Cetetherm

# Cetetherm AquaTank

## EM (7 BAR)

**Hot water storage tank, 300-3000 litres**

### APPLICATIONS

Cetetherm AquaTank EM is a range of enamel (glass lined) Domestic Hot Water (DHW) storage tanks from 300 - 3000 litres. These tanks are designed for use in combination with Cetetherm's tap water systems like AquaFirst, AquaEfficiency, AquaProtect or AquaCompact. Ideal for any premises where the water flow need is not constant such as in:

- apartment blocks
- hospitals
- hotels
- retirement and nursing homes
- schools
- leisure centres...

### KEY BENEFITS

- Robust and good value for money
- Easy maintenance thanks to tanks' polished inside surface
- High resistance to any chemicals and to high temperatures
- Energy saving insulations with high level of fireclass
- Sanitary conformity of materials in contact with DHW
- Easy to install

### WORKING PRINCIPLE

The AquaTank acts as a buffer to meet the power peaks occurring at high water flow rates. The Domestic Hot Water (DHW) - heated up by the connected tap water system - is stored at the top of the vessel. The specific AquaTank internal tube arrangement keeps the hot water separated from the recycling and cold water inlet and improves stratification during peak hours. The cold water inlet at the very bottom of the tank (see flowchart) avoids having a zone of stagnant cold water inside the vessel. When high demand occurs, hot water is drawn from the bottom to the centre and from the centre to the very top of the vessel.

### INSULATION

The enamel AquaTank range is available with 2 types of insulation:

- M1 insulation: 100 mm glass wool covered with a PVC-jacket, Eurofire class B
- M0 insulation: 100 mm rockwool covered with an aluminium-plate cladding, Eurofire fireclass A
- Conform to the EU directive of energy efficiency (see technical data).
- Extremely low heat losses thanks to the special design of the insulation avoiding the so-called "chimney-effet" between insulation and vessel surface (see technical data).
- Very easy to remove and refit makes this vessel easy to transport into and out of premises.

### FLEXIBLE ENERGY SOURCE

The complete AquaTank Enamel range is able to accept electric immersion heaters. These immersion heaters can be installed on the inspection holes in a very simple way.

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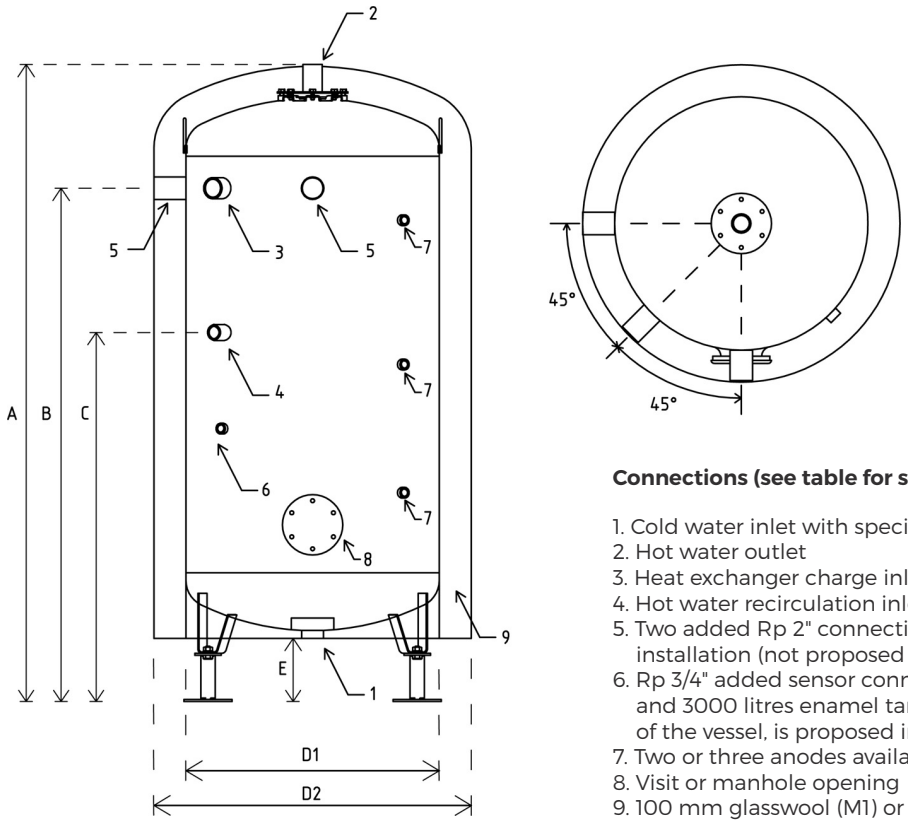
## DRAWING




