

# TECHNICAL DATA

	Cooling						Ventilation with heat recovery	
	Cooling <sup>(1)</sup>	Heating		Gas heaters		Electric heaters	Nominal airflow / external pressure	Fresh air airflow / ErP 2018 heat recovery efficiency <sup>(3)</sup>
		Heat pump <sup>(1)</sup>	Water heater <sup>(2)</sup>	2-step	Modulated			
	HP	W	G	Gm	E	m <sup>3</sup> /h / Pa	m <sup>3</sup> /h / %	
	kW	kW	kW / kW	kW - kW	kW			
<b>Cube 20</b> ⊖ ⊕ ⊕	20,0	19,0	48,0	40,2 / 20,4	33,5 - 5,0	25,0	5000 / 350	5000 / 79,3
<b>Cube 40</b> ⊖ ⊕ ⊕	41,8	41,5	74,0	47,9 / 25,8	40,5 - 8,1	25,0	8000 / 350	8000 / 73,1
<b>Cube 50</b> ⊖ ⊕ ⊕	57,0	53,9	111,0	92,3 / 56,2	97,2 - 13,4	od 25,0	14000 / 350	14000 / 73,7
<b>Cube 60</b> ⊖ ⊕ ⊕	64,4	61,4	120,0	92,3 / 56,2	97,2 - 13,4	od 25,0	16000 / 350	15000 / 73,0
<b>Cube 80</b> ⊖ ⊕ ⊕	79,4	76,5	158,0	92,3 / 56,2	97,2 - 17,8	od 25,0	19000 / 350	17000 / 73,3
<b>Cube 100</b> ⊖ ⊕ ⊕	90,0	87,0	167,0	92,3 / 56,2	97,2 - 17,8	od 25,0	21000 / 350	17000 / 73,3
<b>Cube 120</b> ⊖ ⊕ ⊕	134,4	126,8	182,0	92,3 / 76,8	97,2 - 17,8	od 25,0	24000 / 350	20000 / 73,0
<b>Cube 160</b> ⊖ ⊕ ⊕	155,6	152,0	199,0	92,3 / 76,8	97,2 - 17,8	od 25,0	28000 / 350	20000 / 73,0
<b>Cube R8</b> ⊖ ⊕	nd.	nd.	74,0	47,9 / 20,3	40,5 - 5,0	25,0	8000 / 350	8000 / 73,1
<b>Cube R21</b> ⊖ ⊕	nd.	nd.	167,0	92,3 / 56,2	97,2 - 17,8	od 25,0	21000 / 350	17000 / 73,3
<b>Cube 20 / NW</b> ⊖ ⊕ ⊕	20,0	19,0	48,0	40,2 / 20,4	33,5 - 5,0	25,0	5000 / nd.	5000 / 79,3
<b>Cube 40 / NW</b> ⊖ ⊕ ⊕	41,8	41,5	74,0	47,9 / 25,8	40,5 - 8,1	25,0	8000 / nd.	8000 / 73,1
<b>Cube R8 / NW</b> ⊖ ⊕	nd.	nd.	74,0	47,9 / 20,3	40,5 - 5,0	25,0	8000 / nd.	8000 / 73,1

⊖ cooling    ⊕ heating    ⊕⊕ ventilation with heat recovery

(1) Cooling – outside temperature 35°C [TS], inlet temperature 27°C [TS] / 19°C [TM]. Heating – outside temperature 7°C [TS], 6°C [TM], inlet temperature 20°C [TS]. TS - dry thermometer, TM - liquid thermometer, net EER - net cooling capacity / overall power consumption, net COP = net heating capacity / overall power consumption.

(2) Heating medium parameters 70/50°C and inlet air temperature 8°C.

(3) In accordance with UE 1253/2014 regulation. Inlet/outlet air temperature difference 20K, dry air.

We reserve the right to change technical data and design parameters.



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## Contact our Project Support Department

Ask for:

- technical data,
- CAD libraries,
- range of units,
- custom-made solutions.

