# Heating and Air Treatment

Whether at home or work we all try to create 'just the right atmosphere'. It affects our comfort, our health and is good for business.

Achieving that goal will vary by location, time of day, the seasons and the activity. It might be a smoky pub, stale air and lack of air movement in a factory, hygiene concerns in a doctor's waiting room, a cold winter's draught through a shop doorway or an uncomfortable bedroom on a hot summers night.

Some points to bear in mind.

At work, employers are legally required to ensure that during working hours temperatures are reasonable and comfortable. In public areas where there is smoking, employers have a duty of care to employees to ensure that exposure to passive smoke is minimised.

In public places, body heat and odour can be the overriding problem. The average heat output in a pub is about 250W per person. So, for example, a pub with 80 people can be adding 20kW of heat to an enclosed room.

Solar heat gain can be a major contributor to discomfort in glazed atriums and conservatories.

An open window may make matters worse with the ingress of noise and fumes.

The activity inside may limit or forbid unattenuated openings to the outside e.g. a factory process or a disco. At home, double-glazing and improved insulation provide higher levels of air tightness than ever before. This is good for our general comfort but often fails to cope with seasonal extremes.

Xpelair's wide range of ventilation solutions now includes heating, cooling and filtration systems designed to provide pleasant air movement that refreshes and combats stale air, remove airborne pollutants at source, and heat or cool on demand. In addition, controllers and Xpelair accessories allow you to design a customised solution for individual applications.

Heating & Air Treatment Product selector	Digitemp	WH & WHP	DCH	ScreenHeat	PlinthHeat	SweepFan	Electrostatic Air Cleaners	
Page Number	84	86	86	88	88	90	92	94
Fan Type	Air conditioner	Fan heater	Fan heater	Over door heater	Plinth heater	Circulation fan	Air cleaner	Air cleaner
Application	Heating and cooling	Commercial	Domestic and commercial	Hot air curtain	Kitchen	Destratisfication	Air purification	Air purification
Models	4	3	1	2	6	4	6	4
Max heating output (kW)	2.03	6	3	4.5	2			
Max cooling capacity kW)	2.45							
Mounting	Wall	Wall	Wall	Wall	Cupboard base	Ceiling	Ceiling	Floor, wall, ceiling
Control Options								
Remote Control					•			
Integral Controls					-			





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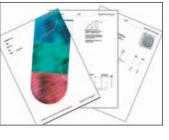
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# **Xpelair Digitemp**

Comfort air conditioning and heating





# Key features

Туре:	Modular climate control
Application:	Domestic, commercial and leisure
Control options:	Remote hand held
Hole size:	155mm

CE

# The Range

Cool in summer, cosy in winter. Xpelair **Digitemp** offers all year climate control for homes of all shapes and sizes. Installing climate control can bring a sense of comfort and style to a home, fulfiling the expectations of modern family life.

The self-contained **Digitemp** unit is ideal for use in the bedroom and living spaces, conservatories and studies. The quiet and sleek unit is installed internally without the use of an unsightly outdoor condensing unit – making it particularly suitable for use in apartments and multi storey locations where other systems require planning permission. The **Digitemp** is even suitable for some listed building applications. **Digitemp** is a stylish 'slimline' wall mounted 'all-in-one' solution, providing all year round comfort – cooling, heating and dehumidification all at the touch of a hand held remote control.

With no outdoor condensing unit to install and no gas connections, the unit is easy and quick to fit at high or low level. Installation can be done internally with the only sign of the system on the outside of the building being two discreet grilles.

The WA210 and WA245 models provide cooling only. Whereas the WHP210 and WHP245 provide the convenience of heating and cooling in a single unit.

