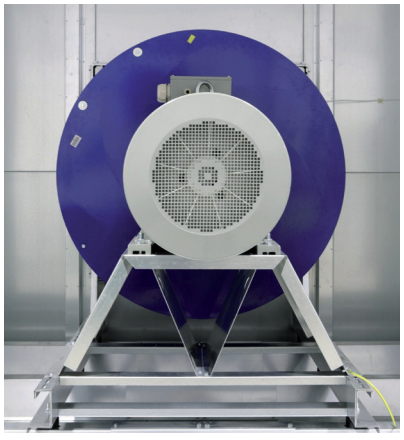
CIC
JAN HŘEBEC

# H and HL air-conditioning units





- Non-frame structure
- Excellent strength of structure D1, D2
- Casing air leakage L1, L2
- Thermal bridging factor TB2
- Thermal transmittance T3
- Easy installation and maintenance of units
- High variability of units options

# H and HL air-conditioning Units

## Usage and working conditions

H and HL frameless air handling units are modular units of square or rectangular cross-section. The units are intended for the central distribution and optimization of air, i.e., filtration, heating, cooling, heat recovery, humidification and dehumidification in production facilities, administrative buildings, hospitals, shopping centers, schools, sports complexes, restaurants, the food industry and other areas. The standard units can be placed in an environment with out-door temperatures from -30 ° C to + 40 ° C. The units are produced in options for outdoor, indoor, hygienic environment use, as well as for potentially explosive atmospheres (ATEX).

## Structure

The H and HL units are made of frameless sandwich panels.

The casing of the panel consists of two steel zinc plates with a thickness of 0.8 mm, peripherally connected by blind rivets. The outer cover of the unit is finished in shade RAL9002 - ivory.

Inside the panel is mineral wool insulation with volumetric weight of 50 kg/m³, degree of flammability is A1. The thickness of the panel is 50 mm.

Our non-frame design ensures a perfectly clean surface and thus automatically ensures the hygienic design of our air handling units.

