



# POWRMATIC®

Delivering complete climate control solutions worldwide

Heat recovery units with low running costs and minimum maintenance aiding the effective distribution of tempered air throughout the space.

**The Destratification range from Powrmatic.**

## CECx / HCF

Destratification Fan Range

Heat Recovery Systems



# CECx High Velocity De-stratification



## Product Benefits



REDUCES BUILDING  
ENERGY COSTS



RECYCLES  
INTERNAL HEAT



MINIMAL  
MAINTENANCE



QUICK & EASY  
INSTALLATION



LOW RUNNING  
NOISE LEVEL



IMPROVES  
WORKFORCE COMFORT



PARTS  
WARRANTY

## Recirculation Energy Saving Comfort

The CECx Range from Powrmatic.

Powrmatic CECx is a high velocity heat recovery unit with low running costs and requiring minimal maintenance.

The CECx is designed for higher level mounting and will automatically recirculate high level hot air, reducing stratification and associated heat losses.

CECx fans are specifically designed to lower the fuel consumption of space heating systems and at the same time, improve comfort levels.

### Models Available

- CECx 1400
- CECx 2250
- CECx 3350
- CECx 4500
- CECx 6500

## Product Features

### Quick & Easy Installation

The CECx fans can be suspended via the optional CECx Fixing kit which can be installed up to six times faster than traditional hanging systems. There is no requirement for nuts, bolts, clamps or other accessories. These fixing kits are strong, safe, industry approved with a 5:1 safety factor load rating and aesthetically discreet and lightweight. (see page 6 for more information)

### Construction

The CECx Calecon fans comprise of a panel box construction which has reduced in its overall height for a slimmer profile (4500 & 6500 models only) onto which is a resiliently mounted axial fan set which discharges warm air through a four-way adjustable louvred grille.



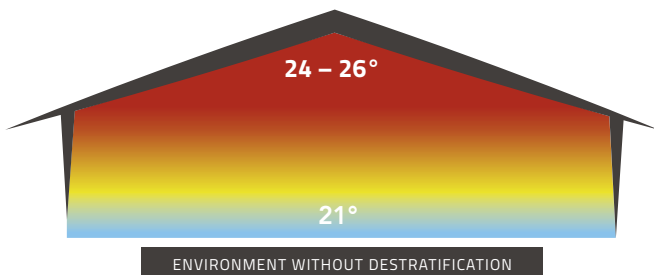
Slimline  
CECx6500 Model

### Automatic Thermostat

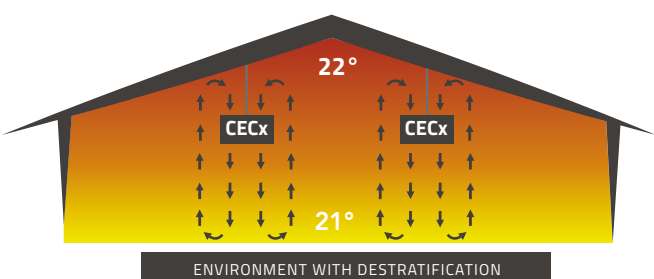
Automatic thermostatic controls inhibit fan operation until the roof space temperature reaches a pre-determined level, preventing the premature discharge of cold air.

### Hot Air Recirculation

CECx destratification fans will automatically recirculate high level hot air, reducing stratification and associated heat losses via the adjustable louvres, returning useful heat back into the working zone and saving on energy and operating costs.



Temperatures shown are for a typical building



## How CECx Fans Works

The two diagrams (left) illustrate how destratification fans can effectively distribute heat throughout the space so that stratification is minimised and there is only a very small temperature gradient between the working zone and the roof space. The ability of the destratification system to reduce the temperature of the air in the roof space also reduces the rate of heat loss through the roof.

Approvals **CE**  
All CECx fans are CE approved.

