

redge[®]
FORMERLY
LENNOX



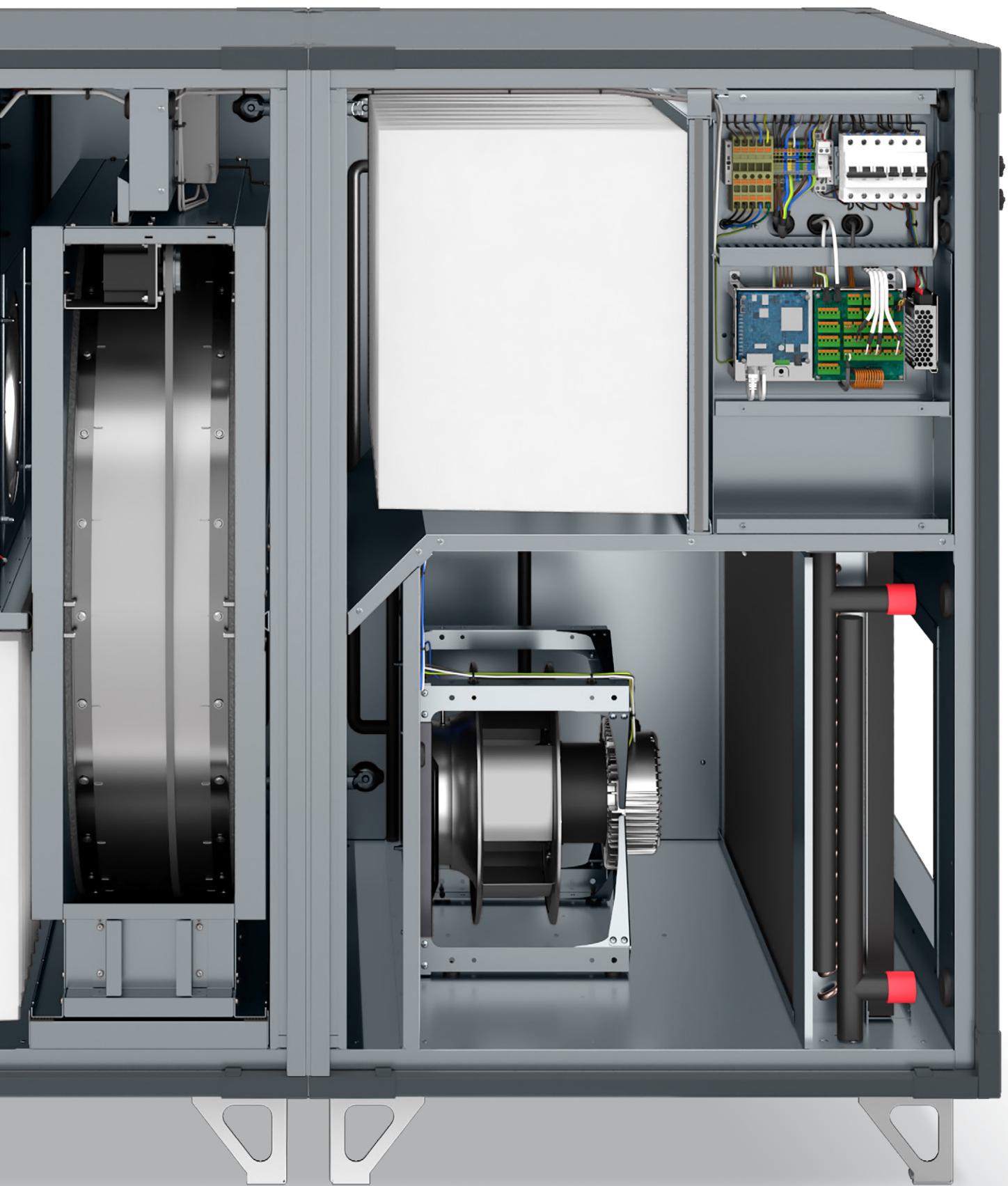
ONEAIR EDGE

Compact AHU



AIR COOLED





MAIN ADVANTAGES

QUALITY:

- » Casing parameters compliant with EN1886 standard: T2, TB2, L1, D1, F9

COMPACT CASING:

- » Casing material - Magnelis® (magnesium-zinc coating)
- » Mineral wool insulation - panel thickness: 50 mm
- » Mechanically poured gasket

HIGH EFFICIENCY:

