HRV Cool Plus™

Offering extra protection against overheating

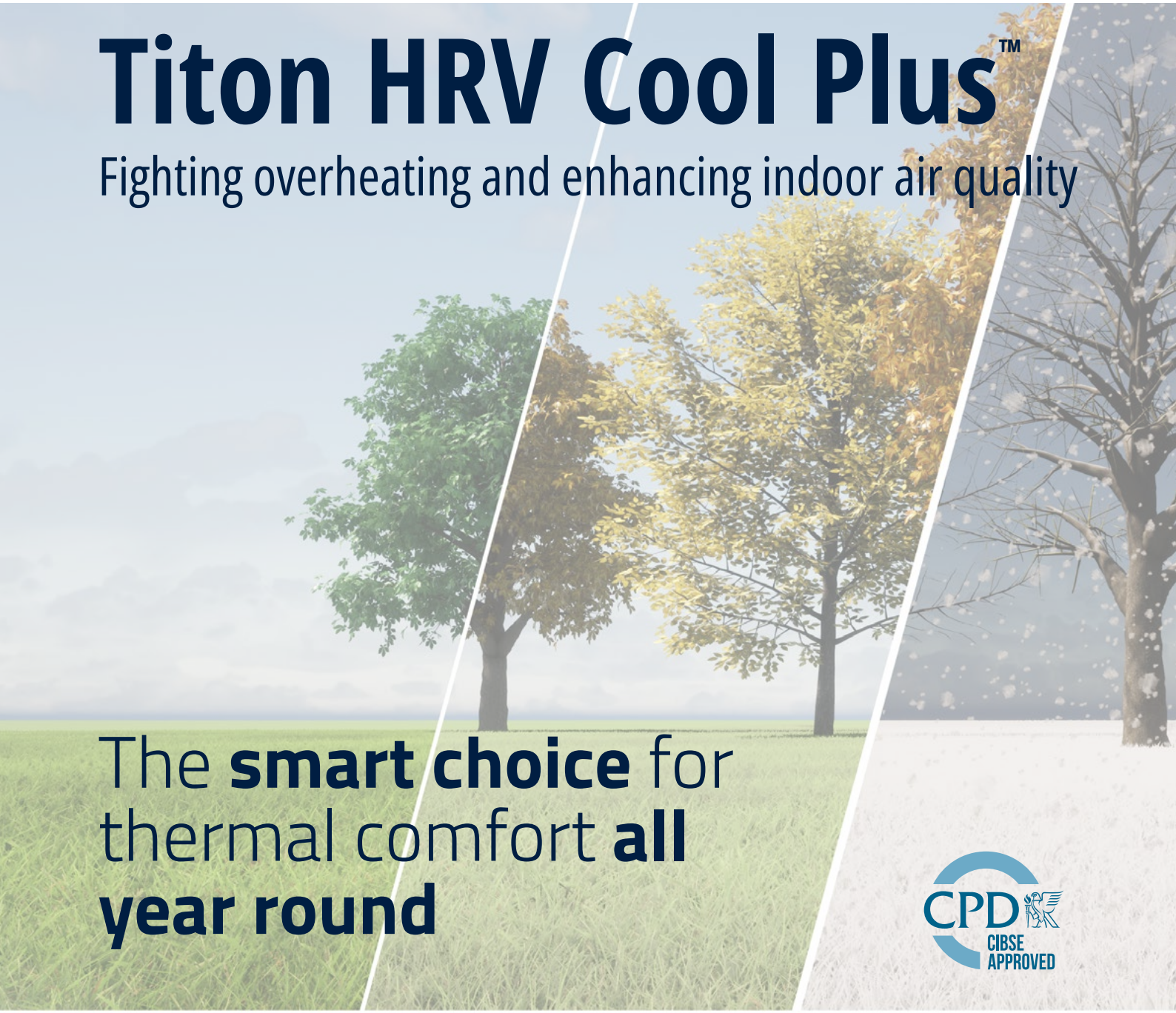


Titon®

Introducing the new

Titon HRV Cool Plus™

Fighting overheating and enhancing indoor air quality



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

CPD CIBSE APPROVED

- 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. (100kg Wall / 106kg Floor)
- Installation below the ceiling in the heated space but compact enough to permit the location of a washing machine below
- 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
- CIBSE accredited CPD course available on Part O
- Left and right handed configurations available



Overheating and ventilation

Overheating in homes can also pose various risks, including heat stress, dehydration, an increase of health conditions.

