HRV Cool Plus™

HRV Accessories

Offering extra protection against overheating

The new Titon HRV Cool Plus™ offers a solution designed to deliver cooling and filtered air for user comfort in warmer weather conditions. It seamlessly integrates into heat recovery ventilation systems and has intuitive controls.

Equipped with an integrated cooling module, the HRV Q Plus/MVHR system enhances its performance by pre-cooling incoming fresh air during warmer months. By merging improved air quality and energy efficiency, MVHR systems with cooling modules greatly aid in creating sustainable and comfortable indoor environments, while also aligning with Approved Document O (ADO) guidelines by recycling energy within a home.

Cooling

Features & Benefits

- **Up to 3.3 kW total cooling (subject to volume flow and relative humidity)**
- **Available for wall mounting or floor mounting. When using the wall bracket the supporting wall must be suitable for the combined weight of the cooler, MVHR, bracket assembly. (100 kg Wall / 106 kg Floor)**
- **Minimal maintenance of fully sealed refrigerant heat pump with coil & fin heat exchangers. Similar to a fridge or freezer. Proven & reliable. Refrigerant is R407c (GWP 1774)**
- **Heat cell will provide cooling assistance to pre-chill incoming fresh air when in operation exactly as it does normally with heat**
- **Installation below the ceiling in the heated space but compact enough to permit the location of a washing machine below**
- **Port sizes are 160mm**

Operation Cycle

- Pre-set temperature inside the dwelling is reached
- MVHR increased speed to cooler boost
- Once achieved the cooler will start
- Pre-set tempered internal temperature reached
- Cooler will deactivate
- MVHR decreased to continuous levels

Additional Controls

- Optional manual mode via the onboard aura-t™
- Minimum atmosphere temperature controls to ensure the cooler doesn't operate with the dwelling heating system
- Cooler can be deactivated via the thermostat and/or onboard aura-t™

How

- Thermostat in Cooling Mode
- MVHR atmospheric temperature sensing
- Sufficient airflow for cooling operation automatically set by our controls
- Internal pressure sensors ensure cooler operates only when sufficient airflow is maintained
- Active communication between MVHR and Cooler

Mechanical Ventilation with Heat Recovery (MVHR) is a critical system in modern building design, serving as a key component for maintaining indoor air quality and energy efficiency. MVHR systems are primarily designed to provide a constant supply of fresh, filtered air while simultaneously expelling stale air from within a building. This process not only ensures a healthier indoor environment by reducing pollutants and excess humidity but also plays a vital role in conserving energy.

Product Codes

HRV Cool Q Plus™ -
TP755 - Wall mounted unit
TP754 - Floor mounted unit
(left hand config only)

Filters:
ISO Coarse 85% (G4) filters fitted as standard.

Pack requirements

- Cooler enabled HRV Q Plus MVHR
- HRV Cool Plus™ cooler
- Connection silencer ducts x 4
- Room Thermostat
- Wall mounting bracket or Floor standing bracket
- Middle duct cover

Accessories

- Cooler top duct cover
- HRV Drain Cover

Please note that the room thermostat will be in the packing for the HRV MVHR and that the 'Duct cover' will be part of the mounting kits.

Standards

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

Meets requirements of Building Regulations Approved Document O (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 and UKCA marked.

Specification

Dimensions:
Wall mounted
704mm wide x 515mm deep x 1430 high (excluding ports).
Floor mounted
704mm wide x 515mm deep x 2005 high (excluding ports).

Weight: Wall mounted 100kg, Floor mounted 106kg
Finish: White Paint (RAL9016 Semi-gloss Traffic White)

Materials:
Housing: Zintec sheet steel housing, powder coated white
Internals: Expanded polypropylene (EPP)
Heat exchanger: Made from high quality PET materials
Internal insulation: Closed cell foamed Nitrile rubber, class 'O' fire rating
Standard filters: Grade ISO Coarse 85% (G4) synthetic filters.