- » Rotary heat exchanger: condensing or sorption
- » HEX counterflow heat exchanger: aluminium
- » Highly efficient fan sets with electronically commutated (EC) motors

COMPACT SIZE:

- » Ability to move the unit through a 900 mm door
- » Air handling unit base configuration: heat recovery, fan sets, filters, heater (optional)
- » Number of sections:
 - Sizes LXVVSA11-22 RRG and HEX - one section
 - Sizes LXVVSA29-56 RRG - two sections
 - Sizes LXVVSA29-40 HEX - three sections

EASY TO MAINTAIN AND CLEAN:

- » Access to the unit from both sides
- » Easy access for cleaning fan sets and heat exchangers

CONTROLS:

- » Multifunctional controls integrated with the unit
 - configured and ready to operate (Plug&Play)
- » mHMI application available as standard on the unit

CERTIFICATES



Casing parameters compliant with EN1886 standard	Class
Thermal bridging	TB2
Thermal transmittance	T2
Casing air tightness	L1
Mechanical properties	D1
Filter tightness	F9



ONEAIR EDGE AHUs are compliant with the requirements of the **Ecodesign 1253/2014** directive.



ONEAIR EDGE AHUs are manufactured in accordance with:

- » **ISO 9001 certificate**
 - guarantees full repeatability of production of the AHUs
- » **ISO 14001 certificate**
 - confirms effective environmental management



ONEAIR EDGE AHUs are **CE certified**:

- » a declaration of conformity with European standards concerning the safety of equipment operation and requirements for electromagnetic compatibility



PANELS

- » Panels made of mineral wool, double-sided coated with metal sheet with zinc-magnesium coating - Magnelis®
- » Corrosion class: C5
- » Panel thickness: 50 mm
- » Thermal insulation: mineral wool



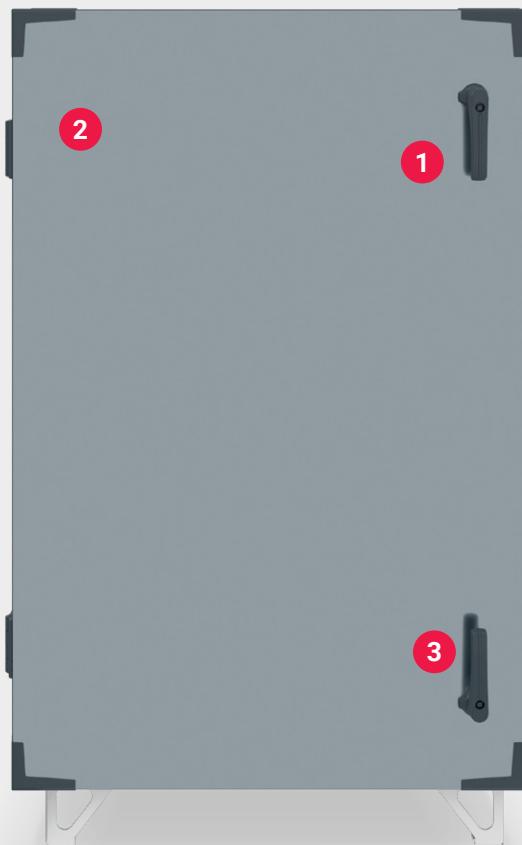
POURED GASKET

- » High tightness of inspection panels achieved through the use of a poured gasket
- » Continuity of the gasket along the entire length
- » Microbiological neutrality



DOOR HANDLES

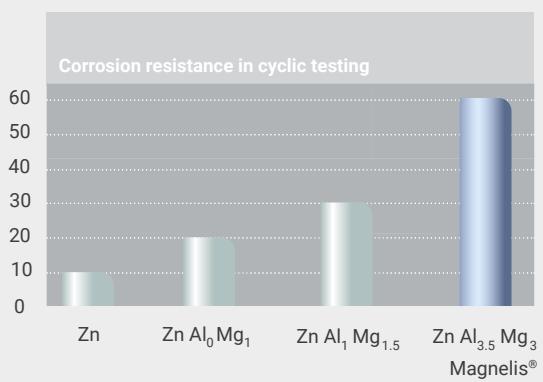
- » Easy access to panel components
- » Adjustable roller pressure ensures that the panels remain sealed during the life of the air handling unit



BENEFITS of Magnelis®:

