

## Efficient ventilation units with heat recovery





## WS 75 Powerbox

The ideal ventilation unit for small residential units as well as for medical and business premises and offices.

# WS 75 Powerbox – high-tech with an elegant design

#### Good air with effective heat recovery

The compact WS 75 units are the ideal ventilation solution for a pleasant and balanced indoor climate.

They provide optimal indoor air in small residential units as well as in offices and medical premises.

Thanks to its elegant design, the Powerbox can also be ideally integrated in any room ambience.

#### **Comfortable indoor climate**

- Healthy and hygienic indoor climate thanks to continuous ventilation throughout the year
- Heat- and humidity-transferring enthalpy heat exchanger ensures a pleasant indoor climate – even in the winter

#### **Ideal applications**

- Hotel rooms
- Student flats
- Nursing care homes
- Offices
- Small flats up to approx. 60 m²



WS 75 Powerbox with surface-mounted cover and glass insert, optionally with printed "tree motif"





WS 75 Powerbox with flush-mounted cover and glass insert, optionally with printed "tree motif"



WS 75 Powerbox with flush-mounted cover made of solid glass

## WS 75 Powerbox – the ventilation unit – efficient and reliable

#### **WS 75 Powerbox - the optimal ventilation solution**

In addition to a healthy and pleasant indoor climate, the building fabric is also reliably protected against moisture damage, thus preventing costly and time-consuming renovation.

#### Advantages at a glance

- Fully-automatic demand-driven operation via humidity sensor
   VOC and COP sensors available as accessories
- Air quality display via LED
- Innovative glass control element
- The integrated W-LAN module enables operation via the Air@home app
- Very quiet ventilation due to extremely sound-absorbing and heat-insulating housing construction
- Simple installation, Plug and Play
- No condensate drain required

- EC fans with constant volume flow: The volumetric flows do not require adjustment
- High energy efficiency due to EC DC motor, energy efficiency class A
- Fully automatic frost protection with continuous ventilation thanks to an innovative antifreeze circuit
- Electric supplementary heating available as an accessory
- With filter change indicator, easy filter replacement
- Unit housing made of powder-coated sheet steel, painted, colour: traffic white, RAL 9016

#### Flexible installation position of the WS 75 Powerbox



#### Intuitive control via the glass control element



## WS 75 Powerbox – Ventilation with remarkable capabilities

#### High ease of use – Individual ventilation operation

The various ventilation modes can be quickly set on the glass control element. The intuitive user interface of the touch display is convenient and using it just as easy.

 Individual ventilation operation with adjustable operating modes and ventilation levels

#### Operating modes

 Automatic sensor: Fully-automatic demand-driven volumetric flow regulation via integrated humidity sensor, optionally via CO<sub>2</sub> or VOC

#### Manual operating mode

The volumetric flow can be manually adjusted according to the air levels

- Eco supply air mode, only the supply air fan runs, in summer, for example, cooler air flows into the bedroom
- Eco exhaust air mode, only the exhaust air fan runs, used air is transported out
- Intensive ventilation with increased air volume /
   Party ventilation if there are several people in the room for a long period of time

#### Ventilation levels (manual)



Ventilation off



Humidity protection ventilation



Reduced ventilation



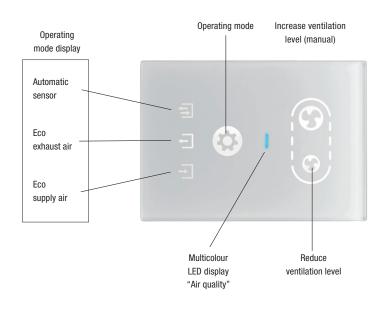
Nominal ventilation



Intermittent ventilation (time limited)



Intensive ventilation



Ventilation levels 2 to 4 can be set individually via the commissioning software

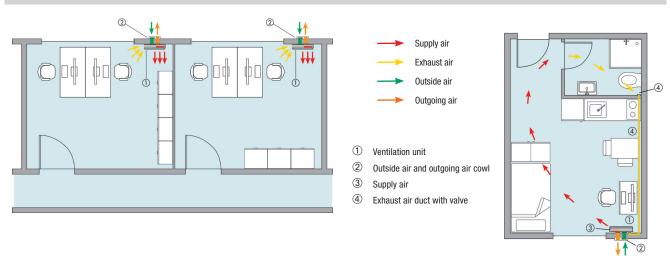
#### Flexible installation versions for the most diverse installation situations

The Powerbox is equipped for a wide variety of ventilations solutions and for the most diverse requirements.

