POWRMATIC®

Delivering complete climate control solutions worldwide

Highly efficient heat pump air conditioner technology incorporating style and simplicity for any room installation without the need for an any outdoor condenser.

The Vision Range from Powrmatic.

Vision Range

Vision & VertiCool Models

Twin Duct Packaged Heat Pump Air Conditioners

Vision Range Vision & VertiC

Product Benefits

- NO OUTDOOR CONDENSER
- HORIZONTAL OR VERTICAL OPTION
- ENERGY EFFICIENT PERFORMANCE
- WiFi CONTROL
- THE PERFECT HOTEL ROOM SOLUTION
- D.I.Y INSTALLATION
- COST SAVING 3-4 HOUR INSTALL TIME

Style Efficiency Simplicity

Packaged heat pump air conditioners from Powrmatic.

The new Powrmatic Vision range is a twin duct low level PTAC air conditioner & heat pump and removes the need for an outdoor unit saving you costs on installation and improving the aesthetic appearance of your building.

To assist hoteliers with air conditioning control, Powrmatic have introduced WiFi Control which lets you control multiple units from your smart-phone device or tablet via your local WiFi network. The Vision inverter model has a impressive 27dB(A) and with a depth of just 17cm.

Available in either horizontal or vertical, the Vision range can be integrated seamlessly into any room with minimal disruption.

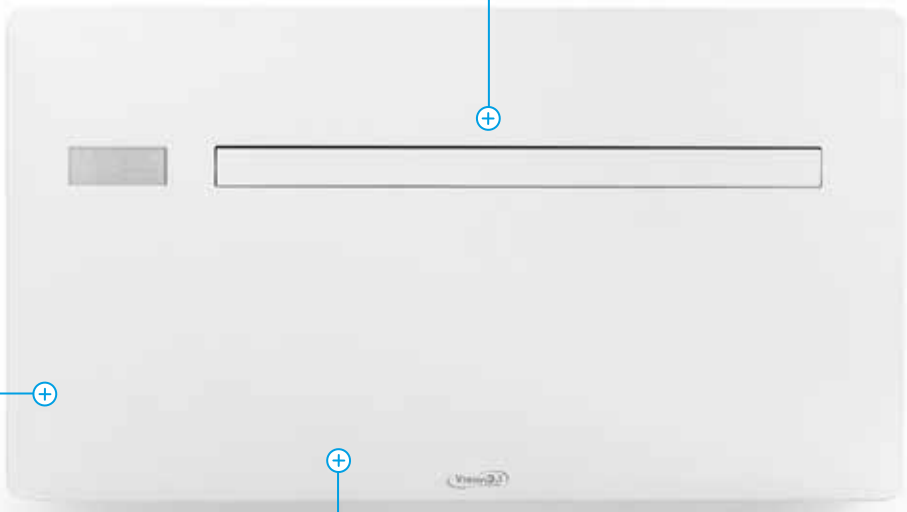
Models Available Heading (all models are WiFi enabled)

- Vision 2.3 DW
- Vision 3.1 DW
- Vision VertiCool 3.1 DW
- Vision 3.1 DW/H (Low Temperature Resistance Heater)
- Vision LTHW (Fan coil model)
- Vision H20
- Vision DWM (Marinised model. Special order only-MOQ 50 Units)

Product Features

Stylish & Contemporary Design

The Vision features clean lines in a contemporary, eye-catching style that will complement any décor with and no sight of an outdoor condenser it makes the unit ideal for hotel rooms, restaurants and many other hospitality applications.



New Model & Design Available

Powrmatic have now introduced the 3.1kW Vision VertiCool upright standing model to give a heating and cooling option for those rooms with limited horizontal high or low wall space.

The standard horizontal Vision has also been re-designed with a more curved finish and full metal body to improve its visual appearance and performance longevity.

Quick Installation & No Room Downtime

The Vision can be installed in under 4 hours which eliminates any downtime to any room during installation. The Vision can be retrofitted into many applications where there is a current A/C system. With no requirement for an external condenser, and extensive pipework, upgrading an existing split air conditioning system is simple.