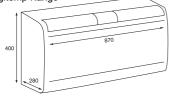
	WA210	WA245	WHP210	WHP245
Reference Number	91173AA	91174AA	91175AA	91154AA
Cooling capacity (kW)	2.1	2.45	2.1	2.45
Heating capacity (kW)			1.9	2.03
EER (Energy Efficiency Ratio)	2.66	2.66	2.23	2.23
COP (Coefficient of Performance)			2.64	1.88
Max. absorbed power rating (W)	930	1320	930	1320
Dehumidification capacity (I/h)	1.0	1.2	1.0	1.2
Energy efficiency class (cooling)	A	С	А	С
Energy efficiency class (heating)			С	F
Room air volume (m <sup>3</sup> /h)	350	390	350	390
Fan speed settings	3	3	3	3
Noise levels dB(A)	37	39	37	39
Refrigerant type	R410a	R410a	R410a	R410a
Max range of infrared remote control (m)	8	8	8	8
Power supply (V)	230	230	230	230
Power supply (Hz)	50	50	50	50
Guarantee (years, UK)	2	2	2	2



- · Can operate in cooling, heating or dehumidification modes to maximise comfort.
- Easy installation from within the room patented folding grille system eliminates the need for external access
- · Everything needed to fit the unit is supplied apart from a drill and Ø155mm core cutter!
- The electronic control system includes infrared remote control night function and automatic operation
- · Can be installed at high or low level for maximum flexibility and useable space
- · Economic and efficient, combining low power consumption when cooling with a high
- efficiency heating capacity • Digitemp uses a three speed fan including
- night mode for super-quiet operation Factory sealed refrigerant system eliminates
- the need to connect hoses · Self-diagnostic programme for all maintenance
- requirements

#### Dimensions

#### **Digitemp Range**



# Installation

Cooling and Dehumidification 2.1kW (cooling) Ref. 91173AA 2.45kW (cooling) Ref. 91174AA

Cooling, Heating and Dehumidification 2.1kW (cooling) and 1.9kW (heating) Ref. 91175AA 2.45kW (cooling) and 2.03kW (heating) Ref. 91154AA

#### Controllers



The automatic control system provides precise climate control at the press of a button. All operational modes are programmable using the infrared handset - no need to move to adjust the room temperature.

Typical Specifications on page 135.

High level installation

Low level installation

Internal appearance



External appearance

Installing Digitemp from within the room at high or low level is quick and easy. The refrigerant system is factory sealed so installation does not involve opening the system or the connection of any hoses.

Digitemp can only be positioned against an outside wall. Where possible the unit should be sited in the centre of the wall

Two 155mm diameter holes are core drilled at a sloping angle towards the outside. The diameter must not be reduced or restricted.

The indoor wall bracket and ducts are fitted

The patented, folding, outside inlet and outlet grilles are installed from within the room.

The unit is fixed to the bracket with care taken that it is perfectly level.

The unit is wired to a fused spur.

# Xpelair WH30, WH60, WHP30 & DCH3000A

Commercial wall heaters



#### Key features

Туре:	Wall Heating
Application:	Commercial and Industrial
Control options:	Integral/remote



# The Range

The Xpelair **WH** and **DCH** ranges of wall heaters have stood the test of time to remain market leaders.

The **WH** range is perfect for use in factories, warehouses, workshops, canteens, and is also ideal for public areas of shops, waiting rooms, office, garages, hospitals, large stores and even agricultural applications.

Whatever the size, shape and application of a project, the **WH** range has a unit that will suit its heating requirements. Efficient, stylish, discreet and energy efficient, the **WH** range offers choice, flexibility and outstanding heating performance.

The **WH30** and **WH60** models provide robust and rugged heating units, while the **WHP30** provides comfortable, reliable heating solutions for shops, offices, domestic workshops and conservatories.

The wall fitted **DCH 3000A** fan powered heater circulates instant warmth to a room. From its unobtrusive position on any wall, the heater spreads heat and comfort around the room while remaining inconspicuous and quiet.

Suitable for a variety of commercial applications including hallways, offices, pubs, restaurants, shops and hotel rooms, the sleek wall-mounted unit fits perfectly into any busy area where reliable, comfortable heat is required.

Requiring only two wall screw fixings, the unit is easy to fit and lightweight, making it ideal for rented or additional spot heating applications. The heater offers a choice of three heat outputs and can be automatically regulated using the built in thermostatic control. For all year round comfort, the heater becomes a circulation fan at the flick of a switch.

Both the **WH** and **DCH3000A** ranges have gained a worldwide reputation for excellence and the range continues to be built to the high standard that has won it this acclaim. This has resulted in a range of tough, compact space heaters for the most demanding environments.

