



Chauffe-eau
Waterverwarmer
Wassererwärmer
Water heater

سخان



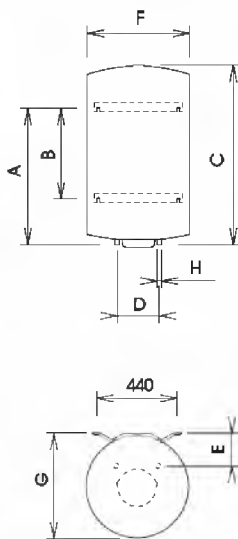
INSTRUCTIONS TECHNIQUES POUR L'INSTALLATION ET LA MANUTENTION
INSTALLATIE EN GEBRUIKSAANWIJZINGEN
TECHNISCHE ANLEITUNG FÜR MONTAGE UND WARTUNG
INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE

تعليمات التركيب والاستخدام والصيانة صفحة

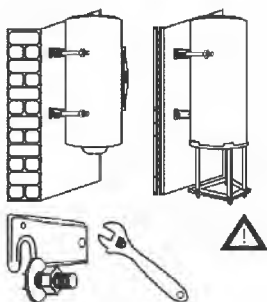
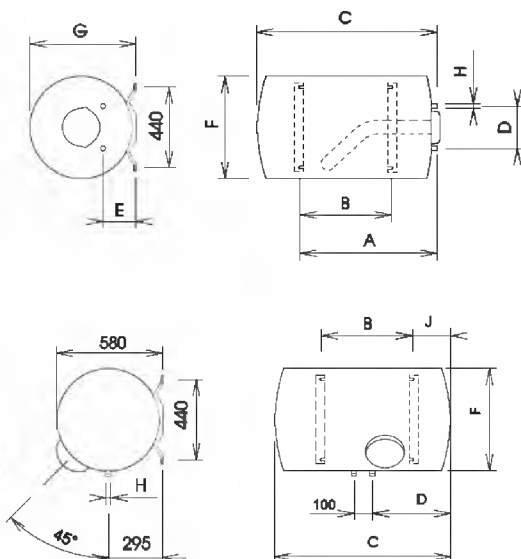
| I - CARACTERISTIQUES TECHNIQUES | | DIMENSIONS EN mm | | | | | | | | | | Poids net |
|--|---|------------------|-----|------|-----|-----|-----|-----|-------|-----|-----|---------------|
| I - TECNISCHE KENMERKEN MODELLEN | | AFMETINGEN IN mm | | | | | | | | | | Netto gewicht |
| I - TECNISCHE MERKMALE MODELLE | | ABMESUNGEN IN mm | | | | | | | | | | Netto gewicht |
| I - TECHNICAL CHARACTERISTICS MODELS | | DIMENSIONS IN mm | | | | | | | | | | Net weight |
| | | A | B | C | D | E | ØF | G | H | J | L | kg |
| VERTICAL - VERTIKAAL VERTICAL - VERTICALE | GAMME STEATITE & HPC/QUIE/ZEN - STEATITE GAMMA & HPC/QUIE/ZEN - SERIESTEATIT & HPC/QUIE/ZEN - CERAMIC CORE ELEMENT & HPC/QUIE/ZEN | | | | | | | | | | | |
| | 050 VERT 470 STEA MO(-A) EU | 410 | - | 560 | 160 | 120 | 470 | 485 | G1/2" | - | - | 17 |
| | 075 VERT 470 STEA MO(-A) EU | 590 | - | 760 | 230 | 175 | 470 | 485 | G3/4" | - | - | 23 |
| | 100 VERT 505 STEA MO EU | 560 | - | 835 | 230 | 175 | 505 | 515 | G3/4" | - | - | 31 |
| | 150 VERT 505 STEA MO EU | 1050 | 800 | 1160 | 230 | 175 | 505 | 515 | G3/4" | - | - | 39 |
| | 200 VERT 505 STEA MO EU | 1050 | 800 | 1463 | 230 | 175 | 505 | 515 | G3/4" | - | - | 47 |
| | 100 VERT 530 HPC/ZEN/STEA MO(-A) EU | 560 | - | 835 | 230 | 175 | 530 | 545 | G3/4" | - | - | 32 |
| | 150 VERT 530 HPC/ZEN/STEA MO(-A) EU | 1050 | 800 | 1160 | 230 | 175 | 530 | 545 | G3/4" | - | - | 40 |
| | 200 VERT 530 HPC/ZEN/STEA MO(-A) EU | 1050 | 800 | 1463 | 230 | 175 | 530 | 545 | G3/4" | - | - | 49 |
| | 100 VERT 560 HPC/QUIE/STEA MO/ MT B EU | 530 | - | 770 | 230 | 175 | 560 | 575 | G3/4" | - | - | 31 |
| | 150 VERT 560 HPC/QUIE/STEA MO/ MT B EU | 750 | 500 | 1010 | 230 | 175 | 560 | 575 | G3/4" | - | - | 39 |
| | 200 VERT 560 HPC/QUIE/STEA MO/ MT B EU | 1050 | 800 | 1280 | 230 | 175 | 560 | 575 | G3/4" | - | - | 47 |
| | 250 VERT 560 HPC/QUIE/STEA MO/TR EU | 1050 | 800 | 1550 | 230 | 175 | 560 | 575 | G3/4" | - | - | 61 |
| | GAMME BLINOOE - BARKERBUIJS GAMMA - GESCHLOSSENE AUSFÜHRUNG - STEEL ALLOY ELEMENT | | | | | | | | | | | |
| | 050 VERT 470 THER MO(-A) EU | 410 | - | 560 | 160 | 120 | 470 | 485 | G1/2" | - | - | 17 |
| | 075 VERT 470 THER MO(-A) EU | 590 | - | 760 | 230 | 175 | 470 | 485 | G3/4" | - | - | 23 |
| | 100 VERT 530 THER MO(-A) EU EU | 560 | - | 835 | 230 | 175 | 530 | 545 | G3/4" | - | - | 32 |
| | 150 VERT 530 THER MO/TR(-A) EU | 1050 | 800 | 1160 | 230 | 175 | 530 | 545 | G3/4" | - | - | 40 |
| | 200 VERT 530 THER MO/TR(-A) EU | 1050 | 800 | 1463 | 230 | 175 | 530 | 545 | G3/4" | - | - | 49 |
| | 100 VERT 560 THER MO EU | 530 | - | 770 | 230 | 175 | 560 | 575 | G3/4" | - | - | 29 |
| | 150 VERT 560 THER MO EU | 750 | 500 | 1010 | 230 | 175 | 560 | 575 | G3/4" | - | - | 37 |
| | 200 VERT 560 THER MO EU | 1050 | 800 | 1280 | 230 | 175 | 560 | 575 | G3/4" | - | - | 45 |
| HORIZONTAL BAS/BOTTOM- HORIZONTALAAL LOWER | GAMME STEATITE - STEATITE GAMMA - SERIESTEATIT - CERAMIC | | | | | | | | | | | |
| | 100 HORB 560 STEA MO EU | - | 800 | 750 | 320 | - | 560 | 575 | G3/4" | 260 | - | 30 |
| | 150 HORB 560 STEA MO EU | - | 500 | 1010 | 460 | - | 560 | 575 | G3/4" | 260 | - | 38 |
| | 200 HORB 560 STEA MO EU | - | 800 | 1270 | 580 | - | 560 | 575 | G3/4" | 260 | - | 46 |
| | GAMME BLINOOE - BARKERBUIJS GAMMA - GESCHLOSSENE AUSFÜHRUNG - STEEL ALLOY ELEMENT | | | | | | | | | | | |
| HORIZONTAL DROIT- HORIZONTALAAL LAT | 075 HORB 505 THER MO EU | - | 325 | 670 | 260 | - | 505 | 575 | G3/4" | 260 | - | 24 |
| | 100 HORB 560 THER MO EU | - | 280 | 750 | 320 | - | 560 | 575 | G3/4" | 260 | - | 30 |
| | 150 HORB 560 THER MO EU | - | 500 | 1010 | 460 | - | 560 | 575 | G3/4" | 260 | - | 38 |
| | 200 HORB 560 THER MO EU | - | 800 | 1270 | 580 | - | 560 | 575 | G3/4" | 260 | - | 46 |
| | GAMME BLINOOE - BARKERBUIJS GAMMA - GESCHLOSSENE AUSFÜHRUNG - STEEL ALLOY ELEMENT | | | | | | | | | | | |
| HORIZONTAL DROIT- HORIZONTALAAL LAT | 075 HORD 505 THER MO EU | 590 | 370 | 760 | 230 | 195 | 505 | 515 | G3/4" | - | - | 24 |
| | 100 HORD 530 THER MO EU | 560 | 345 | 835 | 230 | 185 | 530 | 545 | G3/4" | - | - | 32 |
| | 150 HORD 530 THER MO EU | 1050 | 800 | 1160 | 230 | 185 | 530 | 545 | G3/4" | - | - | 40 |
| | 200 HORD 530 THER MO EU | 1050 | 800 | 1463 | 230 | 185 | 530 | 545 | G3/4" | - | - | 49 |
| | 100 HORD 570 THER MO EU | 530 | 280 | 760 | 230 | 180 | 570 | 585 | G3/4" | - | - | 31 |
| SUR SOKLE - OP SOKKEL - AUF SOKKEL - FREE STANDING - SU ZOCCOLO | 150 HORD 570 THER MO EU | 750 | 500 | 1020 | 230 | 180 | 570 | 585 | G3/4" | - | - | 39 |
| | 200 HORD 570 THER MO EU | 1050 | 800 | 1285 | 230 | 180 | 570 | 585 | G3/4" | - | - | 45 |
| | GAMME STEATITE & HPC/QUIE/ZEN - STEATITE GAMMA & HPC/QUIE/ZEN - SERIESTEATIT & HPC/QUIE/ZEN - CERAMIC CORE ELEMENT & HPC/QUIE/ZEN | | | | | | | | | | | |
| | 200 STAB 570 HPC/QUIE/ZEN/STEA MO(-A) EU | - | - | 1300 | - | - | 570 | 630 | G3/4" | - | 365 | 55 |
| | 250 STAB 570 HPC/QUIE/ZEN/STEA MO(-A) EU | - | - | 1560 | - | - | 570 | 630 | G3/4" | - | 365 | 64 |
| SUR SOKLE - OP SOKKEL - AUF SOKKEL - FREE STANDING - SU ZOCCOLO | 300 STAB 570 HPC/QUIE/ZEN/STEA MO/TM(-A) EU | - | - | 1820 | - | - | 570 | 630 | G3/4" | - | 365 | 77 |
| | 250 STAB 570 HPC MO(-A) EU | - | - | 1690 | - | - | 570 | 660 | G3/4" | - | 395 | 55 |
| | 270 STAB 570 HPC MO/TM/MT EU | - | - | 1800 | - | - | 570 | 660 | G3/4" | - | 395 | 64 |
| | 300 STAB 570 HPC MO(-A) EU | - | - | 1970 | - | - | 570 | 660 | G3/4" | - | 395 | 77 |
| | GAMME BLINOOE - BARKERBUIJS GAMMA - GESCHLOSSENE AUSFÜHRUNG - STEEL ALLOY ELEMENT | | | | | | | | | | | |
| SUR SOKLE - OP SOKKEL - AUF SOKKEL - FREE STANDING - SU ZOCCOLO | 200 STAB 570 THER MO(-A) EU | - | - | 1300 | - | - | 570 | 630 | G3/4" | - | 365 | 51 |
| | 250 STAB 570 THER MO(-A) EU | - | - | 1560 | - | - | 570 | 630 | G3/4" | - | 365 | 63 |
| | 300 STAB 570 THER MO/TM(-A) EU | - | - | 1820 | - | - | 570 | 630 | G3/4" | - | 365 | 76 |
| | 500 STAB 714 THER MT | - | - | 1870 | - | - | 714 | | G1" | | 335 | 95 |

