

# POWRMATIC®

A range of highly efficient combination heat pump air conditioners incorporating style & simplicity for every application without any outdoor condenser.

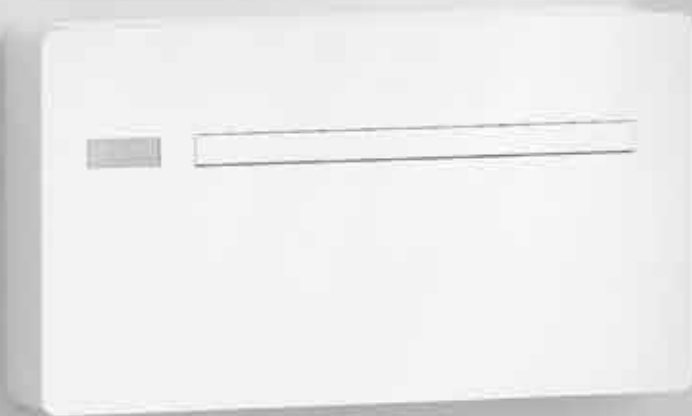
**The Vision Range from Powrmatic.**

VISION  
VISIONVERTICOOOL  
VISIONH<sub>2</sub>O  
VISIONCOMPACT  
VISIONMAXI



## Vision Range

Twin Duct Packaged  
Heat Pump Air Conditioners



# Vision Range Overview

## The air conditioner without an outdoor unit.

The multi combination Vision Range from Powrmatic are highly efficient heat pumps that work both for air conditioning and heating without any requirement for an outdoor condenser unit.

The new Vision range, now even more complete, has the right product for any type of installation, space or kW output requirements for any application.

Efficient & innovative design meets contemporary style. A slim body, quiet operation with maximum performance for any environment.

## Product Features



### Efficient By Design

With DC Inverter technology, power is optimized to obtain maximum comfort with lower consumption and noise.



### Full Cloud Control

WiFi Control gives owners ability to fully control each unit via the mobile app.



### Quick Installation

3-4 hour installation time with no F-Gas certificate required.



### Heat & Cool

Heat pump technology allows for heating and cooling in one unit.



### Versatile Configuration

Full combination versatility allows for installation into any space.



VISION

# Vision Range Combinations

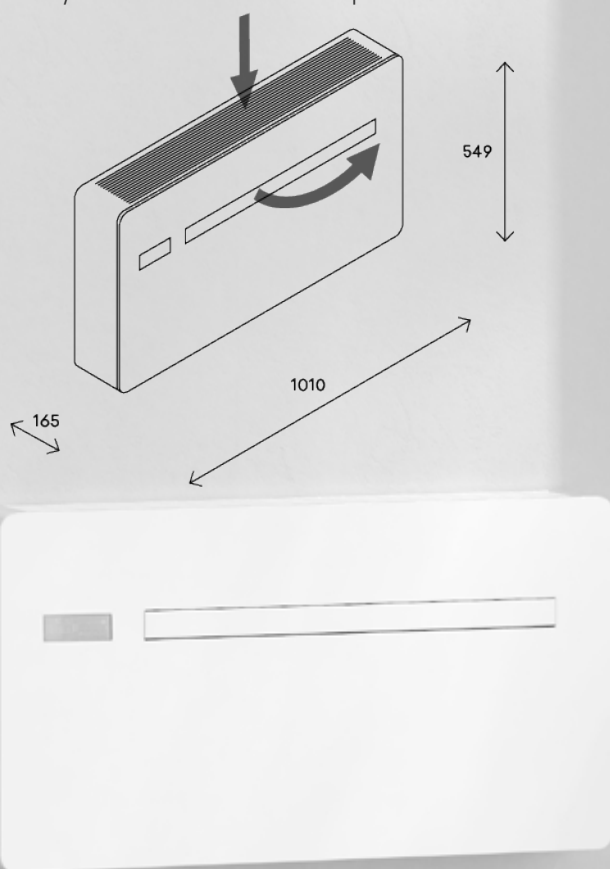
## VISION

The ever popular Vision range is a highly efficient heat pump air conditioner incorporating style and simplicity for any room installation without the need for an any outdoor condenser.

The standard Vision is available in 2.6kW & 3.1kW along with a 3.1DWH which has an additional heating boost via a electrical heater that intervenes automatically when outdoor temperatures become extremely low.

Also available are marinised versions (DMW) for application near harsh sea waters along with a Low Temperature Hot Water fan coil unit (LTHW). **(See page 20 & 21 for more information)**

The Vision H<sub>2</sub>O only requires its own cold water mains connection, and a waste water drain. The H<sub>2</sub>O can also connect to any existing chiller loop or or condenser without any external duct holes required.