	WH30	WH60	WHP30	DCH3000A
Reference number	98392AC	00147AC	89999AW	90792AW
Electrical power (kW)	3	6	3	3
Phase	1	1 or 3	1	1
Air delivery (m <sup>3</sup> /h)	274	311	300	115
Air delivery (I/s)	76	86	83	32
Temperature increase (°C)	26	45	30	n/a
Weight (kg)	5	6.5	2.9	4.5
Remote switch (not supplied)				
Integral controls				
No. of heat settings				3
Guarantee (years, UK)	1	1	1	1



# Xpelair WH30

# Ref. 98392AC

- 3kW industrial fan heater Compact wall hung design
- Compact wail hung design
  Heavy duty steel casing with die cast
- Heavy duty steel casing with the casinal aluminium guards
  Spiral wound Nichrome wire element
- Spiral wound Nichrome wire
- Metal wall bracket
- Multi directional positioning -180° horizontal swivel and 45° vertical tilt then locked in position
- Wall bracket cover
- Double safety feature of thermal cut out with auto reset and one shot fusible link
- · Single phase product
- For cool air circulation facility and thermostatic heating control use HC301 Controller (not supplied)

# Xpelair WH60 features over the WH30 Ref. 00147AC

- 6kW industrial fan heater
- Wall or ceiling mounting with multi directional positioning - 180° horizontal swivel and 45° vertical tilt then locked in position
- Suitable for Single and Three phase supplies
- Operated by remote switch (not supplied)

# Dimensions

#### Xpelair WHP30 Ref. 89999AW

- 3kW commercial fan heater Fan heater complete with HC301
- thermostatic controller
- Compact wall hung design
- Flame retardant polycarbonate / glass filled nylon casing
- Spiral wound Nichrome wire element
- Grey wall bracket
- Multi directional positioning 180° horizontal swivel and 45° vertical tilt then locked in position
- Double insulated with two thermal cut outs
- · Finished in a white and grey casing
- · Single phase product
- For cool air circulation facility and thermostatic heating control use HC301 Controller (included)

# Xpelair DCH3000A

# Ref. 90792AW

- 3kW wall mounted heater with circulation fan
- Three heat settings 1kW, 2kW and 3kW
  Adjustable EnergySaver temperature sensor control regulates heat output

146

327

276

· Easy installation and simple operation

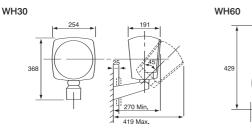
Controllers

#### HC301 Controller for WH30 and WHP30 Ref. 21877AW

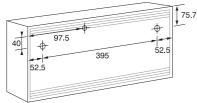
 Controller provides On/Off switching combined with fan only or fan and heater operation. Variable thermostatic control. Not suitable for WH60.



Typical Specifications on page 135-136. Wiring Diagrams on page 147.



#### DCH3000A



#### Installation and Accessories

#### WH30

Should be sited between 2m and 2.5m from the floor level to the centre of the unit, a minimum of 200mm from the ceiling and 100mm from adjacent walls and other objects. Not recommend for rooms with a ceiling height greater then 5m.

#### WHP30

Should be sited at least 1.8m from the floor level to the centre of the unit, a minimum of 150mm from the ceiling and 300mm from adjacent walls and other objects. Not recommend for rooms with a ceiling height greater then 5m.

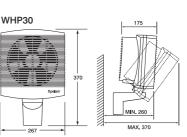
#### WH60

Recommended height 2.3m – 2.6m floor to centre of heater

#### DHC3000A

Heater should be mounted not less than 305mm from the floor or 610mm from a ceiling and nearby objects.

The unit must be mounted on an unbroken surface which completely covers the back panel.



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# **Xpelair ScreenHeat & PlinthHeat**

Doorway hot air curtains and plinth heaters





# Key features

Туре:	Unitary Heating
Application:	Shops, offices, kitchens
Control options:	Integral/remote

CE

# The Range

The **ScreenHeat** range of fan powered doorway heaters provides the ideal solution for draught exclusion on external doors. When mounted on the inside of an external door, the **ScreenHeat** creates a 'hot air curtain' to prevent cold draughts entering a building.

In summer, the **ScreenHeat** can be switched to run only with the fan to form a barrier against incoming dust and provide a refreshing breeze. Suitable for a range of doorway applications in commercial premises such as shops, offices, workshops and stores, the **ScreenHeat** is designed for fast installation with two key hole-slot brackets providing complete flexibility of adjustment from vertical to horizontal. Easily accessible switches allow the option to run the unit on fan only or at half or full heat output.