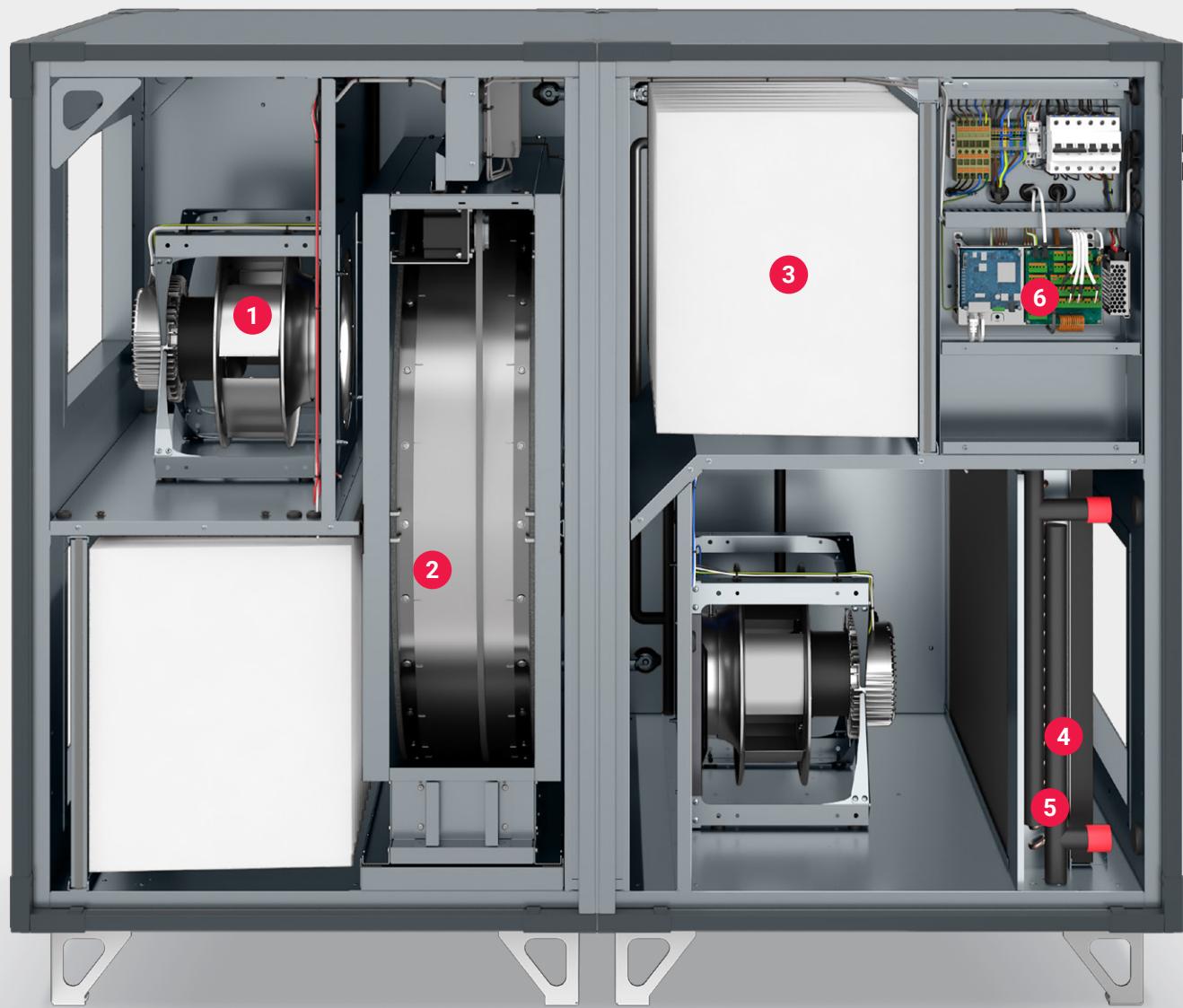
- » **Exceptional corrosion resistance**
 - magnesium in the coating forms a stable protective layer on the steel surface, allowing long-term protection in harsh environments
- » **Self-repairing properties** - the presence of magnesium supports coating regeneration
- » **Environmentally friendly** - reduced zinc content

Number of cycles until the appearance of red rust.



