

## 9 Wiring diagrams

9 - 1 Notes & Legend

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### ETVH12E6V / ETVH12UE6V / ETVH12E9W / ETVX12E6V / ETVX12E9W

#### NOTES to go through before starting the unit

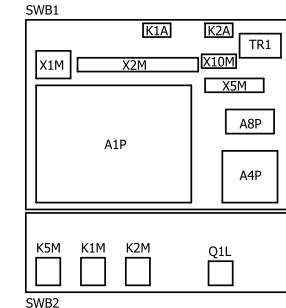
|             |                                |  |                             |
|-------------|--------------------------------|--|-----------------------------|
| X1M         | : Main terminal                |  | : Option                    |
| X2M         | : Field wiring terminal for AC |  | : Wiring depending on model |
| X5M         | : Field wiring terminal for DC |  | : Not mounted in switch box |
| X6M         | : BUH Power supply terminal    |  | : PCB                       |
| X10M        | : Smartgrid terminal           |  |                             |
| — — — — —   | : Earth wiring                 |  |                             |
| — — **/12.2 | : Field supply                 |  |                             |
| (1)         | : Several wiring possibilities |  |                             |

#### NOTES

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

|                            |   |
|----------------------------|---|
| Backup heater power supply | <input type="checkbox"/> GT1 (3~, 230V, 6kW)          |
|                            | <input type="checkbox"/> 6V3 (1N~, 230V, 6kW)         |
|                            | <input type="checkbox"/> 6WN/9WN (3N~, 400V, 6/9kW)   |
| User installed options:    | <input type="checkbox"/> Remote user interface        |
|                            | <input type="checkbox"/> Ext. indoor thermistor       |
|                            | <input type="checkbox"/> Ext. outdoor thermistor      |
|                            | <input type="checkbox"/> Digital I/O PCB              |
|                            | <input type="checkbox"/> Demand PCB                   |
|                            | <input type="checkbox"/> Safety thermostat            |
|                            | <input type="checkbox"/> Smartgrid kit                |
|                            | <input type="checkbox"/> WLAN adapter module          |
|                            | <input type="checkbox"/> WLAN cartridge               |
|                            | <input type="checkbox"/> BZONE mixing kit             |
| Main LWT:                  | <input type="checkbox"/> ON/OFF thermostat (wired)    |
|                            | <input type="checkbox"/> ON/OFF thermostat (wireless) |
|                            | <input type="checkbox"/> Ext. thermistor              |
|                            | <input type="checkbox"/> Heat pump convector          |
| Add LWT:                   | <input type="checkbox"/> ON/OFF thermostat (wired)    |
|                            | <input type="checkbox"/> ON/OFF thermostat (wireless) |
|                            | <input type="checkbox"/> Ext. thermistor              |
|                            | <input type="checkbox"/> Heat pump convector          |

#### POSITION IN SWITCH BOX



#### LEGEND

| Part n°        | Description                                     | Part n°      | Description                                     |
|----------------|---|--------------|---|
| A1P            | main PCB  | P1M          | MMI display                                     |
| A2P            | * ON/OFF thermostat (PC=power circuit)          | PC (A1SP)    | * power circuit                                 |
| A3P            | * heat pump convector                           | PHC1 (A4P)   | * optocoupler input circuit                     |
| A4P            | * digital I/O PCB                               | Q1L          | thermal protector backup heater                 |
| A8P            | * demand PCB                                    | Q4L          | # safety thermostat                             |
| A9P            | status indicator                                | Q'DI         | # earth leakage circuit breaker                 |
| A11P           | MMI main PCB                                    | R1H (A2P)    | * humidity sensor                               |
| A14P           | * user interface PCB                            | R1T (A1P)    | outlet water heat exchanger thermistor          |
| A15P           | * receiver PCB (wireless ON/OFF thermostat)     | R1T (A2P)    | * ambient sensor ON/OFF thermostat              |
| A20P           | * WLAN adapter module                           | R1T (A14P)   | * ambient sensor user interface                 |
| A30P           | * BZONE mixing kit PCB                          | R2T (A1P)    | outlet backup heater thermistor                 |
| B2L            | flow sensor                                     | R2T (A2P)    | * external sensor (floor or ambient)            |
| B1PW           | water pressure sensor                           | RST, R8T     | domestic hot water thermistor                   |
| CN* (A4P)      | * connector                                     | R6T          | * external indoor or outdoor ambient thermistor |
| D51 (A8P)      | * dipswitch                                     | S1L          | flow switch                                     |
| E1H            | backup heater element (1 kW)                    | S1S          | # preferential kWh rate PS contact              |
| E2H            | backup heater element (2 kW)                    | S2S          | # electrical meter pulse input 1                |
| E*P (A9P)      | indication LED                                  | S3S          | # electrical meter pulse input 2                |
| F1B            | # overcurrent fuse backup heater                | S4S          | # smart grid feed-in                            |
| F1T            | thermal fuse backup heater                      | S6S-S9S      | * digital power limitation inputs               |
| F1U, F2U (A4P) | * fuse 5 A 250 V for digital I/O PCB            | S10S-S11S    | # low voltage smartgrid contact                 |
| F1U (A1P)      | fuse 5 A 250 V for PCB                          | S51 (A4P)    | * selector switch                               |
| K1A, K2A       | * high voltage smartgrid relay                  | SW1~2 (A12P) | turn buttons                                    |
| K1M, K2M       | * contactor backup heater                       | SW3~5 (A12P) | push button                                     |
| KSM            | * safety contactor BUH                          | TR1          | power supply transformer                        |
| K*R (A*P)      | relay on PCB                                    | X6M          | # BUH power supply terminal strip               |
| M1P            | main supply pump                                | X10M         | * smartgrid power supply terminal strip         |
| M2P            | # domestic hot water pump                       | X*, X*A, J*  | connector                                       |
| M2S            | # 2 way valve for cooling mode                  | X*H*, X*Y    |   |
| M3S            | 3 way valve for spaceheating/domestic hot water | X*M          | terminal strip                                  |