**A+**

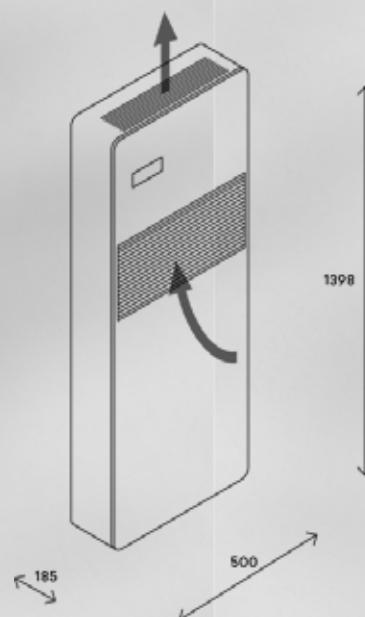
Energy Rating

### Models Available

2.6DW / 3.1DW / 3.1DWH / 3.6H<sub>2</sub>O

## VISIONVERTICOOOL

The Vision VertiCool 3.1kW is a new and stylish vertical approach that can be installed in areas between windows, or in room corners making it the perfect alternative for those rooms where space and access to an external low or high wall is limited. The VertiCool is installed the same as the standard unit with an impressive depth of only 185mm allow it to integrate seamlessly into any room.



**A**

Energy Rating

### Models Available

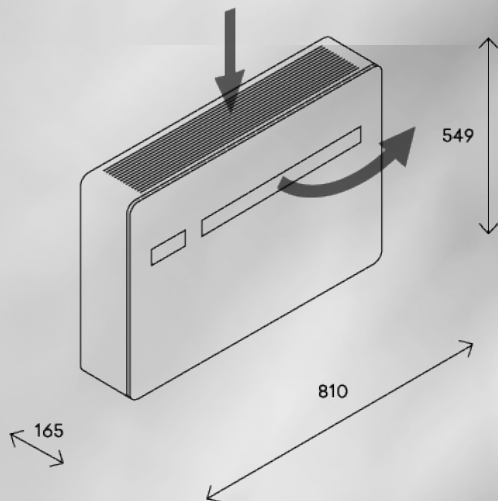
3.1DW





## VISIONCOMPACT

The new Vision Compact is the perfect solution for when space is at a premium. The Compact measures just 810mm wide and fits narrow spaces or under windows for constraint areas. It's the first fixed double duct air conditioner to use R290 (propane) gas giving an impressive cooling & heating capacity with a low environmental impact.



**R290**  
GAS

**A+**

Energy Rating

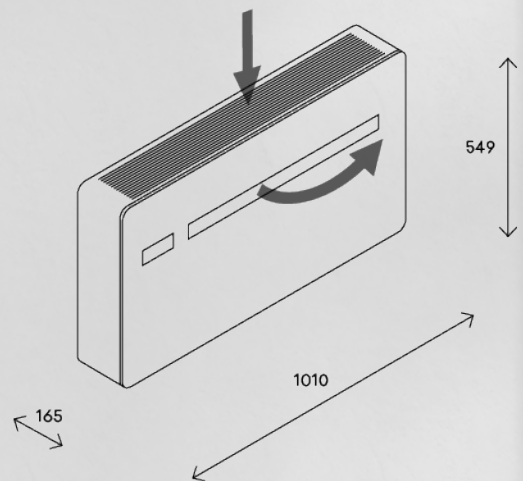
**Models Available**

**2.3DW**



## VISIONMAXI

For larger spaces and bigger kW output requirements, The new Vision Maxi ticks all the boxes. Still the same size as the standard units, the Maxi delivers a huge 3.6kW of cooling capacity. The Maxi requires 202mm external duct holes compared to the 162mm holes on the standard units.



**R32**  
GAS

**A+**

Energy Rating

**Models Available**

**3.6DW**







Work from  
home in  
comfort.

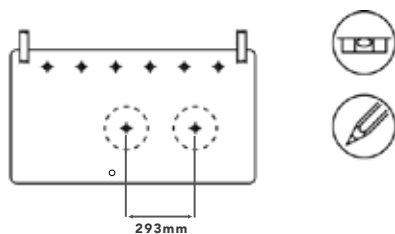
# Through The Wall Installation

Each Vision unit benefits from simple installation that requires no down-time or loss of revenue for building owners whilst also reducing the re-decoration costs after the use of cable runs and external condensers after the installation. With no F-Gas certificate requirement this significantly reduces the overall installations costs.

The Vision range is the perfect solution for retro-fitting and can be the ideal replacement in many rooms offering both heating and cooling. Each unit is supplied with a 13A standard BS plug top.

Just see the easy 4 steps guide below.

