



AquaTank HC EM (10 bar)

Storage water heater, 200-1000 litre

AquaTank HC EM is our range of indirectly heated, unvented (closed) storage water heaters. These enamelled (glass lined) hot water storage heaters are for customers who prefer the hygienic coating of enamel which also allows operation with chlorinated water. This leaflet describes standard cylinders available in capacities between 200 and 1000 litres.

Pressure vessel code

AquaTank HC EM meets the requirements of the PED 97/23/EEC code. Other pressure vessel codes can be offered on request.

Heating coil reduces the power demand

AquaTank HC EM is equipped with an enamelled heating coil to charge the vessel. The AquaTank HC is then employed to store drinking water in facilities in which the water flow is not constant – where sudden high demands occur more or less regularly, such as in apartment houses, sports centres, schools, hotels and hospitals. With a built in heating coil, the power demand can be substantially reduced compared to a direct water heater, since the AquaTank HC acts as a buffer to meet the power peaks occurring at high water flow rates. Following such high water demand, heating takes place very quickly, because the water that has been heated by the coil is stored at the top of the tank. The recovery period is short. The unique shape of the heating coil reaches down to the bottom and heats all of the water inside the vessel.

High effectiveness for maximum hot water

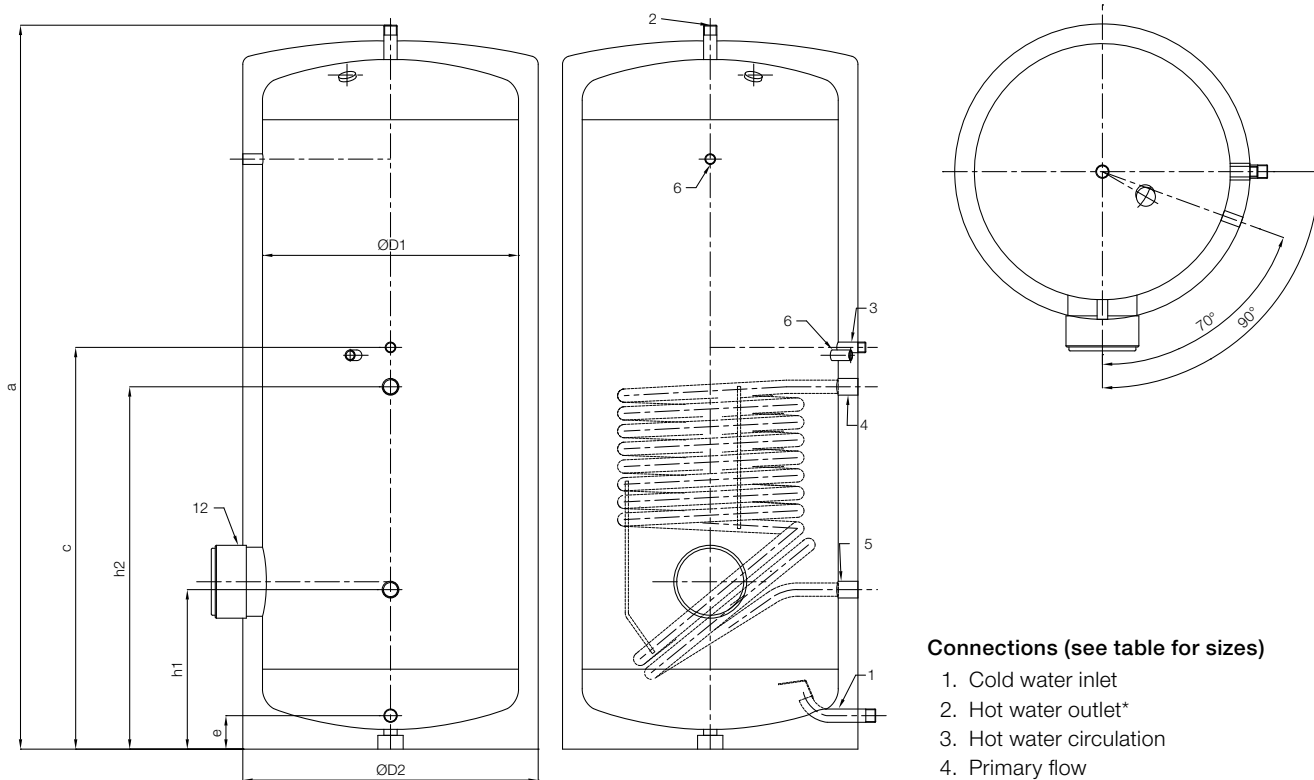
The effectiveness of this type of storage tank from which hot water is drawn depends on its ability to keep the hot water separated from the cold water admitted into the tank. The AquaTank HC is particularly good in this respect because of its internal tube arrangement. The incoming cold water is gently distributed across the bottom of the tank, which prevents it from mixing with the hot water. The hot water is then drawn from the very top in the centre of the cylinder. Moreover, since vertical hot water storage tanks are more effective than horizontal ones, the AquaTank HC is of upright design.



Effective and environment-friendly insulation

The insulation is made of environment-friendly CFC-free foam. The special design of the insulation avoids the so called “chimney-effect” between insulation and cylinder surface guaranteeing for the lowest heat losses.

The insulation conforms to the strict energy saving demands stipulated by the German EnEV law.



Connections (see table for sizes)

1. Cold water inlet
2. Hot water outlet*
3. Hot water circulation
4. Primary flow
5. Primary return
6. Instrument connection, ½" **
9. Drain (to be put into connecting pipework)
12. Inspection opening, 120/180 mm dia.***

Notes:

Connections 1, 2, 3 have male threads number 4, 5, 6 have female threads.

Operating data:

Vessel	Max. operating pressure (gauge)	10 bar
	Max. operating temperature	95°C
Heating coil	Max. operating pressure (gauge)	10 bar
	Max. operating temperature	110°C

Tank capacity Litres	Dimensions, mm							Connection sizes, inch					Heat losses kWh in 24h	Dry weight kg
	a	c	h1	h2	D1	D2	e	1	2	3	4	5		
200	1340	748	263	638	-	600	85	1	1	¾	1	1	1.8	121
300	1797	1028	263	728	-	600	85	1	1	¾	1	1	2.2	149
500	1838	1020	405	920	-	750	85	1	1	1	1	1	2.7	205
800	1982	860	380	1025	790	990	120	1½	1½	1¼	1¼	1¼	4.5	272
1000	2328	1025	380	1190	790	990	120	1½	1½	1¼	1¼	1¼	5.5	299

Dimensions are target values. Binding figures are shown on the drawings.

* for capacities 800 & 1000 L the hot water outlet is in the cylindrical part of the vessel, see details in the design drawings

** ½" only for capacities 200 to 500 litres, capacities 800 & 1000 L are equipped with a fastening bar for surface sensors

*** 180/240 mm for capacities 800 & 1000 L

Insulation material:

Capacity 200 to 500 L >> PUR foam injected between vessel and outer metal cladding (powder-coated)

Capacity 800 & 1000 L >> Soft-foam covered with a PVC-jacket

ECF00150EN 0811

Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.