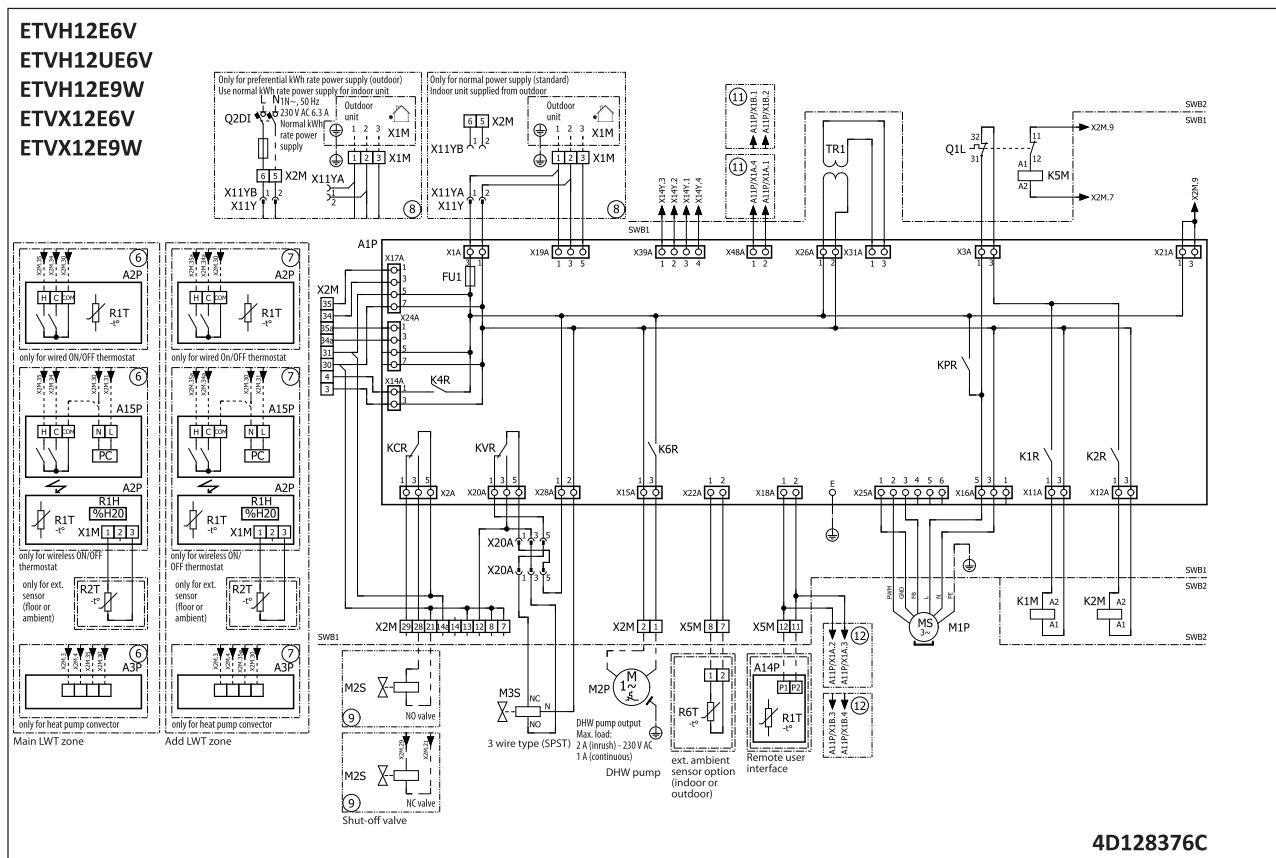
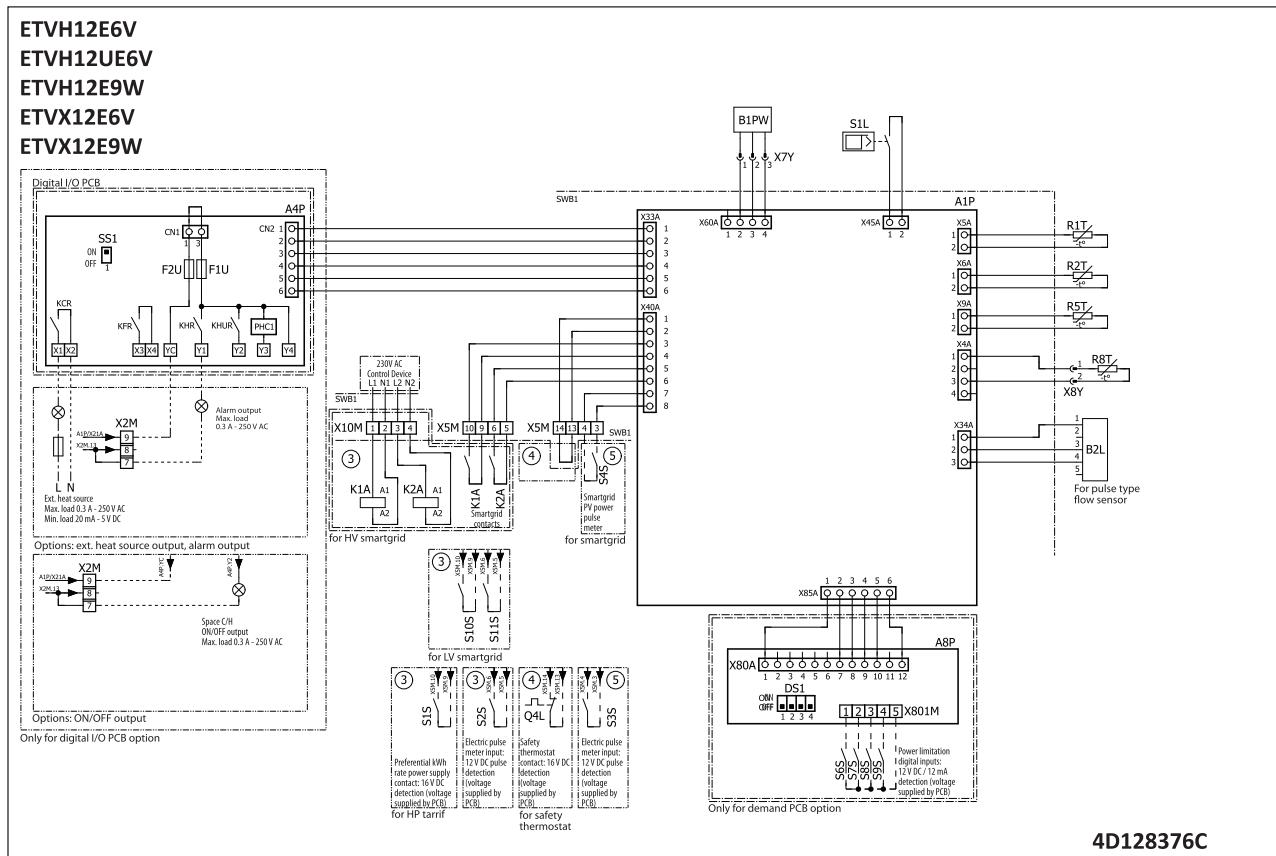
\*: optional

#: field supply

4D128376C

## 9 Wiring diagrams

### 9 - 2 Control Circuit



## 9 Wiring diagrams

### Control Circuit

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