**ScreenHeat** units are available in a contemporary white/grey paint finish.

**PlinthHeat** is the ideal product for kitchens and fits into 120mm kitchen plinths.

When in use for cooking, most kitchens don't need additional heating. But it can be a different story in the morning.

The **PlinthHeat** range can provide vital warmth to a cold floor and rapidly heat the room. The unit sits neatly in the plinth below the kitchen cupboard to provide an unobtrusive flow of warm air at floor level. Available with built-in control or for further convenience a thermostat and switch can be wall mounted elsewhere in the room.

The units are available in three colours to match modern décor; ice white, conker brown and brushed stainless steel.

	ScreenHeat 3	ScreenHeat 4.5	PlinthHeat BR	PlinthHeat WR	PlinthHeat SR	PlinthHeat B	PlinthHeat W	PlinthHeat S
Reference number	91469AW	91470AW	91468AB	91467AW	91313AW	91466AB	91465AW	91312AW
Colour	white/grey	white/grey	brown	white	stainless steel	brown	white	stainless steel
Integral Control								
Remote Control								
Requires remote control kit 87100								
Electrical power (kW)	3	4.5	2	2	2	2	2	2
No. of heat settings	2 & cold	2 & cold	2	2	2	2	2	2
Air delivery (m <sup>3</sup> /h)	250	250	110	110	110	110	110	110
Air delivery (I/s)	71	71	28	28	28	28	28	28
Weight (kg)	5.44	5.44	2.35	2.35	2.35	2.35	2.35	2.35
Guarantee (years, UK)	1	1	1	1	1	1	1	1



#### ScreenHeat 3 Ref. 91469AW

### · Doorway hot air curtain

- Two heat outputs: 1.5kW, and 3kW
- High volume throughput 250m<sup>3</sup>/h
- · Smooth running, shaded pole motor, with greased for life bearings and safety thermal overload protection
- · Heater element is of open coil design supported by ceramic insulators
- · The heater has a separate thermal cut-out
- Integral switching for ease of installation
- · Zinc coated steel, powder coated body
- Two mounting brackets which can be fitted prior to main case
- · Brackets allow the unit to be rotated from vertical to horizontal
- Tangential blower
- · White/grey finish

#### ScreenHeat 4.5 Ref. 91470AW

- · Features over the ScreenHeat 3
- Two heat outputs 2.25kW and 4.5kW

#### PlinthHeat

PlinthHeat with remote control\* in conker brown Ref. 91468AB

PlinthHeat with remote control\* in ice white Ref. 91467AW

PlinthHeat with remote control\* in brushed stainless steel Ref. 91313AW

PlinthHeat with integral control in conker brown Ref. 91466AB

PlinthHeat with integral control in ice white Ref. 91465AW

PlinthHeat with integral control in brushed stainless steel Ref. 91312AW

#### · Available in a choice of models with integral

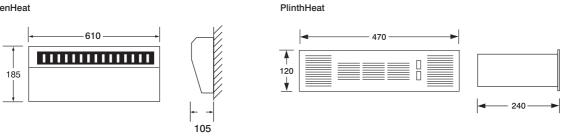
- controls or with remote thermostatic controls • 1kW and 2kW settings
- · Stitched 'black heat' element

- · Maintenance free motor with sealed for life bearings
- · Power 'On' indicator lamp
- · Automatic thermal cut out for safety
- Fits flush with standard plinths of 120mm and over
- Crossflow blower
- · Available in ice white, conker brown and stainless steel finishes
- \* Requires remote thermostatic control kit consisting of wall mounted single stage variable thermostat, fused double pole switch. two gang box and cable wall clamp. Ref. 87100

Typical Specifications on page 136. Wiring Diagrams on page 147.

# Dimensions

# ScreenHeat



# Installation

#### ScreenHeat

The units can be fixed directly to the wall using the key slot holes provided. For an adjustable outlet use the brackets provided. Fit directly above the door at a height of between 1.8 to 2.25m from the floor. The recommended cable sizes are 2.5mm<sup>2</sup> for the 3 and 4.0mm<sup>2</sup> for the 4.5.

Versatile brackets offer flexible positioning and adjustment.

Electrical supply 220-240V 50Hz single phase.

