Replace mismatched component(s).
E 91	**System Sensor Shorted**: A short circuit has been detected in the system temperature sensor circuit	1. Check system temperature sensor and wiring for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 92	**System Sensor Open**: An open circuit has been detected in the system temperature sensor circuit.	1. Check system temperature sensor and wiring for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 93	**Outdoor Sensor Shorted**: A short circuit has been detected in the outdoor temperature sensor circuit.	1. Check outdoor temperature sensor and wiring for a short circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 94	**Internal Display Fault**: Display memory error	Turn unit off and on to resume normal operation.
E 95	**Supply Sensor Error**: Supply sensor reading is invalid	1. Check wiring between display and control module. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 96	**Outdoor Sensor Open**: An open circuit has been detected in the outdoor temperature sensor circuit.	1. Check outdoor temperature sensor and wiring for an open circuit. 2. If necessary replace the sensor, or the wire harness. 3. After fixing the problem reset the appliance and resume normal operation.
E 97	**Cascade Mismatch**: Cascade configuration has changed.	1. Run autodetection if change was intentional, or else check wiring between appliances. 2. Appliance will automatically reset once repaired.
E 98	**Cascade Bus Error**: Communication with other appliances has been lost.	1. Check wiring between appliances. 2. Appliance will automatically reset once repaired.
E 99	**Controller Bus Error**: Communication between appliance display and control module has been lost.	1. Check wiring between components. 2. Appliance will automatically reset once repaired.

SERVICE LOG

Service date	CO2 %	Flue gas T°	Efficiency	Remarks	Name	Signature

ACV A BRAND OF GROUPE ATLANTIC

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Belgium

ACV

EXCELLENCE IN HOT WATER

WaterMaster

25 - 35 - 45 - 70 - 85 - 120 Evo

25 - 45 - 70 X Evo

ML


.....6


.....9


.....14


.....20

	Fragile - Breekbaar - Zerbrechlich - Frágil - Fragile - Ostrożnie - Хрупкое!
	Keep dry - Maintenir au sec - Droog bewaren - Trocken aufbewahren - Manténgase seco - Tenere al riparo da acqua e umidità - Chronić przed wilgocią - Хранить в сухом месте
	Keep standing up - Maintenir en position verticale - Rechtop bewaren - Aufrecht stehen lassen - Manténgase de pie - Mantenere in posizione verticale - Utrzymywać w pozycji stojącej - Располагать строго вертикально
	Danger of tipping over - Risque de basculement - Omval gevaar - Kippgefahr - Riesgo de vuelco - Pericolo di ribaltamento - Niebezpieczeństwo przewrócenia - Не опрокидывать
	Hand truck or pallet truck required for transport - Utiliser un diable ou un transpalette pour le transport - Steekwagen of palletwagen gewenst voor transport - Sackkarre oder Palettenhubwagen für Transport erforderlich - Use carretilla de mano o transpalet para el transporte - Carico pesante, utilizzare carrello a mano o transpallet per la movimentazione - Wózek ręczny lub paletowy wymagany do transportu - Использование ручной тележки для транспортировки
	Gas Connection - Raccordement gaz - Gasaansluiting - Gasanschluss - Conexión de gas - Collegamento gas - Podłączenie gazu - Подключение газа
	Condensate trap (ball syphon) - Siphon (condensats) - Sifon - Kondensatfalle (Ball-Syphon) - Recogida de condensados (sifón de bola) - Sifone scarico condensa - Syfon kondensatu - Сифон для отведения конденсата
	Domestic Hot Water circuit - Circuit sanitaire - circuit sanitair warm water (SWW) - Warmwasserkreislauf -Circuito de agua caliente sanitaria - Acqua calda sanitaria - Obieg ciepłej wody - Контур ГВС
	Primary circuit - Circuit primaire - Primaire kring - Primärkreislauf - Circuito primario - Obieg grzewczy - Отопительный контур
	DHW Recirculation - Recirculation sanitaire - Recirculatie SWW - Rezirkulation Warmwasser - Recirculación de ACS - Ricircolo di acqua sanitaria - Recyrkulacja c.w. - Рециркуляция ГВС
	Safety valve connected to the sewage system - Soupape de sécurité raccordée à l'égout - Veiligheidsklep aangesloten op de riolering - Sicherheitsventil mit Verbindung an die Kanalisation - Válvula de seguridad que conectar a la red de alcantarillado - Valvola di sicurezza (con scarico convogliato) - Zawór bezpieczeństwa podłączony do kanalizacji - Сливное отверстие предохранительного клапана должно быть подключено к дренажной линии
	Connection to the sewage system - Raccordement à l'égout - Aansluiting op de riolering - Verbindung zu Kanalisation - Conexión a la red de alcantarillado - Collegamento allo scarico - Podłączenie do kanalizacji - Сливное отверстие должно быть подключено к дренажной линии
	Electricity - Electricité - Elektriciteit - Elektrizität - Electricidad - Sotto tensione - Elektryczność - Электричество

	Alarm - Alarme - Alarma - Allarme - Сигнал “Авария”
	Disposal and recycling - Mise au rebut et recyclage - Verwijdering en recycling - Entsorgung und Recycling - Eliminación y reciclaje - Smaltimento e riciclaggio - wyrzucanie i recykling - Утилизация и переработка
 	Mise au rebut et recyclage des produits et notices (FRANCE uniquement) Consulter le livret FR.
	Essential instruction for safety (of persons and equipment) Consigne essentielle à la sécurité (des personnes et du matériel) Belangrijke instructies voor de veiligheid (van personen en materiaal) Grundlegende Hinweise für die Sicherheit (von Personen und Geräten) Instrucción esencial para la seguridad (de las personas y del material) Istruzione essenziale per la sicurezza (delle persone e delle apparecchiature) Najważniejsze instrukcje bezpieczeństwa (Bezpieczeństwo osób i sprzętu) Основные инструкция для обеспечения безопасности (безопасность лиц и оборудования)
	Essential instruction for electrical safety (electrical hazard) Consigne essentielle à la sécurité électrique (danger lié à la présence d'électricité) Belangrijke voorschriften met betrekking tot de elektrische installatie (elektrisch gevaar) Grundlegende Hinweise für die elektrische Sicherheit (elektrische Gefahr) Instrucción esencial para la seguridad eléctrica (peligro eléctrico) Istruzione essenziale per la sicurezza elettrica (pericolo shock elettrico) Najważniejsze instrukcje dla bezpieczeństwa elektrycznego (Niebezpieczeństwo porażenia). Основные инструкция по электрической безопасности (опасность поражения электрическим током)
	Essential instruction for the correct operation of the appliance or the system Consigne essentielle au bon fonctionnement de l'appareil ou de l'installation Belangrijke instructie voor een correcte werking van het toestel of de installatie Grundlegende Hinweise für die korrekte Arbeitsweise der Anwendung oder des Systems Instrucción esencial para el correcto funcionamiento del aparato o de la instalación Istruzione essenziale per il corretto funzionamento dell’apparecchio o dell’impianto Najważniejsze instrukcje dla prawidłowej pracy urządzenia Основные инструкция для корректного функционирования прибо ра или системы
	General remark - Remarque à caractère général - Algemene opmerking - Generelle Hinweise - Nota general - Nota generale - Uwaga ogólna - Общее замечание
	Dimensions - Afmetingen - Abmessungen - Dimensiones - Dimensioni - Wymiary - Габаритные размеры
	Wiring diagrams - Schémas électriques - Elektrische schema's - Schaltplan - Esquemas eléctricos - schema elettrico - schematy połączeń - схемы подключения
	Information - Informatie - Informationen - Informaciones - Informazioni - Informacje - Информация
	Assembly - Assemblage - Montage - Montaje - Montaggio - Montaż - монтаж

The part number (Code) and serial number (N°) of the appliance are indicated on its rating plate and must be provided to ACV in case of warranty claim. Failure to do so will make the claim void.

Le numéro d'article (Code) et le numéro de série (N°) de l'appareil sont repris sur sa plaque signalétique et doivent être transmis à ACV dans le cas d'un appel en garantie. À défaut, l'appel en garantie sera réputé nul.

Het serie nummer (N°) en artikel code (CODE) zijn vermeld op een type plaat eigen aan het product, deze informatie dient aan ACV medegedeeld te worden in geval van een beschadiging aan het toestel welke onder de garantie voorwaarden valt. In geval dat deze informatie niet kan verstrekt worden vervalt de garantie.

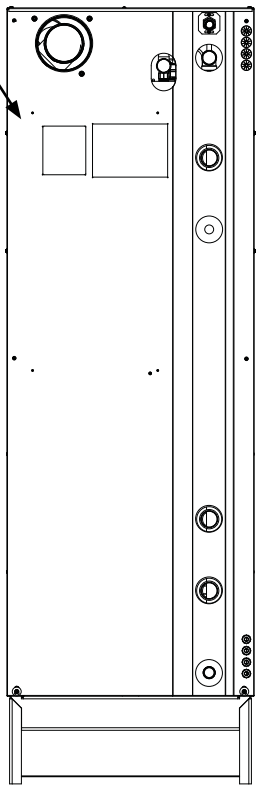
Die Produktnummer (Code) und die Seriennummer (N°) des Kessels, welche auf dem Typenschild angegeben sind, müssen ACV im Falle einer Beanstandung vorgelegt werden! Andernfalls wird die Beanstandung nichtig gemacht.

El número de pieza (Código) y el número de serie (N°) del aparato vienen indicados en la placa de la misma y deben ser comunicadas a ACV en caso de reclamación en garantía. En caso contrario, no se atenderá la reclamación.

Il codice articolo (CODE) e la matricola (N°) dell'apparecchio indicati nella targhetta devono essere forniti ad ACV in caso di richiesta garanzia. In caso contrario non sarà possibile fare la verifica per la garanzia.

Kod urządzenia (CODE) i numer seryjny (N°) są podane na tabliczce znamionowej. Są one niezbędne w przypadku reklamacji urządzenia. Ich uszkodzenie czy usunięcie spowoduje utratę gwarancji.

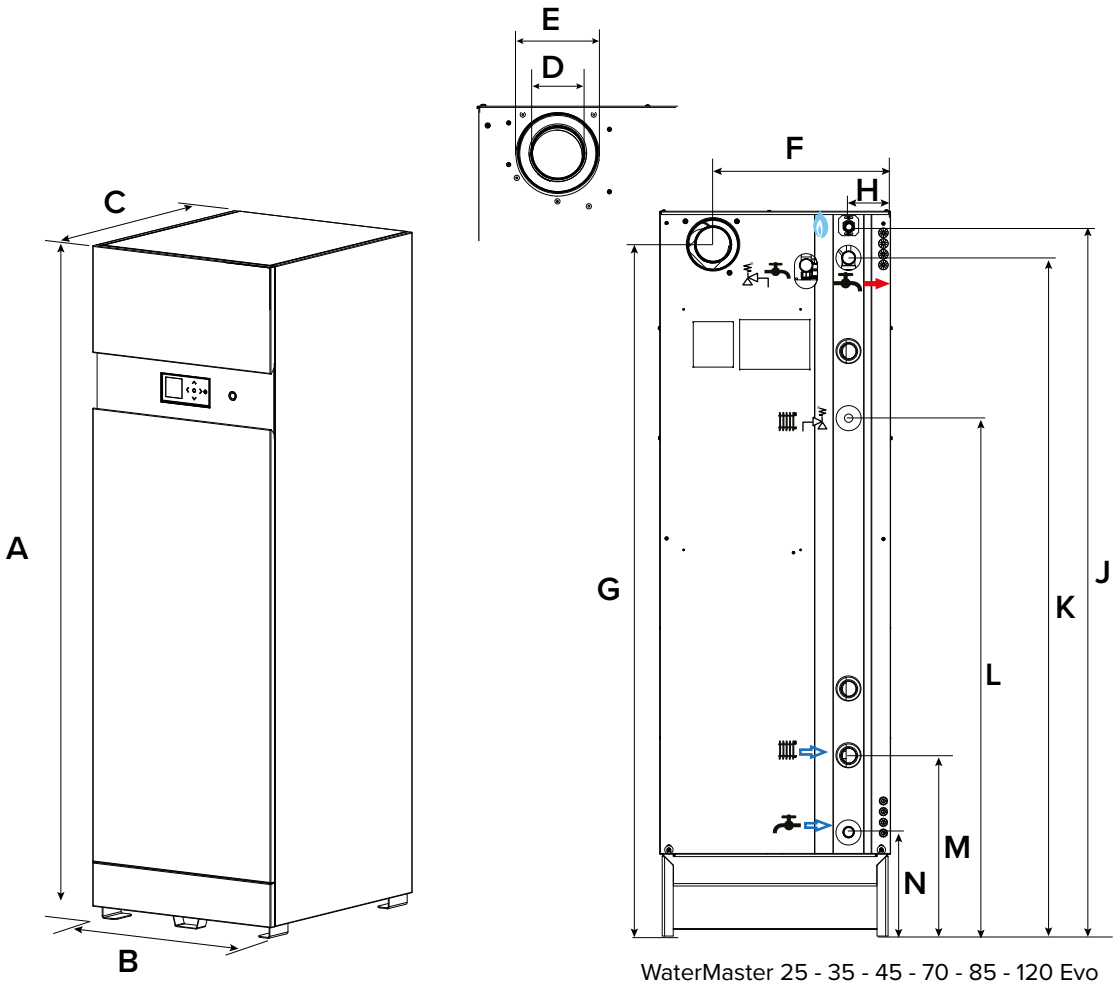
Код и серийный номер устройства, указанные на заводском шильдике, должны быть представлены производителю при возникновении гарантийного случая. Без предоставления этой информации производитель в праве отказаться от гарантийных обязательств.