# HCF Low Velocity Sweep Fan



## Product Benefits



REDUCES BUILDING  
ENERGY COSTS



RECYCLES  
INTERNAL HEAT



MINIMAL  
MAINTENANCE



QUICK & EASY  
INSTALLATION



LOW RUNNING  
NOISE LEVEL



IMPROVES  
WORKFORCE COMFORT



1  
YEAR  
PARTS  
WARRANTY

## Low Cost Fuel Reduction Flexibility

The HCF Range from Powrmatic

HCF low velocity impeller de-stratification fans are specifically designed to lower the fuel consumption of space heating systems.

The gentle displacement of warm air from roof level down into the working zone converts wasted heat into useful heat reducing fuel consumption.

An additional benefit is the ability of the fans to enhance comfort levels by creating a uniform pattern of heat throughout the area within which they are installed.

### Model Available

- HCF 1400





# Product Features

## Application

The HCF fans are also used in conjunction with Powrmatic warm air heating systems. Suspended from the ceiling, fans are attached to the building structure via a purpose made boss and drop rod which has the benefit of an additional safety retaining wire.

## Construction

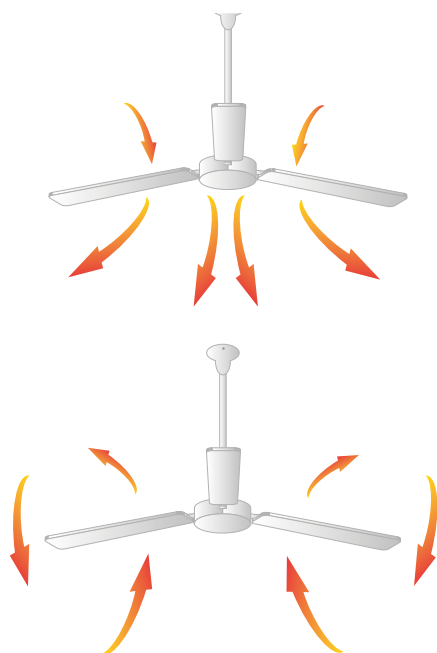
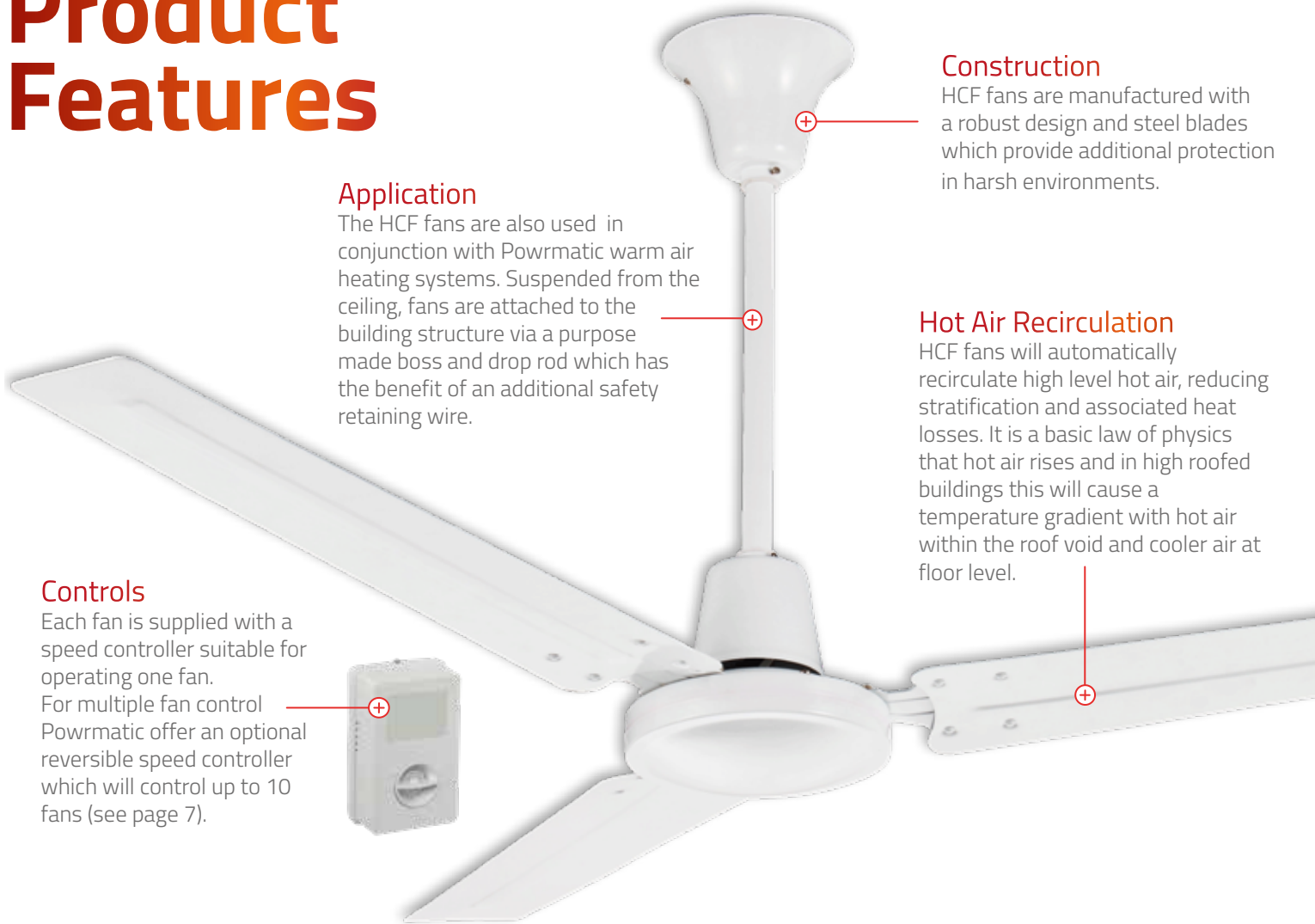
HCF fans are manufactured with a robust design and steel blades which provide additional protection in harsh environments.

