



The New Activair R290 High Temperature Heat Pump

The Activair High Temperature Heat Pump uses R290 refrigerant.

The refrigerant will be located in the outdoor unit only and will not require interference. This document provides the guidelines for those involved in installation.



| Model | R290 (kg) |
|---------------|-----------|
| Activair 9kW | 0.50kg |
| Activair 15kW | 0.85kg |
| Activair 22kW | 1.30kg |

Important information about R290 refrigerant:

- GWP = 3
- LFL= 0.038kg/m³
- Class (ISO 817) = A3 “Higher Flammability”
- Properties and Appearance:
 - Colourless
 - Odourless
 - Denser than air
 - Exists in vapour form at normal atmospheric pressure

Competency:

All individuals involved in the installation process should be appropriately competent to carry out any task they perform.

This includes:



Comprehend the risks and hazards e.g. flammability



Adherence and understanding of local and national regulations and standard e.g. EN 378



The ability to foster a safe working environment.



The ability to apply safe working practice.

For more information, please refer to the latest edition of ADR regulations.

Storage is subject to fire brigades' assessment per the local area and are required to be checked individually. Although it is expected that the storage requirements remain unchanged; for R290 systems, it is the same as R32 systems.

Protective Workwear, Equipment and Tools:

All protective workwear requirements for the handling of R290 products are the same as R32 products.

This includes personal protective clothing as follows:

- Appropriate protective clothing and shoes
- Eye protection or face shield
- Protective gloves

Protection Zone Requirements:

1. No possible sources of ignition

Such as open flames, electrical systems, plug sockets, lamps, electrical switches, and objects with high surface temperatures (>360°C)


2. No building openings.

Such as doors, windows, light shafts, cellar entrances, ventilation system openings.

3. No drainage and wastewater shafts.

In the event of a refrigerant leak, it is essential that the refrigerant cannot enter any drainage shafts.

In the protective zone, no subsequent structural alterations are to be made that impact on the above outlined rules for the protective zone.

 **Important**

- It is the installer/ service engineer's responsibility to follow the local and national regulations.
- All work is required to be completed in accordance with Trianco's recommendation. For the Activair range, please refer to the installation manual.

Storage and Transport:

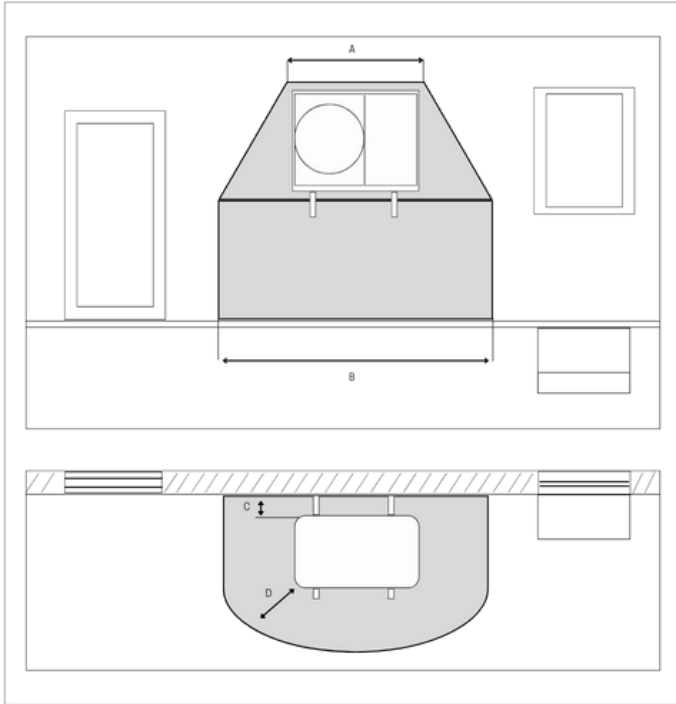
ADR Regulation: 'European Agreement concerning the International Carriage of Dangerous Goods by Road.' The regulation outlines the rules that allow for the safe transportation of goods. Goods classified as dangerous have a 'UN number' assigned by the consignor. Limitations and control measurements can then be applied.

With Activair HTHP, UN number 3368 and Transport Category is applicable.

If the total vehicle load remains below '1000 points', systems stay below ADR threshold. This means that, the minimum safety requirements would apply:

- General training for driver (ADR 1.3.2). A record should be kept (ADR 1.3.3).
- Carry one 2kg dry powder fire extinguisher or equivalent (ADR 8.1.4.2)
- Stow the dangerous goods properly (ADR 7.5.7)

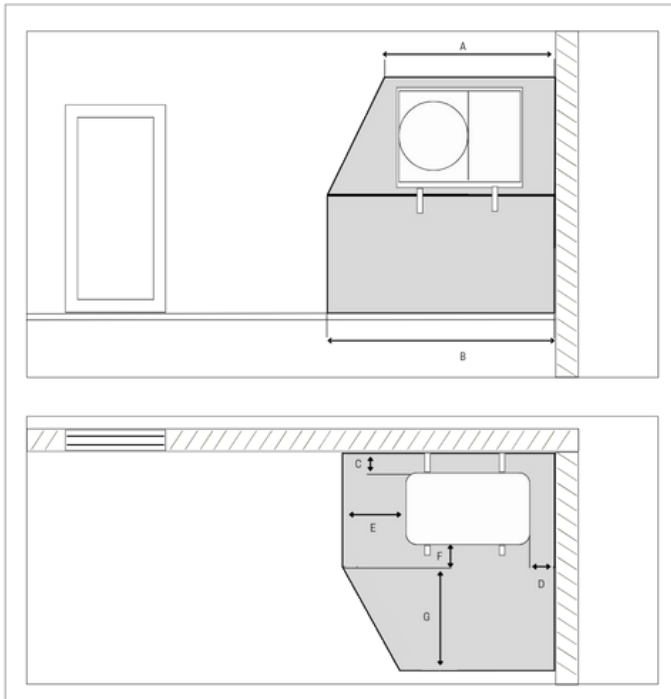
1.4 Protective zone for wall installation in front of a building wall



- A 9kW - 2167 / 15kW - 2287 / 22kW - 2250mm
- B 9kW - 3167 / 15kW - 3287 / 22kW - 3250mm
- C 300*
- D 1000*

*For all Activair models

1.5 Protective zone for wall installation in a building corner

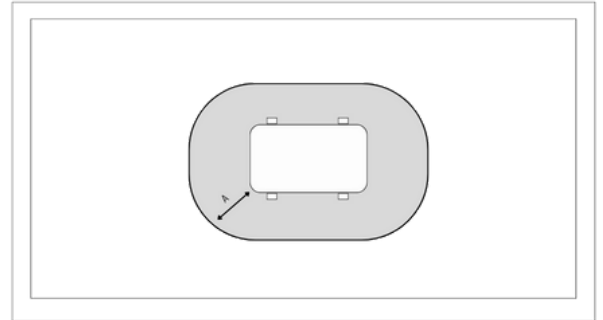


- A 9kW - 2167 / 15kW - 2287 / 22kW - 2250mm
- B 9kW - 2667 / 15kW - 2787 / 22kW - 2750mm

- C 300mm*
- D 500mm*
- E 1000mm*
- F 500mm*
- G 1800mm*

*For all Activair models

1.6 Protective zone for flat-roof installation



- A 1000mm*

*For all Activair models.