Daikin Installers YouTube

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altherma

# Typical mechanical and electrical schematics 2023

Rev. 8

# Altherma 3 Systems

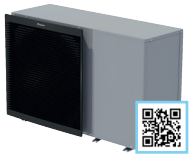
## Outdoor Units

### ERGA - Low Temperature Single Fan
- Up to 65°C flow temperature
- Classes ranges from 4-8
- R32 refrigerant
- Refrigerant connections between outdoor and indoor

### ERLA - Low Temperature Single Fan
- Up to 60°C flow temperature
- Classes ranges from 11-16
- R32 refrigerant
- Refrigerant connections between outdoor and indoor

### EPGA - Low Temperature Twin Fan
- Up to 60°C flow temperature
- Classes ranges from 11-16
- R32 refrigerant
- Water connections between outdoor and indoor

### EPRA - High Temperature Single Fan
- Up to 70°C flow temperature
- Classes ranges from 8-18
- R32 refrigerant
- Water connections between outdoor and indoor



### EDLA - Low Temperature Single Fan
- Monobloc
- Up to 60°C flow temperature
- Classes ranges from 4-16
- R32 refrigerant

| Type | Code | Class |
|---|---|---|
| Low Temp Single Fan | ERGA04EV3 | 4 |
| | ERGA06EV3H | 6 |
| | ERGA08EV3H7 | 8 |
| | ERLA11DV3 | 11 |
| | ERLA14DV3 | 14 |
| | ERLA16DV37 | 16 |
| Low Temp Twin Fan | EPGA11DV37 | 11 |
| | EPGA14DV37 | 14 |
| | EPGA16DV37 | 16 |
| High Temp Single Fan | EPRA08EV3 | 8 |
| | EPRA10EV3 | 10 |
| | EPRA12EV3 | 12 |
| | EPRA14DV37 | 14 |
| | EPRA16DV37 | 16 |
| | EPRA18DV37 | 18 |
| Low Temp Monobloc | EDLA04E3V3 | 4 |
| | EDLA06E3V3 | 6 |
| | EDLA08E3V3 | 8 |
| | EDLA09D3V3 | 9 |
| | EDLA11D3V3 | 11 |
| | EDLA14D3V3 | 14 |
| | EDLA16DV37 | 16 |

## Indoor Units

### EHVH/EBVH/EAVH/ETVH
- Integrated floor standing models with 180L or 230L stainless steel tanks
- 600 x 625 footprint
- MMi interface
- All piping connections are held on top of the unit
- Can be programmed from a USB

### EHBH/EBBH/EABH/ETBH
- Space saving wall hung models that can be combined with a number of tank styles including;
  - EKHWSU-D3V3 -Stainless steel domestic hot water tanks ranging from 150L to 300L
  - EKHWP-B/PB- Polypropylene domestic hot water tanks with solar support ranging from 300L to 500L
- MMi interface
- Can be programmed from a USB

### EHSH-D/ EBSH-D/ETSH-D
- Integrated floor standing solar unit with a 300L or 500L polypropylene domestic hot water tank
- Lightweight
- MMi interface
- Can be programmed from a USB

### EKHWS(U)-D
- available in 150, 180, 200, 250 and 300 litres in stainless steel

| Outdoor | Indoors | Type | Tank | Dimensions |
|---|---|---|---|---|
| ERGA04-08 | EHVH | Floor Standing | Integrated 180L / 230L | 1,650/1,850 x 595 x 625 |
| | EHBH | Wall Mounted | Separate 150 - 300L | 890 x 440 x 390 |
| | EHSH (Solar) | Floor Standing | Integrated 300L / 500L | 1890 x 595/790 x 615/790 |
| ERLA11-16 | EBVH | Floor Standing | Integrated 180L / 230L | 1,650/1,850 x 595 x 625 |
| | EBBH | Wall Mounted | Separate 150 - 300L | 890 x 440 x 390 |
| | EBSH (Solar) | Floor Standing | Integrated 300L / 500L | 1890 x 595/790 x 615/790 |
| EPGA11-16 | EAVH | Floor Standing | Integrated 180L /230L | 1,650/1,850 x 595 x 625 |
| | EABH | Wall Mounted | Separate 150 - 300L | 890 x 440 x 390 |
| EPRA10-18 | ETVH | Floor Standing | Integrated 180L /230L | 1,650/1,850 x 595 x 625 |
| | ETBH | Wall Mounted | Separate 150 - 300L | 890 x 440 x 390 |
| | ETSH (Solar) | Floor Standing | Integrated 300L / 500L | 1890 x 595/790 x 615/790 |
| EDLA04-16 | EKHWS(U)-D | Free Standing | Separate 150 - 300L | Height: 1,000 - 1,745 |

# Selecting the correct heatpump

To select the correct heat pump system for your home a number of factors need to be considered.

**1. Is it a New or Existing Building?**
Our low temperature systems are designed specifically for new builds. For home energy upgrades that will not be replacing the existing radiators, our high temperature system is a turnkey solution to replace the existing heat source like oil or gas.

**2. What is the leaving water temperature?**
Depending on your selected heat emitter, applicable floor areas will vary. Lower temperature emitters, like underfloor heating and aluminium radiators, allow heat pumps to operate more effectively therefore allowing larger floor areas to be covered by a system. Older heat emitters, like existing radiators, require the heat pump system to generate higher temperatures which can reduce the overall floor area that can be covered.

**3. What is the Floor Area of the building?**
Floor areas and U values are used to calculate the capacity of the system. The table across provides guideline capacities for floor areas of new and retrofit projects based on leaving water temperatures. These guidelines are based on standard Irish conditions. Each project is different, and the system capacity should be evaluated based on the project conditions.

**4. Will the system be part of a grant application?**
If you are looking to apply for an SEAI grant your home needs to meet a number of different requirements, that must be addressed prior to selecting a heat pump. Your BER Assessor will be able to aid with this. Only after planning all other upgrades should the heating system be selected. To read our full brochure on SEAI Grants please scan the QR code or visit www.daikin.ie

Daikin Home Energy Upgrades

| Type | System | New Build | Renovation HLI ≤ 2 | | |
|---|---|---|---|---|---|
| | | LWT 35°C - 45°C | LWT 55°C | LWT 60°C | LWT 65°C |
| Low Temp Refrigerant Splits | ERGA04EV3 | ≤155m² | N/A | N/A | N/A |
| | ERGA06EV3H | ≤ 180m² | ≤ 105m² | N/A | N/A |
| | ERGA08EV3H7 | ≤ 210m² | ≤ 135m² | N/A | N/A |
| | ERLA11DV3 | ≤ 270m² | ≤ 180m² | ≤ 160m² | N/A |
| | ERLA14DV3 | ≤ 295m² | ≤ 185m² | ≤ 160m² | N/A |
| | ERLA16DV37 | ≤ 350m² | ≤ 215m² | ≤ 150m² | N/A |
| Low Temp Hydrosplits | EPGA11DV37 | ≤ 325m² | ≤ 205m² | ≤ 185m² | N/A |
| | EPGA14DV37 | ≤ 365m² | ≤ 230m² | ≤ 210m² | N/A |
| | EPGA16DV37 | ≤ 400m² | ≤ 260m² | ≤ 235m² | N/A |
| Monoblocs | EDLA04E3V3 | ≤ 155m² | N/A | N/A | N/A |
| | EDLA06E3V3 | ≤ 180m² | ≤ 105m² | N/A | N/A |
| | EDLA08E3V3 | ≤ 210m² | ≤ 135m² | N/A | N/A |
| | EDLA09D3V3 | ≤ 255m² | ≤ 185m² | ≤ 160m² | N/A |
| | EDLA11D3V3 | ≤325m² | ≤ 185m² | ≤ 160m² | N/A |
| | EDLA14D3V3 | ≤ 325m² | ≤ 195m² | ≤ 160m² | N/A |
| | EDLA16D3V37 | ≤ 340m² | ≤ 200m² | ≤ 160m² | N/A |
| High Temp Hydrosplits | EPRA08EV3 | ≤ 255m² | ≤ 170m² | ≤ 170m² | ≤ 175m² |
| | EPRA10EV3 | ≤ 270m² | ≤ 185m² | ≤ 190m² | ≤ 195m² |
| | EPRA12EV3 | ≤ 290m² | ≤ 195m² | ≤ 205m² | ≤ 215m² |
| | EPRA14DV37 | ≤ 270m² | ≤ 200m² | ≤ 200m² | ≤ 200m² |
| | EPRA16DV37 | ≤ 300m² | ≤ 230m² | ≤ 230m² | ≤ 225m² |
| | EPRA18DV37 | ≤ 320m² | ≤ 240m² | ≤ 240m² | ≤ 235m² |

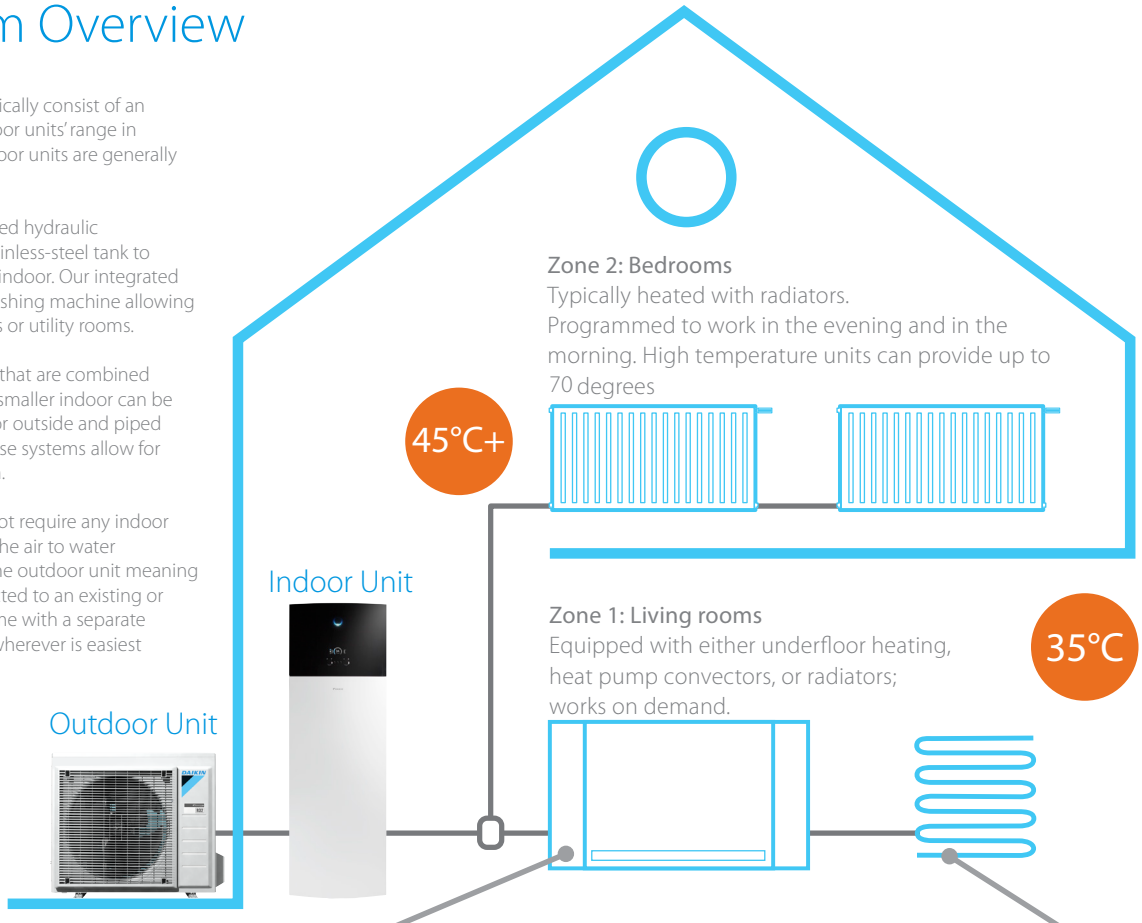
# Typical System Overview

Air to Water heat pump systems typically consist of an outdoor unit and indoor unit. Outdoor units' range in style, capacity and connections. Indoor units are generally integrated or wall hung.

Integrated units combine the required hydraulic components and controls with a stainless-steel tank to provide you with an all in one sleek indoor. Our integrated units are the same floor area of a washing machine allowing them to fit into kitchens, hot presses or utility rooms.

Wall Hung units are smaller indoors that are combined with a separate hot water tank. The smaller indoor can be installed in presses and cupboards or outside and piped into an existing or new cylinder. These systems allow for maximum flexibility with installation.

Lastly, Monobloc style systems do not require any indoor other than a hot water cylinder. All the air to water components are contained inside the outdoor unit meaning only water pipes need to be connected to an existing or new hot water tank. Monoblocs come with a separate control panel that can be installed wherever is easiest




Fan coils, also called heat pump convectors, are hydronic emitters that can provide cooling or heating. A perfect addition to any home for cold winter nights or hot summer days

Your underfloor piping system is designed to receive mid-temperature water to heat your home.

# ESB Form C1 Details

## Integrated

Altherma 3 Low Temperature Single Fan Integrated
**ERGA(04/06/08)EV3 + EHVH(04/08)S(18/23)E6V**

- Manufacturer: Daikin Europe
- Type/Reference: ERGA/EHVH
- Max Power consumption: 4.3kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 0kW

Note: Inverter fed heat pump

Altherma 3 Low Temperature Single Fan Integrated
**ERLA(11/14/16)DV3 + EBVH(11/16)S(18/23)D6V**

- Manufacturer: Daikin Europe
- Type/Reference: ERLA/EBVH
- Max Power consumption: 6.13kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 0kW

Note: Inverter fed heat pump

Altherma 3 Low Temperature Twin Fan Integrated
**EPGA(11/14/16)DV3 + EAVH16S(18/23)D6V**

- Manufacturer: Daikin Europe
- Type/Reference: EPGA/EAVH
- Max Power consumption: 6.71kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 0kW

Note: Inverter fed heat pump

Altherma 3 High Temperature Integrated
**EPRA(14/16/18)DV3 + ETVH18S(18/23)D6V**

- Manufacturer: Daikin Europe
- Type/Reference: EPRA/ETVH
- Max Power consumption: 6.72kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 0kW

Note: Inverter fed heat pump

## Wall Hung

Altherma 3 Low Temperature Single Fan Wall Hung
**ERGA(04/06/08)EV3 + EHBH(04/08)E6V+ EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: ERGA/EHBH
- Max Power consumption: 4.3kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

Altherma 3 Low Temperature Single Fan Wall Hung
**ERLA(11/14/16)DV3 + EBBH(11/16)D6V+ EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: ERLA/EBBH
- Max Power consumption: 6.13kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

Altherma 3 Low Temperature Twin Fan Wall Hung
**EPGA(11/14/16)DV3 + EABH16D6V+ EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: EPGA/EABH
- Max Power consumption: 6.71kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

Altherma 3 High Temperature Wall Hung
**EPRA(14/16/18)DV3 + ETBH18D6V+ EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: EPRA/ETBH
- Max Power consumption: 6.72kW
- Max Power Boost/Backup: 6kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

## Monobloc

Altherma 3 Low Temperature Monobloc
**EDLA(04/06/08)E3V3 + EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: EDLA-E3V3
- Max Power consumption: 4.43kW
- Max Power Boost/Backup: 3kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

Altherma 3 Low Temperature Monobloc
**EDLA(09/11/14/16)E3V3 + EKHWSU(150/200/300)D3V3**

- Manufacturer: Daikin Europe
- Type/Reference: EDLA-D3V3
- Max Power consumption: 6.57kW
- Max Power Boost/Backup: 3kW
- Max Power Tank Immersion: 3kW

Note: Inverter fed heat pump

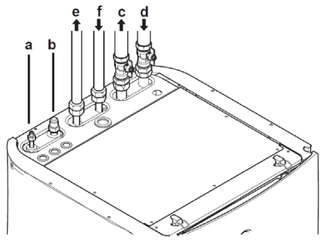
# Altherma 3 Low Temperature Single Fan Integrated

# ERGA04-08EV

Inside the Machine | What is the machine doing | Power Up Settings | Error on Setup | Customer Settings | Hot Water + Heating on and off | Set Schedules | End User Settings | Programming a USB | Loading settings from a USB

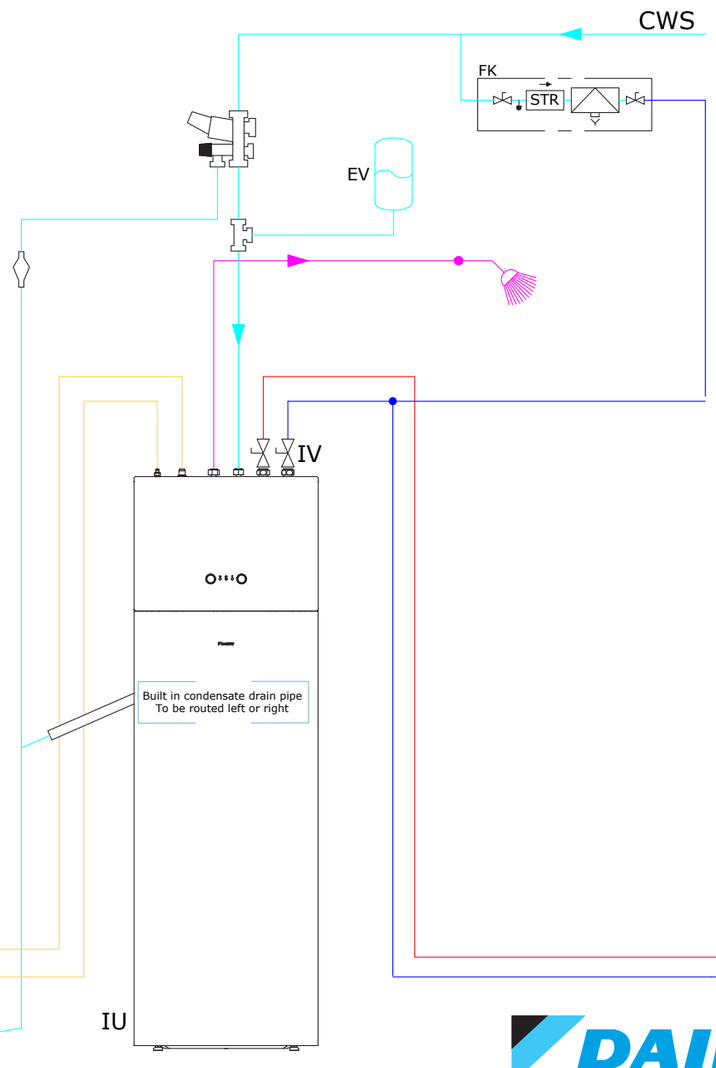
## Piping Connections

A) Refrigeration Liquid Connection - 1/4"
B) Refrigeration Gas Connection - 5/8"
C) Space Heating out - 1"
D) Space Heating in - 1"
E) Domestic Hot Water out - 3/4"
F) Cold Water Supply - 3/4"