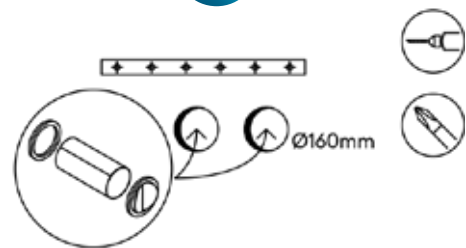
1



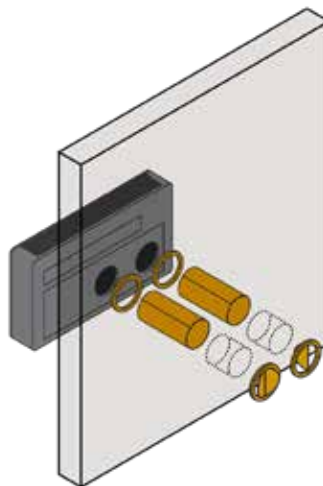
Mount the provided paper template level to the desired wall and mark the 6 x fixing bracket holes, 2 x 160mm diameter duct holes and the 14mm condensate hole.

(The distance between the duct holes is 293mm)

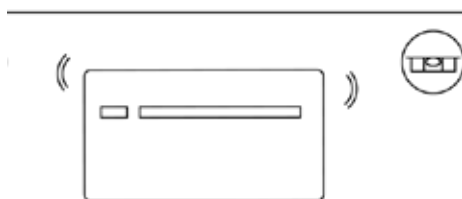
2



Fix the supporting bracket to the wall, insert the plastic lining sleeves through the duct holes. Attach the plastic indoor flanges and then fix the self folding outdoor grilles from inside the building.



3



Mount the unit on the wall onto the bracket checking for the correct alignment.

4



Connect the unit to your standard 13A plug socket and insert the condensate drain pipe through the back.



# Flexible Control At Your Fingertips

The unit can be controlled 4 different ways depending on your requirements. Besides the newly enlarged remote control, the on board control allows the user to set any possible function, including a "lock" position to avoid un-proper use and weekly scheduling.

The mobile app allows the management of the unit from remote positions through WIFI such as a hotel reception desk controlling multiple units from one location.

There is also the ability to have a individual hard-wired controller which can be mounted near the unit if required.



**Integrated Touch Screen**



**Remote Touch Screen (hard-wired)**



**Remote Control**



**IOS or Android App**

# No Outside Condenser



Conventional air conditioning systems will require a unsightly external condenser with visual cabling and pipework. The in-built condenser allows for minimal exterior disruptive appearance with further reduced re-decoration costs both internally and externally.

The 162mm twin duct, and a 18mm condensate pipe hole reduces the outdoor impact of air conditioning systems and seamlessly integrates into any exterior building design.

The external grilles provide the inlet and outlet vents for the supply and discharge air via the twin ducts which in turn connects to the condenser coil.



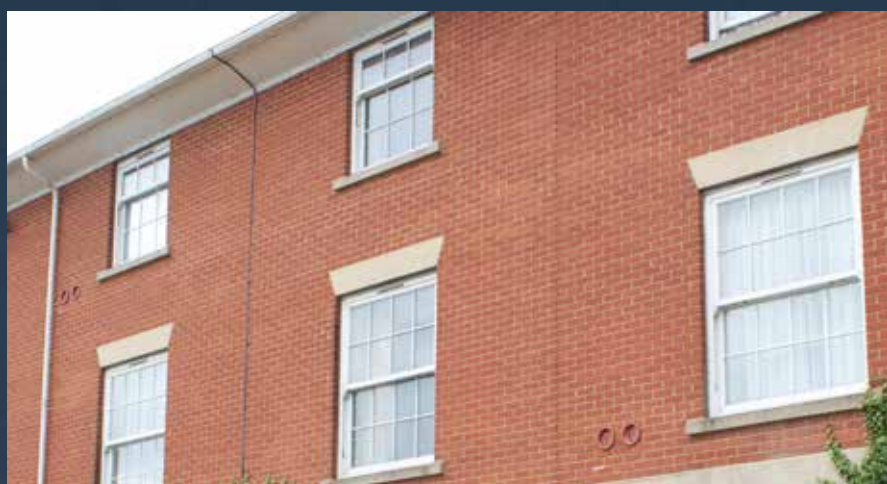
**Vision Standard**



**Vision VertiCool**







On specialist projects of over 50 units, the external grilles can be painted to any BS or RAL number to blend in with the buildings exterior walls.



