

# Model: Kair Trakmaster

## Model Number: KHRVF100

### Installation and Maintenance Instructions and User Guide

Rev 2.05



*Damp Free Solutions*

6 Chiltonian, Manor Lane, Lee, SE12 0TX

Tel: 08451 66 20 40 Fax: 08451 66 20 50

Web: [www.kiltox.co.uk](http://www.kiltox.co.uk)

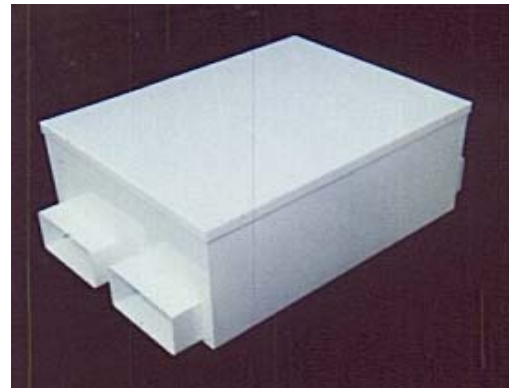
#### ■ GENERAL

Kair™ Trakmaster KHRVF100 Heat Recovery Ventilators provide a continuous air change, replacing stale moisture-laden air with fresh, pre-warmed air from outside. The continuous controlling of Relative Humidity levels ensures that conditions will not exist in which condensation or mould growth problems can develop and thrive.

Kair™ Trakmaster KHRVF100 controls condensation problems in small flats and bungalows and are an integral part of the Kair 'Hybrid' Heat Recovery Systems (See separate Data sheet).

The pressurised input of fresh air and the exhaust of damp polluted air will create continuous air movement, which in turn leads to surface evaporation. In effect a 'drying out' process takes place.

Unlike conventional extractor fans, which suck out and waste expensively produced heat, Kair™ Trakmaster KHRVF100 Heat Recovery Ventilators recover up to 65% of exhaust heat, even when operating on boost mode.



#### ■ SITE REQUIREMENTS

The Kair™ Trakmaster is designed for easy installation by use of standard rectangular or circular ducting. Installation can, if required, be undertaken entirely within a building with no requirement for external access using core-drilled 'through wall ducting cowls'. This feature can dramatically reduce installation costs on high-rise applications.

The Kair™ Trakmaster unit should be sited as near as possible to an external wall, with input and exhaust points kept slightly apart to prohibit cross contamination of exhaust and supply air.

The units are factory set to provide a positive pressure and the input supply of air should be directed to a central point such as a landing stairwell, main entrance hall or passage.

If specifically required, a 'balanced' airflow can be obtained by adjusting the wiring of the unit. This should only be carried out by a qualified electrician who should contact Kair™ Ventilation for detailed instructions.

#### ■ CONTROL

A variety of manual or automatic controls are available including:

a) KSC2 – Two speed switch for manual override.



