

Climate you need

# Imagine beautiful summer afternoon on a meadow like this...

- wind softly breaths. You feel freshness in the air
- sun is shining. It warms you up
- you are lying on a cold soil. You are slightly chilled
- you put a sweater on. It keeps you warm
- there is no dust in the air. You gently breath the clean air
- it was raining this morning. Air you breath is moistured enough

# But you are probably in some building and you need...

- fresh air
- heat
- cold
- heat recovery
- filtration
- humidity



# Why ventilation ?



In the sea full of reasons “Why I should think of ventilation in home, office building, industrial facility, hotel... ?”, think about this first and ask yourself “Why not?”

- **Comfort:** More and more we breath indoor than outdoor. Too high or too low temperature or high CO<sub>2</sub> concentration makes as feel unpleasant. Open window in the office or vicinity of trees and open meadows looks like a science fiction these days than ever before. So ventilation is a must.
- **Energy savings:** No need for opening your windows and producing draughts anymore! Ventilation systems with heat recovery, automatic control, optimised components are mainstream issues worldwide.
- **Humidity:** High humidity causes microbiological organisms, germs and fungies to spread. Low humidity causes irritation, allergies and headaches. Optimum humidity is protecting your health and improving your work environment.
- **Technology and regulation:** Some food or health proceses are impossible to be performed without reliable and precise air climate. Like : kitchen grease and explosive gas extortion, air tightness, microbiologically clean air, classes of air purity etc. Fulfilment of specific branch, technology or national law regulation is something you should keep in mind.

## Tradition

- Established in 1967
- 1500 satisfied customers worldwide
- 4000 equiped facilities in 26 countries worldwide
- 7000 units manufactured and delivered
- 19 engineers and several branch experts employed



# Advantages



- Family owned enterprise
- Devotion to customers needs and demands
- Experience and knowledge
- Wide product range
- Energy efficient and reliable products
- Top quality manufacture
- State of the art products and services
- After sales support
- Devotion to product and quality system improvements

# Quality



Quality for us, starts with motivated employees, passion for customer needs, fast respond, advisory and consulting, processe mastermind, usage of top quality materials and components, genuine desing, efficient manufacture, final control and acceptance, quick and precise delivery, fast commisioning, reliable service and maintenance, proffesional support and much more...

An overview of certificates and appovals we are proud off :



# Standard units

## MODULAR AIR HANDLING UNITS

- sizes : KU 1 – KU 24
- air volume flow rates: 800 – 130 000 m<sup>3</sup>/h
- according to EN 1886 and EN 13053
- with or without heat recovery
- panel thickness: 25 / 50 mm
- standard, hygienic, Ex-proof or anti grease design
- horizontal, vertical, double deck or side-by-side execution
- for indoor or outdoor installation
- different panels and components finishing

### Advantages for you:

- modular and adjustable sizes and design
- wide range of applications and versions
- different standard configurations for all your needs



## MODULAR CEILING AIR HANDLING UNITS

- sizes : KU 1 – KU 3
- air volume flow rates: 500 – 4 000 m<sup>3</sup>/h
- standard configuration: SP 1 – SP 10
- according to EN 1886 and EN 13053
- with or without heat recovery
- panel thickness: 25 mm
- standard, hygienic or Ex-proof design
- horizontal, vertical or side-by-side execution
- for indoor installation
- different panels and components finishing

### Advantages for you:

- low installation height: max 350 mm
- suitable for under ceiling installation
- easy maintenance and access from below

- modular and adjustable sizes and design
- wide range of applications and versions



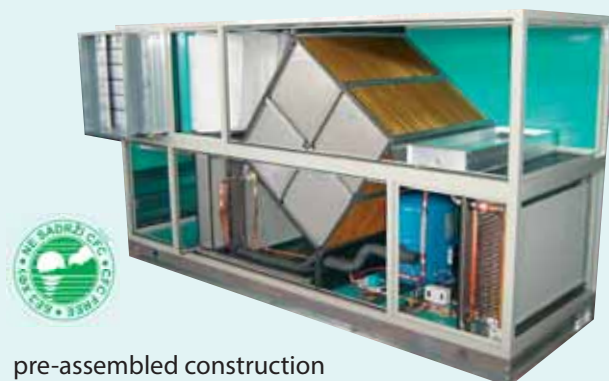
## MODULAR POOL AIR HANDLING UNITS

- sizes : KU 4 – KU 13
- volume air flow rates: 3 200 – 36 000 m<sup>3</sup>/h
- for standard or thermal pool water
- with or without heat recovery
- with or without heat pump
- with CFC free refrigerant
- panel thickness: 25 / 50 mm
- for indoor or outdoor installation
- 5 different operation modes
- heat exchanger fins epoxy coated
- different panels and components finishing

