

**Vortair**  
Ultra

# The quiet achiever

The energy saving **Vortair Ultra** in-line fans produce powerful air flows without generating high noise levels. The range features a heavy duty galvanised steel construction and an innovative mixed flow impeller with highly efficient blade geometry.



# Powerful air flows without the high noise levels

The unique design of Vortair Ultra combines a heavy duty axial style fan case with a cutting edge mixed flow impeller.

It has virtually no air redirecting losses and as a result produces a more efficient air flow. The fully optimised and compact design of Vortair Ultra creates high air flow rates without increasing noise levels.

This can often result in smaller fan sizes meeting the required performance.

## Highly efficient design minimises energy usage

Greenhouse gas emissions and the high cost of energy are a growing concern, particularly to building owners and tenants. Consequently, architects, engineers and developers are constantly searching for ways to reduce the running costs of a building without compromising the comfort and productivity of building occupants.

The innovative impeller design of Vortair Ultra produces up to 30% more air flow than standard Elta Fans PowerLine models with the same impeller size. Therefore a smaller size Vortair Ultra that consumes less energy and produces less noise could meet the required specification and be installed as a viable alternative.





## Choice of AC and Energy Efficient EC motors

The Vortair Ultra is available in an AC configuration, or can be fitted with an EC motor for further savings in running costs.

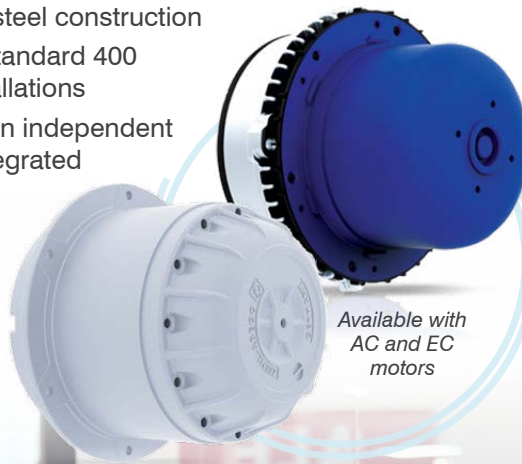
Vortair Ultra with EC motors feature fully integrated, infinitely variable speed control which eliminates the need for external VSDs, current overloads and motor phase protection. Optional matching sensors monitor the ambient conditions and provide real time feedback to the fan. The fan's on-board microprocessor then adjusts its speed and therefore modulates the ventilation rate to match the specific requirements of the area.

### Features

- Produces powerful air flows without generating high noise levels
- Innovative mixed flow impeller with high performance blade geometry
- Available with either AC and EC motors
- Available in 6 impeller sizes ranging from 250 to 450mm diameters (400 to 710mm case diameters)
- Heavy duty galvanised steel construction
- Can be retrofitted into standard 400 to 710mm axial fan installations
- EC models can run as an independent ventilation source or integrated into most building management systems.



*Innovative mixed flow impeller design*



*Available with AC and EC motors*

## Intelligent controllers

The Vortair Ultra range can utilise the easy to use **Aviator controllers** to better manage a ventilation system. Aviator takes advantage of the latest digital technology to ensure it can be tailored to suit the requirements of any application.



The **Aviator Touch PRO** features an intuitive graphic interface, and can control up to 10 fans and be connected to 2 Sensors. This flexible controller can be factory pre-configured to operate each Vortair Ultra fan individually or help drive a Demand Control Ventilation system. It features a run to end timer and a 7 day scheduler that enables the set up of operational periods.

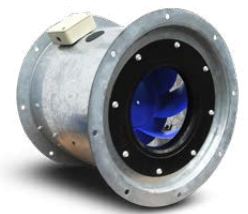


The **Aviator Touch** is designed to control up to 4 fans individually or in a single group. It can turn each fan on and off, alter fan speed and set run time.

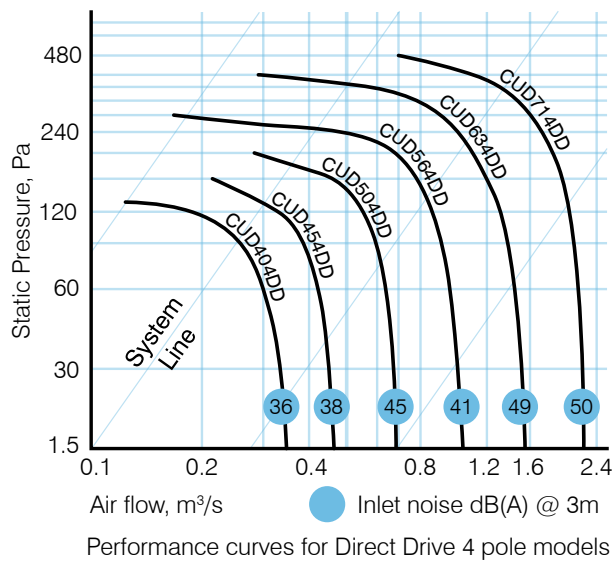
Aviator controllers use the Elta Fans ComLink system (RS485) to connect the controller, Vortair Ultra fans and sensors together. This intelligent system provides reliable communication between devices, significant installation cost savings and a higher level of system monitoring and adjustment.



# More air flow without producing higher noise levels



## Performance Curve



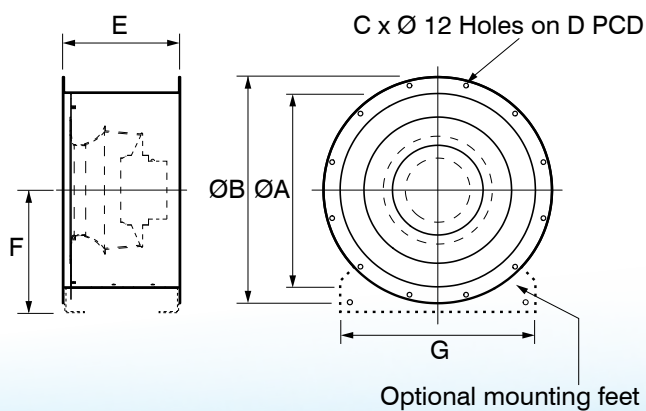
## Matching Elta Fans Ancillaries



## Tested to the latest Standards

**Air flow tests** to ISO 5801:2007    **Noise tests** to ISO 3744:2010

## Dimensional Drawings



Model CUD.. CUE..	ØA	ØB	C	D	Direct Drive Motor	External Rotor Motor	F	G	App. wt. Kg#
					E*	E**			
404.	400	485	8	450	450	300	250	400	41
454.	450	535	8	500	450	300	280	450	43
EC45					-				
504.					450				
506.					600				
508.	500	585	12	560	-	300	315	500	45
EC50					-				
564.					450				
566.					600				
568.	560	645	12	620	-	300	355	560	51
EC56					-				
634.					600				
636.					600				
638.	630	715	12	690	-	400	400	630	57
EC63					-				
714.					600				
716.					600				
718.	710	795	16	770	-	400	450	710	66
EC71					-				

Dimensions in mm

\* Fan with direct-drive motor - DD  
 \*\* Fan with AC or EC external rotor motor  
 # Weight for fan with direct-drive motor only

Please note:  
 Direct-drive fans are 3-Phase only.  
 External rotor motors: 1-Phase to 450mm case, 3-Phase from 500mm and above.

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