HRV2.85 Q Plus

## Ultra energy efficient Heat Recovery Ventilation unit

MVHR

For use in medium to large sized dwellings

The enhanced capacity HRV2.85 Q Plus continuously running whole-house ventilation unit with heat recovery has been specifically designed to give improved performance over older models, in line with new build design requirements. It is independently tested by the BRE.

Combining extremely low power consumption and a highly efficient heat exchanger, the HRV2.85 Q Plus is specifically designed to enhance SAP performance via Appendix Q, yet still small enough to be easily incorporated into medium or large sized dwellings.

The Eco versions offer a 100% airflow diverting Summer Bypass, recognised and listed in the UK Product Characteristics Database. They also include intelligent humidity options and can be fitted with the auralite® status indicator, aura-t™ (HMB and B models), auramode® and aurastat® controllers (B models only).

aurastat®	auralite®	auramode®	aura-t™
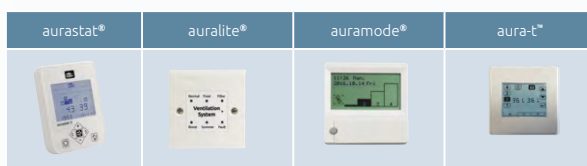
Features & Benefits

- Highly compact, making a highly versatile unit
- Lightweight for easy handling
- Extremely low Specific Fan Power; down to 0.54 W/l/s
- Highly efficient heat exchanger; up to 92%
- Airflow up to 93l/s (334 m³/h) at 100 Pa
- Intelligent controller, quick and easy to commission
- Accepts 150mm diameter ducting, no adaptors required
- Independent fan adjustment
- Intelligent frost protection, stepped reduction of supply air rates prevents HRV unit from freezing
- Setback facility to reduce ventilation where local regulations allow
- Fully adjustable boost overrun timer 0-60 minutes; can be used with non-latching (momentary) switches to prevent unit from being accidentally left in boost mode
- Volt free switching control
- ISO Coarse 55% (G3) filters as standard with ISO Coarse 60% (G4) as an option
- Quick fix mounting bracket
- IP32 rating
- On board aura-t™ option
- Patented features and design
- Effective in reducing pollutants in the home and improving Indoor Air Quality (IAQ), therefore reducing the risk of Toxic Home Syndrome
- Available in left and right handed configurations

Basic version:
- Summer Mode

Eco Versions:
- Intelligent Summer Bypass & humidity controls
- SUMMERboost® facility

Eco HMB Models:
- Compatible with auralite® (TP518) status indicator and aura-t™ controller
- Fitted with removable filter covers on the front panel

Eco B Models:
- Compatible with Eco-aura range; aurastat®, auramode® and aura-t™ controllers and auralite® (TP519) status indicator
- Duct Pre-heater control (requires independent power supply)
- BMS compatible via RS485 (subject to limitations, additional software requirements and specification with any order)

Product Codes

HRV2.85 Q Plus –
TP407A - Energy Rating A

HRV2.85 Q Plus HMB Eco auralite® & aura-t™ ready –
TP407HMB/544 (left hand config) or
TP407HMB/RH (right hand config) – Energy Rating A

HRV2.85 Q Plus B Eco-aura controls ready –
TP417B/LH (left hand config) or
TP417B/RH (right hand config) – Energy Rating A+
TP417BC (Cold Climate) – Energy Rating A+

Filters (Basic Version):
XP40132/099 - ISO Coarse 55% (G3) filters
fitted as standard (UK only).
XP46122/099 - ISO Coarse 60% (G4) filters
fitted on request (Europe fitted as standard).

Filters (Eco Versions):
XP40133/099 - ISO Coarse 55% (G3) filters
fitted as standard (UK only).
XP46133/099 - ISO Coarse 60% (G4) filters
fitted on request (Europe fitted as standard).
XP46222/099 - ISO Coarse 55% (G3)/ISO ePM1 55% (F7)
filters available on request.
XP46232/099 - ISO Coarse 60% (G4) filters/ISO ePM1
55% (F7) filters available on request.

Standards

Conforms to requirements of UK statutory Building
Regulations and Technical Standards for Ventilation and
BRE 398.

SAP Appendix Q tested.

Exceeds requirements of Building Regulations Approved
Document L (England & Wales).

EU RoHS Directive compliant.

Conforms to requirements of EC council directives
relating to Electromagnetic Compatibility and Electrical
Safety:
2006/95/EC (LVD), 2004/108/EC (EMC)
EN 60335-1:2002/A2:2006, EN 60335-2- 80:2003/
A1:2004.

CE Marked.

