



OPERATING AND INSTALLATION MANUAL

METROMINI 4MX

Instantaneous Water Heater



METROMINI 4 MX

METRO No: 117041603

VVS No: 345141331

TABLE OF CONTENTS

Safety instructions.....	4
Delivery and handling	8
Technical drawing.....	8
Positioning.....	9
Typical installations.....	9
Electrical installation	13
Technical specifications.....	14
User instructions.....	16
Maintenance	19
Troubleshooting and Service	20
Warranty and declaration of conformity.....	22
Extra warranty	23

CAUTION

Please read the safety instructions carefully and in full before using the product, and follow the instructions during operation.

SAFETY INSTRUCTIONS

Installation, initial commissioning and maintenance of this product must only be carried out by an authorized plumber/electrician who is responsible for compliance with applicable standards and installation regulations. We accept no liability for damage caused by failure to comply with these safety instructions.

This product must NOT be used by children under 3 years of age. Children over 3 years of age or persons with reduced physical or cognitive abilities must NOT use the product without supervision and instruction in proper use. The product should not be used by persons who lack experience or knowledge of correct and safe operation. Before using the product, it is important to understand the risks associated with incorrect use. Children must NOT play with the product, nor clean or maintain it without supervision.

CAUTION

Remember to shut off the water at the main valve during holidays. The water heater must be disconnected if there is a risk of frost.

-
- Do not use the instantaneous water heater before it has been correctly installed and is functioning properly.
 - Under no circumstances remove the cover before disconnecting the power supply.
 - Never make technical modifications to the water heater, electrical wiring, or water pipes.
 - The water heater must always be connected to a protective earth (ground).
 - Be aware that temperatures exceeding 43°C may feel very hot and may cause scalding. Also note that the tap and fittings may become very hot after extended use.
 - The instantaneous water heater is intended for domestic use only and must be installed indoors in a frost-free room. It may only be used to heat water supplied from the main water system.
 - The water heater must never be exposed to frost.
 - The values stated on the rating plate must be observed.
 - In the event of malfunction, immediately disconnect the fuse. In the event of leakage, immediately shut off the cold water supply. Repairs may only be carried out by an authorized plumber/electrician.

-
- Before using the water heater for the first time, and every time it has been drained (e.g., due to plumbing work, frost risk or maintenance), it must be properly vented in accordance with the instructions in this manual.
 - If supplied with preheated water, the inlet temperature must not exceed 60°C.
 - The water heater must not be used by persons with limited physical, sensory or mental capabilities, or lack of experience and/or knowledge, unless supervised by a person responsible for their safety and instructed in proper use.
 - If the power supply cable is damaged, it must be replaced by a qualified professional to avoid danger. The damaged cable must be replaced with an original power supply cable.
 - For permanently connected water heaters, installation must include a multi-pole switch in accordance with VDE 0700 with a contact separation of $\rightarrow 3$ mm between poles.
 - The wall bracket must be mounted using the supplied screws and wall plugs. The water heater must be mounted on the wall bracket. The water heater may only be operated when securely mounted.
 -

-
- The specific water resistance must never fall below the stated minimum value.
 - The maximum water pressure must never exceed the specified value.

For unpressurized installation, also observe:

- The water outlet behind the heater must not be blocked, and water flow must not be restricted.
- Installations on the water outlet, such as shower heads, aerators, etc., must be descaled regularly. Deposits should be removed at regular intervals.
- Only fittings that meet the requirement for VA approval may be used.

DELIVERY AND HANDLING

Immediately upon receipt, check whether the water heater is complete and undamaged. If not, this must be reported to the transport company immediately. All shipments are at the recipient's risk unless otherwise agreed. The instantaneous water heater must always be stored in a frost-free environment, as it contains water from factory testing

