INSTALLATION AND OPERATING INSTRUCTIONS

PERFECT 3.5, 4.0, 4.5, 5.0, 5.5 MIX instantaneous water heaters

1. Purpose and characteristics

PERFECT 3.5 - 5.5 MIX instantaneous water heaters are designed to supply hot water to such sanitary devices as sinks and washbasins in households, washrooms, bathrooms, workshops and catering outlets. Thanks to the electronic system controlling the performance of the heater, all most unreliable mechanical parts such as a membrane and switch contacts, which are used in this type of heaters, have been eliminated. This way, the reliability and durability of the devices have been significantly improved. The water heater can only be connected to the cold water pipe.

Caution!!! You mustn't install, disconnect or move the heater to the sides while the power supply is turned on. The device can operate only in the position shown in the figure below. Any attempt to start the device in other positions will cause damage to the heating element and the loss of warranty.

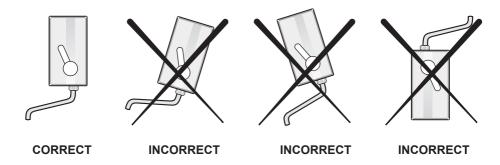


fig. 1

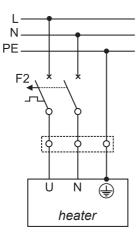
2. Safety recommendations

- Only a qualified electrician can connect the device to the electrical wiring and check the efficiency of the anti electric shock protection.
- The heater must be earthed and neutrally grounded.
- The heater must be permanently connected to the electrical wiring.
- The wiring must be equipped with a residual current circuit breaker.
- The air temperature in the rooms where the heater is installed cannot decrease below 0°C.
- Periodically check the condition of the electrical wiring (voltage drops) in particular the electrical connection.
- Cut off the power supply before each disconnection of the heater from the faucet.
- The heater can operate only in the position shown in figure 1.
- The device can be used only when it is fully operational and it has been installed properly.
- In case of malfunctioning of the heater, cut off the power and water supply
- Do not take off the case when the device is connected to the power source.
- Water flow in the heater ought to be controlled in such a way that the water temperature does not cause the feeling of heat (especially as far as children are concerned).

- The device cannot be installed in an aggressive environment or the environment exposed to explosion.
- The heater should not be used with the load voltage lower than 200 V.
- Only original parts can be used.
- All maintenance works should be conducted when the device is disconnected from the power source.
- Do not allow the electrical wiring to become wet.
- Regularly clean the faucet aerator.
- Children should be supervised to ensure that they do not play with the device.
- This device may be used by children over three years old and people with limited physical, sensory or mental abilities, or with no experience and knowledge if they are supervised or were provided with instructions regarding the use of the device in a safe way and understand possible dangers.

3. Installation of the heater

Wiring diagram



TN-S earthing system

F2 - bipolar circuit breaker

L - phase wire

N - neutral

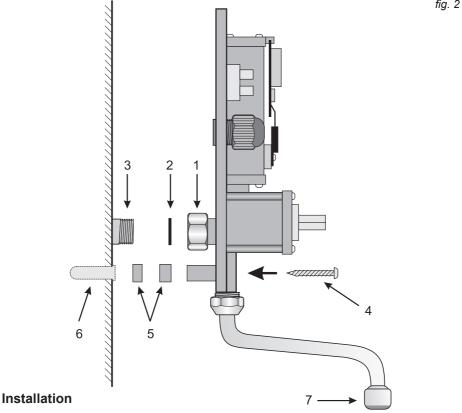
PE - protective earth

Minimum recommended cross section of cables

Perfect 3.5 MIX -1,5 mm² Perfect 4.0 - 5.5 MIX -2,5 mm²

Recommended breakers:

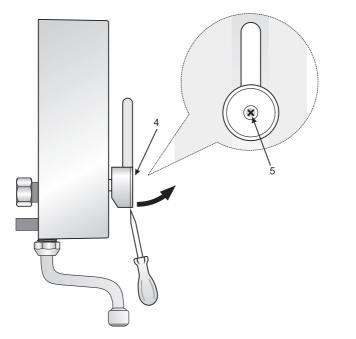
Perfect 3.5 MIX - 16 A Perfect 4.0 - 5.5 MIX - 25 A



Caution!!!