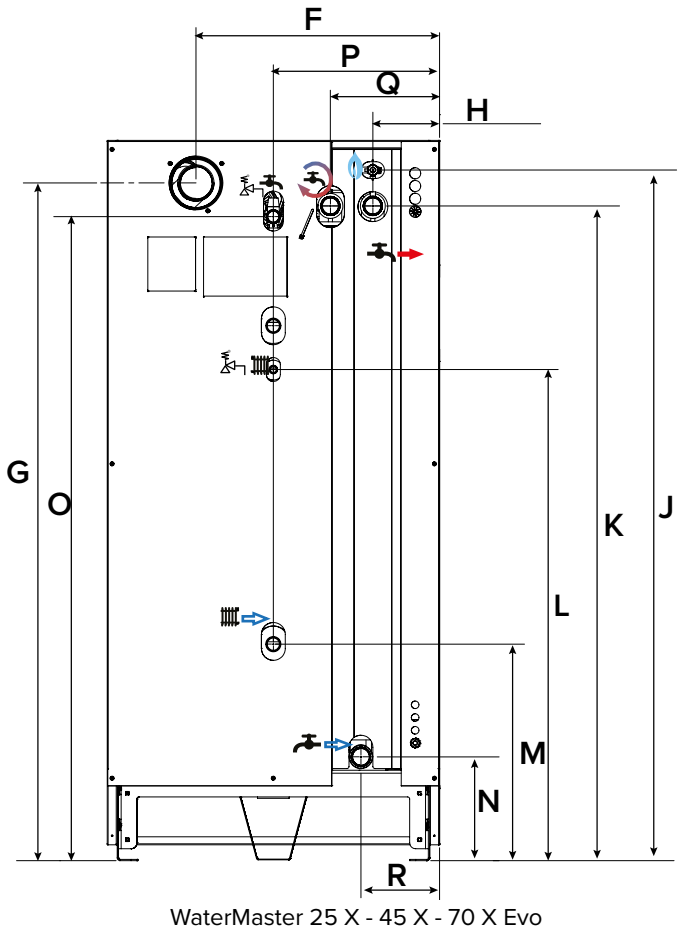
GAS CATEGORIES / CATÉGORIES DE GAZ / GASCATEGORIEËN / GAS KATEGORIEN / CATEGORÍAS GAS / CATEGORIA GAS / KATEGORIE GAZOWE / КАТЕГОРИИ ГАЗА

		G20	G25		G20 ⇆ G25	G31		
Pressure/Pression/Druk/Druck/Presión/Pressione/Ciśnienie/ Давление (mbar/мбар)		20	20	25	20 ⇆ 25	30	37	50
Country/Pays/Land/Länder/País/Paese/Kraj/страны	Category /Categorie/Kategorie/Categoria/Kategoria/ Категория							
AT	II_{2H3P}	●						●
BE	$I_{2E(S)}$*				●			
	$I_{2E(R)}$**				●			
	I_{3P}						●	
CH	II_{2H3P}	●					●	●
CZ	II_{2H3P}	●					●	
DE	II_{2E3P}	●						●
	II_{2ELL3P}	●	●					●
ES	II_{2H3P}	●					●	
FI	II_{2H3P}	●				●		
FR	II_{2Er3P}	●		●			●	●
GB	II_{2H3P}	●					●	
GR	II_{2H3P}	●					●	
HR	II_{2H3P}	●					●	
IE	II_{2H3P}	●					●	
IT	II_{2H3P}	●					●	
LT	II_{2H3P}	●					●	
LU	II_{2E3P}	●				●		
LV	I_{2H}	●						
NL	II_{2EK3P}***			●			●	
	II_{2L3P}			●		●		●
PL	II_{2E3P}	●					●	
PT	II_{2H3P}	●					●	
RO	II_{2H3P}	●				●		
SI	II_{2H3P}	●				●		
SK	II_{2H3P}	●					●	●

* WM 25 (X) / 35 / 45 (X) / 70 (X) Evo
** WM 85 / 120 Evo
*** G25.3

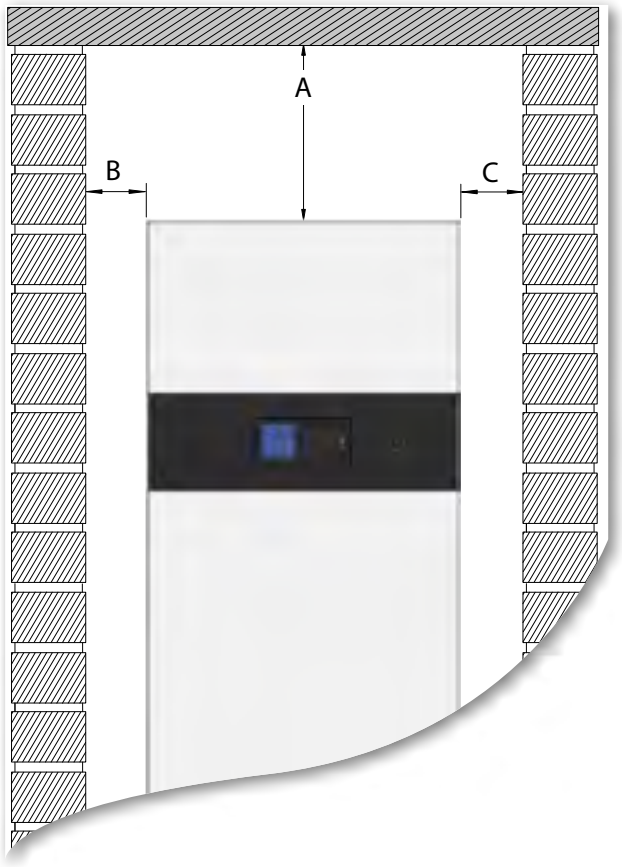


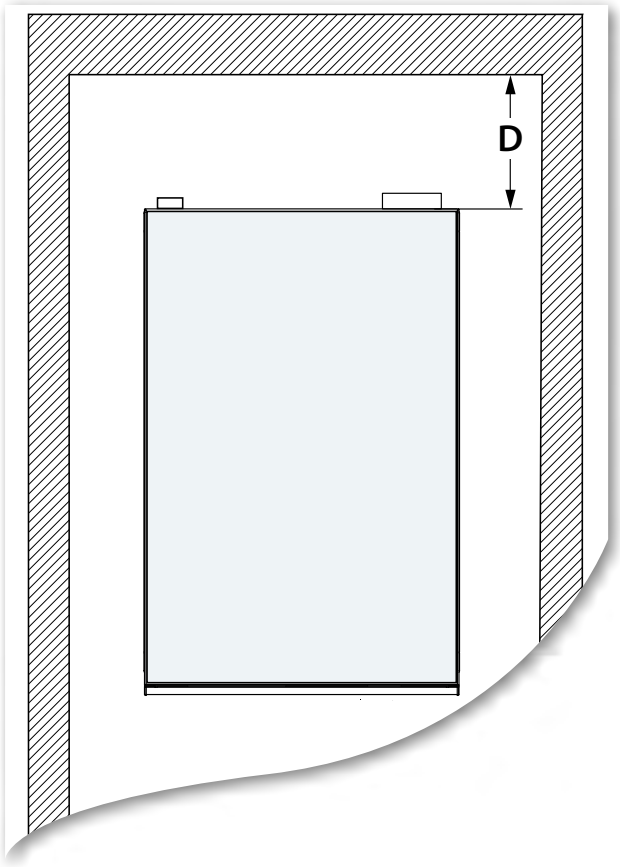
WaterMaster 25 - 35 - 45 - 70 - 85 - 120 Evo



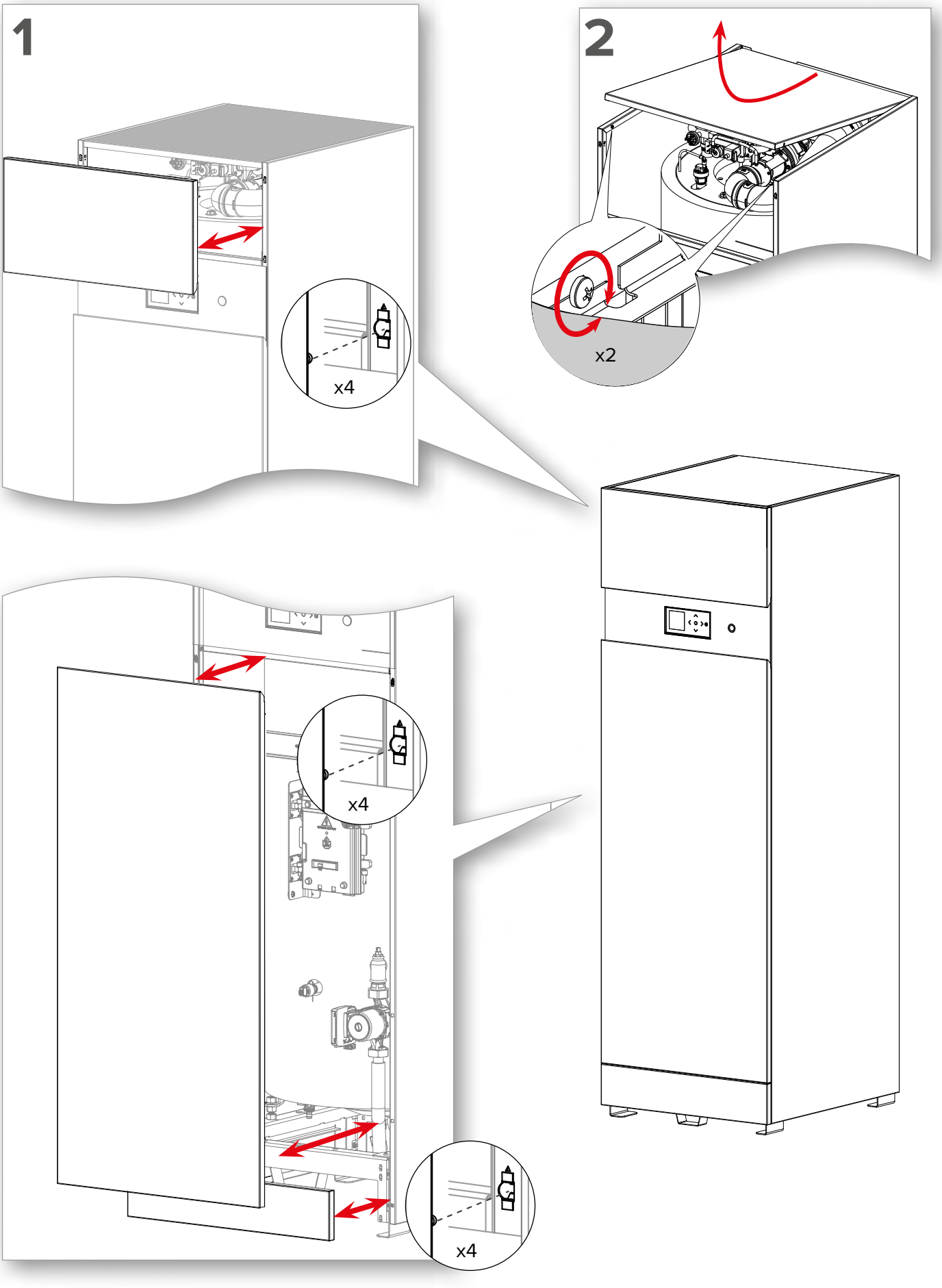
WaterMaster 25 X - 45 X - 70 X Evo

		WaterMaster Evo			
		25 - 35 - 45	70 - 85 - 120	25 X - 45 X	70 X
A	mm/мм	1780	2170	1810	2170
B	mm/мм	600	690	835	835
C	mm/мм	708	787	997	997
D	mm/мм	80	100	80	100
E	mm/мм	125	150	125	150
F	mm/мм	450	510	612	600
G	mm/мм	1680	2060	1702	2060
H	mm/мм	110	125	168	165
J ( )	mm/мм	1730	2110	1735	2118
K ( )	mm/мм	1623	2015	1645	2026
L ( )	mm/мм	1305	1535	1234	1521
M (+ kit)	mm/мм	458	525	544	551
N ( )	mm/мм	285	295	260	280
O	mm/мм	—	—	1618	1994
P	mm/мм	—	—	418	418
Q	mm/мм	—	—	274	274
R	mm/мм	—	—	198	198
∅ [F] -	"	1	1.1/2	1	1.1/2
∅ [M] -	"	1	1	1.1/2	1.1/2
∅ [M] -	"	—	—	1.1/2	1.1/2
∅ [M] -	"	3/4	3/4	3/4	3/4
Min. ∅ Flue pipe - cheminée - schouw - Abgassystems - chimenea - condotto fumi - kanał spalin - дымоотвода	mm/мм	80	100	80	100
Drained weight - Poids à vide - Leeg gewicht - Leergewicht - Peso a vacio - Peso a vuoto - Waga (pusty) - Масса пустого)	Kg/кг	177	298	270	380

