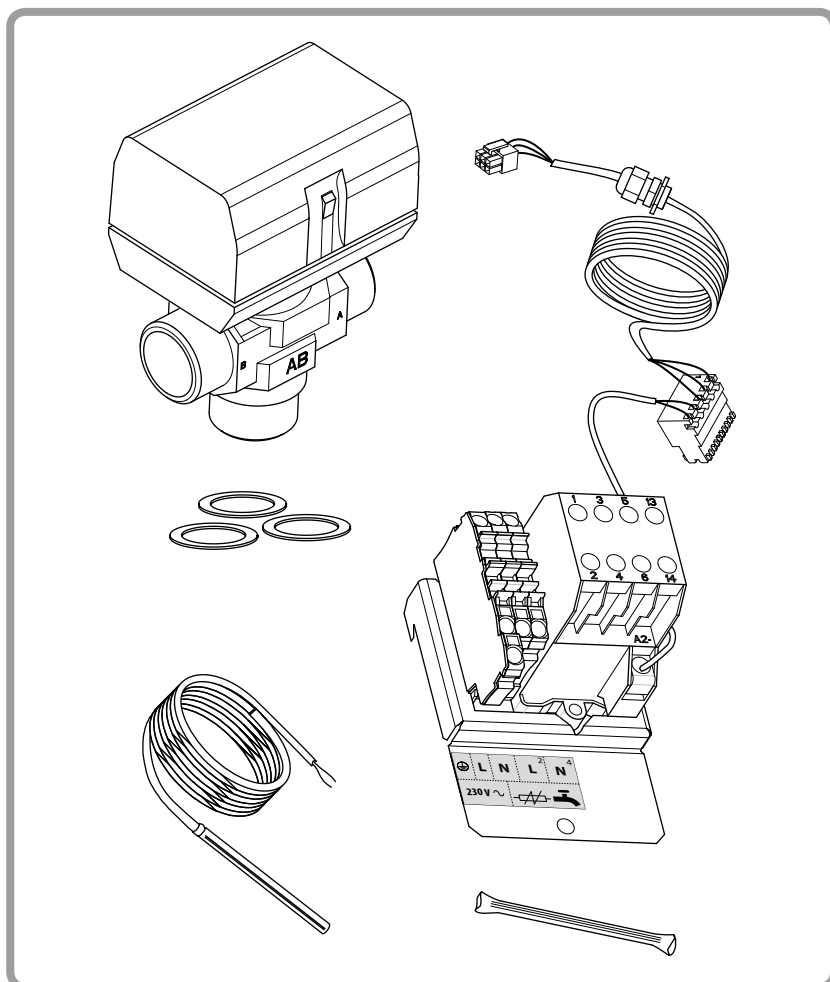
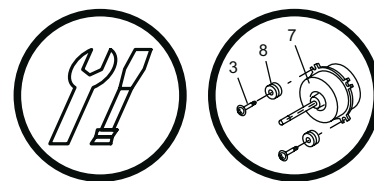


## DHW kit UTW-KDW\*D

To connect a DHW tank  
to a single service heat pump



- ☞ This manual mainly concerns the installation and connection of the distribution valve and the hot water sensor.
- ☞ Please refer to the heat pump and DHW tank technical manuals for how to install and configure these items.



### Installation instructions

**intended for the  
professional technician**

these must be kept safe  
for subsequent consultation

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Subject to modifications without notice.  
Non contractual document.

# 1 Assembly and connections

## 1.1 Scope of application

The plumbing kit enables you to connect a DHW tank to a single service heat pump.

Warning !

The heat pump produces the domestic hot water (DHW), which is then additively heated, if required, by electrical back-up heating inside the tank: **The hot water tank should be equipped with an electrical backup** in order to ensure a target temperature above 45°C and for legionella protection cycles.

## 1.2 The DHW sensor

The sensor must be installed in place of the thermostat regulation bulb in the electrical back-up heating system.

- Temporarily remove the thermostat.
- Extract and **isolate** the regulation bulb from the electrical back-up heating system.
- Place the hot water sensor in the housing for the cylinder sensors.
- Re-install the thermostat.