**Connections (see table for sizes)**

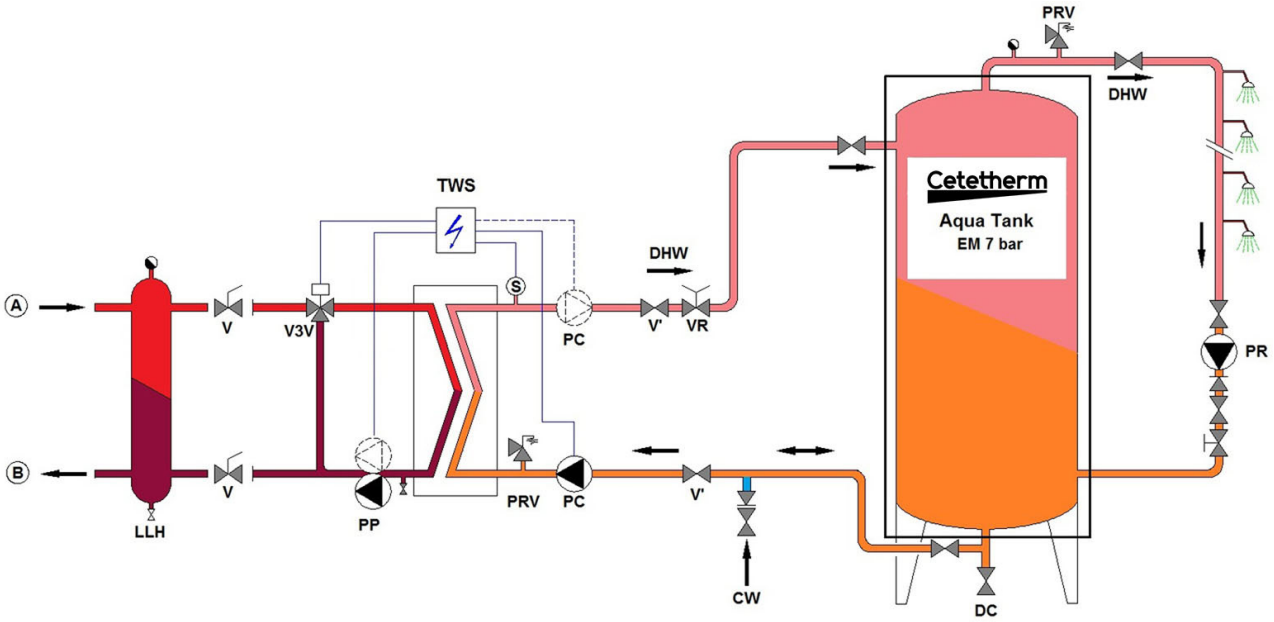
1. Cold water inlet with specific stratification feature
2. Hot water outlet
3. Heat exchanger charge inlet
4. Hot water recirculation inlet
5. Two added Rp 2" connections for extra inlet or safety valve installation (not proposed on 2500 and 3000 litres enamel tank)
6. Rp 3/4" added sensor connection on all the range except on 2500 and 3000 litres enamel tank where an added Rp 2" on the bottom of the vessel, is proposed instead
7. Two or three anodes available depending on the volume of the tank
8. Visit or manhole opening
9. 100 mm glasswool (M1) or rock wool (M0) insulation

