# EHB(H/X)-CB

## NOTES TO GO THROUGH BEFORE STARTING THE UNIT

X1M : Main terminal
X2M : Field wiring terminal for AC
X5M : Field wiring terminal for DC
X6M, X7M : Backup heater terminal
X4M : Booster heater terminal

— - — - : Earth wiring
15 : Wire number 15
- - - - - - - - - - : Field supply
→ **/12.2 : Connection ** continues on page 12 column 2
① : Several wiring possibilities

: Option

: Wiring depending on model

: Not mounted in switchbox

: PCB

**Backup heater configuration (Only for*9W):**

- □ 3V3 (1N~, 230 V, 3 kW)
- □ 6V3 (1N~, 230 V, 6 kW)
- □ 6WN (3N~, 400 V, 6 kW)
- □ 9WN (3N~, 400 V, 9 kW)
- □ 6T1 (3~, 230 V, 6 kW)

**User installed options:**

- □ Bottom plate heater
- □ Domestic hot water tank
- □ Domestic hot water tank with solar connection
- □ Remote user interface
- □ Ext. indoor thermistor
- □ Ext. outdoor thermistor
- □ Digital I/O PCB
- □ Demand PCB
- □ Solar pump and control station

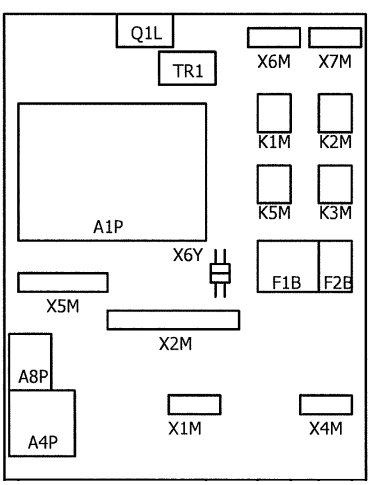
Main LWT:

- □ ON/OFF thermostat (Wired)
- □ ON/OFF thermostat (Wireless)
  - □ Ext. Thermistor
- □ Heat pump convector

Add LWT:

- □ ON/OFF thermostat (Wired)
- □ ON/OFF thermostat (Wireless)
  - □ Ext. Thermistor
- □ Heat pump convector

## POSITION IN SWITCHBOX




## LEGEND

* : Optional
(*) : Standard for *HV*, Optional for *HB*
# : Field supply

| | | |
|---|---|---|
| A1P | | : Main PCB |
| A2P | | : User interface PCB |
| A3P | * | : Solar pumpstation PCB |
| A3P | * | : ON/OFF thermostat (PC=Power circuit) |
| A3P | * | : Heat pump convector |
| A4P | * | : Digital I/O PCB |
| A4P | * | : Receiver PCB (wireless ON/OFF thermostat) |
| A8P | * | : Demand PCB |
| B1L | | : Flow sensor |
| BSK | * | : Solar pump station relay |
| DS1 (A8P) | * | : Dipswitch |
| E1H | | : Backup heater element (1 kW) |
| E2H | | : Backup heater element (2 kW) |
| E3H | | : Backup heater element (3 kW) |
| E4H | * | : Booster heater (3 kW) |
| F1B | | : Overcurrent fuse backup heater |
| F2B | * | : Overcurrent fuse booster heater |
| F1T | | : Thermal fuse backup heater |
| F1U,F2U | * | : Fuse 5A 250V for digital I/O PCB |
| FU1 | | : Fuse T 6.3A 250 V for PCB |
| PHC1 | * | : Optocoupler input circuit |
| K1M,K2M | | : Contactor backup heater |
| K3M | * | : Contactor booster heater |
| K5M | | : Safety contactor BUH (only *9W) |
| K*R | | : Relay on PCB |
| M1P | | : Main supply pump |
| M2P | # | : Domestic hot water pump |
| M2S | # | : 2 way valve for cooling mode |
| M3S | (*) | : 3 way valve for floorheating/domestic hot water |
| Q1DI, Q2DI | # | : Earth leakage circuit breaker |
| Q1L | | : Thermal protector backup heater |
| Q2L | * | : Thermal protector booster heater |
| R1T | | : Outlet water heat exchanger thermistor |
| R1T (A2P) | | : Ambient sensor user interface |
| R1T (A3P) | * | : Ambient sensor ON/OFF thermostat |
| R2T | | : Outlet backup heater thermistor |
| R2T | * | : External sensor (floor or ambient) |
| R3T | | : Refrigerant liquid side thermistor |
| R4T | | : Inlet water thermistor |
| R5T | (*) | : Domestic hot water thermistor |
| R6T | * | : External indoor or outdoor ambient thermistor |
| R1H (A3P) | * | : Humidity sensor |
| S1S | # | : Preferential kWh rate power supply contact |
| S2S | # | : Electrical meter pulse input 1 |
| S3S | # | : Electrical meter pulse input 2 |
| S6S-S9S | # | : Digital power limitation inputs |
| SS1 (A4P) | * | : Selector switch |
| TR1 | | : Power supply transformer |
| X*M | | : Terminal strip |
| X*Y | | : Connector |