It is estimated over 4,500 people died in the UK in 2022 due to high temperatures, the largest on record in recent years.

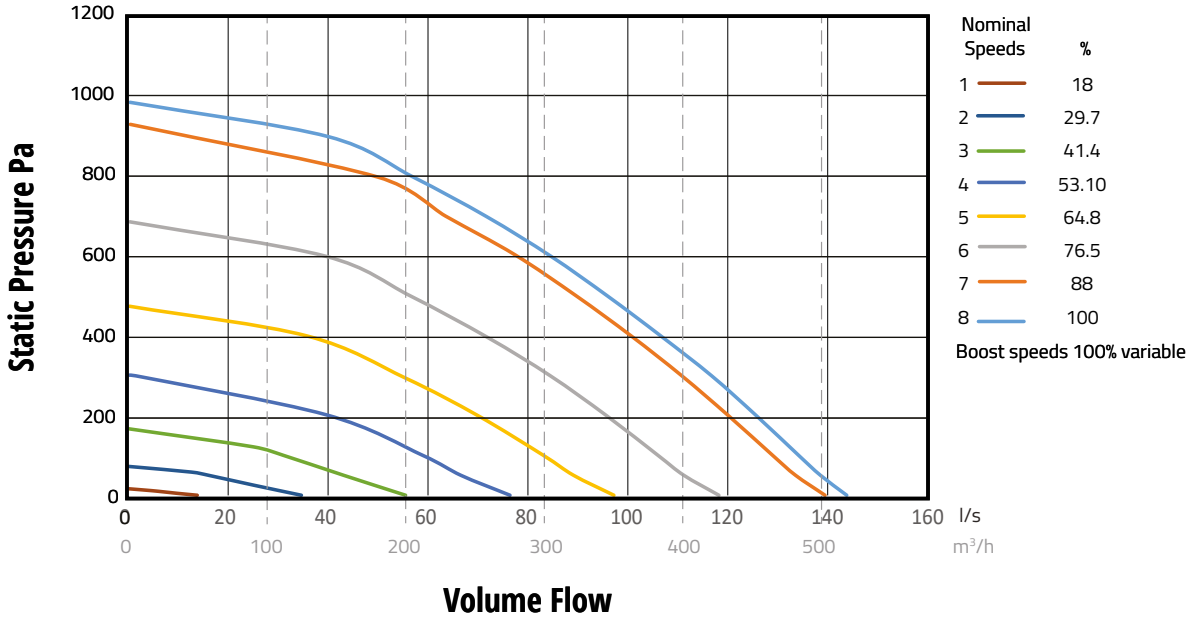
Titon's new innovative HRV Cool Plus™ was designed and created in response to growing overheating issues where standard ventilation cannot alleviate overheating. Supporting building regulation Approved Document O (ADO) it advises mechanical cooling may only be used when it is not possible to remove sufficient heat from the indoor environment without it.

HRV Cool Plus™ is engineered to seamlessly integrate into heat recovery ventilation (MVHR) systems, delivering cooling, filtered air to enhance user comfort. With its integrated cooling module, this cutting-edge solution pre-cools incoming fresh air during warmer months, ensuring a comfortable indoor environment.

The remarkably compact size allows installation below the ceiling in utilities rooms allowing enough space to accommodate other appliances such as washing machines or tumble driers.

The **smart choice** for thermal comfort

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.



