

eQ PRIME Air Handling Unit

The right choice



PRIME



FläktWoods

5 simple steps to an energy efficient and



eQ PRIME – the right choice!

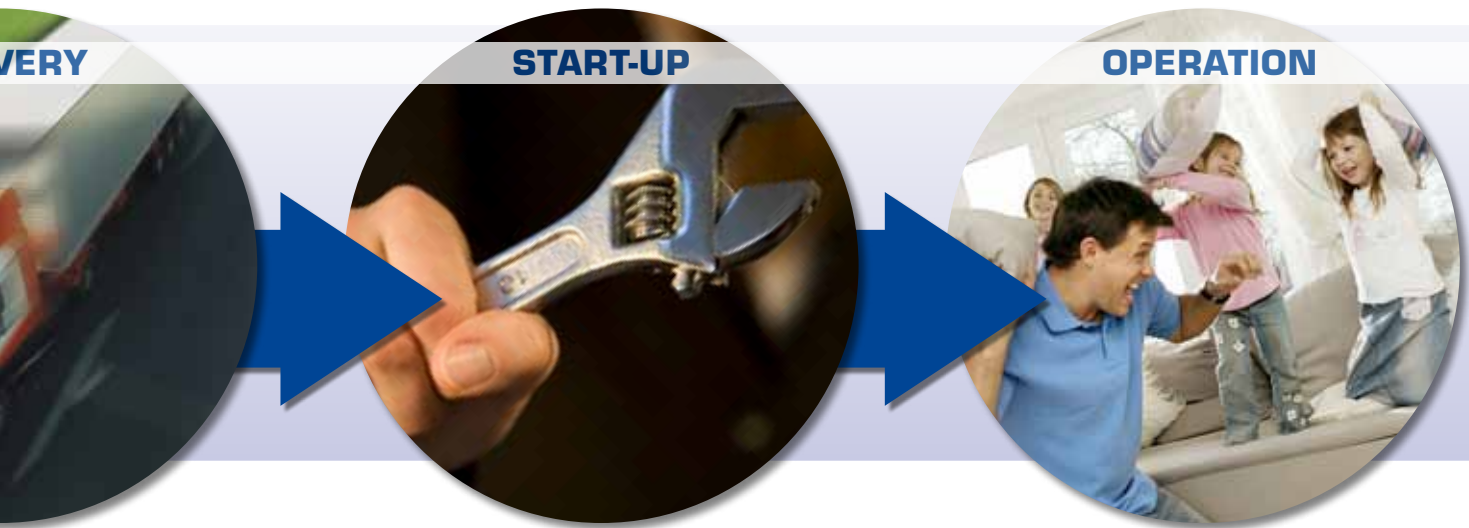
Modern buildings need to be ventilated in an efficient way. We all want good indoor climate and we need to reduce our energy consumption and environmental impact as well as comply with new legislation. We can help you achieve that!

At Fläkt Woods we are committed to develop Air Climate Solutions that are the best in their class for our customers. With the new eQ Prime range of standardised Air Handling Units, combined with perfectly integrated products from Fläkt Woods, we are in a unique position to offer your complete Air Climate Solution for areas such as Offices, Retail and Residential applications.

With standardised units, quick delivery and easy installation, as well as commissioning and start-up by Fläkt Woods, we can optimize the energy efficiency, the Life Cycle Cost and the indoor climate - all integrated in one very attractive package. This also becomes a natural step in our strategy to reduce the environmental footprint for us and our clients – it's in our DNA!



healthy indoor climate at the right cost!



eQ PRIME – reliable and efficient

Our core focus is to satisfy our customer's needs and to supply energy efficient products whilst providing capital cost savings.

- High indoor air quality
- Energy efficient and cost effective
- Easy selection and fast delivery
- Plug & play and easy installation

The right choice for most of applications:

- Public buildings
- Educational buildings
- Retail
- Offices
- ... and many more



Best in class solutions!

New!

PM Motor Fan set

The New Permanent Magnet motors provide the highest energy efficient savings, helping to lower SFPv and electrical energy costs!

Dampers

Dampers are supplied fitted to the unit and with actuators wired to the unit controller.