WiFi Control

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.

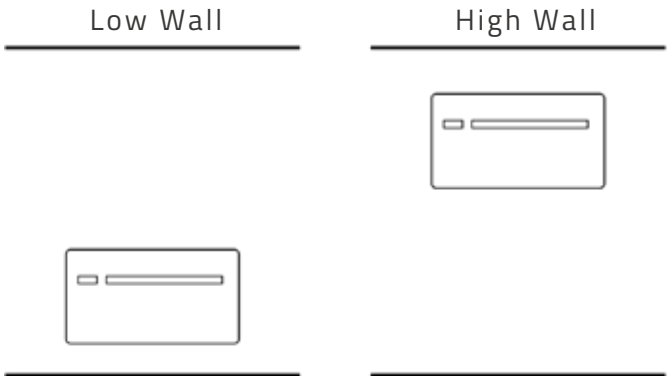
Heating & Cooling Option

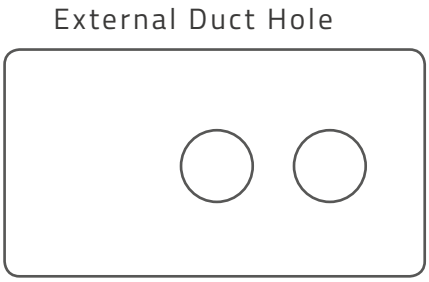
Each Vision model has the ability to heat and cool your building from -6°c to 31°c. The Vision DW/H has lowering performances in heating when outdoor temperature is falling where the heat pump is integrated (and not replaced) by a 1kW electrical resistance that intervenes automatically when outdoor temperature become extremely low.

Vision

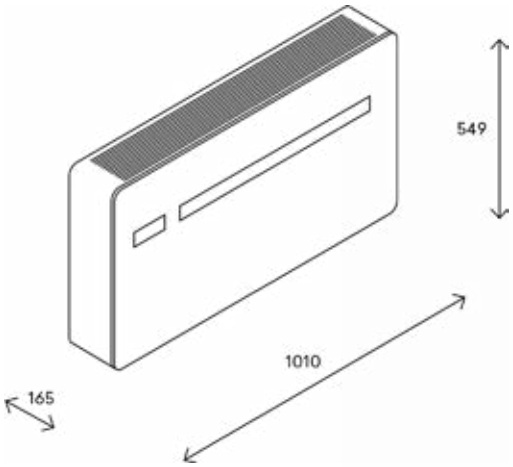
The Vision range has been designed with a smooth curved shell and now incorporates a full metal body to give it a more solid and consistent performance eliminating all plastic parts in its construction.

The units employs new techniques and technology to precisely follow the curves of the design, all the way to the elegantly rounded corners. The smooth, polished white PPC finish allows the unit to fully complement any room decor and design.