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

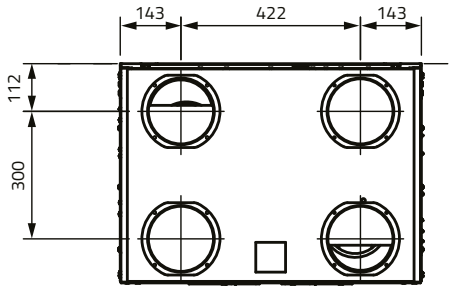
Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	1.9	2.2	2.4	2.6	2.7	2.9	3.1
	Combined Sensible kW	1.3	1.5	1.7	1.8	2.0	2.1	2.3
	Supply Air °C	14.0	14.4	14.9	15.3	15.6	15.9	16.2
24°C Internal	Combined Total kW	1.9	2.1	2.3	2.5	2.6	2.8	3.0
	Combined Sensible 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.

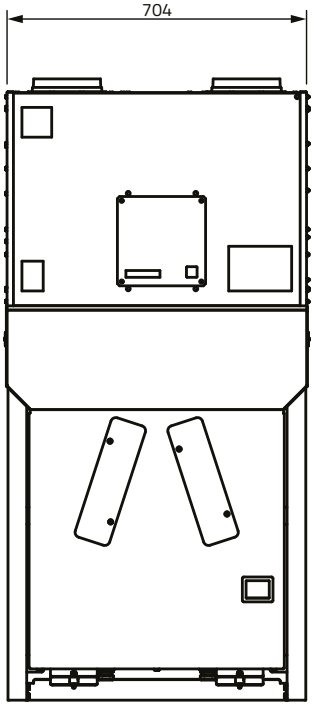
Wall Mounted - Drawing & Dimensions

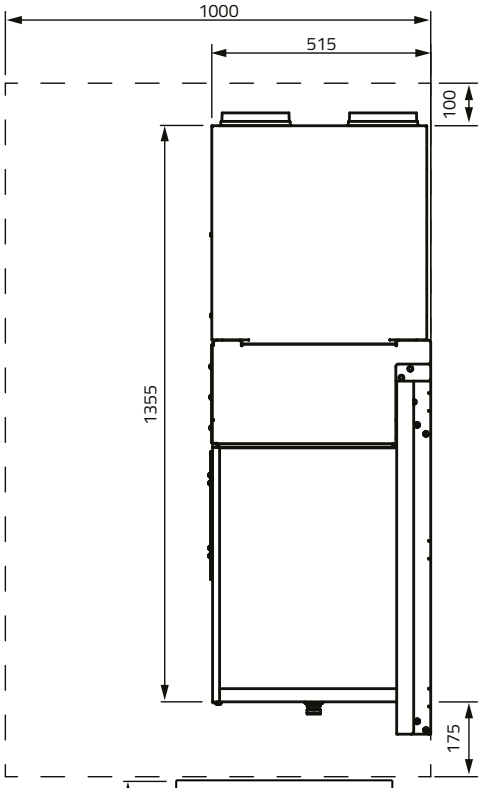


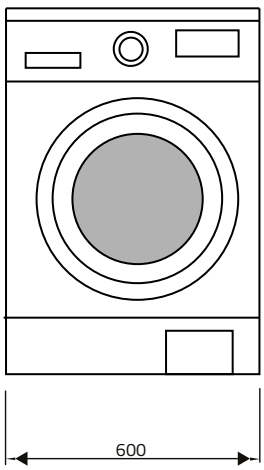
Ports Ø160

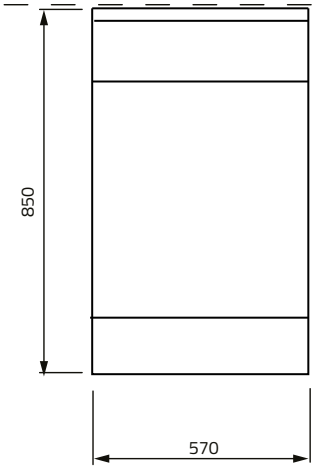
100 kg

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



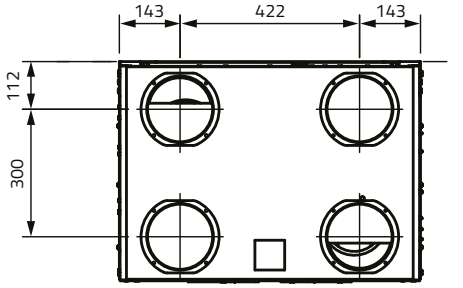






Dimensions in mm

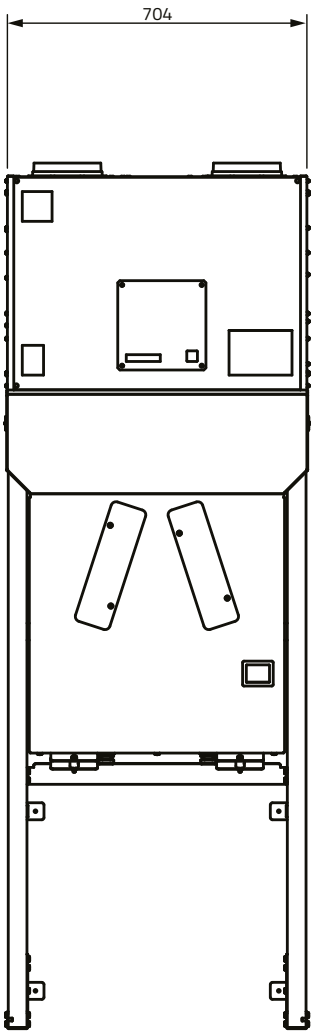
Floor Mounted - Drawing & Dimensions