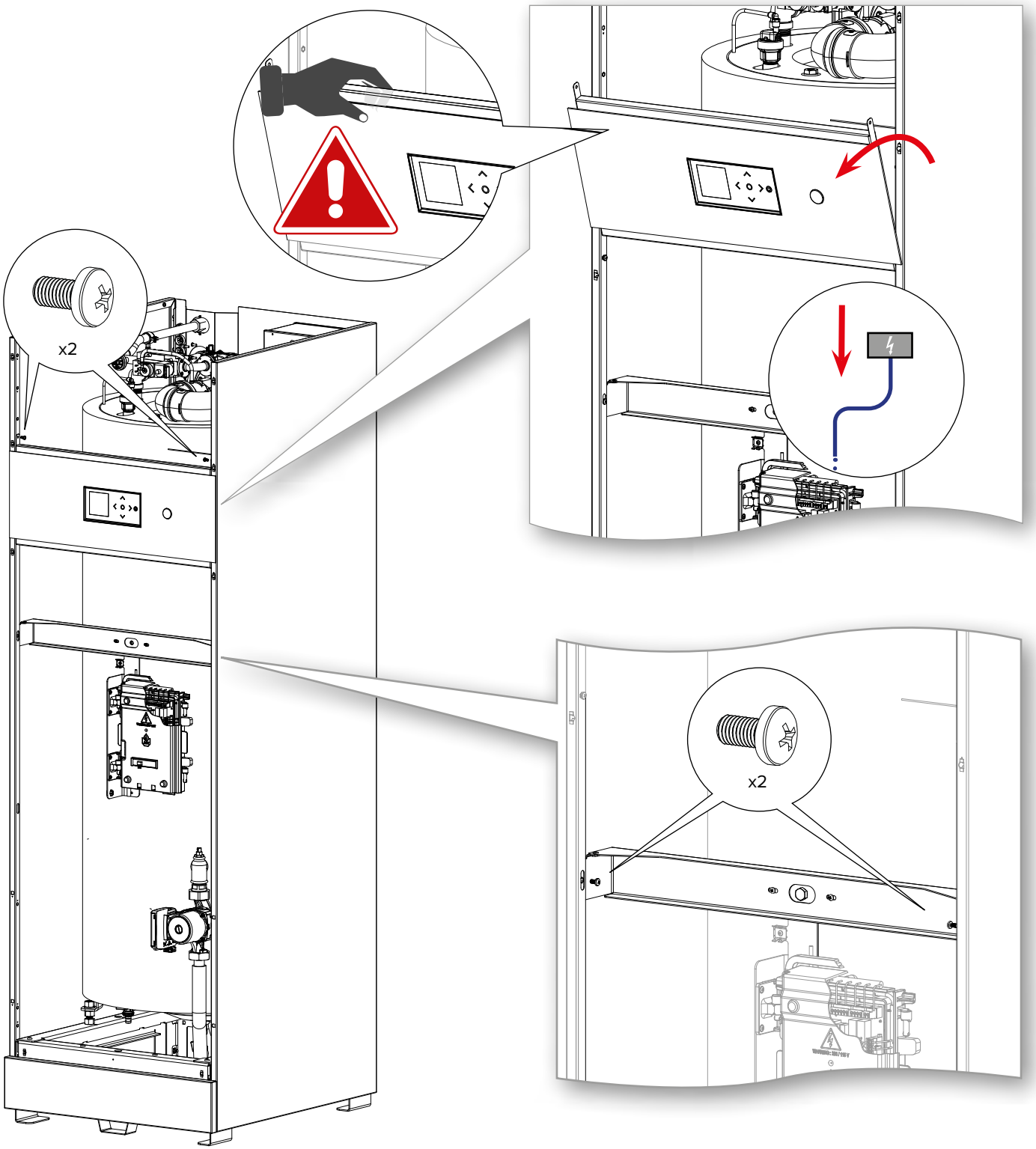


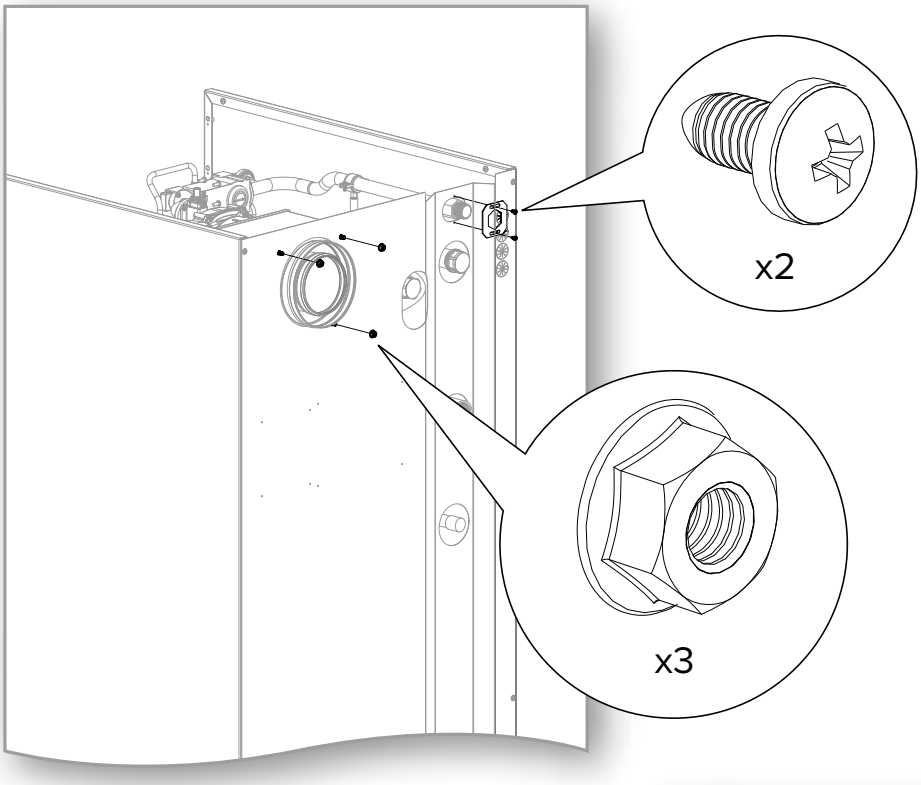


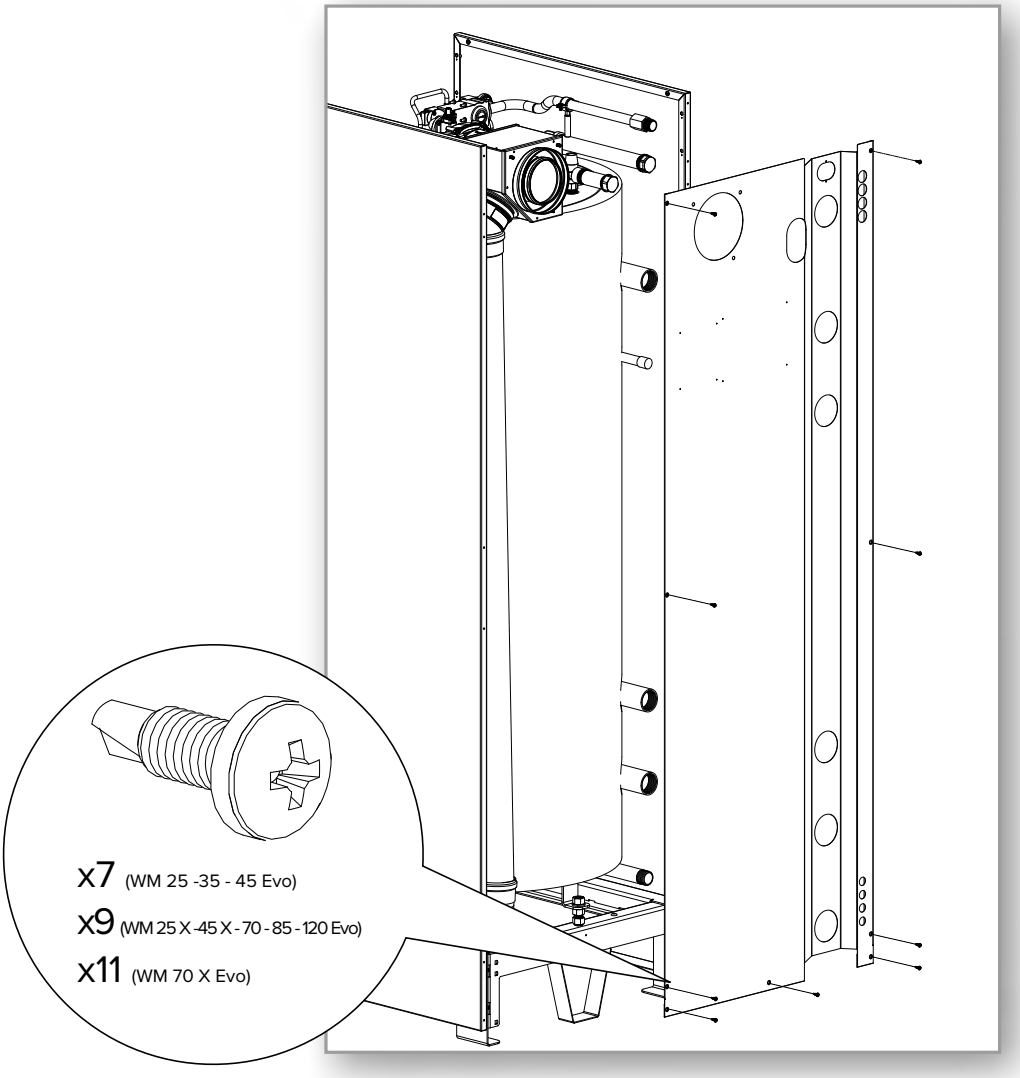
		WaterMaster Evo		
		25 (X) - 35 - 45 (X)	**70 (X) - 85**	**120**
A (mm/мм)	Std	300	500	350
	Min	200	400	250
B (mm/мм)	Std	800	800	800
	Min	600	600	600
C (mm/мм)	Std	400	400	400
	Min	250	250	250
D (mm/мм)	Std	600	600	600
	Min	400	400	400

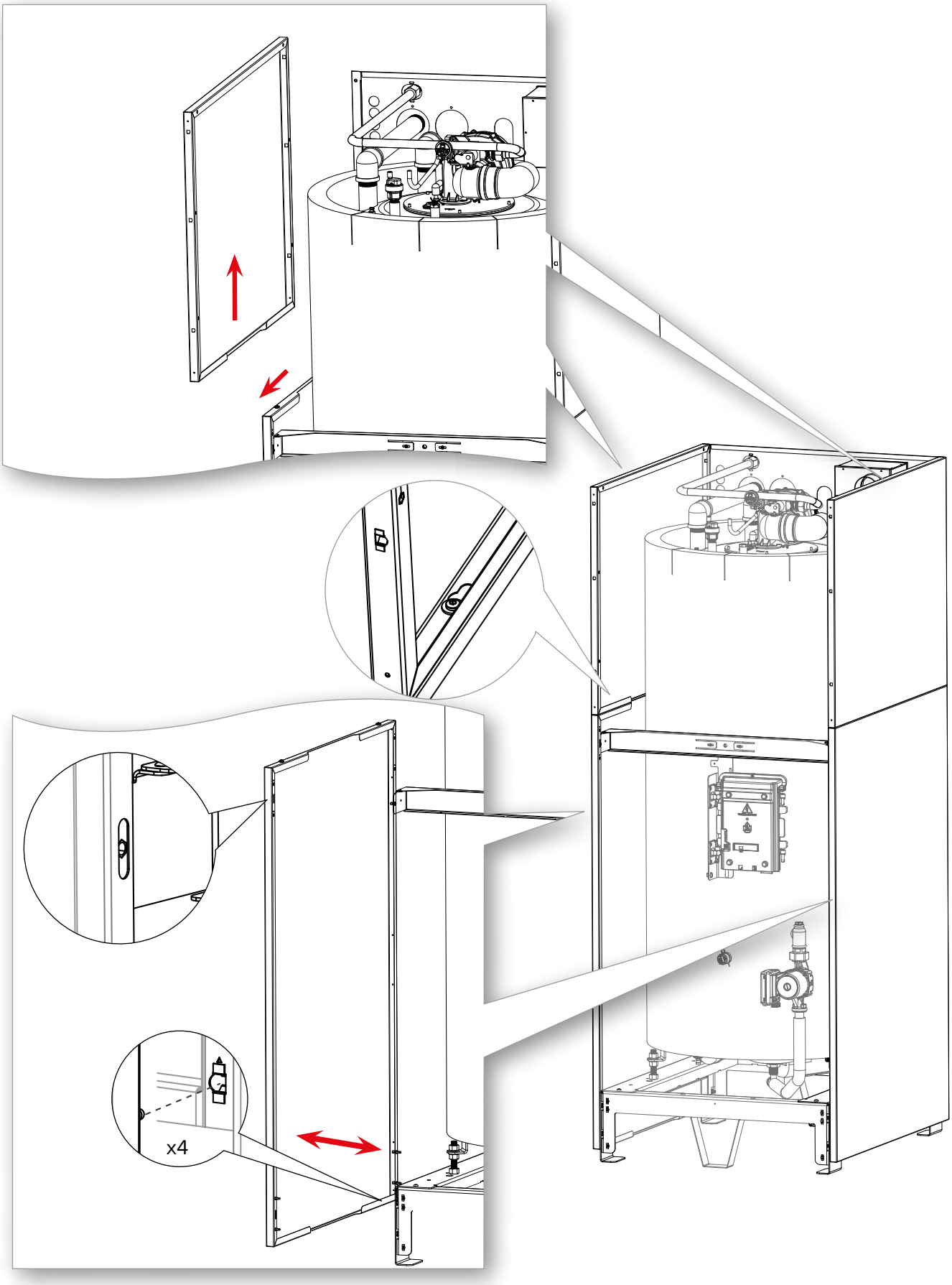

1
x4
2
x2
x4
x4

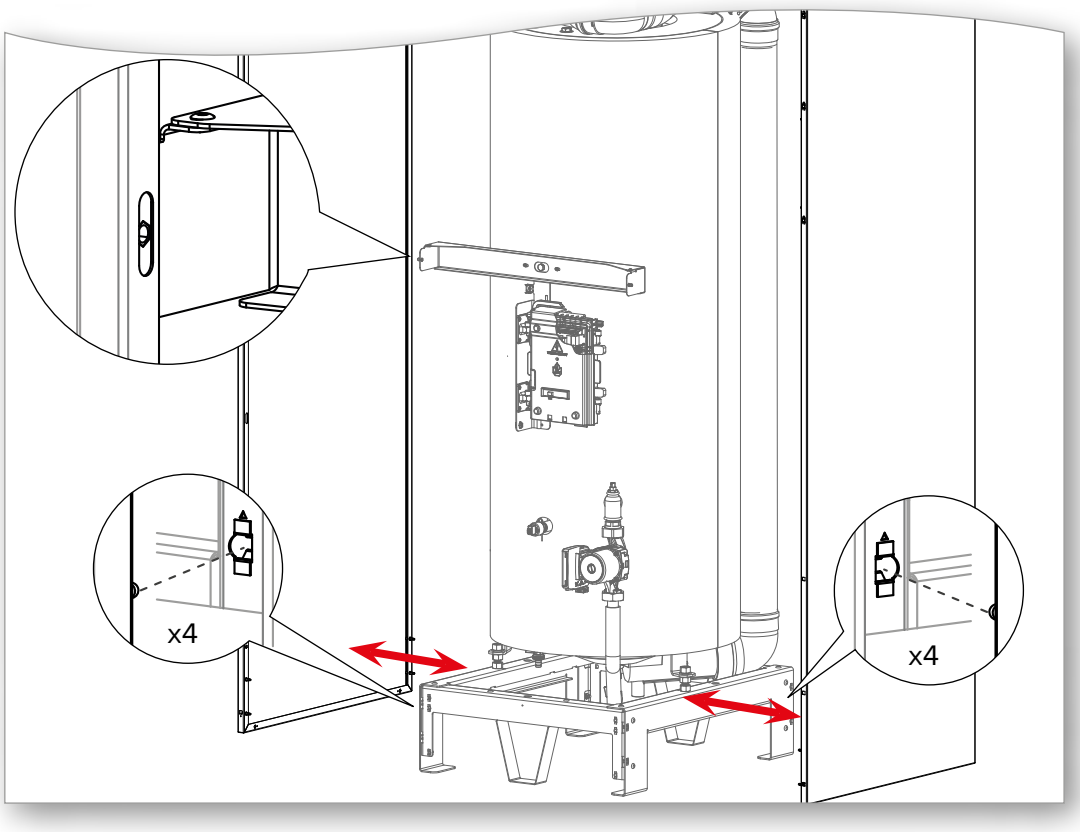
- Isolate the external power supply
- Couper l'alimentation électrique externe de l'appareil
- Verbreek de externe elektrische voeding
- Schalten Sie das Gerät stromlos
- Aísle el suministro eléctrico externo del aparato
- Interrompere l’alimentazione elettrica esterna
- Odłącz urządzenie od zasilania energią elektryczną
- Отключите электропитание

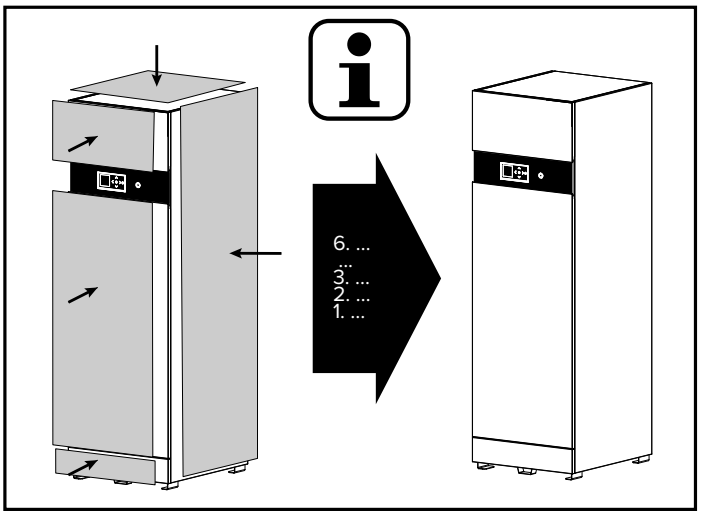



x2
x3


x7 (WM 25 -35 - 45 Evo)
x9 (WM 25 X -45 X - 70 - 85 - 120 Evo)
x11 (WM 70 X Evo)