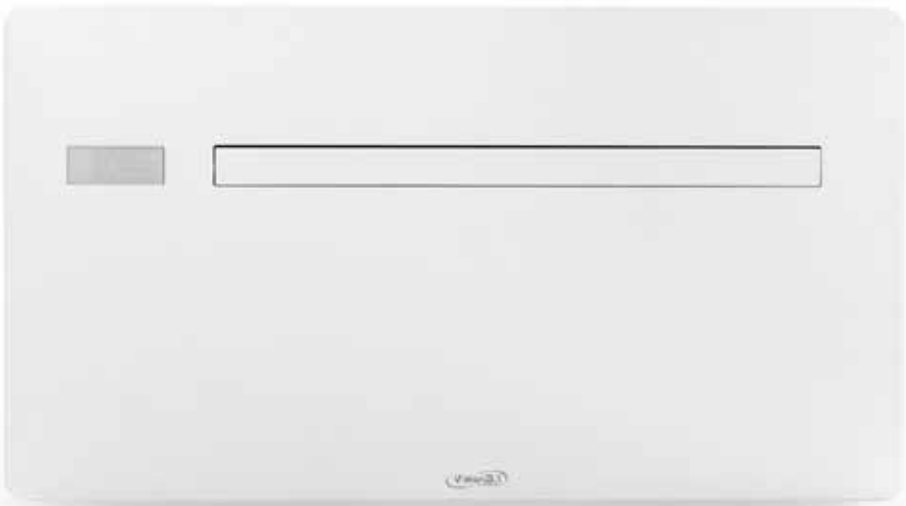




Dimensions



NEW DESIGN



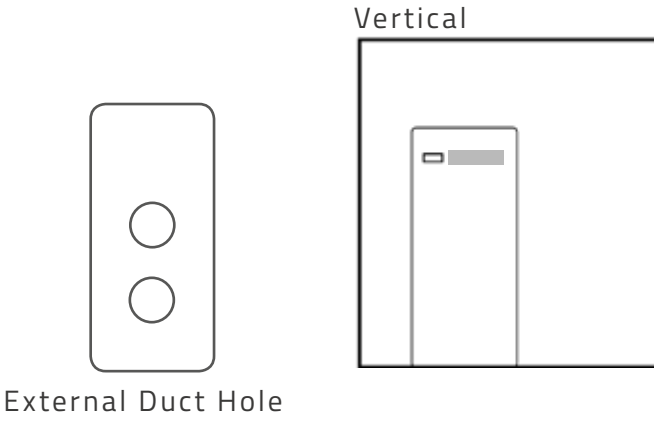
Wi Fi CONTROL

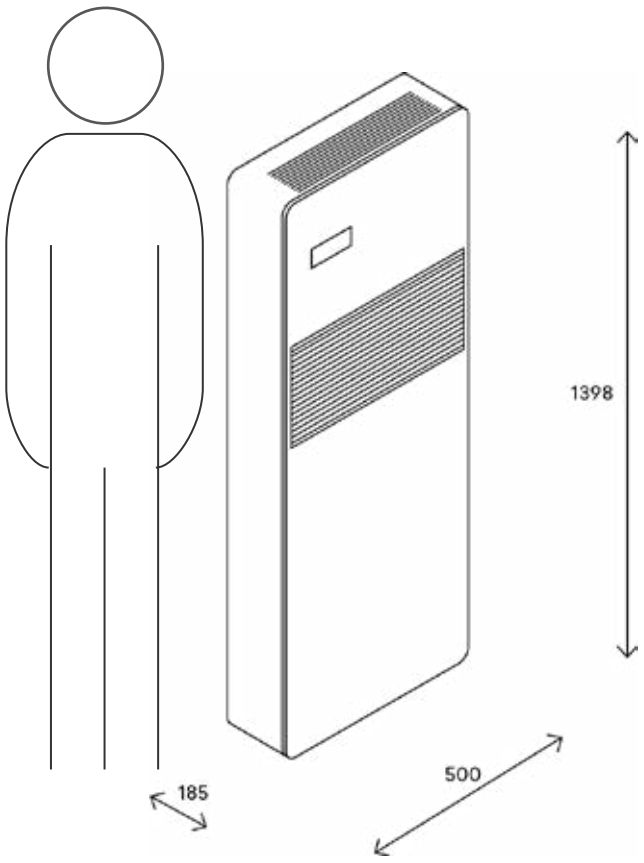
Vision VertiCool

The Vision VertiCool 3.1kW is the latest in the range with 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.

NEW PRODUCT





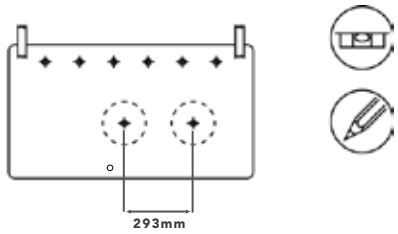
Through The Wall Installation

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.