b) HUM2 - Automatic switching two speed humidistat



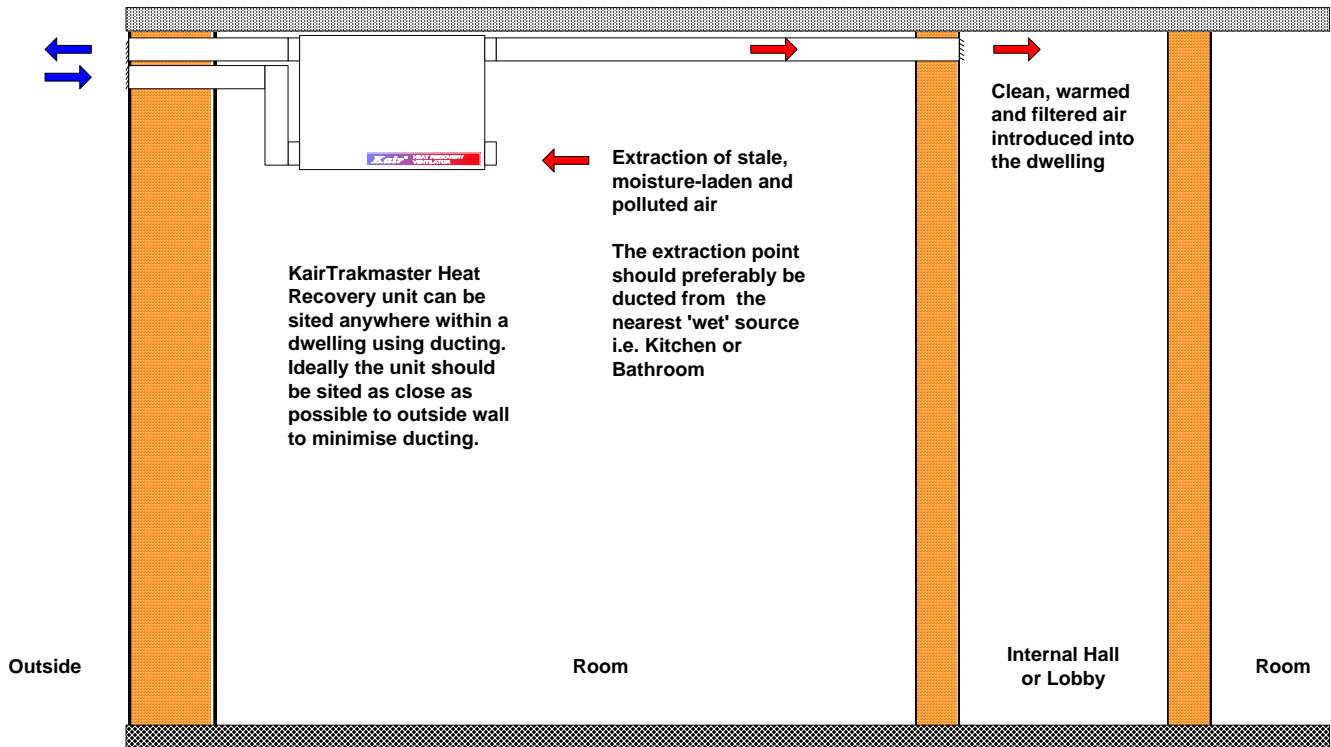
Independent switching for input or extract motors to vary pressures for Summer / Winter settings – internal bathrooms / kitchens variable life styles – multiple occupancy.

## ■ SITING THE UNIT

Identify a suitable place in which to site the unit, taking into account the need to preserve the aesthetics of the dwelling.

The unit is best sited in a cupboard in the kitchen pantry or entrance hallway and should be fitted with minimal runs of ducting. Unless the unit is to be boxed in, it should NOT be sited in bedrooms or bathrooms.

All grilles should be sited as near to ceilings as possible to take advantage of warm air convection. Avoid siting the grille where air brought in may be excessively contaminated with odours.



### *Internal Extract Point(s):*

Wherever possible, air should be extracted from the kitchen, bathroom or other moisture producing areas.

### *Internal Supply Point(s):*

Air should always be supplied to a central point such as an entrance hall, a passage or landing stairwell, to create pressurisation and continuous air movement.

### *External Supply Point:*

The external supply grille must be sited at least 500mm away from the flue of gas or open fire appliances to avoid the possibility of backflow from exhaust gas.

If the unit is sited in a loft, ensure that there is adequate ventilation within the loft space itself. If loft is not adequately ventilated, the supply duct should be fed directly from the outside air supply via ridge, tile or soffit vents etc.

### *External Extract Point:*

Can be sited anywhere within reason but kept as far from window openings as possible. It should also be kept, wherever possible, slightly apart from the supply feed grille so as to minimise cross contamination of input/exhaust air.

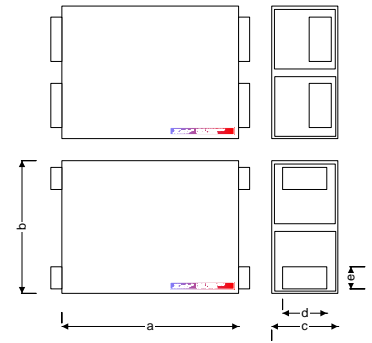
N.B. All ducting terminals and joins should be sealed with mastic sealant to ensure airflow efficiency.