10 µm of coating submitted for an alternated cycling of 8 hours fog cycle (5% NaCl) / dry cycle / humidity cycle.
Source: ArcelorMittal Global R&D

AIR HANDLING UNITS WITH ROTARY HEAT EXCHANGER





FAN SET

- » Efficient, quiet fan with high-efficiency EC motor of IE4 class



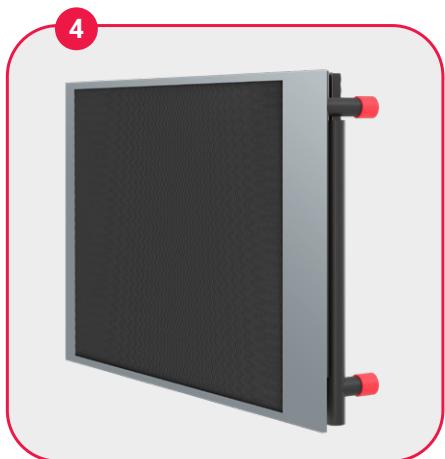
ENERGY RECOVERY

- » Rotary heat exchanger: condensation or sorption
- » Up to 90% heat recovery efficiency
- » Adjustable cleaning sector angle



FILTERS

- » Filter type - pocket filters
- » Filtration class: ePM10 50% - ePM1 80%
- » Gasket on the frame ensures high level of tightness



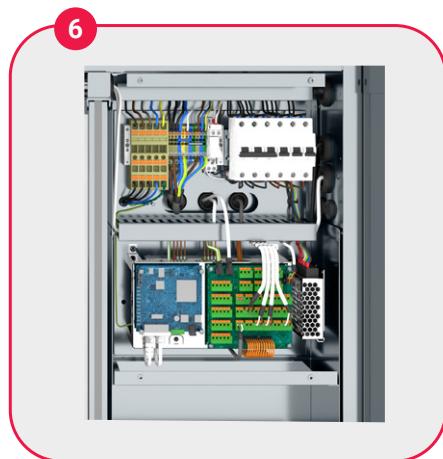
WATER HEATER (BUILT-IN)

- » Number of rows - 1 or 2
- » Easy to clean exchanger
- » Easy to service



ELECTRIC HEATER (BUILT-IN)

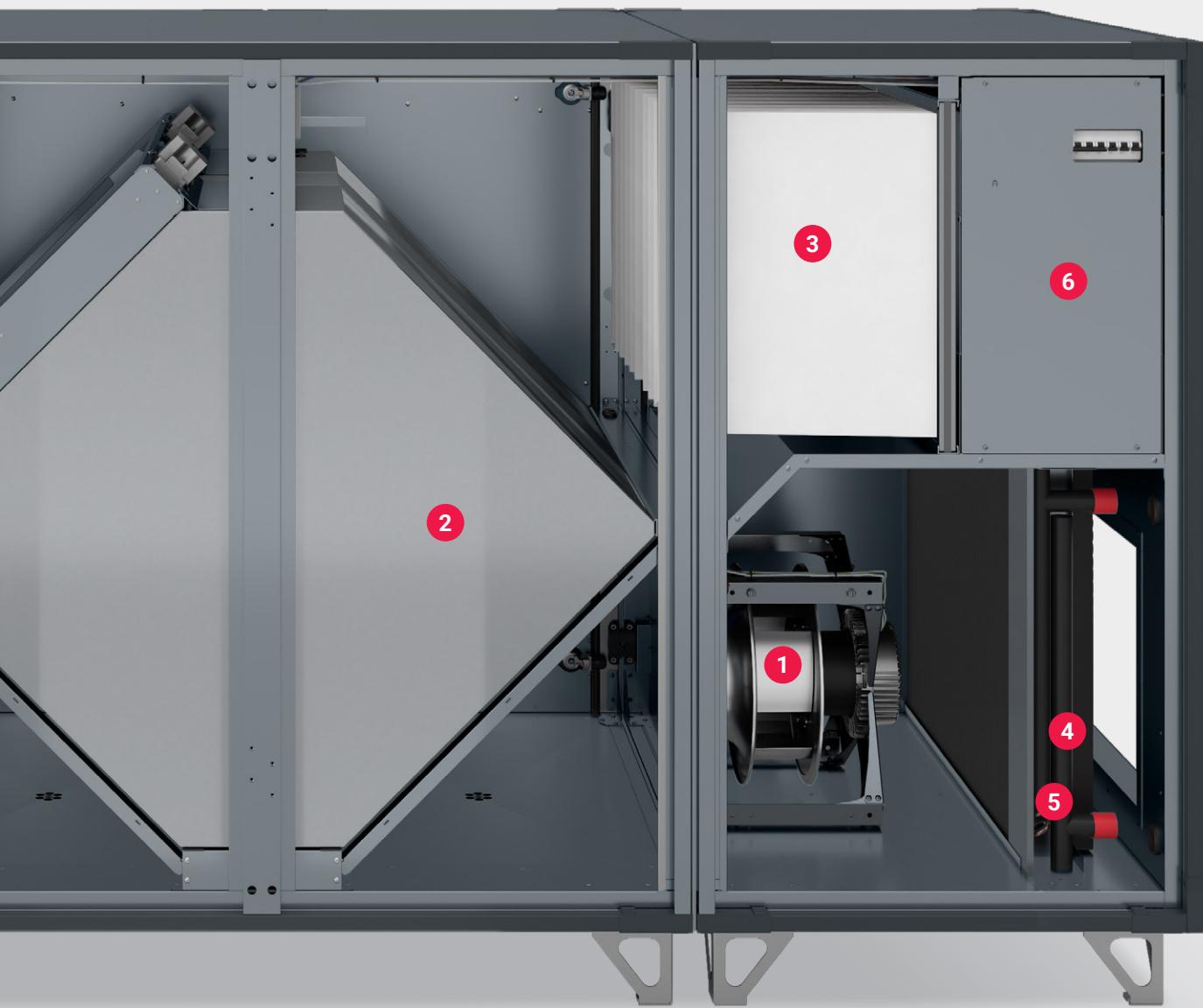
- » Heater power from 3 to 21 kW (depending on unit size)
- » Dual protection level in the power circuit
- » Smooth adjustment across the full power range
- » Ease of maintenance