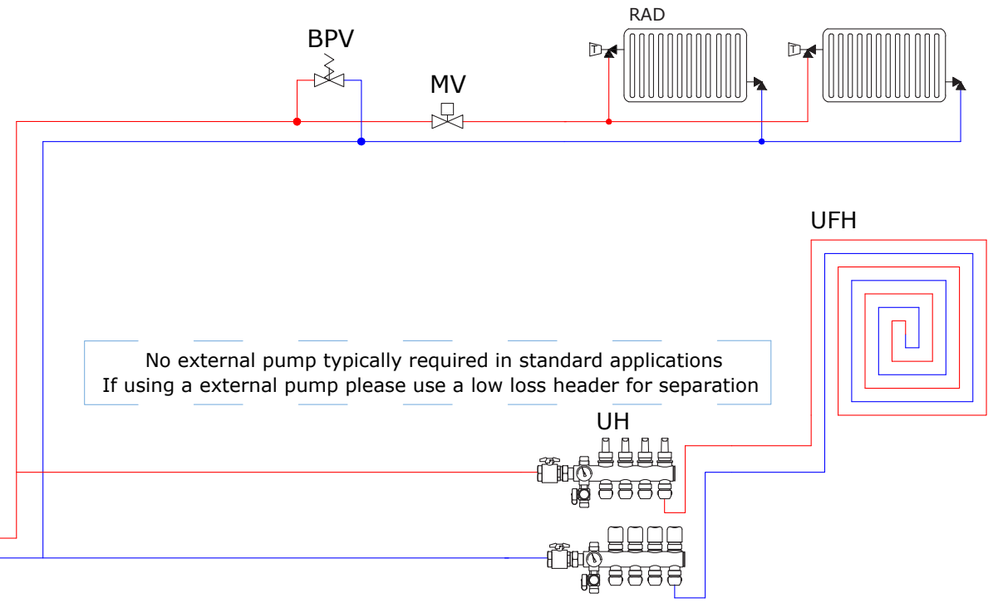

## Piping Guidelines

Minimum: 3m
Maximum: 30m (ventilation required if 27m+)
Height Difference: 20m
Min Flow Rate: 12L/min




By-Pass valve fitted on heating circuit
(i.e. after 3 way valve)

Minimum flow rate of 12litres/min required



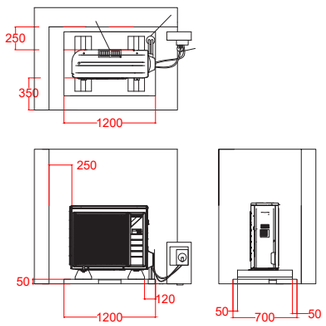

No external pump typically required in standard applications
If using a external pump please use a low loss header for separation

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERGA04-08EV |
| IU | Indoor Unit | EHVH04-08S(18/23)E6V/E9W |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |

## Outdoor Mounting

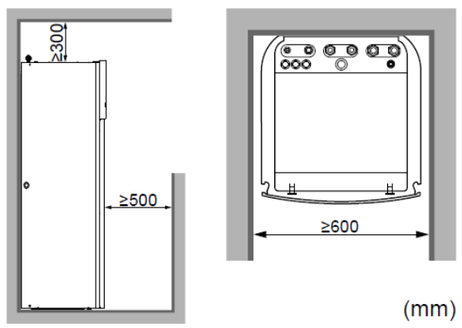
Wall Mounted:
The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

Floor Standing:
The unit should be installed on 2 rubber mounts/flexi feet (supplied by Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
   Additional gas may be required, reference installation manual
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals




## Indoor Mounting

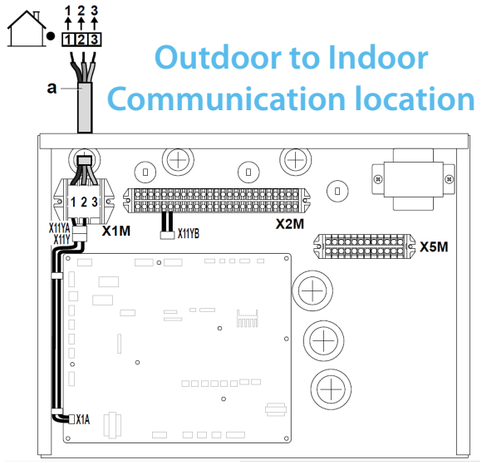
All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 595mm wide x 625mm deep. The 180ltr unit is 1650mm high and the 230ltr is 1850mm.
The 180ltr unit is 131kg and the 230ltr is 139kg.

# Altherma 3 Low Temperature Single Fan Integrated

# ERGA04-08EV

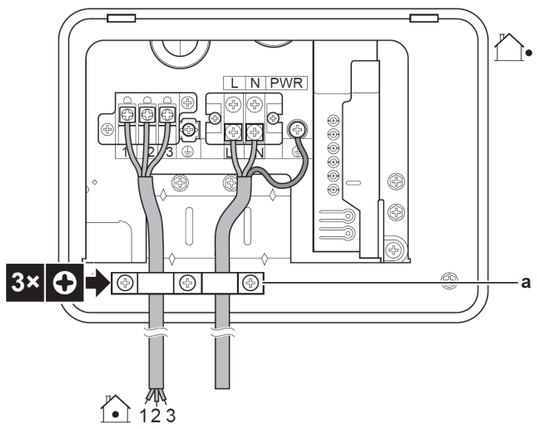
| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERGA04-08EV |
| IU | Indoor Unit | EHVH04-08S(18/23)E6V/E9W |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 4sq x 3 core power supply with isolation switch and 25Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

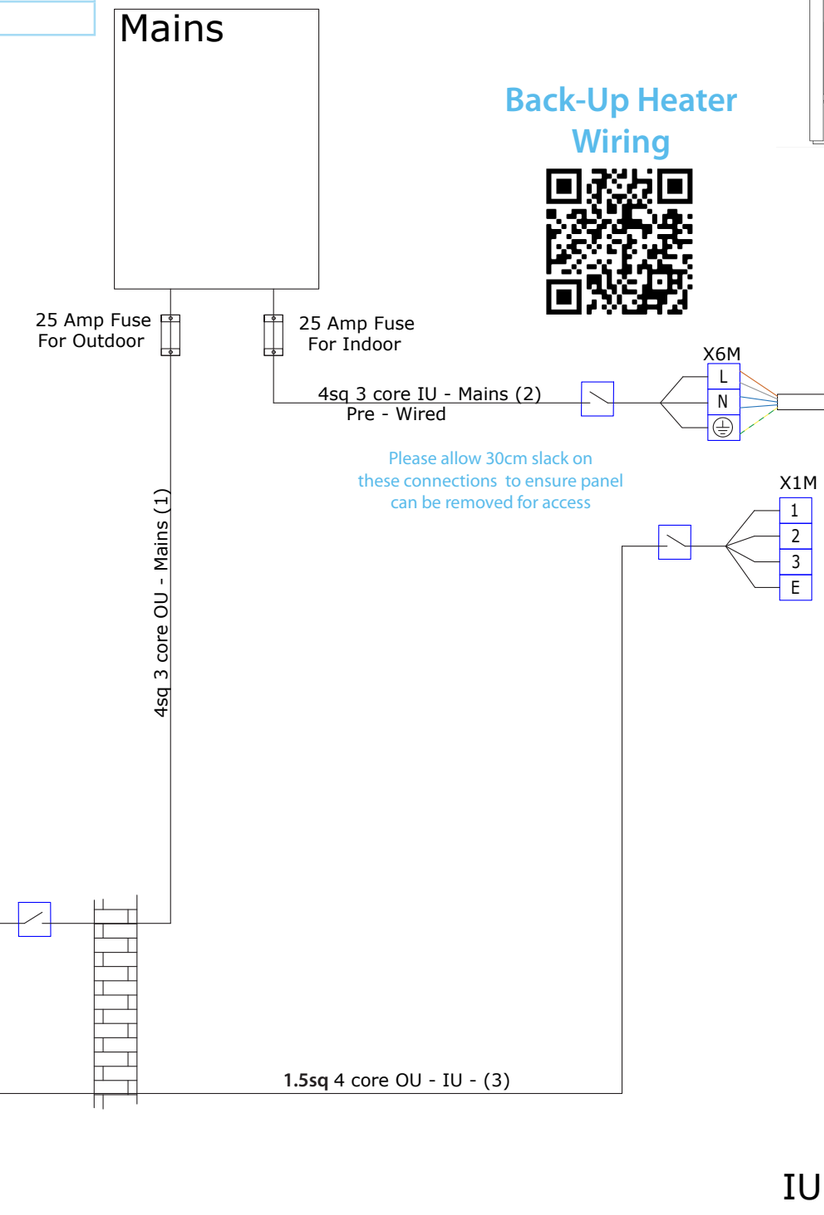
## Outdoor to Indoor Communication location

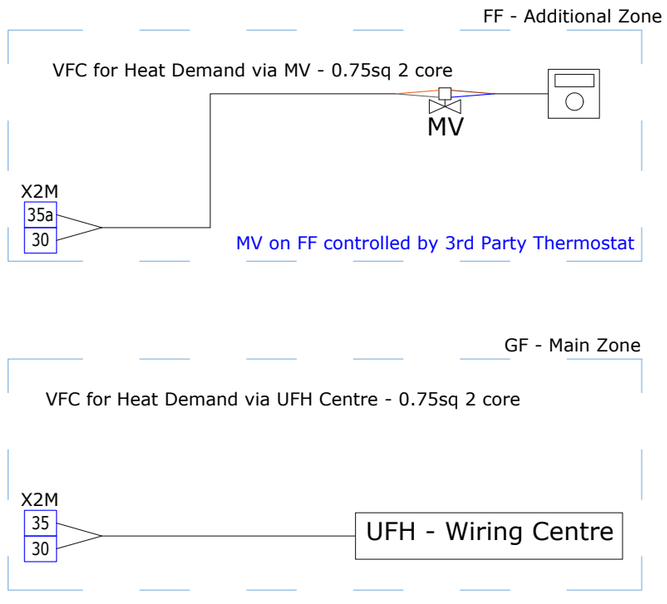



## Back-Up Heater Wiring

## Outdoor Unit Switchbox location

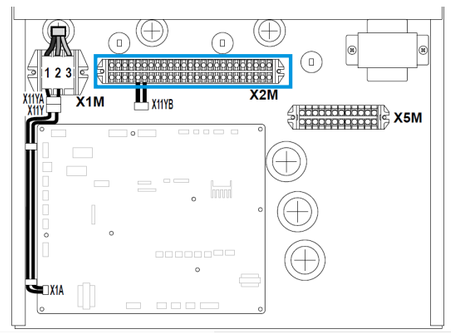



Max Running Current - 25A

Max Running Current - 26A




## Indoor Unit X2M location

# Altherma 3 Low Temperature Single Fan Wall Hung

# ERGA04-08EV

What is the machine doing

Power Up Settings

Error on Setup

Customer Settings

Hot Water + Heating on and off

Set Schedules

End User Settings

Programming a USB

Loading settings from a USB

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERGA04-08EV |
| IU | Indoor Unit | EHBH04-08E6V |
| HWT | Hot Water Tank | EKHWS-D3V3 / EKHWSU-D3V3 |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| RAD | Radiator | field supply |
| MV | Motorized Valve | field supply |
| 3MV | 3 Port Motorized Valve | delivered with Daikin HWT |

## Piping Connections

A) Refrigerant Liquid Connection - 1/ 4”
B) Refrigerant Gas Connection - 5/8"
C) Space Heating out - 1"
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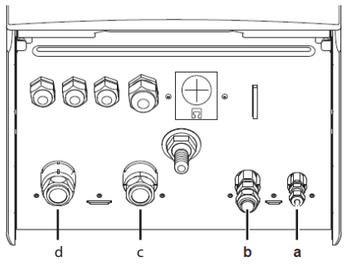
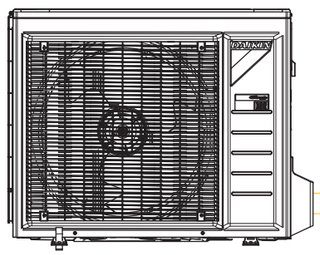
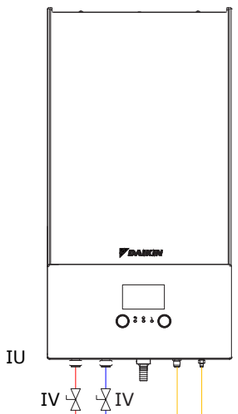



## Piping Guidelines

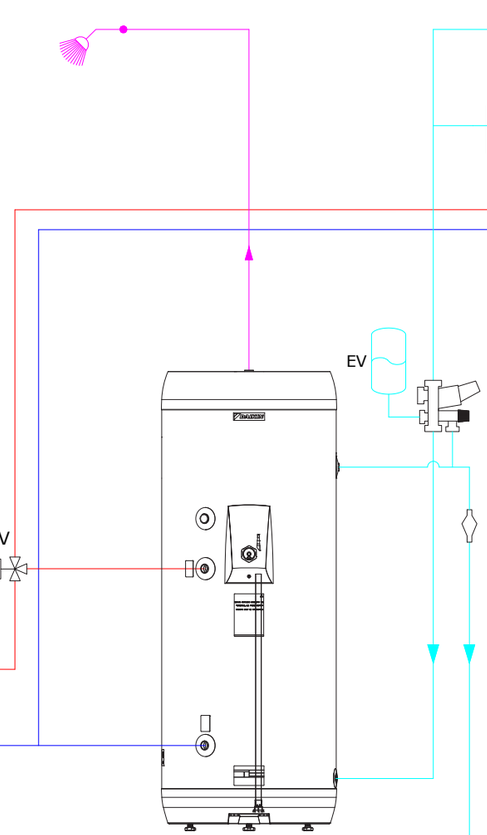
Minimum: 3m
Maximum: 30m (ventilation required if 27m+)
Height Difference: 20m
Min Flow Rate: 12L/min

OU



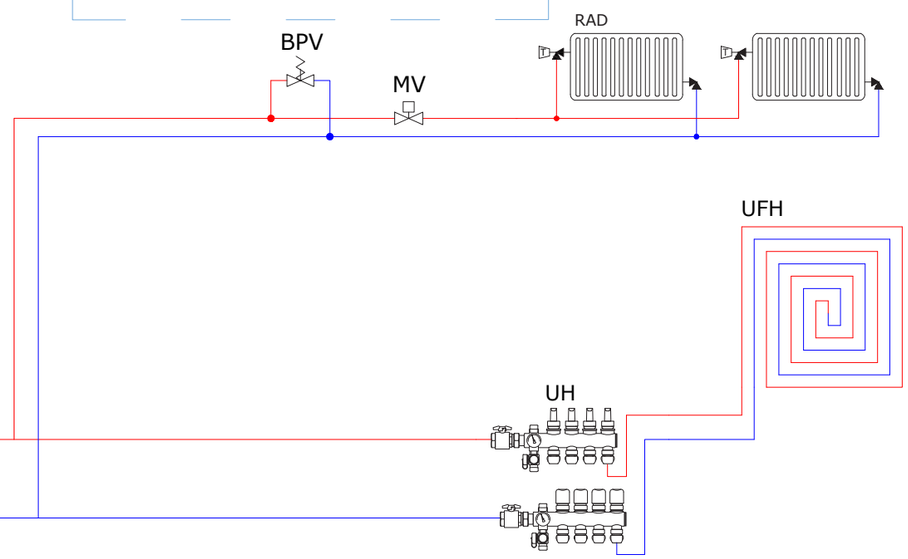



3 Way Valve Demo




By-Pass valve fitted on heating circuit (i.e. after 3 way valve)

Minimum flow rate of 12litres/min required

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## Outdoor Mounting

Wall Mounted:
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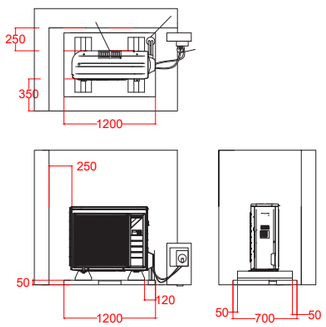


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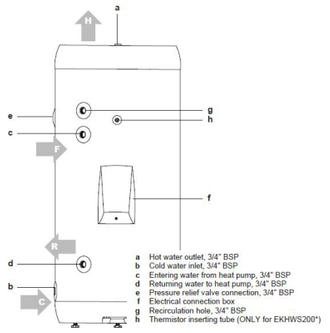
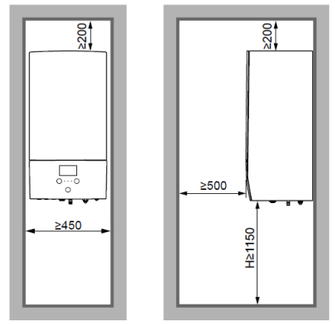



(mm)

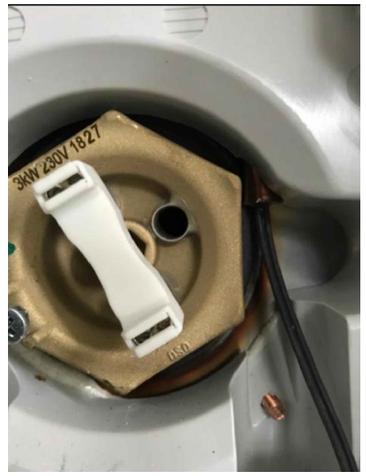
## Indoor Mounting

All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 840x440x390(mm) (HxWxD).
Tank sizing varies.