TECHNICAL DRAWING

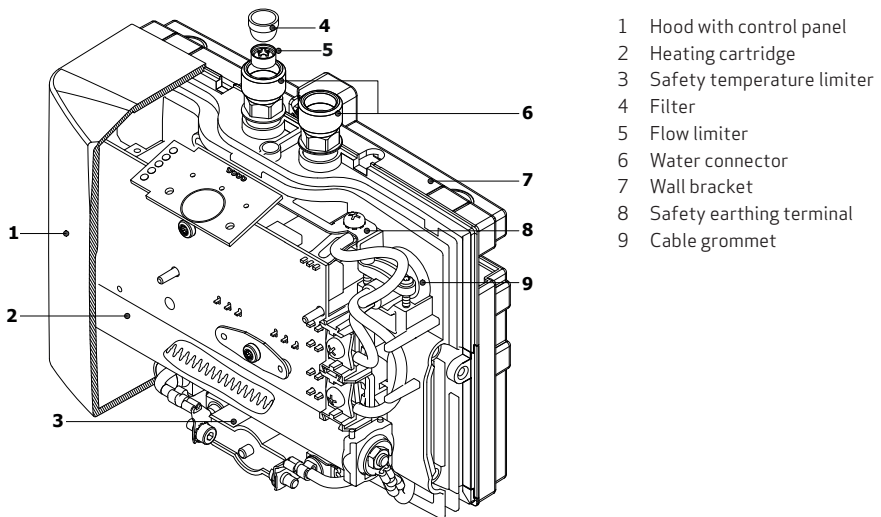
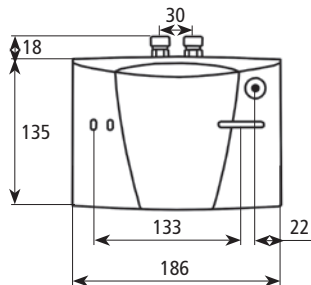


Figure 1

DIMENSIONS

All dimensions in mm:

	METROMINI 4MX
Height	135 mm
Width	186 mm
Depth	88 mm



POSITIONING

The instantaneous water heater must be installed near the water supply and in a frost-free room. We only guarantee reliable operation if VA-approved fittings are used (sensor-operated models are not recommended). During installation and operation, water pipes must not exert mechanical stress on the product's water connections. If this cannot be ensured due to installation conditions, flexible connections are recommended.

TYPICAL INSTALLATIONS

The following must be observed

- The installation must comply with the Danish Building Regulations and all other relevant standards and requirements, including electrical and plumbing regulations.
- Check all technical data on the rating plate.
- Ensure all accessories are removed from the packaging.
- Ensure easy access to the heater.
- Install an external shut-off valve on the inlet side.
- Thoroughly flush the water pipes before connection
- Operating pressure requirements: The optimal operating pressure is 0.2–0.8 MPa (2–8 bar), the minimum required pressure is 0.065 MPa (0.65 bar), and the maximum allowable pressure must not exceed 1 MPa (10 bar).
- The heater activates when water flow exceeds 1.2 l/min.
- The heater should not be used with sensor-operated taps, as this may cause operational problems.
- A non-return valve is not required. If installed, it may only be placed on the hot water outlet after the heater.
- The minimum water resistance requirement must be met (information available from your local water supplier).

This instantaneous water heater is designed to supply sufficient hot water economically for a washbasin. It must be installed with a mixing tap. When the hot water tap is opened, the heater automatically switches on once the minimum flow rate is reached and heats the water as it flows through the unit.

The heater is factory preset to an outlet temperature of 38°C, which is ideal for hand washing.

The achievable outlet temperature depends on both flow rate and inlet temperature. (Fig. 2). If the desired temperature is not achieved, reduce the flow rate at the hot water tap.

The outlet temperature can be changed using the selector button on the top of the housing. Once the selected temperature is reached, the electronic controller reduces the power supply to ensure that the outlet temperature does not exceed the set value. This automatic temperature control ensures a constant and reliable hand-washing temperature.

If a lower temperature is required, cold water must be mixed in.

If water flow is too low, pressure is too low, or the hot water tap is closed, the heater switches off automatically. For optimal water flow, the supplied aerator must be used. It should be screwed onto the tap outlet. If the thread does not fit the chrome cap, any standard M22/M24 size cap may be used.