FR

VERTICAL
VERTIKAAL
VERTIKAL



HORIZONTAL - HORIZONTALAAL



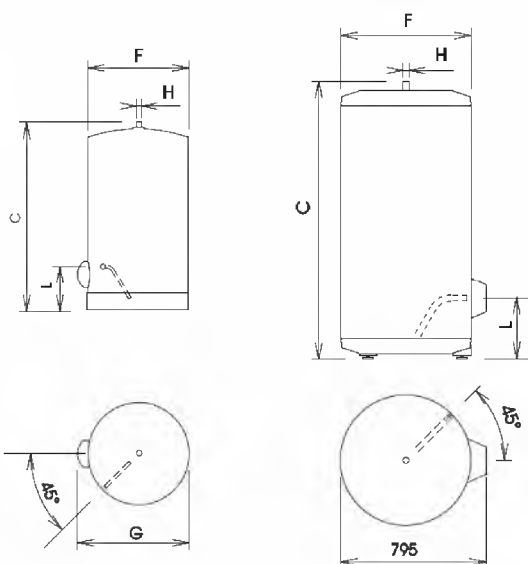
Support obligatoire
pour le 250L

Ondersteuning verplicht
voor 250L

Unterstützen obligatorisch
für 250L

Support mandatory
for 250L

SOCLE - OP SOKKEL - AUF SOCKEL - FREE STANDING
200-300 500



Anti-legionella recommendations (European standard CEN/TR 16355)

Information

Legionella is a small bacterium, of stick-like form, and is found naturally in fresh water.

Legionnaire's disease is a serious pulmonary infection caused by inhalation of the *Legionella pneumophila* bacterium and other species of *Legionella*. The bacterium is frequently to be found in the plumbing of houses, hotels and water used in A/C and air cooling systems. The most effective measure against infection is to prevent the bacterium proliferating in water circuits.

European standard CEN/TR 16355 provides guidelines for preventing the proliferation of Legionella in drinking water systems, without substituting applicable local legislation.

EN

General recommendations

"Conditions favourable to the proliferation of Legionella". The following conditions are favourable to the proliferation of Legionella:

- Water temperature in the range 25 - 50 °C. To reduce the proliferation of Legionella, the water temperature be kept with these limits to prevent them growing or reduce their growth to a minimum. If this is not possible, the drinking water system must be sanitised thermally;
- Stagnant water. To prevent water stagnating for a long time, the drinking water system must be flushed or made to run abundantly at least once a week;
- Nutrients, biofilms and sediment in the circuit, including boilers, etc. Sediment may promote the proliferation of Legionella and should be regularly eliminated from water storage devices, boilers and expansion/holding tanks (for instance, once a year).

As regards storage heater like the present, if:

- 1) the appliance is switched off for several months at a time or
- 2) the water temperature is kept constant in the range 25 - 50°C,

the Legionella bacterium may grow inside the tank. If such circumstances, to reduce the proliferation of the bacterium, one must run a thermal sanitisation cycle.

This cycle is suited to use in domestic hot water systems and complies with the guidelines for the prevention of Legionella given in Table 2 of standard CEN/TR 16355 (see below).

Table 2 - Types of hot water system

| | Separate hot and cold water | | | | Mixed hot and cold water | | | | | |
|---------------------|-----------------------------|--------------------------|--------------------------------|----------------------------|---------------------------------------|-----------------------------------|------------------------------------|---|---------------------------------------|-----------------------------------|
| | No storage | | Storage | | No storage upline of the mixer valves | | Storage upline of the mixer valves | | No storage upline of the mixer valves | |
| | No circulation of hot water | Circulation of hot water | No circulation of mixed water | Circulation of mixed water | No circulation of mixed water | Circulation of mixed water | No circulation of mixed water | Circulation of mixed water | No circulation of mixed water | Circulation of mixed water |
| Ref. in Enclosure C | C.1 | C.2 | C.3 | C.4 | C.5 | C.6 | C.7 | C.8 | C.9 | C.10 |
| Temperature | - | ≥ 50 °C ^a | in storage heater ^a | ≥ 50 °C ^a | Thermal disinfection ^d | Thermal disinfection ^d | in storage heater ^a | ≥ 50 °C ^a Thermal disinfection ^d | Thermal disinfection ^d | Thermal disinfection ^d |
| Stagnation | - | ≥ 3 l ^b | - | ≥ 3 l ^b | - | ≥ 3 l ^b | - | ≥ 3 l ^b | - | ≥ 3 l ^b |
| Sediment | - | - | remove ^c | remove ^c | - | - | remove ^c | remove ^c | - | - |

^a Temperature ≥ 55°C all day or at least 1h a day ≥60°C.

