

Integrated DHW production system kit for heat pumps

DHW KIT



3-way external valve management



DHW/Cold/hot water production

PLUS

- ✓ Complete kit to simplify the system set-up
- ✓ Single interface for managing air conditioning and producing DHW
- ✓ Wide LCD display for a comfortable reading of all the operating parameters

A single command for the complete management of the hydro-thermal-sanitary system.

The need to use a single heat power unit for summer and winter air conditioning as well as the production of domestic hot water, keeping, at the same time, low the cost of the system, led us to develop DHW KIT. Developed to be linked to every Galletti's heat pump equipped with an adequate operating range (as the series MPI DC), it is composed of a remote control panel for the complete management of the system MYCHILLER DHW – and of a deviating three-way valve especially developed and measured for this use. MYCHILLER DHW uses the Modbus protocol on RS485 network to control the status of the connected unit and, according to the requests coming from the system, it modifies the operating mode and the production temperature of water.

A temperature sensor connected to the controller allows to measure the thermal level of water in the thermal storage tank and to activate the production process of DHW, according to this probe and in priority to the needs of the air conditioning.

- Switch to heat pump mode (if the unit is producing cold water for air-conditioning)
- Deviation of the three-way valve
- Setpoint modification to a settable level, compatible with the needs of domestic use
- Switch back to the previous operating mode once the request has been satisfied.

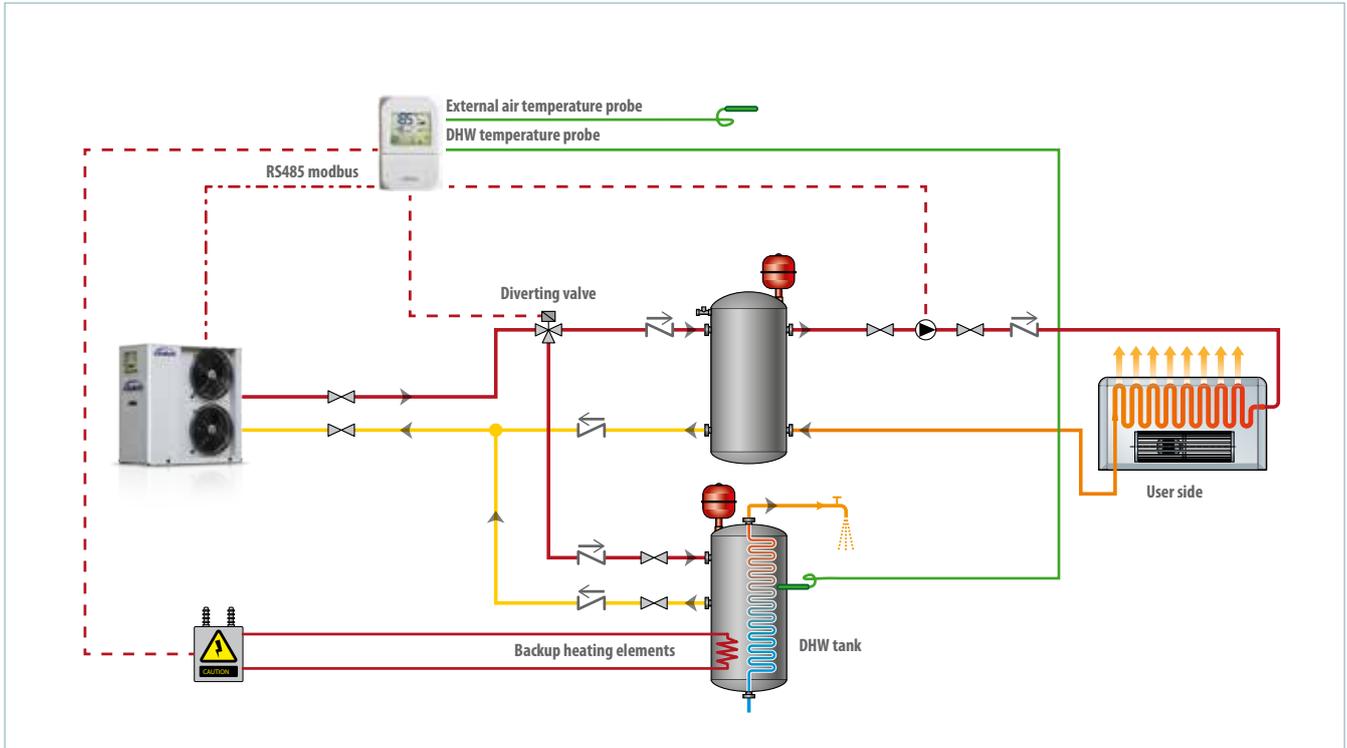
The production of domestic hot water through heat pumps requires the use of thermal storage tanks specifically developed for this operation, as the ones belonging to Galletti's TP and TS series, in order to guarantee a complete separation between technical water circulating in the system and the domestic water coming from the distribution network.

MYCHILLER DHW can also manage an integrative electrical resistance to install in the thermal storage tank, which is activated when external air temperature does not allow the heat pump to warm up the water up to a sufficient temperature.



APPLICATION EXAMPLES

System diagram with hydraulic circuit breaker and booster pump.



System diagram with inertial tank in line.

