# ELBH-E6V / ELBH-E9W / ELBX-E6V / ELBX-E9W

## NOTES to go through before starting the unit

X1M : Main terminal
X2M : Field wiring terminal for AC
X5M : Field wiring terminal for DC
X6M : BUH Power supply terminal
X7M, X8M : BSH Power supply terminal
X10M : Smartgrid terminal
: Earth wiring
: Field supply
(1) : Several wiring possibilities

: Option
: Wiring depending on model
: Not mounted in switch box
: PCB

## NOTES

1. Connection point of the power supply for the BUH/BSH should be foreseen outside the unit.

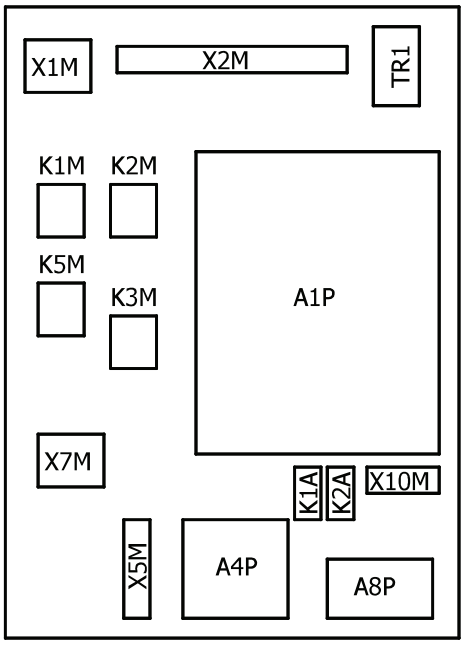
Backup heater power supply
☐ 6T1 (3~, 230V, 6kW)
☐ 6V3 (1N~, 230V, 6kW)
☐ 6WN/9WN (3N~, 400V, 6/9kW)

User installed options:
☐ LAN adapter
☐ Domextic hot water tank
☐ Remote user interface
☐ Ext. indoor thermistor
☐ Ext. outdoor thermistor
☐ Digital I/O PCB
☐ Demand PCB
☐ Safety thermostat
☐ Smartgrid kit
☐ WLAN adapter module
☐ WLAN cartridge
☐ Bizone mixing kit

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 SWITCH BOX




## LEGEND

| Part n° | | Description |
|---|---|---|
| A1P | | main PCB |
| A2P | * | ON/OFF thermostat (PC=power circuit) |
| A3P | * | heat pump convector |
| A4P | * | digital I/O PCB |
| A8P | * | demand PCB |
| A9P | | status indicator |
| A11P | | MMI main PCB |
| A13P | * | LAN adapter |
| A14P | * | user interface PCB |
| A15P | * | receiver PCB (wireless ON/OFF thermostat) |
| A20P | * | WLAN module |
| A30P | * | Bizone mixing kit PCB |
| B2L | | flow sensor |
| B1PW | | water pressure sensor |
| BSK (A3P) | | solar pump station relay |
| CN* (A4P) | * | connector |
| DS1 (A8P) | * | dipswitch |
| E1H | | backup heater element (1 kW) |
| E2H | | backup heater element (2 kW) |
| E4H | * | booster heater (3 kW) |
| E*P (A9P) | | indication LED |
| F1B | # | overcurrent fuse backup heater |
| F2B | # | overcurrent fuse booster heater |
| F1T | | thermal fuse backup heater |
| F1U, F2U (A4P) | * | fuse 5 A 250 V for digital I/O PCB |
| FU1 (A1P) | | fuse T 6.3A 250 V for PCB |
| K1A, K2A | * | high voltage smartgrid relay |
| K1M, K2M | | contactor backup heater |
| K3M | * | contactor booster heater |
| K5M | | safety contactor BUH |
| K*R (A1P-A4P) | | relay on PCB |
| M1P | | main supply pump |
| M2P | # | domestic hot water pump |
| M2S | # | 2 way valve for cooling mode |
| M3S | * | 3 way valve for space heating /domestic hot water |
| P1M | | MMI display |

| Part n° | | Description |
|---|---|---|
| PC (A15P) | * | power circuit |
| PHC1 (A4P) | * | optocoupler input circuit |
| Q1L | | thermal protector backup heater |
| Q2L | * | thermal protector booster heater |
| Q4L | # | safety thermostat |
| Q*DI | # | earth leakage circuit breaker |
| R1H (A2P) | * | humidity sensor |
| R1T (A1P) | | outlet water heat exchanger thermistor |
| R1T (A2P) | * | ambient sensor ON/OFF thermostat |
| R1T (A14P) | * | ambient sensor user interface |
| R2T (A1P) | | outlet backup heater thermistor |
| R2T (A2P) | * | 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 |
| S1S | # | preferential kWh rate PS contact |
| S2S | # | electrical meter pulse input 1 |
| S3S | # | electrical meter pulse input 2 |
| S4S | # | smart grid feed-in |
| S6S-S9S | * | digital power limitation inputs |
| S10S-S11S | # | low voltage smartgrid contact |
| SS1 (A4P) | * | selector switch |
| SW1~2 (A11P) | | turn buttons |
| SW3~5 (A11P) | | push button |
| TR1 | | power supply transformer |
| X6M | # | BUH power supply terminal strip |
| X6M | * | BSH power supply connector |
| X7M, X8M | * | BSH power supply terminal strip |
| X10M | * | smartgrid power supply terminal strip |
| X*, X*A, X*H*, X*Y | | connector |
| X*M | | terminal strip |

* : optional #: field supply