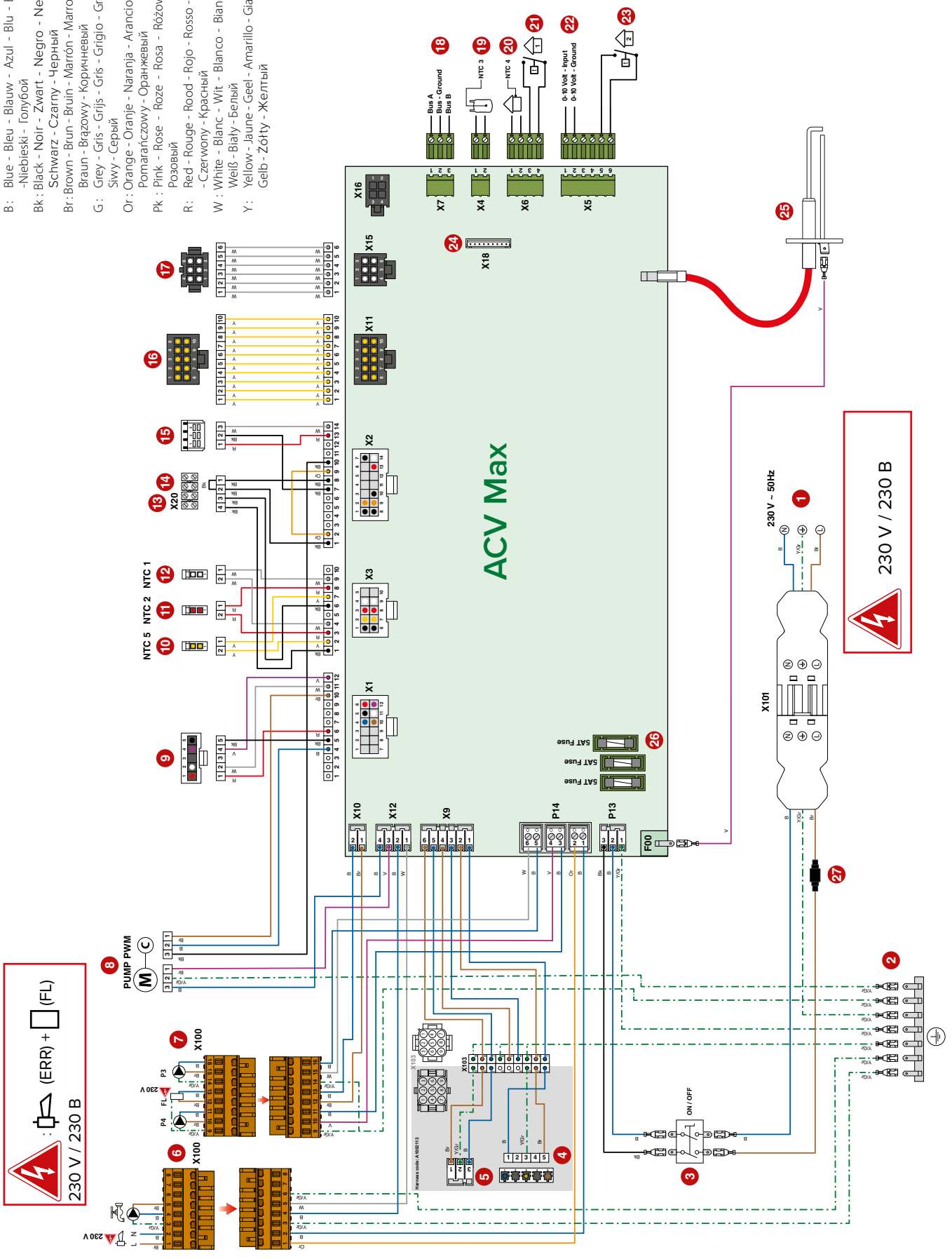

x4


x4
x4


6. ...
...
3. ...
2. ...
1. ...

WATERMASTER® 25 - 35 - 45 Evo
WATERMASTER® 25 X - 45 X Evo

B : Blue - Bleu - Blauw - Azul - Blu - Blau -Niebieski - Голубой
Bk : Black - Noir - Zwart - Negro - Nero - Schwarz - Czarny - Черный
Br : Brown - Brun - Bruin - Marrón - Marrone - Braun - Brązowy - Коричневый
G : Grey - Gris - Grijs - Gris - Grigio - Grau - Siwy - Серый
Or : Orange - Oranje - Naranja - Arancione - Pomarańczowy - Оранжевый
Pk : Pink - Rose - Roze - Rosa - Różowy - Розовый
R : Red - Rouge - Rood - Rojo - Rosso - Rot - Czerwony - Красный
W : White - Blanc - Wit - Blanco - Bianco - Weiß - Biały - Белый
Y : Yellow - Jaune - Geel - Amarillo - Giallo - Gelb - Żółty - Желтый



1.	230 V power supply plug - Fiche d'alimentation 230 V - Voedingsstekker 230 V - 230 V Anschlussklemme - Toma de alimentación 230 V - Alimentazione elettrica 230 V - Przewód 230V - Подключение питания 230 В
2.	Ground - Masse - Aarding - Erdung - Masa - Messa a terra - Uziemienie - Заземление
3.	ON/OFF master switch – Interrupteur principal marche/arrêt – Hoofdschakelaar Aan/Uit – AN/AUS Hauptschalter – Interruptor ON/OFF – Interruttore generale on/off – Wyłącznik kotła – Главный выключатель ВКЛ/ВЫКЛ
4.	Gas valve rectified – Vanne gaz rectifiée – Gasklep - Gelijkgericht – Gasventil gleichrichtet – Válvula de gas rectificada – Valvola gas – Zawór gazowy (VrAC) – Штекер газового клапана
5.	Burner power supply – Alimentation brûleur – Toevoer brander – Stromversorgung des Brenners – Alimentación del quemador – Alimentazione del bruciatore – Zasilanie palnika – Электропитание горелки
6.	Terminal block for optional items – Bornier pour éléments optionnels – Klemmen voor optionele elementen – Klemmenblock für Zubehör – Regleta de conexión para elementos externos – Morsettiera per accessori opzionali – Listwa zaciskowa dla opcjonalnych elementów – Клеммная колодка для дополнительных элементов:
7.	Terminal block for optional items: – Bornier pour éléments optionnels – Klemmen voor optionele elementen – Klemmblock für optionales Zubehör – Regleta opcional de conexión para elementos externos opcionales – Morsettiera per accessori opzionali – Listwa zaciskowa dla opcjonalnych elementów: – Клеммный блок для дополнительных элементов (опция)
8.	Modulating pump PWM – PWM pompe modulante – PWM modulerende pomp – PWM modulierende Pumpe – Bomba de modulación PWM – Pompa modulante PWM – Pompa mieszająca modulowana PWM – Насос с модуляцией мощности (PWM)
9.	Burner PWM plug – Fiche PWM du brûleur – PWM-stekker brander – Brenner PWM Stecker – Ficha PWM quemador – Scheda PWM del bruciatore – Wtyczka palnika z modulacją – Линия управления вентилятором горелки
10.	NTC5 flue gas temperature sensor – Sonde de température fumée - NTC5 – NTC5-rookgastemperatuurvoeler – NTC5 - Abgas-Temperaturfühler – Sonda de temperatura de humos NTC5 – Sonda temperatura fumi NTC5 – Czujnik temperatury spalin NTC5 – Темп. датчик NTC5 (уходящих газов)
11.	NTC2 return sensor – Sonde température retour - NTC2 – NTC2-retourtemperatuurvoeler – NTC2 - Rücklauf-Temperaturfühler – Sonda de retorno NTC2 – Sonda ritorno NTC2 – Czujnik powrotu NTC2 – Темп. датчик NTC2 (обратная линия отопления)
12.	NTC1 supply sensor – Sonde température départ - NTC1 – NTC1-aanvoervoeler – NTC1 - Vorlauf-Temperaturfühler – Sonda de impulsión NTC1 – Sonda mandata NTC1 – Czujnik zasilania NTC1 – Темп. датчик NTC1 (подающая линия отопления)
13.	NTC - Low temperature circuit – NTC - circuit basse température – NTC lage temperatuur – NTC - Niedertemperaturkreis – NTC de circuito de baja temperatura – Sonda NTC circuito miscelato bassa temperatura (opzionale) – Czujnik NTC obiegu niskotemperaturowego – Темп. датчик NTC (низкотемпературный контур)
14.	High limit switch – Thermostat de sécurité – Veiligheidsthermostaat – Maximalthermostat – Termostato de seguridad – Termostato di sicurezza – Obwód dodatkowego ogranicznika temperatury (fabrycznie mostek) – Защитный термостат редельной температуры
15.	Low water pressure sensor – Pressostat manque d'eau – Waterdruksensor – Wassermangelschalter – Presostato de falta de agua – Trasduttore pressione circuito idraulico – Czujnik ciśnienia wody grzewczej – Датчик давления теплоносителя
16.	PCB (Display) – PCB (Écran) – PCB (Display) – PCB (Display) – PCB (Pantalla) – PCB (Display) – Wyświetlacz – Подключение панели управления контроллера
17.	ACVMax programmation plug – Fiche de programmation ACVMax – Programmeerstekker ACVMax – ACVMax-Programmieranschluss – Ficha de programación ACVMAX – Connettore per programmazione scheda ACVMax – Gniazdo programowania sterownika ACVMAX – Разъем программирования ACVMAX
18.	A & B Modbus (option) – Modbus A & B (option) – A & B Modbus (optie) – A & B Modbus (optional) – A & B Modbus (opcional) – A & B Modbus (opzionale) – Podłączenie magistrali Modbus (opcja) – Шина данных "Modbus" конт. A, B (опция)
19.	NTC3 DHW sensor – Sonde sanitaire - NTC3 – NTC3-warmwatervoeler SWW – NTC3 - Brauchwasserfühler – Sonda de ACS NTC3 – Sonda acqua sanitaria NTC3 – Czujnik c.w. NTC3 – Темп. датчик NTC3 (ГВС)
20.	NTC4 outdoor temperature sensor (option) – Sonde de température extérieure - NTC4 (option) – NTC4-buitenvoeler (optie) – NTC4 - Außenfühler (optional) – Sonda de temperatura exterior NTC4 (opcional) – Sonda temperatura esterna NTC4 (opzionale) – Czujnik temperatury zewnętrznej NTC4 (opcja) – Темп. датчик NTC4 (уличная температура) (опция)
21.	Room thermostat 1 (option) – Thermostat d'ambiance 1 (option) – Kamerthermostaat 1 (optie) – Raumthermostat 1 (optional) – Termostato de ambiente 1 (opcional) – Termostato ambiente 1 (opzionale) – Termostat pokojowy obiegu 1 (opcja) – Комнатный термостат 1 (опция)
22.	0-10 Volt (option) – 0-10 Volt (option) – 0-10 Volt (optie) – 0-10 Volt (optional) – 0-10 V (opcional) – 0-10 Volt (opzionale) – 0-10 Volt (opcja) – Сигнал 0-10 В (опция)
23.	Room thermostat 2 (option) – Thermostat d'ambiance 2 (option) – Kamerthermostaat 2 (optie) – Raumthermostat 2 (optional) – Termostato de ambiente 2 (opcional) – Termostato ambiente 2 (opzionale) – Termostat pokojowy obiegu 2 (opcja) – Комнатный термостат 2 (опция)
24.	Connection for interface control unit – Raccordement pour Interface Control Unit – Connector voor EBV interface (control unit) – Anschluss für Regeleinheit Control Unit – Conexión para Interface Control Unit – Innesto per scheda interfaccia (Control Unit) – Gniazdo dla modułu komunikacyjnego RMCI (do współpracy z regulatorem Room Unit/Control Unit) – Подключение интерфейсного модуля для Control Unit
25.	Ignition and ionization cable – Câble d'allumage et d'ionisation – Ontstekings- en ionisatiekabel – Ionisations- und Zündkabel – Cable de encendido y de ionización – Cavo accensione e ionizzazione – Przewód zapłonowo - jonizacyjny – Подключение интерфейсного модуля для Control Unit (опция)
26.	5AT slow-blow fuse (3x) for internal and optional circuits* – Fusible 5AT temporisé (3x) pour circuits internes et optionnels* – 5AT Traag zekering (3x) voor interne en optionele circuits – Träge 5 Ampere-Sicherung 3x für interne und optionale Schaltungen* – Fusible térmico de 5AT (3x) para protección de circuitos internos y circuitos opcionales * – Fusibili 5AT ritardati (3 pezzi) per circuiti interni e opzionali* – 5AT bezpiecznik topikowy (3x) dla obiegów wewnętrznych i opcjonalnych* – Плавкие предохранители 5A (3x) для защиты внутренних электрических цепей и цепей питания внешней электрических нагрузки*
27.	10A fuse, 250V, Dim: 5x20 mm - Fusible 10A, 250V, Dim: 5x20 mm - Zekering 10A, 250V, 5x20 mm - 10 Ampere-Sicherung, 250 V, 5x20 mm - Fusible 10A, 250 V, Dim. 5x20 mm - Fusibile 10A, 250 V, dim. 5x20 mm - 10A bezpiecznik topikowy, 250 V, 5x20 mm - Плавкие предохранители 10A, 250В, 5x20 мм

WATERMASTER® 70 (X) - 85 Evo

B : Blue - Bleu - Blauw - Azul - Blu - Blau -Niebieski - Голубой
Bk : Black - Noir - Zwart - Negro - Nero - Schwarz - Czarny - Черный
Br : Brown - Brun - Bruin - Marrón - Marrone - Braun - Brązowy - Коричневый
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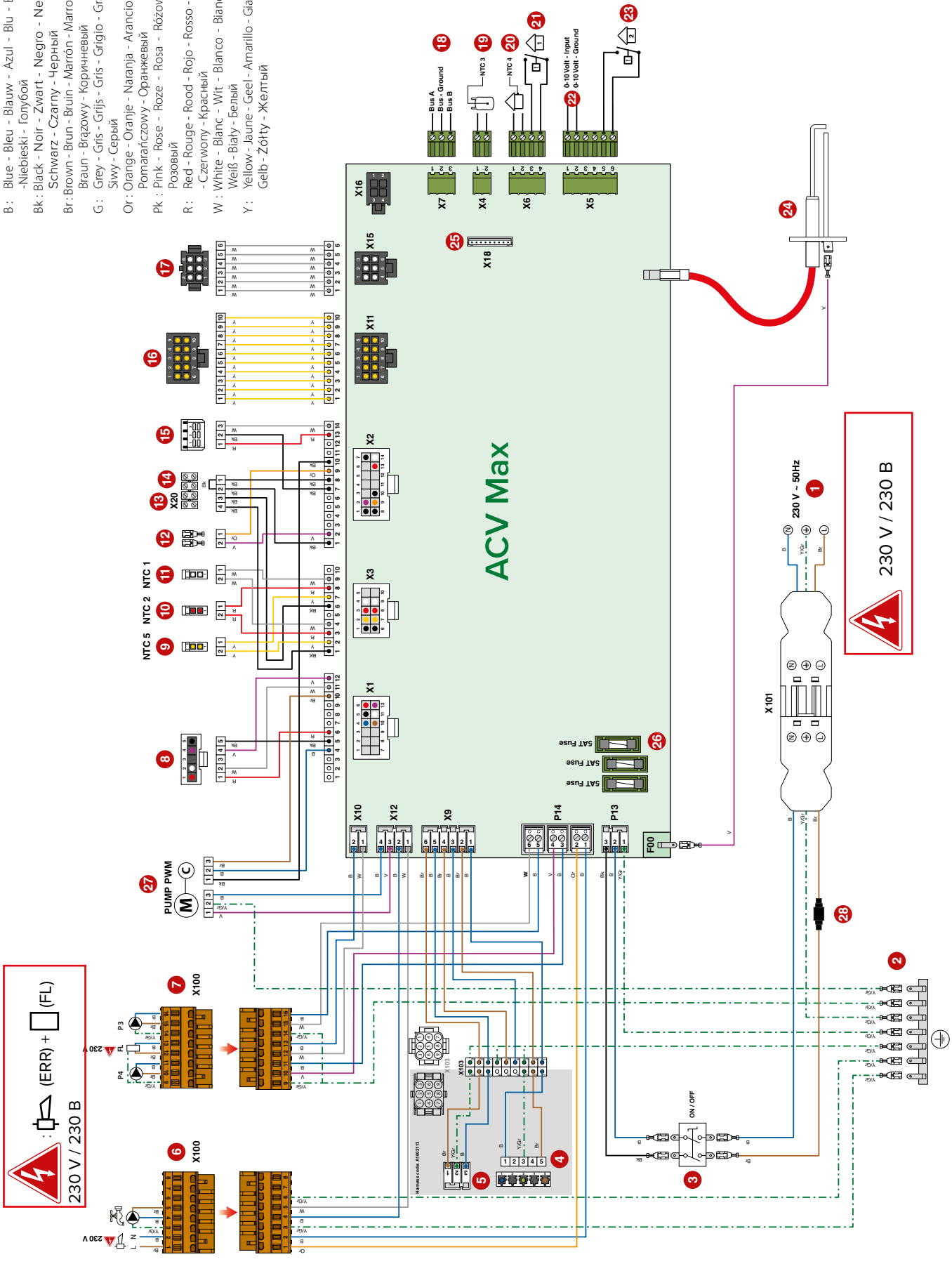
W : White - Blanc - Wit - Blanco - Bianco - Weiß - Biały - Белый
Y : Yellow - Jaune - Geel - Amarillo - Giallo - Gelb - Żółty - Желтый