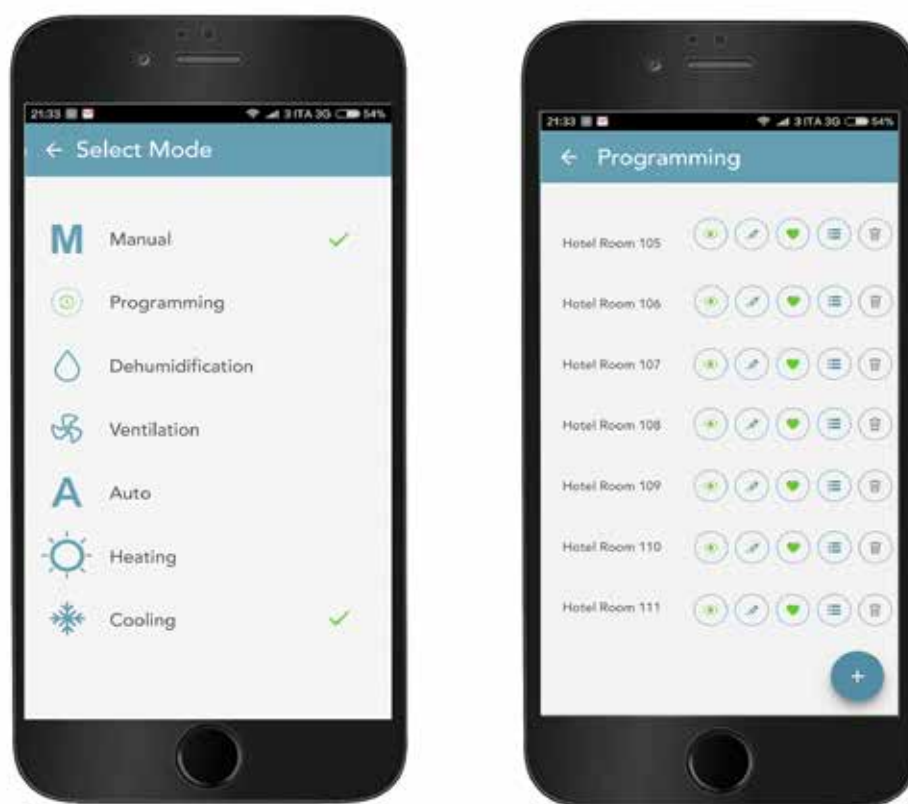


# Mobile App Control

The Vision WiFi mobile app now lets you control multiple units from your smart-phone device or tablet via your local WiFi network.

The easy to use app displays current temperature settings and allows the user to change temperature, fan speed, and air flow direction from anywhere at a touch of a button. In applications such as hotel buildings, the reception desk can activate, control, and deactivate each unit in every room depending on the occupancy.

They can warm up or cool down the room before hotel guests arrive, and ensure the units are switched off when the room is unoccupied saving valuable energy consumption. Building owners can also utilise the weekly scheduling function to quickly and efficiently set desired settings for the whole week.

