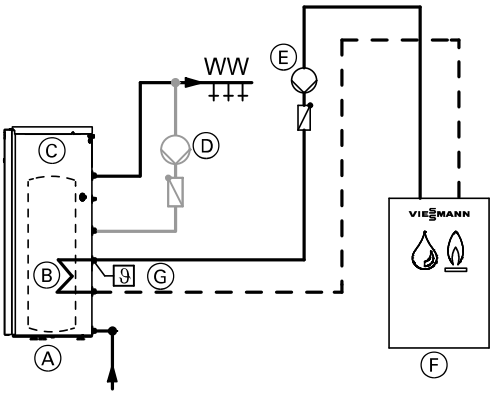
Vitocal 060-A, type T0S-ze



Ⓒ Heat pump module
Ⓓ DHW circulation pump (on site)
Ⓔ Circulation pump for cylinder heating
Ⓕ External heat generator
Ⓖ Cylinder temperature sensor

Ⓐ Vitocal 060-A, type T0S-ze
Ⓑ Integral DHW cylinder with smooth tube indirect coil

Electrical connection of the external heat generator

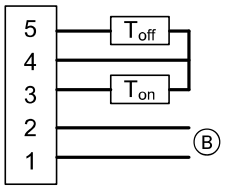
Vitocal 060-A, type T0S-ze
The external heat generator is activated either manually or via the switching contact of the heat pump control unit.

If an immersion heater EHT (accessories) is also installed, it must be controlled via the switching contact of the heat pump control unit. In this case, the external heat generator is controlled manually, e.g. via the contactor relay (accessories). This means the cylinder temperature can also be influenced by the external heat generator.

Operating mode	Electrical connection of the external heat generator	
	System with immersion heater EHT	System without immersion heater EHT
Recirculation air mode	Manual	Switching contact or Manual
Recirculation air mode with air discharge to the outside	Manual	Switching contact or Manual
Outdoor air mode	Manual	Switching contact

Vitocal 262-A, type T2H-ze
The cylinder temperature sensor for DHW reheating via the external heat generator is connected to the heat pump control unit. The external heat generator is activated via a switching contact of the heat pump control unit. The start and stop temperatures are set as fixed, using resistors T_{on} and T_{off} on plug 5.
If an immersion heater EHT (accessories) is also installed, it must be controlled via the switching contact of the heat pump control unit. The heat pump control unit assumes control for optimum hybrid operation.

Connecting the external heat generator to plug 5 of the heat pump control unit



Ⓑ Enclosed signal line for issuing a demand to the external heat generator
T_{off} Resistor for the stop temperature of the external heat generator DHW temperature (indicated on the control unit of the external heat generator): > 60 °C
T_{on} Resistor for the start temperature of the external heat generator DHW temperature (indicated on the control unit of the external heat generator): < 30 °C

Resistors T_{on} and T_{off} for the cylinder temperature sensor for DHW reheating
For use with a Viessmann external heat generator, the resistors on plug 5 are factory-fitted for an NTC 10 kΩ cylinder temperature sensor.

In conjunction with third party manufacturer external heat generators, the resistors on plug [5] may have to be adapted to the cylinder temperature sensor used according to the following table (resistors part of standard delivery).

Resistor according to cylinder temperature sensor used for the external heat generator

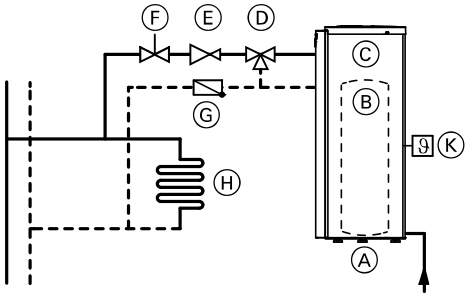
Temperature sensor	Required resistor on the switching contact			
	T_{off}		T_{on}	
	Connection at terminals 4, 5	Colour coding	Connection at terminals 3, 4	Colour coding
NTC 10 kΩ (delivered condition)	1.3 kΩ	Brown/Orange/Black/ Brown/Brown	10 kΩ	Brown/Black/Black/Red/ Brown
Pt500	649 Ω	Blue/Yellow/White/ Black/Brown	549 Ω	Green/Yellow/White/ Black/Brown
Pt1000	1.3 kΩ	Brown/Orange/Black/ Brown/Brown	1.1 kΩ	Brown/Brown/Black/ Brown/Brown

Detailed information regarding system examples: **www.viessmann-schemes.com**

5.10 DHW Booster HP: Hydraulic connection

Connecting the underfloor heating

The DHW Booster HP uses the heating return as the primary energy source for generating DHW.
In the summer months, the slight heat extraction from the underfloor heating circuits provides simple and cost-free cooling.
The higher the return temperature from the underfloor heating, the more efficiently the heat pump works.



Ⓐ DHW Booster HP, type 170 L
Ⓑ Integral DHW cylinder with smooth tube indirect coil
Ⓒ Heat pump module
Ⓓ Automatic thermostatic mixing valve
Ⓔ Pressure reducer
Ⓕ Flow regulating valve
Ⓖ Non-return valve
Ⓗ Underfloor heating
Ⓚ Cylinder temperature sensor

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