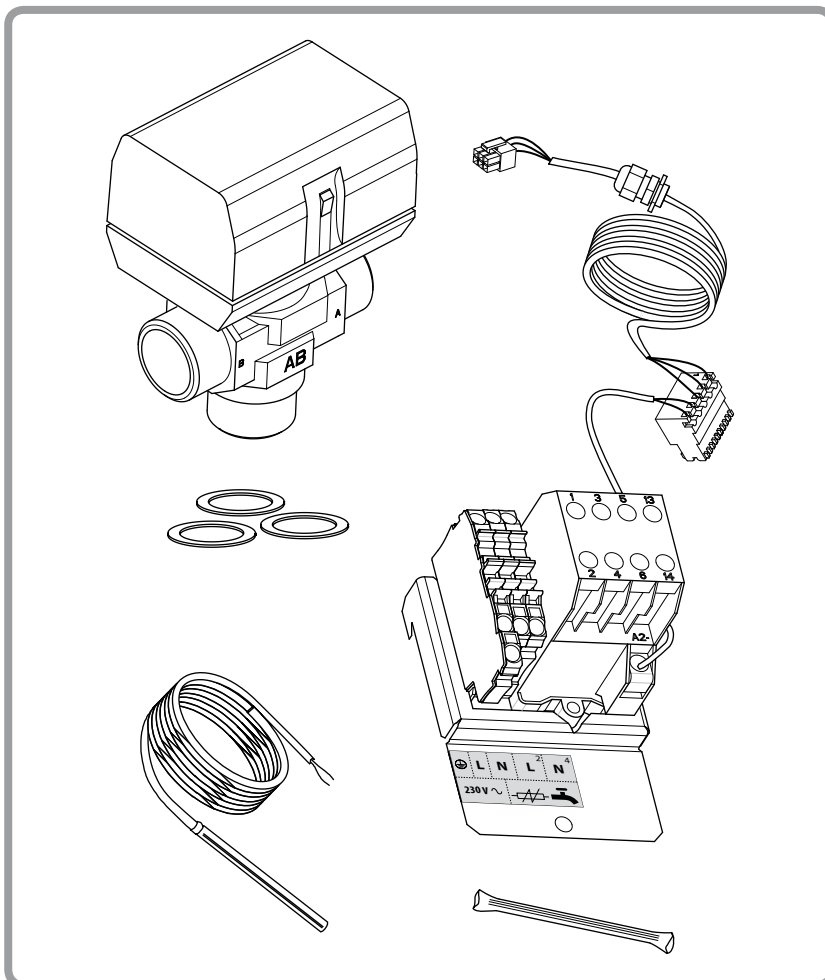
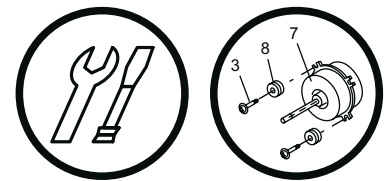


DHW kit UTW-KDW*D

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

Fujitsu General (Euro) GmbH
Wertstrasse 20
40549 Düsseldorf - Germany

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.

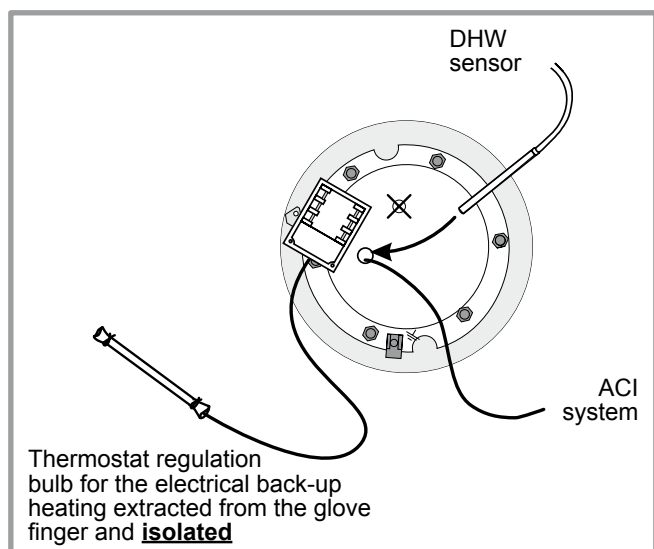


Figure 1 - Hot water sensor housing
(Example: Vertical DHW tank)