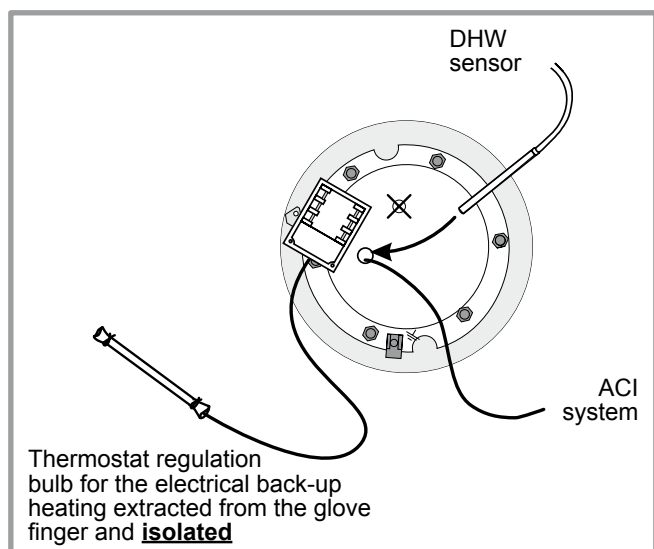


Figure 1 - Hot water sensor housing  
(Example: Vertical DHW tank)

## 1.3 The distribution valve

Carefully comply with the direction for fitting the distribution valve:

- Channel AB: Inlet from the hydraulic unit.
  - Open channel A: Outlet to DHW tank.
  - Open channel B: Outlet to the heating circuit.
- ☞ **Do not position the servomotor under the valve.**

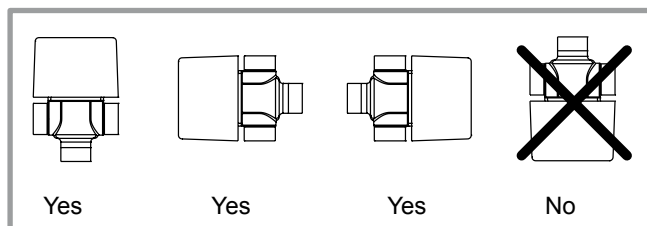


Figure 2 - Positioning of the distribution valve

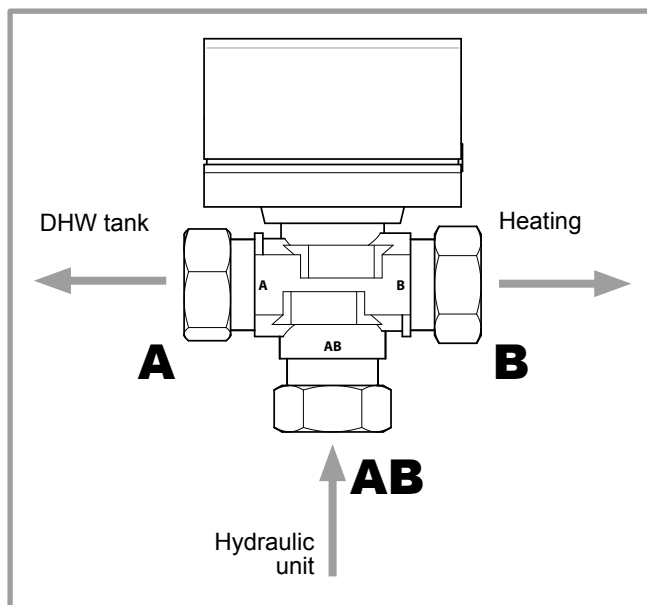


Figure 3 - Direction of assembly for the distribution valve

### 1.4 Electrical connections

The electrical connections must only be made when all the other fitting operations have been completed (fixing, assembly, etc.).

☞ **Do not place the sensor lines and the sector supply lines near in order to avoid interferences due to voltage points in the sector supply.**

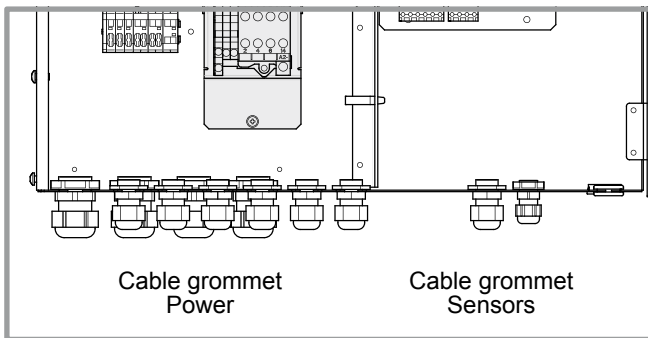


Figure 4 - Cable bushing

Ensure that all the electrical cables are housed in the spaces provided for this purpose (inside the lifting handles). To avoid undue interferences due to voltage peaks, use a shielded cable (standard telephone cable) to connect the sensors.