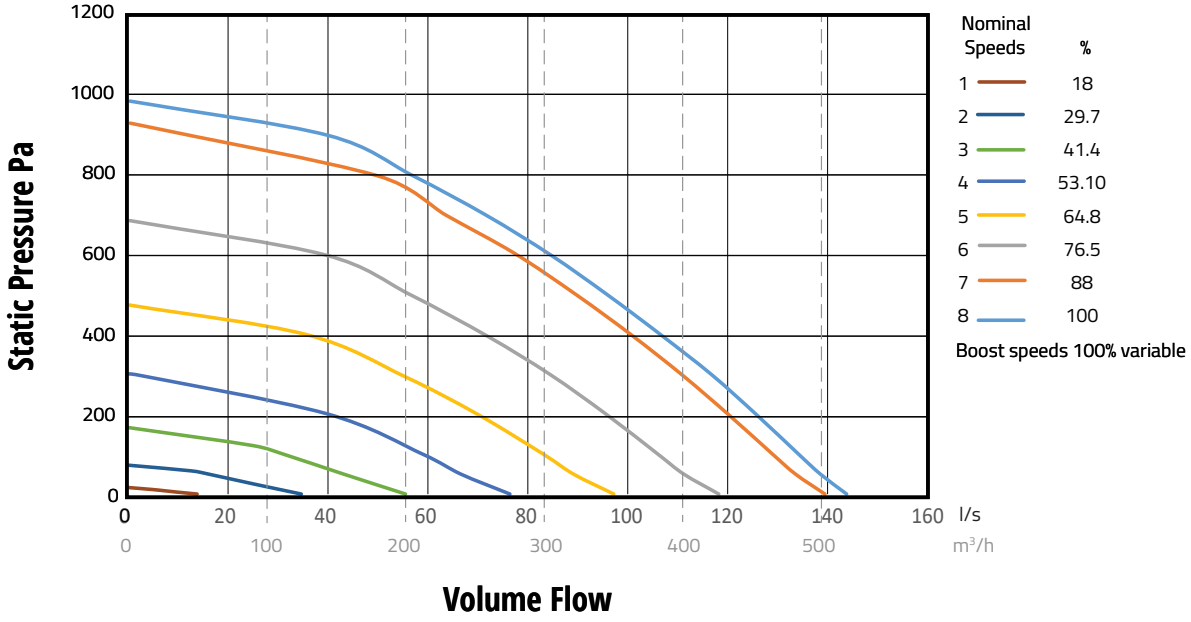
Electrical:
HRV Unit: 230V ~ 50/60Hz, 5A fuse
Cooler: 230V ~ 50/60Hz, 8A fuse

Installation: To be installed accordance with the relevant and applicable building regulations.

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

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

Nominal Fan Performance

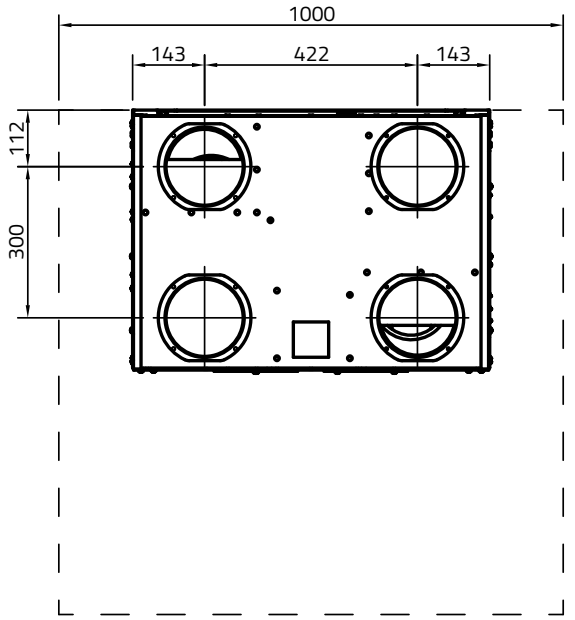


Acoustic Data

Product	% of Max flow	Airflow	dB(A) @ 3m Hemispherical			dB(A) @ 3m Spherical
			Induct Inlet	Induct Outlet	Casing Breakout	Casing Breakout
HRV Cool Q Plus™	57%	76l/s @ 35Pa	33	37	35	32
	76%	100l/s @ 71Pa	41	44	46	43
	100%	134l/s @ 100Pa	48	48	50	47