CONTROLS:

- » Multifunctional controls integrated with the unit - configured and ready to operate (Plug&Play)
- » Ability to connect service devices without opening the unit
- » Remote servicing capability via Ethernet, Wi-Fi, Bluetooth, GSM

AIR HANDLING UNITS WITH COUNTERFLOW HEAT EXCHANGER





FAN SET

- » Efficient, silent fan with high efficiency EC motor of IE4 class



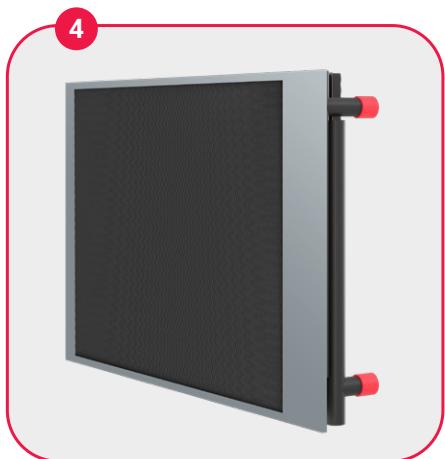
ENERGY RECOVERY

- » High efficiency hexagonal counterflow heat exchanger with bypass
- » Material - aluminium
- » Up to 90% efficiency
- » Operating temperature range: -40°C to +90°C



FILTERS

- » Filter type - pocket
- » Degree of filtration: ePM10 50% - ePM1 80%
- » Gasket on the frame ensures high level of tightness



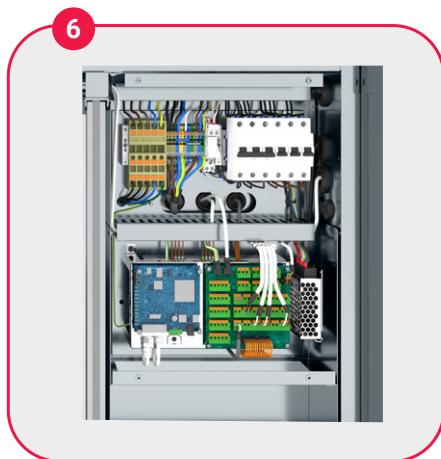
WATER HEATER (BUILT-IN)

- » Number of rows - 1 or 2
- » Easy to clean exchanger
- » Easy to service



ELECTRIC HEATER (BUILT-IN)