# Altherma 3 Low Temperature Single Fan Wall Hung

# ERGA04-08EV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERGA04-08EV |
| IU | Indoor Unit | EHBH04-08E6V |
| HWT | Hot Water Tank | EKHWS(U)-D3V3 |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 4sq x 3 core power supply with isolation switch and 25Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

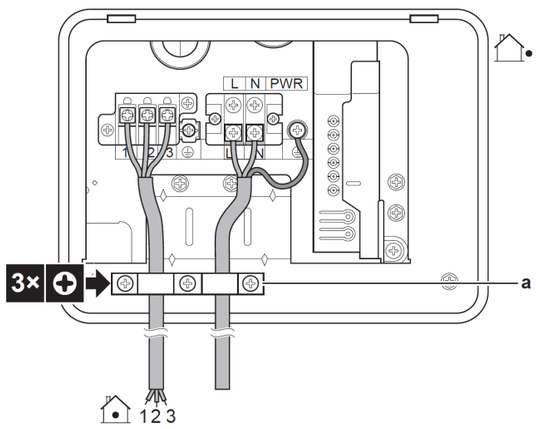


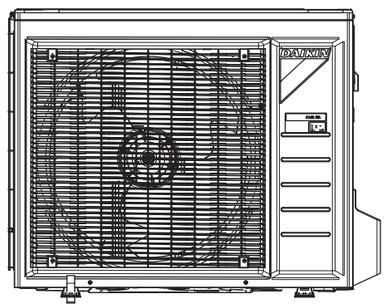

For Daikin 300ltr tank fix the tank thermistor in the opening like image

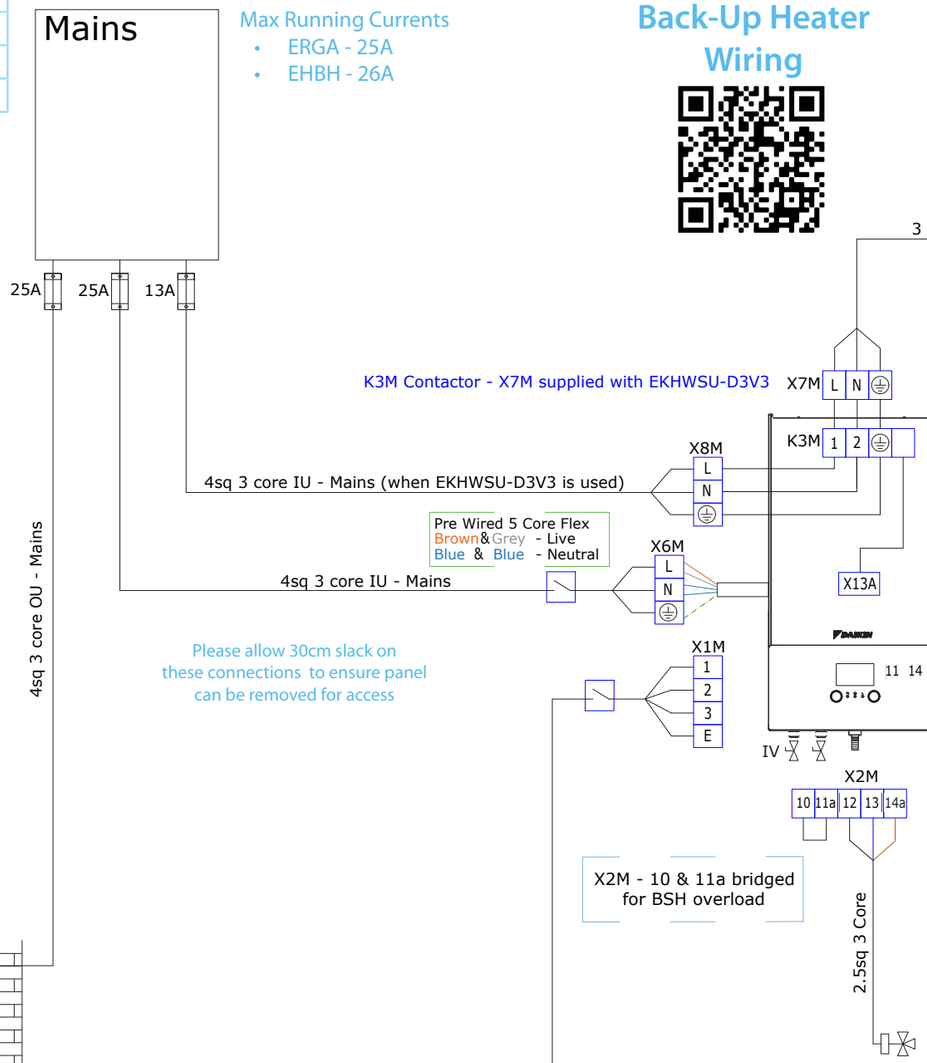
Max Running Currents
- ERGA - 25A
- EHBH - 26A

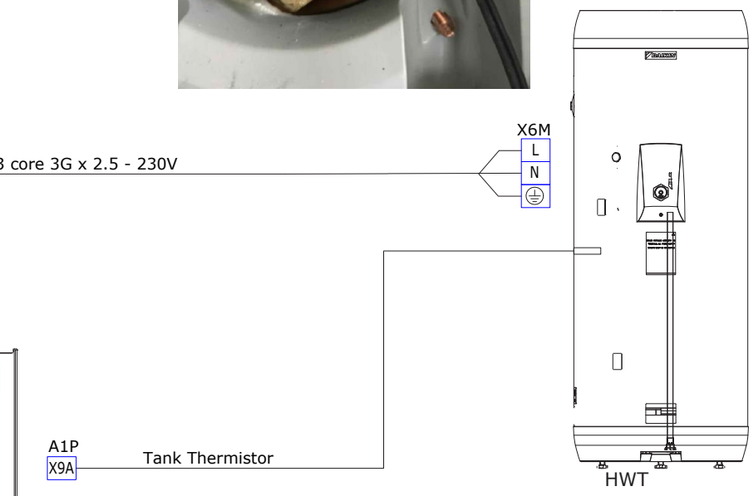
## Back-Up Heater Wiring

## Outdoor Unit Switchbox location

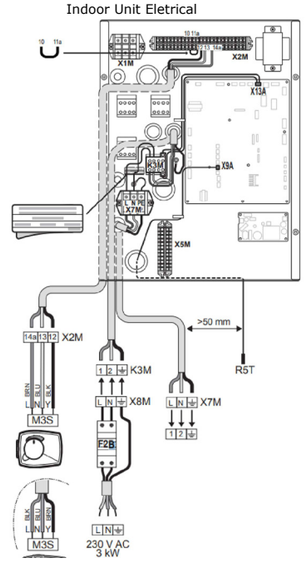



Indoor Unit Eletrical



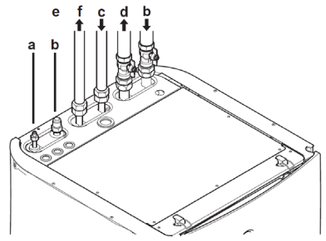
# Altherma 3 Low Temperature Single Fan Integrated

# ERLA11-16DV

Inside the Machine | What is the machine doing | Power Up Settings | Error on Setup | Customer Settings | Hot Water + Heating on and off | Set Schedules | End User Settings | Programming a USB | Loading settings from a USB

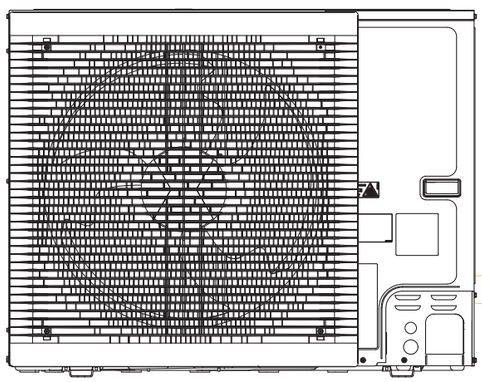
## Piping Connections

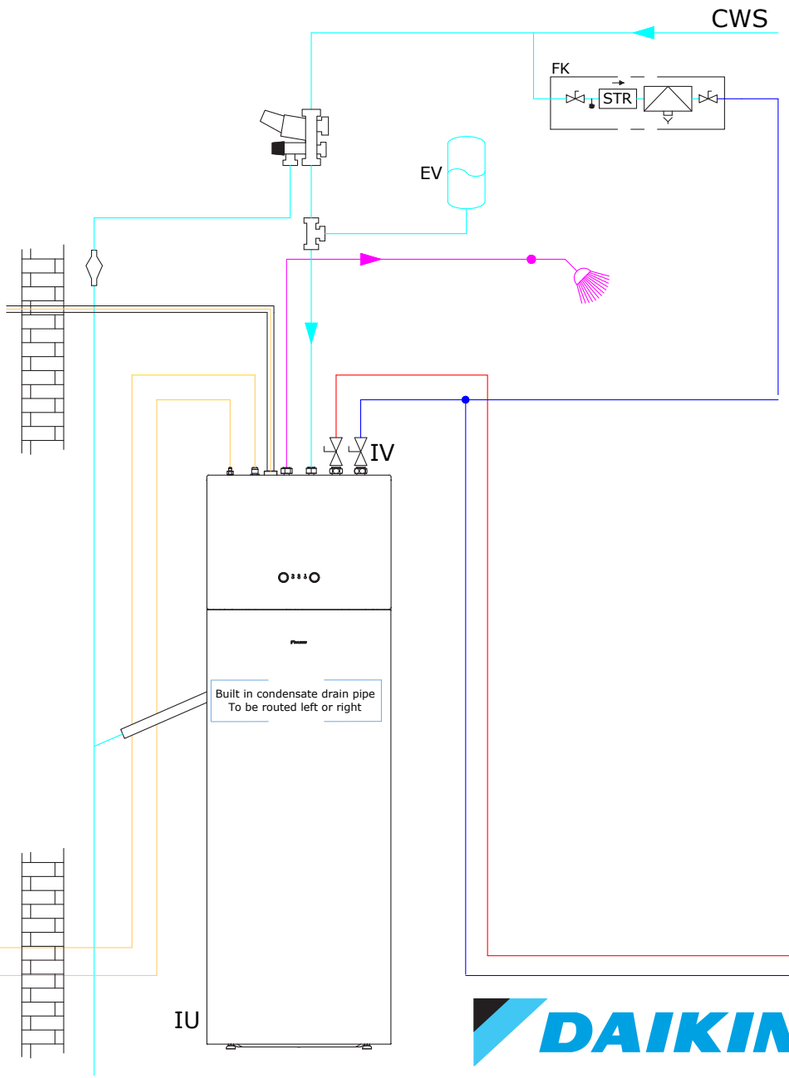
A) Refrigeration Liquid Connection - 3/8"
B) Refrigeration Gas Connection - 5/8"
C) Space Heating out - 1"
D) Space Heating in - 1"
E) Domestic Hot Water out - 3/4"
F) Cold Water Supply - 3/4"




## Piping Guidelines

Minimum: 3m
Maximum: 50m (Charge requirements in manual)
Height Difference: 20m
Min Flow Rate: 22L/min (heating/defrost/DHW)
16L/min (cooling)

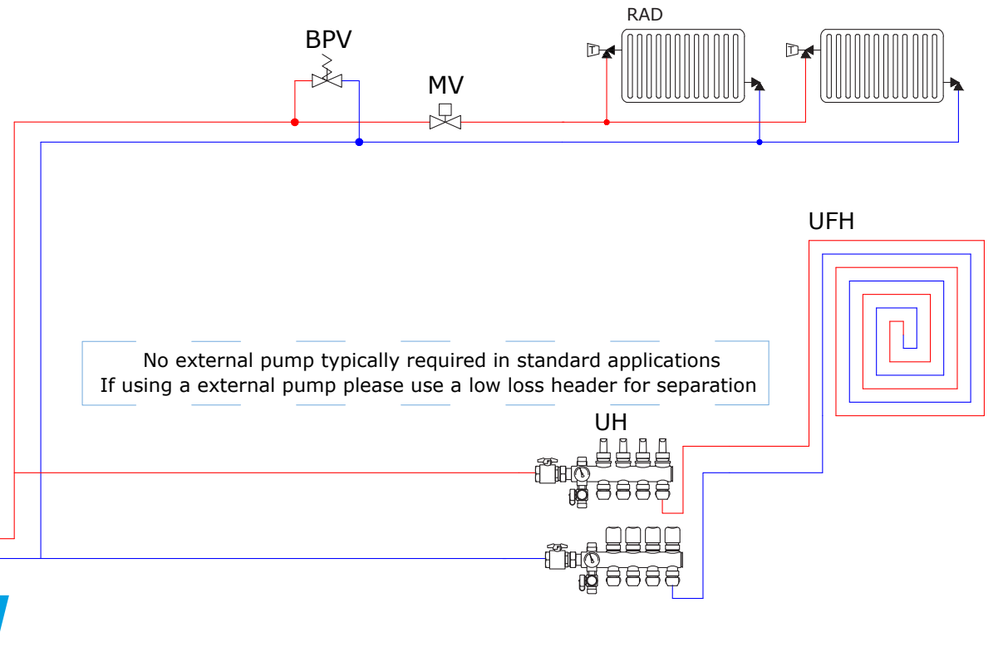





By-Pass valve fitted on heating circuit
(i.e. after 3 way valve)

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERLA11-16DV |
| IU | Indoor Unit | EBVH11-16S(18/23)D6V/D9W |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |

Minimum flow rate of 22 litres/min required for heating/defrost/DHW production
16litres/min required for cooling operating

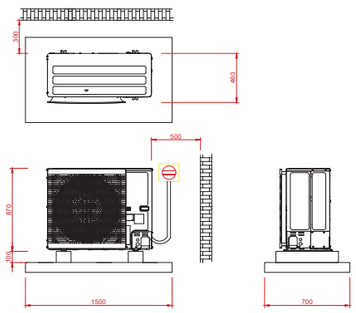



No external pump typically required in standard applications
If using a external pump please use a low loss header for separation

## Outdoor Mounting

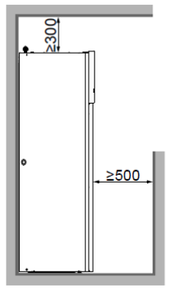
Wall Mounted:
The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

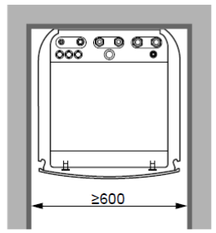
Floor Standing:
The unit should be installed on 2 rubber mounts/flexi feet (supplied by Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
   Additional gas may be required, reference installation manual
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals

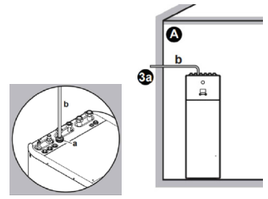



(mm)

## Indoor Mounting

All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 595mm wide x 634mm deep. The 180ltr unit is 1655mm high and the 230ltr is 1855mm. The 180ltr unit is 124kg and the 230ltr is 133kg.




Chimney pipe to be routed externally based on R32 requirements

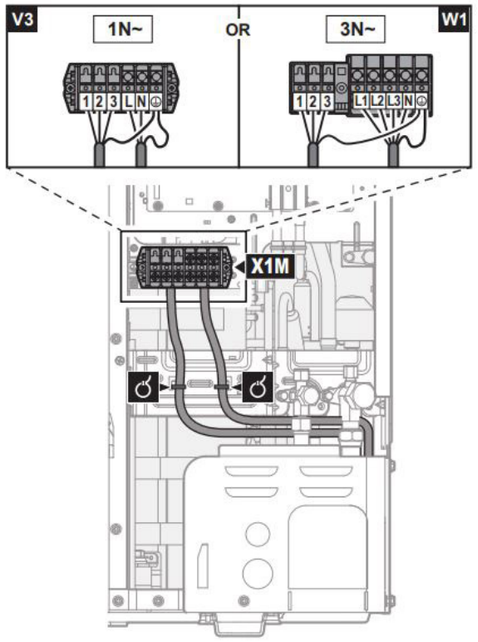
If chimney can't be routed to outside please follow minimum floor area requirements in Installation Manual

# Altherma 3 Low Temperature Single Fan Integrated

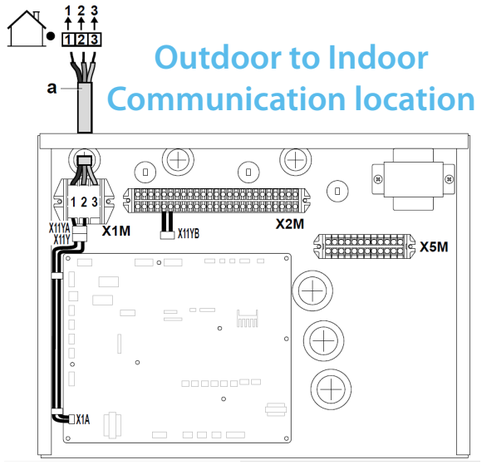
# ERLA11-16DV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERLA11-16DV |
| IU | Indoor Unit | EBVH11-16S(18/23)D6V |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

## Outdoor Unit Switchbox location

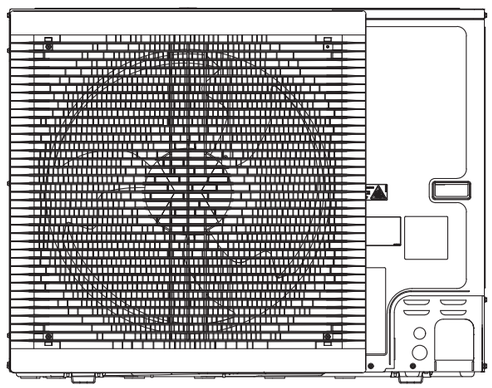



## Outdoor to Indoor Communication location




## Back-Up Heater Wiring



Max Running Current - 32A

Max Running Current - 26A




## Indoor Unit X2M location

DAIKIN

# Altherma 3 Low Temperature Single Fan Wall Hung

# ERLA11-16DV

What is the machine doing

Power Up Settings

Error on Setup

Customer Settings

Hot Water + Heating on and off

Set Schedules

End User Settings

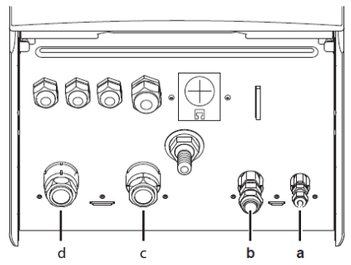
Programming a USB

Loading settings from a USB

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERLA11-16DV |
| IU | Indoor Unit | EBBH11-16DV |
| HWT | Hot Water Tank | EKHWS-D3V3 / EKHWSU-D3V3 |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| RAD | Radiator | field supply |
| MV | Motorized Valve | field supply |
| 3MV | 3 Port Motorized Valve | delivered with Daikin HWT |

