

eQ PRIME® S/T

» ENERGY EFFICIENT AIR HANDLING UNITS – FLEXIBLE AND CLOUD CONNECTED



eQ Prime S/T Designed for comfort, flexibility, energy efficiency and simplicity

eQ Prime is the straightforward choice to achieve an excellent indoor climate at minimised costs, both initially and longterm. We have designed the Air Handling Unit to achieve high energy efficiency both through carefully selected energy saving components and by optimising the overall system efficiency. Flexibility is standard, the unit comes in two versions – eQ Prime S with side connections and eQ Prime T with all connections at the top.



eQ Prime S/T can be supplied with white painted or AluZinc panels.

QUICK FACTS

Compact design

- Supply and exhaust air in a combined casing
- Meets VDI 6022 standard
- Available in outdoor version

· High efficiency energy recovery options:

- Heat Recovery Wheel (Regoterm 270 Premium)
- Plate Heat Exchanger (Recuterm Counterflow)
- Optional Integrated Heat Pump (ReCooler HP)

High efficiency fans

- Bluefin energy efficient composite impeller
- EC Motors (IE5) maximum system efficiency and low sound levels

Controls and monitoring

- ISYteq 4.0 integrated controls
- CLOUD for ISYteq connection
- BMS connection



FläktGroup eQ Prime S/T Air Handling Units meets the highest demands. Energy and casing performance have been thoroughly tested and verified by Eurovent.

AIR FLOW RANGES

eQ Prime S: **720-21.600 m³/h** (0.2-6 m³/s) Available in 8 sizes

eQ Prime T: **720–9.000 m³/h** (0.2–2.5 m³/s) Available in 4 sizes





FLEXIBILITY AS STANDARD

Easy to select and calculate in ACON to provide a perfect fit for a wide range of applications. Energy recovery options include Heat Recovery Wheel, Counterflow Plate Heat Exchanger and **ReCooler Heat Pump.**



INTEGRATED CONTROLS

Optimised performance and efficiency with factory-fitted controls. Easy to use interface and connectivity with BMS systems and cloud connected remote control.



EASY INSTALLATION

Designed to keep installation and commissioning to a minimum. Delivered "ready for use" with minimal assembly and wiring required on-site. Available in side and top connected versions.



OPTIMISED LIFE CYCLE COST

eQ Prime is designed for top energy efficiency and a long life-span with low installation, running and maintenance costs.



HYGIENIC DESIGN

eQ Prime S/T meet the VDI 6022 hygiene standard. The units are also approved for T2/TB2.

6022



OPTIONAL PAINTED PANELS

The unit can be supplied in AluZinc (standard), white painted panels or as an outdoor version for a perfect fit for every project.



Use less – get more! Packed with energy-efficient components and smart technology



REGOTERM[®]/REGASORP

Heat Recovery Wheels from FläktGroup offer high levels of heating and cooling recovery at low pressure drops. Our Heat Recovery Wheels come with different efficiency variants allowing true optimisation according to climate zone and supply air temperature needs.

- Up to 90% temperature efficiency
- Regoterm 270 Premium for optimised ratio between heat recovery and pressure drop
- RegAsorp Sorption Wheel for up to 90% humidity transfer and efficient cooling recovery



RECUTERM®

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Recuterm is our Counterflow Plate Heat Exchanger for high temperature efficiency ~85%. Recuterm Counterflow is ideal for central Air Handling Units in residential buildings where there is a need to consider risk of odour transfer. Recuterm AFP (Advanced Frost Protection) demand based frost protection offers reliable operation and the highest total energy efficiency in cold climates.

- · Heat transfer efficiency up to 85%
- Recuterm Advanced Frost Protection
- · Splittable for entry into narrow building openings



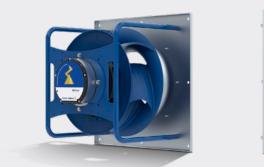
ReCOOLER[®] HP

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ReCooler HP is the combination of a reversible Heat Pump unit and a Heat Recovery Wheel in one unit - bringing true benefits from design to operations. eQ Prime S/T with ReCooler HP is a complete plug & play Air Handling Unit for ventilation, heating and cooling, where everything is included and factory tested.

- High performance and comfort with low running costs
- · Heat pump mode (heating and cooling)
- · Quick and easy installation

This product contains fluorinated greenhouse gas, R410A, with a GWP-factor of 2088. Refrigerant quantity: 3.8–11.8 kg, corresponding to 7.9–24.6 tonnes of CO₂ equivalent per circui







EC MOTORS

The Air Handling Units are supplied with fans equipped with IE5 EC-motors. EC motors are used in all eQ Prime S/T units to achieve a short footprint of the unit to maximise the use of valuable floor space.