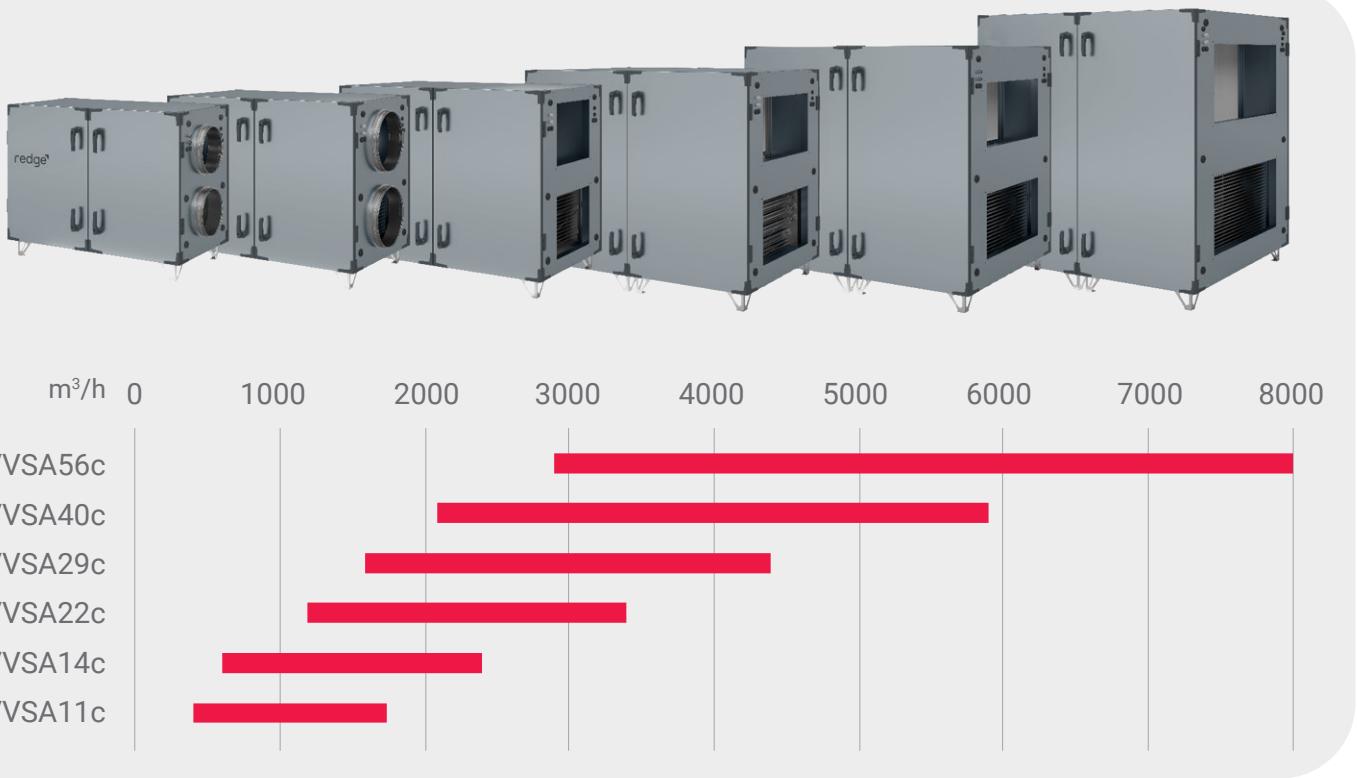
- » Heater power from 3 to 21 kW (depending on unit size)
- » Dual protection level in the power circuit
- » Smooth adjustment across the full power range
- » Ease of maintenance



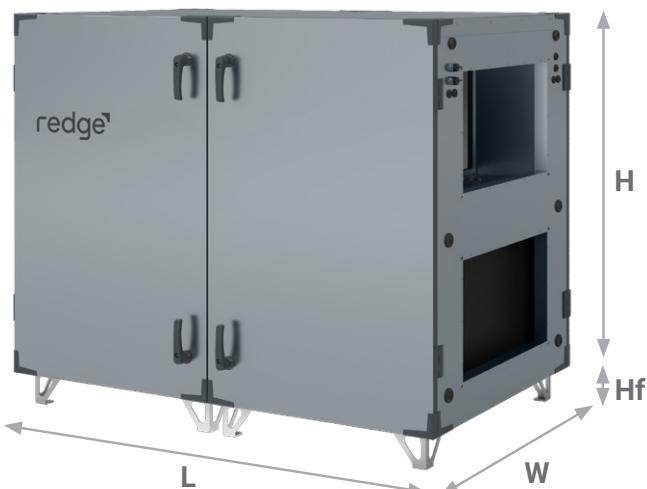
CONTROLS

- » Multifunctional controls integrated with the unit - configured and ready to operate (Plug&Play)
- » Ability to connect service devices without opening the unit
- » Remote servicing capability via Ethernet, Wi-Fi, Bluetooth, GSM

