

# Energy Efficient Heat Recovery

*SAP Appendix Q listed*



**RELIABILITY YOU CAN TRUST**



All New

# LE155 & LE250

## Energy Efficient Heat Recovery

Modern construction and refurbishment standards are guided by environmental issues and energy conservation, resulting in dwellings with improved insulation and energy efficiency.

The dwelling becomes tightly sealed with much reduced adventitious ventilation. A lack of ventilation not only produces an uncomfortable living environment, but also puts the fabric of the building, and its contents, at risk from condensation. To overcome these problems, the dwelling needs to be ventilated (i.e. the stale moisture laden air replaced with fresh air) and the most efficient method is to use a mechanical ventilation system with heat recovery.

Using this method the air can be managed to accurately control the amount of replacement and the fresh air is pre-warmed indirectly by the extracted air.

An average family of four can generate 5-15 litres of water vapour per day and with no means of escape it will migrate to other parts of the house and condense on cooler surfaces.

All models incorporate the Johnson & Starley aluminium heat exchanger. It is robust for long life, has a high efficiency rating and is easily removed for maintenance purposes.



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*LE155*  
*LE250*



Aluminium Plate Heat Exchanger

HIGH EFFICIENCY BOILERS

WARM AIR CENTRAL HEATING  
VENTILATION & HEAT RECOVERY

FILTER & CLEANERS  
WATER HEATERS & CYLINDERS

HOME COMFORT SOLUTIONS

# New Energy Efficient Motors

SAP APPENDIX Q LISTED

## How The System Works

Whole house mechanical ventilation with heat recovery will eradicate condensation and its damaging effects and provide a cleaner, fresher living environment within the dwelling.

Stale, moist air is extracted from 'wet' rooms through grilles/cooker hood (if fitted), passed across an aluminium plate heat exchanger to remove the heat, and the residue is exhausted to atmosphere. Fresh filtered supply air is drawn across the heat exchanger, warmed by the retained heat and distributed through ceiling mounted grilles to 'dry' rooms.

The unit can also be fitted in a roof space or, wall mounted in a utility room or cupboard. A range of remote control options are available - See page 5 for details.



LE155 Heat Recovery  
with optional cooker hood fitted

LE155 & LE250  
without optional cooker hood



### FEATURES

- EC fan motors. - Energy efficient fan motors, approximately half the power consumption of AC fans.
- Integral commissioning panel - for easy and accurate normal running and boost setting.
- Aluminium heat exchanger - for efficiency, long life and ease of maintenance.
- White or steel effect finish - to match with modern designs.