The eQ Prime control and regulation system has the following standard functions:

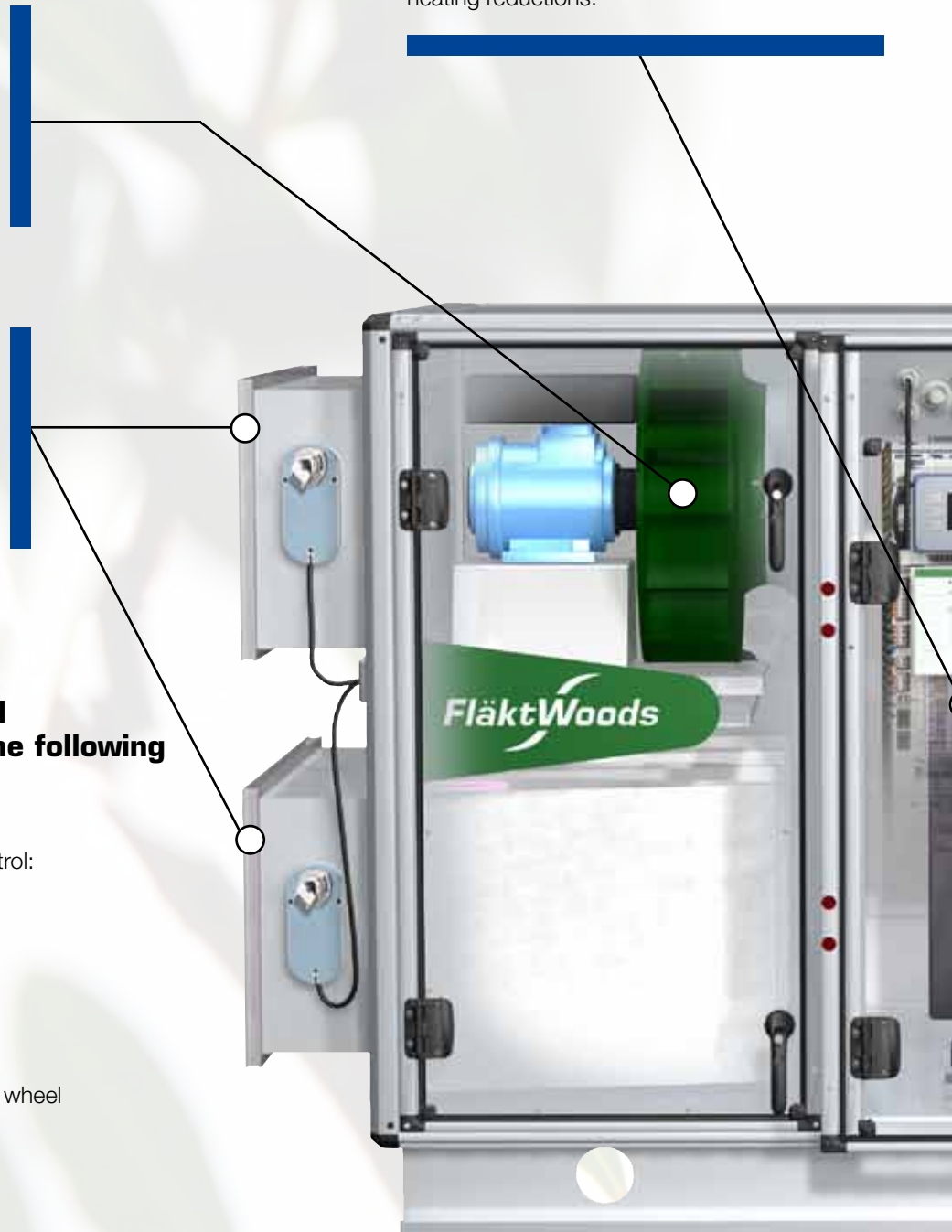
- Fan flow control
- Three options of temperature control:
 - Room temperature control
 - Extract temperature control
 - Supply temperature control
- Regulation of heaters and coolers
- Filter monitoring
- Regulation of the energy recovery wheel
- Regulation of dampers
- Cooling recovery
- BMS (controls) interface options
- Comprehensive web server schematic
- Energy saving by summer night cooling function
- Alarm functions

See list of accessories on page 7 for more functions.