^b Volume of water contained in the pipes between the circulation system and the most distant tap.

^c Remove the sediment from the storage heater as required by local conditions, but no less frequently than once a year.

^d Thermal disinfection for 20 minutes at 60°C, for 10 minutes at 65°C or 5 minutes at 70 °C at all delivery points at least once a week.

^e The water temperature in the circulation circuit may not fall below 50°C.

- Not required

| Vertical Installation | | | | | | | | | | |
|-----------------------------|-------------------------|-------------------|-------------|------------------|-----------|---------|-----------------|--|---|----------------------|
| Model | Capacity [L] | Product range | Qelec [KWH] | Charging profile | Supply | V40 [L] | η _{ph} | ¹ Static losses Q _{per} [W/(kWhe.kWh)] | ² Water production at 40°C [L] | L _{wa} [dB] |
| Ø470 VERT | 50 | THER | 6,665 | M | energized | 65 | 36,1% | 0,79 | nc | 15 |
| | | STEAT/ACC | 6,679 | M | | 65 | 36,0% | 0,72 | nc | |
| | 75 | THER | 6,688 | M | energized | 90 | 36,0% | 0,99 | 136 | |
| | | STEAT/ACC | 6,650 | M | | 85 | 36,6% | 0,96 | 129 | |
| Ø505 VERT | 100 | THER | 12,883 | L | energized | 143 | 37,0% | 1,31 | 176 | |
| | | STEAT | 12,903 | L | | 140 | 37,0% | 1,31 | 180 | |
| | 150 | THER | 6,689 | M | Off Peak | 222 | 36,0% | 1,75 | 276 | |
| | | STEAT | 6,689 | M | | 237 | 36,0% | 1,75 | 277 | |
| | 200 | THER | 12,883 | L | Off Peak | 251 | 37,0% | 2,15 | 359 | |
| | | STEAT | 12,883 | L | | 336 | 37,0% | 2,15 | 372 | |
| Ø530 VERT | 100 | THER | 12,502 | L | energized | 143 | 37,9% | 1,06 | 176 | |
| | | HPC/ZEN/STEAT/ACC | 12,442 | L | | 148 | 38,0% | 1,06 | 180 | |
| | 150 | THER | 6,601 | M | Off Peak | 237 | 36,4% | 1,35 | 276 | |
| | | HPC/ZEN/STEAT | 6,578 | M | | 222 | 36,5% | 1,35 | 277 | |
| | 200 | THER | 12,612 | L | Off Peak | 351 | 37,6% | 1,76 | 359 | |
| | | HPC/ZEN/STEAT | 12,506 | L | | 336 | 37,9% | 1,76 | 372 | |
| Ø560 VERT | 100 | THER | 12,840 | L | energized | 145 | 37,1% | 1,03 | 177 | |
| | | HPC/QUIE/STEAT | 12,792 | L | | 140 | 37,2% | 1,05/1,03* | 176/172* | |
| | 150 | THER | 6,681 | M | Off Peak | 220 | 36,0% | 1,48 | 276 | |
| | | HPC/QUIE/STEAT | 6,669 | M | | 230 | 36,1% | 1,48/1,41* | 271 | |
| | 200 | THER | 12,865 | L | Off Peak | 334 | 37,0% | 1,73 | 370 | |
| | | HPC/QUIE/STEAT | 12,766 | L | | 332 | 37,3% | 1,73 | 372 | |
| | 250 | STEAT | 12,821 | L | Off Peak | 317 | 37,1% | 1,97 | 455 | |
| | Horizontal Installation | | | | | | | | | |
| Ø505 HORD | 75 | THER | 6,683 | M | energized | 69 | 36,0% | nc | nc | 15 |
| | 100 | STEAT | 6,353 | M | energized | 121 | 37,5% | 1,65 | 165 | |
| | | THER | 6,246 | M | | 108 | 38,0% | 1,65 | 165 | |
| | | STEAT | 12,798 | L | | 196 | 37,2% | 2,25 | 231 | |
| Ø560 HORD | 150 | THER | 12,552 | L | energized | 177 | 37,8% | 2,25 | 231 | |
| | | STEAT | 13,126 | L | | 221 | 37,0% | 2,68 | 318 | |
| | | THER | 13,126 | L | | 197 | 37,0% | 2,68 | 318 | |
| | | | | | | | | | | |
| Ø505 HORD | 75 | THER | 6,531 | M | energized | 96 | 36,7% | nc | nc | |
| | 100 | THER | 6,687 | M | energized | 158 | 36,0% | 1,33 | 178 | |
| | 150 | THER | 12,882 | L | | 222 | 37,0% | 1,65 | 279 | |
| | 200 | THER | 12,882 | L | | 301 | 37,0% | 1,97 | 366 | |
| Ø570 HORD | 100 | THER | 6,687 | M | energized | 160 | 36,0% | 1,32 | 187 | |
| | 150 | THER | 12,882 | L | | 263 | 37,0% | 1,68 | 281 | |
| | 200 | THER | 12,882 | L | | 303 | 37,0% | 2,02 | 367 | |
| | | | | | | | | | | |
| Floor Standing Installation | | | | | | | | | | |
| Ø570 STABLE | 200 | THER | 12,883 | L | Off Peak | 330 | 37,1% | 1,98 | 356 | 15 |
| | | HPC/STEAT | 12,883 | L | | 333 | 37,0% | 1,98 | 349 | |
| | 250 | THER | 12,883 | L | | 373 | 37,0% | 2,36 | 469 | |
| | | STEAT | 12,883 | L | | 370 | 37,0% | 2,36 | 460 | |
| | 300 | THER | 12,883 | L | | 473 | 37,0% | 2,61 | 525 | |
| | | STEAT | 12,883 | L | | 473 | 37,0% | 2,61 | 515 | |
| | 250 | HPC | 12,879 | L | Off Peak | 423 | 37,0% | 2,17 | 458 | |
| | 270 | HPC | 12,667 | L | | 430 | 37,5% | 2,3 | 505 | |
| | 300 | HPC | 12,808 | L | | 524 | 37,2% | 2,45 | 563 | |
| | 300 | QUIE/ZEN | 12,883 | L | | 473 | 37,0% | 2,61 | 525 | |
| | | | | | | | | | | |

* value for the range HPC/PTEC (Ø560)

** value according to the specifications LGIE 103-14D*

nc = not concerned

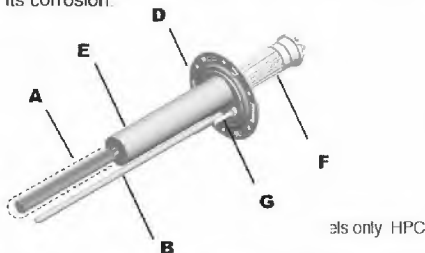
1.5. Professional TECH PTEC steatite range - HPC - QUIETIS - ZEN

1.5.a. Definition of the range

Heating element: Steatite heating element located inside a bush

Anti-corrosion protection: Enamelled boiler + Professional TECH anode - HPC - QUIETIS - ZEN

The exclusive Professional TECH system solution is an anodic anti-corrosion electronic protection system with a modulated current. It ensures maximum durability in terms of the boiler used in the water heater, regardless of whether more or less aggressive water is used. The electronic circuit creates a difference in potential between the boiler and the titanium electrode, so that optimal boiler protection is guaranteed, thereby preventing its corrosion.



Picture 3- Steatite heating element + Professional TECH anode

1.5.b. Technical features

See page 6.

INSTALLATION

1. Legal obligations and recommendations relating to product installation

Before installing this appliance, please read the instructions contained in this manual carefully. Failure to observe these instructions may lead to the guarantee becoming void.

1. All product installation and maintenance work must only be performed by qualified professionals. Current national legislation must be observed. In particular, all regulations relating to water heaters must be fully observed.

2. The manufacturer shall not be held liable for any damage caused by unprofessional or improper installation, or by failure to comply with the instructions contained in the user manual.

4. If the appliance is installed in a room which is just above an inhabited space (a loft, attic, false ceiling, etc.), insulate the piping and fit a retention tank with water drainage. Connection

to the sewage system is compulsory in all instances.

Advice To avoid excessive energy consumption, we recommend that the water heater is positioned as close as possible to the hot water drawing points (recommended distance: no greater than 8 metres).