Specification

Dimensions: 715mm wide x 490mm high (excluding
ports) x 415mm deep (426mm with mounting bracket)

Weight: 24kg

Finish: White Paint

Materials:
Housing: Zintec sheet steel housing, powder
coated white
Internals: Expanded polypropylene (EPP)
Heat exchanger: Polystyrene
Internal insulation: Closed cell foamed Nitrile rubber,
class 'O' fire rating
Standard filters: Grade ISO Coarse 55% (G3) synthetic
filters.

Guarantee period: 3 years (UK only)

Electrical: 230V ~ 50/60Hz, 3A fuse

Installation: Install in accordance with regulatory
requirements, such as the Ventilation: Approved
Document F and the Residential Ventilation Association
recommendations.

Maintenance: Service and filter clean/replacement
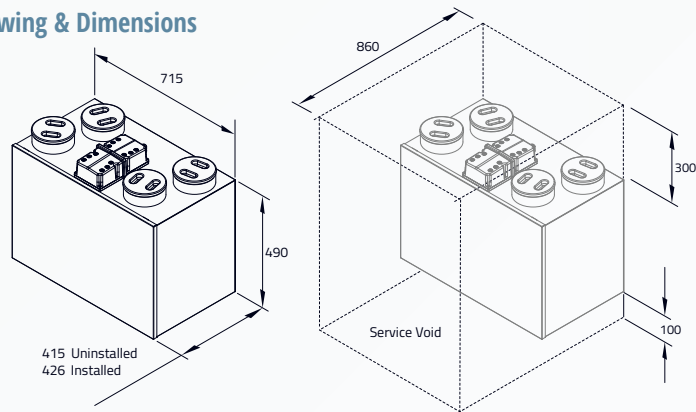subject to local environment - see product manual.

Acoustics: Full acoustic data available online
www.titon.com/acoustics.

Drawing & Dimensions

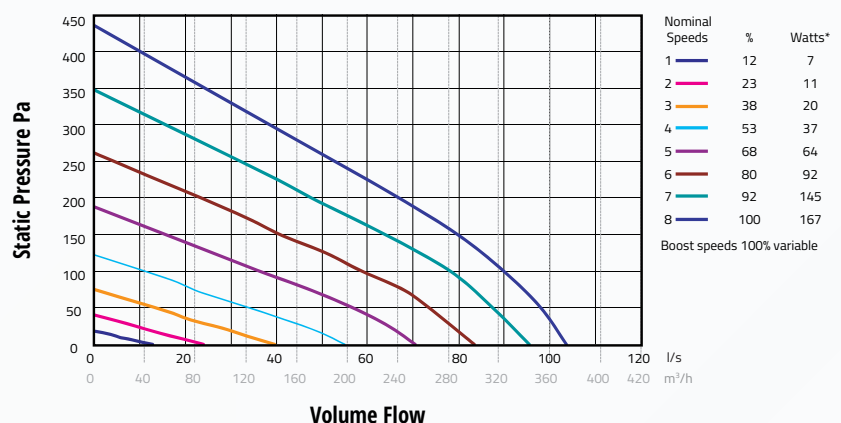Dimensions in mm

Performance

The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at www.titon.com.

Exhaust terminal configuration*	Fan speed setting	SFP (W/l/s)	Heat exchange efficiency (%)	SFP (W/l/s)	Heat exchange efficiency (%)
		2009		2012	
Kitchen + 1 additional wet room	100% variable	0.6	92%	0.6	91%
Kitchen + 2 additional wet rooms	100% variable	0.54	91%	0.62	90%
Kitchen + 3 additional wet rooms	100% variable	0.57	90%	0.72	89%
Kitchen + 4 additional wet rooms	100% variable	0.65	89%	0.88	88%
Kitchen + 5 additional wet rooms	100% variable	0.74	88%	1.06	87%
Kitchen + 6 additional wet rooms	100% variable	0.85	88%	1.3	87%
Kitchen + 7 additional wet rooms	100% variable	1	87%	-	-

Figures taken from the BRE Test Results.
*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements.

Nominal Fan Performance

Nominal Speeds	%	Watts*
1	12	7
2	23	11
3	38	20
4	53	37
5	68	64
6	80	92
7	92	145
8	100	167

Boost speeds 100% variable

*@FID (0 Pa)
100% variable speed control. Performance curves for Eco version.

Acoustic Data

Product	% of Max flow	Airflow	dB(A) @ 3m Hemispherical			dB(A) @ 3m Spherical
			Induct Inlet	Induct Outlet	Casing Breakout	Casing Breakout
HRV2.85 Q Plus	31%	29l/s @ 7Pa	22	33	14	11
	66%	61l/s @ 40Pa	34	47	24	21
	100%	93l/s @ 100Pa	42	56	34	31

For full frequency acoustic data at various speeds please see www.titon.com. All acoustic data is third party tested at Sound Research Laboratories (SRL) Ltd.