AIR HANDLING UNITS WITH ROTARY HEAT EXCHANGER

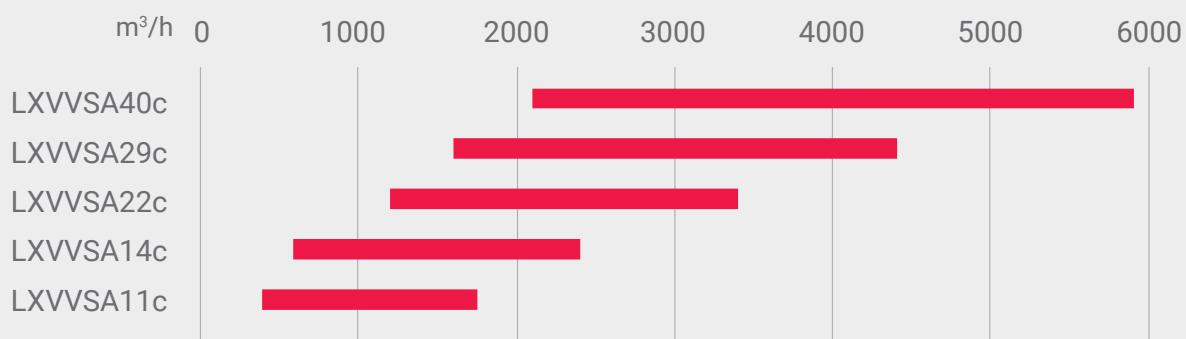


Size	Min. air flow	Max. air flow	Height *	Width	Length	Connection diameter	Connection height	Connection width	Frame height
	m³/h	m³/h	mm	mm	mm	mm	mm	mm	mm
LXVVSA11c	420	1700	962	750	1385	315	-	-	120
LXVVSA14c	640	2400	1062	865	1490	400	-	-	120
LXVVSA22c	1200	3400	1175	947	1605	-	400	500	120
LXVVSA29c	1600	4400	1330	1124	1752	-	400	700	120
LXVVSA40c	2100	5900	1478	1284	1752	-	400	800	120
LXVVSA56c	2900	8000	1718	1514	1752	-	500	1000	120

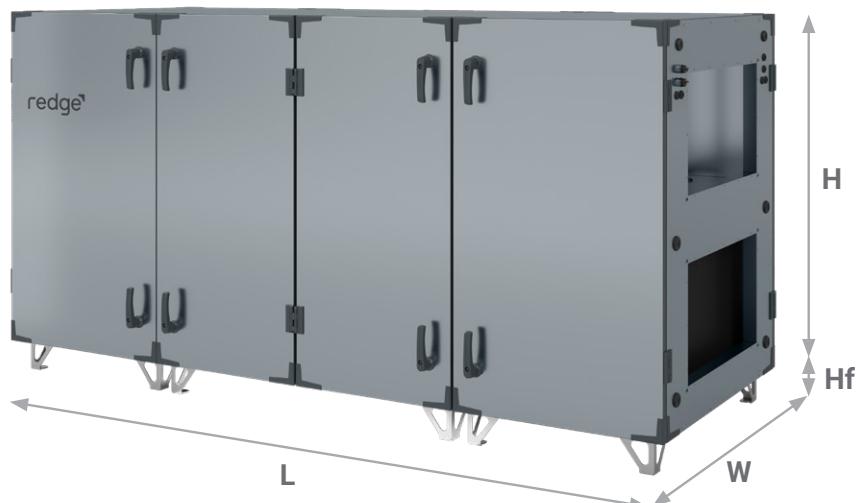


* The height of the unit does not include the height of the frame

AIR HANDLING UNITS WITH COUNTERFLOW HEAT EXCHANGER



Size	Min. air flow	Max. air flow	Height *	Width	Length	Connection diameter	Connection height	Connection width	Frame height
	m³/h	m³/h	mm	mm	mm	mm	mm	mm	mm
LXVVSA11c	390	1700	962	750	2000	315	-	-	120
LXVVSA14c	590	2400	1062	865	2000	400	-	-	120
LXVVSA22c	1200	3400	1175	947	2540	-	400	500	120
LXVVSA29c	1600	4400	1330	1124	2811	-	400	700	120
LXVVSA40c	2100	5900	1478	1284	2811	-	400	800	120



* The height of the unit does not include the height of the frame

ADDITIONAL AIR HANDLING FUNCTIONS

» UNITS WITH ROTARY AND COUNTERFLOW HEAT EXCHANGER



ADDITIONAL PROTECTION AGAINST EXTERNAL CONDITIONS:

- » roof over base unit and extensions
- » cover on air dampers actuator

Available additional features: duct silencer, freon cooler, water cooler.