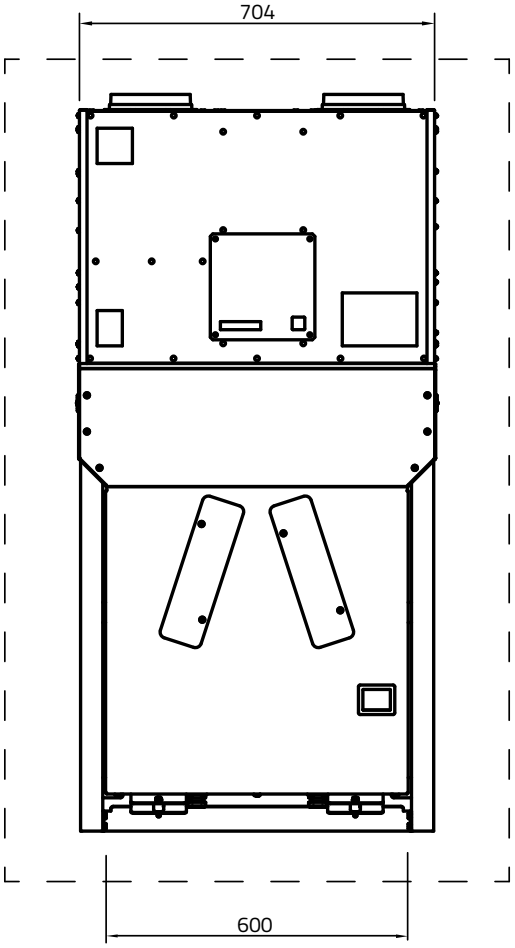
For full frequency acoustic data at various speeds please see www.titon.com. All acoustic data is third party tested at Sound Research Laboratories (SRL) Ltd.