Recommendation when installing in the bathroom:

The water heater installation in the bathroom must be adapted in accordance with national rules and standards in force (NFC 15-100, RGIE, etc.).

EN

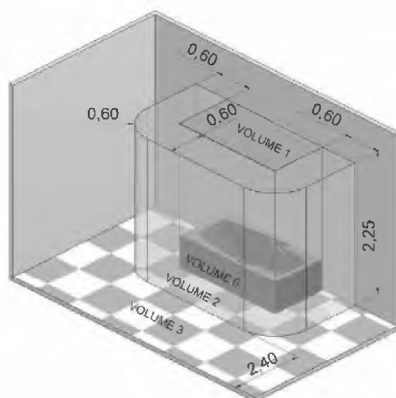
Volume classifications:

➤ **Volume 0:** This is the interior volume of the bathtub or shower tray.

➤ **Volume 1:** This is the volume outside that bathtub or shower tray and is limited on the one side by the vertical cylindrical surface circumscribed to the edge of the bathtub or shower tray, and on the other by the horizontal plane at 2.25 m from the bottom of the bath or shower base.

➤ **Volume 2:** This is the volume external to volume 1. It is limited by the vertical cylindrical surface 0.60m from the edge of the bathtub or shower tray and limited by a horizontal plane at 2.25 m above the bottom of the bathtub or shower tray.

➤ **Volume 3:** This is the volume external to volume 2. It is limited by the vertical cylindrical surface 2.40m from volume 2 and limited by a horizontal plane at 2.25 m above the bottom of the bathtub or shower tray.



Authorised water heater fixing zones:

A : Magnesium anode / B : Spike / C : Immersion heating element / D : Plate / E : Bush / F : Steatite heating element / G : Professional TECH anode.

1 « This regulation applies in France and the installer must keep up to date with all subsequent modifications. For installation in other countries, please refer to applicable local regulations ».

Fixed, low voltage water heaters are permitted in **volume 1** as long as they have maximum protection level (IPX4). Please note: horizontal type water heaters, installed as high up as possible in **volume 1** are permitted for France only.

Only fixed water heaters which have a protection degree of at least IP 24 are permitted within the **protection volume (B)**.

2. Installing the product

2.1. Material required

2.1.a. Tools and materials which should be provided

- If the wall cannot withstand the weight of the water heater ⇒ a support or a ceiling fixing kit.
- If you wish to fix a horizontal model to a wall or to a ceiling ⇒ a set of fixing straps.
- For the seal : hemp/tow and sealing paste or a seal for connections to be screwed in, depending on the model.
- Spirit level.

If the water heater is fitted with fixing brackets:

- For each fixing bracket ⇒ 2 rawlplugs and 2 bichromate concrete screws, Fischer M10, M12 or M14 type.
- Material necessary for drilling with M10, M12 or M14 diameter.
- Dynamometric spanner.
- Nuts with M10, M12 or M14 diameter.
- Washer with M10, M12 or M14 diameter.

2.1.b. Accessories

Indispensable accessories:

- Safety assembly (suited to the model).
- Dielectric connection(s).
- If the water pressure is greater than 4.5 bar ⇒ a pressure reducer.

Others:

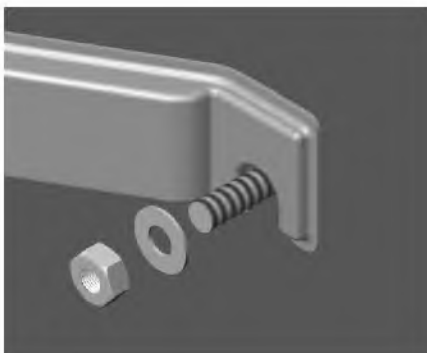
- Cut-off valve.
- Domestic hot water expansion vessel.
- Mixer which helps to prevent the risk of burns, as the temperature does not exceed 50°C at the drawing points and 60°C in the kitchen (this is a legal obligation in France).

2.2. Assembly

2.2.a. General instructions for the fixing brackets

Fix the support bracket(s) to a load-bearing wall using suitable **fastening bolts** measuring **10 mm in diameter** and **flat steel washers** measuring a **minimum of 24 mm** and a **maximum of 30 mm in (external) diameter**.

IMPORTANT: MAKE SURE THAT THE NUT IS WELL TIGHTENED



Picture 5 - Fitting the fixing bracket Installation values

2.2.b. VERT Vertical wall-fitted model

Position the appliance at least 50 cm from the floor and at least 5 cm from the ceiling to facilitate maintenance work. (Picture 6)

This model can also be installed on a support (optional), but **it absolutely must be fixed to a load-bearing wall** with the upper fixing bracket.

Make sure that the installed support is suitable for the model of water heater and diameter in question, and that it is correctly assembled and installed.

Advice We recommend the use of a support which is compatible with the products designed by this manufacturer.

Advice Use the installation template printed on the packaging of the water heater.

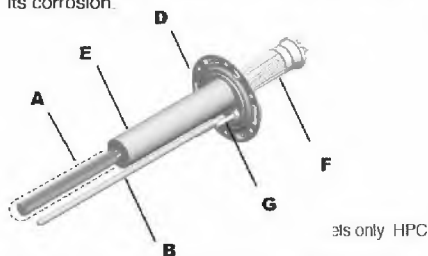
1.5. Professional TECH PTEC steatite range - HPC - QUIETIS - ZEN

1.5.a. Definition of the range

Heating element: Steatite heating element located inside a bush

Anti-corrosion protection: Enamelled boiler + Professional TECH anode - HPC - QUIETIS - ZEN

The exclusive Professional TECH system solution is an anodic anti-corrosion electronic protection system with a modulated current. It ensures maximum durability in terms of the boiler used in the water heater, regardless of whether more or less aggressive water is used. The electronic circuit creates a difference in potential between the boiler and the titanium electrode, so that optimal boiler protection is guaranteed, thereby preventing its corrosion.



Picture 3- Steatite heating element + Professional TECH anode

1.5.b. Technical features

See page 6.

INSTALLATION

1. Legal obligations and recommendations relating to product installation

Before installing this appliance, please read the instructions contained in this manual carefully. Failure to observe these instructions may lead to the guarantee becoming void.

1. All product installation and maintenance work must only be performed by qualified professionals. Current national legislation must be observed. In particular, all regulations relating to water heaters must be fully observed.

2. The manufacturer shall not be held liable for any damage caused by unprofessional or improper installation, or by failure to comply with the instructions contained in the user manual.

4. If the appliance is installed in a room which is just above an inhabited space (a loft, attic, false ceiling, etc.), insulate the piping and fit a retention tank with water drainage. Connection

to the sewage system is compulsory in all instances.

Advice To avoid excessive energy consumption, we recommend that the water heater is positioned as close as possible to the hot water drawing points (recommended distance: no greater than 8 metres).

Recommendation when installing in the bathroom:

The water heater installation in the bathroom must be adapted in accordance with national rules and standards in force (NFC 15-100, RGIE, etc.).

EN

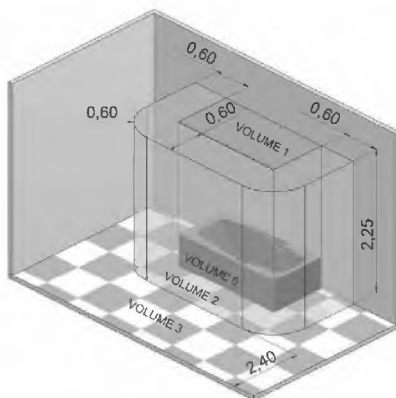
Volume classifications:

➤ **Volume 0:** This is the interior volume of the bathtub or shower tray.

➤ **Volume 1:** This is the volume outside that bathtub or shower tray and is limited on the one side by the vertical cylindrical surface circumscribed to the edge of the bathtub or shower tray, and on the other by the horizontal plane at 2.25 m from the bottom of the bath or shower base.

➤ **Volume 2:** This is the volume external to volume 1. It is limited by the vertical cylindrical surface 0.60m from the edge of the bathtub or shower tray and limited by a horizontal plane at 2.25 m above the bottom of the bathtub or shower tray.

➤ **Volume 3:** This is the volume external to volume 2. It is limited by the vertical cylindrical surface 2.40m from volume 2 and limited by a horizontal plane at 2.25 m above the bottom of the bathtub or shower tray.