- · EC Blue motor technology for maximum system efficiency
- · Excellent sound performance low noise level



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CONTROLS

Advanced built-in controls that enables a comfortable indoor climate with the highest energy efficiency. Experience-based operating modes designed for optimum performance in a wide range of applications. Simplifying both planning, installation and operation.

- · Developed for optimal component usage
- · Full connectivity for remote and system control
- · Quick and simple installation
- · Modbus and BACnet always available



eQ PRIME S/T

All our air handling expertise packaged and ready to deliver a better climate both inside and outside your buildings.

Energy efficiency – the true essence of our solutions

All of FläktGroup's research, development and testing activities are singularly focused to provide our customers with the best and most efficient solutions possible to their ventilation and indoor climate challenges. From new and innovative products, smart component choices and manufacturing processes to advanced controls, minimised running cost and easy maintenance - we always strive for improvement and to deliver the best for your long-term economy and our environment.

The eQ Prime S/T range of compact Air Handling Units is a perfect example of this. Standardised, yet customisable - they combine high-performing components and our systems knowledge into complete solutions that use smart controls to optimise the energy savings. Cloud connected remote control simplify operation and minimises the need for service visits - lowering the maintenance cost for the building owner. All whilst delivering the high levels of indoor comfort that is needed and expected in modern buildings.

ISYteq 4.0 Powerful integrated controls with smart cloud connectivity

ISYteq 4.0 is designed from the ground up to be easy to install, commission, connect, use and maintain. Our platform contains smart control functions that bring out the best in FläktGroup's eQ Prime S/T Air Handling Units. All the funtionality needed to provide high comfort and good indoor air quality in combination with energy savings is included in ISYteq 4.0. This contributes to a continous optimisation of the total cost of ownership, which is helped even further by reduced downtime and servicing costs of your installation.



DIFFERENT WAYS TO CONNECT AND CONTROL



The handheld touch panel ISYteq Touch 7.1 is used for accessing the graphical web interface. The same interface is also available from the integrated web server, enabling access from a browser in a computer, tablet or mobile. For easy connection, Wifi is always included.

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In the web interface you can find smart functions facilitating start up, usage and maintenance. To mention a few, the startup wizard, air adjustment mode and automatic generation of the commissioning protocols will really facilitate the start-up and commissioning.



To allow limited access from the ventilated premises, ISYteq Touch 2.1 is a good choice. It allows access to set points, active profile, control mode and alarms – all at an attractive price.

ISYteq 4.0 - BENEFITS

- A standardised control system installed in a serial production manner is a guarantee for cost effectiveness, reliability and quality.
- One supplier takes responsibility of the complete system, reducing risk for customer.
- All necessary components are delivered with the Air Handling Unit, no need for 3rd party suppliers, which simplifies logistics on the building site.
- Easy installation thanks to fitted sensors, actuators and internal quick connectors.
- Complete order unique controls documentation including wiring diagrams is available already at the specification/ quotation phase.
- ISYteq 4.0 is factory tested and preconfigured with an order unique factory configuration. Final configuration is done with the integrated start-up-wizard on site.
- ISYteq 4.0 is a native BACnet controller designed for communication. Modbus and BACnet (B-BC) communication are always included as standard.
- The ethernet connection is used to access the web interface or to connect the unit to the CLOUD for ISYteq.
- An integrated 4G modem is available as an option for connection to cloud.

ISYteq 4.0

Advanced functions for better efficiency and improved indoor climate



AUTOMATIC PRESSURE BALANCING

By carefully balancing the air pressure in an Air Handling Unit with Heat Recovery Wheel we can eliminate leakage between Extract and Supply air and thereby minimising the risk of recirculating airborne particles.



SORPTION WHEEL WITH ENTHALPY RECOVERY

With a Sorption Wheel we can remove external moisture and reduce the latent load on the cooling coil. This gives reduced running cost and better indoor air comfort with minimal extra investment.



ENHANCED ENERGY MONITORING

ISYteq 4.0 allows you to monitor energy usage on component level to give you easy access to all the data needed to reduce running cost, identify areas for future performance related maintenance, set alarms for abnormal events and much more.



FROST PROTECTION

Our Counterflow Plate Heat Exchanger is available with three different frost protection levels, to ensure optimal functionality in all climates.