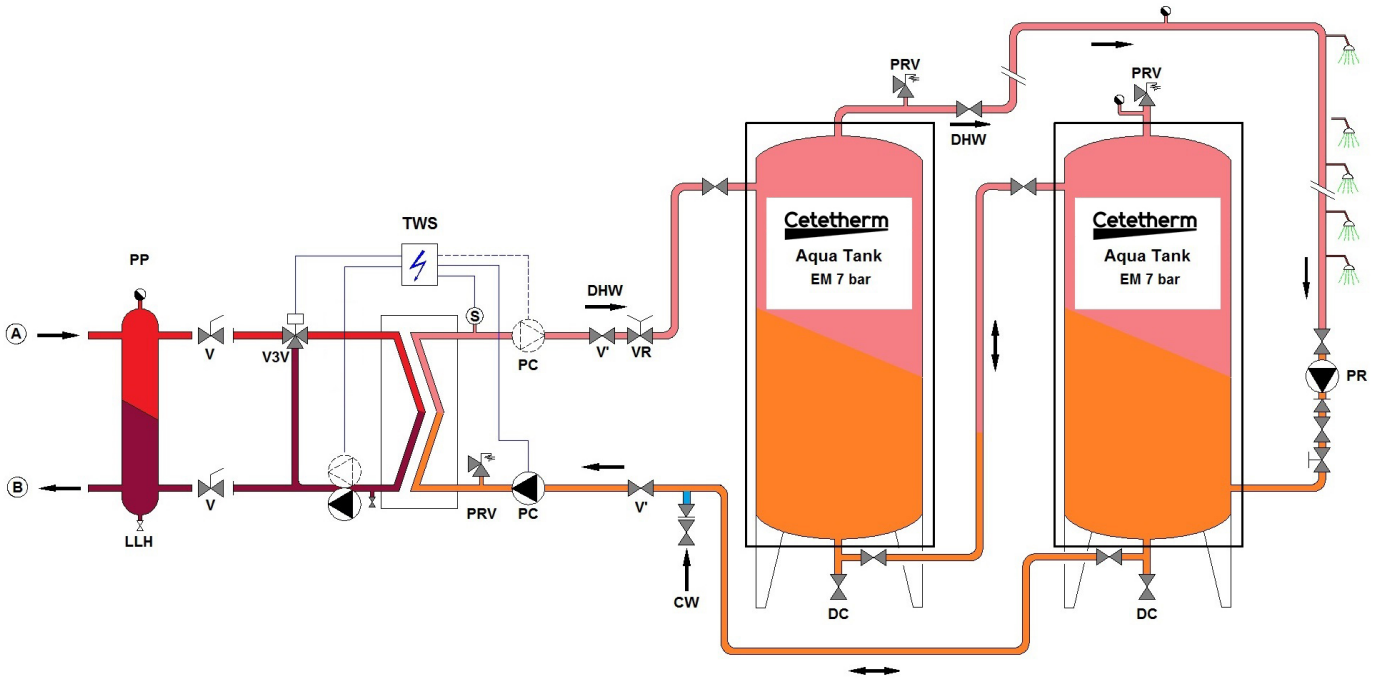
## TECHNICAL DATA

| Article number | Tank capacity (L) | Inspection opening (mm) | Insulation (100mm) | Dimensions* (mm) | | | | | | Connections 1 / 2 / 3 / 4 | ErP class * standing losses (W) | Dry weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | A | B | C | E | D1 | D2 (insulated) | | | |
| AQT030EB1100 | 300 | 110 | M1 | 1804 | 1395 | 1075 | 216 | 549 | 749 | 2" / 2" / 2" / 1" | B / 61.2 | 110 |
| AQT030ED1100 | | 260 | M1 | | | | | | | | B / 63.4 | 120 |
| AQT050EB1100 | 500 | 110 | M1 | 2143 | 1748 | 959 | 198 | 630 | 830 | 2" / 2" / 2" / 1" | C / 90.6 | 137 |
| AQT050ED1100 | | 260 | M1 | | | | | | | | C / 95.5 | 150 |
| AQT050EB0100 | | 110 | M0 | 2133 | | | | | | | C / 92.1 | 165 |
| AQT050ED0100 | | 260 | M0 | | | | | | | | C / 102.9 | 167 |
| AQT075EB1100 | 750 | 110 | M1 | 2047 | 1601 | 1151 | 197 | 790 | 990 | 2" / 2" / 2" / 1" | C / 126.7 | 200 |
| AQT075EC1100 | | 400 | M1 | | | | | | | | C / 130.0 | 243 |
| AQT075EB0100 | | 110 | M0 | 2037 | | | | | | | C / 121.8 | 260 |
| AQT075EC0100 | | 400 | M0 | | | | | | | | C / 130.9 | 293 |
| AQT100EB1100 | 1000 | 110 | M1 | 2400 | 1954 | 1324 | 197 | 790 | 990 | 2" / 2" / 2" / 1" | C / 129.8 | 263 |
| AQT100EC1100 | | 400 | M1 | | | | | | | | C / 139.0 | 263 |
| AQT100EB0100 | | 110 | M0 | 2390 | | | | | | | C / 129.1 | 293 |
| AQT100EC0100 | | 400 | M0 | | | | | | | | C / 140.7 | 320 |
| AQT150EB1100 | 1500 | 110 | M1 | 2226 | 1700 | 1250 | 221 | 1100 | 1300 | 2" / 2" / 2" / 1" | C / 152.6 | 344 |