Each time the device is cut off from the cold water outlet, it must be previously disconnected from the power supply. Otherwise, the heating element may be damaged. Non-compliance with the instructions will lead to the loss of warranty.

Firmly screw the half union of the heater (1) with the gasket (2) to the cold water pipe (3) ended with 1/2" external thread. If the heater is firmly screwed to the water pipe, there is no need to screw it to the wall. However, the heater ought to be screwed to the wall in case it moves to the sides while using it. To do that, take off the cover of the knob (4) fig. 3, unscrew the screw (5) fig. 3 and take off the knob. Then, unscrew the screws on both sides of the heater case. Take off the heater case. Screw the half union of the heater (1) with the gasket (2) to the cold water pipe. Mark the place on the wall where the hole of 6 mm diameter for a rawlplug is to be drilled (6). Adjust the length of the spacer sleeves (5) by shortening them. Unscrew the heater from the cold water outlet. Drill a hole in the wall for the rawlplug. Insert the rawlplug into the hole. (6) Lightly screw the half union of the heater (1) with the gasket (2) to the cold water outlet. Then, firmly screw the screw to the rawlplug, bearing in mind that the spacer sleeves (5) must be put between the wall and the back of the case. Firmly screw the half union. Put on the case and screw the screws. Install the knob. Check leak



tightness of hydraulic connections. Turn on the hot water tap for a few seconds in order to release the air from the heater. Connect the heater to the electrical wiring. Turn on the power supply.

4. Temperature adjustment

Caution!!!

The outlet water temperature depends on:

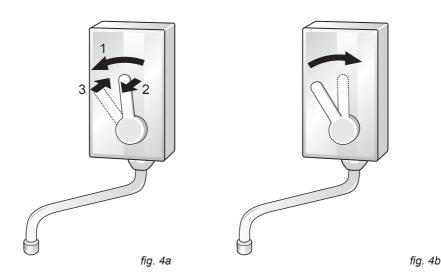
- water flow (the lower water flow, the higher temperature and the higher water flow, the lower temperature)
- inlet water temperature
- voltage drops in the electrical wiring while using the device

Inlet water temperature 15 °C

Water flow	[l/min]	1,5	2	2,5	3
Perfect 3.5 MIX	[°C]	48	40	35	32
Perfect 4.0 MIX	[°C]	53	43,5	38	34
Perfect 4.5 MIX	[°C]	59,5	48,5	41	37
Perfect 5.0 MIX	[°C]	62,5	50,5	43,5	39
Perfect 5.5 MIX	[°C]	_	54	46	41

How to adjust water temperature

- It is advisable to start the adjustment by turning the knob to the left and pulling it towards you.
 Then, control the water flow by pulling the knob slowly towards the heater. (fig. 4a)
- The water temperature can be decreased by mixing cold and hot water by turning the knob to the right. (fig. 4b)
- Excessive hot water flow control or turning the knob too much may cause that the heater will turn off.
- The highest hot water flow rate is obtained by turning the knob to the left and by regulating the water flow slowly.



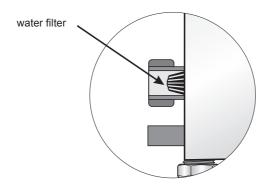
5. Cleaning sediment from the heater

Caution!!!

Each time the device is cut off from the cold water outlet, it must be previously disconnected from the power supply. Otherwise, the heating element may be damaged. Non-compliance with the instructions will lead to the loss of warranty.

