



...more than **air**



# COMPACT **H**

**COMPACT UNIT**  
WITH COUNTER FLOW HEAT EXCHANGER

[www.vbw.pl](http://www.vbw.pl)

# COMPACT H

## General information

The Compact H air handling unit is a compact supply air and exhaust air device with a high-efficiency, counterflow heat exchanger.

Air handling unit is adapted for indoor installation (BS version) and outdoor (BD version). AHU-s configuration is available in left and right version.

The product is available in 7 sizes covering the airflow range from 200 to 9000 m<sup>3</sup>/h.

The COMPACT H air handling unit is dedicated to small ones and medium-sized facilities. The device is equipped with the highest class components and is designed to stay full functionality with reduced dimensions. Plus all of them functional sections of the device have been placed in one housing, which makes the dimensions of the air handling unit compact and facilitate its transport, installation and service.

The COMPACT H air handling unit is delivered as complete device, equipped with full automatic power supply and control with internal wiring, operating in the Plug&Play system. This solution ensures that the customer receives a device that is ready to work immediately after initial configuration, connecting the necessary external accessories and supply voltage.

# 7

SIZE BASIC

up to  
**87%** EFFICIENCY  
HEAT RECOVERY

EFFICIENCY [m<sup>3</sup>/h]  
**200 - 9000**



Counter flow heat exchanger



Indoor/  
outdoor unit



Self-supporting  
construction



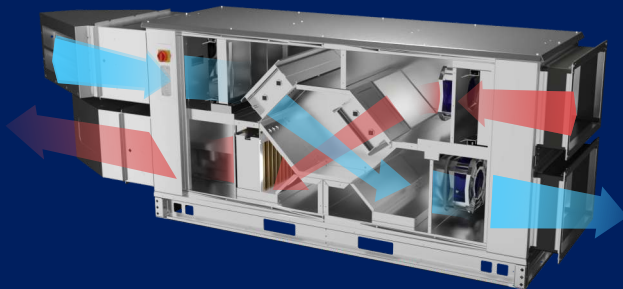
Energy efficient  
device



Compact  
dimensions



Plug&Play  
automation  
(standard)



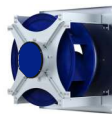
# Technical Specifications

- 7 basic sizes
  - Air flow range from 200 to 9000 m<sup>3</sup>/h
  - Counter flow heat exchanger
  - Heat recovery efficiency up to 87%
  - Internal (BS) or external (BD) execution
  - Outdoor version (BD) equipped with a special roof (made of sheet steel resistant to weather conditions and corrosion)
  - Outdoor version (BD) equipped with an integrated air intake and exhaust
  - Panel filters:
    - ISO ePM10 50% (M5)
    - ISO ePM1 70% (F7)
  - Insulation – 50mm (Glass mineral wool – reaction to fire A1 (non-combustible))
  - Panels coated by the Magnelis Zm310
  - Highly energy efficient EC fans (Ie4)
  - PTC electric heater / water heater
  - Power and control switchgear cabinet installed inside the AHU
  - Plug&Play automation
- 
- **Additional sections** (the device can be enriched with additional cooperating sections)
  - Recirculation
  - Water/ freon cooling coil
  - Humidifying system
  - Damper
  - Secondary filters

# Elements of the device COMPACT H



Counter flow  
heat exchanger



Highly energy  
efficient EC fans (Ie4)



Panel  
filters



Double,  
flexible hinges



Integrated air intake  
and exhaust  
(in BD outdoor version)