## Advantages of frameless structure

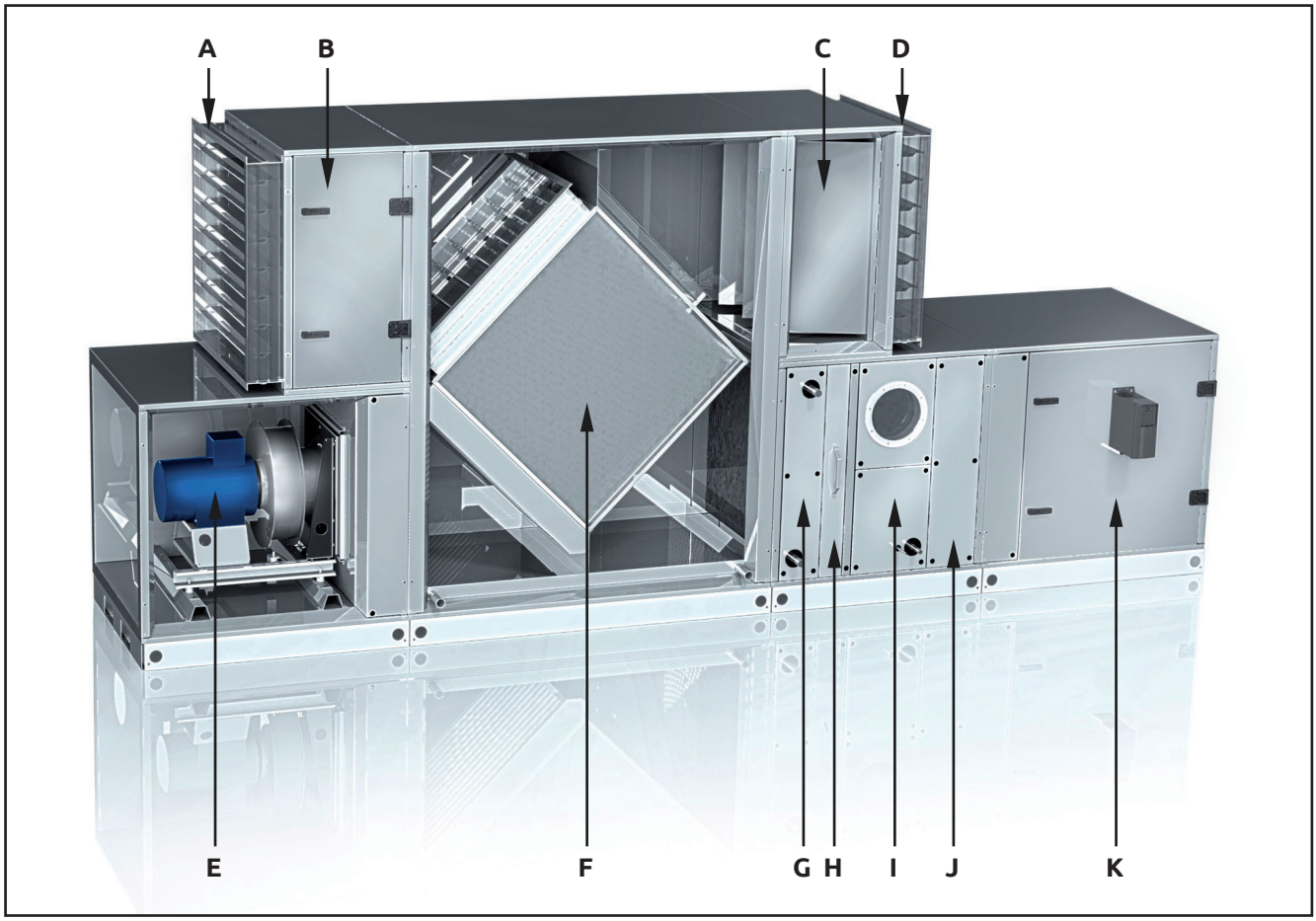
- excellent strength of the structure
- reduced heat losses through the shell of the unit
- clear inner area of the unit
- compliance with hygienic requirement without further modifications
- shorter length of individual sections compared to frame modular units
- easy maintenance of units
- high variability of unit options
- lower purchase price

| Size | Nominal airflow V [m³/h] |
|---|---|
| H 2, HL 2 | 2000 |
| H 2.5, HL 2.5 | 2500 |
| H 3.15, HL 3.15 | 3150 |
| H 4, HL 4 | 4000 |
| H 5, HL 5 | 5000 |
| H 6.3, HL 6.3 | 6300 |
| H 8, HL 8 | 8000 |
| H 10, HL 10 | 10000 |
| H 12.5, HL 12.5 | 12500 |
| H 16, HL 16 | 16000 |
| H 20, HL 20 | 20000 |
| H 25, HL 25 | 25000 |
| H 31.5, HL 31.5 | 31500 |
| H 40, HL 40 | 40000 |
| H 50, HL 50 | 50000 |
| H 63, HL 63 | 63000 |
| H 80, HL 80 | 80000 |
| H 100, HL 100 | 100000 |

Plate heat exchanger



Schema of H and HL air handling unit




**A** – Terminal panel with flap/flex. connection, louvres, **B** – Supply filter G1–H14, **C** – Exhaust filter G4 – H14, **D** – Terminal pane with flap, louvres, **E** – Exhaust plug fan with frequency converter, **F** – Plate heat exchanger /rotary for heat recovery, **G** – Heating section – hot water / electrial / steam / gas, **H** – Capillary frame, **I** – Cooling section – water/ DX cooler, **J** – Drop separator, **K** – Supply plug fan with frequency converter

# Reference

**Bobcat Dobříš**




H and HL air-conditioning units
(15 units) outdoor unit, installed air performance ca. 421,900 m³/h

**Dukovany nuclear power plant**



H and HL air-conditioning units
(5 units) seismic resistant 5,000–8,000 m³/h

**Plzeňská teplárenská – biomass dryer**



H and HL air-conditioning unit
Frameless air handling unit performance 100,000 m³/h

**KFC Nový Smíchov**



H and HL air-conditioning units
(2 units) total performance 20,000 m³/h

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