



Hydraulic Tower with Heat Pump Manager

For air-to-water heat pumps installed outdoors

Hydraulics – often underestimated but so important

The required heating water flow must be guaranteed in all operating conditions for trouble-free operation of the heat pump. Coupled with a sufficiently large heating water volume, this ensures the minimum runtimes of the compressor and enables energy-efficient heat generation. With air-to-water heat pumps the installation of a buffer tank connected in series guarantees the energy required for defrosting. Lowering the flow temperature by 1 °C increases the efficiency of the heat generation by a whole 2.5 %. Therefore, the temperature level generated by the heat pump should, if possible, be fed directly into the heating system. A mixer is only required if radiators and underfloor heating systems are used in combination. Heating and domestic hot water requests must be processed separately due to the great differences in temperature.

The simple and quick way to the perfect hydraulics

The HPK 200S hydraulic tower is simply connected to the air-to-water heat pump installed outdoors via one electric and two hydraulic connecting lines. The integrated components for an unmixed heating circuit ensure the required heating water flow and trouble-free operation. With the required safety units and the expansion vessel integrated into the casing, the heating flow and return flow can be directly connected to the top of the hydraulic tower. If, in addition to heating operation, domestic hot water preparation is also to be carried out via the heat pump, the hot water circulating pump can be mounted in the designated location and a hydraulic connection to the hot water cylinder next to it can be established.

Dimplex

INNOVATIVE HEATING AND COOLING



HPK 200S hydraulic tower

- ✓ High degree of operational safety and fast installation
- ✓ Integrated buffer tank (200 l), expansion vessel (24 l) and switchable supplementary heating (2, 4, 6 kW)
- ✓ Integrated circulating pumps ensure the heating water flow and supply an unmixed heating circuit
- ✓ Heat pump manager with all components connected ready-for-use
- ✓ Can be expanded to include domestic hot water preparation and an additional mixed heating circuit

Energy saving hydraulics

The dual differential pressureless manifold enables the maximum variety of hydraulic options without compromising when it comes to efficiency. The hydraulic isolation is realised using two differential pressureless manifolds (bypass pipes) with a check valve each. The circulating pump in the generator circuit is only operated when the compressor is running to reduce the runtimes. The uniform flow through the buffer tank connected in series extends the runtimes of the compressor and ensures defrosting in all operating conditions.

HPK 200S hydraulic tower: Perfect hydraulics for high annual performance factors

HPK 200S hydraulic tower: Can be used for all air-to-water heat pumps with wall-mounted heat pump manager WPM 2006 plus

| Hydraulic tower | | HPK 200S |
|--|----|-----------|
| Part number | | 355980 |
| Connection voltage regulation | V | 230 |
| Connection voltage supplementary heating | V | 230 / 400 |
| Width | mm | 680 |
| Height | mm | 1660 |
| Depth | mm | 800 |
| Weight | kg | 187 |
| Connection heating / hot water | | 1 1/4" |
| Expansion vessel | L | 24 |

Due to the integrated heat pump manager, the hydraulic tower cannot be ordered separately. For each combinable heat pump there is a sales package consisting of the heat pump without a regulation system and the hydraulic tower.

Flexible expansion options

The hydraulic tower enables the quick and simple connection of an air-to-water heat pump installed outdoors to a heating system with an unmixed heating circuit. A 400 l hot water cylinder (special accessory WWSP 442E) in the same design is available for domestic hot water preparation. The hot water circulating pump and a mixer module (available as special accessory) can be installed and wired directly in the hydraulic tower. Hydraulic versions are available for combination with an existing boiler or the infeed of renewable energy (e.g. solar).