## Piping Connections

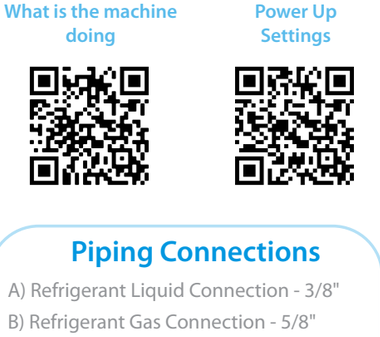
A) Refrigerant Liquid Connection - 3/8"
B) Refrigerant Gas Connection - 5/8"
C) Space Heating out - 1"
D) Space Heating in - 1"
E) Domestic Hot Water out - 3/4"
F) Cold Water Supply - 3/4"

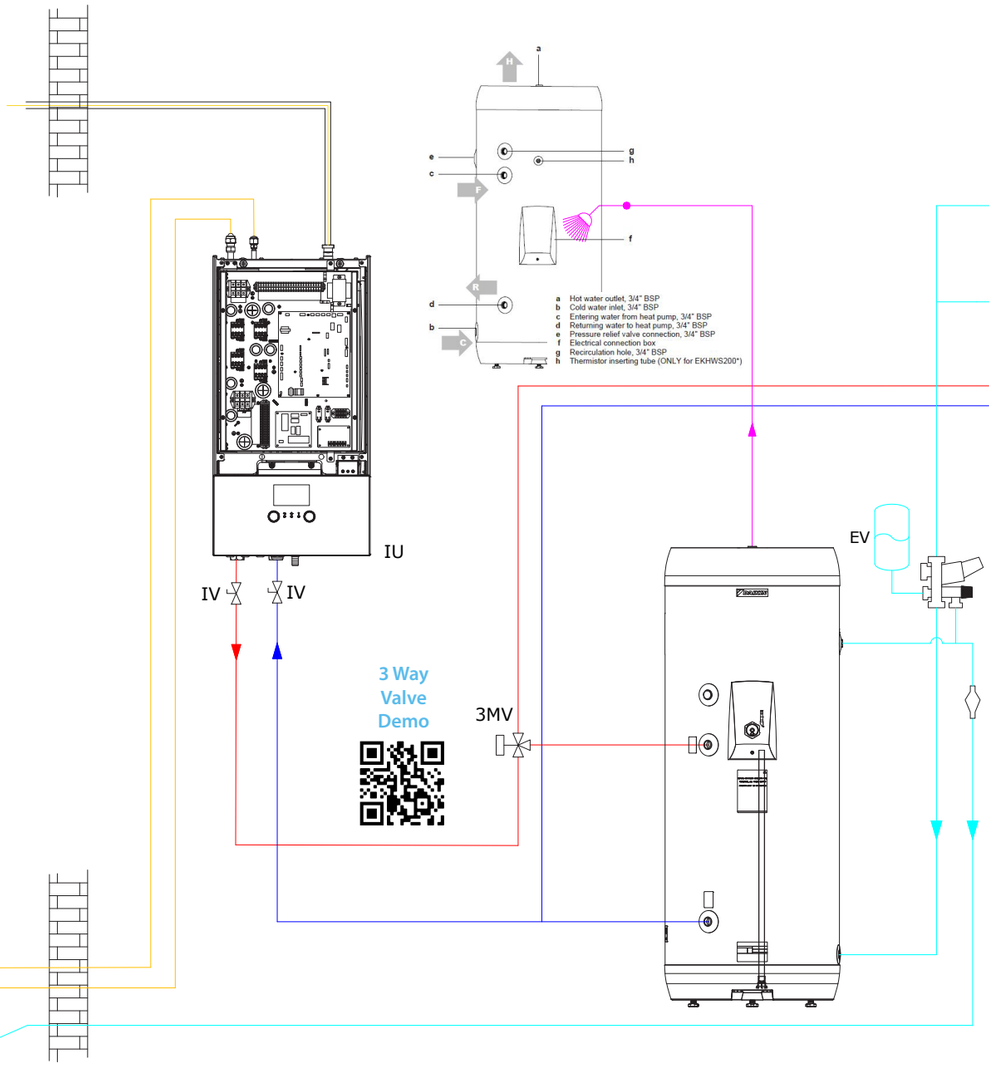



## Piping Guidelines

Minimum: 3m
Maximum: 50m (Charge requirements in manual)
Height Difference: 20m
Min Flow Rate: 22L/min (heating,defrost,DHW)
16L/min (cooling)

OU






a Hot water outlet, 3/4" BSP
b Cold water inlet, 3/4" BSP
c Entering water from heat pump, 3/4" BSP
d Returning water to heat pump, 3/4" BSP
e Pressure relief valve connection, 3/4" BSP
f Electrical connection box
g Recirculation hole, 3/4" BSP
h Thermistor inserting tube (ONLY for EKHWS200*)

By-Pass valve fitted on heating circuit (i.e. after 3 way valve)

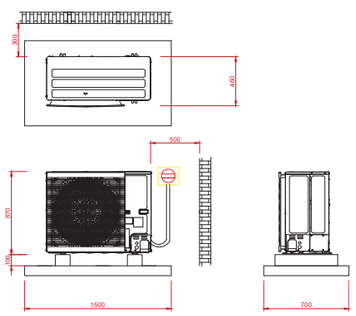
Minimum flow rate of 22 litres/min required for heating/defrost/DHW production
16litres/min required for cooling operating

DAIKIN

## Outdoor Mounting

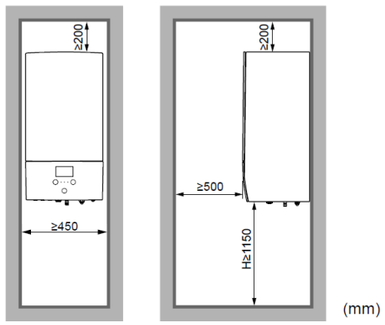
Wall Mounted:
The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

Floor Standing:
The unit should be installed on 2 rubber mounts/flexi feet (supplied by Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

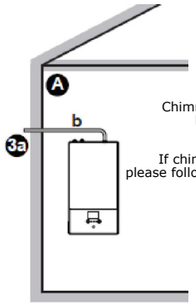
1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
   Additional gas may be required, reference installation manual
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals




(mm)

## Indoor Mounting

All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 840x440x390(mm) (HxWxD).
Tank sizing varies.




Chimney pipe to be routed externally based on R32 requirements

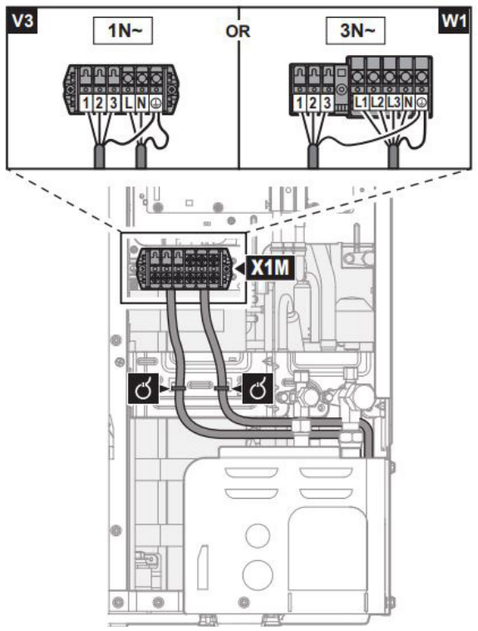
If chimney can't be routed to outside please follow minimum floor area requirements in Installation Manual

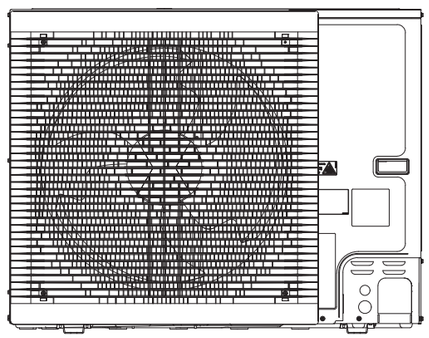
# Altherma 3 Low Temperature Single Fan Wall Hung

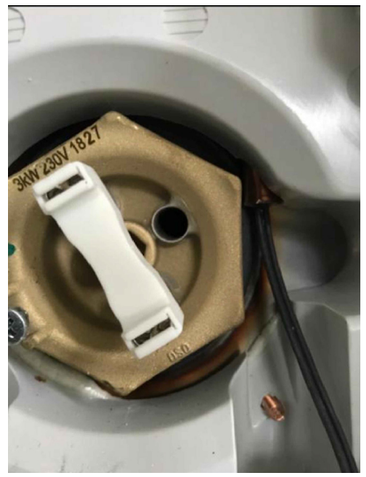
# ERLA11-16DV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | ERLA11-16DV |
| IU | Indoor Unit | EBBH11-16DV |
| HWT | Hot Water Tank | EKHWS(U)-D3V3 |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

## Outdoor Unit Switchbox location






For Daikin 300ltr tank fix the tank thermistor in the opening like image

Mains

Max Running Currents
- ERLA - 32A
- EBBH - 26A

## Back-Up Heater Wiring

32 Amp Fuse For Outdoor

25A

13A

6sq 3 core OU - Mains (1)

4sq 3 core IU - Mains (when EKHWSU-D3V3 is used)

4sq 3 core IU - Mains

Pre Wired 5 Core Flex
Brown & Grey - Live
Blue & Blue - Neutral

Please allow 30cm slack on these connections to ensure panel can be removed for access

X1M
L
N
1
2
3
E

**1.5sq** 4 core OU - IU

K3M Contactor - X7M supplied with EKHWSU-D3V3

X7M L N

K3M 1 2

X8M L N

X6M L N

X1M 1 2 3 E

X13A

IV

X2M 10 11a 12 13 14a

X2M - 10 & 11a bridged for BSH overload

2.5sq 3 Core

3 core 3G x 2.5 - 230V

X6M L N

A1P X9A — Tank Thermistor

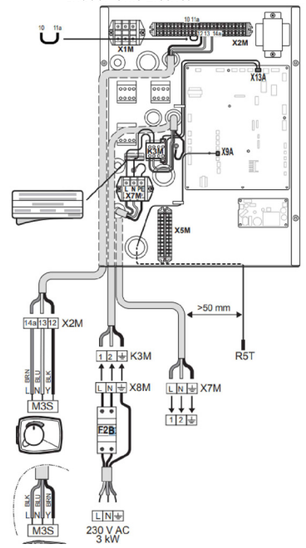
HWT

MV on FF controlled by 3rd Party Thermostat

X2M 30 35a — VFC for Heat Demand (Additional Zone) — 0.75sq x 2 core — MV

X2M 30 35 — VFC for Heat Demand (Main Zone) — 0.75sq x 2 core — UFH - Wiring Centre

Indoor Unit Eletrical



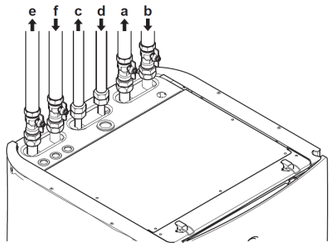
# Altherma 3 Low Temperature Twin Fan Integrated

# EPGA11-16DV

Inside the Machine | What is the machine doing | Power Up Settings | Error on Setup | Customer Settings | Hot Water + Heating on and off | Set Schedules | End User Settings | Programming a USB | Loading settings from a USB

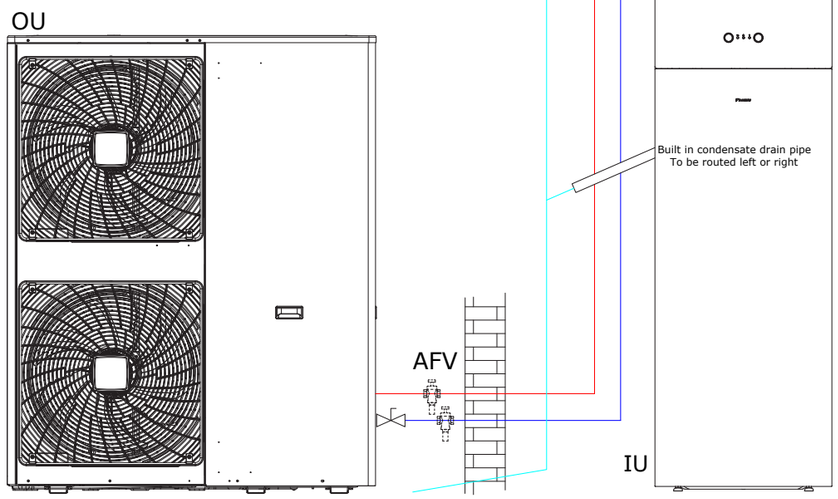
## Piping Connections

A) Space Heating out - 1"
B) Space Heating in - 1"
C) Domestic Hot Water out - 3/4"
D) Cold Water Supply - 3/4"
E) Water Connection out - 1"
F) Water Connection in - 1"




## Piping Guidelines

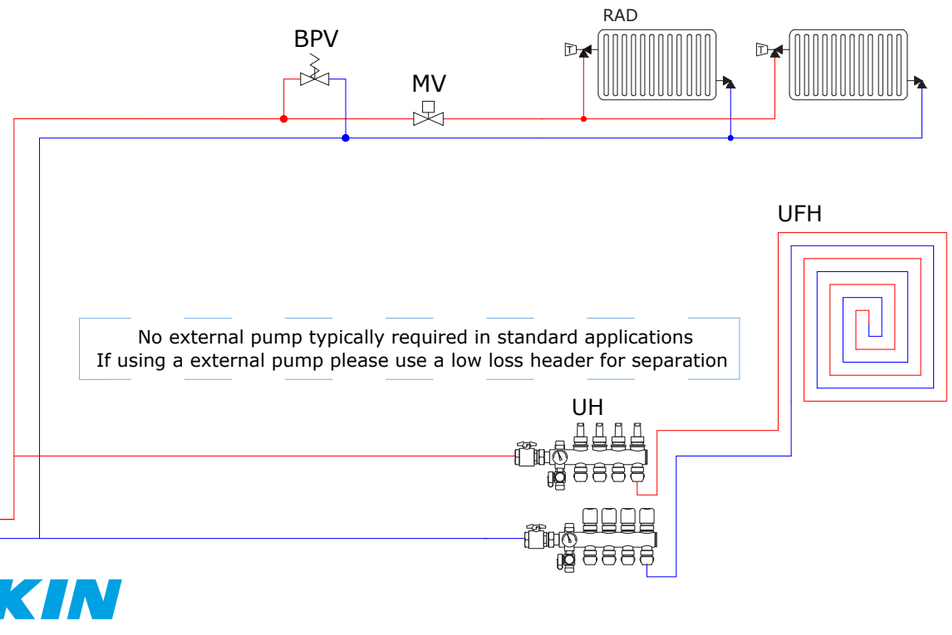
Minimum: 3m
Maximum: Visit HSN
Height Difference: 10m
Min Flow Rate: 20L/min
Min Flow Rate: 20L/min




| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPGA11-16DV |
| IU | Indoor Unit | EAVH016S(18/23)D6V/D9W |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| AFV | Anti Freeze Valve | ordered separately |

By-Pass valve fitted on heating circuit (i.e. after 3 way valve)

Minimum flow rate of 20litres/min required



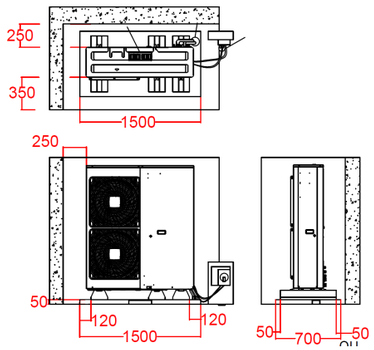

No external pump typically required in standard applications
If using a external pump please use a low loss header for separation

DAIKIN

## Outdoor Mounting

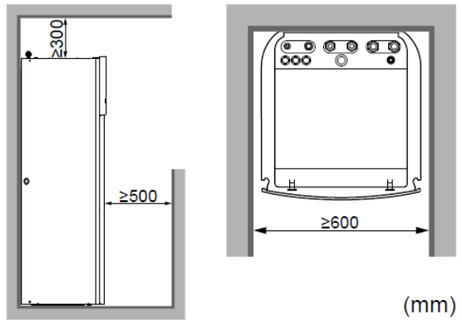
Wall Mounted:
The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

Floor Standing:
The unit should be installed on 3 rubber mounts/flexi feet (supplied via Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals




## Indoor Mounting

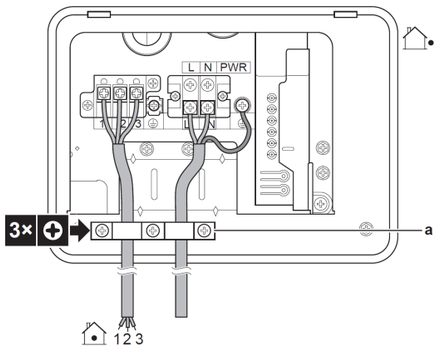
All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 595mm wide x 625mm deep. The 180ltr unit is 1650mm high and the 230ltr is 1850mm.
The 180ltr unit is 109kg and the 230ltr is 118kg.