1. 230 V power supply plug - Fiche d'alimentation 230 V - Voedingsstekker 230 V - 230 V Anschlussklemme - Toma de alimentación 230 V - Alimentazione elettrica 230 V - Przewód 230V - Подключение питания 230 В
2. Ground - Masse - Aarding - Erdung - Masa - Messa a terra - Uziemienie - Заземление
3. ON/OFF master switch – Interrupteur principal marche/arrêt – Hoofdschakelaar Aan/Uit – AN/AUS Hauptschalter – Interruptor ON/OFF – Interruttore generale on/off – Wyłącznik kotła – Главный выключатель ВКЛ/ВЫКЛ
4. Gas valve rectified – Vanne gaz rectifiée – Gasklep - Gelijkgericht – Gasventil gleichrichtet – Válvula de gas rectificada – Valvola gas rettificata – Zawór gazowy (VrAC) – Штекер газового клапана
5. Burner power supply – Alimentation brûleur – Toevoer brander – Stromversorgung des Brenners – Alimentación del quemador – Alimentazione del bruciatore – Zasilanie palnika – Электропитание горелки
6. Terminal block for optional items – Bornier pour éléments optionnels – Klemmen voor optionele elementen – Klemmenblock für Zubehör – Regleta de conexión para elementos externos – Morsettiera per accessori opzionali – Listwa zaciskowa dla opcjonalnych elementów – Клеммная колодка для дополнительных элементов:
7. Terminal block for optional items: – Bornier pour éléments optionnels – Klemmen voor optionele elementen – Klemmblock für optionales Zubehör – Regleta opcional de conexión para elementos externos opcionales – Morsettiera per accessori opzionali – Listwa zaciskowa dla opcjonalnych elementów: – Клеммный блок для дополнительных элементов (опция)
8. Burner PWM plug – Fiche PWM du brûleur – PWM-stekker brander – Brenner PWM Stecker – Ficha PWM quemador – Scheda PWM del bruciatore – Wtyczka palnika z modulacją – Линия управления вентилятором горелки
9. NTC5 flue gas temperature sensor – Sonde de température fumée - NTC5 – NTC5-rookgastemperatuurvoeler – NTC5 - Abgas-Temperaturfühler – Sonda de temperatura de humos NTC5 – Sonda temperatura fumi NTC5 – Czujnik temperatury spalin NTC5 – Темп. датчик NTC5 (уходящих газов)
10. NTC2 return sensor – Sonde température retour - NTC2 – NTC2-retourtemperatuurvoeler – NTC2 - Rücklauf-Temperaturfühler – Sonda de retorno NTC2 – Sonda ritorno NTC2 – Czujnik powrotu NTC2 – Темп. датчик NTC2 (обратная линия отопления)
11. NTC1 supply sensor – Sonde température départ - NTC1 – NTC1-aanvoervoeler – NTC1 - Vorlauf-Temperaturfühler – Sonda de impulsión NTC1 – Sonda mandata NTC1 – Czujnik zasilania NTC1 – Темп. датчик NTC1 (подающая линия отопления)
12. Gas pressure switch - Pressostat gaz - Drukschakelaar gas - Gasdruckwächter - Presostato de gas - Pressostato gas - Presostat ciśnienia gazu - Реле давления газа
13. NTC - Low temperature circuit – NTC - circuit basse température – NTC lage temperatuur – NTC - Niedertemperaturkreis – NTC de circuito de baja temperatura – Sonda NTC circuito miscelato bassa temperatura (opzionale) – Czujnik NTC obiegu niskotemperaturowego – Темп. датчик NTC (низкотемпературный контур)
14. High limit switch – Thermostat de sécurité – Veiligheidsthermostaat – Maximalthermostat – Termostato de seguridad – Termostato di sicurezza – Obwód dodatkowego ogranicznika temperatury (fabrycznie mostek) – Защитный термостат редельной температуры
15. Low water pressure sensor – Pressostat manque d'eau – Waterdruksensor – Wassermangelschalter – Presostato de falta de agua – Trasduttore pressione circuito idraulico – Czujnik ciśnienia wody grzewczej – Датчик давления теплоносителя
16. PCB (Display) – PCB (Écran) – PCB (Display) – PCB (Display) – PCB (Pantalla) – PCB (Display) – Wyświetlacz – Подключение панели управления контроллера
17. ACVMax programmation plug – Fiche de programmation ACVMax – Programmeerstekker ACVMax – ACVMax-Programmieranschluss – Ficha de programación ACVMAX – Connettore per programmazione scheda ACVMax – Gniazdo programowania sterownika ACVMAX – Разъем программирования ACVMAX
18. A & B Modbus (option) – Modbus A & B (option) – A & B Modbus (optie) – A & B Modbus (optional) – A & B Modbus (opcional) – A & B Modbus (opzionale) – Podłączenie magistrali Modbus (opcja) – Шина данных "Modbus" конт. A, B (опция)
19. NTC3 DHW sensor – Sonde sanitaire - NTC3 – NTC3-warmwatervoeler SWW – NTC3 - Brauchwasserfühler – Sonda de ACS NTC3 – Sonda acqua sanitaria NTC3 – Czujnik c.w. NTC3 – Темп. датчик NTC3 (ГВС)
20. NTC4 outdoor temperature sensor (option) – Sonde de température extérieure - NTC4 (option) – NTC4-buitenvoeler (optie) – NTC4 - Außenfühler (optional) – Sonda de temperatura exterior NTC4 (opcional) – Sonda temperatura esterna NTC4 (opzionale) – Czujnik temperatury zewnętrznej NTC4 (opcja) – Темп. датчик NTC4 (уличная температура) (опция)
21. Room thermostat 1 (option) – Thermostat d'ambiance 1 (option) – Kamerthermostaat 1 (optie) – Raumthermostat 1 (optional) – Termostato de ambiente 1 (opcional) – Termostato ambiente 1 (opzionale) – Termostat pokojowy obiegu 1 (opcja) – Комнатный термостат 1 (опция)
22. 0-10 Volt (option) – 0-10 Volt (option) – 0-10 Volt (optie) – 0-10 Volt (optional) – 0-10 V (opcional) – 0-10 Volt (opzionale) – 0-10 Volt (opcja) – Сигнал 0-10 В (опция)
23. Room thermostat 2 (option) – Thermostat d'ambiance 2 (option) – Kamerthermostaat 2 (optie) – Raumthermostat 2 (optional) – Termostato de ambiente 2 (opcional) – Termostato ambiente 2 (opzionale) – Termostat pokojowy obiegu 2 (opcja) – Комнатный термостат 2 (опция)
24. Connection for interface control unit – Raccordement pour Interface Control Unit – Connector voor EBV interface (control unit) – Anschluss für Regeleinheit Control Unit – Conexión para Interface Control Unit – Innesto per scheda interfaccia (Control Unit) – Gniazdo dla modułu komunikacyjnego RMCI (do współpracy z regulatorem Room Unit/Control Unit) – Подключение интерфейсного модуля для Control Unit
25. Ignition and ionization cable – Câble d'allumage et d'ionisation – Ontstekings- en ionisatiekabel – Ionisations- und Zündkabel – Cable de encendido y de ionización – Cavo accensione e ionizzazione – Przewód zapłonowo - jonizacyjny – Подключение интерфейсного модуля для Control Unit (опция)
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27. Modulating pump PWM – PWM pompe modulante – PWM modulerende pomp – PWM modulierende Pumpe – Bomba de modulación PWM – Pompa modulante PWM – Pompa mieszająca modulowana PWM – Насос с модуляцией мощности (PWM)
28. 10A fuse, 250V, Dim: 5x20 mm - Fusible 10A, 250V, Dim: 5x20 mm - Zekering 10A, 250V, 5x20 mm - 10 Ampere-Sicherung, 250 V, 5x20 mm - Fusible 10A, 250 V, Dim. 5x20 mm - Fusibile 10A, 250 V, dim. 5x20 mm - 10A bezpiecznik topikowy, 250 V, 5x20 mm - Плавкие предохранители 10А, 250В, 5x20 мм

WATERMASTER® 120 Evo

B : Blue - Bleu - Blauw - Azul - Blu - Blau -Niebieski - Голубой
Bk : Black - Noir - Zwart - Negro - Nero - Schwarz - Czarny - Чёрный
Br : Brown - Brun - Bruin - Marrón - Marrone - Braun - Brązowy - Коричневый
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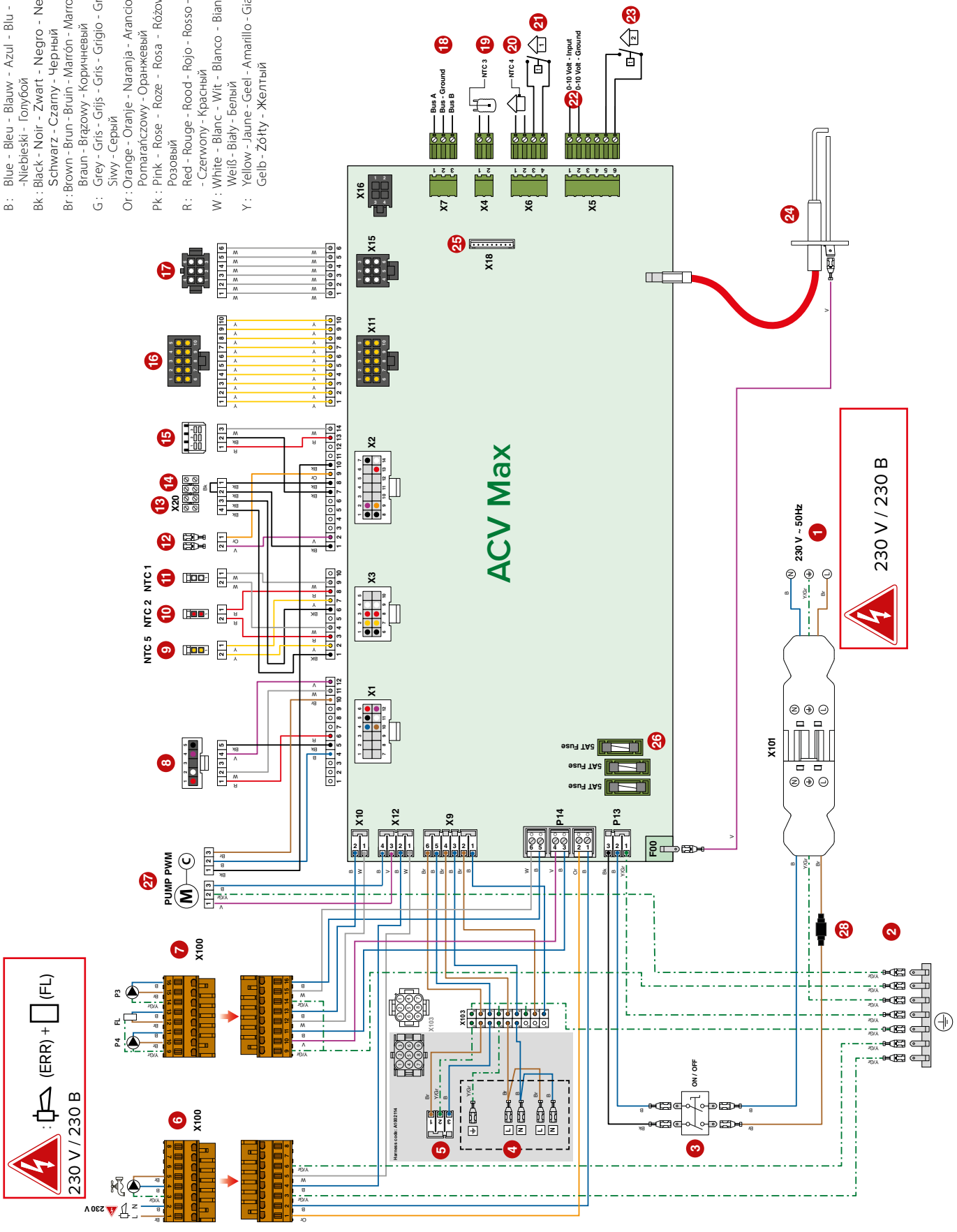