## Hot Air Recirculation

HCF fans will automatically recirculate high level hot air, reducing stratification and associated heat losses. It is a basic law of physics that hot air rises and in high roofed buildings this will cause a temperature gradient with hot air within the roof void and cooler air at floor level.

## Controls

Each fan is supplied with a speed controller suitable for operating one fan. For multiple fan control Powrmatic offer an optional reversible speed controller which will control up to 10 fans (see page 7).



## How HCF Fans Works

The two diagrams (left) illustrate how the HCF Sweep Fans effectively distribute heat throughout the space.

The HCF Sweep fan will rotate counter clockwise forcing the wasted warm air at roof level down into the working zones improving the climate control energy efficiency.

When used with a reversible controller the HCF fan can rotate clockwise drawing the room air up towards the ceiling and forcing the warm air back down into the working zones.

Approvals **CE**  
All HCF fans are CE approved.

# CECx Technical Specification

Model			CECx 1400	CECx2250	CECx3350	CECx4500	CECx6500
Air flow		m <sup>3</sup> /s	0.77	1.2	1.58	2.1	3.07
		m <sup>3</sup> /h	2772	4320	5688	7560	11052
Mounting Height (maximum)		m	6	12	15	17	25
Mounting Height (suggested minimum)		m	2.1	2.8	3.8	4.1	6.0
Electrics	Supply	V/ph/Hz	230V/1Phase/50Hz				
	Start Current	amps	1.3	2.9	3.1	5.6	5.7
	Run Current	amps	0.78	1.1	1.2	2.2	2.5
Dimensions	Width	mm	600	600	654	808	808
	Depth	mm	600	600	654	808	808
	Overall Height	mm	240	240	250	290	260
Nett weight		kg	16	22	25	29	33
Noise Level @ 5m (Q=2)		LPA dB	50	50	50	52	52

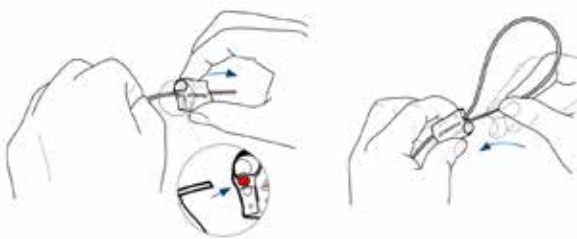
## CECx Fixing Kit

The CECx fixing kit is a fast locking solution for quick and easy suspension of our CECx destratification fans.