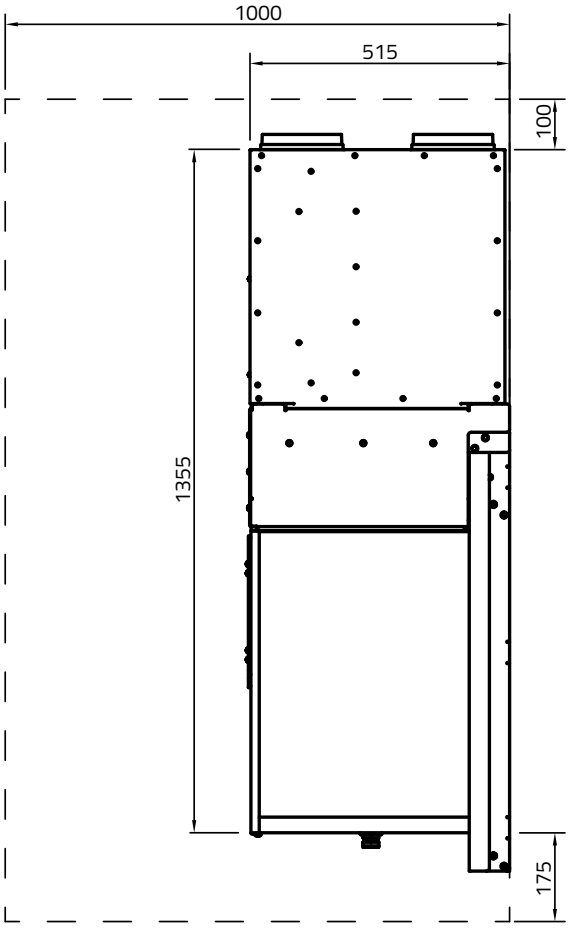
Wall Mounted - Drawing & Dimensions



Ports Ø160

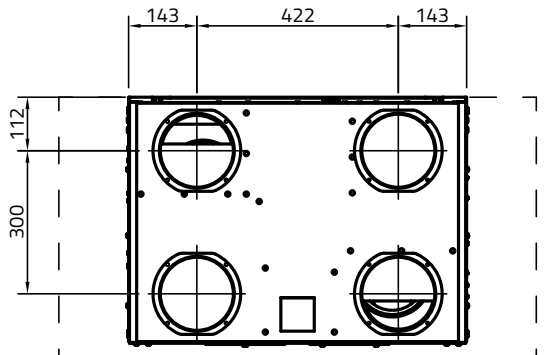
100 kg





Dimensions in mm

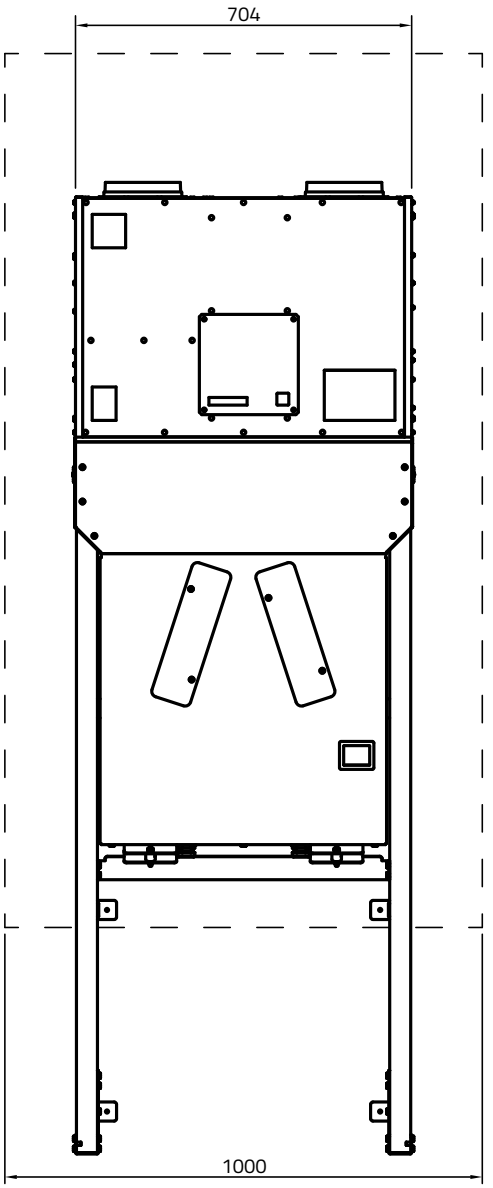
Floor Mounted - Drawing & Dimensions

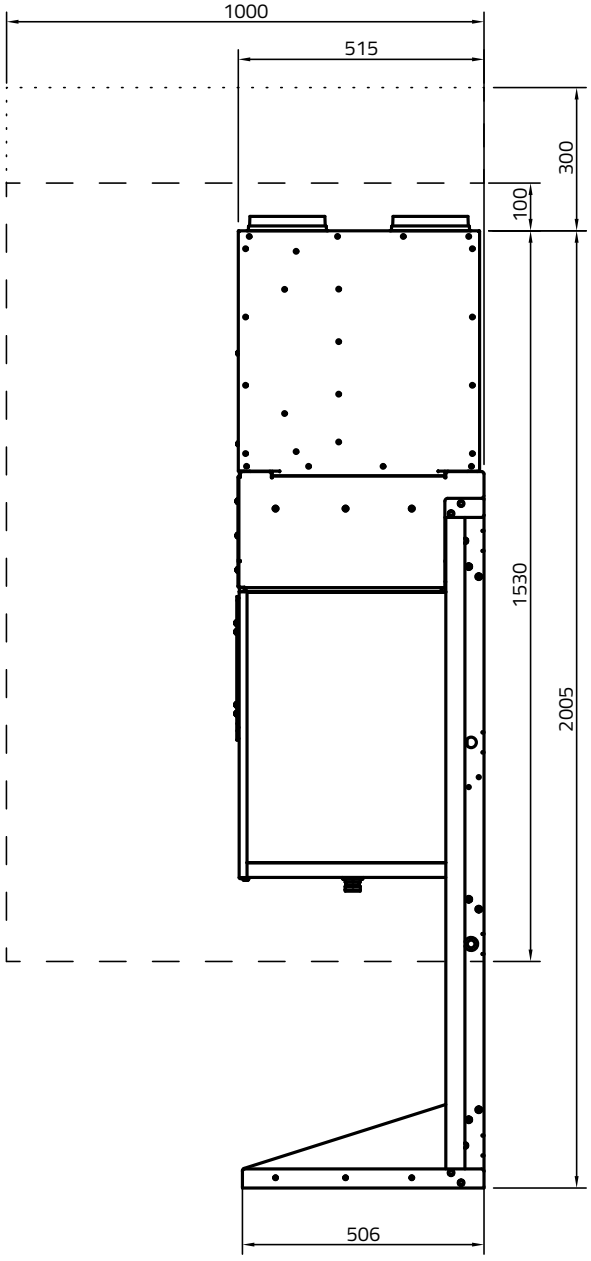


Ports Ø160

106 kg

. . . . . 300 Void is required to enable fitment of optional duct cover





Dimensions in mm

Preliminary Tempering Performance

db 29 wb 21.2 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	1.8	1.9	2.1	2.3	2.4	2.6	2.7
	Combined Sensible kW	1.3	1.4	1.6	1.7	1.9	2.0	2.1
	Supply Air °C	11.6	12.2	12.7	13.1	13.5	13.9	14.2
24°C Internal	Combined Total kW	1.7	1.9	2.0	2.2	2.3	2.5	2.6
	Combined Sensible kW	1.2	1.4	1.5	1.7	1.8	2.0	2.1
	Supply Air °C	12.0	12.5	13.0	13.4	13.8	14.2	14.5
25°C Internal	Combined Total kW	1.6	1.8	2.0	2.1	2.2	2.4	2.5
	Combined Sensible kW	1.2	1.4	1.5	1.7	1.8	1.9	2.1
	Supply Air °C	12.3	12.9	13.4	13.8	14.2	14.5	14.8
26°C Internal	Combined Total kW	1.6	1.7	1.9	2.0	2.1	2.3	2.4
	Combined Sensible kW	1.2	1.3	1.5	1.6	1.7	1.9	2.0
	Supply Air °C	12.7	13.2	13.7	14.1	14.5	14.8	15.1

db 32 wb 23.7 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	1.9	2.2	2.4	2.6	2.7	2.9	3.1
	Combined Sensible kW	1.3	1.5	1.7	1.8	2.0	2.1	2.3
	Supply Air °C	14.0	14.4	14.9	15.3	15.6	15.9	16.2
24°C Internal	Combined Total kW	1.9	2.1	2.3	2.5	2.6	2.8	3.0
	Combined Sensible kW	1.3	1.5	1.6	1.8	1.9	2.1	2.2
	Supply Air °C	14.3	14.8	15.2	15.6	15.9	16.2	16.5
25°C Internal	Combined Total kW	1.8	2.0	2.2	2.4	2.5	2.7	2.8
	Combined Sensible kW	1.3	1.4	1.6	1.7	1.9	2.0	2.2
	Supply Air °C	14.6	15.1	15.5	15.9	16.2	16.5	16.8
26°C Internal	Combined Total kW	1.8	2.0	2.1	2.3	2.5	2.6	2.7
	Combined Sensible kW	1.2	1.4	1.6	1.7	1.9	2.0	2.2
	Supply Air °C	15.0	15.4	15.8	16.2	16.5	16.8	17.1

db 34 wb 25.3 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	2.0	2.3	2.5	2.7	2.9	3.1	3.3
