

## Air Handling Units

- Customized solutions
- Low energy consumption
- Long lifetime
- Hygienic design
- Controls with open communication
- DX cooling technology
- German engineering



# Casing and components

Creating the optimum air conditioning solution for each individual project: With products which are easy to maintain, extremely durable and designed with an eye to low energy consumption.

## Casing construction

- wide performance range from 1,000 m<sup>3</sup>/h up to 300,000 m<sup>3</sup>/h
- any casing dimension based on a module of 102 mm in height, width and length
- indoor, weatherproof or hygienic version



## Thermo-panel and Thermo-access-door

- thermal break between internal and external sheets by a synthetic profile
- long lifetime through galvanized steel and additional powder coating or stainless steel
- high thermal insulation, air tightness and low tendency of condensation



## Humidifier - Air washer

- casing made of stainless steel
- stainless steel pump
- different humidifier length
- humidification control with speed adjusted pump
- flawless hygiene with HYGIENECONTROL

## Plug fan

- cost efficient through reduction of air flow loss and air flow adaptation to the requirements with frequency controlling
- best cleanability through open construction
- high operational safety due to lack of belts and fan bearings
- maintenance friendly through direct drive
- precise measuring of air flow with calibrated inlet nozzle



## Cooling coil with drain pan

- hygienic drain pan in stainless steel, sloped for complete draining of condensate
- good cleanability
- heat exchanger (for CW or DX) made of Cu/Al, Cu/Cu or with coated fins

## Duplex filter frame

- minimal casing length by combining pre-filter and bag filter in one universal filter rack, completely coated
- special frame for separate measurement of each filter stage
- high air tightness
- durably foamed seal

## More components

- HEPA-filter
  - heating coil
  - electrical heater
  - heat recovery system
  - desiccant rotor
  - steam humidifier
- see [www.robatherm.com](http://www.robatherm.com)

# Integrated control technology

robatherm combines the **customized Air Handling Units with integrated control and automation systems** into one complete unit. A single partner coordinates AHUs and controls. The warranty limits are clearly defined.