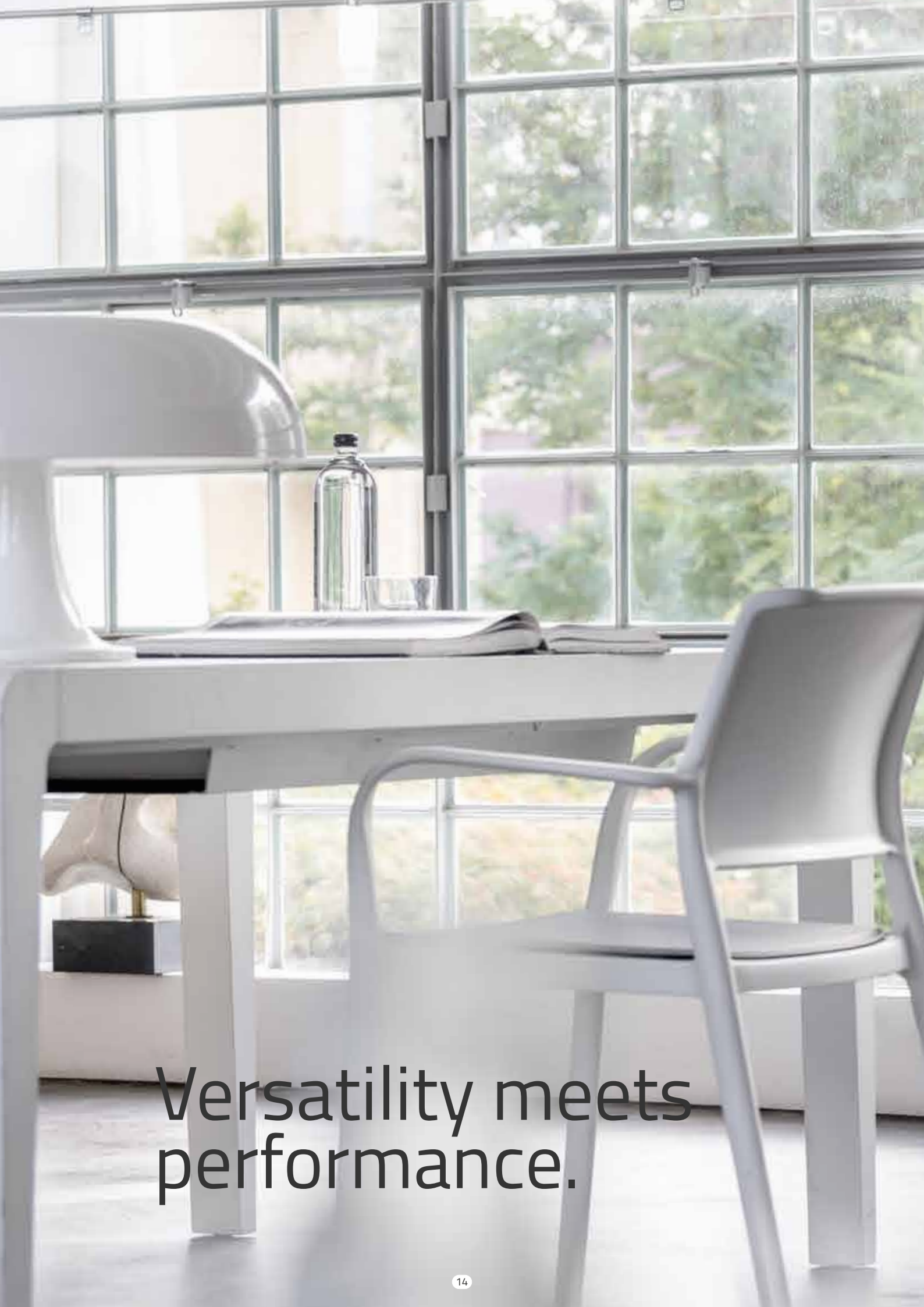


## Download The Mobile App (InnovaApp TwoPointZero)



# Mobile App Control





Versatility meets  
performance.





# VISION VERTICOOL

Compact width  
for any constraint.

**R290**  
GAS

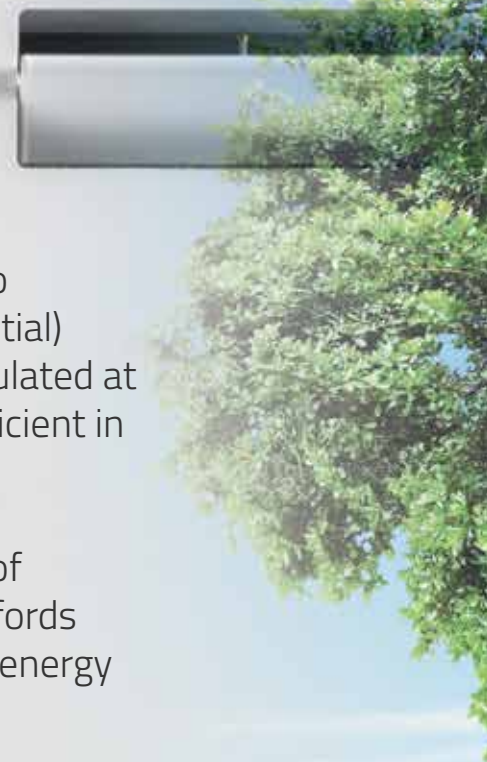
**VISIONCOMPACT**





With a energy saving ratio of almost 3 to 1, the Vision DC Inverter technology, capacities are optimised so to have the best comfort with the lowest power consumption and noise.

The Dual Power feature it is possible to select the highest capacity so to reach the requested temperature as soon as possible. Once reached the set temperature the Vision will automatically set the comfort function.



The newly designed Vision Compact Unit has been created to function utilising the latest Low GWP (Global Warming Potential) refrigerant gas, R290, which is not only climate friendly, calculated at 0.003 kg's of CO2 per KG of refrigerant, but a very energy efficient in heating medium.

The Vision Compact 2.3 DW consumes only 570/540 watts of electricity to generate 2.3/2.4 kW of cooling/heating. This affords the unit an EER of 3.01, and a COP of 3.15, equal to an A/A+ energy rating label.

All this has been achieved, from a remodelled casing size of only 810 mm width, while keeping the same depth, 165 mm, and height of 549 mm, which enables installation in much reduced spaces, for both domestic and commercial applications.

#### Dual Power Cooling (Vision 3.1)



#### Dual Power Heating (Vision 3.1)





Low environmental  
impact. Hot or cold.