# Altherma 3 Low Temperature Twin Fan Integrated

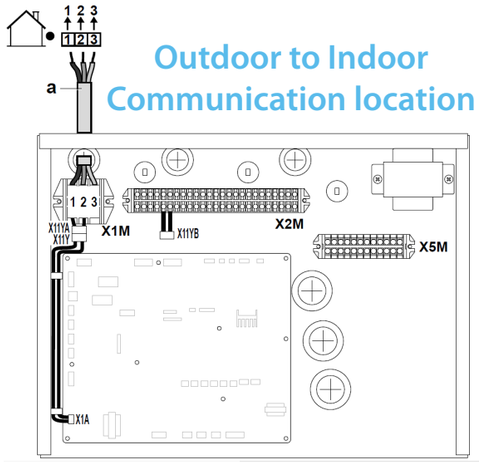
# EPGA11-16DV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPGA11-16DV |
| IU | Indoor Unit | EAVH11-16S(18/23)D6V/D9W |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

## Outdoor Unit Switchbox location

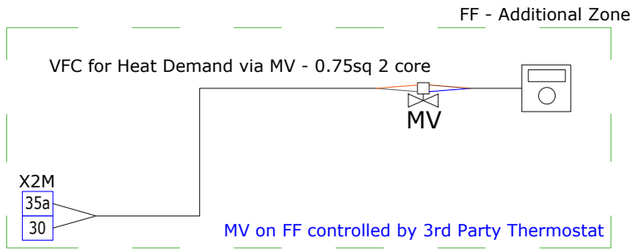


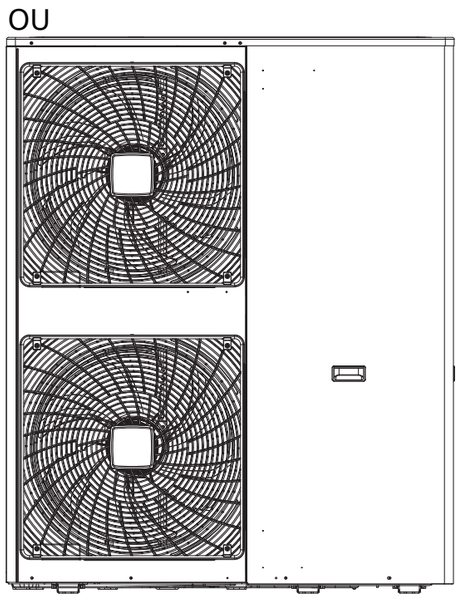

## Outdoor to Indoor Communication location




## Back-Up Heater Wiring



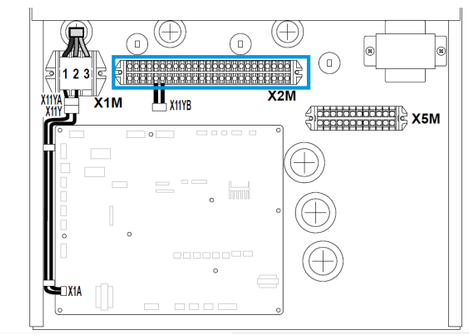




Max Running Current - 30.7A

IU

Max Running Current - 26A




## Indoor Unit X2M location

DAIKIN

# Altherma 3 Low Temperature Twin Fan Wall Hung

# EPGA11-16DV

What is the machine doing

Power Up Settings

Error on Setup

Customer Settings

Hot Water + Heating on and off

Set Schedules

End User Settings

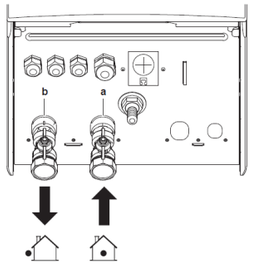
Programming a USB

Loading settings from a USB

## Piping Connections

A) Water Connection out - 1"

B) Water Connection in - 1"




## Piping Guidelines

Minimum: 3m

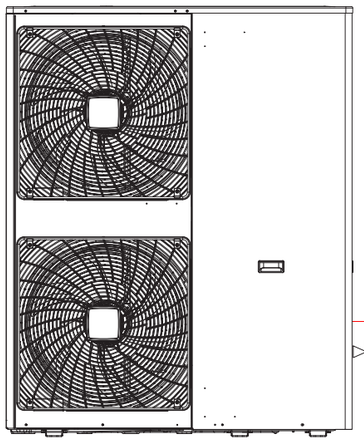
Maximum: Visit HSN

Height Difference: 10m

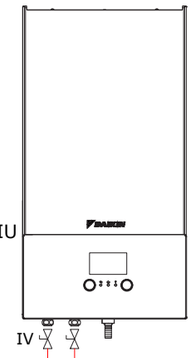
Min Flow Rate: 20L/min

| LEGEND: | | |
|---|---|---|
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| RAD | Radiator | field supply |
| MV | Motorized Valve | field supply |
| 3MV | 3 Port Motorized Valve | delivered with Daikin HWT |
| AVF | Anti Freeze Valve | ordered separately |
| OU | Outdoor Unit | EPGA11-16DV |
| IU | Indoor Unit | EABH16D6V |
| HWT | Hot Water Tank | EKHWS-D3V3 / EKHWSU-D3V3 |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |

OU



IU



IV

AFV

3 Way Valve Demo

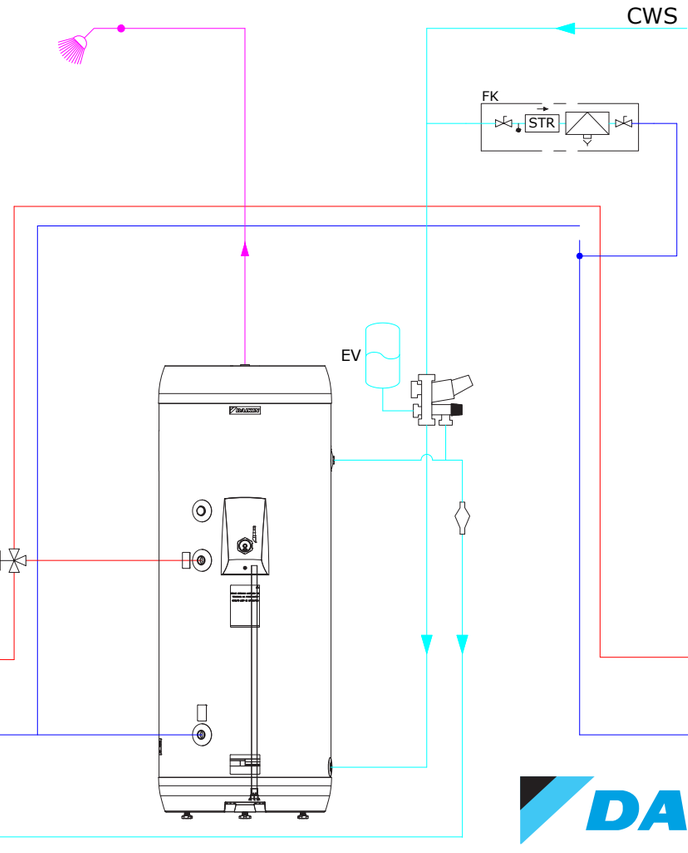
3MV

EV

CWS

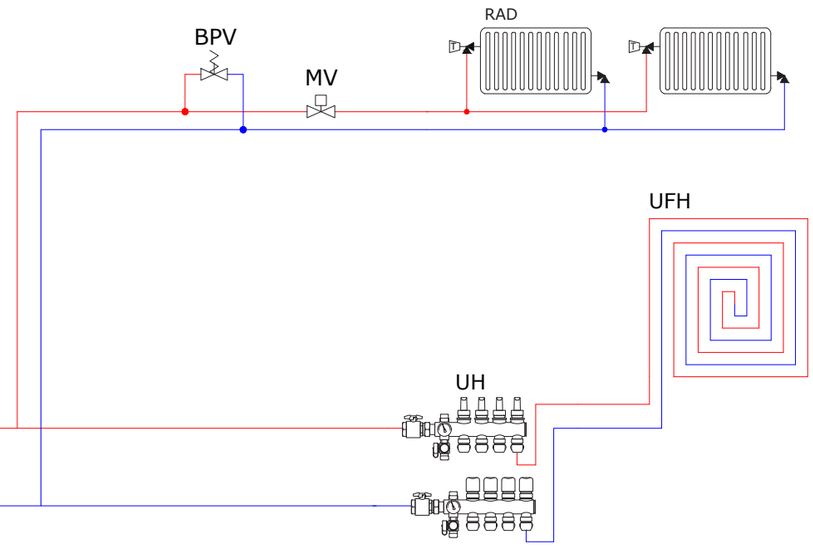
FK

STR



By-Pass valve fitted on heating circuit (i.e. after 3 way valve)

Minimum flow rate of 20litres/min required




DAIKIN

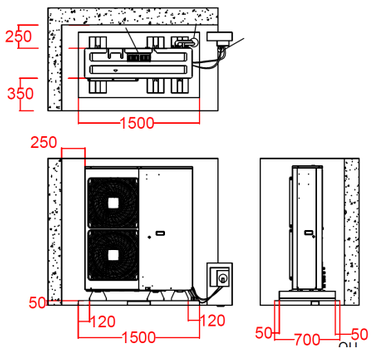
## Outdoor Mounting

Wall Mounted:

The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

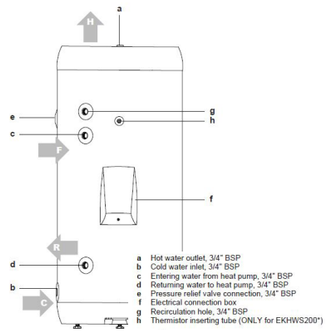
Floor Standing:

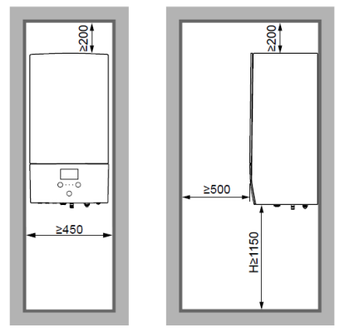
The unit should be installed on 3 rubber mounts/flexi feet (supplied via Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals




(mm)

## Indoor Mounting

All components are accessible via the front panels.

There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.

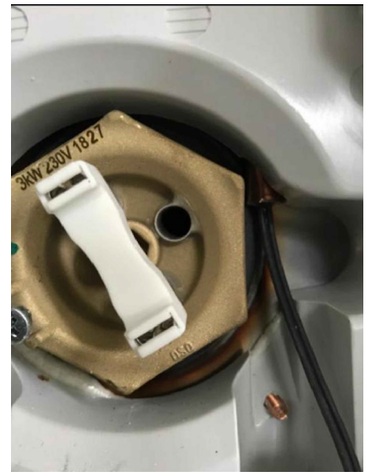
Note: indoor unit dimensions are 840x440x390mm (HxWxD).

Tank sizing varies.

# Altherma 3 Low Temperature Twin Fan Wall Hung

# EPGA11-16DV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPGA11-16DV |
| IU | Indoor Unit | EAVH11-16S(18/23)D6V/D9W |
| HWT | Hot Water Tank | EKHWS(U)-D3V3 |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |




For Daikin 300ltr tank fix the tank thermistor in the opening like image

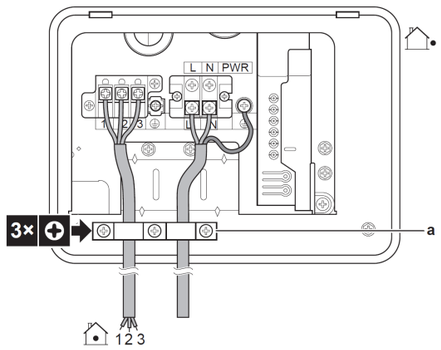
Mains

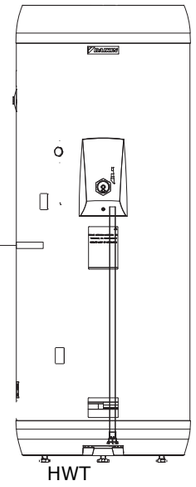
32A 25A 13A

Max Running Currents
- EPGA - 30.7A
- EHBH - 26A

## Back-Up Heater Wiring

## Outdoor Unit Switchbox location




3 core 3G x 2.5 - 230V

X6M L N

K3M Contactor - X7M supplied with EKHWSU-D3V3

X7M L N

Please allow 30cm slack on these connections to ensure panel can be removed for access

X8M L N

K3M 1 2

4sq 3 core IU - Mains (when EKHWSU-D3V3 is used)

Pre Wired 5 Core Flex
Brown & Grey - Live
Blue & Blue - Neutral

X6M L N

4sq 3 core IU - Mains

X13A

X1M 1 2 3 E

11 14

IV

A1P X9A Tank Thermistor

X2M 30 35a VFC for Heat Demand (Additional Zone) 0.75sq x 2 core

MV on FF controlled by 3rd Party Thermostat

MV

X2M 30 35 VFC for Heat Demand (Main Zone) 0.75sq x 2 core

UFH - Wiring Centre

X2M 10 11a 12 13 14a

X2M - 10 & 11a bridged for BSH overload

2.5sq 3 Core

OU

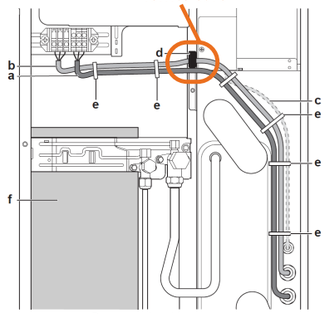
X1M L N

X1M 1 2 3 E

6sq 3 core OU - Mains

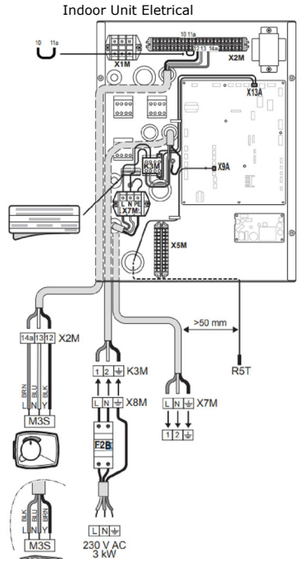
1.5sq 4 core OU - IU

Communication cable only through ferrite core




a Power supply cable
b Communication cable
c Cable for bottom plate heater (optional)
d Ferrite core
e Tie strap
f Compressor

Indoor Unit Eletrical



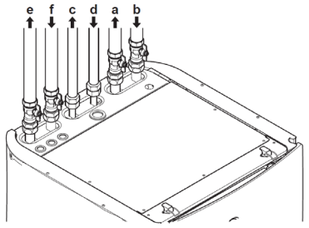
# Altherma 3 High Temperature Integrated

# EPRA08-16E/DV

Inside the Machine | What is the machine doing | Power Up Settings | Error on Setup | Customer Settings | Hot Water + Heating on and off | Set Schedules | End User Settings | Programming a USB | Loading settings from a USB

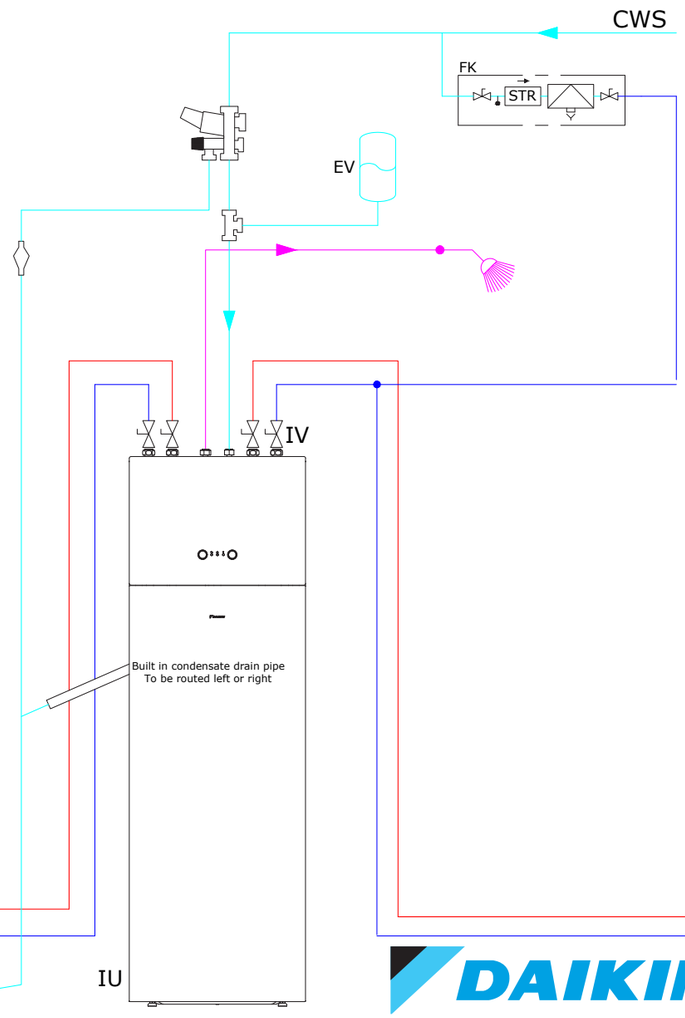
## Piping Connections

A) Space Heating out - 1"
B) Space Heating in - 1"
C) Domestic Hot Water out - 3/4"
D) Cold Water Supply - 3/4"
E) Water Connection out - 1"
F) Water Connection in - 1"




## Piping Guidelines

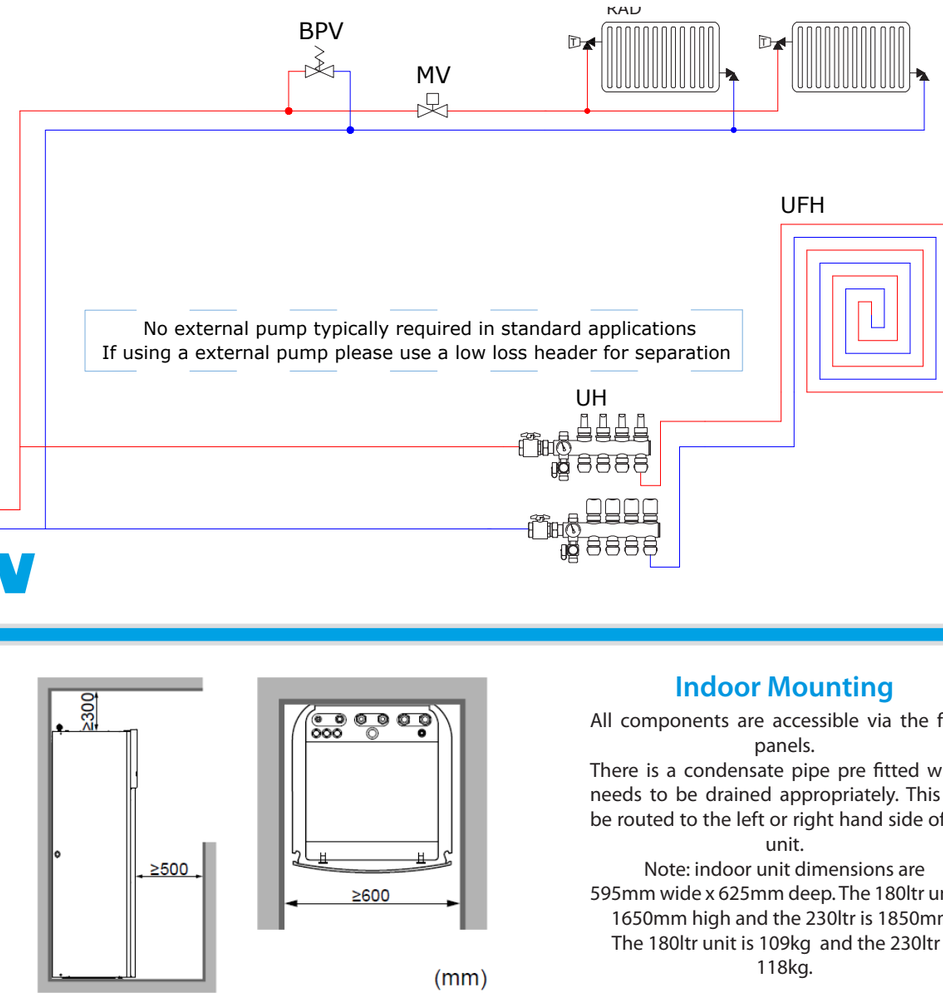
Minimum: 3m
Maximum: Visit HSN
Height Difference: 10m
Min Flow Rate: 20L/min




| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPRA08-18E/DV |
| IU | Indoor Unit | ETVH(12/16)S(18/23)E6V |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| AFV | Anti Freeze Valve | ordered separately |