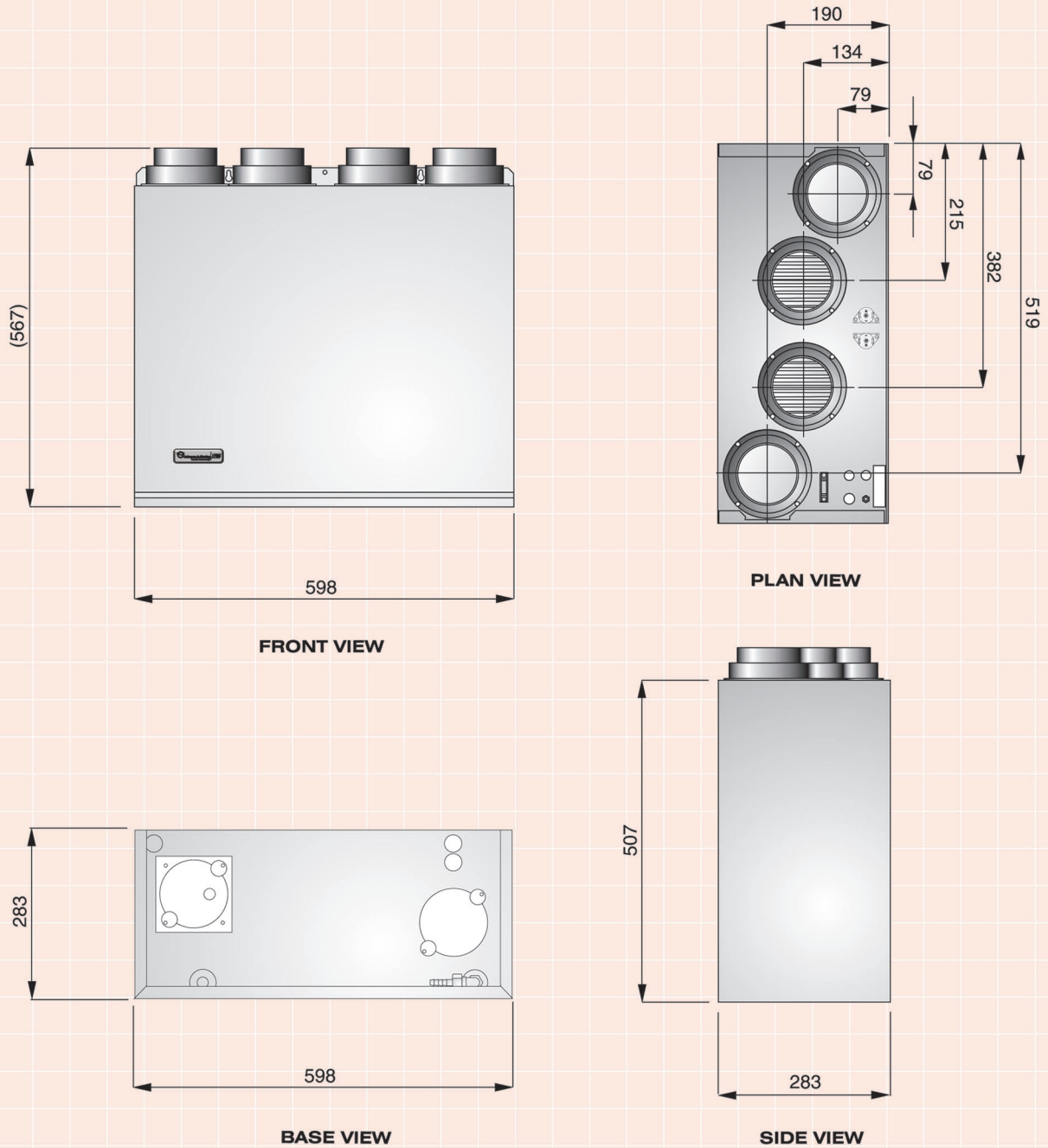
## CHS & CHW COOKER HOOD

When siting the LE155 or LE250 above a cooker hob, the optional slim line cooker hood can be fitted to capture moisture laden air and cooking smells at source.

The hood is complete with filter, lighting, boost and summer mode switching.

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# Technical Dimensions



LE155 & LE250 DIMENSIONS

HIGH EFFICIENCY BOILERS

WARM AIR CENTRAL HEATING  
VENTILATION & HEAT RECOVERY

FILTER & CLEANERS  
WATER HEATERS & CYLINDERS

HOME COMFORT SOLUTIONS

# Controlled Ventilation

Accurate management of supply and extract rates is essential to achieve effective and efficient ventilation of a dwelling. The LE range of Heat Recovery units incorporate a commissioning panel for use by the installer. Extract rates can be accurately set for normal and boost settings.

## Switching Options



Commissioning Panel



### LE155 & LE250

Installed with CHW or CHS Cooker Hood

The boost extract rate will be set at the commissioning panel during installation. In this application the boost facility can be activated by the switch on the cooker hood

Additionally, boost can be controlled from a remotely sited Johnson & Starley speed controller (optional). The unit can also be wired to facilitate other boost switching i.e. humidistat, lighting circuit etc.



### LE155 & LE250

Installed without Cooker Hood

The boost extract rate will be set at the commissioning panel during installation. For boost activation and summer mode switching, a number of optional Johnson & Starley controls are available.

The unit can also be wired to facilitate other boost switching i.e., humidistat, lighting circuit etc.