- 1. By-pass damper (> -16 °C)
- 2. Advanced frost protection (> -22 °C)
- 3. Advanced frost protection + pre-heater (< -22 °C)

Quick guide **eQ PRIME S** – Side connected



eQ PRIME S with Heat Recovery Wheel

Size	Nominal airflow m³/h m³/s	Fan size	Length (mm)*	Width (mm)	Height (mm)	Longest block (mm)	Longest block (mm) (VDI)	Duct connection (mm)	Approx weight (kg)
005	1,140 0.4	Standard	1,450	1,050	1,102	550	750	500 x 300	310
008	2,880 0.8 3,660 1.0	Small Large	1,450 1,550	1,350	1,302	550	750	800 x 400	420
011	4,320 1.2 5,040 1.4	Small Large	1,550 1,650	1,450	1,502	550	850 900	800 x 400	530
018	6,840 1.9 7,920 2.2	Small Large	1,750 1,850	1,650	1,702	650	900	1,100 x 500	660
023	10,440 2.9 11,880 3.3	Small Large	1,950 2,050	1,850	2,002	650 700	-	1,400 x 600	930
032	13,320 3.7 15,120 4.2	Small Large	2,050 1,850	1,950	2,202	700 650	-	1,400 x 800	1,010
041	16,920 4.7 19,080 5.3	Small Large	1,850 1,950	2,150	2,302	650	-	1,700 x 800	1,090
050	21,240 5.9 23,400 6.5	Small Large	2,050 2,150	2,450	2,602	750 800	-	2,000 x 800	1,420

* VDI 6022, T2/TB2 Increases length, see Acon for details

eQ PRIME S with Counterflow Plate Heat Exchanger

Size	Nominal airflow m³/h m³/s	Fan size	Length (mm)*	Width (mm)	Height (mm)	Longest block (mm)**	Duct connection (mm)	Approx weight (kg)
005	1,140 0.4	Standard	2,150	950	1,102	1,250	500 x 300	490
008	2,880 0.8 3,660 1.0	Small Large	2,250 2,350	1,250	1,302	1,350	800 x 400	715
011	4,320 1.2 5,040 1.4	Small Large	2,600 2,700	1,350	1,502	1,600	800 x 400	935
018	6,840 1.9 7,920 2.2	Small Large	2,900 3,000	1,550	1,702	1,800	1,100 x 500	1,200
023	10,440 2.9 11,880 3.3	Small Large	3,450 3,550	1,850	2,002	2,150	1,400 x 600	1,800
032	13,320 3.7 15,120 4.2	Small Large	3,850 3,650	1,950	2,202	2,450	1,400 x 800	2,150
041	11,500 3.2 12,700 3.5	Small Large	3,650 3,750	2,150	2,302	2,450***	1,700 x 800	1,950 2,000
050	14,000 3.9 15,500 4.3	Small Large	3,900 4,200	2,450	2,602	2,600***	2,000 x 800	2,300 2,450

*T2/TB2 Increases length, see Acon for details **Splittable *** Not splittable

eQ PRIME S with ReCooler HP

Size	Nominal airflow m³/h m³/s	Fan size	Length (mm)*/**	Width (mm)	Height (mm)	Longest block (mm)	Duct connection (mm)	Approx weight (kg)
008	2,880 0.8 3,660 1.0	Small Large	2,350 2,450	1,550	1,302	1,350	800 x 400	790
011	4,320 1.2 5,040 1.4	Small Large	2,650 2,750	1,650	1,502	1,350	800 x 400	960
018	6,840 1.9 7,920 2.2	Small Large	2,750 2,850	1,850	1,702	1,350	1,100 x 500	1,150
023	10,440 2.9 11,880 3.3	Small Large	3,050 3,150	2,150	2,002	1,350	1,400 x 600	1,600
032	13,320 3.7 15,120 4.2	Small Large	3,150 2,950	2,250	2,202	1,350	1,400 x 800	1,610
041	16,920 4.7 19,080 5.3	Small Large	3,150 3,250	2,450	2,302	1,550	1,700 x 800	1,930
050	21,240 5.9 23,400 6.5	Small Large	3,250 3,350	2,750	2,602	1,550	2,000 x 800	2,280

Quick guide eQ PRIME T – Top connected



eQ PRIME T with Heat Recovery Wheel

Size	Nominal airflow m ³ /h m ³ /s	Fan size	Length (mm)*	Width (mm)	Height (mm)	Longest block (mm)	Longest block (mm) (VDI)	Duct connection (mm)	Approx weight (kg)
008	2,880 0.8 3,660 1.0	Small Large	2,330	1,350	1,302	890	1,100	900 x 300	580
011	4,320 1.2 5,040 1.4	Small Large	2,330	1,450	1,502	890	1,150	900 x 300	670
018	6,840 1.9 7,920 2.2	Small Large	2,430	1,650	1,702	890	1,150 –	1,200 x 300	820
023	10,440 2.9 11,880 3.3	Small Large	2,430	1,850	2,002	890	-	1,500 x 300	1,070