Authorised water heater fixing zones:

A : Magnesium anode / B : Spike / C : Immersion heating element / D : Plate / E : Bush / F : Steatite heating element / G : Professional TECH anode.

1 « This regulation applies in France and the installer must keep up to date with all subsequent modifications. For installation in other countries, please refer to applicable local regulations ».

Fixed, low voltage water heaters are permitted in **volume 1** as long as they have maximum protection level (IPX4). Please note: horizontal type water heaters, installed as high up as possible in **volume 1** are permitted for France only.

Only fixed water heaters which have a protection degree of at least IP 24 are permitted within the **protection volume (B)**.

2. Installing the product

2.1. Material required

2.1.a. Tools and materials which should be provided

- If the wall cannot withstand the weight of the water heater ⇒ a support or a ceiling fixing kit.
- If you wish to fix a horizontal model to a wall or to a ceiling ⇒ a set of fixing straps.
- For the seal : hemp/tow and sealing paste or a seal for connections to be screwed in, depending on the model.
- Spirit level.

If the water heater is fitted with fixing brackets:

- For each fixing bracket ⇒ 2 rawlplugs and 2 bichromate concrete screws, Fischer M10, M12 or M14 type.
- Material necessary for drilling with M10, M12 or M14 diameter.
- Dynamometric spanner.
- Nuts with M10, M12 or M14 diameter.
- Washer with M10, M12 or M14 diameter.

2.1.b. Accessories

Indispensable accessories:

- Safety assembly (suited to the model).
- Dielectric connection(s).
- If the water pressure is greater than 4.5 bar ⇒ a pressure reducer.

Others:

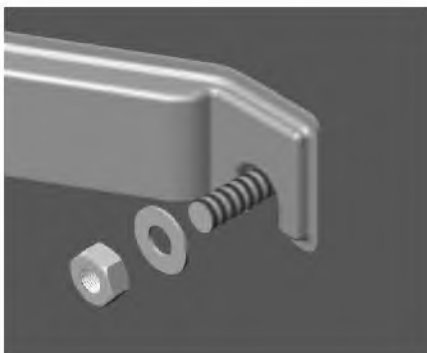
- Cut-off valve.
- Domestic hot water expansion vessel.
- Mixer which helps to prevent the risk of burns, as the temperature does not exceed 50°C at the drawing points and 60°C in the kitchen (this is a legal obligation in France).

2.2. Assembly

2.2.a. General instructions for the fixing brackets

Fix the support bracket(s) to a load-bearing wall using suitable **fastening bolts** measuring 10 mm in diameter and **flat steel washers** measuring a minimum of 24 mm and a maximum of 30 mm in (external) diameter.

IMPORTANT: MAKE SURE THAT THE NUT IS WELL TIGHTENED



Picture 5 - Fitting the fixing bracket Installation values

2.2.b. VERT Vertical wall-fitted model

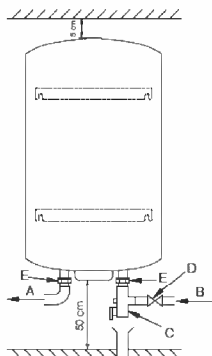
Position the appliance at least 50 cm from the floor and at least 5 cm from the ceiling to facilitate maintenance work. (Picture 6)

This model can also be installed on a support (optional), but **it absolutely must be fixed to a load-bearing wall** with the upper fixing bracket.

Make sure that the installed support is suitable for the model of water heater and diameter in question, and that it is correctly assembled and installed.

Advice We recommend the use of a support which is compatible with the products designed by this manufacturer.

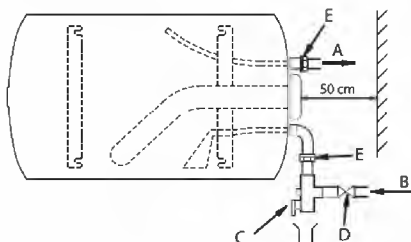
Advice Use the installation template printed on the packaging of the water heater.



Picture 6 - Installation values

2.2.c. HORD horizontal model

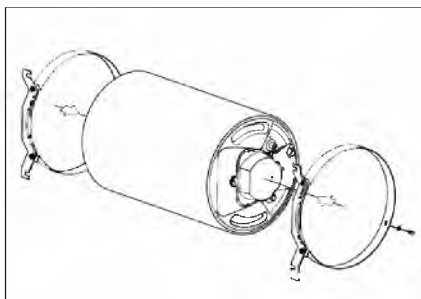
The model is already prepared at the company so that it can be installed horizontally onto a wall; the supply pipes are located on the **right-hand side** of the appliance (Picture 7).



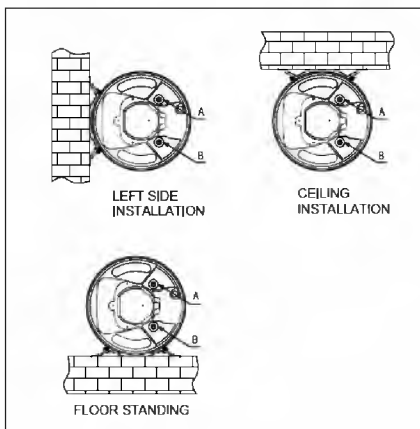
Picture 7 - Horizontal element on the protection element
- supply pipes on the right-hand side

It can also be installed on the floor or the ceiling if necessary, using a set of straps (optional, Picture 8). The orientation of the tubes must imperatively remain on the vertical plane with cold water inlet (blue) at the bottom as shown in FIG. 9.

In this situation, please consult the installation instructions supplied with the set of straps.



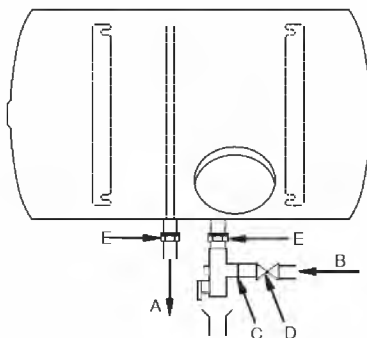
Picture 8



Picture 9

HORBas HORB version with water inlet and outlet pipes on the bodywork ring nut

This appliance is designed to be fitted to the wall horizontally; the supply pipes are located at the base (Picture 10).

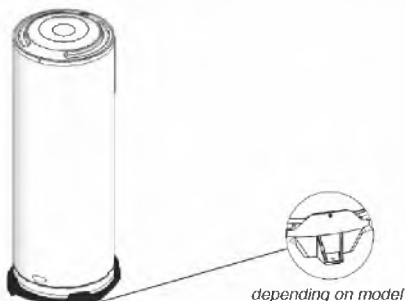


Picture 10 - Horizontal model on ring nut

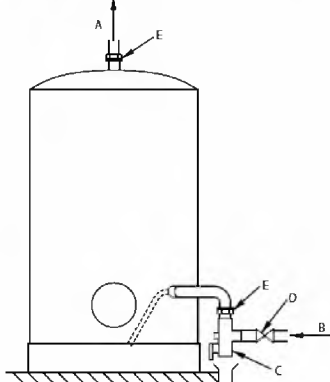
A : Hot water / B : Cold water / C : Safety assembly / D : Shut-off valve / E : Dielectric connection

2.2.d. STAB models on base structures

This appliance is fitted with a base structure which is fixed to the product while it is still at the company. Position the appliance on a perfectly flat and level surface.




Picture 11 – Model on base structure



Picture 12 – Model on base structure

3. Water connection

1. The operating pressure is indicated on the data plate of the water heater (see water heater).

2.  **Connection with materials synthesis**
 DTU **PER are prohibit: flood risk**

To connect the tank on plastic pipe "PER" installation existent, intercalate on the out-let (hot water) a copper pipe with minimum longer 50 cm to avoid any damage.

The connection of a water heater to copper piping must be performed using a dielectric connection. These dielectric connections are available as an optional extra or as standard, depending on the model purchased.

If you only have one dielectric connector, you must fit it to the hot water outlet!

3. When the input pressure of the network is greater than 4.5 bar, a pressure reducer must be

installed upstream of the safety assembly.

4. If the water systems have the following features:

- > small pipes;
 - > taps with ceramic plates / mixer taps;
- a "ram stabilising" device or a domestic hot water expansion vessel suited to the system must be installed as close as possible to the taps.