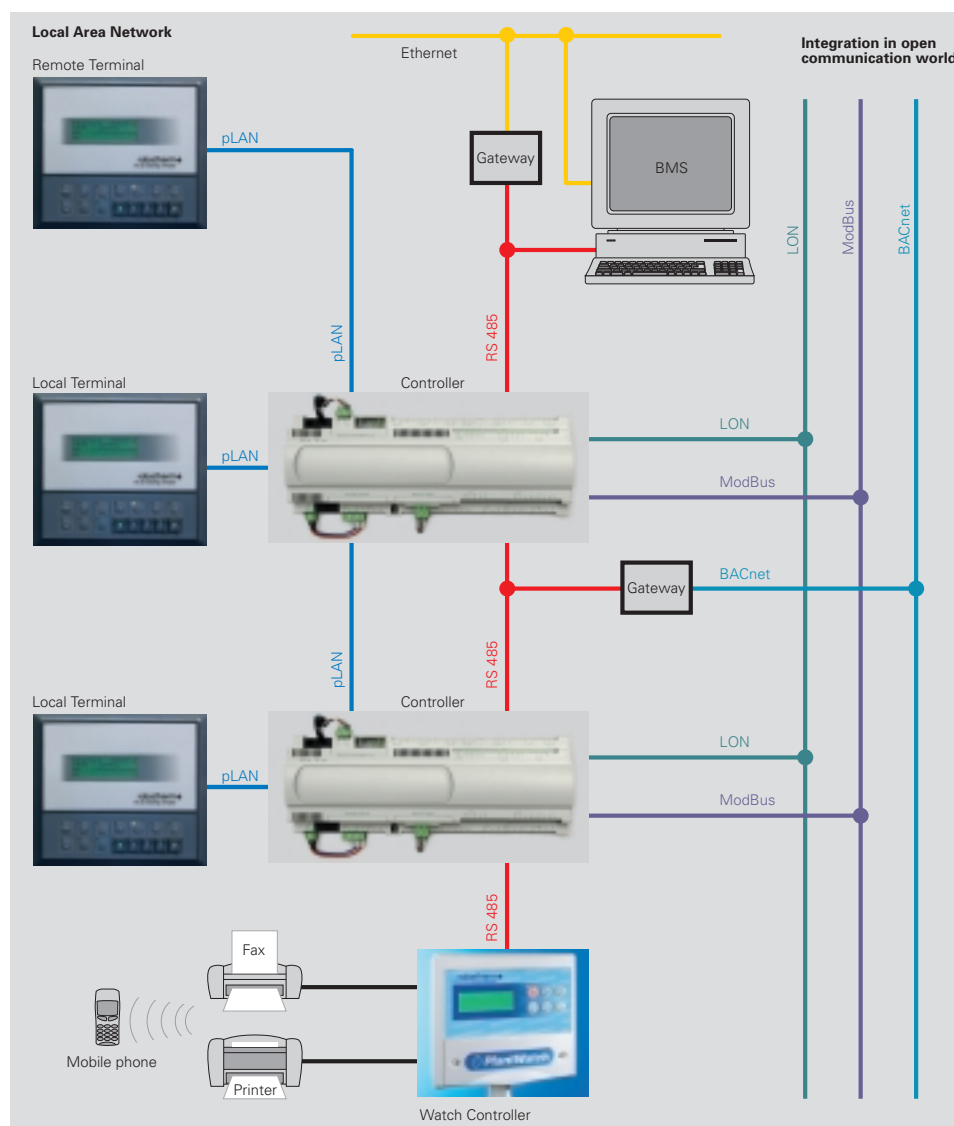


## Control cabinet

- integration of all power and control components in the unit
- systems usually delivered ready-to-plug-in
- time and cost savings due to reduced installation effort on site
- lower investment costs in relation to external control systems
- individual and flexible adaptation to the casing dimensions
- compact construction with low space requirements
- high degree of operational safety



robatherm DDC-software **Smart Control** is specifically developed for Air Handling Units.



## Smart Control

- universal modules for complex and individual solutions of all possible HVAC tasks
- complete configuration and parameterisation directly at the terminal without an external PC
- easy operation with dynamic, multilingual full text display
- maintenance management with an automatic diagnostic message for each component

## Communication

- easy to use remote terminal (up to 15 controllers)
- compact watch controller for a central alarm monitoring
- building management system (BMS) connects to all subcontracted parts
- open system with LON, ModBus, BACnet protocol offers an economical connection with third party systems

# Integrated DX cooling technology

robatherm combines the **customized Air Handling Units with integrated DX cooling systems** into one complete unit. A single partner coordinates AHUs and cooling systems. The warranty limits are clearly defined.

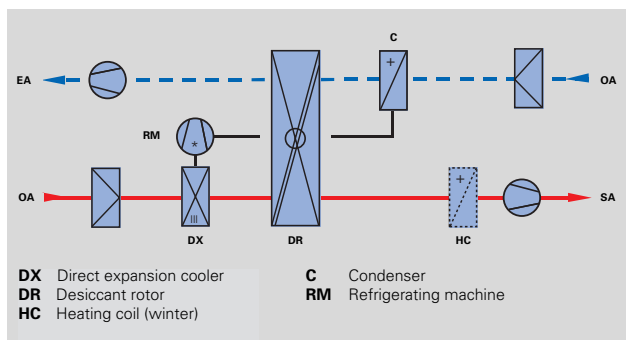
## DX cooling technology

- systems usually delivered ready-to-plug-in
- time and cost savings through easy on site installation
- lower investment costs in relation to external cooling systems
- compact construction with low space requirements
- high degree of operational safety
- independently operational



## ◀ Cooling components

- optimized component design
- energy saving by using multi stages with steady capacity control
- environmentally friendly, CFC-free refrigerants
- variable condenser arrangements



## ◀ Example

Primary-AHU (PAU) with integrated DX cooling technology and desiccant rotor



**Certified quality by EUROVENT**  
**Tested by TÜV Süddeutschland**

**Mechanical characteristics according to EN 1886:**

- thermal transmittance: class T2
- thermal bridge: class TB2
- casing leakage: class L2
- filter bypass leakage: class F9
- casing strength: class D2

**Rating and performance according to EN 13053:**

- air flow
- pressure
- electrical power input
- heating and cooling capacity
- heat recovery
- sound power

robatherm  
 Industriestrasse 26  
 89325 Burgau  
 Germany

Phone +49 8222 999 0  
 Fax +49 8222 999 222  
 E-Mail info@robatherm.com  
 Web www.robatherm.com