New!

The Semco energy recovery wheel

The Semco energy recovery wheel is a market leader and will provide considerable cooling and heating reductions.



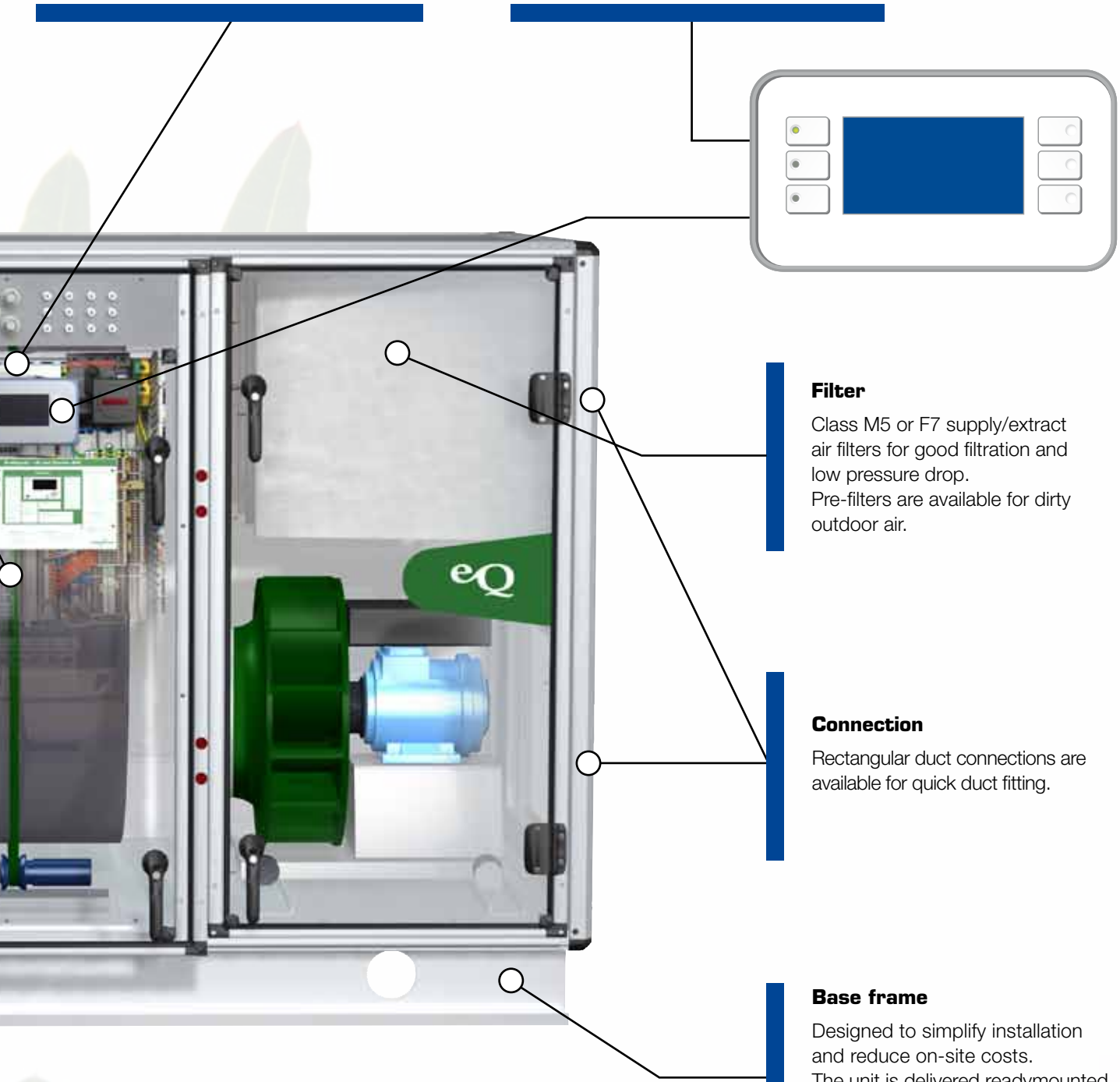


Control and regulation system

Intelligent built in control system; which interfaces with the building management system (BMS) providing optimum performance and energy monitoring for the eQ Prime unit.