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.**

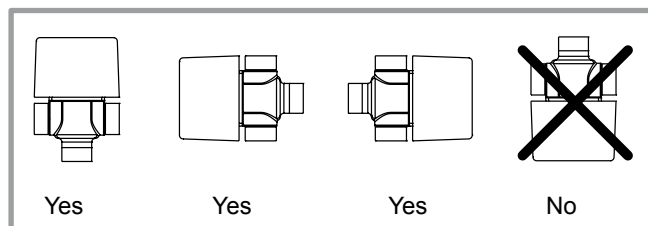


Figure 2 - Positioning of the distribution valve

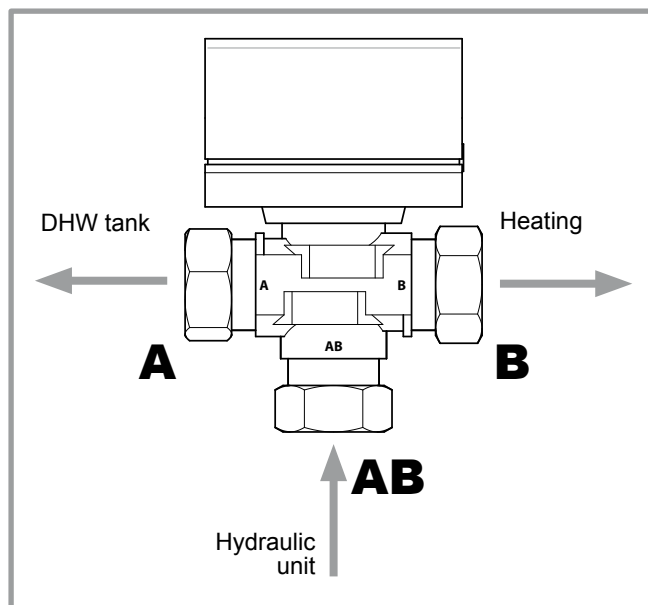


Figure 3 - Direction of assembly for the distribution valve

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.

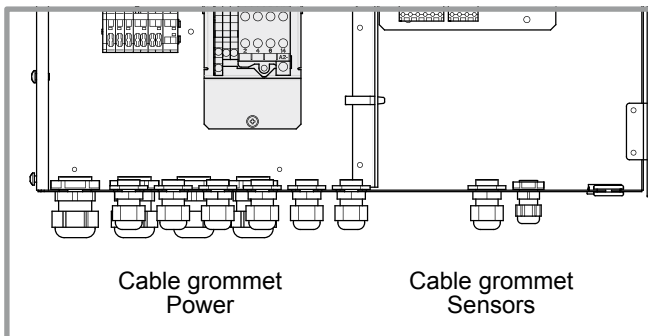


Figure 4 - Cable bushing

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.