| AQT150EC1100 | | 400 | M1 | | | | | | | | C / 165.0 | 390 |
| AQT150EB0100 | | 110 | M0 | 2216 | | | | | | | C / 153.3 | 384 |
| AQT150EC0100 | | 400 | M0 | | | | | | | | C / 166.4 | 480 |
| AQT200EC1100 | 2000 | 400 | M1 | 2414 | 1888 | 1258 | 221 | 1100 | 1300 | 2" / 2" / 2" / 1" | C / 174.3 | 420 |
| AQT200EC0100 | | 400 | M0 | 2404 | | | | | | | C / 184.1 | 520 |
| AQT250EC1100 | 2500 | 400 | M1 | 2245 | 1680 | 1180 | 215 | 1400 | 1600 | 2" / 2" / 2" / 2" | E / 298.2 | 556 |
| AQT250EC0100 | | 400 | M0 | | | | | | | | E / 304.1 | 660 |
| AQT300EC1100 | 3000 | 400 | M1 | 2374 | 1810 | 1245 | 215 | 1400 | 1600 | 2" / 2" / 2" / 2" | E / 323.2 | 560 |
| AQT300EC0100 | | 400 | M0 | | | | | | | | E / 329.7 | 665 |

* EN12897: 2006

## FLOWCHARTS




| | |
|---|---|
| A | Primary inlet |
| B | Primary outlet |
| CW | Cold water inlet |
| DC | Draining valve |
| DHW | Domestic Hot Water |
| HE | Heat exchanger (PHE) |
| PC | Charging pump (one or two) |
| PP | Primary pump (single or double) |
| PR | Recycling pump (on installation) |
| PRV | Pressure relief valve |
| S | DHW temperature sensor |
| TWS | Tap Water System |
| V | Manual gate valve |
| VR | Balancing valve |
| V3V | Mixing 3-port control valve with actuator |

| Operating limits | |
|---|---|
| Maximum operating pressure (gauge) | 7 bar |
| Maximum operating temperature | 95°C |

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