#### **Ceiling Mount**



Wall Mount



#### PlinthHeat

Hole height: 95mm

Hole width: 440mm

Electrical supply 220-240V 50Hz single phase.

# **Xpelair SweepFan**

Commercial ceiling fan range



#### Key features

Туре:	Commercial quality cooling and destratification fans			
Application:	Commercial/Industrial			
Control options:	Range of optional controllers available			

CE

### The Range

Originally designed to provide a cool flow of air during warm periods, Xpelair **SweepFans** are a popular choice for winter applications too, where their use as heat destratification units can reduce heating costs. These commercial quality products are designed for use in public buildings, shops, theme pubs, restaurants, village halls, churches, hospitals, schools, farm buildings, factories, warehouses and other commercial buildings.

**SweepFans** are designed for worldwide use, including hot and humid conditions. The units are rated for continuous operation in commercial applications at temperatures up to 40°C and are suitable for upwards or downwards airflow. The triple bladed units are available in four sizes with swept diameters from 900 to 1500mm. Fan blades are steel and are supplied in matched sets. **SweepFans** are supplied with a choice of two lengths of suspension rod giving overall drops of 375 or 750mm.

In summer the atmosphere can become stifling hot. **SweepFans** can provide immediate relief by quietly delivering a continuous cooling breeze over a wide area. To maximise the benefit it is good practice to introduce fresh air into the area.

In winter stratification will naturally occur in a room as hot air rises to ceiling level (or the apex of the roof) and cooler air sinks to ground level. Xpelair **SweepFans** will effectively destratify the hot air which gathers at ceiling height by pushing it downwards to mix with cooler air nearer to ground level, thus providing a more uniform temperature profile from floor to ceiling. This results in reduced heating costs as all the hot air does not gather at ceiling height, and thermal losses are reduced. The units should be set for downward airflow at low speed for optimum effect.

The optional Xpelair ThermoMiser sensor control system can automatically compare high and low level temperatures and ensure that the fans are operated to maximise energy efficiency. The controller should be sited where the ambient is less than 35°C, with the two sensors fitted at high and low level and connected using the cables supplied. In summer the control knob can be used to manually override the sensors. For no-frills speed control the Xpelair **SweepFan** controllers are available for the control of a single fan or groups of up to 6 fans.

All **SweepFans** have integral anti-vibration bobbins and a continuously rated capacitor start and run external rotor motor. The motor incorporates two sets of caged ball bearings for extra long life.

### Select the right product for your application

	NWAN36	NWAN48	NWAN56	NWAN60
Reference number	90409AW	90410AW	90411AW	90412AW
Swept diameter (mm)	900	1200	1400	1500
Remote switch (not supplied)				
Reversible operation				
Maximum speed (rpm)	350	310	280	260
Air delivery (m <sup>3</sup> /h)	8761	10890	12474	13959
Air delivery (I/s)	2434	3025	3465	3878
Electrical power rating (W)	50	65	65	65
Weight (kg)*	6.5	6.5	6.5	6.5
Overall drop options (mm)	375/750	375/750	375/750	375/750
Guarantee (years, UK)	2	2	2	2

\*All models 6.5kg with marginal weight variance according to sweep diameter



# NWAN36

#### Ref. 90409AW

 900mm diameter sweep fan for cooling or destratification

#### NWAN48

# Ref. 90410AW

 1200mm diameter sweep fan for cooling or destratification

### NWAN56

#### Ref. 90411AW

• 1400mm diameter sweep fan for cooling or destratification

#### NWAN60

#### Ref. 90412AW

• 1500mm diameter sweep fan for cooling or destratification

Tip! For optimum performance of Xpelair SweepFans choose a dedicated Xpelair controller.

Typical Specifications on page 137. Wiring Diagrams on page 147.