### Advantages for you:

- full automatic control and regulation
- top quality materials and workmanship

- wide range of applications and sizes



- pre-assembled construction
- smaller units fully wired

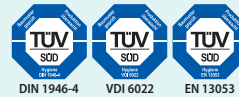
## MODULAR HYGIENIC AIR HANDLING UNITS

- sizes : KU 1 – KU 17
- air volume flow rates: 800 to 60 000 m<sup>3</sup>/h
- made according to DIN 1946, VDI 6022, VDI 3803
- with or without heat recovery
- insulation thickness: 50 mm
- horizontal, vertical, double deck or side-by-side execution
- for indoor or outdoor installation
- different panels and components finishing
- TÜV certified

### Advantages for you:

- modular construction
- easy maintenance
- for whole range of different hygienic application

- certified and approved by TÜV Germany



## MODULAR AIR HEATERS

- sizes: TR 25 - TR 400
- capacity from: 23 - 400 kW
- high thermal efficiency (min. 90 %)
- reduced NOx emissions
- with fan, automatic control, switchbox and burner chamber
- for gas (natural, propane, LNG) or oil

### Advantages for you:

- no secondary media
- no additional boilers, pumps, fittings needed
- cheap and fast installation
- quick warm up
- best fits for paint shops, workshops, greenhouses, warehouses, markets



## SWITCH BOXES AND AUTOMATIC CONTROL

- technical preparation, production, start up, maintenance and service
- cooperation with different components manufacturers
- spare parts stock
- provided with technical documentation
- DDC and PXC controllers

### Advantages for you:

- comply with all air handling unit functions
- suited to different control elements supplier
- fully wired and connected (on smaller units)



# Product range

## AIR HEATERS

**Reduced NOx emissions**



● 23-400 kW

## COMPACT CEILING

**Easy installation, easy maintenance**



● 500-8 700 m<sup>3</sup>/h

## STANDARD

**Modular, Ceiling, Pool, Hygienic**



● 500-130 000 m<sup>3</sup>/h

# CLIMATE JUST WH



# PRO

## NEW GENERATION

**ProkPAKT<sup>®</sup>**



- With plate or rotary wheel heat exchanger
- 600-13 500 m<sup>3</sup>/h



PREMIUM

**Modular, Hygienic,  
Compact**



- 500-60 000 m<sup>3</sup>/h

HERE YOU NEED IT

OKLIMA

NEW GENERATION

**ProkCOOL<sup>®</sup>**



- 40% of the cooling capacity saved by adiabatic cooling
- 1 800 – 29 000 m<sup>3</sup>/h

NEW GENERATION

**ProkFULL<sup>®</sup>**



- High energy recovery ratio (>90%)
- 2 700 – 34 000 m<sup>3</sup>/h

NEW GENERATION

**ProkPOOL<sup>®</sup>**



- Double heat recovery system
- 1 000-3 000 m<sup>3</sup>/h

# Premium units



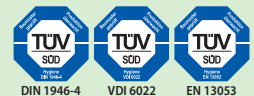
## PREMIUM MODULAR AIR HANDLING UNITS

- sizes : KU 1 – KU 17
- air volume flow rates: 800 – 60 000 m<sup>3</sup>/h
- according to EN 1886 and EN 13053
- with thermal break profiles and panels
- with or without heat recovery
- panel thickness: 50 mm
- standard, hygienic, Ex-proof or anti grease design
- horizontal, vertical, double deck or side-by-side execution
- for indoor or outdoor installation
- different panels and components finishing



## PREMIUM HYGIENIC AIR HANDLING UNITS

- sizes : KU 1 – KU 17
- air volume flow rates: 800 - 60 000 m<sup>3</sup>/h
- made according to DIN 1946-4, VDI 6022 and VDI 3803
- with thermal break profiles and panels
- with or without heat recovery
- panel thickness: 50 mm
- horizontal, vertical, double deck or side-by-side execution
- for indoor or outdoor installation
- different panels and components finishing
- TÜV certified



## PREMIUM COMPACT AIR HANDLING UNITS

- air volume flow : 600-22 000 m<sup>3</sup>/h (compact plate) or 900-38 000 m<sup>3</sup>/h (compact rotor)
- high energy recovery ratio (80 – 90 %)
- energy efficiency class A
- Optimal sfp ratio 0,9-1,2 kw/m<sup>3</sup> s
- EC fans with high efficiency ratio through the whole range of volume flows
- low airborne noise due to improved construction design and optimized component selection
- automatic control with intelligent logic and simple user interface
- adjustable and flexible – a lot of accessories, options and alternatives
- plate or rotary wheel heat exchanger