Advice *We recommend that a shut-off valve is installed upstream from the safety assembly.*

See pictures 6, 7, 8, 9, 10, and 12.

4. Electrical connection

4.1. Important considerations

THE WIRING DIAGRAM IS STUK ONTO THE APPLIANCE; USE IT AS A REFERENCE GUIDE.

4.2. The models with TM and TR designation are three-phase versions (TRI):

These three-phase devices are wired in 400 V TRI by the manufacturer. They can be connected 230V TRI or 230V single-phase (see wiring diagram on the device).

4.3. The models with MT designation are three-phase devices:

These devices are wired 230V single phase by the manufacturer and can be connected to 230V TRI or 400V TRI (See wiring diagram on the device) **The 500 liters floor standing model is wired 400V TRI by the manufacturer.** The electrical connection of the device is made exclusively on the thermostat's terminals or on the device's terminal board.

ANY DIRECT CONNECTION TO THE HEATING ELEMENT IS HAZARDOUS ANYS IS STRICTLY PROHIBITED.

A : Hot water / B : Cold water / C : Safety assembly / D : Shut-off valve / E : Dielectric connection

4.4.1 PROfessional TECH (PTEC) and QUIETIS

The boiler protection anode is controlled by an electronic device powered at the network current or using a battery designed for systems operating in day/night mode, in order to keep the boiler protected during the day. Correct operation of the protection system **REQUIRES A PERMANENT POWER SUPPLY** (network or batteries). The appliance cannot, in fact, be left without a power supply for more than 48 hours.

4.4.2 HPC and ZEN

The boiler protection anode is controlled by an electronic device powered at the network current. In case of system operating in day/night mode, during the night the protection is guaranteed by the PROfessional TECH anode, while during the day the protection is guaranteed by the magnesium anode.

ATTENTION: The anti-corrosion system cannot stay without power supply more than 1 week.

4.5 Day/night or permanent power supply: operating principle

4.5.1 Products PROfessional TECH (PTEC) and QUIETIS

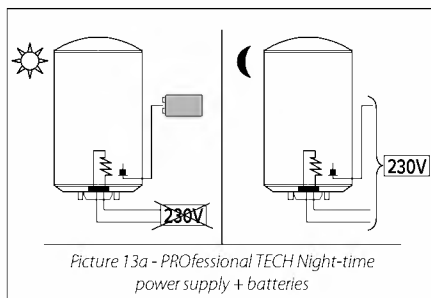
① Night-time power supply + batteries

- > Heating element ↔ Night-time power supply (exclusive or dual timer schedule) (Picture 13a).
- > Anode PROfessional TECH ↔ Night-time power supply + day-time operation with batteries.*

* Electric water heaters, designed for a night-time power supply, are fitted with Ni-MH batteries which are charged every night, thereby protecting the boiler during the day.

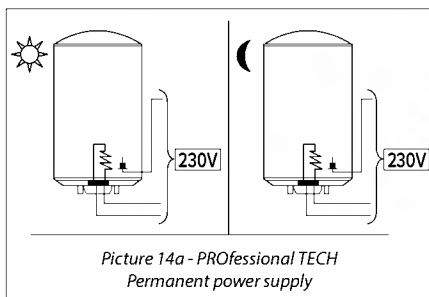
CAUTION: The batteries do not have an indefinite lifespan: it makes good sense to replace them once they have been used for one or two years.

In order to guarantee full boiler protection, any faulty batteries must be replaced. If the batteries are not replaced, the guarantee will become void.



② Permanent power supply

- > Heating element and anode PROfessional TECH ↔ Continuous power supply (Picture 14a).
- > Operation without battery.

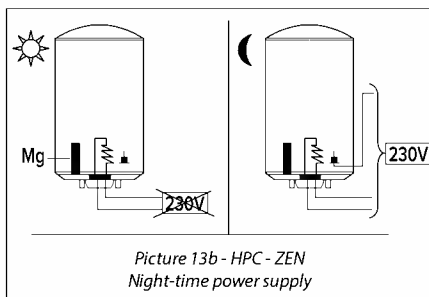


4.5.2 Products HPC and ZEN

① Night-time power supply

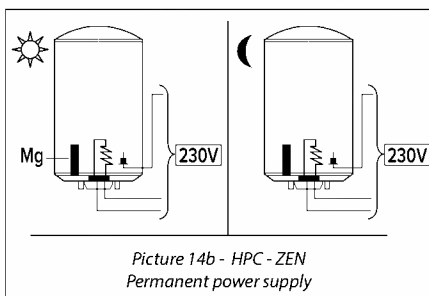
- > Heating element ↔ Night-time power supply (exclusive or dual timer schedule) (Picture 13b).
- > Anode PROfessional TECH ↔ Night-time power supply.*

* In products HPC and ZEN, the protection is however guaranteed during the day by the magnesium anode.



② Permanent power supply

- > Heating element and anode PROfessional TECH => Continuous power supply (Picture 14b).



OPERATION

1. Introduction

1.1. User considerations

1. The installation of the water heater is the responsibility of the purchaser.

2. 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 they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

3. The end user is responsible for recycling the appliance once it can no longer be used. For further information, please consult the introduction of this booklet 1.1. – Regulations relating to transportation, storage and recycling.

2. Operating advice

2.1. Temperature adjustment

We recommend the thermostat is not set to its maximum position, in order to avoid limescale build-up and prevent burns. It is nevertheless essential to find a suitable compromise so as to avoid bacterial proliferation while trying to prevent the water heater from experiencing unnecessary limescale build-up.

On the other hand, in order to prevent burns, a suitable mixer should be used so that the temperature does not exceed 50°C at any of the drawing points. This is a compulsory regulation in France.

Advice When using a mixer at a drawing point, we recommend that the temperature is set to approximately 60°C.

2.2. Maintenance

➤ Empty the appliance **annually** (twice a year if the water has been treated with a softening agent) in order to:

1. check the condition of the magnesium anode;
2. remove all deposits inside the boiler.

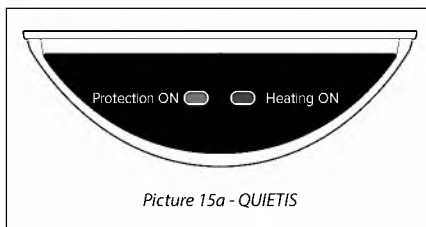
Contact your installer.

2.3. Indicator lights

2.3.1 Products PROfessional TECH steatite range and QUIETIS

The boiler protection anode is controlled by an electronic device powered at the network current or using a battery designed for systems operating in day/night mode, in order to keep the boiler protected during the day.

The PROfessional TECH system cannot be left without a power supply for over 48 hours



Indicator light PROTECTION ON: light ON

Light OFF = anti-corrosion protection defect : replace the battery NIMH 9V. If the defect goes on, contact your installer.

Indicator light: HEATING ON

Light ON= under heating

Light OFF = out of heating

If connected to the mains with a dual timer schedule or exclusive night-time schedule (only for models with battery), the green indicator light switches on but is very weak for the first 48 hours in accordance with the charge status of the battery. Check the indication light after 48 hours of operation.

Advice In order to guarantee full boiler protection (green light illuminated), any faulty batteries must be replaced.

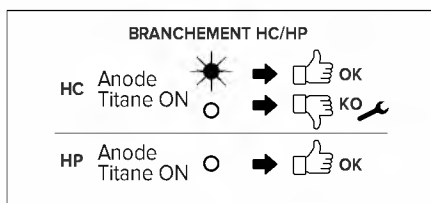
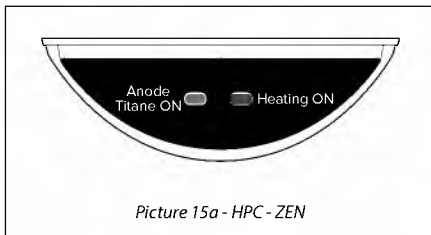
If the batteries are not replaced, the guarantee will become void. It makes good sense to replace them once they have been used for one or two years.

2.3.2 Products HPC and ZEN

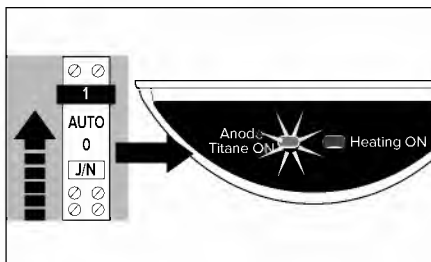
The boiler protection anode is controlled by an electronic device powered at the network current, in order to keep the boiler protected during the night.