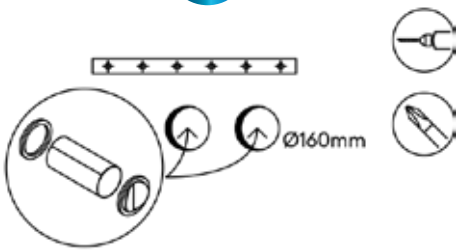
1



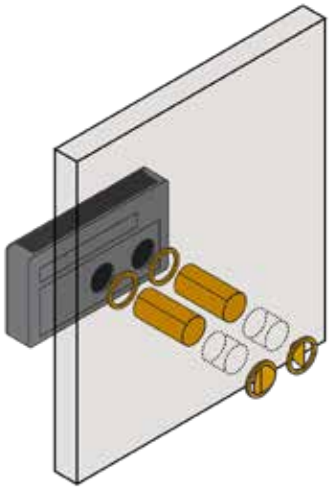
Mount the provided paper template level to the desired wall and mark the 6 x fixing bracket holes, 2 x 160mm dimeter duct holes and the 14mm condensate hole.

(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.



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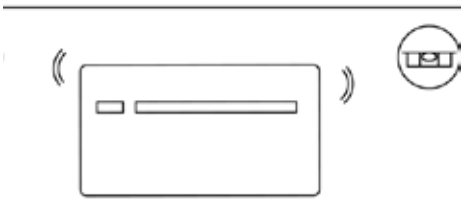
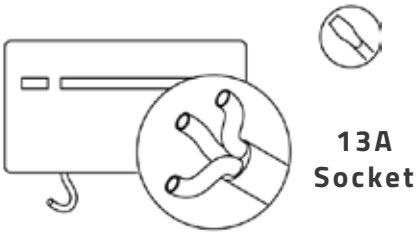


Mount the unit on the wall onto the bracket checking for the correct alignment.

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 controller 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 ontrollerwhich 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 160mm 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.

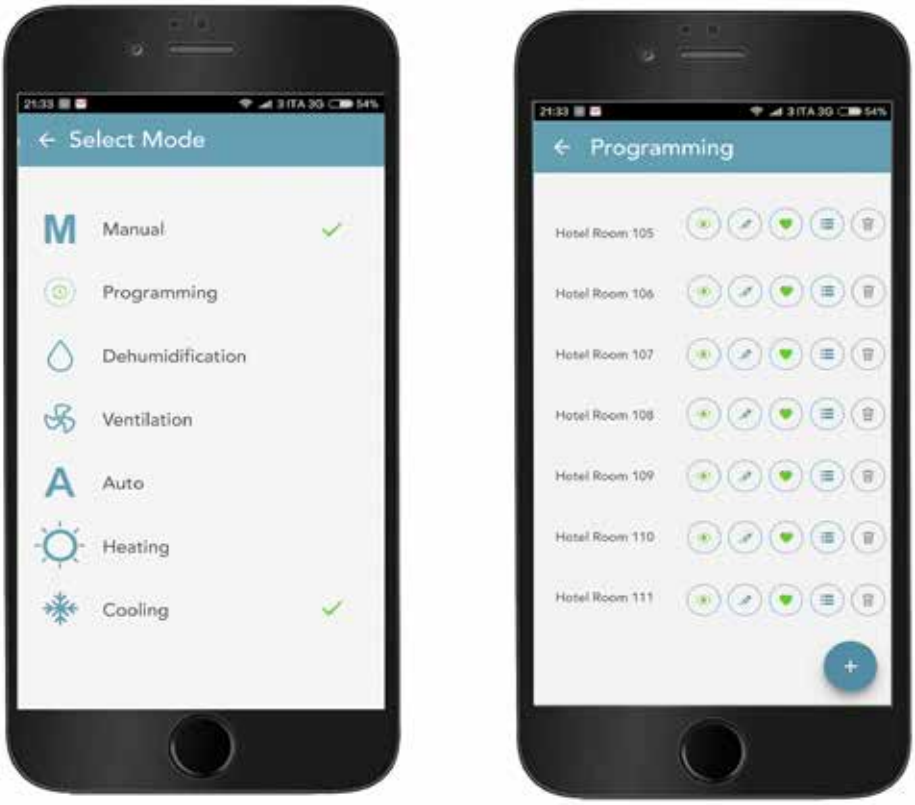
On specialist projects of over 50 units, the external grilles can be painted to any BS or RAL number to blend in with the buildings exterior walls.