- **1** - Place the relay-terminal block assembly in the electrical case.
- **2** - Connect the hot water tank to the **3** and **4** terminals of the **X84** connector of the HP's regulation board.
- **3** - Connect the bundle with the 5-stud connector to **X15**.
- **4** - Connect the distribution valve.
- **5** - Connect the DHW tank's resistance to **Earth** terminal and to relay RP DHW on terminals **2** (L) and **4** (N).
- **( )** - Connect the power supply of the tank's integral corrosion protection system (active anti-corrosion protection), should it include one, to a continuous power supply which is protected to the level required by the manufacturer.
- **6** - Connect the hot water tank's power supply originating from the electrical case to the **L, N, Earth** terminals of the DHW kit terminal block (Protection by rated circuit breaker).

**Contract with the power provider**

The heat pump's operation can be controlled to suit special contracts (e.g. off-peak, day/night). In particular, domestic hot water (DHW) at Nominal temperature will be produced during the off-peak hours when electricity is cheaper.

- **7** - Connect the "energy provider" contact to the EX2 inlet of the **X11** connector.

230V on input EX2 = "Peak hours" information activated. Set the 83 or 1620 parameter according to the desired operation.

- **( )** - Stick the label of wiring inside the front plate of the hydraulic unit.

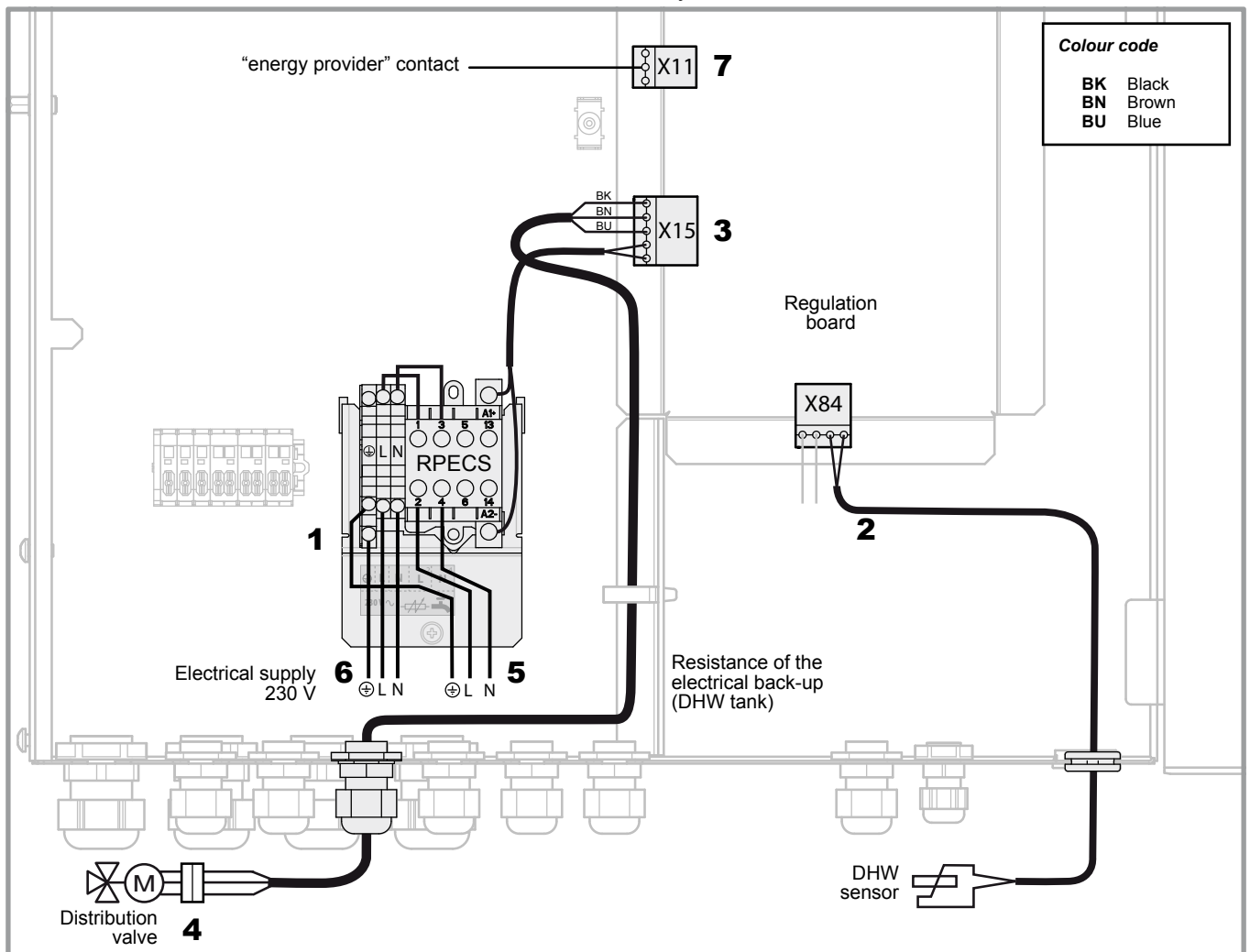


Figure 5 - DHW kit Electrical connections

## 1.5 DHW comfort temperature

To ensure a DHW setting over 45°C, the electrical back-up heating or the boiler must be left on.