# Controllers

#### Xpelair Single SweepFan Controller WAC1 Ref. 21852AW

 Two slide switches provides On/Off operation and 5 speed settings. Complete with transformer controller for quiet operation and 'fan running' indicator light

#### Xpelair Group SweepFan Controller WAC6 Ref. 21853AW

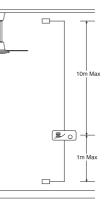
- For the simultaneous speed control of 1 to 6 SweepFan units. Two slide switches provides On/Off operation and infinitely available speed settings
- Complete with 'fan running' indicator light

#### Xpelair Group SweepFan Reversing Controller WAC6R Ref. 21878AW

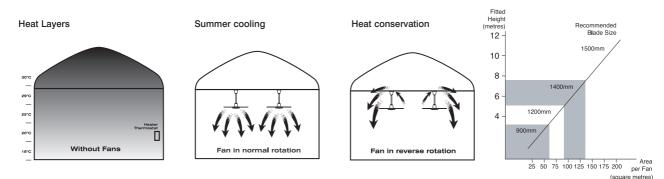
 For the simultaneous speed control of 1 to 6 SweepFan units. Two slide switches provides On/Off operation and infinitely variable speed settings. Complete with 'fan running' indicator light and choice of winter/summer upwards or downwards airflow

#### Xpelair ThermoMiser SweepFan Auto Temperature Controller AWC Ref. 21857AW

- De-stratification controller supplied with two thermo sensors at high / low level monitoring between preset minimum and maximum values. For the simultaneous speed control of 1 to 10 SweepFan units. Three slide switches provides On/Off operation and upwards or downwards rotation, manual override
- Complete with fan running light



# Air Movement



# Dimensions

#### NWAN Range



	Dimensions	(mm)		
	NWAN36	NWAN48	NWAN56	NWAN60
Sweep Diameter	900	1200	1400	1500
Overall Drop		All models, ceili	ng to bottom of fan:	
	;	375 or 750 (two o	down rods supplied)	

#### Installation

#### Which fan diameter do I choose?

SweepFan units are delivered with two suspension rods. Ideally the fan blade should be at 2700mm or more from the floor (but never less than 2400mm) and a minimum of 375mm from the ceiling.

Spacing will vary according to individual building layout. As a rule of thumb, in the majority of temperate climate applications Xpelair SweepFans should be spaced 4500 – 6000mm between blade tips apart. In hot and humid applications this should be reduced by a third. The units should be no closer that one and a half diameters from pillars and walls in order to avoid turbulence unbalancing the unit and causing it to sway. Check that the units are clear of lighting to avoid strobe effects.

A speed controller is recommended particularly for multi unit installations.

# **Xpelair Electrostatic Air Cleaners**

Surface and recessed models



### Key features

Туре:	Air Cleaners
Application:	Pubs, clubs, restaurants, offices
Control options:	Remote hand held

CE

# The Range

With the allocation of separate smoking and non-smoking areas in public places, controlling the build up of tobacco smoke has never been simpler.

Suitable for commercial premises such as pubs, restaurants, designated smoking rooms, conference rooms, offices, meeting rooms and clubs.

Xpelair **Electrostatic Air Cleaners** can be used on their own or as part of a complete ventilation strategy. Ventilation relies on a flow of air across a space. Often in pubs and restaurants, the design of nooks and alcove areas creates unventilated spaces. The area around the dartboard tends to be a 'hot spot'; and at the bar it is good practice to counter smoke drifting towards serving staff. Airborne dust is also removed down to 0.01 microns. As well as healthier air quality, **Electrostatic Air Cleaners** means less frequent cleaning and redecoration, resulting in lower costs.

Xpelair **Electrostatic Air Cleaners** are a convenient way of dealing with tobacco smoke at source, so preventing it migrating to other parts of the building.

They are easy to fit to a ceiling or can be recessed where a suspended ceiling or ceiling void is available.

All units come complete with a hand held remote control so that the unit can be easily operated by staff.

		EAC400K	EAC400W	EAC700K	EAC700W	EACF400W	EACF700W
Reference number		89869AK	89861AW	89870AK	89862AW	90015AW	89981AW
Mounting		Ceiling	Ceiling	Ceiling	Ceiling	Ceiling	Ceiling
Finish		Black/woodgrain	White	Black/woodgrain	White	White	White
Air flow (m <sup>3</sup> /h)	High	1000	1000	2000	2000	780	1500
	Medium					660	1260
	Low	400	400	1000	1000	420	1080
Sound pressure level (dB(A)@3m)		58	58	60	60	58	63
Number of cells		1	1	2	2	1	2
Max electrical power (W)		115	115	300	300	275	315
Installed weight (kg)		19	19	32	32	24.5	37.6
Guarantee (years, UK)		1	1	1	1	1	1