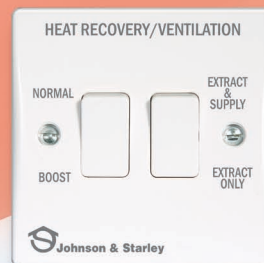
**J&S**  
Remote Speed Controller



**JS3**  
Remote Summer Switch



**JS4**  
Remote Speed Boost



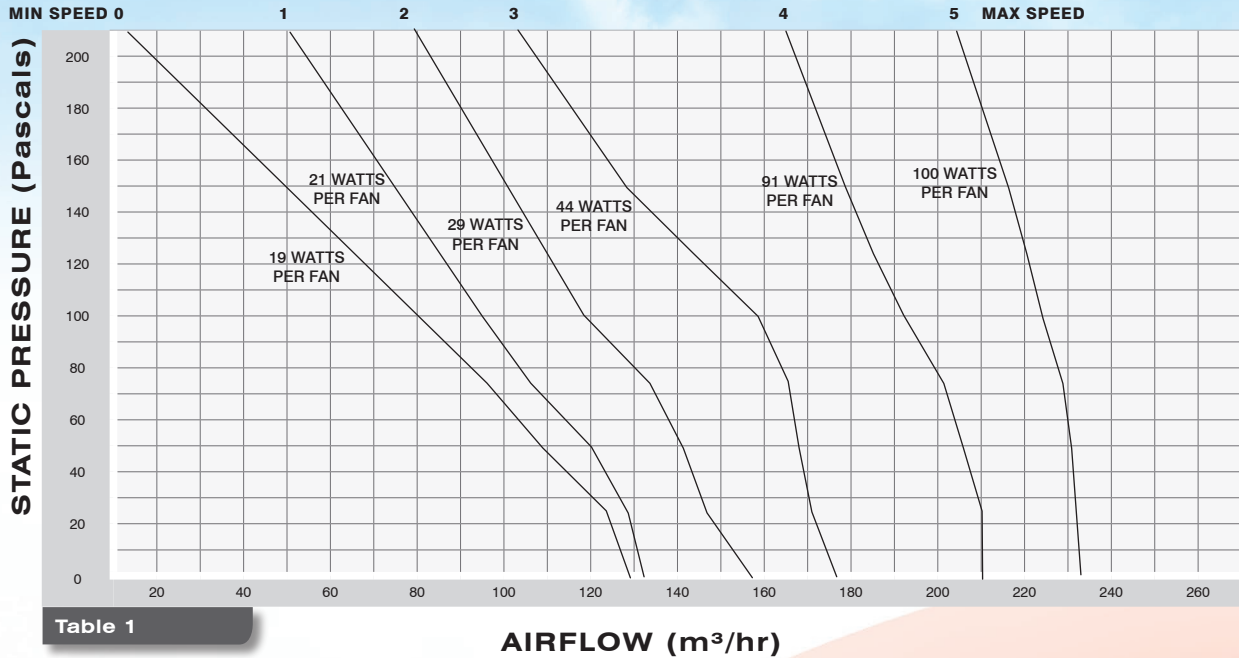
**JS6**  
Remote Boost & Summer Mode Switch

