

DATA SHEET

DB_WRG_MAKANI_R_ZS-TOUCH_V23.02_EN

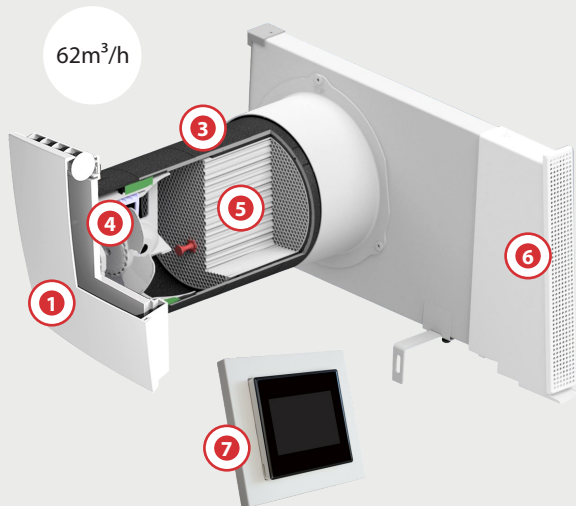
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WRG MAKANI R SERIES WITH ZS-TOUCH CONTROL UNIT

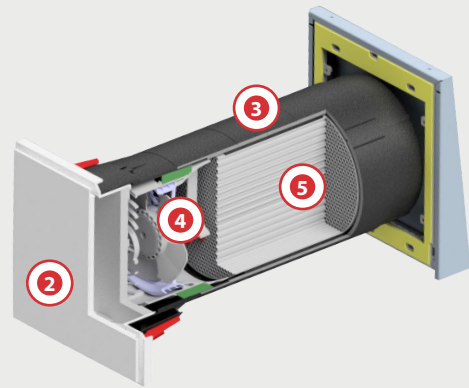
Decentralised ventilation unit with up to 85% heat recovery and maximum sound insulation function



LAL - concealed installation inside the reveal



LAW - straight-through-the-wall mounting version



Mounting types

- Straight through the wall (LAW)
- Through the reveal, horizontal (LAL)
- Through the reveal, tilted diagonally downwards (LAL V50/V100)
- Vertical flat duct directed downwards, angled (LAF3 VU)



85% heat recovery



With sound insulation up to **69 dB** ($D_{n,e,w}$)

① Room-side Z-PLUS DESIGN cover panel

- Fully thermally insulated cover
- Adjustable air outlet roller with adjustable air flow
- Integrated filter
- Tool-free inspection / filter change

② Room-side Z-IQ DESIGN cover panel

- 360° air outlet
- Integrated filter
- Tool-free inspection / filter change

③ Wall installation / Ring module set

- Minimum wall thickness requirement 300 mm for (LAX) mounting option and 280 mm for (LAW)
- Adjustable flat duct end
- Condensate drainage integrated at the reveal end
- Modularly expandable

④ System carrier unit with fan

- Highest air flow rate (up to 62m³/h)
- Energy-efficient, pressure-stable EC fan
- Particularly quiet operation
- Flow straightener and integrated protective grille

⑤ High-performance heat exchanger

- Hexagonal ceramic honeycombs
- Heat recovery rate of up to 85%
- Highly absorbent special foam coating for optimised airflow
- Closed-cell ceramic guarantees maximum hygiene and easy cleaning processes

⑥ Aluminium facade finish

- Homogeneous / discreet appearance
- Highest material quality
- Smallest dimensions
- Available in any RAL colour on request

⑦ ZS-TOUCH control unit

- Central control unit with integrated temperature and hygrosensor, as well as interface for further connections
- Control of 2-8 fans in paired operation
- 4 intelligent programme functions, 5 air levels
- Multi-zone operation possible
- Further functions: Time control, pause mode

OVERVIEW OF DEVICE DESIGN

SERIES: WRG MAKANI R - OVERVIEW OF DEVICE DESIGN

The following metrics show an excerpt of the tested installation types listed below. These can be extended to other installation types using additional components and adapted to specific project requirements. System-compliant accessories are available on request.

Subject to technical changes. Illustrations and specifications are not binding. Values are based on installation variant LAW (straight through the wall).