	Combined Sensible kW	1.3	1.5	1.7	1.9	2.0	2.2	2.4
	Supply Air °C	15.5	16.0	16.4	16.7	17.1	17.4	17.6
24°C Internal	Combined Total kW	2.0	2.2	2.4	2.7	2.8	3.0	3.2
	Combined Sensible kW	1.3	1.5	1.7	1.8	2.0	2.2	2.3
	Supply Air °C	15.9	16.3	16.7	17.0	17.4	17.6	17.9
25°C Internal	Combined Total kW	1.9	2.2	2.4	2.6	2.8	2.9	3.1
	Combined Sensible kW	1.3	1.5	1.6	1.8	2.0	2.1	2.3
	Supply Air °C	16.2	16.6	17.0	17.3	17.6	17.9	18.2
26°C Internal	Combined Total kW	1.9	2.1	2.3	2.5	2.7	2.8	3.0
	Combined Sensible kW	1.3	1.4	1.6	1.8	1.9	2.1	2.2
	Supply Air °C	16.6	16.9	17.3	17.6	17.9	18.2	18.5

The combined total kW cooling accounted for coolth recovery, sensible and latent cooling. These results therefore reflect expected cooling power and supply air temperatures when in operation. For cooling output data based on your assumed external design conditions, please consult Titon.

Introducing **the new**

HRV COOL PLUS™

The **smart choice** for thermal comfort **all year round**

Overheating indoors can present several dangers, such as heat-related stress, dehydration, and heightened health issues. The new Titon HRV Cool Plus™ offers a solution designed to deliver cooling, filtered air for user comfort in warmer weather conditions via a compact efficient MVHR and cooling module.

- Up to 3.3kW total cooling (subject to volume flow and relative humidity)
- Available for wall mounting or floor mounting.
- No need for run around ducting. Keeps complexity low.
- Minimal maintenance of fully sealed refrigerant heat pump with coil & fin heat exchangers.
- Heat cell will provide cooling assistance to pre-chill incoming fresh air when in operation exactly as it does normally with heat
- CIBSE accredited CPD course available on Part O

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Titon® ventilation systems