# Fan Performance Graphs

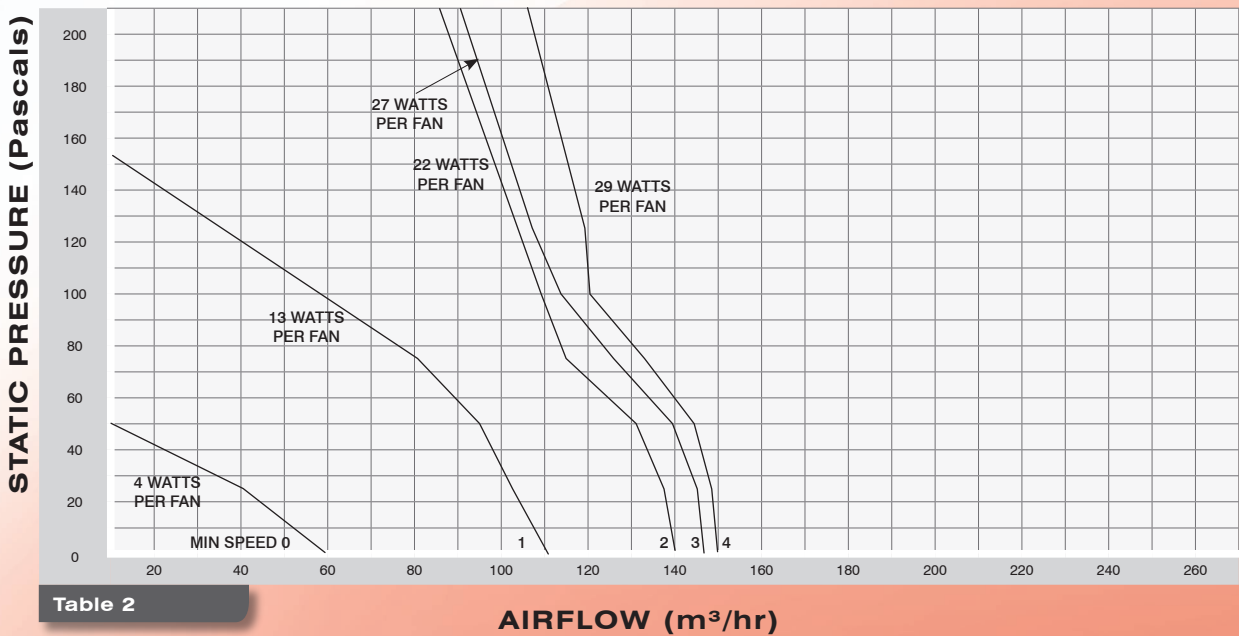
(NOTE:- Performance graphs shown for two extracts, kitchen & bathroom)

## LE155

BOOST SETTING



MINIMUM SETTING



HIGH EFFICIENCY BOILERS

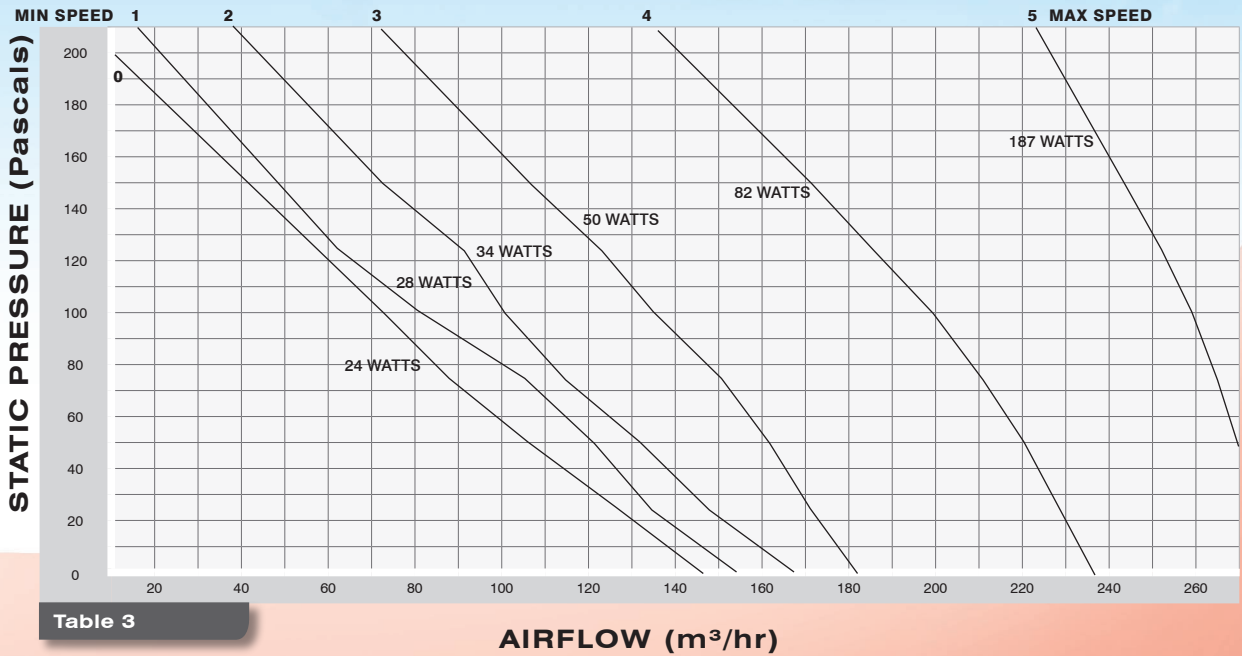
WARM AIR CENTRAL HEATING  
VENTILATION & HEAT RECOVERY