User Interface Terminal

The hand held terminal is simple to use and has a magnetic back so that you can conveniently fix it to the unit when not in use. The terminal is rated IP65 for outdoor use.



Filter

Class M5 or F7 supply/extract air filters for good filtration and low pressure drop. Pre-filters are available for dirty outdoor air.

Connection

Rectangular duct connections are available for quick duct fitting.

Base frame

Designed to simplify installation and reduce on-site costs. The unit is delivered readymounted on a single baseframe, with the option of separating the unit if necessary.

eQ PRIME – full of functionality

The eQ Prime comes with the possibility to add a wide range of features for increased functionality and optimized operation. Since the unit is designed for quick and reliable installation most functions are already factory mounted and connected to the controller.

Functions can also be supplied for mounting in ducts for installations with space constraints.

Heaters and coolers

On top of offering the most energy efficient heat recovery, the eQ Prime offers a large array of heating and cooling coils. These are dimensioned in Fläkt Woods selection software ACON and optimized for exact duty demands.

The coils are placed in cased blocks connected to the unit after the supply air fan. Water heaters and coolers can be supplied with frost protection, valves and actuators. Heaters are available as water or electrical coils, and coolers are available as water or DX coils.

Silencer

The eQ Prime can be designed with silencers for efficient and reliable sound attenuation and are calculated in ACON. Cased silencers offer simple installation as well as protection and insulation.

Damper

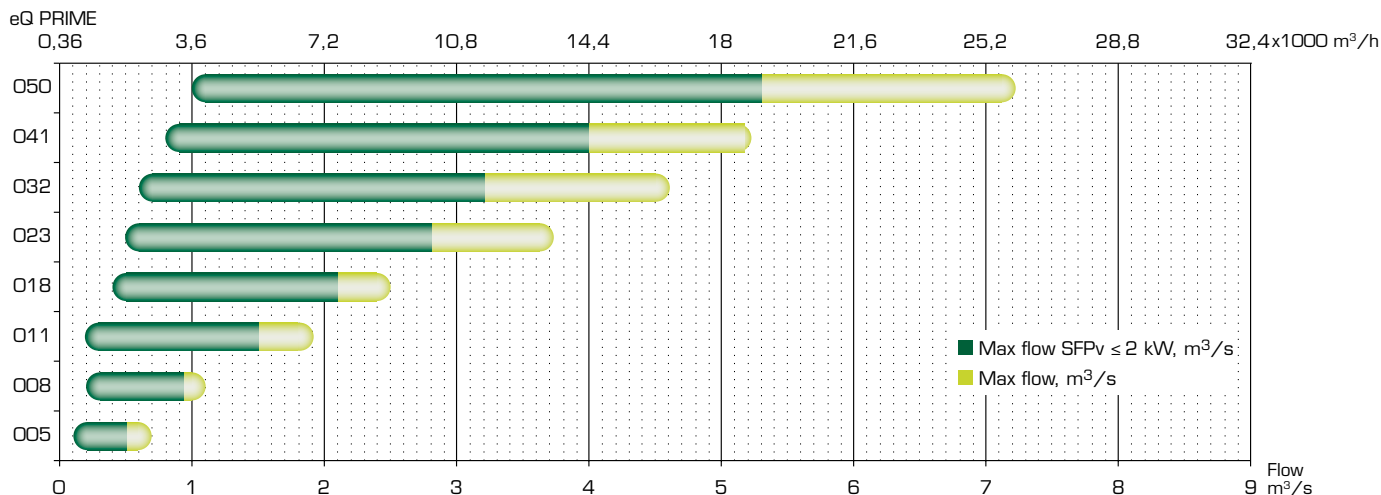
The eQ Prime can be supplied with mounted dampers on outdoor and exhaust air connections. Dampers are equipped with actuators, which are connected to the controller for quick and reliable installation.

Outdoor version

The eQ Prime is possible to configure for indoor or outdoor installation. For the outdoor version a roof for rain and snow protection is assembled on the unit, and dampers are mounted inside the casing to protect the actuators.