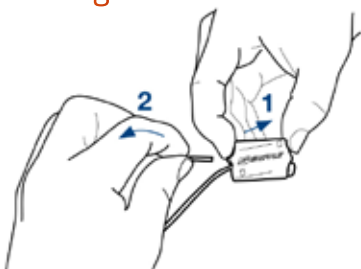
### Features

- Up to 6 times faster to install than traditional methods
- Kit supplied with 4 x 1.5m of fixing cable including fittings
- Key-less - no tool required for adjustment
- Ergonomic buttons allow rapid adjustment
- Discreet and aesthetic design
- Load rated at 45 kg per wire with a 5:1 safety factor

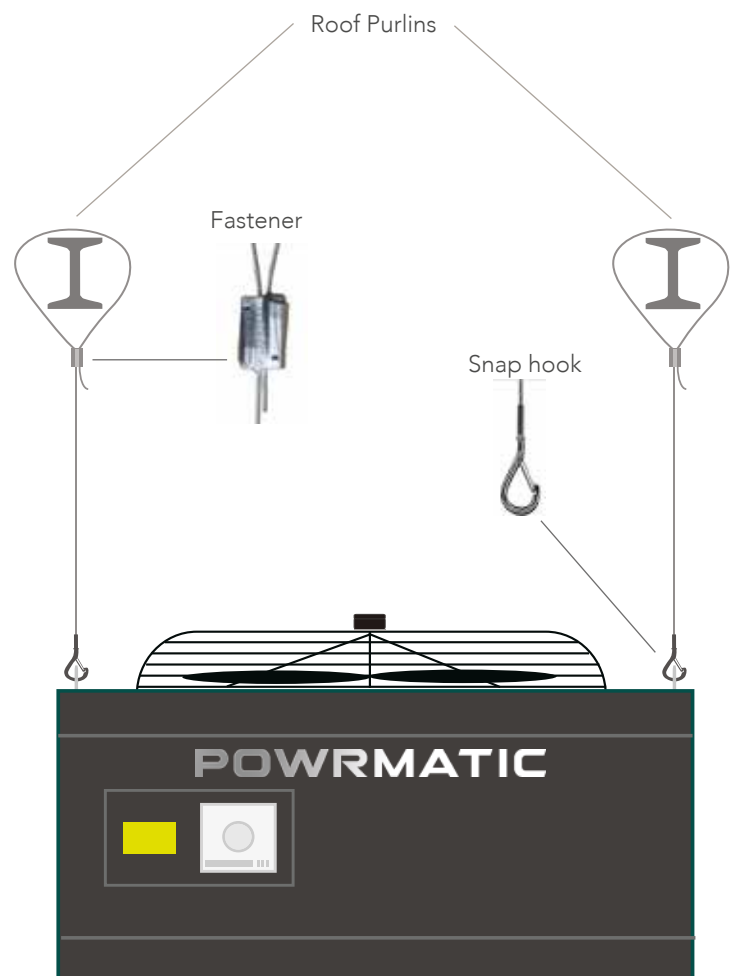
### Connecting



### Releasing



### Installing



# HCF Technical Specification

Model			HCF 1400
Air Displacement (At Maximum Speed)		m <sup>3</sup> /h	10,030
Mounting Height	Maximum	m	12
	Minimum	m	2.3
Floor Coverage At Maximum Height		m <sup>2</sup>	130
Electrical Data (Load At Maximum Speed)	Supply	V/ph/Hz	230/1/50
	Motor Rating	Watts	60.0
	Load Current	Amps	0.263
Overall Dimensions	Height (Max)	mm	610
	Blade Sweep	mm	1400
Nett Weight		Kg	5.4
Noise Level @5m (free field)		dB(A)	54

## Notes:

- When siting the fans care must be taken to ensure that the impellers are kept are kept well clear of personnel at all times

## Optional Speed Control

HCF Units

### Reversible HCF Fan Controller



The optional Powrmatic reversible controller allows you to change the direction of airflow the for the Powrmatic HCF Sweep.

# 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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