FILTER & CLEANERS  
WATER HEATERS & CYLINDERS

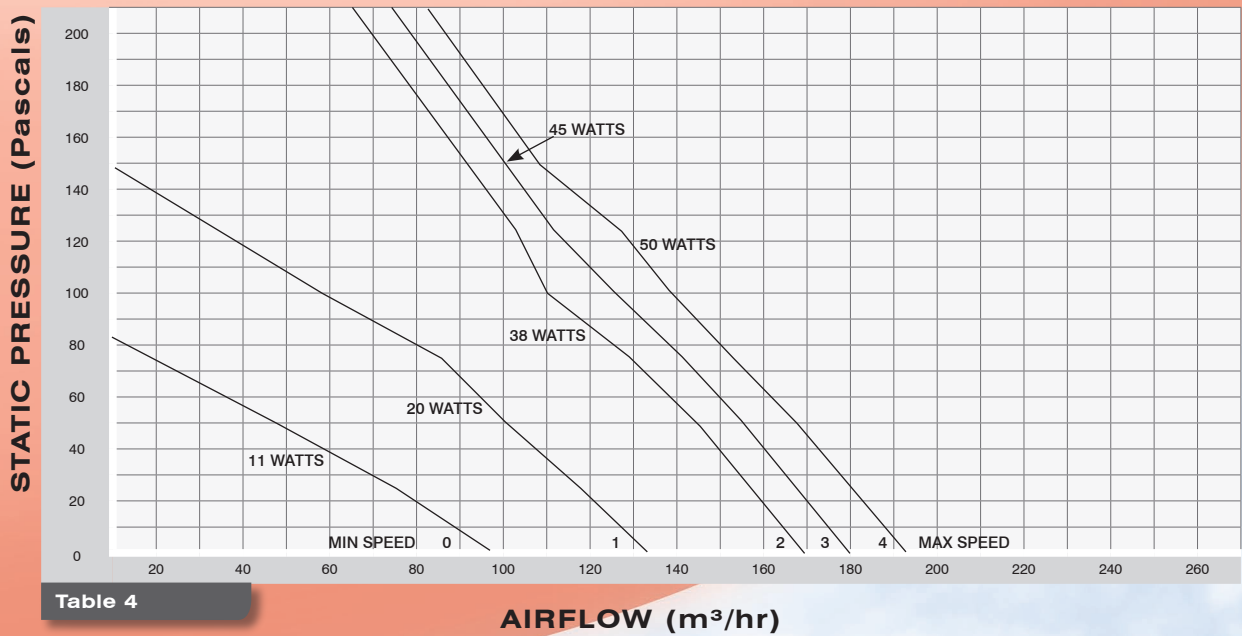
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# LE250

## BOOST SETTING WITH 2 FANS RUNNING



## MINIMUM SETTING WITH 2 FANS RUNNING



**Johnson & Starley** are the leading UK & European manufacturers of a complete range of **Domestic Warm Air Heaters**. All the heaters suit both **Replacement** and **Upgrade** needs and are compliant with the new (2005/6) amendments to Part L of the Building Regulations.

## HOME COMFORT SOLUTIONS

### Company Details

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## COMMERCIAL & INDUSTRIAL H&V SOLUTIONS

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