# Daikin Altherma 3 ERGA-DV3 / EHVH-D6V Installer Guide

Outdoor	ERGA04DV3		ERGA06DV3		ERGA08DV3	
Indoor	EHVH04S18D6V	EHVH04S23D6V	EHVH08S18D6V	EHVH08S23D6V	EHVH08S18D6V	EHVH08S23D6V

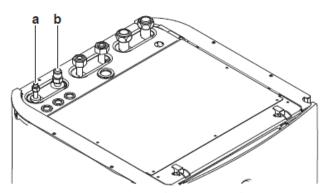
## Mechanical

Outdoor unit to Indoor Unit: 5/8" Gas Line 1/4" Liquid Line

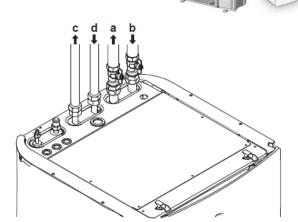
To be completed by F-Gas Certified Installer.

Indoor Unit DHW Outlet & Inlet: 3/4" Female

**Indoor Space Heating Flow & Return: 1" Female** 



- a Refrigerant liquid connection
- b Refrigerant gas connection



- Space heating water out
- b Space heating water in
- c Domestic hot water out
- **d** Domestic cold water in (cold water supply)

### **Valves Included with Units**

2 x Shut Off Valves – Space heating circuit

1 x Overpressure By-Pass Valve – To be installed on space heating circuit as far away from the indoor unit as possible. Before the motorized valves / manifolds.

When DHW Unvented Kit is purchased (EKUHWHTB) – 1 x Pressure Reducing Valve and Expansion Relief Valve & 1 x Expansion Vessel

**Space Heating Zone(s)** 

System can work with Underfloor Heating, Radiators & Convectors. See example schematics.

## **Mounting the Units**

#### **Outdoor:**

- If the outdoor unit is to be 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.
- If the outdoor unit is to be 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.

Note outdoor unit dimensions 740 x 884 x 388mm and weight is 58.5kg

The unit requires space around the back and sides and approx. 1 metre in front for adequate airflow.

#### Indoor:

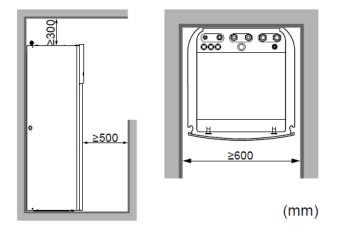
The pipework goes directly into the top of the unit.

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 600mm 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.



Outdoor unit to Mains: 4sq x 3 core Power Supply (25 AMP Fuse Breaker RCBO type B/C sensitive)

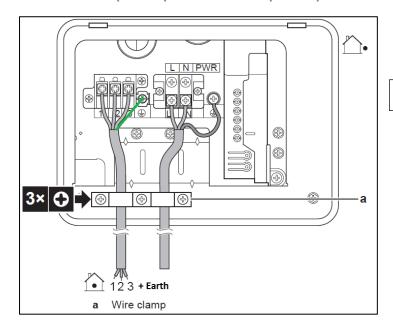
X1M (LNE) – Include Isolation Switch

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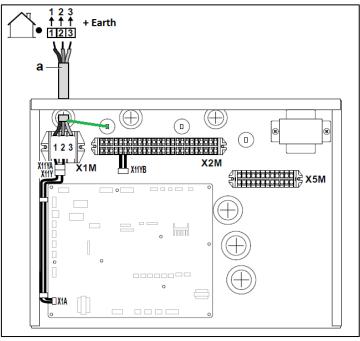
Pre-Wired Cable X6M (LNE)

### **Indoor Unit to Outdoor Unit: 2.5sq x 4 core Communication**

Outdoor = X1M (123 + E) - Indoor = X1M (123 + E)



Outdoor Unit Switch Box

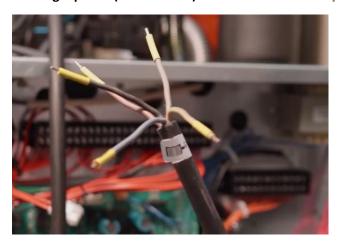


Indoor Unit Switch Box

# **Pre Wired Back Up Heater**

5 core flex pre wired for 3 Phase Supply (D9W Models) (3 x Live, Neutral & Earth)

For single phase (D6V Models) connect Brown & Grey to Live AND (Black/Blue) & Blue to Neutral



# **User Interface**

4 Pin & 2 Pin connections from indoor connect to first two connections as shown.

The unit can be commissioned via a USB Key. See Contractor Tools for details.



## **Controls Methods**

The system can be configured to work off Leaving Water Temp, Room Thermostat or External Room Thermostat.

Control	In this control
Leaving water	Unit operation is decided based on the leaving water temperature regardless the actual room temperature and/or heating or cooling demand of the room.
External room thermostat	Unit operation is decided by the external thermostat or equivalent (e.g. heat pump convector).
Room thermostat	Unit operation is decided based on the ambient temperature of the user interface used as a room thermostat.

### **External Room Thermostat (Most Common)**

System can be used with any 3<sup>rd</sup> party Thermostats.

Indoor unit requires a Volt Free Contact from Heat Demand (e.g. Motorized Valves / UFH Wiring Centre)

0.75sq x 2 Core Indoor – (X2M 30 & 35 Zone 1) + (X2M 30 & 35a Additional Zone)

Note: If there are Rads GF & FF this counts as 1 Zone.

Only if there is UFH & Rads then it counts as 2 Zones and we need to use 35a as above.



## **Additional Tools for Contractors**

### **Stand By Me**

This is an online warranty platform for end users & installers.

Once a unit is installed the installer uploads the information via Stand By Me or the Daikin E-Care App. The end users can register their warranty via a 5 digit code. Both parties will receive notifications about annual services.

https://standbyme.daikin.ie/en/

### **Heating Solutions Navigator**

This is a tool built into Stand By Me. This allows installer to complete heat loss calculations, radiator sizing and UFH design & configure the system onto a USB key for quick and easy on site commissioning.

#### **Manuals**

Full installation Manuals available via Daikin.ie

https://www.daikin.ie/en\_gb/products/ERGA04-08DV.html

https://www.daikin.ie/en\_gb/products/EHVH-DVG.html