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)

Available on the App Store

ANDROID APP ON Google Play

Mobile App Control

Air Movement

Warm or cold internal air is efficiently distributed via the independent oscillating vane at the front of the unit by internal evaporator fan dependent on the desired room temperature requirement. The conditioned air is then returned to the room to provide comfort cooling or reverse cycle heating. Outdoor air is drawn in via the external inlet grille which cools the hot condenser in cooling mode, this in turn provides ambient heat to the condenser coil when reverse cycle heating mode.

Energy Efficiency

Thanks to DC Inverter technology, capacities are optimised so to have the best comfort with the lowest power consumption and noise.

Thanks to 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.

Dual Power Cooling (Vision 3.1)

0.73 kW Input — **3.10 kW Output**

Dual Power Heating (Vision 3.1)

0.72 kW Input **3.05 kW Output**

Typical Room Coverage
(General guide only)

This is a guide and is intended to provide general information only. Factors such as building fabric, and orientation will significantly contribute to the selection. Powrmatic strongly recommends you contact our sales team for accurate product selection and sizing.

Maintenance

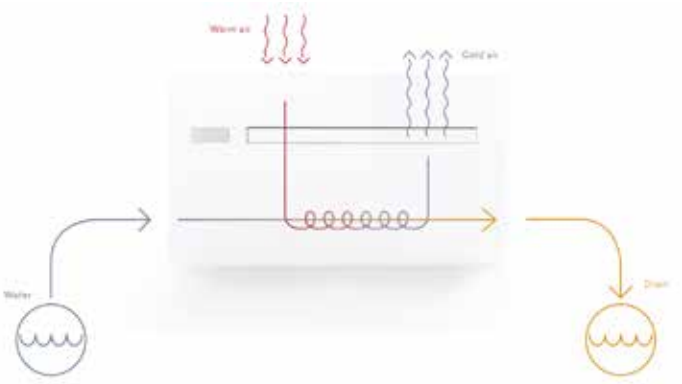
Maintenance is simple with every Vision model. The opening grille panel on the top can be detached and the units filters are easily accessible for cleaning and maintenance. With very little moving parts, the packaged unit limits maintenance contracts which is backed up with a comprehensive range of replacement parts at our warehouse.

Additional Models

Vision H_20

The Powrmatic Vision H_20 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.

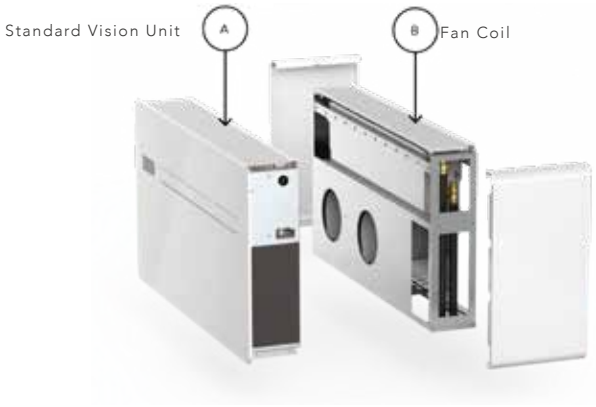
The Vision H20 only requires its own cold water mains connection, and a waste water drain. The H20 can also connect to any existing chiller loop or or condenser.



Fan Coil Model (LHTW)

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.