## ■ INSTALLING THE UNIT

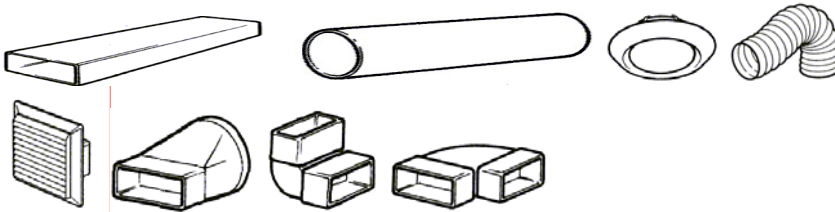
**IMPORTANT:** Ensure that the mains electrical supply is switched OFF before commencing installation or maintenance.

The Kair™ Trakmaster is designed for easy installation by use of 102mm core drilled holes. Installation is undertaken entirely within a building with no requirement for external access, thus reducing installation costs on high-rise applications.

Screwdriver access must be provided to the sides of the machine to allow removal off unit lid for maintenance and filter cleaning.



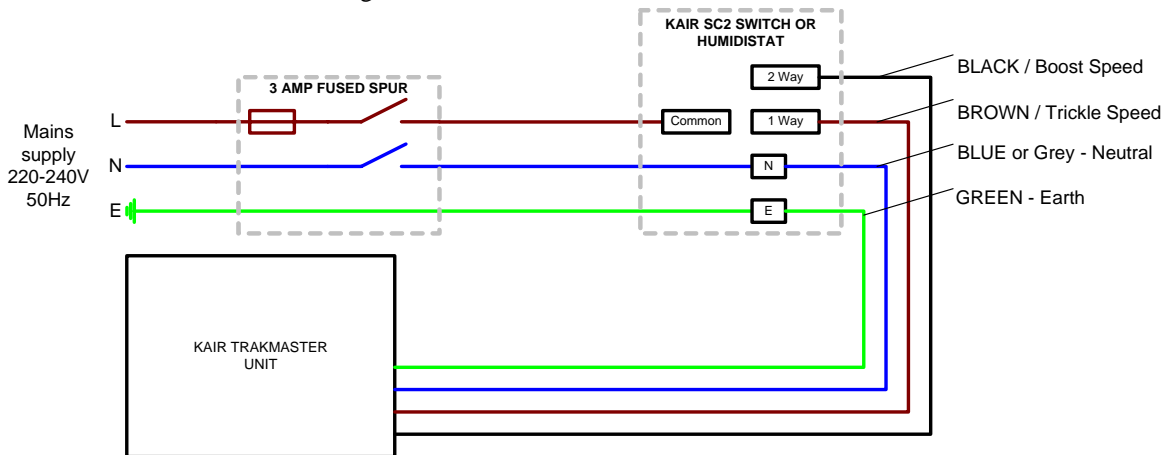
## ■ DUCTING THE UNIT



Full ancillary list available on request

## ■ WIRING INSTALLATION

Installation can be carried out by a suitably qualified craftsman and connected to electrical supply by an electrician in accordance with current IEE Regulations.



## ■ MAINTENANCE

The unit should be properly maintained with filters being changed at least once a year. Supply and exhaust grilles should be cleaned and kept clear of dust, organic debris etc to ensure free flow of air. Full maintenance / repair service is available.

■ **INSTALLATION DETAILS**

Installer stamp:

SERIAL NUMBER:

DATE INSTALLED:

■ **SUPPLIER DETAILS**

Suppliers stamp:

■ **TECHNICAL ASSISTANCE**

For technical assistance on any matter concerning this unit you may contact the above or the manufacturer:

Kair Ventilation Limited

Post: 6 Chiltonian Industrial Estate, Manor Lane, Lee, London, SE12 0TX

Tel: 08451 66 22 40

Fax: 08451 66 22 50

Web: [www.kair.co.uk](http://www.kair.co.uk)