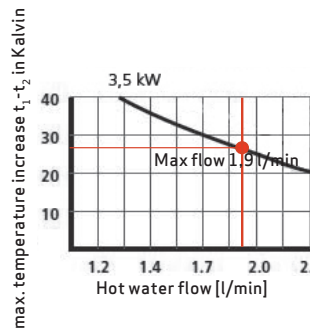


Figure 2

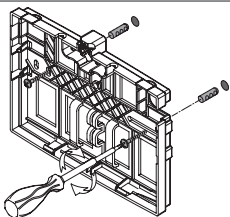


Figure 3

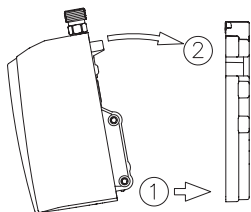


Figure 4

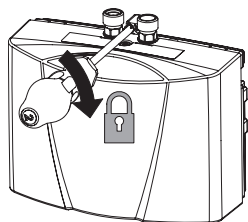


Figure 5

- a Seal
- b Strainer
- c Flow limiter
- d Cold water-connection (inlet)
- e Hot water-connection (outlet)
- f Rating plate

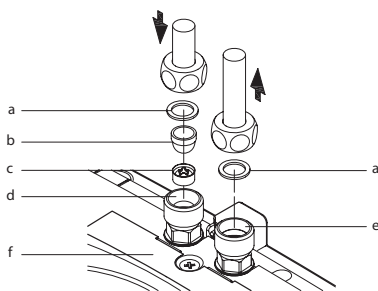


Figure 6

Shower Installation

The product is not suitable for shower installation.

Installing the Instantaneous Water Heater

- Mount the heater with the water connections facing upwards.
- Attach the wall bracket to the wall using screws and appropriate wall plugs (Figure 3).
- Place the heater on the wall bracket and click it into position (Figure 4).
- Secure the heater to the wall bracket using a Phillips screwdriver (Figure 5).
- The heater must not be used before it is properly secured.

Fitting Connection (Figure 6)

Cold water inlet (blue, left)

Hot water outlet (red, right)

- Connect the tap's hot water hose/pipe to the red hot water outlet.
- Connect the cold water hose/pipe to the blue cold water inlet.
- Avoid mechanical stress from tight pipes or hoses.
- Check all connections for leaks after installation.

Removing the Heater from the Wall Bracket (Figure 7)

- Use a Phillips screwdriver to release the lock between the water connections (1).
- Tilt the heater slightly forward (2).
- Lift the heater off the wall bracket.

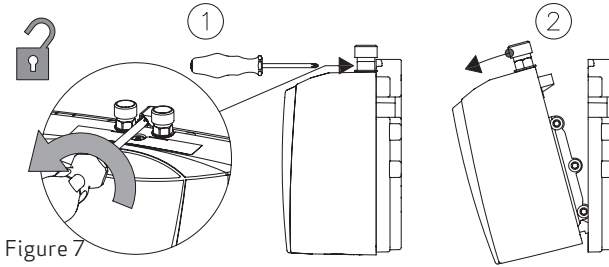


Figure 7

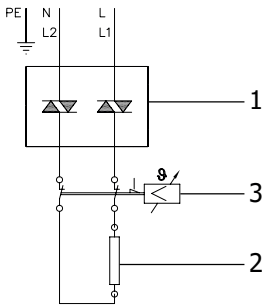
CAUTION

Water pipes must not exert any mechanical pressure on the heater during or after installation. If this cannot be guaranteed, flexible connectors are recommended.

ELECTRICAL INSTALLATION

Circuit diagram

1. Electronic regulator
2. Heating element
3. Safety thermal cut-out



CAUTION

If the mains cable is damaged, it must be replaced by an authorized technician with an original replacement cable from the manufacturer to ensure safe and proper operation.

Completely fill the heater with water by repeatedly opening and closing the hot water tap before connecting the power supply.

Failure to follow this instruction may damage the heating element.

- Ensure power is disconnected before installation.
- Electrical installation must only be carried out by an authorized electrician.
- Installation must comply with IEC regulations and national regulations.
- The mains cable must be permanently connected via the junction box shown in the wiring diagram.
- The earth conductor must be connected.
- The circuit breaker must comply with IEC standards and have a contact separation of at least 3 mm per phase.
- The electrical installation must have suitable cable cross-section and be protected with 16A.
- The heater must be protected by a 16A fuse.

Commissioning

Do not switch on the power at this stage.

- Open the hot water tap and allow water to flow until it is free of air bubbles.
- Then switch on the power supply.
- If desired, set the outlet temperature (see Figure 8).
- Explain the functions to the user and ensure they understand how to operate the appliance.
- Hand over the instruction manual to the user.