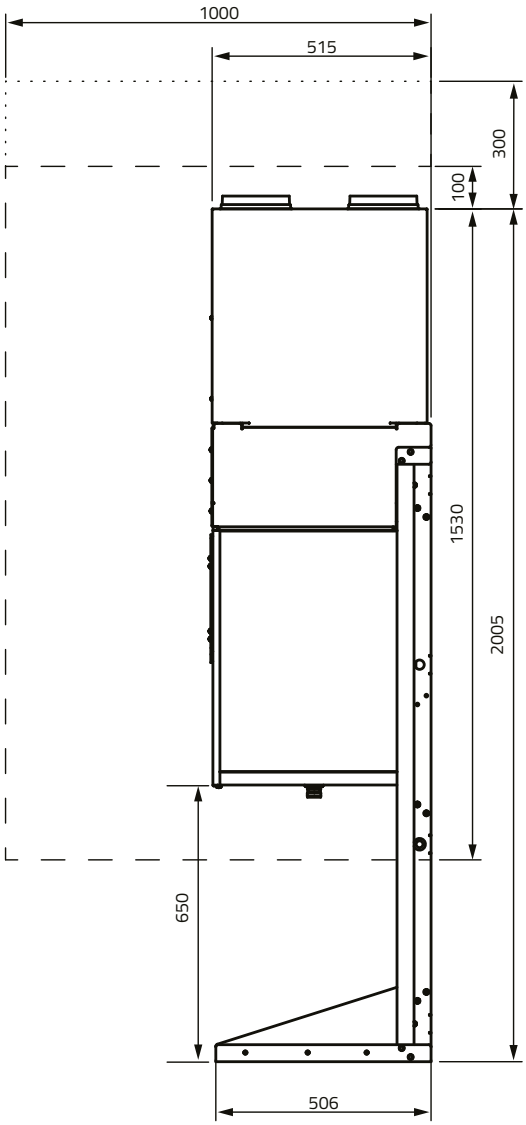


Ports Ø160

100 kg

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





Dimensions in mm

The **smart choice** for thermal comfort

Product Codes

HRV Cool Q Plus™ -
TP755 - Wall mounted unit
TP754 - Floor mounted unit
(Left and right hand config available)

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 (TP760)
- 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.

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 100 kg, Floor mounted 106 kg
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.



Room Thermostat (TP760)

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 does not operate with the dwelling heating system
- Cooler can be deactivated via the thermostat and/or onboard aura-t™

How It Works

- 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