By-Pass valve fitted on heating circuit (i.e. after 3 way valve)

**Minimum flow rate of 20 litres/min required**

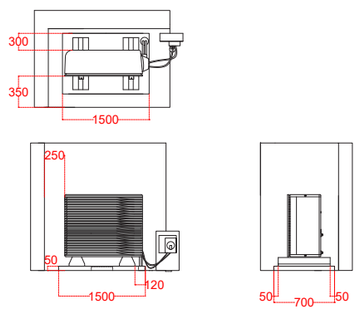



No external pump typically required in standard applications
If using a external pump please use a low loss header for separation

## Outdoor Mounting

Wall Mounted:
The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

Floor Standing:
The unit should be installed on 2 rubber mounts/flexi feet (available via Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals

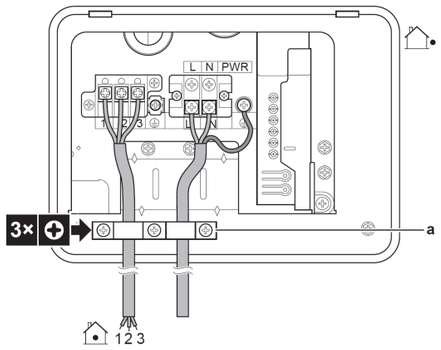



## Indoor Mounting

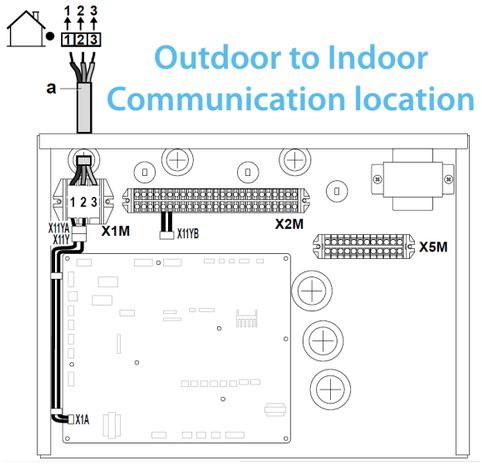
All components are accessible via the front panels.
There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.
Note: indoor unit dimensions are 595mm wide x 625mm deep. The 180ltr unit is 1650mm high and the 230ltr is 1850mm.
The 180ltr unit is 109kg and the 230ltr is 118kg.

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPRA8-18E/DV |
| IU | Indoor Unit | ETVH16S(18/23)D6V |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |

## Outdoor Unit Switchbox location

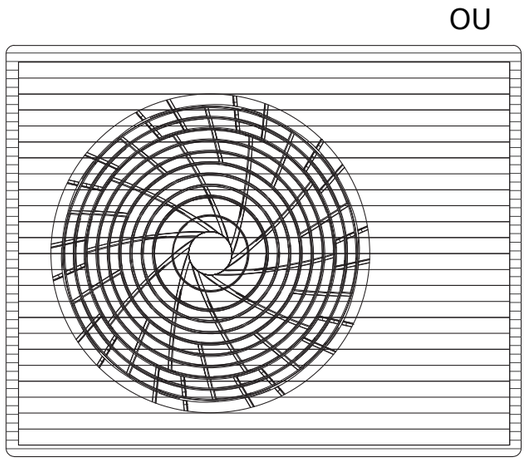


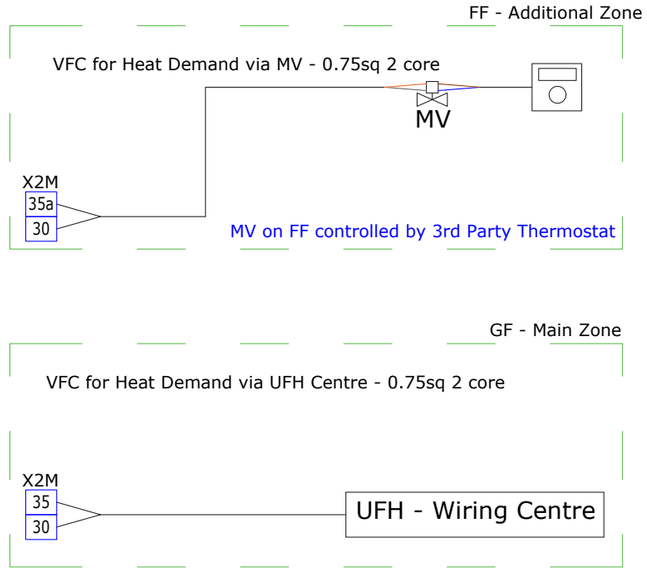

## Outdoor to Indoor Communication location

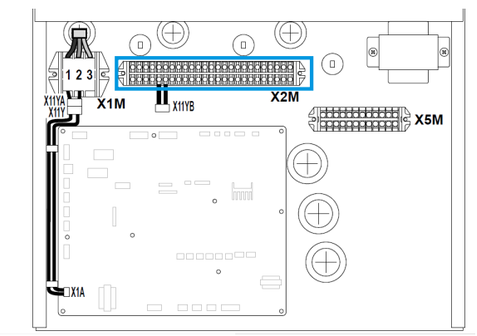



## Back-Up Heater Wiring






## Indoor Unit X2M location

# Altherma 3 High Temperature Wall Hung

# EPRA08-16E/DV

What is the machine doing

Power Up Settings

Error on Setup

Customer Settings

Hot Water + Heating on and off

Set Schedules

End User Settings

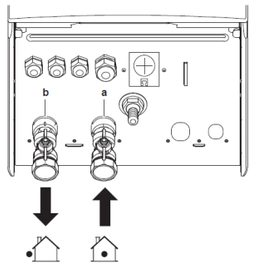
Programming a USB

Loading settings from a USB

## Piping Connections

A) Water Connection out - 1"

B) Water Connection in - 1"




## Piping Guidelines

Minimum: 3m

Maximum: Visit HSN

Height Difference: 10m

Min Flow Rate: 25L/min

| LEGEND: | | |
|---|---|---|
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | delivered with unit |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| RAD | Radiator | field supply |
| MV | Motorized Valve | field supply |
| 3MV | 3 Port Motorized Valve | delivered with Daikin HWT |
| AVF | Anti Freeze Valve | ordered separately |
| OU | Outdoor Unit | EPRA8-18E/DV |
| IU | Indoor Unit | ETBH16D6V |
| HWT | Hot Water Tank | EKHWS-D3V3 / EKHWSU-D3V3 |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CW | Water Inlet Safety Group | field supply , according to local regulations |



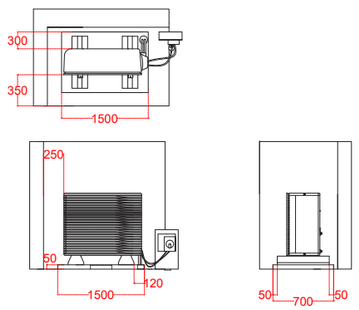

## Outdoor Mounting

Wall Mounted:

The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

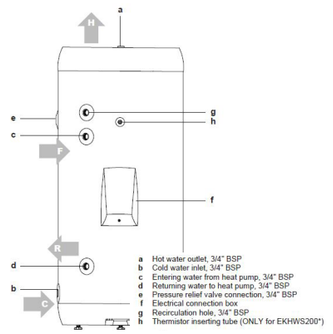
Floor Standing:

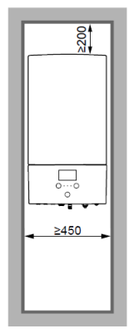
The unit should be installed on 2 rubber mounts/flexi feet (available via Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.

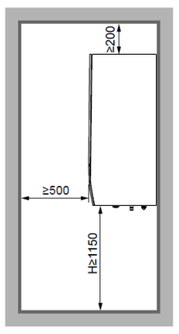



## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals




(mm)

## Indoor Mounting

All components are accessible via the front panels.

There is a condensate pipe pre fitted which needs to be drained appropriately. This can be routed to the left or right hand side of the unit.

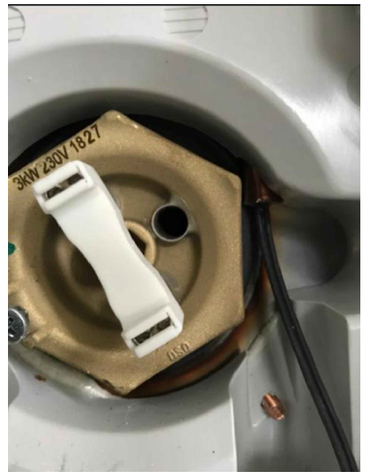
Note: indoor unit dimensions are 840x440x390mm (HxWxD).

Tank sizing varies.

# Altherma 3 High Temperature Wall Hung

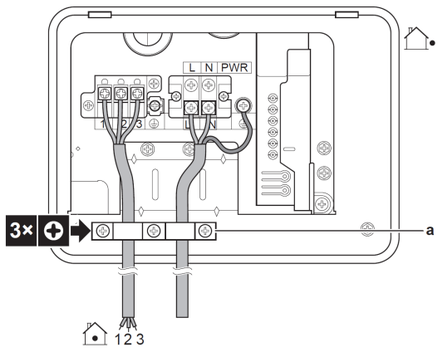
# EPRA08-16E/DV

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EPRA8-18E/DV |
| IU | Indoor Unit | ETVH16S(18/23)D6V/D9W |
| HWT | Hot Water Tank | EKHWS(U)-D3V3 |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Outdoor to Mains | 6sq x 3 core power supply with isolation switch and 32Amp fuse |
| 2 | Indoor to Mains | 4sq x 3 core power supply with 25Amp fuse |
| 3 | Outdoor to Indoor | 1.5sq x 4 Core communication |
| 4 | Indoor heat demand | 0.75 X 2 Core Volt free contact |




For Daikin 300ltr tank fix the tank thermistor in the opening like image

## Outdoor Unit Switchbox location




## Back-Up Heater Wiring

Mains

32A 25A 13A

6sq 3 core OU - Mains

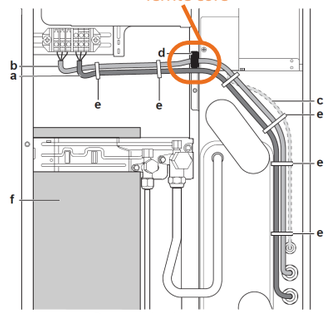
OU

X1M L N

X1M 1 2 3 E

1.5sq 4 core OU - IU

Communication cable only through ferrite core




a Power supply cable
b Communication cable
c Cable for bottom plate heater (optional)
d Ferrite core
e Tie strap
f Compressor

K3M Contactor - X7M supplied with EKHWSU-D3V3

Please allow 30cm slack on these connections to ensure panel can be removed for access

4sq 3 core IU - Mains (when EKHWSU-D3V3 is used)

Pre Wired 5 Core Flex
Brown & Grey - Live
Blue & Blue - Neutral

4sq 3 core IU - Mains

X8M L N

X6M L N

X1M 1 2 3 E

X7M L N

K3M 1 2

X13A

11 14

IV

X2M 10 11a 12 13 14a

X2M - 10 & 11a bridged for BSH overload

2.5sq 3 Core

3 core 3G x 2.5 - 230V

X6M L N

A1P X9A Tank Thermistor

HWT

X2M 30 35a VFC for Heat Demand (Additional Zone) 0.75sq x 2 core

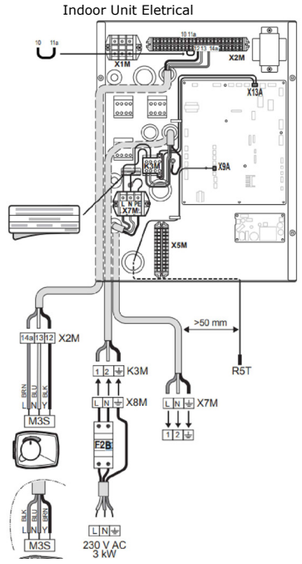
MV on FF controlled by 3rd Party Thermostat

MV

X2M 30 35 VFC for Heat Demand (Main Zone) 0.75sq x 2 core

UFH - Wiring Centre

Indoor Unit Eletrical




DAIKIN

# Altherma 3 Monobloc

# EDLA04-16E/DV

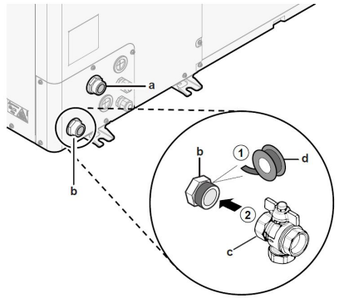
## Piping Connections

Water Connection out - 1"

Water Connection in - 1"

## Piping Limitations

Max Pipe Length - Refer to installation manual



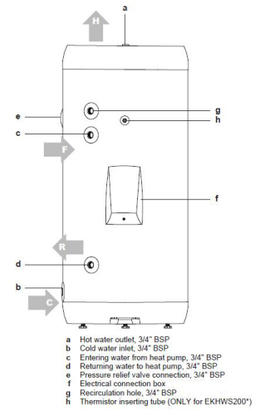

a Water OUT (screw connection, male, 1")
b Water IN (screw connection, male, 1")
c Shut-off valve with integrated filter (delivered as accessory)(2× screw connection, female, 1")
d Thread sealant

Monobloc Overview

| For 4 - 8kw Monobloc | |
|---|---|
| **If operation is....** | **Then the minimum required flow rate is....** |
| Cooling | 10 l/min |
| Heating | 6 l/min |
| BUH operation | 12 l/min |
| Heating defrost | 12 l /min |
| DHW | 25 l/min |

| For 9 - 16kw Monobloc | |
|---|---|
| **If operation is....** | **Then the minimum required flow rate is....** |
| Cooling | 20 l/min |
| Heating/defrost when outdoor temperature is above -5' C | |
| Heating/defrost when outdoor temperature is below -5' C | 22 l/min |
| Domestic hot water production | 28 l /min |

| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EDLA04-16E/DV |
| HWT | Hot Water Tank | EKHWS(U)XXXDV3 |
| IV | Isolation Valve | delivered with unit |
| FK | Filling Kit | field supply, according to local regulations |
| STR | Strainer | field supply |
| EV | Expansion Vessel | field supply |
| CWS | Water Inlet Safety Group | field supply , according to local regulations |
| TMV | Thermostatic Valve | field supply |
| BPV | ByPass Valve | Ordered separately for monobloc units |
| UFH | Underfloor Heating | field supply |
| UH | Manifold | field supply |
| AFV | Anti Freeze Valve | ordered separately |
| 3MV | 3 Port Motorized Valve | delivered with Daikin HWT |




a Hot water outlet, 3/4" BSP
b Cold water inlet, 3/4" BSP
c Entering water from heat pump, 3/4" BSP
d Returning water to heat pump, 3/4" BSP
e Pressure relief valve connection, 3/4" BSP
f Electrical connection box
g Recirculation hole, 3/4" BSP
h Thermistor inserting tube (ONLY for EKHWS200*)

3 Way Valve Demo



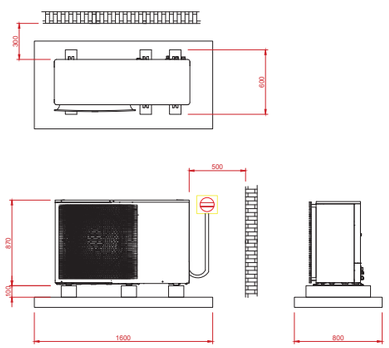

## Outdoor Mounting

Wall Mounted:

The unit should be installed on cantilever arms (field supply) with drip tray fitted (available via Daikin) and condensate pipe fitted to storm drain.

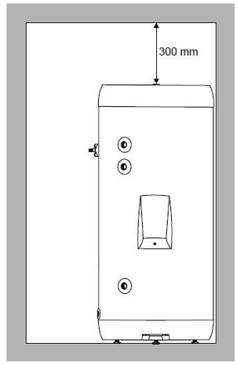
Floor Standing:

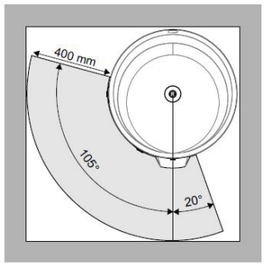
The unit should be installed on 3 rubber mounts/flexi feet (supplied via Daikin). The drainage can also be achieved by the means of an eco-drain or drain gully underneath the unit connected to storm drain.




## Precommissioning Steps

1. Plinth sized correctly as shown with condensate run off
2. Duct sealed and dry
3. Power to Indoor and Outdoor unit
4. Power to Back-Up Heater
5. External control wired
6. System filled and vented
7. Bypass valve fitted on farthest loop from heat pump. Ensure min. flow rate as per manuals



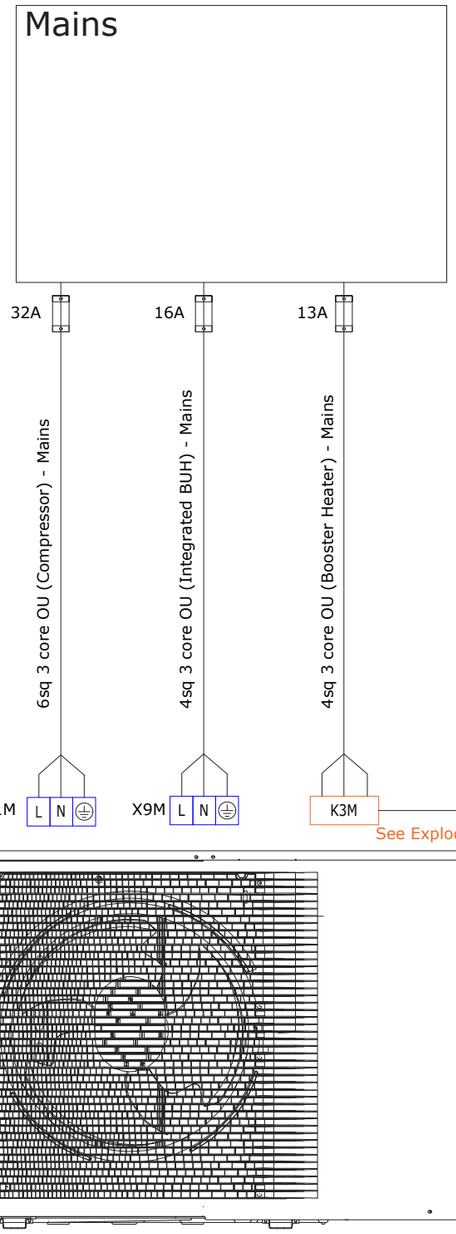

## Indoor Mounting

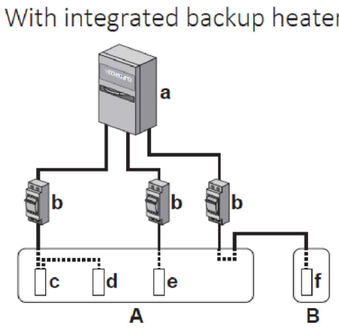
There is a condensate pipe pre fitted which needs to be drained appropriately.