- Surface-mounted installation version
  - Supply and exhaust air directly via the ventilation unit
  - Supply and exhaust air via the unit and second room connection via ventilation ducts
- Flush-mounted installation version
  Supply and exhaust air via ventilation ducts

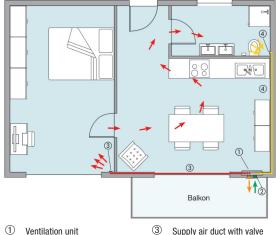
## WS 75 Powerbox -Installation examples from the field

#### Surface-mounted installation examples: offices / student flats

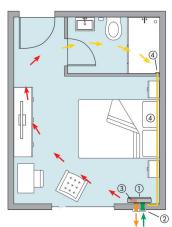


#### Flush-mounted installation example: two-room flat

#### Surface-mounted installation example: hotel room/room in nursing care facility

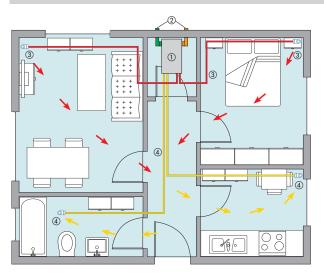


- Supply air duct with valve
- Outside air and outgoing air cowl  $\ \ \ \ \ \ \ \ \ \ \ \ \$ Exhaust air duct with valve



- Ventilation unit
- Supply air
- Exhaust air duct with valve

#### Ceiling mounting installation example: approx. 60 m² flat



- Supply air Exhaust air

Supply air Exhaust air Outside air Outgoing air

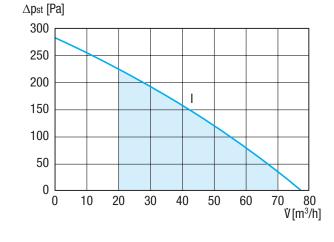
- Outside air
- Outgoing air
- Ventilation unit
- Outside air and outgoing air cowln
- Supply air duct with valve
- Exhaust air duct with valve

### WS 75 Powerbox – Technology in detail

#### **Product features**

- Housing made of sound-absorbing EPP plastic
- Housing cover made of powder-coated sheet steel (colour: traffic white, similar to RAL 9016, fine texture matt) with glass insert or made entirely of glass
- Outside and outgoing air connections DN 90
- WS 75 surface-mounted housing, supply air and exhaust air openings on unit
- WS 75 recessed-mounted unit, duct connections DN 75, air supply via ducts and valves
- No condensate drain required
- Protection of the external façade by means of a drip tray on the external cover
- Filter class: outside air ISO Coarse > 60% (G4),
   optionally ePM1 z 50% (F7), exhaust air ISO Coarse > 60%(G4)
- Weight 17.5 kg

#### **Characteristic curve**



#### Performance features

- Ventilation levels (factory setting)	Air volume			
		L <sub>WA2</sub> dB (A)		
		UPA	APA	
		UPGA		
Humidity protection ventilation	20 m <sup>3</sup> /h	23	27	
Reduced ventilation	30 m <sup>3</sup> /h	24	30	
Nominal ventilation	40 m <sup>3</sup> /h	27	35	
Intermittent ventilation	50 m <sup>3</sup> /h	28	39	
Intensive ventilation	50 m <sup>3</sup> /h	28	39	
– Max. volumetric flows that can be set	70 m³/h	33	44	
- Evaluated standard sound level difference		D <sub>n</sub> [dB]*		
WS 75 with combination wall connection		48		
WS 75 with soffit element Duo LE		56		
– Degree of heat provision	egree of heat provision		up to 93 %	
- Rated voltage		230 V		
- Power frequency		50 / 60 Hz		
- Power consumption at 30 m³/h		6,1 W		
- Degree of protection		IP 00		
- Permitted outside air temperature		−15 to +40 °C		
- Energy efficiency class		A		
- SEC value [kWh/(m²a)]			-41	

<sup>\*</sup>With accessories the standard sound level difference can be further increased.