- rotor wheel types : condensation, hygroscopic, sorption
- monoblock or splitted in separate delivery sections
- easy installation, easy maintenance



# New generation units

## AIR HANDLING UNITS WITH "ADIABATIC" COOLING

### *ProkCOOL*<sup>®</sup>

- 14 different sizes
- air volume flow : 1 800 – 29 000 m<sup>3</sup>/h
- with plate exchanger
- high energy recovery ratio (>75%)
- > 40% of total cooling capacity from adiabatic cooling
- with digital scroll compressors
- for different temperature regimes
- automatic control system
- integrated control switchbox and control panel
- environmental friendly refrigerant R407C or R410A



## REGENATIVE AIR HANDLING UNITS

### *ProkFULL*<sup>®</sup>

- 14 different sizes
- air volume flow : 2 700 – 34 000 m<sup>3</sup>/h
- with innovative heat recovery system
- high energy recovery ratio (>90%)
- energy efficiency class A
- low electric energy consumption
- reduced investment and operating costs for building heating system
  - no additional heating system required
  - less cooling capacity needed
  - no additional pumps, exchangers, fittings

- reduced energy required for humidification system during winter period
- automatic control system
- integrated control switchbox and control panel



## COMPACT POOL AIR HANDLING UNITS

### *ProkPOOL*<sup>®</sup>

- 3 different sizes
- air volume flow : 1 000 – 3 000 m<sup>3</sup>/h
- double heat recovery system
- high energy recovery ratio (>70%)
- with digital scroll compressors
- EC fans with high efficiency ratio through the whole range of volume flows
- with water or electrical heater
- fast and efficient room air warm-up
- with water condenser for heating up of the pool water (option)
- automatic control system

- integrated control switchbox and control panel
- environmental friendly refrigerant R407C or R410A



# New generation units

## COMPACT AIR HANDLING UNITS WITH HEAT RECOVERY

### ProkPAKT<sup>®</sup>

- air volume flow : 600-22 000 m<sup>3</sup>/h (compact plate) or 900-38 000 m<sup>3</sup>/h (compact rotor)
- high energy recovery ratio (80 – 90 %)
- energy efficiency class A
- Optimal sfp ratio 0,9-1,2 kw/m<sup>3</sup> s
- EC fans with high efficiency ratio through the whole range of volume flows
- low airborne noise due to improved construction design and optimized component selection
- automatic control with intelligent logic and simple user interface
- adjustable and flexible – a lot of accessories, options and alternatives
- plate or rotary wheel heat exchanger

- rotor wheel types : condensation, hygroscopic, sorption
- monoblock or splitted in separate delivery sections
- easy installation, easy maintenance



## Other equipment and accessories

### COMPACT CEILING AIR HANDLING UNITS

- Supply and extract unit for ceiling void installation (500-8 800 m<sup>3</sup>/h)
- AHU with crossflow plate heat exchanger (500-3 500 m<sup>3</sup>/h)
- AHU with plate heat exchanger (100-800 m<sup>3</sup>/h)
- AHU with rotating heat wheel (500-8 700 m<sup>3</sup>/h)
- AHU with heat recovery wheel and high efficiency fans (500-8 700 m<sup>3</sup>/h)



### VENTILATION EQUIPMENT AND ACCESSORIES

- Air dampers
- Sand eliminators
- Sound attenuators
- Dispensers



# Services

## DESIGN AND CONSULTING

Our sales and technical support personnel will gladly help you and advise you in choosing the right equipment.

We bring solutions and advantages to you.



## START-UP

For normal unit operation it is necessary to make right installation of all components, setup parameters, adjust automatic



control options and start up the unit. Our professional personnel is trained for all these jobs.



## MAINTENANCE

Safe and long lasting operation of devices depends on periodical maintenance. Allow our personnel to take care of maintenance

of your devices. Choose the model, schedule and range of maintenance that best suits your needs.

## SERVICE

Cost of device malfunctions make severe problems in work processes. Our service personnel can help you to overcome such problems and

faults on equipment, quick and reliable, anytime and anywhere. Our service team works 24 hours/ 7 days a week



## SPARE PARTS

All components which need to be changed periodically (filters, belts etc.) as well as all the other parts (fan, motors, coil) are available.



We are offering original and quality parts.



## SHEET METAL PROCESSING

- Modeling in AutoCad and SolidWorks
- Technical data file build-up
- Machine processing (cutting, bending, punching, notching)

- Finishing (riveting, welding, boring, spot welding)
- Parts assembly
- Final control, packing, delivery

# Unit selection software

## AIRCALC++

Unit selection software AIRCALC++ enables easy and quick selection of appropriate size, type and configuration of unit, according to requested parameters and conditions. Great variety of options and printouts will ease and speed-up the process of unit construction and offer a lot of precious and needed unit data (technical data, noise levels, fan curves, dimensions, weights etc.)