TECHNICAL SPECIFICATIONS

Model		METROMINI 4MX
METRO	N0.	117041603
Volume	Liter	0,2
Design pressure	bar	10
Minimum water pressure	bar	0,65
Optimal operating pressure	bar	2-8
Required specific water resistance at 5°C	$\Omega \cdot \text{cm}$ [S/m]	>1100 [0,0909]
Voltage	V	L1/N/J - 230 V
Power	kW	3,5
Fuse	A	16
Factory temperature setting	°C	38
Adjustment range	°C	35/38/45
Adjustment of domestic hot water temperature		The selector button on the top of the housing.
Maximum inlet temperature	°C	70
Maximum temperature increase at	1,9 l/min	dT = 28°C
Activation flow rate	l/min	1,2
Required cable size	mm ²	1,5
Weight including water	kg	1,5
Protection class	IP	25
Water connection		G 3/8"
Dimensions (H×W×D)	mm	135x186x88

Product data sheet in accordance with EU regulation ..
812/2013 814/2013

a	b		c	d	e	f	h	i
	b.1	b.2			η_{WH} %	AEC kWh	°C	L_{WA} dB(A)
METRO THERM A/S	Metromini 4MX	-	XXS	A	39	473	45	15

Forklaring

a	Brand
b.1	Model
b.2	Type
c	Load profile
d	Energy efficiency class
e	Energy efficiency
f	Annual electricity consumption
g	Alternative load profile, corresponding energy efficiency and annual electricity consumption, if applicable
h	Temperature setting for the temperature control
i	Internal sound power level

Additional Information



All specific precautions for installation, assembly, maintenance and use are described in the operating and installation instructions.



All data in this product data sheet have been determined in accordance with the specifications of the relevant European directives. Differences from other product information stated elsewhere may result from different test conditions.

Energy consumption has been determined in accordance with a standardized measurement method based on EU guidelines. The actual energy consumption depends on individual usage requirements.

USER INSTRUCTIONS

Read this instruction manual carefully before installing and using the instantaneous water heater.

Important


This appliance must not be used by children under 3 years of age. Children over 3 years of age and persons with reduced physical, sensory or mental capabilities, or persons lacking experience and knowledge, may only use the appliance if they have received supervision or instruction concerning safe use of the appliance and understand the hazards involved. Children must not play with the appliance. Cleaning and maintenance must not be performed by children without supervision.

CAUTION

Remember to shut off the water supply at the main valve during holidays. The water heater must be disconnected if there is a risk of frost.

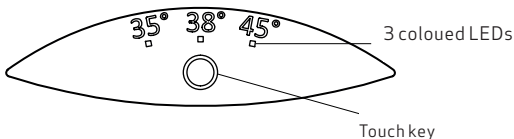
Safety instructions can be found on page 4 of this manual.

Adjusting the Temperature

- The touch key  allows you to select one of the three preset temperatures.
- Every key press sets the temperature to the next level:

35°C  38°C  45°C (maks.)

- After 45°C the selection returns to 35°C.
- The currently selected temperature is indicated by one of three coloured LEDs.



Figur 8

Deactivate / Activate LED Standby

As an energy-saving function of the control panel, the active LED automatically goes out approx. 20 seconds after the last operation (e.g. tapping or temperature selection).

However, in order to be able to recognise the selected setting at any time, the LED can be permanently activated and the LED standby function deactivated with the following procedure:

- Press and hold the sensor button (approx. 7-8 seconds). After approx. 5 seconds, the active LED goes out. Continue to hold down the sensor key.
- The green and yellow LEDs light up to indicate activation/deactivation. Release the sensor key.

If the fitting is opened in LED standby mode (LED off) or the sensor key is pressed, the last active LED lights up (wake-up), but the temperature is not yet switched over. The temperature can only be adjusted when the button is pressed again.

The LED standby function can be reactivated in the same way.

This function remains stored even in the event of a power failure.

Service flush function

For the professional!

For thermal cleaning of the flexible hose and fitting, the outlet temperature can be set to $\rightarrow 50\text{ }^{\circ}\text{C}$ for the next tapping. When the service rinse function is active, showering is not permitted due to the high temperatures.

-
- Press and hold the sensor button (approx. 10-12 seconds) until the red and yellow LEDs light up. Release the sensor key.
 - Open the hot water valve on the fitting. To reach the maximum temperature, reduce the flow at the fitting or the angle valve until the red and yellow LEDs light up continuously.
 - The function is deactivated as soon as another temperature is set or the flow falls below the minimum for 30 seconds (water stop).