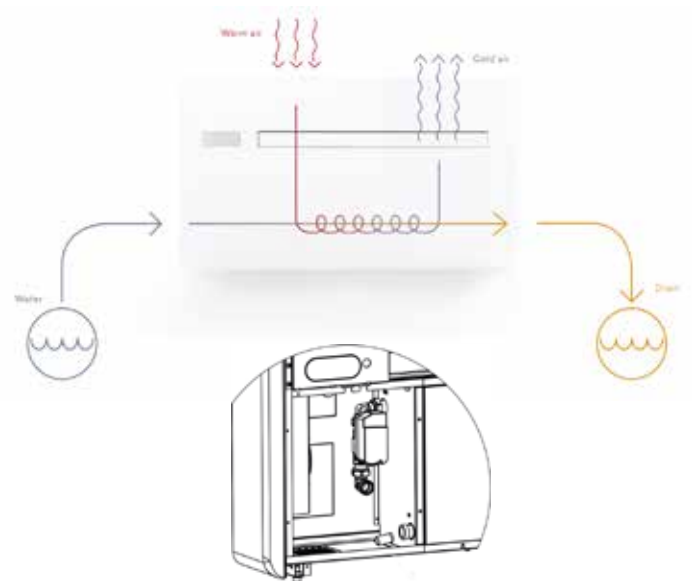


# Additional Model Overview

## Vision H<sub>2</sub>O

The Powrmatic Vision H<sub>2</sub>O is a twin duct low level PTAC air conditioner & heat pump and removes the need for an outdoor unit and external holes/grilles saving you costs on installation and improving the aesthetic appearance of your building.

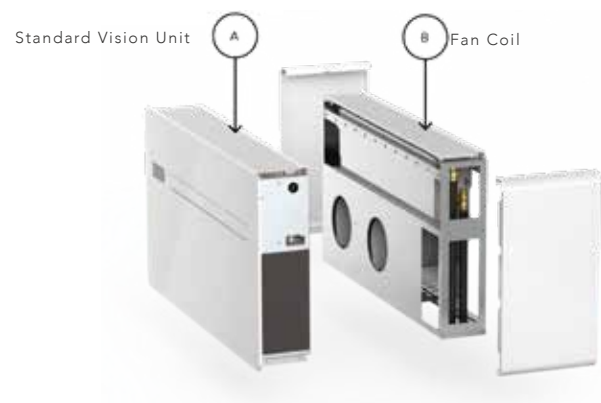
The Vision H2O only requires its own cold water mains connection, and a waste water drain. The H2O can also connect to any existing chiller loop or or condenser.



## Fan Coil Model (LTHW)

The Vision LTHW one single body integrates both an air conditioning system for summer cooling and winter heating, and a fan-coil for winter heating with low temperature hot water systems.

In winter time, heating is supplied by the heat pump functioning mode; when outdoor temperatures decrease, the LTHW automatically integrates the heat pump functioning with a fan-coil to maintain the set temperature. In cases where external temperatures become particularly low, heating with the fan-coil only can be set.



## Vision DWM Marinised Model (Same specification as Vision) (minimum order quantity of 50)

All components near the sea are exposed to corrosive, salty air and must meet special structural requirements. The Vision DWM is a full protected air conditioning unit utilising a copper/copper condenser and evaporator coil, stainless steel chassis, cabinet and assembly components, to, prolong the life of the unit in harsh saline conditions make the Marinised Vision perfect for coastal and high ambient tropical conditioners.

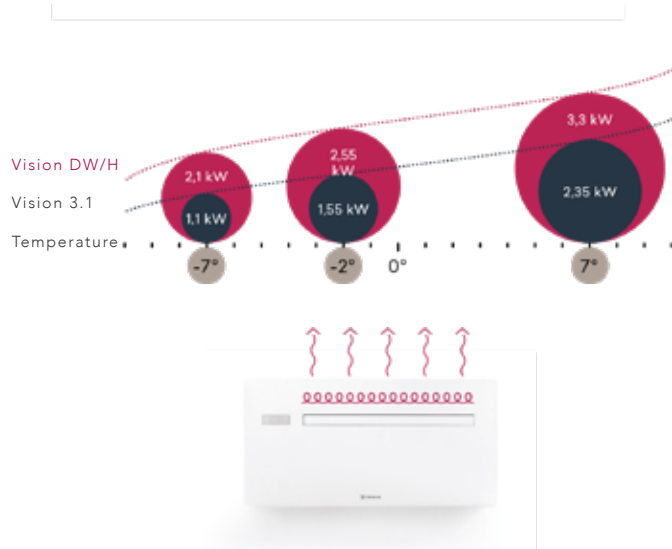


**SPECIAL ORDER ONLY**





# Additional Model Overview



## Additional Heat Model (DW/H)

As all heat pumps have lowering performances in heating when outdoor temperature is falling, sometimes the request is to have a consistent heating capacity with extremely low outdoor temperatures. The Vision DW/H integrates (not replaces) the heat pump with an additional 1 kW electrical heater that intervenes automatically when outdoor temperatures become extremely low.

