

Circuit Connected Systems - Aisol KVS WRG

High speed circuit connected system (KVS WRG) with hydraulically optimized heat exchangers with air and brine. Heat recovery for units with completely separated supply air and exhaust air streams. The heat recovery circle can contain several units in the group. Decentralized heat sources are kept over the circle and the waste heat is used for heating the outside air. System controllers ensure the optimal performance and the maximum annual consumption index for the whole year. The adiabatic exhaust air humidification makes partially natural air-conditioning possible (supply air cooling) without mechanical refrigerant unit.



Customer benefits

- Maximum heat recovery with separate supply and exhaust air streams
- Decentralized sources of the connected systems of waste heat controllers
- For the unit optimization and the energy monitoring simple set of equipment from existing central air-conditioning units to the energy conservation simulation of costs and use
- Defroster controller for outside air filter
- Adiabatic cooling feed of warm and cold weather into the cycle.
- Elimination of heaters and radiators.
- Less air resistance, better SFP (Specific Fan Power).
- Annual consumption indices (JNG) and electricalthermal amplification factors (ETV) in accordance with energy regulations.



Description

Airsol high speed KVS WRG systems work with maximum exchange degrees. On the exhaust side we warm up the water glycol mixture (buffer fluid) as close as possible to the exhaust air temperature. The warmed up medium circulated to the outside air systems is able to warm up the outside air again. That is Airsol heat-transfer agent at a maximum exchange degree. The correctly adjusted water glycol quantity in the intermediate circuit guarantees the maximum temperature difference. In the case of summer the exhaust air is moistened adiabatically and the intermediate circuit is cooled. Adiabatic supply air cooling develops. The effect is maximized by the use of Mountair's hybrid cooling sections. With connected systems several exhaust air systems and supply air systems are interconnected. The Airsol controller monitors and stops the ideal fluid quantities and guarantees a maximum heat recovery. The entire unit is optimized. A better exchange degree means also higher air resistance. If the additionally spent energy reserve is more valuable than the recovered warmth then it forced the system. The annual consumption index says, how many per cents of the entire heating energy by the KVS WRG can be recovered. It is to be noticed that units with humidification are subject to another calculation!

References

- Sauter Bachmann (Netstal, Baujahr 2006, KVS AIRSOL, 2 x 60'000 m³/h)
- Triemli Spital Zürich Etappe II und Etappe III
- Flughafen Zürich Dock E, Midfield
- ETHZ Hönggerberg HIT
- IKEA Spreitenbach
- Novartis Campus, Krischanitz / Moneo / Gehry / Märkli
- Philip Morris Neuchâtel, Campus 2007

Contact

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airto breathe

Circuit connected systems - Aisol KVS WRG - Quotation

Project name: _____
Location: _____ over sea level
Number of units: _____

Standard & Quality

Minergy: ☐ _____
Supply quality: ☐ Q1 ☐ Q2 ☐ Q3 ☐ Q4
Exhaust quality: ☐ Q1 ☐ Q2 ☐ Q3 ☐ Q4

Systems & processes

Circulation: ☐ _____
Heating: ☐ _____
Cooling: ☐ _____
Humidifying: ☐ _____
Water quality: ☐ softened
☐ desalinated
Drying: ☐ _____

Efficiency

Supply air volume: _____ m3/h
Exhaust air volume: _____ m3/h
Supply air filter: _____
Exhaust air filter: _____

Overall dimensions

Max. overall dimensions: _____ mm

Outside air condition

Summer: ☐ _____ °C, %
Winter: ☐ _____ °C, %

Return air

Summer: ☐ _____ °C, %
Winter: ☐ _____ °C, %

Accessories

Installation: ☐ _____
Cooling machine: ☐ _____

General information

☐ Please contact me by email.
☐ Please contact me by phone:
- Availability: _____
- Direct number: _____

Comment / question:

First name: _____
Last name: _____
Company: _____
Address: _____
Postal code – City: _____
Country: _____
Telefon: _____
Fax: _____
E-Mail: _____

Contact

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