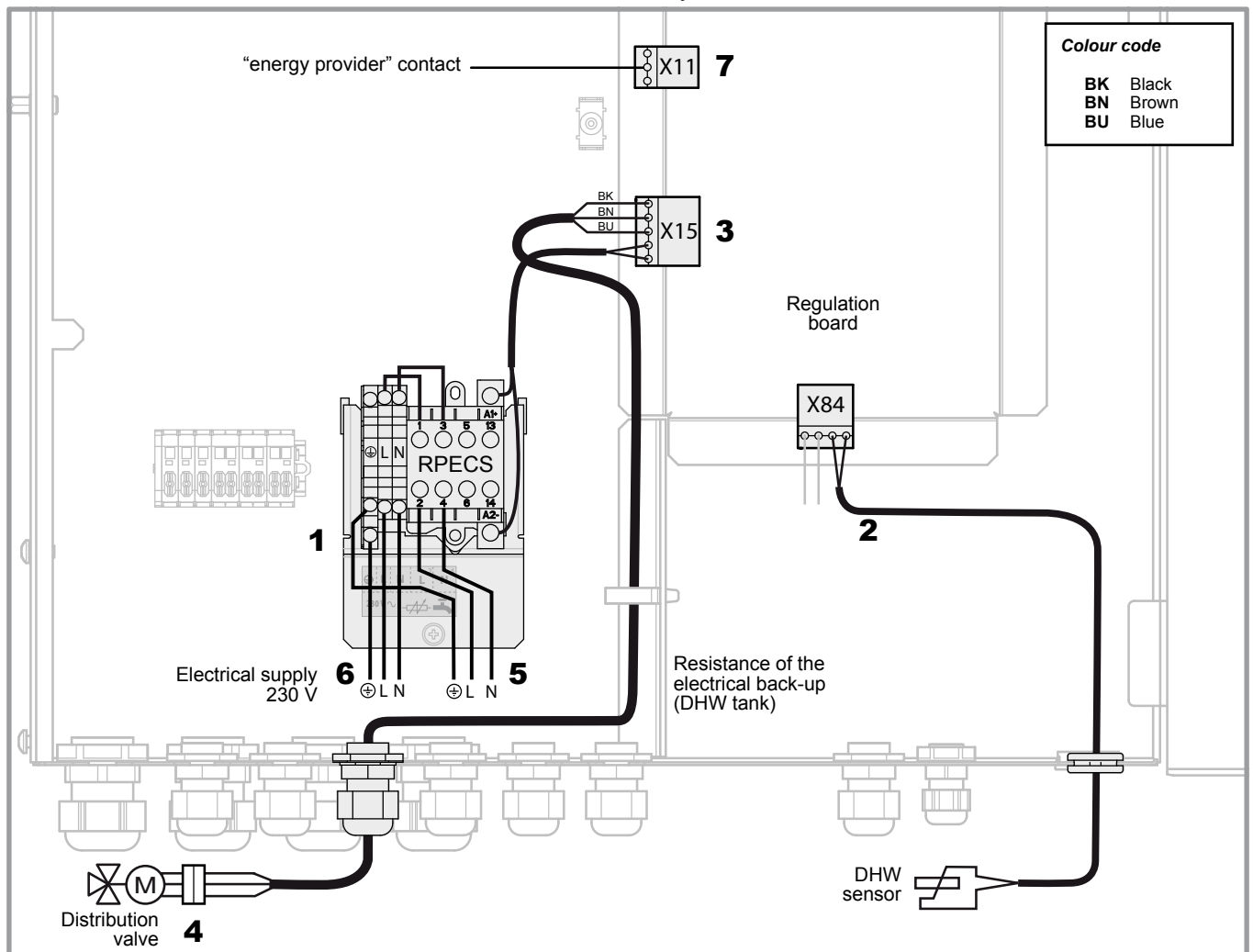


Figure 5 - DHW kit Electrical connections

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.

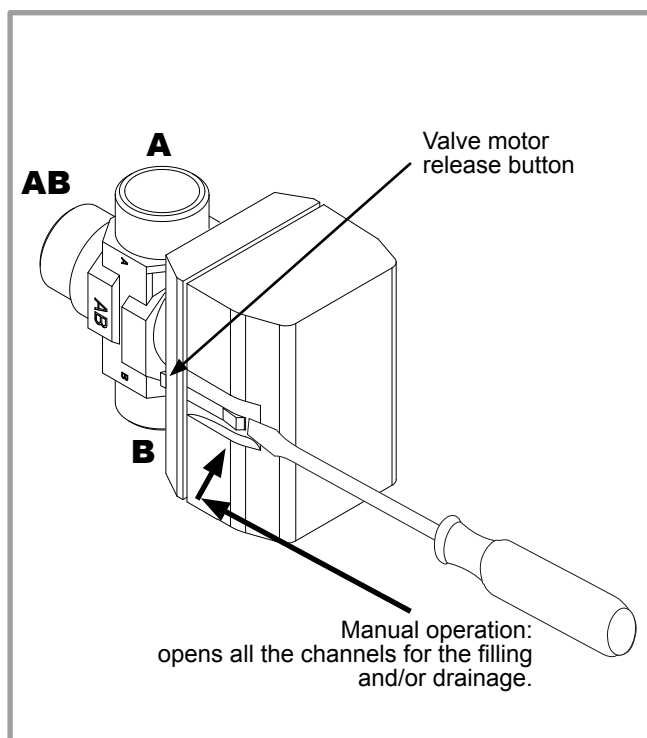


Figure 7 - Distribution valve

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

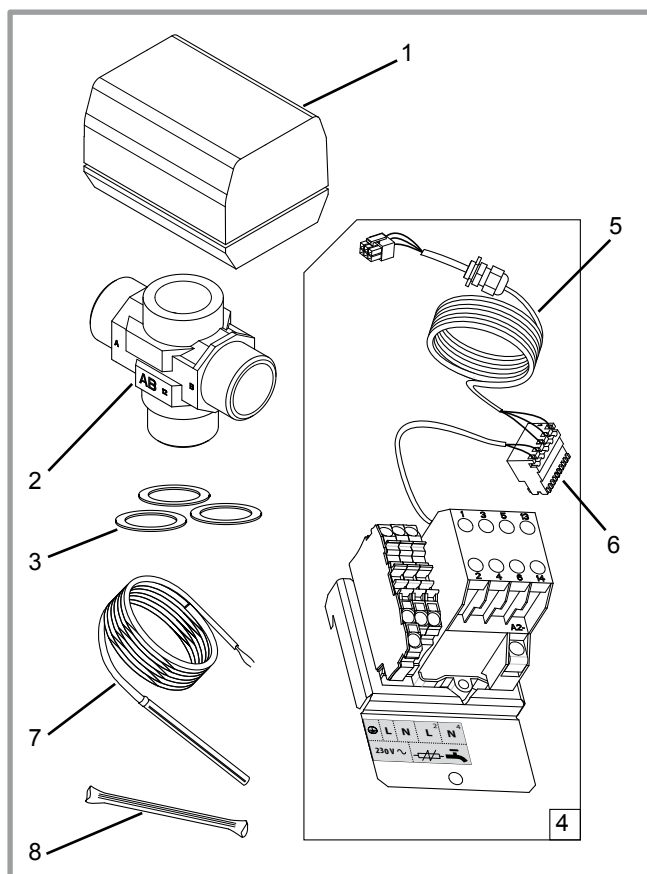


Figure 6 - DHW kit Spare parts

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