Function overview

By operating with a single key, the unit runs through all special functions one after the other when the key is held down for a long time. The LEDs indicate the function that is activated or deactivated at the respective moment when the operating button is released.

Keystroke	LED indication	Function
0 - 3 seconds	GREEN -> YELLOW -> RED -> GREEN...	Temperature change
4 - 6 seconds	OFF	Key lock and temperature lock
7 - 9 seconds	GREEN + YELLOW	Deactivate / Activate LED-Standby
10 - 12 seconds	YELLOW + RED	Service flush function activated
> 13 seconds	Original indication reappears	Cancel entry

MAINTENANCE

To prevent damage to the appliance, the instantaneous water heater must be purged of air before using it for the first time.

Each time it is emptied (for example after work on the plumbing system or following repair work on the appliance), the instantaneous water heater must be purged before it is used again.

1. Switch off the power supply to the instantaneous water heater.
2. To purge the instantaneous water heater, open the hot water tap and wait until the water emerges free of air bubbles.
3. Switch the power supply back on again.

Cleaning and Maintenance

- The appliance and the fittings should only be cleaned with a damp cloth. Do not use abrasive or chlorine-based cleaning agents or solvents.
- Keep the control panel area dry!
- Clean the jet regulator or the hand-shower regularly and replace as necessary.
- Dirt and scale deposited in the pipes and heater will affect the function of the heater. Typical indications include reduced rate of flow or noisy flow. In such cases, have the heater inspected by a technician and, if necessary, have the filter in the cold-water inlet cleaned.

TROUBLESHOOTING AND SERVICE

The following table will help you to determine and rectify the reasons for possible problems.

If the problem cannot be solved using this table, contact an authorized plumber/electrician.

Fault	Cause	Action
No water flows	Water supply is turned off	Open the main water valve and the shut-off valve
Water flows more slowly than expected	The jet regulator is not fitted	Fit the supplied special regulator
	Water pressure is not sufficient	Check the water flow pressure
	Dirt in the pipes	Remove any dirt from the filter, valves and taps / check the technical data
The heater switches itself on and off	Water pressure is varying, flow rate is too low	Remove any dirt / increase the flow water pressure, close other taps, open the shut-off valve further
Water remains cold	Water pressure is not sufficient	Open the shut-off valve, fit the special regulator, check water pressure
	Dirt	Remove dirt from the inlet and outlet
Hot water temperature varies	Supply voltage varies	Check the supply voltage
	Water connections mixed up	Check installation

Fault	Cause	Action
Hot water temperature too low and one LED flashes slowly	Flow rate is too high or inlet temperature is too low	Adjust the flow either at the tap or the valve
One LED flashes rapidly and water remains cold	Defective temperature sensor	Replace temperature sensor (authorized technician)
	Defective heating element	Replace heating element (authorized technician)
All LEDs flash rapidly and water gets warm	Defective control panel cable	Reposition control panel connector (authorized technician)
		Replace control panel (authorized technician)
All LEDs flash rapidly and water remains cold	Defective power unit	Call customer service
LED turns off shortly after keypress	Keylock is active	Deactivate keylock ("How to use", 27)
LED flashes after keypress	Touch key was not touched in centre	Don't touch the touch key for approx. 3 seconds (until LED lights up normally); for proper handling, touch the touch key right in the centre
	Touch key calibration active	

WARRANTY AND DECLARATION OF CONFORMITY

The current warranty conditions and declaration of conformity can always be found on our website:
www.METROTHERM.dk/garanti

EXTRA WARRANTY

GET 1 EXTRA YEAR WARRANTY ON YOUR METRO PRODUCT

We offer one additional year of warranty when you register your product and provide information about where and when it was installed and by which company.

1. Visit://www.metrotherm.dk/produktregistrering or scan the QR code.
2. Enter the product and installation information.
3. You will receive an email confirming your extended warranty.





METRO THERM A/S
RUNDINSVEJ 55
DK3200 HELSINGE
SOS@METROTHERM.DK
WWW.METROTHERM.DK

CLAGE ARTICLE NUMBER
9120-15224
DATE 11-2025



08:046-2603