Cleaning the water filter

- 1. Disconnect the device from the power supply.
- 2. Cut off the heater from the water piping by unscrewing the half union (1) fig. 2. If the heater is screwed to the wall, take off the cover of the knob (4) fig. 3. Unscrew the screw (5) fig. 3 and take off the knob. Then, unscrew the screws on both sides of the heater case. Take off the heater case. Unscrew the rawlplug screw (4) fig. 2. After cleaning the water filter, screw the half union and the heater to the wall. Put on the case and the knob head. Screw the screws fastening the case and the knob head. Then, follow the instructions given in points 5,6,7 in section 5 of the manual.



fiq. 5

- 3. Clean the water filter in the half union.
- 4. Firmly screw the heater to the water piping.
- 5. Check leak tightness of hydraulic connections.
- 6. Turn on the hot water tap for a few seconds in order to release the air from the heater.
- 7. Turn on the power supply.

Cleaning the faucet aerator.

- 1. Unscrew the aerator (7) fig. 2.
- 2. Clean the holes in the faucet aerator.
- Reinstall the faucet aerator.

6. Defects and their countermeasures

Too low water flow:

- clogged water filter (clean it according to the instructions given in section 5 of the manual),
- clogged aerator (clean it according to the instructions given in section 5 of the manual),
- too low water pressure in the water distribution system

The heater does not activate:

- excessive water flow control,
- the head knob turned to the right too much (turn the knob head to the left as far as possible and adjust the water flow).
- no power supply

The heater does not heat despite the fact that the light indicating device activation is turned on:

- too high water flow (adjust it according to the instructions given in section 4 of the manual)
- the head knob is turned to the right too much (turn the knob to the left as much as possible and adjust the water flow),
- very low inlet water temperature.
- significant voltage drops in the electrical wiring

Too high outlet water temperature:

- excessive water flow control
- clogged water filter (clean it according to the instructions given in section 5 of the manual),
- clogged aerator (clean it according to the instructions given in section 5 of the manual)

The heater turns on and immediately turns off:

- pressure fluctuations in the water distribution system.
- excessive water flow control

Abrupt changes in the outlet water temperature:

- voltage fluctuations in the electrical wiring
- changes in water flow rate caused by sudden water pressure drops in the water distribution system

Technical data

Туре	Perfect 3.5 MIX	Perfect 4.0 MIX	Perfect 4.5 MIX	Perfect 5.0 MIX	Perfect 5.5 MIX
Power	230V 50Hz				
Power consumption	15,2 A	17,4 A	19,6 A	21,7 A	23,9 A
Heating coil power	3500 W	4000 W	4500 W	5000 W	5500 W
Heating coil resistance	15,2 Ω	13,3 Ω	11,8 Ω	10,6 Ω	9,6 Ω
Minimum activation flow rate	1,2 l/min.	1,3 l/min.	1,4 l/min.	1,5 l/min.	1,6 l/min.
Maximum input water pressure	0,65 MPa				
Minimum input water pressure	0,04 MPa	0,05 MPa	0,06 MPa	0,07 MPa	0,08 MPa
Outlet water pressure	0 Bar				
Minimum water resistivity at 15°C	1300 Ωcm				
IP rating	IP25	IP25	IP25	IP25	IP25

Set contents

Instantaneous water heater	1 piece
Faucet	1 piece
Gasket	1 piece
Rawlplug with a screw	1 piece
The list of service points	1 piece
Spacer sleeves	2 pieces

SAFE DISPOSAL OF WASTE

Pursuant to the provisions of the Act dated 29 July 2005 on Waste Electrical and Electronic Equipment, it is forbidden to dispose of the waste equipment marked with a crossed-out bin to the communal waste bins.

A user who intends to get rid of this product is obliged to take the equipment he no longer uses to the collection point. Such points are run, among others, by wholesalers or retailers of such equipment and by local organisational units specialising in waste collection.

The above statutory regulations have been introduced in order to limit the amount of the electrical and electronic waste, as well as to ensure the suitable level of waste collection and its recycling. The heater contains no hazardous substances which have a negative impact on health and environment.

The materials used in the device are reusable. Thanks to it, when you reuse them you contribute to environment protection.