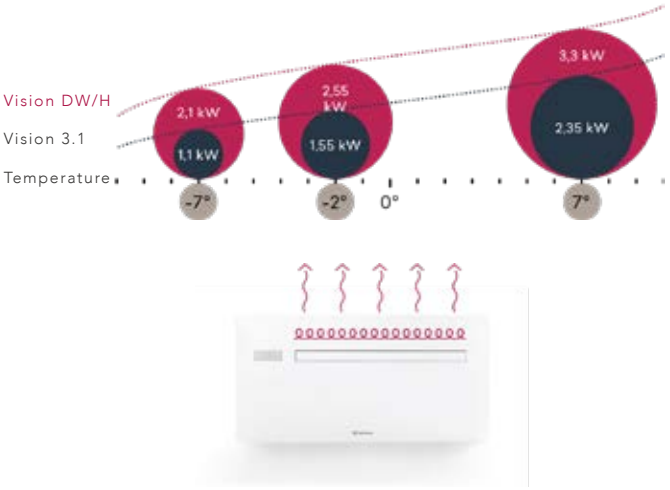
Vision DWM Marinised Model

(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 utllising 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 Models



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

Nottingham Belfry

Installations

Oxford Belfry Hotel

Norton Park Hotel

25c

Technical Specification

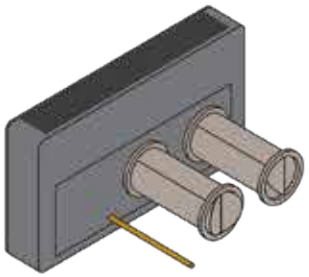
Technical Data	U.M	2.3 DW	3.1 DW	3.1 VertiCool DW	H_2O	3.1 DW/H	LTHW
Cooling Capacity	kW	2.04	2.35	2.35	2.65	2.35	Refer To Model
Cooling Capacity - Dual Power Max / Min	kW	2.6 / 0.8	3.1 / 0.9	3.1 / 0.9	3.6 / 1.3	3.1 / 0.9	
Heating Capacity	kW	2.10	2.36	2.36	3.17	2.36	
Heating Capacity - Dual Power Max / Min	kW	2.64 / 0.7	3.05 / 0.8	3.05 / 0.8	3.84 / 1.38	3.05 / 0.8	
Power Input In Cooling	W	630	730	855	680	730	
Power Input In Heating	W	638	720	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	0.8	0.9	0.9	1.1	0.9	Refer To Model
Power Supply Voltage	V-F-Hz	230/1/50					
EER	W/W	3.24	3.22	2.75	3.89	3.22	
COP	W/W	3.29	3.28	3.15	4.10	3.28	
Energy Efficiency Ratio When Cooling		A+	A+	A	A++	A+	
Energy Efficiency Ratio When Heating		A	A	A	A++	A	
Dimensions (W x H x D)	mm	1030 x 555 x 165	1030 x 555 x 165	500 x 1398 x 185	1010 x 549 x 165	1030 x 555 x 165	1030 x 555 x 143
Weight	Kg	48.5	48.5	53	49.5	48.5	Refer To Model
Noise Level (Min / Max)	dB(A)	26 / 39	27 /41	27 /41	27 / 41	27 /41	
Wall Hole Diameter / Condensate Drain	mm	162 / 14					
Refrigerant Gas		R410A					

Condensate Nebuliser (Vapouriser)

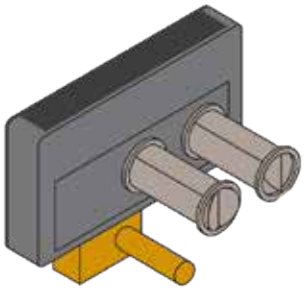
The condensate nebuliser can be supplied to replace the external condensate pipe.

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

Accessories / Spares

Description
Vision Digital Hard Wired Controller
Vision Remote Control (provided with unit)
Condensate Nebuliser
Standard External Grilles (pair)
Flat Aluminum Grills
Anti Insect Grills

Digital Hard Wired Controller
(Only Supplied in White)

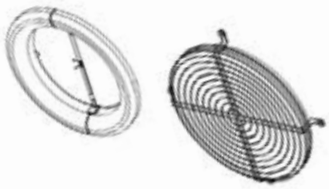
Remote Controller

Condensate Nebuliser

Standard External Grills

Flat Aluminum Grills

Rain Cowls



Anti Insect Grills

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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