



CENTRA INTERNATIONAL

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EXPANSION VESSEL IN A HEAT PUMP SYSTEM

The task of the water is to transfer heat. The heating capacity of the water is at its best when there is no air or gas mixed in it. This is the case in new installations and when servicing and performing system maintenance.

To avoid galvanic corrosion in the Heat Pump system, carbon steel and copper-based materials must not be used, not even in fittings. For that reason, the expansion vessel should be made of stainless steel.

HOW DO HEAT PUMPS WORK?

By transferring heat rather than creating it, heat pumps deliver hot water **3-4 times more efficiently** than conventional water heaters.

- 1 Heat pump pulls warmth from the air.
- 2 Warm air is compressed, increasing its temperature.
- 3 Condenser coils transfer heat to the water.



10
YEARS
glass shield
GUARANTEE



Dimensioning the expansion vessel

The volume of the expansion tank must be big enough for all compensation needs of the heating or cooling system. In big systems with outdoor water-to-gas heat-exchangers the volume may be hundreds of litres. The needed volume must be calculated for each case separately. The calculation must include separately the volume for water as well as the filling pressure of the system. The filling level of the coolant must be marked to level indicator to make it easy for maintenance personnel.



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