In products HPC and ZEN, the protection is however guaranteed during the day by the magnesium anode.

ATTENTION: The anti-corrosion system cannot stay without power supply more than 1 week



In case of installation with night-time power supply only, in order to guarantee the boiler protection, AT LEAST ONCE PER YEAR check regularly the functioning of the Protection light, forcing the electrical connection in manual mode ON.



MAINTENANCE AND REPAIRS

1. Maintenance

Empty the appliance **annually** (twice a year if the water has been treated with a softening agent) in order to:

1. check the condition of the magnesium anode;
2. remove all deposits inside the boiler.

We strongly recommend that the performance of the water softener is checked regularly.

The residual hardness cannot be lower than 15°F for THER, STEA, PTEC, Quietis and VERTUO plus products. Instead the residual hardness cannot be lower than 8°F for HPC and ZEN products.

1.1. Emptying

- Cut off the electricity supply before performing any work on the appliance.
- Shut off the cold water supply at the inlet.
- Open the hot water tap to draw water.
- Open the emptying valve on the safety assembly and the water will flow out of the drainage hole.

1.2. Build-up removal – Checking the anode

- Empty the appliance (see above).
- Remove the protection element and unscrew the base (some residual water may leak out).
- Clean the boiler: without using metal objects or chemical agents, remove any build-up on electrical elements or on the bush (steatite), on the corresponding casing and on the base of the boiler.
- If a magnesium anode is used, check its condition: the magnesium anode is consumed progressively in accordance with the water quality, in order to prevent corrosion of the boiler. If the diameter is smaller than 15 mm (for the armoured range) / 10 mm (for the steatite range), or if the total volume is lower than 50% of the initial volume, the anode should be replaced.
- Use a new seal every time the base is replaced after being removed.
- When screwing in the bolts again, use a “cross-tightening” technique. The tightening torque should be between 18 and 20 Nm.

EN

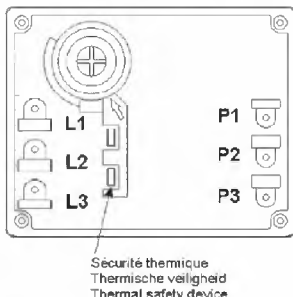
2. Problems, causes and solutions

| CAUSES AND SOLUTIONS | PROBLEM | | | | | | | | | | | | | POSSIBLE CAUSES | COURSE OF ACTION |
|----------------------|------------|------------------|------------------------|--|---|--|---|----------------------|-------------------------------|---------------|------------------------|------------------------------|--|--|---|
| | COLD WATER | WATER IS TOO HOT | INSUFFICIENT FLOW RATE | CONTINUOUS DRAINAGE FROM THE SAFETY ASSEMBLY | PROTECTION ON LIGHT SWITCHED OFF PROFESSIONAL TECH - QUIET IS | *PROTECTION ON LIGHT SWITCHED OFF WHEN PRODUCT IS POWERED HPC - ZEN* | *HEATING ON LIGHT NOT ILLUMINATED (PROFESSIONAL TECH STEATITE RANGE)* | RUSTY-COLOURED WATER | WATER HAS AN UNPLEASANT ODOUR | WATER LEAKAGE | WATER HEATER IS WARPED | NOISE CAUSED BY WATER HEATER | | | |
| | | | | | | | | | | | | | | Power cut (during heating phase) | Check the fuses and replace them if necessary |
| | | | | | | | | | | | | | | *Incorrect temperature adjustment using thermostat* | Adjust the thermostat (+ to the right, - to the left) |
| | | | | | | | | | | | | | | *Thermostat overheating safety activated (appliance overheated)* | See 1 |
| | | | | | | | | | | | | | | Faulty heating elements | See 2 |
| | | | | | | | | | | | | | | Unsuitable day-night programming | *Where necessary, re-activate the heating during the day* |
| | | | | | | | | | | | | | | Thermostat malfunction | See 1 |
| | | | | | | | | | | | | | | *Limescale build-up inside appliance and/or safety assembly* | *Remove build-up. If necessary replace the safety assembly* |
| | | | | | | | | | | | | | | Water mains pressure | *Check the mains pressure. If necessary, install a pressure reducer* |
| | | | | | | | | | | | | | | Water mains flow rate | Check the piping |
| | | | | | | | | | | | | | | Faulty baffle or insert | Contact the technical assistance centre |
| | | | | | | | | | | | | | | *Removal of build-up from the safety assembly* | Replace the safety assembly |
| | | | | | | | | | | | | | | *PROfessional TECH circuit malfunctioning* | See 3 |
| | | | | | | | | | | | | | | *Batteries exhausted or not charged sufficiently* | See 4 |
| | | | | | | | | | | | | | | *No mains power in the PROfessional TECH circuit* | Make sure that electronic circuit of PROfessional TECH protection is functioning correctly |
| | | | | | | | | | | | | | | Boiler empty | Fill the boiler |
| | | | | | | | | | | | | | | *Fast coupling connector not connected* | Connect the fast coupling connector |
| | | | | | | | | | | | | | | Heating element circuit broken | Check the circuit |
| | | | | | | | | | | | | | | *Condition of cables from electronic circuit connector* | Check the cables |
| | | | | | | | | | | | | | | Heating element connector earthing | Check the wiring |
| | | | | | | | | | | | | | | *Appliance capacity insufficient for requirements* | |
| | | | | | | | | | | | | | | Water heater corrosion | Empty the water heater and make sure there is no internal corrosion. If present, replace the water heater |
| | | | | | | | | | | | | | | Bacteria development | *Replace the seal (the seal must be replaced every time the flange is removed!)* |
| | | | | | | | | | | | | | | Flange seal malfunction | *Replace the seal (the seal must be replaced every time the flange is removed!)* |

① Replacing or resetting the thermostat

If the thermostat is deactivated, reset it and establish the cause (short-circuit, faulty thermostat, etc.).

CAUTION: Every thermostat is designed to be reset a maximum of two or three times only!



② Replacing the heating element

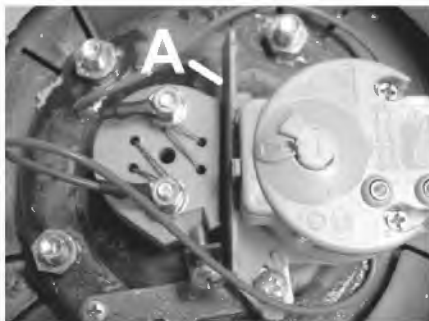
Check the Ohmic value of the heating element and, if necessary, replace it. A null or an infinite value indicates that the heating element must be replaced.

Armoured range

The appliance must be emptied before the armoured heating element may be replaced.

Steatite range – PROfessional TECH steatite range

It is not necessary to empty the appliance before replacing the heating element. During a Technical Assistance procedure for a steatite water heater, it is **absolutely necessary to replace the plastic separator between the thermostat and the heating element** in the water heater as this guarantees the correct operation of the appliance.



Picture 17 - Plastic separator / A: plastic separator

③ Replacing the electronic circuit

PROfessional TECH PTEC steatite range

Before performing any work, make sure you have isolated the appliance from the electricity supply network. The replacement of the electronic circuit is a very simple process. After removing the plastic protection:

- Disconnect the storage cell (press-fit connector on the storage cell).
- Disconnect the 2 wires running from the electronic circuit to the power supply terminal board.
- Disconnect the fast coupling connector with the false movement protection device which links the circuit to the boiler and the electrode.
- Disconnect the electronic circuit from the support (plastic material clips on the corners).
- Replace the faulty circuit with a new one.

Repeat the procedure described above in the reverse order.

④ Replace the battery.

PROfessional TECH steatite range

The storage cell is replaced by disconnecting the press-fit connector and replacing the old storage cell with a **new rechargeable one, Ni-Mh 9 volt 150 mAh minimum.**

EN

GUARANTEE CONDITIONS

Preface: The following provisions cannot be used to reduce or cancel the statutory claim against hidden defects (art. 1611 and subsequent modification of the Civil code).