Because of this the DW/H can deliver a heating capacity of at least 2 kW even with outdoor temperatures down to -7°C, with an energy absorption of 1 kW that is extremely low and fully compatible with standard domestic power supplies.

## Ancillary

### Side Discharge Option (Left or right side)

Air conditioning without outdoor condensing unit are always installed on a perimeter wall, so to exchange air with the outside. Sometimes this is not possible, as the "outside" is lateral with respect to the wall hosting the unit. With this new kit, to be built into the wall, the airflow is deviated laterally: therefore it is possible to install the Vision on the wall with side air exit. This allows many new and unexpected possibilities to install the Vision Unit.

# Installations

Hilton York Hotel



Modular & Portable Buildings



# Installations

Whittlebury Hall Hotel & Spa



Linc Cymru Care Home



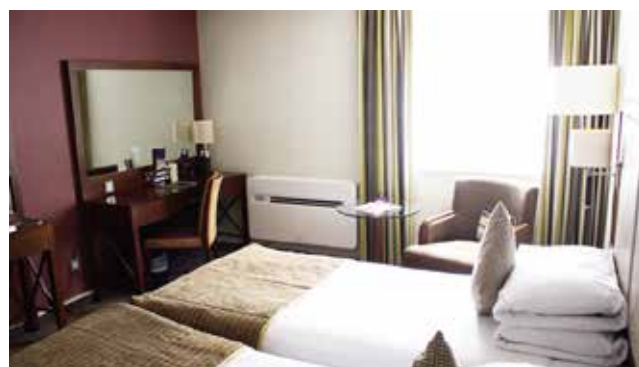


# Installations

Oxford Belfry Hotel



Norton Park Hotel





Minimise your exterior view.



# Technical Specification

Technical Data	U.M	VISION COMPACT 2.3 DW	VISION 2.6 DW	VISION 3.1 DW	VISION MAXI 3.6 DW	VISION VERTCOOL 3.1 DW	VISON H <sub>2</sub> O 3.6 DW	VISION 3.1 DW/H	LTHW	
Cooling Capacity	kW	1.73	2.04	2.35	2.87	2.35	2.65	2.35	Refer To Model	
Cooling Capacity - Dual Power Max / Min	kW	2.35 / 0.7	2.64 / 0.8	3.1 / 0.9	3.5 / 1.05	3.1 / 0.9	3.6 / 1.3	3.1 / 0.9		
Heating Capacity	kW	1.71	2.10	2.36	2.75	2.36	3.17	2.36		
Heating Capacity - Dual Power Max / Min	kW	2.4 / 0.75	2.64 / 0.7	3.05 / 0.8	3.5 / 0.83	3.05 / 0.8	3.84 / 1.38	3.05 / 0.8		
Power Input In Cooling	W	570	630	730	1040	855	680	730		
Power Input In Heating	W	540	638	720	880	750	772	720		
Power Of Electric Heater	kW	N/A							1.00	N/A
Heating Capacity Fan Coil (70°C)	kW	N/A								4.23
Water Flow Rate (Mains Cold Water)	L/h	N/A						149	N/A	364
Water Pressure Loss (70°C)	KPa	N/A						N/A	N/A	10
Dehumidification Capacity	l/h	0.7	0.8	0.9	1.2	0.9	1.1	0.9	Refer To Model	
Power Supply Voltage	V-F-Hz	230/1/50								
EER	W/W	3.01	3.24	3.22	2.74	2.75	3.89	3.22		
COP	W/W	3.15	3.29	3.28	3.12	3.15	4.10	3.28		
Energy Efficiency Ratio When Cooling		A	A+	A+	A	A	A++	A+		
Energy Efficiency Ratio When Heating		A+	A	A	A	A	A++	A		
Dimensions (W x H x D)	mm	810 x 549 x 165	1010 x 549 x 165	1010 x 549 x 165	1010 x 549 x 165	500 x 1398 x 185	1010 x 549 x 165	1010 x 549 x 165	1030 x 555 x 143	
Weight	Kg		48.5	48.5		53	49.5	48.5	Refer To Model	
Nominal Sound Pressure Level (Min / Max)	dB(A)	27 / 39	26 / 39	27 /41	29 / 43	27 /41	27 / 41	27 /41		
Max Noise Level On High @1m Distance	dB(A)	56								
Wall Hole Diameter / Condensate Drain	mm	162 / 18				202 / 18	162 / 18	N/A		162 / 18
Distance Between Holes In Wall	mm	210	293	293	293	293	N/A	293		
Refrigerant Gas		R290	R410A	R410A	R32	R410A	R410A	R410A		