1. 230 V power supply plug - Fiche d'alimentation 230 V - Voedingsstekker 230 V - 230 V Anschlussklemme - Toma de alimentación 230 V - Alimentazione elettrica 230 V - Przewód 230V - Подключение питания 230 В
2. Ground - Masse - Aarding - Erdung - Masa - Messa a terra - Uziemienie - Заземление
3. ON/OFF master switch – Interrupteur principal marche/arrêt – Hoofdschakelaar Aan/Uit – AN/AUS Hauptschalter – Interruptor ON/OFF – Interruttore generale on/off – Wyłącznik kotła – Главный выключатель ВКЛ/ВЫКЛ
4. Gas valve rectified – Vanne gaz rectifiée – Gasklep - Gelijkgericht – Gasventil gleichrichtet – Válvula de gas rectificada – Valvola gas rettificata – Zawór gazowy (VrAC) – Штекер газового клапана
5. Burner power supply – Alimentation brûleur – Toevoer brander – Stromversorgung des Brenners – Alimentación del quemador – Alimentazione del bruciatore – Zasilanie palnika – Электропитание горелки
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10. NTC2 return sensor – Sonde température retour - NTC2 – NTC2-retourtemperatuurvoeler – NTC2 - Rücklauf-Temperaturfühler – Sonda de retorno NTC2 – Sonda ritorno NTC2 – Czujnik powrotu NTC2 – Темп. датчик NTC2 (обратная линия отопления)
11. NTC1 supply sensor – Sonde température départ - NTC1 – NTC1-aanvoervoeler – NTC1 - Vorlauf-Temperaturfühler – Sonda de impulsión NTC1 – Sonda mandata NTC1 – Czujnik zasilania NTC1 – Темп. датчик NTC1 (подающая линия отопления)
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16. PCB (Display) – PCB (Écran) – PCB (Display) – PCB (Display) – PCB (Pantalla) – PCB (Display) – Wyświetlacz – Подключение панели управления контроллера
17. ACVMax programmation plug – Fiche de programmation ACVMax – Programmeerstekker ACVMax – ACVMax-Programmieranschluss – Ficha de programación ACVMAX – Connettore per programmazione scheda ACVMax – Gniazdo programowania sterownika ACVMAX – Разъем программирования ACVMAX
18. A & B Modbus (option) – Modbus A & B (option) – A & B Modbus (optie) – A & B Modbus (optional) – A & B Modbus (opcional) – A & B Modbus (opzionale) – Podłączenie magistrali Modbus (opcja) – Шина данных "Modbus" конт. A, B (опция)
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20. NTC4 outdoor temperature sensor (option) – Sonde de température extérieure - NTC4 (option) – NTC4-buitenvoeler (optie) – NTC4 - Außenfühler (optional) – Sonda de temperatura exterior NTC4 (opcional) – Sonda temperatura esterna NTC4 (opzionale) – Czujnik temperatury zewnętrznej NTC4 (opcja) – Темп. датчик NTC4 (уличная температура) (опция)
21. Room thermostat 1 (option) – Thermostat d'ambiance 1 (option) – Kamerthermostaat 1 (optie) – Raumthermostat 1 (optional) – Termostato de ambiente 1 (opcional) – Termostato ambiente 1 (opzionale) – Termostat pokojowy obiegu 1 (opcja) – Комнатный термостат 1 (опция)
22. 0-10 Volt (option) – 0-10 Volt (option) – 0-10 Volt (optie) – 0-10 Volt (optional) – 0-10 V (opcional) – 0-10 Volt (opzionale) – 0-10 Volt (opcja) – Сигнал 0-10 В (опция)
23. Room thermostat 2 (option) – Thermostat d'ambiance 2 (option) – Kamerthermostaat 2 (optie) – Raumthermostat 2 (optional) – Termostato de ambiente 2 (opcional) – Termostato ambiente 2 (opzionale) – Termostat pokojowy obiegu 2 (opcja) – Комнатный термостат 2 (опция)
24. Connection for interface control unit – Raccordement pour Interface Control Unit – Connector voor EBV interface (control unit) – Anschluss für Regeleinheit Control Unit – Conexión para Interface Control Unit – Innesto per scheda interfaccia (Control Unit) – Gniazdo dla modułu komunikacyjnego RMCI (do współpracy z regulatorem Room Unit/Control Unit) – Подключение интерфейсного модуля для Control Unit
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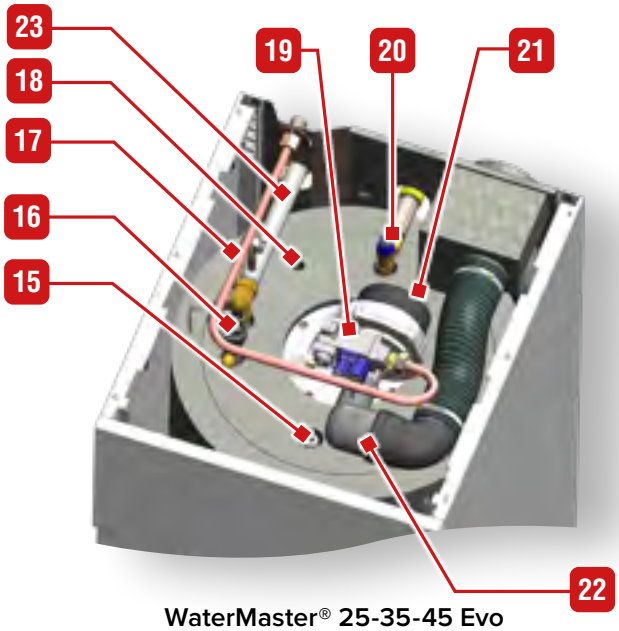
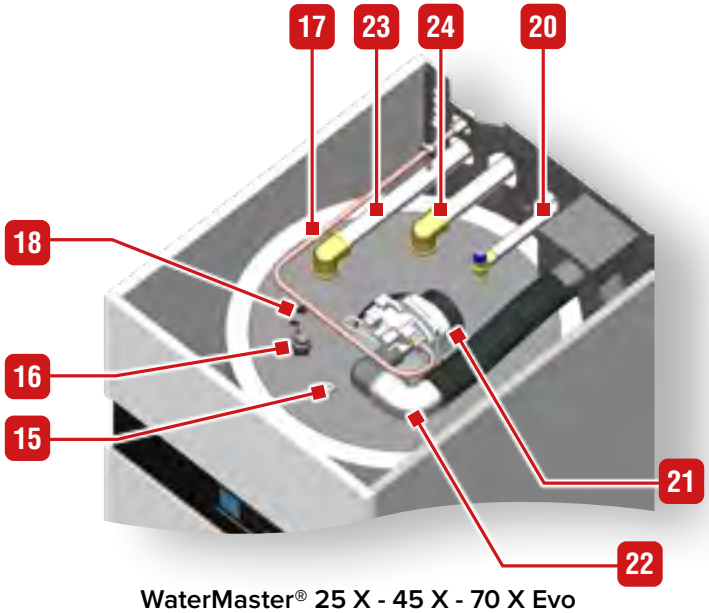
27. Modulating pump PWM – PWM pompe modulante – PWM modulerende pomp – PWM modulierende Pumpe – Bomba de modulación PWM – Pompa modulante PWM – Pompa mieszająca modulowana PWM – Насос с модуляцией мощности (PWM)
28. 10A fuse, 250V, Dim: 5x20 mm - Fusible 10A, 250V, Dim: 5x20 mm - Zekering 10A, 250V, 5x20 mm - 10 Ampere-Sicherung, 250 V, 5x20 mm - Fusible 10A, 250 V, Dim. 5x20 mm - Fusibile 10A, 250 V, dim. 5x20 mm - 10A bezpiecznik topikowy, 250 V, 5x20 mm - Плавкие предохранители 10А, 250В, 5x20 мм

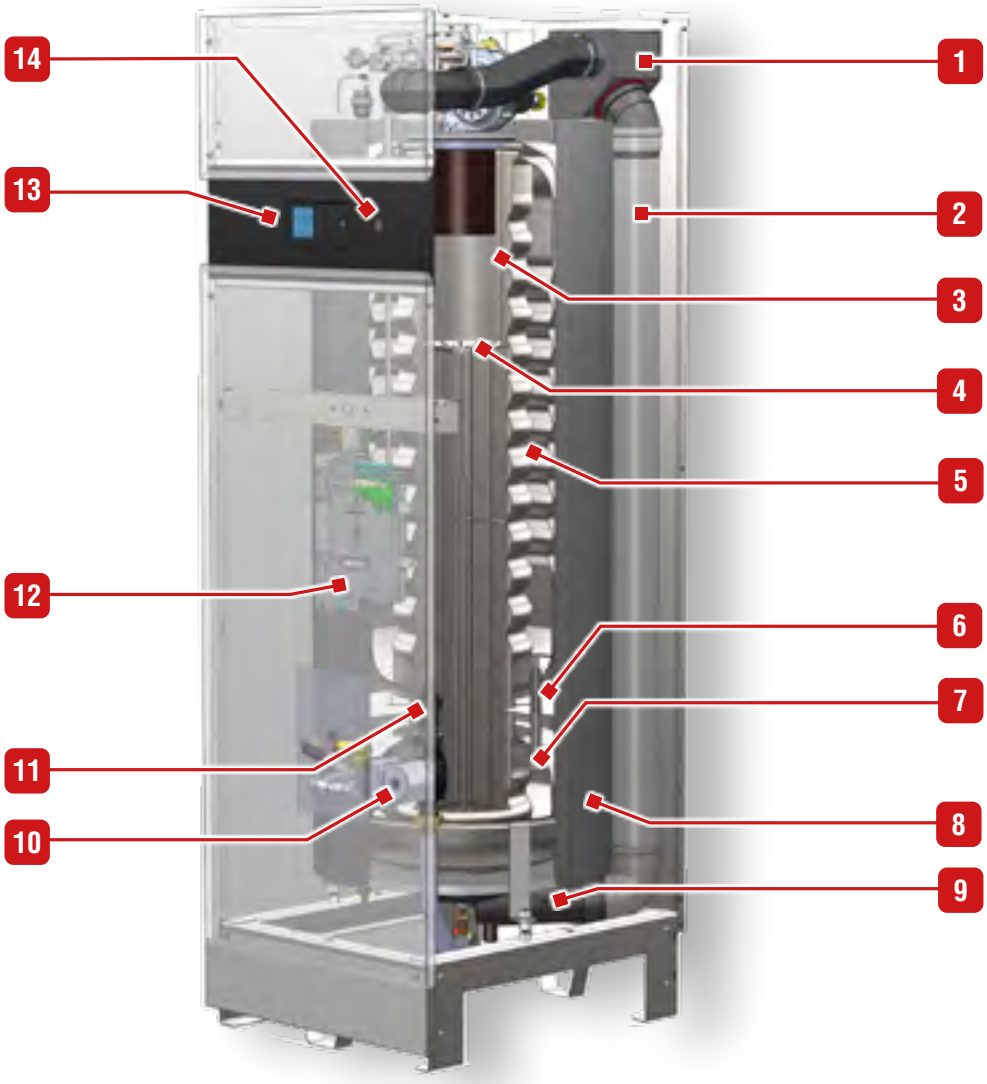
WATERMASTER® 25 - 35 - 45 Evo
WATERMASTER® 25 X - 45 X - 70 X Evo



WaterMaster® 25-35-45 Evo



WaterMaster® 25 X - 45 X - 70 X Evo



EN

1. Concentric flue gas/air inlet box
2. Flue gas exhaust tube
3. Combustion chamber
4. Stainless steel heat exchanger
5. Stainless steel “Tank-in-Tank” hot water production tank
6. Primary circuit separation disc
7. Indirect water pre-heater
8. Insulation
9. Condensate recovery dish + NTC5 sensor (flue gas)
10. High efficiency circulator pump
11. NTC2 sensor (primary return)
12. Electrical panel (with spare fuses at the back)
13. ACVMax Touch Control panel
14. On-Off switch
15. DHW tank dry well (Dip tube with temperature sensor)
16. Automatic air vent
17. Gas pipe
18. NTC1 sensor (primary supply)
19. Gas valve
20. DHW safety valve / (T&P relief valve - UK only)
21. Modulating air/gas premix burner with fan
22. Air inlet
23. DHW outlet
24. DHW recirculation tube

FR

1. Collecteur concentrique d’évacuation des fumées/admission d’’air
2. Conduite de sortie des fumées
3. Chambre de combustion
4. Échangeur en acier inoxydable
5. Ballon d’eau chaude sanitaire «tank-in-tank» en inox
6. Disque de séparation du circuit primaire
7. Préchauffeur indirect de l’eau
8. Isolation
9. Bac à condensats + sonde NTC5 (fumées)
10. Circulateur haut rendement
11. Sonde NTC2 (retour primaire)
12. Tableau électrique (avec fusibles de rechange à l’arrière)
13. Tableau de commande ACVMax Touch
14. Bouton marche/arrêt
15. Doigt de gant (plonge sanitaire avec sonde de température)
16. Purgeur automatique
17. Conduite de gaz
18. Sonde NTC1 (départ primaire)
19. Vanne gaz
20. Soupape de sécurité sanitaire
21. Brûleur modulant à prémélange air/gaz et ventilateur
22. Entrée d’air
23. Sortie sanitaire
24. Circuit de recirculation sanitaire

NL

1. Concentrisch lucht toevoer / rookgas afvoer
2. Schouwpijp
3. Verbrandingskamer
4. Warmtewisselaar uit roestvrij staal
5. Boiler ”Tank in Tank” (binnentank) uit roestvrij staal
6. Scheidingsschijf van de primaire kring
7. Indirecte voorverwarmer van water
8. Isolatie
9. Recuperatiebak voor condenswater + NTC5-rookgasvoeler
10. Hoogrendement voedingspomp
11. NTC2-retourvoeler (primair)
12. Elektriciteitsbord (met reserve zekeringen aan de achterzijde).
13. ACVMax Touch bedieningspaneel
14. Aan/Uit schakelaar
15. Warmwater tank voelerbuis (dompelbuis met temperatuursensor)
16. Automatische ontluchter
17. Gaspijp
18. NTC1-aanvoervoeler (primaire
19. Gasklep
20. Veiligheidsklep SWW
21. Brander met voormenging van Gas/Lucht
22. Lucht inlaat
23. Uitgang SWW
24. Recirculatie SWW

DE

1. Konzentrischer Abgasanschluss
2. Abgasrohr
3. Brennkammer
4. Edelstahlwärmetauscher
5. Edelstahl “Tank-in-Tank” Trinkwasserspeicher
6. Heizkreis Trennblech
7. Indirekter Vorwärmspeicher
8. Isolierung
9. Kondensatsammelbehälter + NTC5 - Abgas-Temperaturfühler
10. Hocheffizienzumwälzpumpe
11. NTC2 - Rücklauf-Temperaturfühler
12. Elektrische Steuerung (mit Ersatzsicherungen an der Rückseite).
13. ACVMax Touch Bedienfeld mit Display und Manometer
14. Ein/Aus Schalter
15. Tauchhülse für Trinkwasser mit NTC Fühler
16. Automatischer Entlüfter (Primär)
17. Gasdruckwächter
18. NTC1 - Vorlauf-Temperaturfühler
19. Gasventil
20. WW-Sicherheitsventil
21. Modulierender Luft/Gas Premix Brenner mit Gebläse
22. Luftzufuhrrohr
23. Warmwasserausgang
24. Zirkulationskreislauf für Warmwasser

ES

1. Caja de entrada concéntrica de salida de humos/entrada de aire
2. Conducto de humos
3. Cámara de combustión
4. Intercambiador de acero inoxidable
5. Acumulador de agua caliente sanitaria “Tank-in-Tank” de acero inoxidable
6. Disco de separación del circuito primario
7. Precalentador indirecto de agua
8. Aislamiento
9. Recipiente recuperador de condensados + Sonda de temperatura de humos NTC5
10. Bomba de circulación de alta eficiencia
11. Sonda de retorno NTC2 circuito primario
12. Cuadro eléctrico (con fusibles de repuesto en la parte posterior)
13. Panel de mandos ACVMax Touch con pantalla y manómetro
14. Interruptor de puesta en marcha
15. Vaina de la sonda del acumulador de ACS (con sonda de temperatura)
16. Purgador de aire automático
17. Tubo de gas
18. Sonda de impulsión NTC1
19. Válvula de gas
20. Válvula de seguridad ACS
21. Quemador modulante de premezcla de aire/gas
22. Entrada de aire
23. Salida de ACS
24. Circuito de recirculacion de ACS

IT

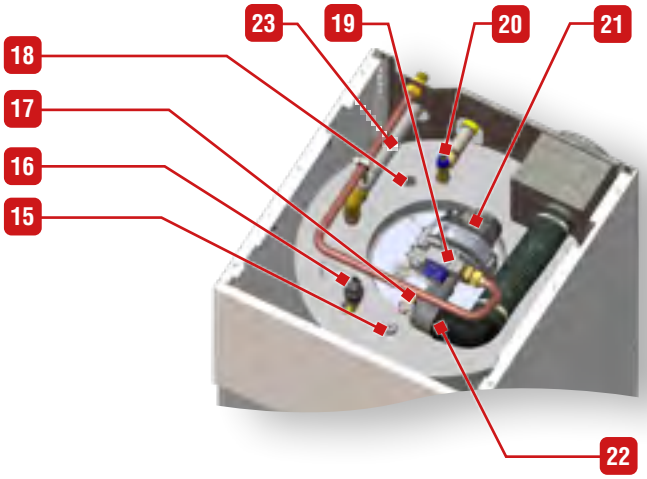
1. Connessione concentrica ingresso aria/espulsione fumi
2. Tubo camino
3. Camera di combustione
4. Scambiatore in acciaio inossidabile
5. Serbatoio di produzione d’acqua calda “Tank-in- Tank” in acciaio inossidabile
6. Disco di separazione del circuito primario
7. Dispositivo di preriscaldamento indiretto dell’acqua
8. Isolamento
9. Serbatoio di recupero della condensa + Sonda temperatura fumi NTC5
10. Circolatore ad elevata efficienza
11. Sonda ritorno NTC2
12. Scheda elettrica (con fusibili di ricambio)
13. Pannello comandi ACVMax Touch con display e manometro
14. Interruttore generale on/off
15. Pozzetto acqua calda sanitaria (con sonda NTC)
16. Spurgo automatico
17. Tubo gas
18. Sonda mandata NTC1
19. Valvola gas
20. Valvola di sicurezza ACS
21. Bruciatore modulante a premiscelazione ARIA/GAS
22. Tubo di aspirazione dell’aria
23. Uscita acqua calda sanitaria
24. Circuito di ricircolo ACS