Given the technical nature of the product and in order to guarantee the safety and protection of the consumer, the electric water heater must be installed, prepared for operation and regularly serviced by a qualified professional in accordance with the instructions provided in the installation manual and in full compliance with industry standards. The appliance must be used in a normal manner, in compliance with industry standards and in accordance with current legislation and the instructions supplied in the installation manual.

The product is developed and guaranteed for the installation and use in domestic appliances.

For industrial use or non domestic ones, take contact with the manufacturer to insure the guarantee and good working of the product.

Given the technical nature of the product, repairs under guarantee must be performed by an authorised technician. The manufacturer shall not be held liable for repairs performed and parts supplied by other professionals or their authorised technicians.

Breakdowns due to the following conditions are not covered by the guarantee:

Unusual environmental conditions:

- > Positioning the appliance in a place which is subject to ice or bad weather.
- > Supplying the appliance with rainwater, well water or water which contains an unusually aggressive content and which does therefore not conform to national regulations or current legislation.

The water's residual hardness may not be less than $\geq 8^\circ\text{F}$ ($\geq 10^\circ\text{F}$ if using a water softener).

The use of a softener does not affect our guarantee, on the condition that the softener is correctly calibrated, monitored and subject to regular maintenance. In this case, the residual hardness must be greater than $\geq 10^\circ\text{F}$.

- > Water pressure greater than 4.5 bar.
- > Various damages caused by knocks or falls during handling after the appliance has been delivered.
- > In particular, water damage which could have been prevented if the water heater had been repaired immediately. The guarantee only applies to the water heater and its components, with the exception of all or part of the electrical or hydraulic system of the appliance.
- > Electricity supply with significant amounts of excess voltage.

A system which does not comply with regulations, current national legislation and which is unprofessional, in particular:

- > The absence or incorrect installation of the safety assembly.
- > The installation of a safety assembly which does not conform to current national legislation of the use of a worn-out safety assembly inside a newly-installed water heater.
- > Modification of the safety assembly adjustment after irregular plumbing work.
- > The use of a tripod which has not been authorised by the manufacturer, or which has not been installed

according to the instructions given in this manual.

- > Unusual corrosion due to poor hydraulic connections (direct iron-copper contact); a lack of insulating attachments.
- > Faulty electrical connection which does not conform to national installation regulations, poor earthing, insufficient wire cross-section, non-adherence to supplied connection diagrams, etc.
- > Switching the appliance on without filling it up first (dry heating).
- > Installation without retention tank as recommended in paragraph 1.1.
- > Appliance installed in a narrow room with inaccessible electrical parts.
- > The use of spare parts which have not been authorised by the manufacturer.

Insufficient maintenance: the water heater must undergo annual maintenance:

- > Unusual build-up on the heating elements and the safety devices.
- > A lack of maintenance in terms of the safety assembly, with resulting excessive pressure.
- > Bodywork subjected to external violence.
- > Modification of the original systems without the manufacturer's approval or using spare parts which have not been specified by the manufacturer.
- > A lack of maintenance in terms of the appliance itself, especially regarding the replacement of the anode when necessary.
- > No replacement of the batteries in an appliance which uses them, or replacement of rechargeable batteries with batteries which do not conform to the demands listed in this set of instructions.

The guarantee is limited to the replacement or repair of appliances and components which we recognise as being originally faulty. If necessary, the part or product should be returned to one of our factories, only after an agreement is made with our Technical Assistance Centres. All expenses relating to labour, carriage, packaging and handling will be paid for by the user. The replacement or repair of a component inside an appliance may not, in any event, give rise to compensation.

Certificate n. TC-B.60719 valid from 21/11/2013 until 20/11/2016

GUARANTEE

HOT WATER BOILERS TERMS OF THE GUARANTEE

1) The hot water boiler must be installed by a qualified technician according to the rule book, standards in force and the provisions laid out in our technical instructions.

The boiler shall be used normally and be serviced on a regular basis by a specialist.

Under such conditions, our guarantee shall be executed via replacement, if necessary, of the appliance or the free-of-charge supply to our Distributor or Installer of the pieces recognized as being defective by our technical department to the exclusion of labour costs, transport costs, any compensation and prolongation of the guarantee. The guarantee will come into effect on the date of installation, with the invoice relating to the installation constituting proof, in the absence of any documentary evidence, the date upon which the guarantee becomes effective shall be the date of manufacture mentioned on the identification plate mounted on the hot water boiler, with this date being extended by a further 3 months.

The hot water tank is guaranteed for a 5-year period when this concerns a simple, electrical model of 50 to 500 litres; a 3-year guarantee applies to 10, 15, 30 litre tanks, with this also applying to continuous flow hot water boilers, combined hot water boilers, preheater reservoirs.

The electrical components and removable parts are guaranteed for a period of two years.

N.B. : Expenses or damages due to defective installation (for instance : freezing, safety valve not connected to a waste water outlet, no retention tank) or to difficult access shall under no circumstances be charged to the manufacturer.

2) LIMITS OF THE GUARANTEE

The guarantee does not cover defects due to :

Abnormal environmental conditions :

installation in premises subject to freezing or bad weather;

appliance is supplied with rain water, well water or unusually corrosive water and is not in accordance with national regulations in force (e.g. : DTU plumbing 60-1 for France, Royal Decree of 27.04.84 and ERRATA of 21.05.85 for Belgium);

the guarantee is limited to the exchange or repair of the hot water boiler and those component parts which we have acknowledged as having been defective from the start. If necessary, the component part or the boiler will have to be returned to one of our factories but only after prior agreement has been obtained from our technical department. Labour, transport and travel costs shall be paid for by the user. Exchange or repair of a component part shall in no event give rise to a demand for compensation,

water pressure (higher than 7 bars);

damage caused by mishandling (impact, falls) after factory delivery;

in particular, water damage which could have been avoided by immediately repairing the hot water boiler. The guarantee applies only to the hot water boiler and its component parts, to the exclusion of any parts relating to the appliance's electrical or hydraulic installation;

power supply with considerable surge voltage.

Any installation which does not comply with the regulations, standards and rule book, in particular :

absence or incorrect installation of a safety valve;

installation of a safety valve which does not comply with the national standards in force (e.g. : NF ANSEAU, TuV,...) and use of a second-hand safety valve in a newly installed hot water boiler.

modifications to the safety valve's adjustment subsequent to breaking the seal;

abnormal corrosion due to incorrect hydraulic connection (direct iron-copper contact);

defective electrical connection which does not comply with national installation standards (e.g. : NF - C. 15100, RGIE,...), incorrect earthing of the installation, insufficient cable width, failure to comply with the recommended wiring diagrams, etc.

the hot water boiler is switched on before it has been filled with water (dry heating).

Defective maintenance :

abnormal scaling of the heating elements and safety valve;

absence of maintenance of the safety valve, leading to excess pressure (see instructions);

boiler body exposed to external attacks;

modifications to the original equipment without the manufacturer's consent or use of spare parts not referenced by the latter;

absence of maintenance of the appliance, and especially non-replacement of the anodes at the appropriate time (see section V).

3) RECOMMENDATIONS

For regions where the water is very hard, the use of a water softener does not entail waiver of our guarantee provided that the water softener is adjusted in compliance with the manufacturer's instructions, and inspected and serviced on a regular basis. In particular : the water's residual hardness may not be less than 15 F.

4) The provisions laid out in the present terms are in addition to any other rights or benefits the purchaser may be entitled to regarding the legal guarantee for hidden defects, applicable in any case whatsoever, in accordance with article 1641 and following of the Civil Code.

5) LEGAL PROCEEDINGS

All disputes shall be settled by the Commercial Courts in Namur, Belgium.

TECHNICAL DEPARTMENT

For all technical questions, please contact :

EN FRANCE

Chaffoteaux sas Carrè Pleyel 5 Rue Pleyel 93521 SAINT DENIS CEDEX

Pour toute question, contactez notre réseau agréé de SAV au: 01 55 84 94 94

EN BELGIQUE ET LUXEMBOURG

Ariston Thermo Benelux sa

Boulevard Industriel/Industrielaan 61 - 1070 Bruxelles/Brussel

Tel. 02 333 48 88 - Fax 02 333 48 89



WE MAKE USE OF
RECYCLED PAPER

Ariston Thermo SpA

Viale Aristide Merloni 45
60044 Fabriano (AN) Italy
Telefono 0732 6011 - Fax 0732 602331
info.it@aristonthermo.com
www.aristonthermo.com