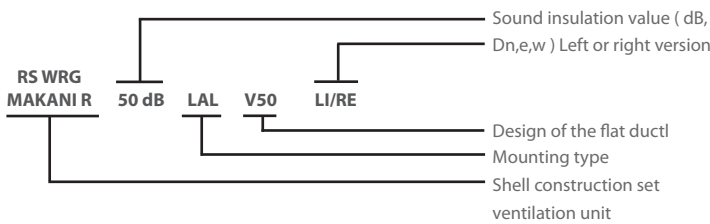
Body shell set (RS) / appliance version	RS WRG MAKANI R 43 dB - LAW Art.-Nr.: 4000-4300VX	RS WRG MAKANI R 47 dB - LAL 50 / LI/RE Art.-Nr.: 4000-4710VX	RS WRG MAKANI R 47 dB - LAL V50 / LI/RE Art.-Nr.: 4000-4720VX	RS WRG MAKANI R 47 dB - LAF3 VU 50 Art.-Nr.: 4000-4730VX	RS WRG MAKANI R 59 dB - LAL 50S / LI/RE Art.-Nr.: 4000-5911VX	RS WRG MAKANI R 59 dB - LAL V50S / LI/RE Art.-Nr.: 4000-5921VX	RS WRG MAKANI R 59 dB - LAF3 VU 50S Art.-Nr.: 4000-5931VX	RS WRG MAKANI R 63 dB - LAL 50SB / LI/RE Art.-Nr.: 4000-6311VX	RS WRG MAKANI R 63 dB - LAL V50SB / LI/RE Art.-Nr.: 4000-6321VX	RS WRG MAKANI R 63 dB - LAF3 VU 50SB Art.-Nr.: 4000-6331VX	RS WRG MAKANI R 69 dB - LAL V100SB / LI/RE Art.-Nr.: 4000-6921VX
Flat duct design (mm)	-	500	500	500	500	500	500	500	500	500	1000
Sound insulation ² (dB D _{n,e,w}) Standard sound level difference (performance data refer to the standard version. Values may deviate with optional construction).	43	47	47	47	59	59	59	63	63	63	69
Approved minimum nominal fan length (mm) (adjustable, extendable)	280 ^{1,3}	300 ¹	300 ¹	355	330	330	385	330	330	385	330
marked minimum dimension X (mm)	-	500	500	500	500	500	500	500	500	500	1000
Dimension A (mm)	-	415	180	90	415	180	90	415	180	90	150
Dimension B (mm)	-	-	-	300 ¹	-	-	330	-	-	330	-
Test number	T01/ T17 ⁴	T20/ T21	T20/ T21	T20/ T21	T14/ T15	T14/ T15	T14/ T15	T16/ T20	T16/ T20	T16/ T20	T18/ T19

¹ with NL 300mm the filter is not fixed in the Z-IQ aperture
² measured according to EN ISO 140-1: 2021 / EN ISO 140-2: 2021 / EN ISO 717-1: 2020, according to ift-Rosenheim test certificate

³ Use with Z-IQ cover plate possible from nominal length (NL) > 300 mm

⁴ Outstanding

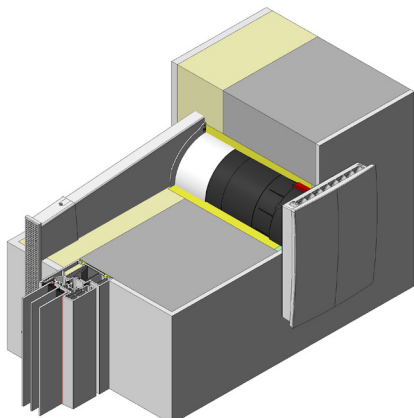
PRODUCT SPECIFICATION KEYS



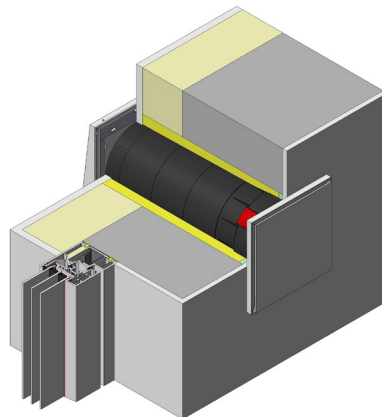
Remark:

In view of the respective property-specific integration, the existing installation conditions must be coordinated with the respective test report. We will be happy to provide you with the test reports on request.

