EUROTEC

qMAXX

SYSTEM

CLOSED LOOP CIRCUIT

Intelligent energy recovery

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Intelligent energy recovery

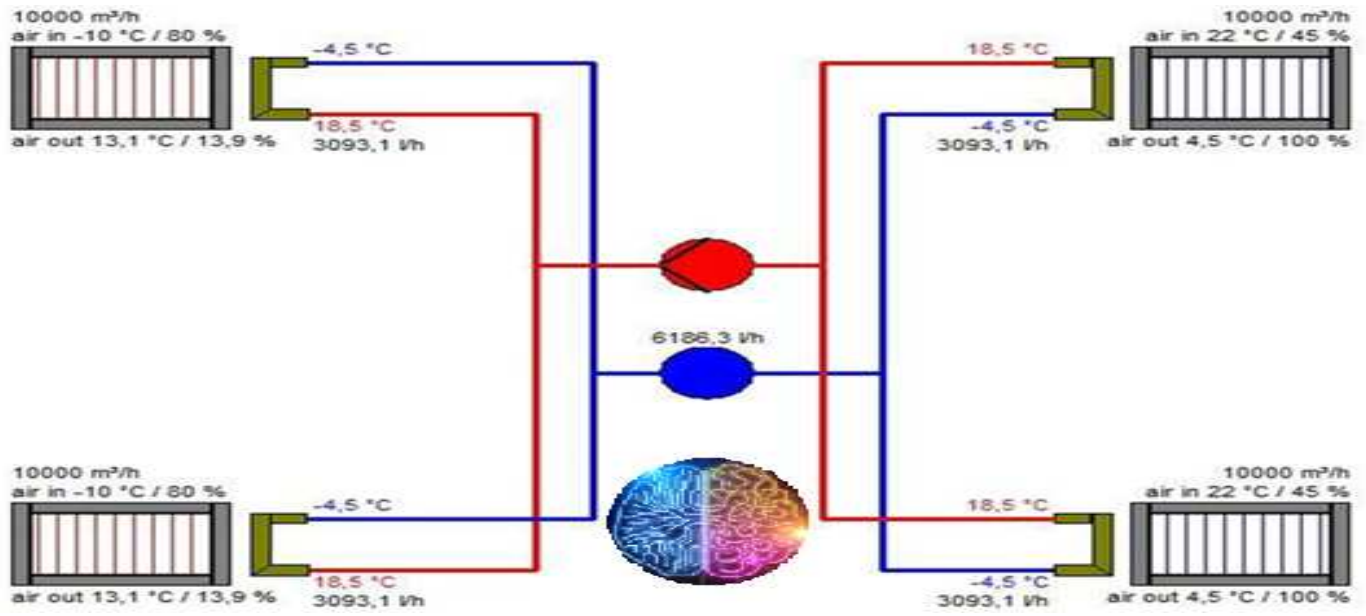
The requirements for air conditioning technology are as demanding as the concepts of technical construction. Modern air conditioning systems should be resource sustainable and energy efficient. With the aim of minimizing energy consumption in the long term, without sacrificing comfort criteria. All laws, rules and regulations are the measure of all things.

The classic closed loop system with relatively low efficiency has been further developed from an optimized selection of components for energy recovery with high efficiency and low pressure losses on the air side.

The innovative system offers highly efficient energy recovery technology in the circular network for spatially separated supply and exhaust air systems.

In a closed loop circuit, an intermediate fluid, by means of a pump, is made to circulate between two or more high efficiency coil exchangers. The heat transferred by the warmer air current to a coil is transported by the fluid intermediate to the other battery and from this yielded to the colder current.

In fact, this system makes it possible to recover heat from several sources spaced from each other and there is also no need to locate the intake air intake and the exhaust air exhaust close to each other. The complete physical separation between the two flows and the consequent exclusion of any danger of contamination make these systems suitable for uses such as: hospitals, operating theaters, clean rooms, laboratories, food where very high requirements for hygiene are required. industrial air technology for energy recovery from process heat and for exhaust gas heat recovery.



Through our Flowbox hydraulic system - the energy contained in the air stream is transferred to the other air stream. In addition, the multifunctional heating or cooling energy can be fed into the flowbox. There is almost no limit to the choice of energy sources. In particular, renewable energy resources significantly improve efficiency. In order to achieve the best efficiency, we not only have highly optimized components for energy efficiency. But with our control system we have a control system for the intelligent grid and the control of all the individual components. With our control system, we optimize efficiency, but we also reduce costs over time.