Note: indoor unit dimensions are as follows;
200L Tank - 600 x 600 x 1305mm
300L Tank - 600 x 600 x 1785mm

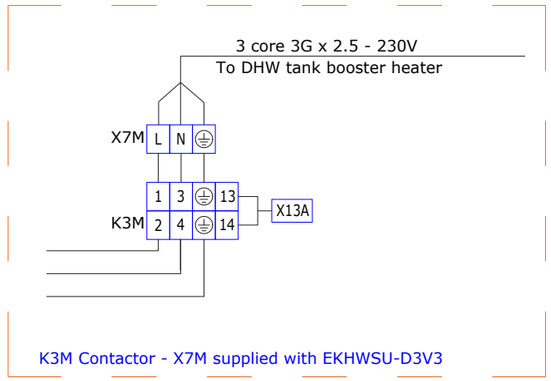
| LEGEND: | | |
|---|---|---|
| OU | Outdoor Unit | EDLA04-16E/DV |
| HWT | Hot Water Tank | EKHWS(U)XXXDV3 |
| UFH | UFH Wiring Centre | field supply |
| MV | Motorized Valve | field supply |
| 1 | Mains to Compressor | 6sq x 3 core power supply with 32Amp fuse |
| 2 | Mains to Integrated BUH | 4sq x 3 core power supply with 16Amp fuse |
| 3 | Mains to Booster Heater | 4sq x 3 core power supply with 13Amp fuse |
| 5 | Outdoor to Tank | 2.5sq x 3 Core 3G |
| 6 | Outdoor to Interface | 0.75sq X 4 Core |

Monobloc Overview



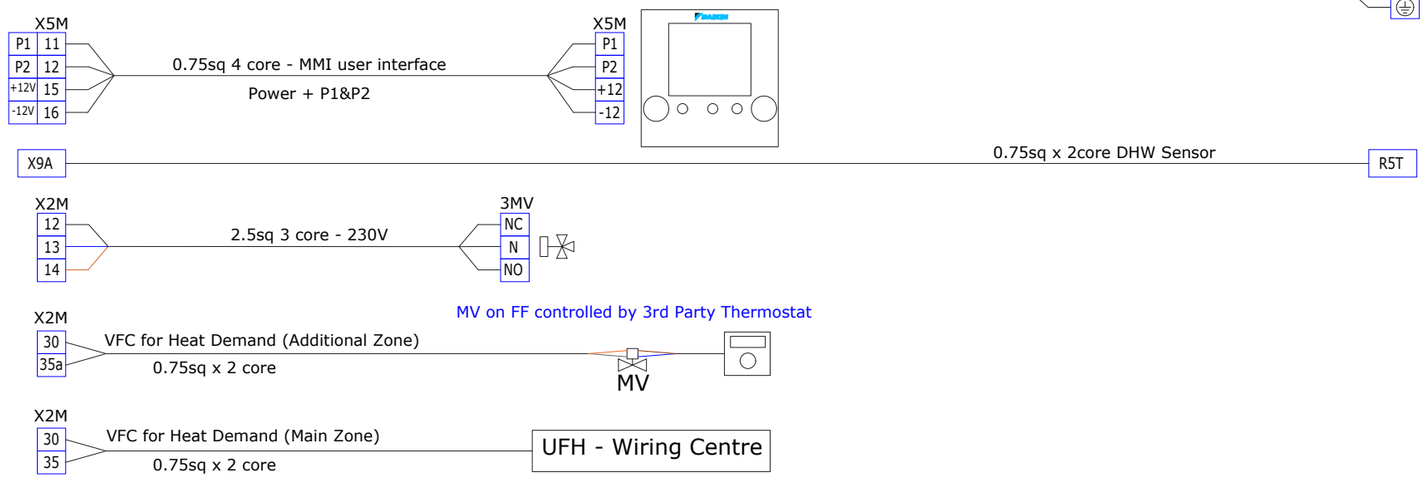



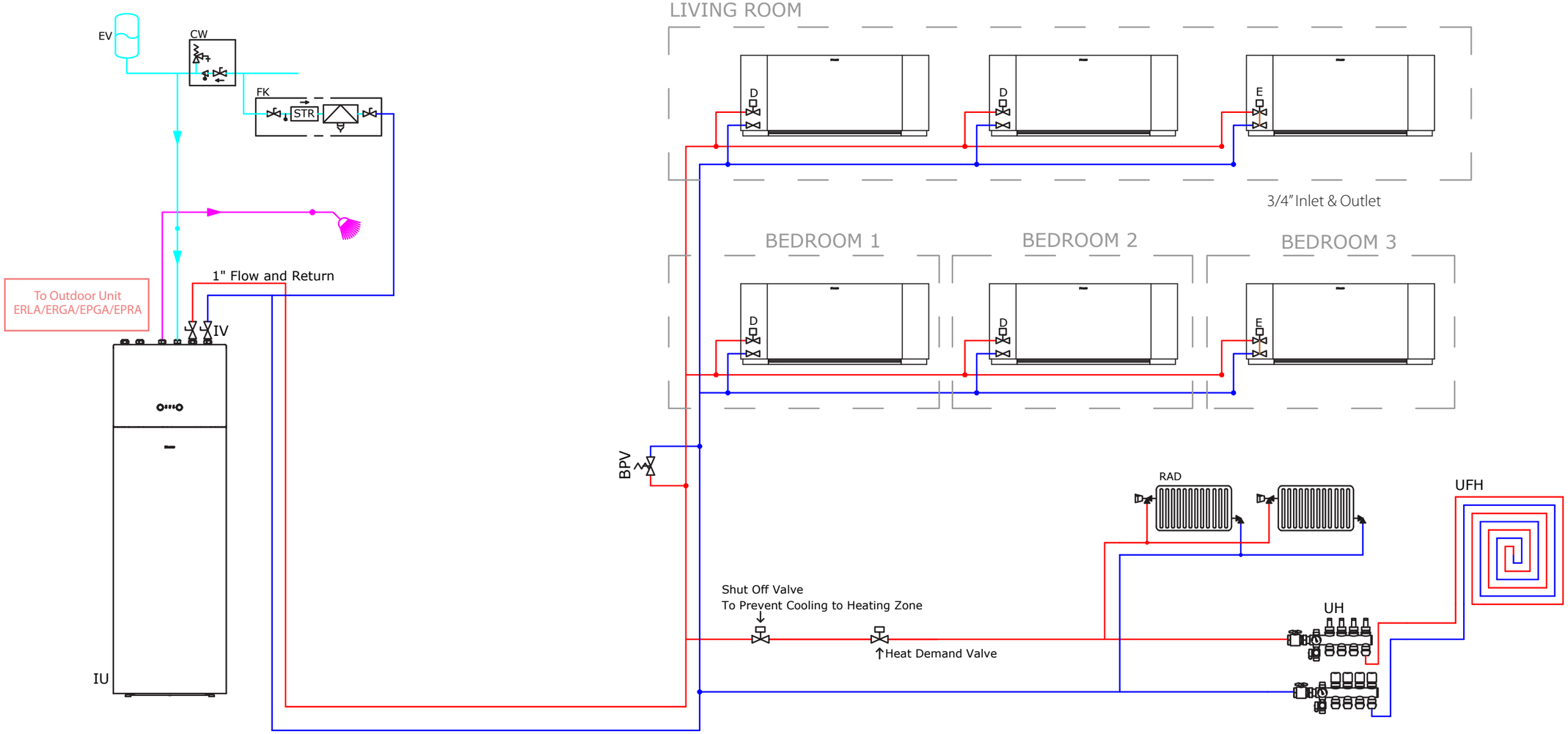

**A** Outdoor unit
**B** DHW tank
**C** External backup heater kit
**a** Electrical cabinet: **Normal kWh rate power supply**
**b** Overcurrent fuse
**c** Compressor module
**d** Hydro module
**e** Backup heater
**f** Booster heater




K3M Contactor - X7M supplied with EKHWSU-D3V3


For Daikin 300ltr tank
fix the tank thermistor
in the opening like image



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## Precommissioning Steps

1. Ensure the wall/ceiling supporting the unit can support the weight
2. Ensure the inlet and outlet grills are free of obstacles
3. Hydraulic connections are sealed and dry
4. Ensure min flow temp of 4° to HPC.
5. All pipework from indoor to HPC to be insulated
6. Check the correct outflow of the condensate drain off by pouring .5L of water into the collection tray in about 5 - 10 minutes
7. Before filling the system make sure the hydraulic unit locksheild is open
8. Evacuate all air from the system as per manual pg12
9. Ensure power to unit as per Elec drawing
10. Condensate drain lines required for cooling

## HPC Horizontal Installation

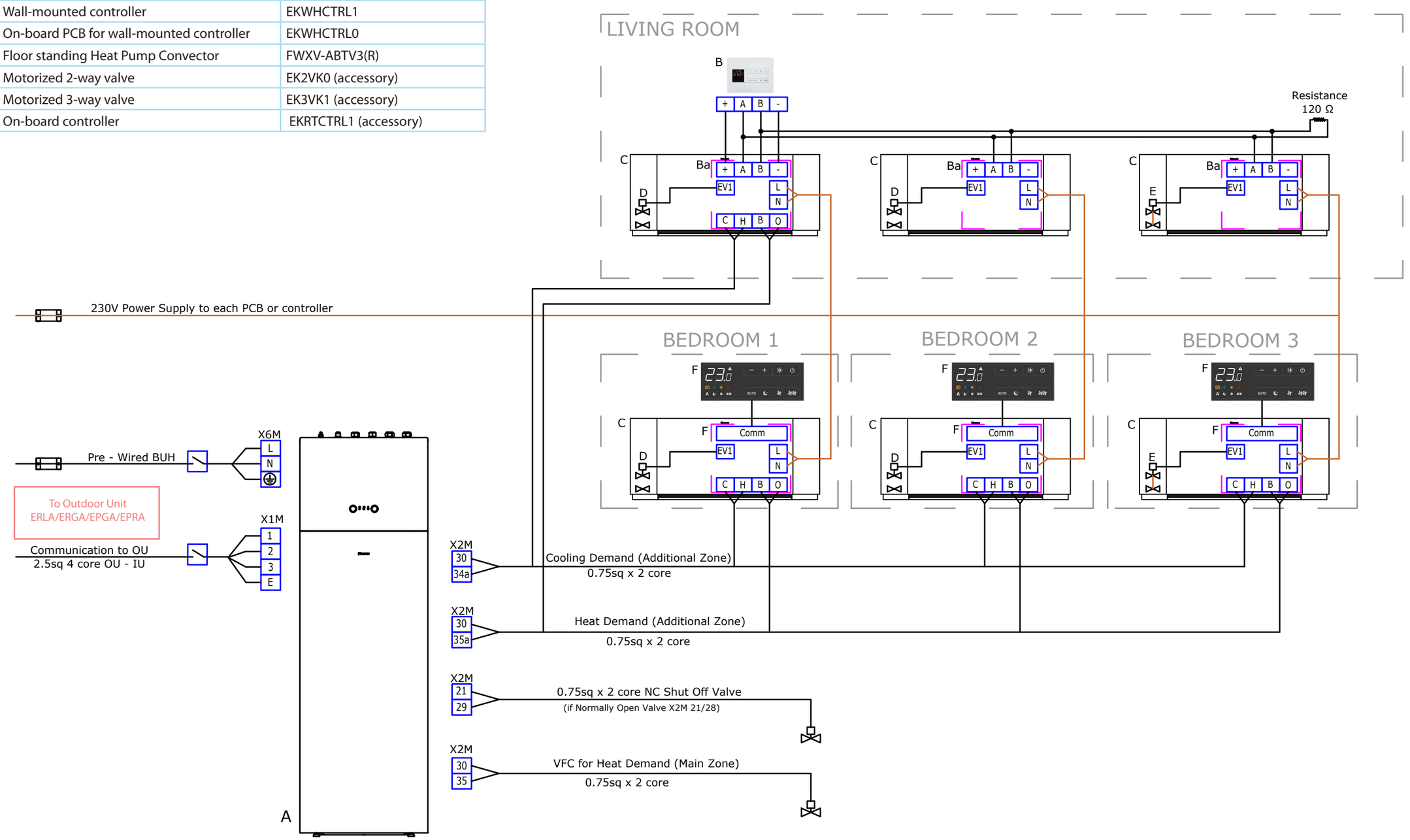
- Using the paper template, trace on the wall/ ceiling the position of the two fixing brackets and the two rear screws.
- Install the unit at level (with a 1-2% tolerance towards the drainage pipe to facilitate the flow of water). A condensate pump may be required.
- Ensure access hatch is provided

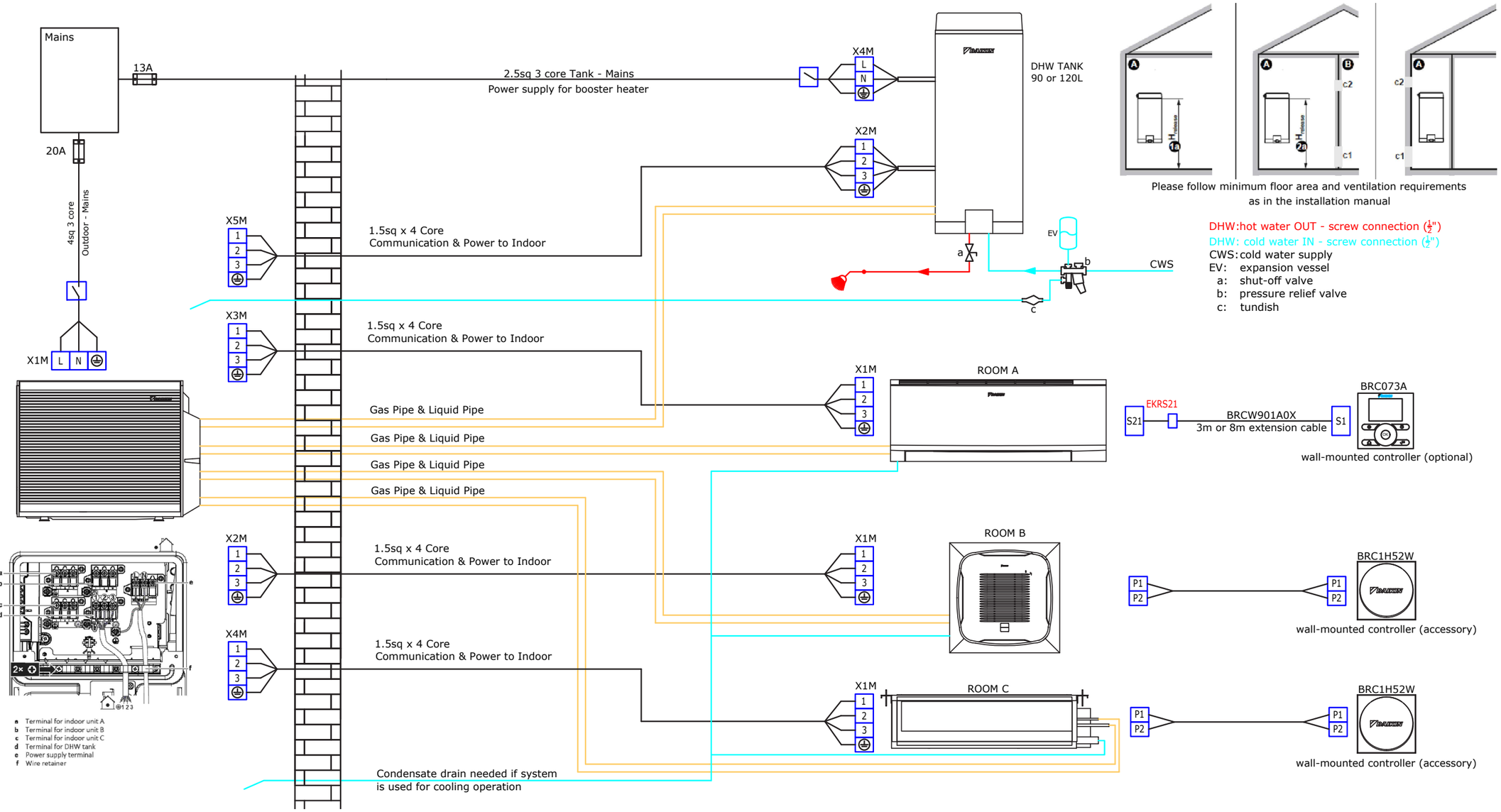
| LEGEND: | | |
|---|---|---|
| IU | Indoor Unit | Varies |
| D | Motorized 2-way valve | EK2VK0 (accessory) |
| E | Motorized 3-way valve | EK3VK1 (accessory) |

Heat Pump Convectors

YouTube

| LEGEND: | | |
|---|---|---|
| A | Indoor Unit | |
| B | Wall-mounted controller | EKWHCTRL1 |
| Ba | On-board PCB for wall-mounted controller | EKWHCTRL0 |
| C | Floor standing Heat Pump Convector | FWXV-ABTV3(R) |
| D | Motorized 2-way valve | EK2VK0 (accessory) |
| E | Motorized 3-way valve | EK3VK1 (accessory) |
| F | On-board controller | EKRTCTRL1 (accessory) |