			LXVVSA11c	LXVVSA14c	LXVVSA22c	LXVVSA29c	LXVVSA40c	LXVVSA56c
Silencer	Length	mm	300/1000	300/1000	1065	1065	1065	1065
Freon cooler	External width	mm	630	750	794	910	1070	1300
	External height	mm	410	460	584	662	736	856
	Length	mm	540	540	771	771	771	771
Water cooler	External width	mm	630	750	794	910	1070	1300
	Outside height	mm	410	460	584	662	736	856
	Length	mm	540	540	718	718	718	718

EQUIPMENT SERVICING

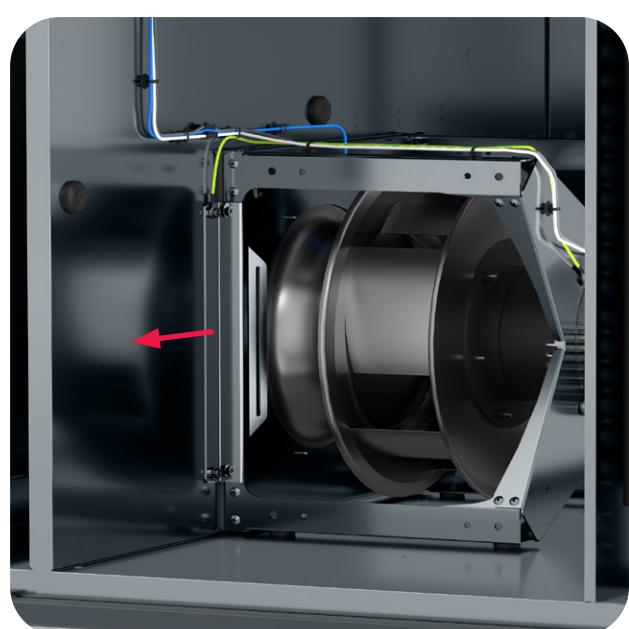
Heat recovery system accessible from both sides for servicing and cleaning.



Connecting service equipment without opening the unit.



Easy disassembly of fan sets assemblies for servicing and inspection purposes.



CONTROLS

ADDITIONAL PROTECTION AGAINST EXTERNAL CONDITIONS

- » Additional protection of the connection point to the main
- » Additional casing for damper actuators



3 EXTERNAL COMMUNICATION PORTS

- » Connecting to the controller without opening the unit

1



CONTROLS

- » Positioned in the exhaust air path, which prevents condensation on controls components
- » Multifunctional controls integrated with the unit - configured and ready to operate (Plug&Play)
- » Ability to connect service devices without opening the unit
- » Remote servicing capability via Ethernet, Wi-Fi, Bluetooth, GSM

2



DEDICATED AIR-HANDLING MEASUREMENT BOARD

- » Optimised connections inside the air handling unit
- » Active filter contamination measurement
- » Continuous air volume (CAV) control
- » Exhaust air temperature and humidity measurement

ONEAIR EDGE MANAGEMENT SYSTEM

Redge provides control automation with a factory-implemented application enabling remote monitoring and management of the air handling unit's operating parameters in real time using a web browser.

ONEAIR EDGE MANAGEMENT SYSTEM:

- » Display of visualizations on various devices.
- » Monitoring and management of a larger number of devices from the open visualisation of a single control panel
- » Easy and intuitive change of the device mode via a central button
- » Tools to support easy and quick setup of the device's optimal operating schedule



SELECTION SOFTWARE



- » Free configuration
- » Built-in savings calculator
- » Intuitive step-by-step selection assistant
- » Integration with CRM, ERP, WMA systems

OPTIMAL FOR:

- » any browser



- » any operating system



DATA EXPORT TO:



REDGE

Due to REDGE ongoing commitment to quality, the specifications, ratings and dimensions are subject to change without notice and without incurring liability.

Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.

Installation and service must be performed by a qualified installer and servicing agency.

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