#### Unit equipment

- Antifreeze circuit
- Electrical supplementary heating
- Humidity control
- Filter monitoring
- CO<sub>2</sub> control / VOC

integrated

optional integrated

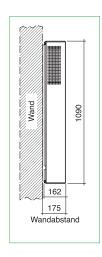
time-controlled

optional

#### **Dimensions for wall installation**

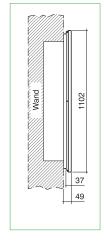
### Surface-mounted variant

Unit cover with glass insert



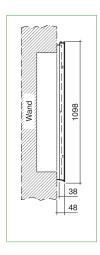
Flush-mounted variant

Unit cover with glass insert



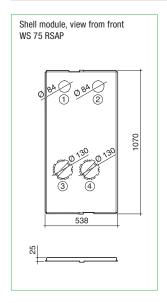
Flush-mounted variant
Unit cover made

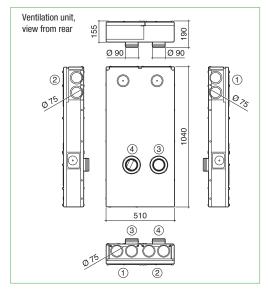
Unit cover mad of solid glass

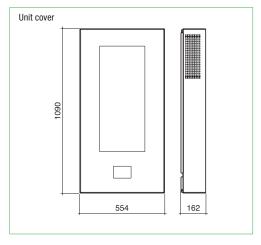


### WS 75 Powerbox – compact and flat

#### WS 75 Powerbox H Surface mounting with RSAP

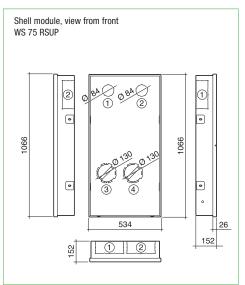


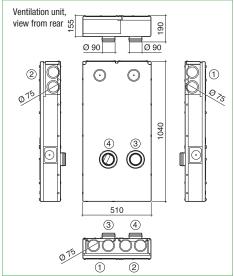


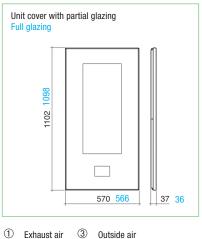


- 1 Exhaust air
- Outside air
- Supply air
- 4 Outgoing air

#### WS 75 Powerbox H Flush-mounting with RSUP



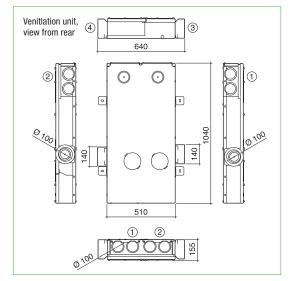




- Exhaust air
- Supply air
- Outgoing air

#### WS 75 Powerbox S model - Socket for outside and outgoing air, lateral (S)

The ventilation unit can be controlled via the control element in the living area using the cable connection



- Exhaust air
- Supply air
- 3 Outside air
- Outgoing air

### Equipment versions & accessories

#### **Surface-mounted version**

Shell kit (1)

WS75 RSAP

0093.1615

Ventilation unit incl. control element (2)

Glass insert with printed motif on request (4)

WS 75 Powerbox H

0095.0646

Unit cover (3)

WS 75 APA

0093.1617







Flush-mounted version / or as a front wall installation

Shell kit (1)

WS75 RSUP

0093.1616

Ventilation unit incl. control element (2)

WS 75 Powerbox H 0095.0646

Unit cover (3)

WS 75 UPA

0093.1618

Glass insert with printed motif on request (4)

Unit cover made of solid glass (5)

WS 75 UPGA

0093.1619









Variant / Unit installation in storage room or suspended ceilings

Ventilation unit including control

element Installation on standard flush-mounted box

Control via cable

WS 75 Powerbox S

0095.0645



Façade / external cover

Façade (brushed stainless steel) (1)

Façade (stainless steel, white powder-coated RAL 9010) (2) Duo KWS E Duo KWS W 0093.1440 0093.1441





Soffit element (1) Soffit element extension (2) Cover Soffit element (3)

Duo LE Duo LEV Duo AE

0093.0087 0093.0089 0093.0088





**Accessories for WS 75 flush mounting** 

Plastic disk valve plastic for supply or exhaust air (1)

Bracket (2)

Slide-in adaptor (3)

Flexible duct DN 75 (4)

TK 10

MF-WE75

MF-F75

MF-WL 100/80/200

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