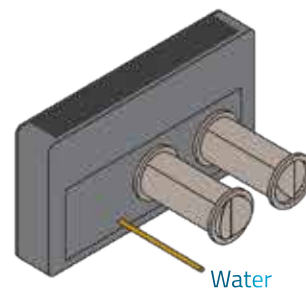
## Condensate Nebuliser - (Vapouriser) (Optional Extra)

The condensate nebuliser can be supplied to replace the external condensate pipe.

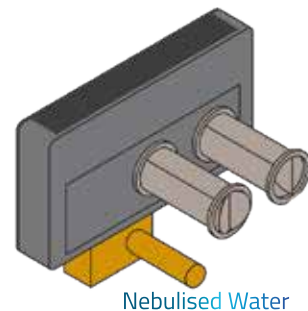
The nebuliser is fitted underneath the unit and effectively heats the condensate air, turns it to vapour and then in turn it is expelled by the internal nebuliser fan.



Technical Data	U.M	Condensate Nebuliser
Dimensions (W x H x D)	mm	378 x 232 x 140
Weight	kg	4.8
Capacity	L/h	2
Inlet (Top Cover)	mm	16
Outlet (Back Side)	mm	80
Consumption (max)	W	220
Power	V	230



Standard External  
Condensate Pipe



Fitted Nebuliser  
Condensate Pipe



## Digital Hard Wired Controller

Simplified control with basic command and unit



### Smart Touch wall control

- Touch interface
- Modulating speed
- Seasonal setting
- Temperature set point
- Ventilation speed

## Remote Controller



### Supplied as standard.

- Possibility to control the airflow direction
- Night well-being key
- Fan speed control
- Timer function setting

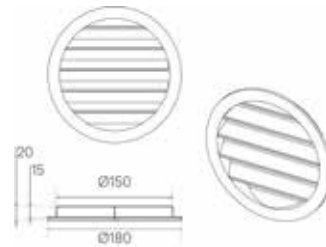
## Standard External Grills



### Supplied as standard.

Vision inlet & Oulets grills (set of two) with fixings. Painted RAL 9003 white colour.

## Flat Aluminum Grills



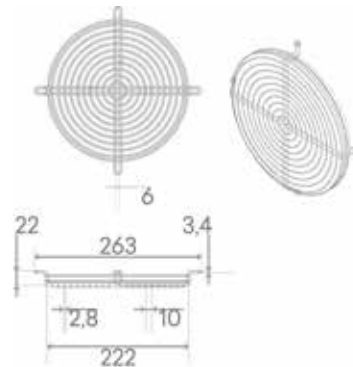
Accessory supplied on request, as an alternative to the folding grills provided. The grids with fixed fins are in aluminium. They are preferred for aesthetic reason or for painting needs.

## Rain Cowls



Top cover of holes for installation of the Vision range on walls exposed to rain and wind. Accessory supplied on request and applicable on external grids with fixed fins. The supply includes 2 covers, one for each grill. RAL 9003 white colour.

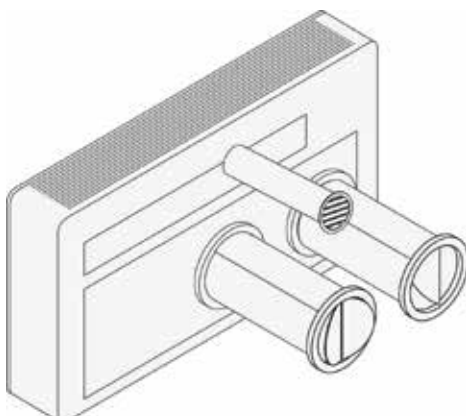
## Anti Insect Grills



The accessory, installed above the grilles, further protects the holes avoiding the possible entry of insects or small materials.

### Kit contains

- 2 metal mesh discs
- 2 grids in metal wire
- fixing screws and plugs



## Fresh Air Kit

This kit allows to incorporate the heat recovery ventilation in the air-conditioning, reducing everything in a single space. The renewal air flow is 24 m<sup>3</sup>/h with alternating flow. The hole diameter of the "Fresh Air" kit is 106 mm.

### Kit contains

- 1 x Heat Recovery Ventilation
- 1 x electrical box to be positioned inside the Vision.

# About Us

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

## Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

## Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

## Air Conditioning

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

## Engineered Products

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

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#keepingthenationwarm

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