*T2/TB2 Increases length, see Acon for details

eQ PRIME T with Counterflow Plate Heat Exchanger

Size	Nominal airflow m³/h m³/s	Fan size	Length (mm)*	Width (mm)	Height (mm)	Longest block (mm)**	Duct connection (mm)	Approx weight (kg)
008	2,880 0.8 3,660 1.0	Small Large	3,130	1,250	1,302	1,350	900 x 300	895
011	4,320 1.2 5,040 1.4	Small Large	3,380	1,350	1,502	1,600	900 x 300	1,150
018	6,840 1.9 7,920 2.2	Small Large	3,580	1,550	1,702	1,800	1,200 x 300	1,400
023	10,440 2.9 11,880 3.3	Small Large	3,930	1,850	2,002	2,150	1,500 x 300	1,830

*T2/TB2 Increases length, see Acon for details **Splittable

eQ PRIME T with ReCooler HP

Size	Nominal airflow m³/h m³/s	Fan size	Length (mm)*/**	Width (mm)	Height (mm)	Longest block (mm)	Duct connection (mm)	Approx weight (kg)
008	2,880 0.8 3,660 1.0	Small Large	3,230	1,550	1,302	1,350	900 x 300	1,030
011	4,320 1.2 5,040 1.4	Small Large	3,230	1,650	1,502	1,350	900 x 300	1,200
018	6,840 1.9 7,920 2.2	Small Large	3,230	1,850	1,702	1,350	1,200 x 300	1,410
023	10,440 2.9 11,880 3.3	Small Large	3,130	2,150	2,002	1,350	1,500 x 300	1,800

*T2/TB2 Increases length, see Acon for details *+100 mm for split ReCooler HP

Easy product , selection with ACON®



Select and configure your eQ Prime Air Handling Unit in ACON

ACON is our powerful and advanced online Product Selection Tool for Air Handling Units. It offers rapid product selection to specific project requirements and provides you with all the technical information.

Sign in on acon.flaktgroup.com or contact us and we will support your unit selection!

- Product dimensions
- Noise data
- Performance data
- Efficiency data
- Life cycle cost Product documentation
- Export of Dxf and Dwg files

An attractive package

The advantages of eQ PRIME[®] S/T – from design to installed unit



END USER/BUILDING OWNER

- Energy efficient Air Handling Units that suit a wide range of applications, from residential to commercial buildings.
- Reduced footprint, to optimise valuable and leaseable floorspace.
- High energy recovery and low operating costs to maximise the return on investment in your building.
- Fulfils new building and environmental certificates (LEED, Breeam, etc.).
- Energy monitoring and communication for optimised operations.
- Complements FläktGroup's market-leading product portfolio for all ventilation needs.



CONSULTANT

- Easy to dimension, select and calculate in ACON to fulfill project requirements.
- Low SFP Value to enable selection of smaller units.
- Fulfils ErP requirements and highest energy efficiency by IE5 EC-motors and high energy recovery RegAsorp Wheel.
- Integrated controls enable specification of system with high energy efficiency and reliable operation.



CONTRACTOR

- Fast delivery.
- Quick and easy installation.
- Easy entry in narrow compartments thanks to splittable casing.
- Factory-fitted integrated controls and internal wiring for fast installation on-site.
- Comprehensive and user-friendly documentation.
- Commissioning support by FläktGroup is available.
- Large sales network is always available for quick support of your project.



Indoor Air Quality makes all the difference

Throughout the world, in thousands of buildings, FläktGroup Air Treatment solutions provide good Indoor Air Quality and increased wellbeing to the people inside.

In offices and schools good ventilation has proven to enhance productivity and concentration levels, as well as reducing the risk for transmission of airborne virus and bacteria.

In nurseries it has the flexibility to adapt, from the intensive play hours to mid-day rest.

In industrial applications with large volume buildings, both people and machinery have productive conditions.

In retail, an optimised indoor climate ensure that customers and staff stay comfortable and alert throughout the day, while ensuring an energy efficient running of the building.

eQ PRIME[®] S/T – a part of the FläktGroup family



Building on a century of experience from tailored solutions, our wide portfolio of Air Handling Units covers all uses from standard to highly specialised and critical applications.



EXCELLENCE IN SOLUTIONS

FläktGroup is the European market leader for smart and energy efficient Indoor Air and Critical Air solutions to support every application area. We offer our customers innovative technologies, high quality and outstanding performance supported by more than a century of accumulated industry experience. The widest product range in the market, and strong market presence in 65 countries worldwide, guarantee that we are always by your side, ready to deliver Excellence in Solutions.

PRODUCT FUNCTIONS BY FLÄKTGROUP

Air Treatment | Air Movement | Air Diffusion Air Distribution | Air Filtration | Air Management & ATD's Air Conditioning & Heating | Controls | Service

» Learn more on www.flaktgroup.com or contact one of our offices