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qFLOW

Energy in motion

Our hydraulic module is a system equipped with all the details to ensure high efficiency operation from the point of view of energy saving. All components are selected based on energy criteria:

- Speed controlled pumps with frequency converter and optional redundancy pump;

- heat exchangers for an additional supply of heat and cold from various energy sources;

- Adiabate air cooling (in the exhaust air)

- Heat pump

- All necessary fittings such as: stop valves, control valves, control valves, overpressure safety valves, pressure monitoring, automatic feeding, flow monitor, dirt filters, heat meter, pressure gauge, thermometer, protection from ice;

- Complete galvanized, stainless steel or copper piping, optional insulation with sheet metal cladding;

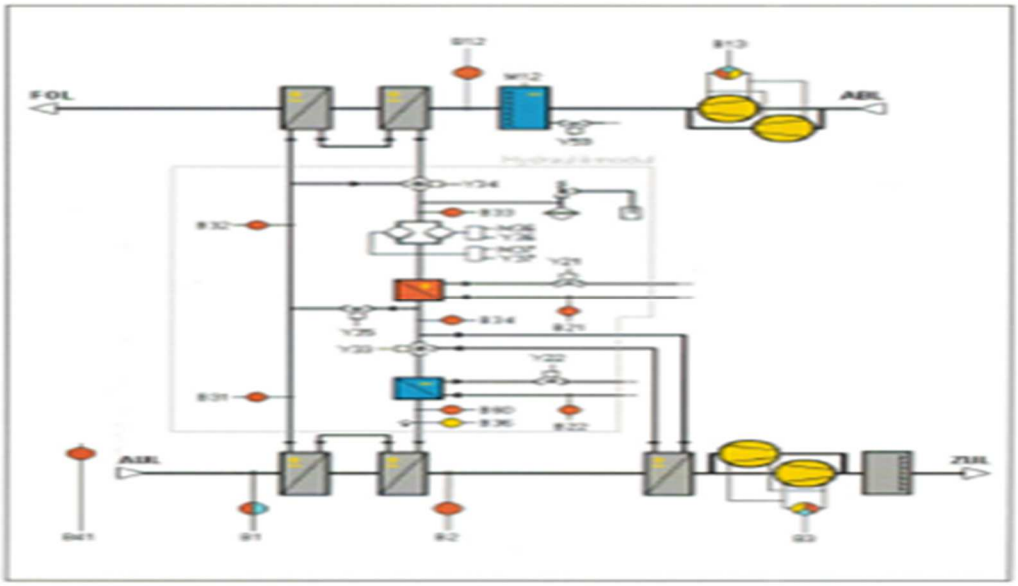
- Control cabinet with mounted and wired control;

- Base frame to house all components;

- Soundproofed structure (optional)

- Weatherproof structure (optional)

All components are sized and installed according to need and requirements.



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Flexible heat transfer

QCOIL

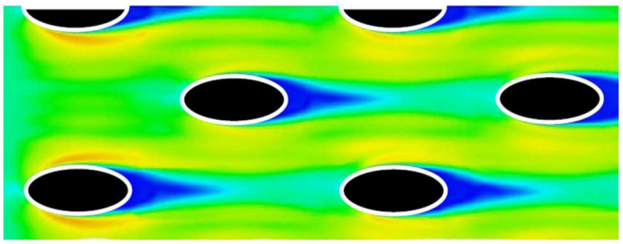
able round tube geometries, we are able to cover a very wide range of applications in terms of performance, energy efficiency, size and hygiene. Maximum flexibility: the optimal geometry for each application. The development and correct calculation of heat exchangers for recovery is one of our core competencies.

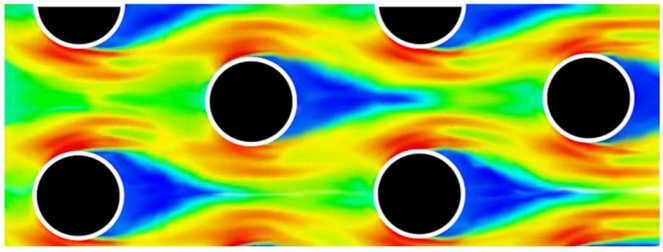
As standard, our heat exchangers consist of copper tubes firmly connected by aluminum electrodes for mechanical expansion. For critical applications, we design various coating systems and corrosion resistant materials (including stainless steel).

For higher and more efficient efficiency, our heat exchangers have a one hundred percent counter-current circuit. This circuit is completely vented, despite the unconventional design, through elbow vents and collection manifolds.

QOVAL

The clever loss of pressure





In addition to the variety of round tube geometries, we have a special oval tube geometry for composite loop systems. The advantages are the low pressure loss on the air side and the better utilization of the existing heat exchanger surface. Consequently, the heat exchanger with oval tubes can be smaller in size than a heat exchanger with round tubes while maintaining the same power. This has the advantage that the heat exchanger requires a smaller installation space. The lower pressure loss on the air side reduces the operating costs for the fan. On the other hand, it is possible to increase the performance of the composite circuit system during a system refurb by replacing the round tube heat exchanger with an oval tube heat exchanger of the same size.

Pre-planning

The control system meets every requirement and has been specially developed for aerial technology applications. The control system can be interfaced with web systems, the specially developed software is optimally matched to the control data. Commissioning can be done very easily, without any programming.Using ftb or usb, the software is loaded onto the controller at the factory. It contains all the necessary parameters and can be saved on an SD card for later configuration. This allows you to customize the application without a PC.

The application for the device with programmable control allows an optimal and personalized adjustment of the software. The operation is performed directly on the controller, in which a touch panel is already integrated.