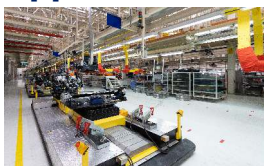


PTC electric heater  
or water heater



Plug&Play  
automation

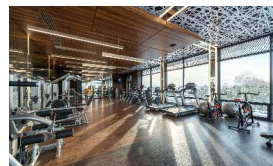
# Application



INDUSTRIAL FACILITIES



SCHOOLS & UNIVERSITIES



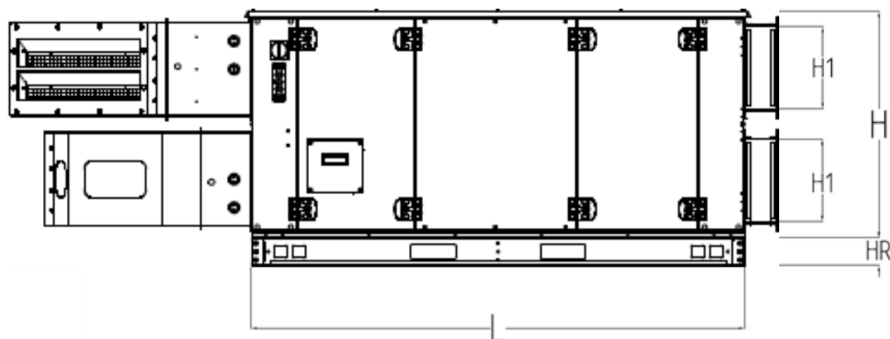
GYM & EXERCISE ROOMS

# Technical data

SIZE OF UNITS		COMPACT-H-1	COMPACT-H-2	COMPACT-H-3	COMPACT-H-4	COMPACT-H-5	COMPACT-H-6	COMPACT-H-7	
AIR VOLUME	[m <sup>3</sup> /h]	200-700	600-1700	1200-2700	2000-4300	2500-5150	4000-7500	5000-9000	
EXTERNAL STATIC PRESSURE	[Pa]	300/300	300/300	400/400	400/400	500/500	500/500	500/500	
MAXIMUM HEAT RECOVERY EFFICIENCY	[%]	86	86,3	85,7	82	81,8	81,5	86,7	
WEIGHT	[kg]	270	380	535	626	852	815	998	
DIMENSIONS	L	[mm]	1750	1950	1950	2450	2450	2600	2850
	L <sub>1</sub>	[mm]	850	950	1265	1265	1440	590	715
	L <sub>2</sub>	[mm]	730	820	1145	1145	1320	470	595
	L <sub>3</sub>	[mm]	-	-	-	-	550	-	-
	B	[mm]	600	800	1200	1200	1400	1600	1600
	H <sub>1</sub>	[mm]	800	1000	1000	1200	1200	1410	1800
	H <sub>2</sub>	[mm]	-	-	-	-	880	1080	
INSULATION	[mm]				50				
COIL CONNECTIONS SIZE	[mm]	500x300	700x400	1100x400	1100x500	1300x500	1500x600	1500x800	
POWER CONSUMPTION	ENGINE POWER	[kW]	0,17/0,17	0,5/0,78	0,78/0,78	1,35/2,5	2,5/3,9	3,9/5,6	3,5/5,4
	POWER OF ELECTRIC HEATER (max.)	[kW]	3	9	12	18	24	33	39
	POWER OF WATER HEATER (max.)	[kW]	7,4	16	27	41	51	76	86
MAXIMUM SUPPLY FUN CURRENT	[A]	1,7/1,7	2,5/4	3,9/4	6,7/4	4/6,2	6,2/9	5,6/8,6	
DEVICE POWER SUPPLY	[V/Hz]				3-400, 50				
SOUND LEVEL	[dBa]	47,4	54,4	51,2	58,5	64,1	64,8	59,5	

FILTERS

ISO 4140-505 (M5),  
ISO 4140-705 (F7)



\*the manufacturer reserves the right to update the data and photos in the catalogue.  
\*photos presenting the offered product are for illustrative purposes only.

# Plug&Play System

The idea behind the control panels with the Plug&Play automation system is to produce and deliver to the customer a device ready for operation immediately after connecting the necessary external accessories and supply voltage.

Our offer includes the possibility of equipping the device with factory and proprietary automation systems. In this case, the devices have internal wiring and a power supply and control switchgear.

This solution ensures easy and quick commissioning of the device and immediate readiness to work on the site.

## Advantages Plug&Play system

- + Reduced assembly time and commissioning (cost reduction)
- + Commissioning of the control panel without interruption  
Factory configuration and full wiring guaranteed trouble-free operation
- + Electrical connection made and checked by qualified technicians
- + Certified cables, electrical terminals, certified boxes and cable connections



## PREMIUM+ Automation

Discover the full possibilities of the proprietary automation system



Full control over device



Optimization of work and incurred running costs



Access to the device 24/7 (Remote Service Center)



Ability to send Email & SMS notifications



Reminding about inspections



Device integration cooperating with exchanges



Individual graphics developed on projects building



Intelligent systems energy management



Internet compatibility access from anywhere in the world



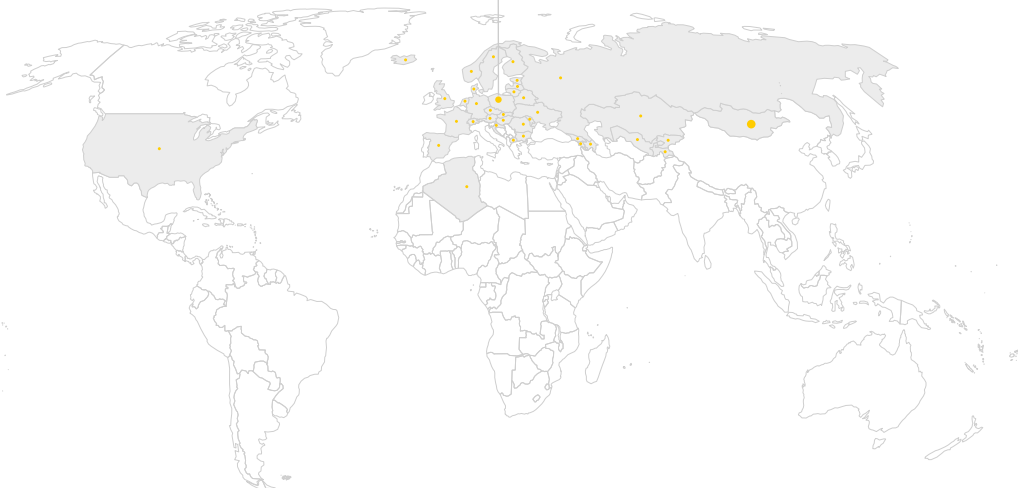
Smart Homes integrated systems smart home

\*additional options possible when selecting the device.

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