PL

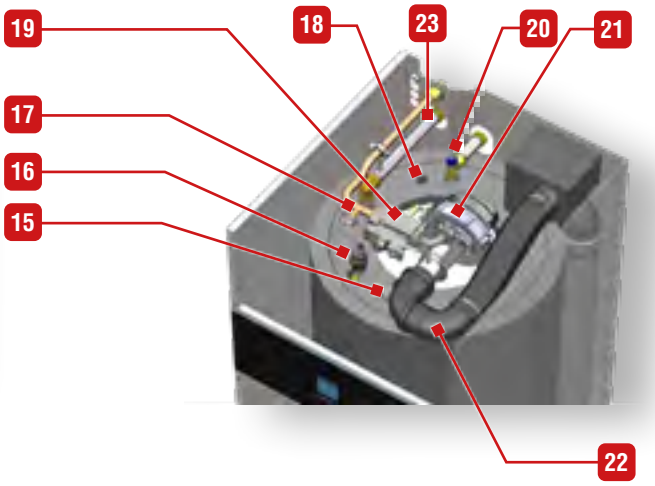
1. Koncentryczny adapter kominowy
2. Kanał spalinowy
3. Komora spalania
4. Wymiennik ciepła ze stali nierdzewnej
5. Zasobnik ciepłej wody ze stali nierdzewnej
6. Płyta separacyjna
7. Wstępne podgrzewanie wody
8. Izolacja
9. Separator kondensatu + Czujnik temperatury spalin NTC5
10. Pompa mieszająca wysokiej sprawności
11. Czujnik powrotu NTC2
12. Panel podłączeń elektrycznych
13. Panel sterowniczy ACVMax Touch
14. Wyłącznik główny kotła
15. Tuleja pomiarowa c.w. (z czujnikiem temperatury)
16. Odpowietrznik automatyczny
17. Rura gazowa
18. Czujnik zasilania NTC1
19. Zawór gazowy
20. Zawór bezpieczeństwa c.w.
21. Modulowany palnik gazowy premix z wentylatorem
22. Wlot powietrza
23. Wylot ciepłej wody
24. Obieg recyrkulacji c.w.

RU

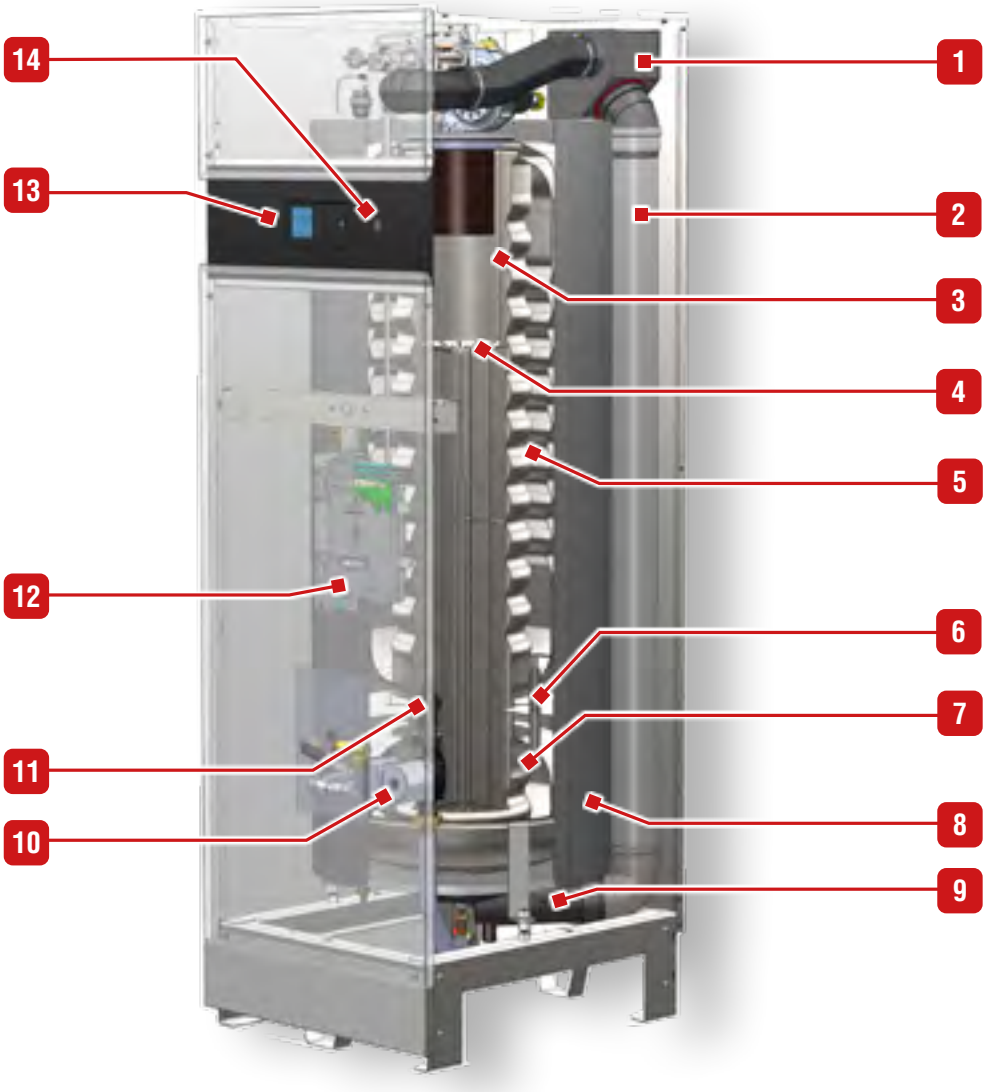
1. Терминал подключения коаксиального дымоотвода
2. Патрубок отвода продуктов сгорания
3. Камера сгорания
4. Первичный теплообменник из нержавеющей стали
5. Бойлер из нержавеющей стали “Бак в Баке” для произв-ва горячей воды
6. Разделительная перегородка в отопительном контуре
7. Бак предварительного нагрева санитарной воды
8. Теплоизоляция
9. Лоток для сбора конденсата + Темп. датчик NTC5 (уходящих газов)
10. Высокоэффективный циркуляционный насос
11. Темп. датчик NTC2 (обратная линия отопления)
12. Блок автоматики управления котлом (с запасными предохранителями на задней стенке)
13. Панель управления ACVMax Touch
14. Главный выключатель ВКЛ/ВЫКЛ
15. Гильза для дачика температуры ГВС
16. Автоматический воздухоотводчик (отопительный контур)
17. Подключение газа
18. Темп. датчик NTC1 (подающая линия отопления)
19. Газовый клапан
20. Предохранительный клапан ГВС
21. Премиксная горелка модуляцией мощности
22. Воздухозаборный патрубок
23. Подача горячей санитарной воды в систему ГВС
24. Контур рециркуляции ГВС



WaterMaster® 70 - 85 Evo



WaterMaster® 120 Evo



EN

1. Concentric flue gas/air inlet box
2. Flue gas exhaust tube
3. Combustion chamber
4. Stainless steel heat exchanger
5. Stainless steel “Tank-in-Tank” hot water production tank (primary + DHW)
6. Primary circuit separation disc
7. Indirect water pre-heater
8. Insulation
9. Condensate recovery dish + NTC5 sensor (flue gas)
10. High efficiency circulator pump
11. NTC2 sensor (Primary return)
12. Electrical panel (with spare fuses at the back)
13. ACVMax Touch Control panel
14. On-Off switch
15. DHW tank dry well (Dip tube with temperature sensor)
16. Automatic air vent
17. Gas pressure switch and gas pipe
18. NTC1 sensor (Primary supply)
19. Gas valve
20. DHW safety valve / (T & P relief valve - UK only)
21. Modulating air/gas premix burner with fan
22. Air inlet
23. DHW outlet

FR

1. Collecteur concentrique d’évacuation des fumées/admission d’air
2. Conduite de sortie fdes umées
3. Chambre de combustion
4. Échangeur en acier inoxydable
5. Ballon d’eau chaude sanitaire «tank-in-tank» en inox
6. Disque de séparation du circuit primaire
7. Préchauffeur indirect de l’eau
8. Isolation
9. Bac à condensats + sonde NTC5 (fumées) (non visibles)
10. Circulateur haut rendement
11. Sonde NTC2 (Retour primaire)
12. Tableau électrique (avec fusibles de rechange à l’arrière)
13. Tableau de commande ACVMax Touch
14. Interrupteur marche-arrêt
15. Doigt de gant (plonge sanitaire avec sonde de température)
16. Purgeur automatique
17. Pressostat gaz
18. Sonde NTC1 (Départ primaire)
19. Vanne gaz
20. Soupape de sécurité sanitaire
21. Brûleur modulant à prémélange air/gaz et ventilateur
22. Entrée d’air
23. Sortie sanitaire

NL

1. Concentrisch lucht toevoer / rookgas afvoer
2. Schouwpijp
3. Verbrandingskamer
4. Warmtewisselaar uit roestvrij staal
5. Boiler ”Tank in Tank” (binnentank) uit roestvrij staal
6. Scheidingsschijf van de primaire kring
7. Indirecte voorverwarmer van water
8. Isolatie
9. Recuperatiebak voor condenswater + NTC5-rookgasvoeler
10. Hoogrendement voedingspomp
11. NTC2-retourvoeler (primair)
12. Elektriciteitsbord (met reserve zekeringen aan de achterzijde).
13. ACVMax Touch bedieningspaneel
14. Aan-Uit schakelaar
15. Warmwater tank voelerbuis (dompelbuis met temperatuursensor)
16. Automatische ontluchter
17. Drukschakelaar gas
18. NTC1-aanvoervoeler (primair)
19. Gasklep
20. Veiligheidsklep SWW
21. Brander met voormenging van Gas/Lucht
22. Lucht inlaat
23. Uitgang SWW

DE

1. Konzentrischer Abgasanschluss
2. Abgasrohr
3. Brennkammer
4. Edelstahlwärmetauscher
5. Edelstahl “Tank-in-Tank” Trinkwasserspeicher
6. Heizkreis Trennblech
7. Indirekter Vorwärmspeicher
8. Isolierung
9. Kondensatsammelbehälter + NTC5 - Abgas-Temperaturfühler
10. Hocheffizienzumwälzpumpe
11. NTC2 - Rücklauf-Temperaturfühler
12. Elektrische Steuerung (mit Ersatzsicherungen an der Rückseite).
13. ACVMax Touch Bedienfeld mit Display und Manometer
14. Ein/Aus Schalter
15. Tauchhülse für Trinkwasser mit NTC Fühler
16. Automatischer Entlüfter (Primärkreis)
17. Gasdruckwächter
18. NTC1 - Vorlauf-Temperaturfühler
19. Gasventil
20. WW-Sicherheitsventil
21. Modulierender Luft/Gas Premix Brenner mit Gebläse
22. Luftzufuhrrohr
23. Warmwasserausgang

ES

1. Caja de entrada concéntrica de salida de humos/entrada de aire
2. Conducto de humos
3. Cámara de combustión
4. Intercambiador de acero inoxidable
5. Acumulador de agua caliente sanitaria “Tank-in-Tank” de acero inoxidable
6. Disco de separación del circuito primario
7. Precalentador indirecto de agua
8. Aislamiento
9. Recipiente recuperador de condensados + Sonda de temperatura de humos NTC5
10. Bomba de circulación de alta eficiencia
11. Sonda de retorno NTC2
12. Cuadro eléctrico (con fusibles de repuesto en la parte posterior)
13. Panel de mandos ACVMax Touch con pantalla y manómetro
14. Interruptor de puesta en marcha
15. Vaina de la sonda del acumulador de ACS (con sonda de temperatura)
16. Purgador de aire automático
17. Presostato de gas
18. Sonda de impulsión NTC1
19. Válvula de gas
20. Válvula de seguridad ACS
21. Quemador modulante de premezcla de aire/gas
22. Entrada de aire
23. Salida de ACS

IT

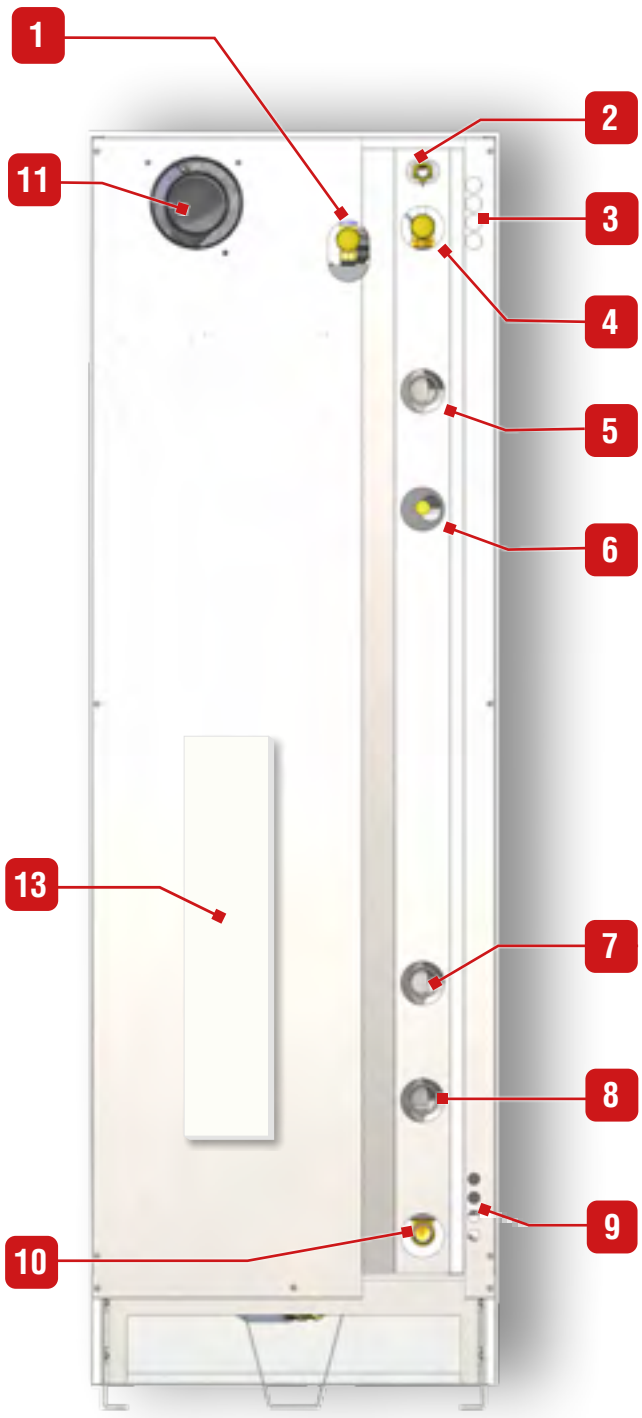
1. Connessione concentrica ingresso aria/espulsione fumi
2. Tubo camino
3. Camera di combustione
4. Scambiatore in acciaio inossidabile
5. Serbatoio di produzione d’acqua calda “Tank-in- Tank” in acciaio inossidabile
6. Disco di separazione del circuito primario
7. Dispositivo di preriscaldamento indiretto dell’acqua
8. Isolamento
9. Serbatoio di recupero della condensa + Sonda temperatura fumi NTC5
10. Circolatore ad elevata efficienza
11. Sonda ritorno NTC2
12. Scheda ACVMax Touch (con fusibili di ricambio)
13. Pannello comandi con display e manometro
14. Interruttore generale on/off
15. Pozzetto acqua calda sanitaria (con sonda NTC)
16. Spurgo automatico
17. Pressostato gas
18. Sonda mandata NTC1
19. Valvola gas
20. Valvola di sicurezza ACS
21. Bruciatore modulante a premiscelazione ARIA/GAS
22. Tubo di aspirazione dell’aria
23. Uscita acqua calda sanitaria