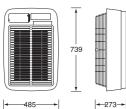
Electrostatic Air Cleaners EAC Surface mounted on ceiling

Airflow: 400 to 1000m3/h EAC400K Black/wood grain Ref: 89869AK EAC400W White Ref:89861AW

Airflow: 1000 to 2000m3/h EAC700K Black/wood grain Ref: 89870AK EAC700W White Ref: 89862AW

- · Available in two sizes/outputs for max. areas of 45sgm and 90sgm
- Mounting rails provide simple and fast installation
- Mesh pre-filter
- Particle charger and aluminium electrostatic plate cell
- · Effective air distribution pattern
- · Complete with hand held infrared remote control
- Dimensions

#### EAC400 Range



- · High efficiency fans
- · Five speeds
- Pre selectable start-up speed
- · Status indicator panel. A 'wash' LED indicates the needs to clean the cell and pre-filter
- Available in black/woodgrain finish or white • For odour removal such as hairdressing sprays, kitchens etc. an additional active
- carbon filter is available • Fits both sizes of unit

### Ref: 89884AA

#### Electrostatic Air Cleaners EACF Recess mounted

Airflow: 420 to 780m3/h EACF400W White Ref: 90015AW

Airflow: 1080 to 1500m3/h EAC700W White Ref: 89981AW

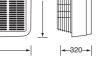
· Available in two sizes/outputs for max. areas of 40sam and 80sam

- Designed for unobtrusive installation in suspended 600 x 600mm ceiling tiles
- Fascia grille may be painted to match the ceiling décor
- Mesh pre-filter
- Particle charger and aluminium electrostatic plate cell
- · Effective air distribution pattern
- Complete with hand held infrared remote control
- High efficiency fans
- · Three speeds
- Pre selectable start-up speed
- Status indicator panel. A 'wash' LED indicates the needs to clean the cell and pre-filter
- · Fascia colour: off white

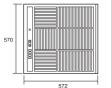
Typical Specifications on page 137.

EAC700 Range

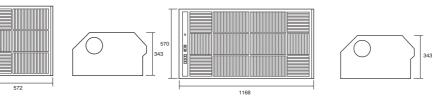
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# EACF400



EACF700



# Installation

The design of an Air Cleaning System is straightforward, involving a set sequence of steps:

#### Step 1:

# Volume of Affected Area or Room

Determine overall volume of affected area or room Width x Length x Average Height  $=m^3$ . Step 2:

# Rate of Air Cleans per Hour

From the table, select the most appropriate hourly air clean rate. The rates listed relate to the likely severity of the indoor pollution problem.

Light	Medium	Heavy			
6 air cleans/hr	8 air cleans/hr	10 air cleans/hr			
Office	Restaurant	Pub			
Computer Room Conference Room Social Club					
Foyer area	Dance Hall	Restaurant/Bar			



Total Air Clean Rate

#### Calculate the total air clean rate for the problem area:

Room Volume (m<sup>3</sup>) [Step 1]xRate of Air Cleans per Hour=(m<sup>3</sup>/hr) [Step 2]

#### Step 4:

# Size and Number of Electrostatic Air Cleaners

The EAC flow rates as calculated should not exceed the value obtained at the three quarter speed setting. This ensures that the system designed has some additional capacity should pollution conditions be abnormal.

Room	Smoking Room			
Size	6x4x3=72m3			
Air Cleans/hr	10			
Total Air Clean Rate	10x72m <sup>3</sup> =720m <sup>3</sup> /h			

1 EAC400 is required for this area.

# **Xpelair DigiPure**

Polarising air filtration





# Key features

Туре:	Air Cleaners
Application:	Pubs, clubs, restaurants, offices
Control options:	Remote hand held



# The Range

Indoor pollution is a growing problem with air inside our buildings being up to 100 times more polluted than outdoors. Sources of indoor pollution include dust, mould spores, biological contaminants, pollen, tobacco smoke and volatile organic compounds. They are especially dangerous to the elderly, infants and allergy sufferers. Xpelair introduces ESSA a unique technology that cleans indoor air to unprecedented levels without producing harmful ozone.