The installation of all external wall fans of the WRG MAKANI® R series must be carried out exclusively on the basis of our installation instructions in accordance with the specifications of the respective test report.



WRG MAKANI R LAL with Z-PLUS cover



WRG MAKANI R LAW with Z-IQ DESIGN cover

TECHNICAL DATA

WRG MAKANI R SERIES

For more information on other appliance components and accessories, see System accessories - WRG MAKANI® R series (SZ_WRG_MAKANI_R_Q)

Series / device version		WRG MAKANI R	
System carrier	Item no:	4000-1000VX	
Inner panel	Item no:	Z-PLUS	Z-IQ
		4000-0130VX	4000-0140VX
Aperture dimensions (HxWxD)	[mm]	ca. 280 x 218 x 55	ca. 200 x 200 x 12
Material (similar to RAL 9003)		ABS white / thermally insulated	
Control / Operation		ZS-TOUCH control unit	
Flush-mounted / sub-distribution	Item no:	4000-1910VX	
Programmes / Functions			
Efficiency ventilation		●	
Shock ventilation		●	
Cross ventilation		●	
Sensor ventilation		●	
Number of power levels		5	
Exhaust air volume flow (Level 1 / 2 / 3 / 4 / 5)	[m³/h]	6 / 23 / 33 / 45 / 63	5 / 23 / 32 / 43 / 60
Heat recovery efficiency according to EN 13141-8	[%]	85	
High-performance heat exchanger		Ceramics, regenerative	
Fan type		EC, axial	
Power consumption¹	[W]	0,4 - 3,5	
Specific input power SEL	[W/(m³/h)]	0,08	0,09
Supply voltage at 50 Hz	[V AC]	85 - 260	
Operating voltage (fan, control unit)	[V DC]	12	
Fan unit connection - control unit	Kabel	J-Y(ST)Y 2x2x0,8mm	
Sound pressure level² (level 1 / 2 / 3 / 4 / 5)	dB (A)	9 / 28 / 38 / 48 / 52	13 / 30 / 42 / 51 / 59
Sound insulation (from external noise)³		according to RS WRG MAKANI R	
Bandwidth Standard sound level difference	dB D _{n,e,w}	43 - 69	
Energy efficiency class		A+	
Filter change indicator (visual)		●	
Available filters according to ISO 16890 (EN 779)			
Hygiene filter ISO Coarse		● 50% (G3)	● 45% (G3)
Pollen filter ISO ePM ₁₀		○ 65% (M6)	○ 50% (M5)
Operation			
Number of fan units		2 - 8	
paired		●	
unpaired		-	
Nominal diameter	DN	150	
Shell opening (Ø)	[mm]	200	
Interference pressure sensitivity according to EN 13141-8	Klasse	S2	
Degree of protection / protection class		IP 20/II	
DIBt - approval		in registration	

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¹ Fan solo, free-blowing

² Emission sound pressure level, Lp(A) TÜV measurement at a distance of one metre

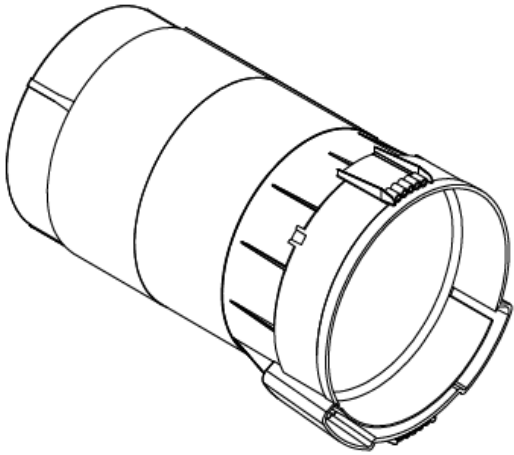
³ Measured according to EN ISO 140-1: 2021 / EN ISO 140-2: 2021 / EN ISO 717-1: 2020, according to ift-Rosenheim test certificate