Please follow minimum floor area and ventilation requirements as in the installation manual

DHW:hot water OUT - screw connection (½")
DHW: cold water IN - screw connection (½")
CWS: cold water supply
EV: expansion vessel
a: shut-off valve
b: pressure relief valve
c: tundish



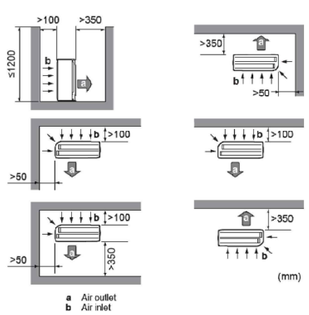

wall-mounted controller (optional)

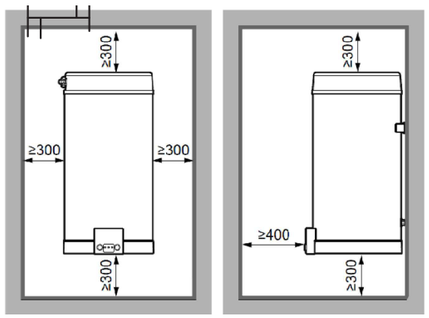



wall-mounted controller (accessory)




wall-mounted controller (accessory)




| Port | Dimensions | Class | Reducer |
|---|---|---|---|
| A | Liquid ø6.4 mm (1/4") | 15, 20, 25, 35, 42* | - |
| | Gas ø9.5 mm (3/8") | | |
| B+C | Liquid ø6.4 mm (1/4")<br>Gas ø12.7 mm (1/2") | 15, 20, 25, 35, 42* | 1+2 (accessory) |
| | | 42, 50, 60 | - |
| | | 71** | ASYCPIR |
| To tank | Liquid ø6.4 mm (1/4") | 90, 120 | - |
| | Gas ø9.5 mm (3/8") | | |

* Only in case of connection with FTXM42R
** Only for connection with FBA71A9. Use option ASYCPIR for liquid (3/8" → 1/4") and gas (5/8" → 1/2")

| LEGEND: |
|---|
| FTXM-R (wall-mounted indoor unit) |
| FCAG-B (round flow cassette indoor unit) |
| FDXM-F9 (concealed ceiling indoor unit) |
| EKHWET-BV3 (DHW tank) |
| 4MWXM52A9 (outdoor unit) |

Multi+

YouTube

# Altherma Accessories

| TYPE | | DESCRIPTION | CODE | ALTHERMA 3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Low Temperature Single Fan | | Low Temperature Single Fan | | Low Temperature Twin Fan | | High Temperature Single Fan | | Monobloc | Multi+ |
| | | | | ERGA RF | ERGA RW | ERLA RF | ERLA RW | EPGA RF | EPGA RW | EPRA RF | EPRA RW | EDLA | 4MWXM-A9 |
| | | | | Floor Standing | Wall Hung | Floor Standing | Wall Hung | Floor Standing | Wall Hung | Floor Standing | Wall Hung | N/A | N/A |
| Installation | | DN20 Bypass Valve | 140111 | included | included | included | included | included | included | included | included | • | |
| | | AntiFreeze Valve | AFVALVE1 | | | | | • (2 required) | • (2 required) | • (2 required) | • (2 required) | • (2 required) | |
| | | Third Party Tank Kit for Tank with Sensor Pocket, incl. 3 way valve & LT thermistor | EKHY3PART | | • | | • | | • | | • | • | |
| | | DHW Unvented Kit | EKUHWHTB | • | • | • | • | • | • | • | • | • | • |
| Controls | Single | Madoka Controller  | BRC1HHDS/W/K | • | • | • | • | • | • | • | • | • | |
| | Multi | DCOM Gateway | DCOM-LT/IO | | | • | • | • | • | • | • | • | |
| | | Sequence Controller – DCOM LT/IO required | EKCC-W | | | • | • | • | • | • | • | • | |
| | Adapters | Lan Adapter Basic + PV Solar connection | BRP069A61 | | | | | • | • | | | | |
| | | Lan Adapter Basic | BRP069A62 | | | | | • | • | | | | |
| | | WLAN Adaptor - Module | BRP069A71 | • | • | • | • | | | • | • | • | |
| | | WLAN Adaptor - Cartridge | BRP069A78 | included | included | • | • | | | | included | Included (4-8 class) | included |
| | | Demand PCB | EKRP1AHT | • | • | • | • | • | • | • | • | • | |
| | | Digital I/O PCB | EKRP1HBA | • | • | • | • | • | • | • | • | • | |
| Drip Trays, Brackets, Fixings | | Drain Pan (ERGA - Single Fan Units) | EKDP008D | • | • | | | | | | | | |
| | | Outdoor Unit Guard (920 x 1120 x 740mm) | K.CG750S | • | • | | | | | | | | |
| | | Back Panel for K.CG750S | K.CG750FPS | • | • | | | | | | | | |
| | | Outdoor Unit Guard (1120 x 1120 x 640mm) | K.CGM | • | • | | | | | | | | |
| | | Part guard to cover exposed side coil | K.CGSIDE | • | • | | | | | | | | • |
| | | Wall brackets - (250kg, 660mm long) | K.CWBXL | • | • | | | | | | | | • |
| | | Wall brackets - stainless steel (250kg, 660mm long) | K.CWBXLSS | • | • | | | | | | | | • |
| | | Low Sound Cover (ERGA) | EKLN08A1 | • | • | | | | | | | | • |
| | | Flexi Feet | K.FF600S | • | • | • | • | • (3 required) | • (3 required) | • | • | K.FF600S(X1),2 Feet<br>K.FF600S(X2),3 Feet | • |

## Useful applications and pages

Daikin Service App

Daikin Technical Hub

Daikin Onecta App

Daikin E Care App

Danfoss Ref Tools

Coming Soon

Daikin Commissioning Tool

Daikin Energy Labels (Eco Design Data)

Daikin Extranet

Daikin Madoka Assistant

Daikin Multi Selection Tool

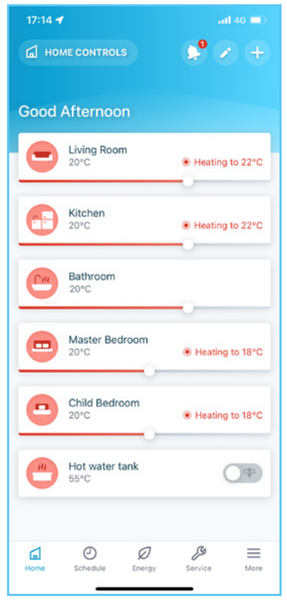
Daikin Databooks & Efficiencies

# Always in control

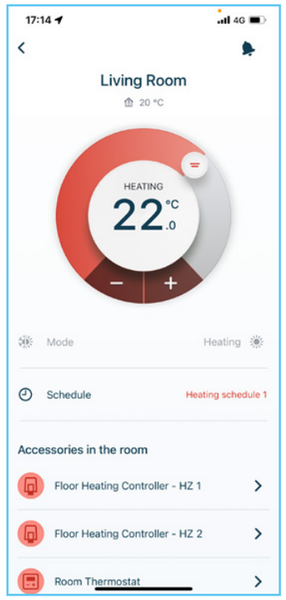
onecta

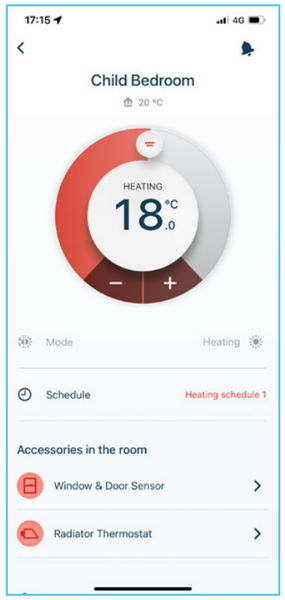
## Jump into a fully connected system!

With Onecta app, you have an overview of all rooms temperatures. You can manage them individually, at home or remotely.




Room overview

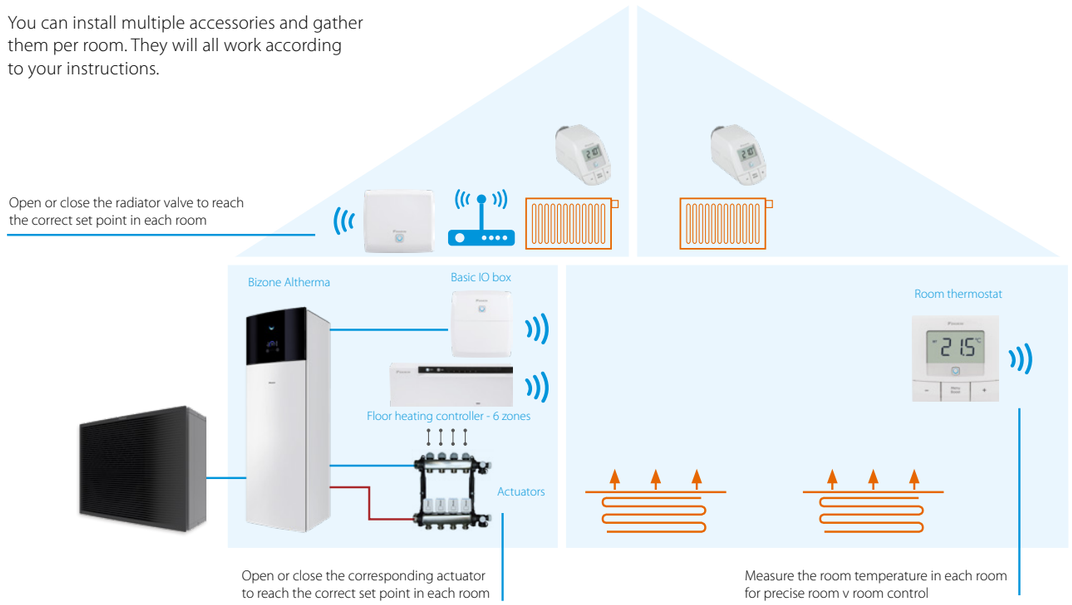


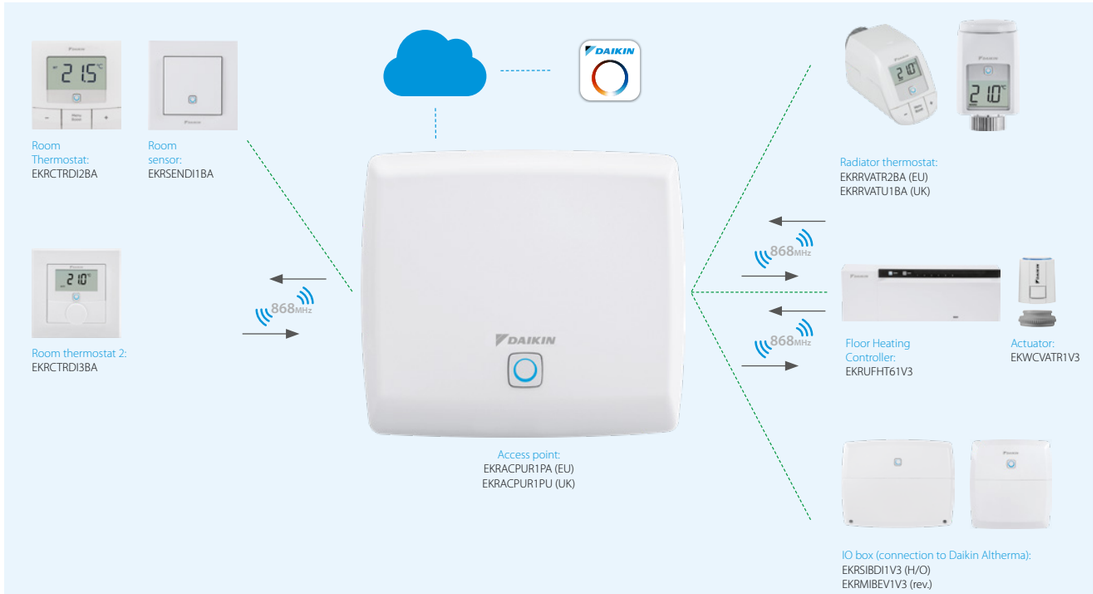

Individual room overview

## Room control made easy

You can install multiple accessories and gather them per room. They will all work according to your instructions.




## Portfolio overview



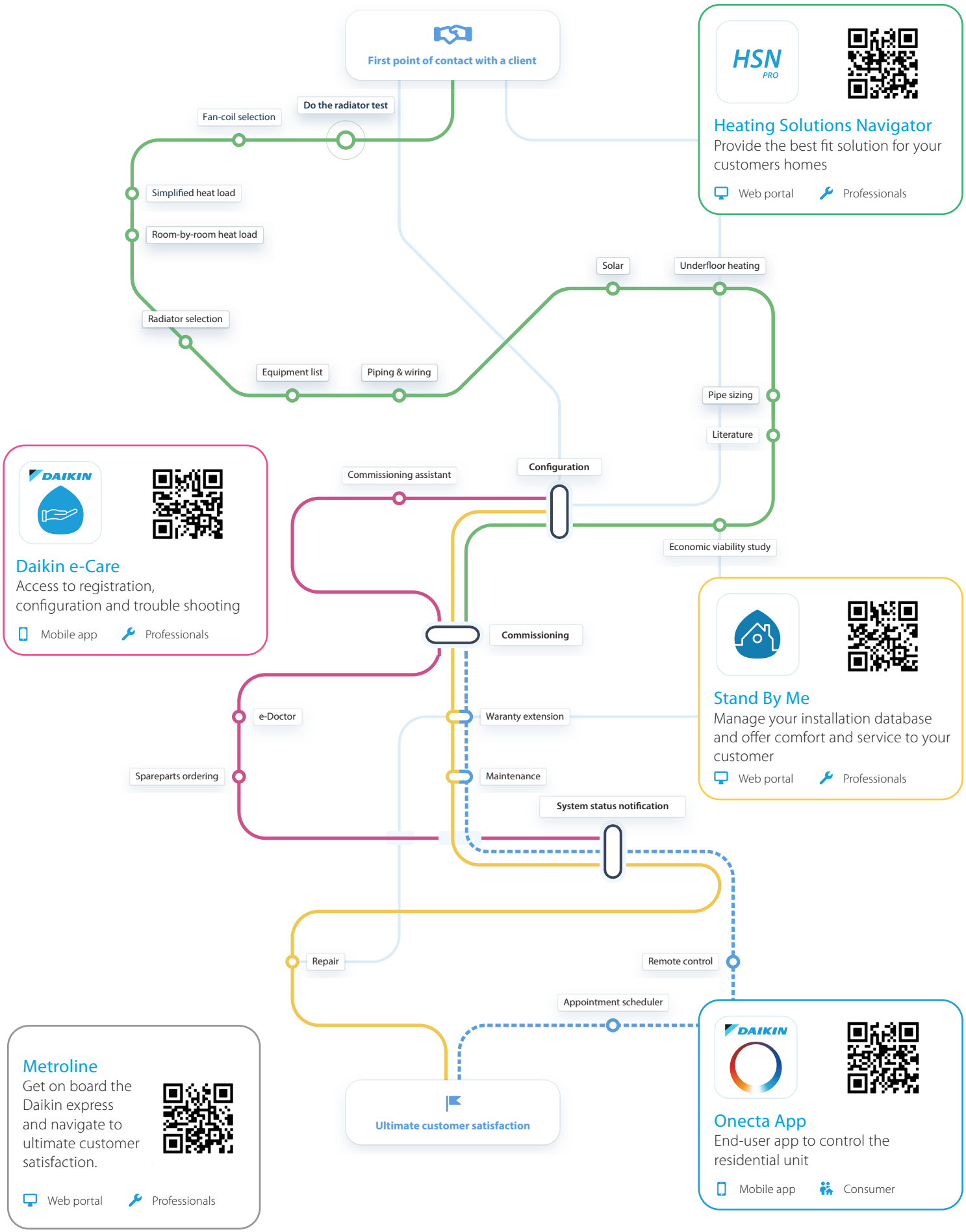

## Combination table

| | | Outdoor unit | Indoor unit | |
|---|---|---|---|---|
| **Air-to-water heat pump** | **Daikin Altherma 3 H MT** Class 08-10-12 | EPRA-E | Floor standing | ETVH/X/Z-E |
| | | | $ECH_2O$ | ETSH(B)/X(B)-P-E |
| | | | Wall mounted | ETBH/X-E |
| | **Daikin Altherma 3 H HT** Class 14-16-18 | EPRA-DV37/W17 | Floor standing | ETVH/X/Z-E |
| | | | $ECH_2O$ | ETSH(B)/X(B)-P-E |
| | | | Wall mounted | ETBH/X-E- |
| | **Daikin Altherma 3 R** 4-6-8 kW | ERGA-EV(H)(7) | Floor standing | EHVH/X/Z-E |
| | | | $ECH_2O$ | ETSH(B)/X(B)-P-E |
| | | | Wall mounted | EHBH/X-E |
| | **Daikin Altherma 3 R** 11-14-16 kW | ERLA-D | Floor standing | EBVH/X/Z-D |
| | | | $ECH_2O$ | EBSH/X-D |
| | | | Wall mounted | EBBH/X-D |
| | **Daikin Altherma 3 M** 4-6-8 kW | EBLA-E | | |
| | | EDLA-E | | |
| | **Daikin Altherma 3 M** 9-11-14-16 kW | EBLA-D | | |
| | | EDLA-D | | |
| **Ground source heat pump** | **Daikin Altherma 3 GEO** | | Floor standing | EGSAH/X-D |
| | **Daikin Altherma 3 WS** | | Floor standing | EWSAH/X-D9W |
| **Hybrid heat pump** | **Daikin Altherma R Hybrid** | EVLQ-CV3 | Wall mounted | EHYHBH-AV32 + EHYKOMB-A |
| | **Daikin Altherma H Hybrid** | EJHA-AV3 | Wall mounted | EHY2KOMB28/32A A |

DAIKIN

# Stand By Me, a journey to customer satisfaction

It's time to relax. With your customer's new Daikin installation and Stand By Me service program, you can rest assured they are benefiting from the best comfort, energy efficiency, usability and service available on the market. Stand By Me eliminates your clients' worries and provides them with a free, extended warranty, quick follow-up from Daikin service providers, and additional warranties for specific parts.



Daikin Ireland
2004/4 Orchard Avenue,
Citywest, Dublin 24
www.daikin.ie

for enquires please contact
heating@daikin.ie