PL

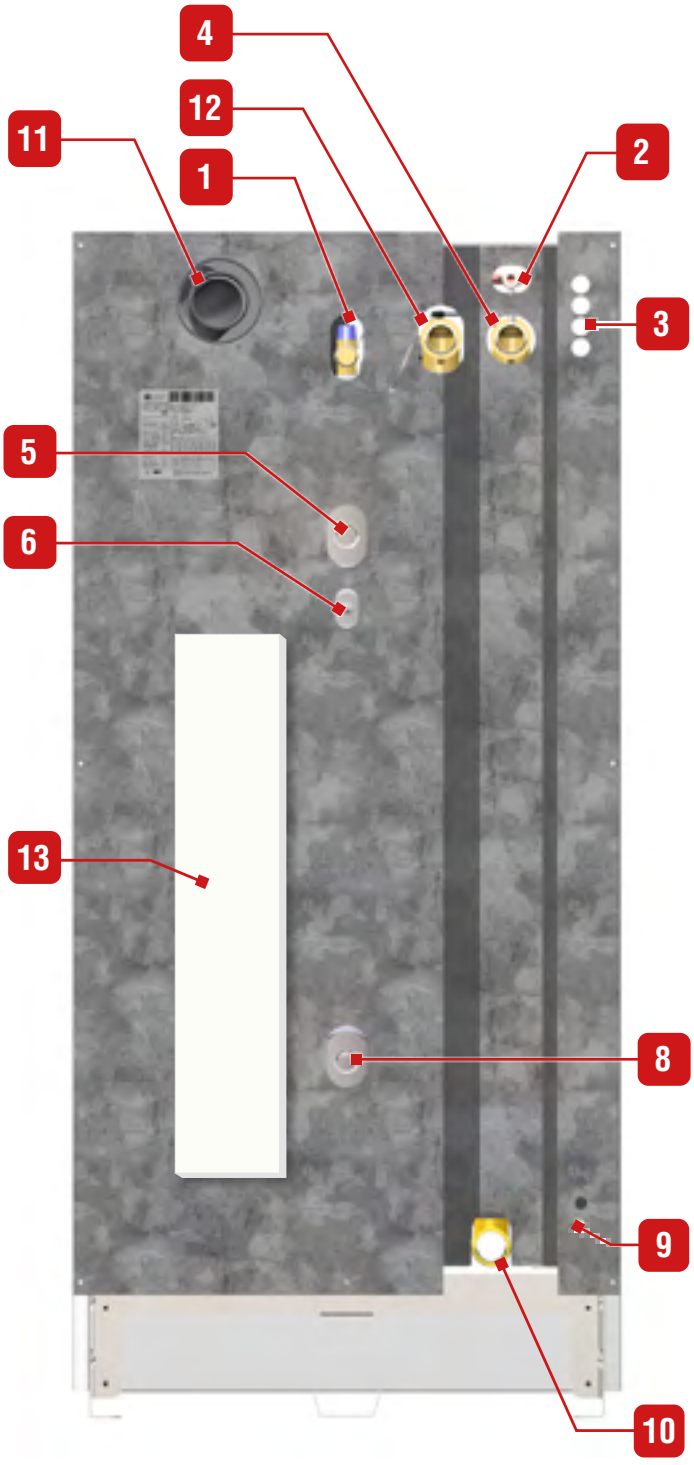
1. Koncentryczny adapter kominowy
2. Kanał spalinowy
3. Komora spalania
4. Wymiennik ciepła ze stali nierdzewnej
5. Zasobnik ciepłej wody ze stali nierdzewnej
6. Płyta separacyjna
7. Wstępne podgrzewanie wody
8. Izolacja
9. Separator kondensatu + Czujnik temperatury spalin NTC5
10. Pompa mieszająca wysokiej sprawności
11. Czujnik powrotu NTC2
12. Panel podłączeń elektrycznych
13. Panel sterowniczy ACVMax Touch
14. Wyłącznik główny kotła
15. Tuleja pomiarowa c.w. (z czujnikiem temperatury)
16. Odpowietrznik automatyczny
17. Rura gazowa
18. Czujnik zasilania NTC1
19. Zawór gazowy
20. Zawór bezpieczeństwa c.w.
21. Modulowany palnik gazowy premix z wentylatorem
22. Wlot powietrza
23. Wylot ciepłej wody

RU

1. Терминал подключения коаксиального дымоотвода
2. Патрубок отвода продуктов сгорания
3. Камера сгорания
4. Первичный теплообменник из нержавеющей стали
5. Бойлер из нержавеющей стали “Бак в Баке” для произв-ва горячей воды
6. Разделительная перегородка в отопительном контуре
7. Бак предварительного нагрева санитарной воды
8. Теплоизоляция
9. Лоток для сбора конденсата + Темп. датчик NTC5 (уходящих газов) (Не показан)
10. Высокоэффективный циркуляционный насос
11. Темп. датчик NTC2 (обратная линия отопления)
12. Блок автоматики управления котлом (с запасными предохранителями на задней стенке)
13. Панель управления ACVMax Touch
14. Главный выключатель ВКЛ/ВЫКЛ
15. Гильза для дачика температуры ГВС
16. Автоматический воздухоотводчик (отопительный контур)
17. Реле давления газа
18. Темп. датчик NTC1 (подающая линия отопления)
19. Газовый клапан
20. Предохранительный клапан ГВС
21. Премиксная горелка модуляцией мощности
22. Воздухозаборный патрубок Подача горячей санитарной воды в систему ГВС



WaterMaster 25 - 35 - 45 - 70 - 85 - 120 Evo



WaterMaster 25 X - 45 X - 70 X Evo

EN

1. Discharge for built-in DHW safety valve / (T & P relief valve - UK only) outlet to be connected to the sewage system
2. Gas connection [M]
3. Grommets for electrical wires (low voltage control)
4. Domestic Hot Water outlet [M]
5. Not used
6. Connection for provided primary safety valve (to be installed).
7. Not used
8. Primary circuit fill connection [F]
9. Grommets for electrical wires (230 V)
10. Domestic Hot Water circuit inlet [M]
11. Flue connection
12. DHW recirculation connection
13. Front bottom panel (stored for transport)

FR

1. Raccord de décharge de la soupape de sécurité sanitaire intégrée
2. Raccord gaz [M]
3. Passe-câbles pour fils électriques (basse tension)
4. Sortie eau chaude sanitaire [M]
5. Pas utilisé
6. Raccord pour la soupape de sécurité du circuit primaire (à installer).
7. Pas utilisé
8. Raccord de remplissage circuit primaire [F]
9. Passe-câbles pour fils électriques (230 V)
10. Entrée circuit ECS [M]
11. Raccord cheminée
12. Raccord pour la recirculation ECS
13. Panneau inférieur avant (position pour le transport)

NL

1. Aansluiting veiligheidsklep SWW op de riolering
2. Gasaansluiting [M]
3. Doorvoer tules voor electro kabels (lage spanning)
4. Uitgang sanitair warm water [M]
5. Niet gebruikt
6. Aansluiting voor primaire veiligheidsklep (te installeren).
7. Niet gebruikt
8. Ingang primaire circuit
9. Doorvoer tules voor electro kabels (230 V)
10. Ingang SWW [M]
11. Schouw aansluiting
12. SWW recirculatie aansluiting
13. Onderste voorpaneel (positie voor transport)

DE

1. Anschluss für Sicherheitsventil Trinkwasser, welches an eine Kanalisation angeschlossen werden muss
2. Gasanschluss [M]
3. Kabeldurchführungen 24 Volt
4. Warmwasserausgang [M]
5. Nicht verwendet
6. Anschluss für Sicherheitsventil Primärkreis
7. Nicht verwendet
8. Primärkreisreingang
9. Kabeldurchführungen 230 Volt
10. Kaltwassereingang [M]
11. Abgasanschluss
12. Anschluss für Warmwasserzirkulation
13. Untere Frontplatte (fPosition für den Transport)

ES

1. La salida de la válvula de seguridad de ACS integrada se debe conectar a la red de alcantarillado
2. Conexión gas [M]
3. Pasacables para cables eléctricos (control de baja tensión)
4. Salida de Agua Caliente Sanitaria [M]
5. No se utiliza
6. Conexión para la válvula de seguridad del circuito primario (para instalar).
7. No se utiliza
8. Conexión de llenado del circuito primario
9. Pasacables para cables eléctricos (230 V)
10. Entrada del circuito de Agua Caliente Sanitaria [M]
11. Conexión conducto de humos
12. Conexión de recirculación de ACS
13. Panel frontal inferior (posición para el transporte)

IT

1. Scarico valvola di sicurezza sanitaria interna (da convogliare ad uno scarico)
2. Collegamento gas [M]
3. Ingresso cavi elettrici (bassa tensione)
4. Uscita Acqua Calda Sanitaria [M]
5. Non utilizzabili
6. Connessione per montaggio valvola di sicurezza fornita (da montare a cura dell'installatore)
7. Non utilizzabili
8. Connessioni riempimento circuito primario.
9. Ingresso cavi elettrici (230 V)
10. Ingresso circuito ACS [M]
11. Collegamento scarico fumi/ ingresso aria comburente
12. Collegamento per il ricircolo dell' ACS
13. Pannello anteriore inferiore (posizione per il trasporto)

PL

1. Wylot dla wbudowanego zaworu bezp. c.w.
2. Podłączenie gazu [M]
3. Dławiki przewodów elektrycznych (sterowanie niskonapięciowe)
4. Wylot ciepłej wody [M]
5. Niedostępne
6. Podłączenie do zaworu bezpieczeństwa (do zainstalowania).
7. Niedostępne
8. Podłączenie napełniania obiegu grzewczego
9. Dławiki przewodów elektrycznych (230 V)
10. Wlot zimnej wody [M]
11. Podłączenie do komina
12. Przyłącze recyrkulacji CWU
13. Panel przedni dolny (pozycja do transportu)

RU

1. Сливной патрубок от предохранительного клапана
2. Подключение газа [M]
3. Кабельные вводы (низковольные подключения)
4. Подача горячей санитарной воды в систему ГВС [M]
5. Не используется]
6. Патрубок подключения предохранительного клапана.
7. Не используется
8. Патрубок заполнения первичного контура
9. Кабельные вводы для электроподключений 230В
10. Подача холодной санитарной воды [M]
11. Подключение дымоотвода
12. Подключение рециркуляции ГВС
13. Нижняя передняя панель (положение для транспортировки)

ACV
EXCELLENCE IN HOT WATER

CE UKCA

DECLARATION OF CONFORMITY TO STANDARDS

1/1

Product type:	**Gas-fired storage water heater**
Name and address of manufacturer:	**Groupe Atlantic Manufacturing Belgium** **Rue Henry Becquerel, 1** **B-7180 Seneffe** **Belgium**

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Model:	**WaterMaster 25 Evo** **WaterMaster 25 X Evo** **WaterMaster 35 Evo** **WaterMaster 45 Evo** **WaterMaster 45 X Evo** **WaterMaster 70 Evo** **WaterMaster 70 X Evo** **WaterMaster 85 Evo** **WaterMaster 120 Evo**

We declare hereby that the appliance specified above is conform to the following regulations and directives:

Regulation/ Directive	Description	Date
(EU) 2016/426	Regulation relating to appliances burning gaseous fuels	09.03.2016
2009/125/EC	Ecodesign Directive (implemented by EU regulation 813/2013)	21.10.2009
2014/35/EU	Low Voltage Directive	26.02.2014
2014/30/EU	Electromagnetic Compatibility Directive	26.02.2014

Relevant harmonised standards :

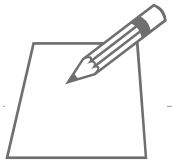
EN 89:2015	EN 55014-1	EN 61000-3-2
EN 60335-2-102	EN 55014-2	EN 61000-3-3

The notified body, (KIWA Nederlands B.V. , Wilmersdorf 50, PO Box 137, 7300 AC APELDOORN, The Netherlands [0063]) performed a Type examination and issued the certificate(s) Nb 17GR0187/01 and UKCA/0558/22/165, ID # **0063CQ3618**

Signed for and on behalf of
Groupe Atlantic Manufacturing Belgium

Seneffe, 01/01/2024

R&D Director
Céline Coupain



ACV A BRAND OF GROUPE ATLANTIC

www.acv.com

Groupe Atlantic Manufacturing Belgium
Rue Henry Becquerel, 1
7180 Seneffe
Belgium

Cross-Reference Table - Evo Models

APPLICABILITY :

664Y8100 - Rev A - HeatMaster 25 - 35 - 45 - 70 -85 - 120 TC Evo
664Y8200 - Rev A - HeatMaster 25C Evo
664Y8300 - Rev A - WaterMaster 25 (X) - 35 - 45 (X) - 70- 85 - 120 Evo

Ref.	ACV	Groupe Atlantic
1.	537D6287	***786251***
2.	537D6184	***786195***
3.	537D6185	***786196***
4.	10800301	***784474***
5.	537D6290	***786254***
6.	537D6300	***786257***
7.	537D6301	***786258***
8.	537D6211	***786217***
9.	537D6212	***786218***
10.	537D6213	***786219***
11.	537D6197	***786205***
12.	537D6198	***786206***
13.	537D6275	***786249***
14.	537D6186	***786197***
15.	537D6187	***786198***
16.	537D6188	***786199***
17.	537D6516	***786362***
18.	537D6271	***786248***
19.	537D6302	***786259***
20.	537D6303	***786260***
21.	537D6304	***786261***
22.	537D6517	***786363***
23.	537D6214	***786220***
24.	537D6215	***786221***
25.	537D6216	***786222***
26.	537D6217	***786223***
27.	537D6199	***786207***
28.	537D6200	***786208***
29.	537D6201	***786209***
30.	537D6189	***786200***
31.	537D6305	***786262***
32.	537D6218	***786224***
33.	537D6202	***786210***

Ref.	ACV	Groupe Atlantic
34.	537D6190	***786201***
35.	537D6191	***786202***
36.	537D6306	***786263***
37.	537D6307	***786264***
38.	537D6219	***786225***
39.	537D6220	***786226***
40.	537D6221	***786227***
41.	537D6222	***786228***
42.	537D6203	***786211***
43.	537D6204	***786212***
44.	537D6193	***786203***
45.	537D6229	***786231***
46.	537D6308	***786265***
47.	537D6310	***786267***
48.	537D6223	***786229***
49.	537D6226	***786230***
50.	537D6266	***786246***
51.	537D6448	***786301***
52.	537D6182	***786193***
53.	537D6183	***786194***
54.	537D6194	***786204***
55.	37D6267	***786247***
56.	537D6451	***786303***
57.	537D6209	***786215***
58.	537D6210	***786216***
59.	537D6208	***786214***
60.	537D6231	***786232***
61.	537D6405	***786287***
62.	537D6207	***786213***
63.	537D6293	***786256***
64.	537D6172	***786191***