Suitable for care homes, hospitals, hotels, schools, surgeries, leisure facilities, offices and commercial premises where there is a responsibility to provide a safe and comfortable environment for those who use them. Xpelair **DigiPure** uses a unique and patented air cleaning technology that removes up to 98% of airborne pollutants. Available in several unit types, air is drawn though the unit capturing pollutants down to 0.01 micron leaving the air we breathe clean, safe and healthy. The system uses polarising screens and removable high specification filters. The system does not use HEPA filters and produces no ozone in the process.

The technology has been endorsed by the British Allergy Foundation (allergy UK).

		XAC420P	XAC480P	XAC520W	XAC640W	XAC550CC	XAC910CC	XAC690UC
Reference number		91215AA	91216AA	91217AA	91218AA	91219AA	91220AA	91221AA
Туре		Portable	Portable	Wall unit	Wall unit	Cassette	Cassette	Under ceiling
Airflow (m <sup>3</sup> /h)	High	1526	1717	1872	2304	1962	3276	2480
	Medium	1145	1336	1318	1724	1638	2628	2099
	Low	763	954	763	1145	1314	1962	1717
Sound pressure level (dB(A)@3m)		48	48	35	35	35	48	56
Weight (kg)		19	28	12	14	26	38	24
Guarantee (years, UK)		2	2	2	2	2	2	2



# DigiPure Portable Models

- 900 sq ft unit **XAC 420P** Ref. 91215AA
- 1200 sq ft unit

#### XAC 480P Ref. 91216AA

- · Ideal for medical / nursing home environments where the requirement is for usage in varying locations in conjunction with other treatment
- Two models for up to 900 sq ft and 1200 sq ft · Status indicator
- · On/Off and three speeds
- Fully mobile
- · Robust construction

# **DigiPure Wall Models**

- 1100 sq ft XAC 520W
- Ref. 91217AA 1450 sq ft

# XAC640W

- Ref. 91218AA
- · For commercial and medical use
- · High wall cabinet style
- Large grille inlet area
- Performance

- · Adjustable outlet louvre
- Removable washable pre-filter
- · Balanced tangential fan for quiet operation
- · Status indicator
- · Hand held remote control provides On/Off and 3 speed control

# **DigiPure Ceiling Cassettes**

1400 sq ft unit XAC 550CC

Ref. 91219AA

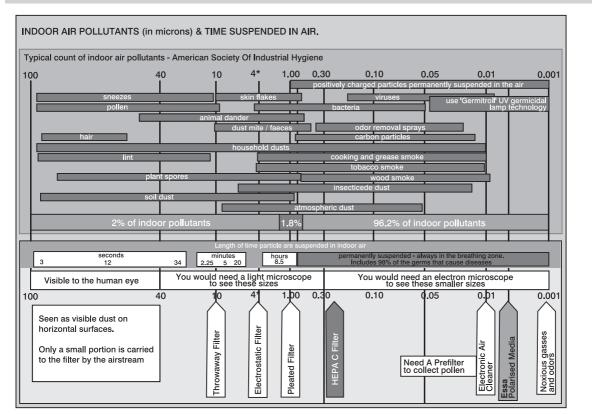
2200 sq ft unit

XAC 910CC

# Ref. 91220AA

- For commercial and medical use
- · Recess mounting for suspended ceilings
- Requires 330mm void · Attractively styled fascia with safety
- fingerguard · Adjustable four way outlet louvres for even
- room distribution
- · Quiet centrifugal fan
- Status indicator
- · Hand held remote control and louvre control · Easy access to filter section

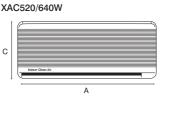
- **DigiPure Under-Ceiling Units XAC 690UC** Ref. 91221AA
- For commercial and medical use
- · Surface mounted to the ceiling
- · For floor areas up to 1750sq ft
- · Attractive louvre outlets at both ends
- Quiet centrifugal fan
- · Status indicator
- · Easy access filters
- · Hand held remote control provides on-off and 3 speed control
- \* Replacement Essa filter medium available for all models Ref. 91316AA

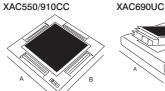


# Dimensions









Model		sions Depth B	(mm) Height C
XAC420P	630	270	870
XAC480P	930	360	960
XAC520W	1020	200	370
XAC640W	1200	200	330
XAC550CC	640	640	33
XAC910CC	950	950	50
XAC690UC	950	830	140

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