## 1.6 Details

### 1.6.1 DHW tank

The Summer/Winter switch (if present) must be set to Summer to enable the electrical back-up heating system to operate.

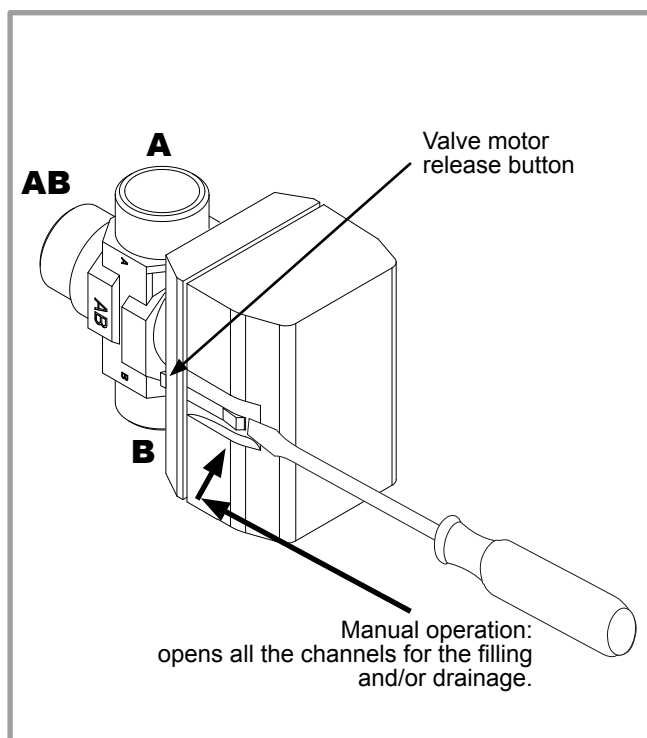


Figure 7 - Distribution valve

## 2 Spare parts

When ordering spare parts, specify the appliance type and serial number, the name of the part and the part number.

Nr	Code	Designation	Type	Qty
1	150322	Motor		.01
2	188253	Valve		.01
3	142735	Gasket	.26x34	.03
4	909136	Relay+Terminal block		.01
5	109444	Bundle		.01
6	110866	Connector		.01
7	198755	Sensor		.01
8	134102	Isolating sheath		0,20 m

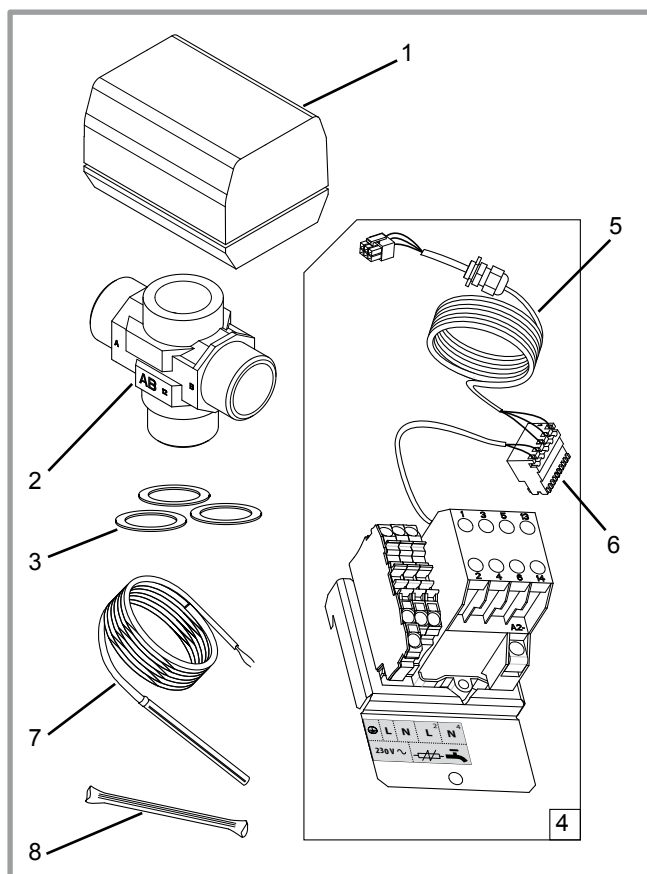


Figure 6 - DHW kit Spare parts

	Complies with:
	- Low voltage directive 2006/95/EC, under standard EN 60335-1.
	- Electromagnetic compatibility Directive 2004/108/EC.