dobory@flowair.pl



### Cube R8 / NW

Type of building:  
production hall



### Cube 40

Type of building:  
car showroom



### Cube 40 i Cube R8

Type of building:  
office-warehouse building



### Cube 40 i Cube 20

Type of building:  
eggs sorting facility



## ROOFTOP PRODUCTS

cooling, heating, ventilation

Rooftop Cube



# SAMPLE APPLICATION OF CUBE UNITS

cooling
 heating
 ventilation with heat recovery

## Duct installation

Cube 20 – 160    Cube R8 – R21

## Ductless installation

Cube 20 – 40 / NW

## Ductless installation

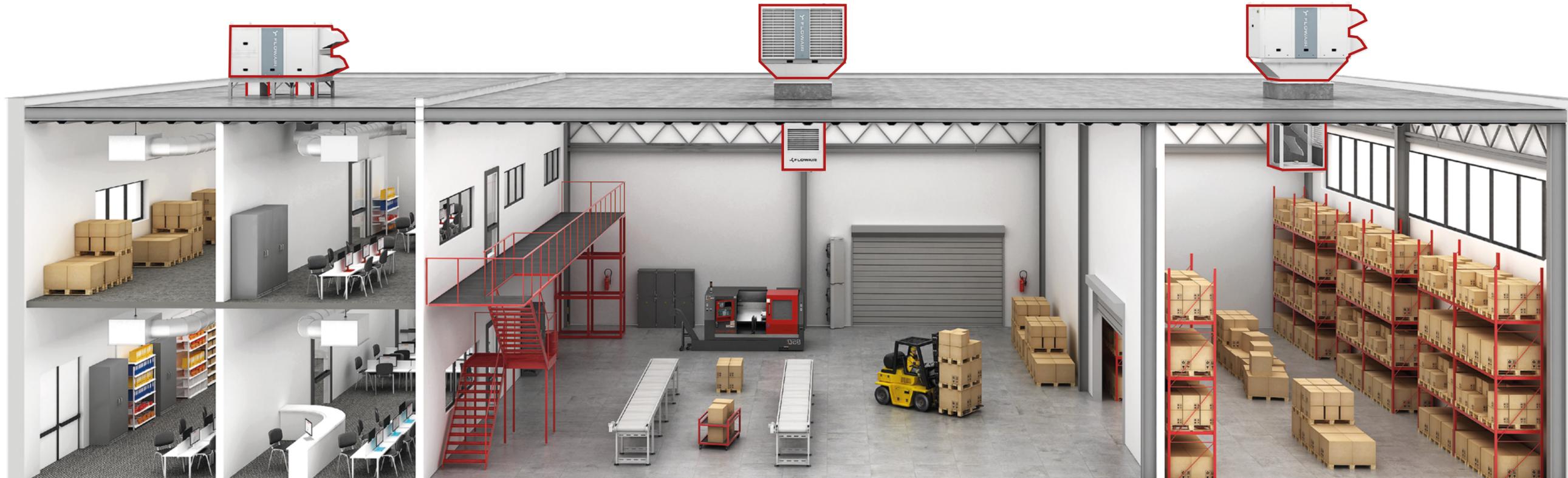
Cube R8 / NW

### Compact

All components needed for complex air processing (thermal treatment and ventilation with heat recovery) are included in one casing.

### Ecodesign

The device fulfills the requirements concerning eco project and ventilation system UE nr 1253/2014, cooling devices UE nr 2016/2281 and is characterized by class A energy efficiency.



### Decentralisation

Using several units instead of one main unit enables independent regulation and increases the reliability of the whole system. It also ensures even, weight distribution on the roof construction.

### 3 years warranty and on-line access

There is an option to monitor and control the device on line with a GSM router and to extend the warranty to 3 years.

## COMPONENTS



**Cooling system:** inverter compressors system operates in tandem or in multicircuit mode and allows the user to adjust cooling capacity to variable demand.



**EC fans:** ensure energy savings and smooth air stream adjustment to the duct installation.



**Rotary heat exchanger:** high heat recovery, installed inside the unit - no need to add any external heat recovery units.



**Three-way valve + circulating pump:** Cube units with water exchanger are equipped with three-way valve with circulating pump in standard.

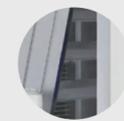
## CONSTRUCTION



**Casing:** the construction is eliminating thermal bridges and together with 50mm of mineral wool assures minimum heat loss and quiet operation.



**Metal base:** direct mounting on substructure and integrated slots for fast and easy lifting.



**Recirculation damper:** smooth regulation of fresh and recirculated air.



**Transport handle:** fast installation and easy lifting without spacing beams.

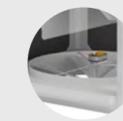
## SILENT BASE WITH DIFFUSER – NW



**Integrated silencer:** built in silencer section with isolation panels guarantees lower noise level.



**Integrated connections:** connect water and electric installations, from the indoor (interior) side, directly to the diffuser module.



**Swirl diffuser with 0-10 V actuator:** smooth regulation of airstream angle depending on operating mode.



**Easy installation:** transport handles, inspection panel and roofing included as standard for faster installation.