Few steps needed for complete air handling unit calculation ...



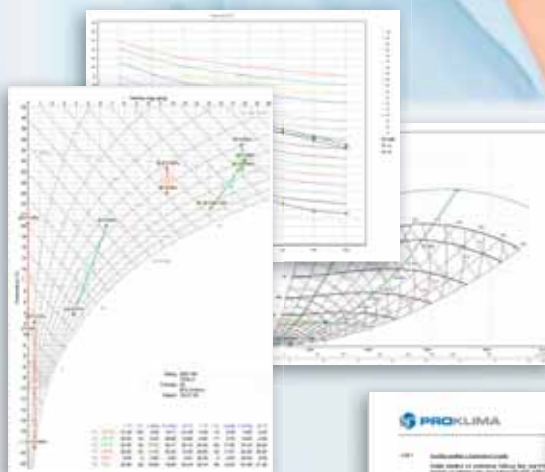
1 Data input



2 Size selection



3 Components and unit dimensions calculation



H-x diagram, noise levels and fan characteristic curves

Data printouts: technical data, unit drawing and detailed unit description



AIRCALC++ Selection software available in our sales department. Contact us on email: [sales@proklima.hr](mailto:sales@proklima.hr)

# References

## Shopping centers

- Avenue Mall, Osijek, Croatia
- Supernova, Karlovac, Croatia
- Lesnina, Zagreb, Croatia
- **West gate shopping city, Zaprešić, Croatia**



- Superkonzum, Šibenik Croatia
- Lumini, Varaždin, Croatia
- Garden mall, Zagreb, Croatia

## Spa & Wellness



- Sanatorij Zarja, Kislovodsk, Russia
- Hotel Korkyra, Vela luka isl. Korčula, Croatia
- Hotel Iliria, Prishtine, Kosovo
- **Hotel Monte mulini, Rovinj, Croatia**
- Princess hotel Casino, Gevgelija, Macedonia
- Krasnodar, Dinskaya, Russia
- Hotel Golf, toplice Sv.Martin, Croatia
- Sanatorium, Krapinske toplice, Croatia
- Villa Carolina, Veli lošinj, Croatia
- Kantrida city pool, Rijeka, Croatia
- Hotel Inero, Biograd, Croatia

## Commercial & Public buildings



- Cinestar Portanova, Zadar, Croatia
- Müller, Zagreb, Croatia
- Toyota Lexus, Moscow, Russia
- **Tbilisi business centre, Tbilisi, Georgia**
- Rilindia, Prishtine, Kosovo
- Euroyachting, Zagreb, Croatia
- Concert hall, Astana, Kazakhstan

## Biotechnology & Hospitals

- Jadranksi galenski laboratorij (JGL), Svilno, Croatia
- Tawam Molecular Imaging Centre, Al Ain, UAE
- Bosnalijek, Sarajevo, BIH
- **Pliva SMJ 1790, Savski Marof, Croatia**
- Fertility center Aparina st., Moscow, Russia
- Perinatal center, Volgograd, Russia
- Hospira Microbiology lab, Savski Marof, Croatia
- Vojnomedicinska akademija (VMA), Belgrade, Serbia
- Sachkhere Hospital, Tbilisi, Georgia
- Diakonissenanstalt, Speyer, Germany
- Poliklinika Medico, Rijeka, Croatia



## Industry facilities

- Haix Shoes factory, Mala subotica, Croatia
- Alstom Turbine blades facility, Karlovac, Croatia
- Milchwerke, Lendershausen, Germany
- **Farmavita, Sarajevo, BIH**
- Vindija, Varaždin, Croatia
- Milchwerke Saputo GmbH, Heiden, Germany
- Olkiluoto Nuclear Power Plant, Olkiluoto Island, Finland



## Halls & Offices

- Velotrek Sport hall, Astana, Kazakhstan
- Tennis sport center Kizilorda, Astana, Kazakhstan
- Spaladium Arena, Split, Croatia
- **Arena Zagreb, Zagreb, Croatia**
- Sport hall Rude, Samobor, Croatia



- Sport hall Višnjik, Zadar, Croatia
- Sport hall Žatika, Poreč, Croatia
- MVD center, Moscow, Russia
- Gradsko saobraćajno preduzeće Beograd (GSP), Belgrade, Serbia
- TDR Tobacco factory office, Kanfanar, Croatia
- T-com Call centar, Zagreb, Croatia