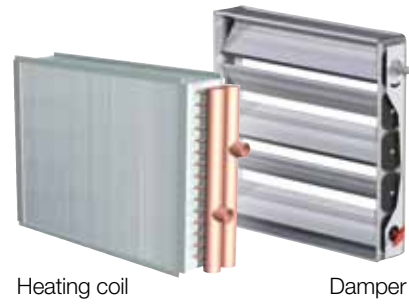
Choose the optimal size according to air volume.



Optional Accessories

Example of accessories that can be delivered with the unit.

- Shunt control of coils
- Fan pressure control (VAV)
- Facade and room sensors for night cooling or night heating functions
- Defrost function of thermal wheel
- Timer for extended or forced operation
- CO₂ sensor
- PIR Movement detector including room lighting control function
- Smoke detector
- Zone control
- Control of extra fan
- Lifting accessories
- Adjustable feet
- Analogue filter measurement
- Pressure adjustment plates



For your convenience, the unit can be delivered with the following duct components:

- Dampers with actuator, two positions with spring
- Heating coil with frost protector, valve and actuator
- Cooling coil with valve and actuator
- Silencers in different attenuation levels
- Electrical heaters for different capacities

eQ Prime, size 005 – 050 with integrated controller in the rotor



eQ Prime can be split into smaller blocks to accommodate a compact design when the air handling unit need to be transported through narrow door openings.

Unit size	Nominal airflow m ³ /s	Fan size	Length mm	Width, mm	Height, mm	Longest block length, mm	Duct connection, mm	Approx. Weight, kg
5	0.4	Standard	1400	1050	1102	500	500 x 300	310
8	0.8	Small	1500	1350	1302	550	800 x 400	420
	1	Large				700		
11	1.2	Small	1900	1450	1502	750	800 x 400	530
	1.4	Large	2000			750		
18	1.9	Small	2100	1650	1702	800	1100 x 500	660
	2.2	Large	2200					
23	2.9	Small	2800	1700	2002	950	1400 x 600	1100
	3.3	Large	2900			1000		
32	3.7	Small	3100	1800	2202	1050	1400 x 800	1350
	4.2	Large	3200			1050		
41	4.7	Small	3150	2000	2302	1100	1700 x 800	1500
	5.3	Large	3250			1100		
50	5.9	Small	3550	2300	2602	1250	2000 x 800	1850
	6.5	Large	3650			1300		

eQ PRIME – control equipment

The eQ Prime comes with integrated controls and is the perfect solution for both small installations with straight forward control functions, and also for large installations with advanced data communication requirements.

Simplicity

The eQ Prime has been developed for simple design, quick deployment and easy installation. The integrated control equipment is supplied already fully programmed in, configured and tested, together with all the necessary field components and documentation. The unit and the control system conforms to EU directives and is CE marked.

Quick installation

The eQ Prime is self-contained and requires no major onsite electrical installation. The control equipment is ready to go as soon as the unit is installed – a true Plug and Play Air Handling Unit!

High quality

The rational production of the eQ Prime is characterized by a rigorous Quality Management System to ensure an electrically safe and approved product. Naturally the standardized design is also a guarantee of cost effectiveness, reliability and high quality.

ACON – our selection tool

Acon is our tool for the selection and planning of air handling units. It is available for quick and reliable eQ Prime selections.

Our web-based proprietary software that is updated regularly without the user having to download and install updates. Acon gives you all this information and support required for excellent planning of your project in the follow areas.

- Product dimensions
- Noise data
- Performance data
- Efficiency data
- Life Cycle Cost
- Product documentation
- Export of Dxf and Dwg files



Find out more on

[www.flaktwoods.com/selection tools](http://www.flaktwoods.com/selection_tools)

eQ – smart web

The eQ Smart web constantly monitors the health, readiness and performance of the eQ by staying in control of the unit 24/7, 365 days a year!





We help you to get started!

Fast, Easy and Safe

Fläkt Woods offer the commissioning and initial startup of your units; we ensure your design match the site environment, the specified performance and quality standards.

This is a valuable service since we ensure your unit is optimized in the installed environment by customizing the unit's control system settings, thus ensuring energy efficient operation and maximizing your unit's life.

Our motto is Fast, Easy and Safe, so you can confidently trust Fläkt Woods to take care of everything from the order through to delivery and startup. It's as easy as that!

For Safe and Optimal operation we help you to:

- Set operating periods and set points in the control unit.
- Check and document that the installation has been performed correctly
- Adjust the controls to ensure even performance and economic control.
- Set alarm parameters to customer requirements.

Commissioning of eQ PRIME – how it works

- Contact your local Fläkt Woods sales office or representative for local conditions and order of commissioning.
- Prior to commissioning, the installation completion checklist should be sent to Fläkt Woods.
- A preliminary appointment is made with your nearest local commissioning team.
- Request placed with Fläkt Woods.
- We contact you to make a definite appointment.
- Commissioning carried out. Setpoints and operating periods are set according to your requirements.
- You receive a report after the commissioning is completed.

eQ PRIME – the straightforward choice for excellent indoor climate and minimized energy costs



FOR PROPERTY OWNERS

The most energy efficient Air Handling Unit in the market!

The best energy recovery and low operating costs.

Fulfils new building and environmental certificates (LEED, Breeam, etc.)

Energy monitoring and communication for optimized operations.

FOR CONSULTANTS

Low SFP Value to enable selection of smaller units!

Fulfills ErP requirements and highest energy efficiency by PM motors and high energy recovery SEMCO wheel.

Integrated controls enable specification of system with high energy efficiency and reliable operation.

Simple ACON interface allow for configuration of eQ Prime.

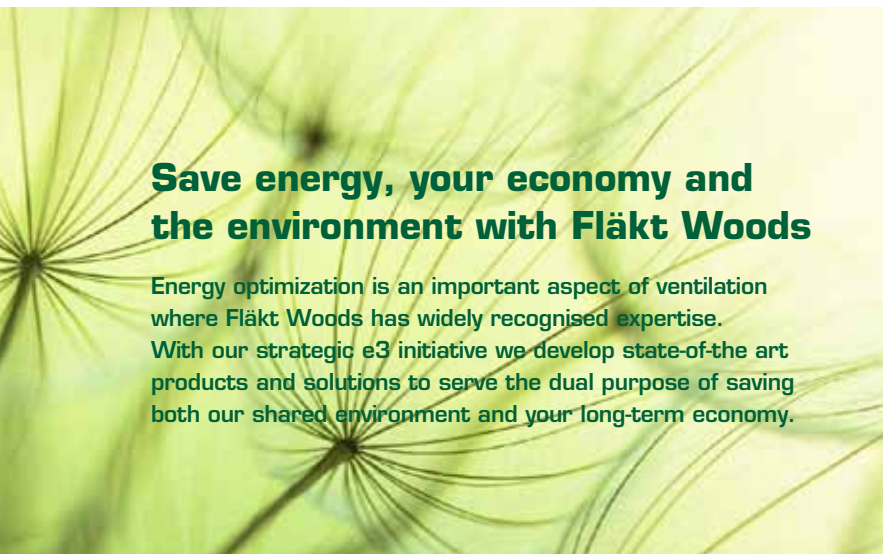
FOR INSTALLERS

Quick and reliable installation!

Casing possible to split for entry in narrow compartments.

Integrated controls and mounted VSD's and cables for fast start up.

Commisioning support by Fläkt Woods is available.



Save energy, your economy and the environment with Fläkt Woods

Energy optimization is an important aspect of ventilation where Fläkt Woods has widely recognised expertise. With our strategic e3 initiative we develop state-of-the art products and solutions to serve the dual purpose of saving both our shared environment and your long-term economy.



Fläkt Woods takes pride in combining energy efficient (e3) products into fully integrated (i3) systems. Learn more at:

www.flaktwoods.com

We Bring Air to Life

Fläkt Woods is a global leader in air management.
We specialize in the design and manufacture of a wide
range of air climate and air movement solutions.

Our collective experience is unrivalled.

We are constantly aiming to provide systems that
precisely deliver required function and performance as
well as maximum energy efficiency.



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