● standard/installed ○ optionally available - not available

TECHNICAL ILLUSTRATIONS

FAN DESIGN: RS LAW

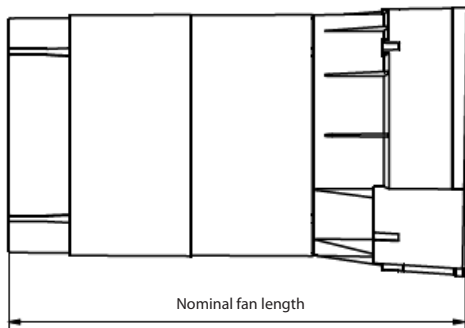
Model view



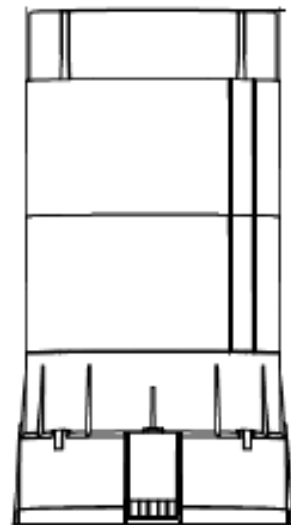
Front view



Side view



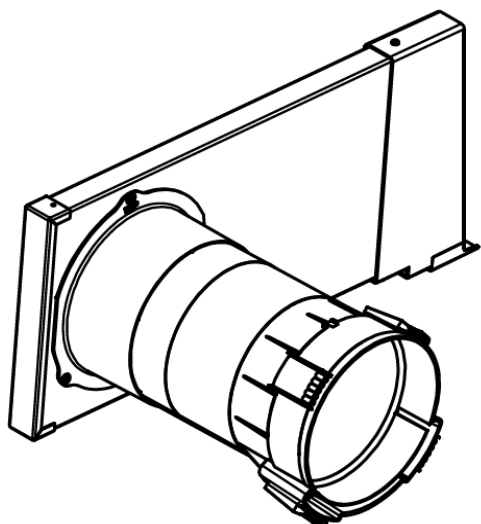
Top view



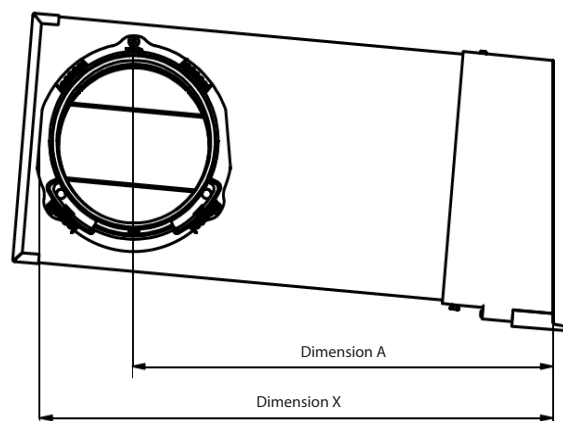
TECHNICAL ILLUSTRATIONS

FAN DESIGN: RS LAL 50 / 100

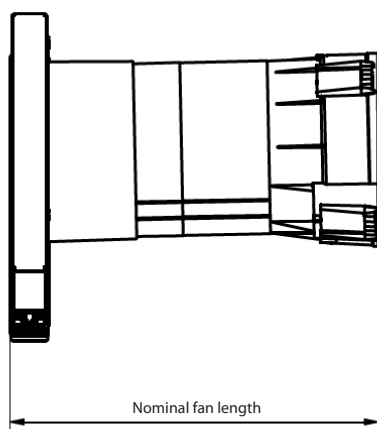
Model view



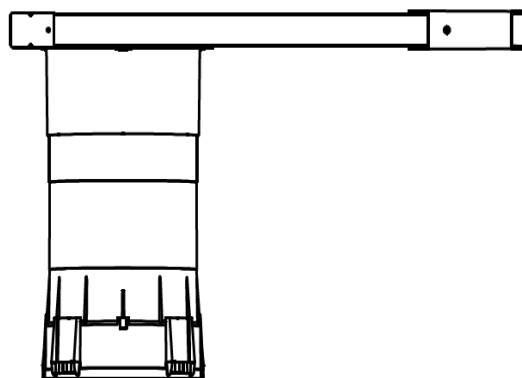
Front view



Side view



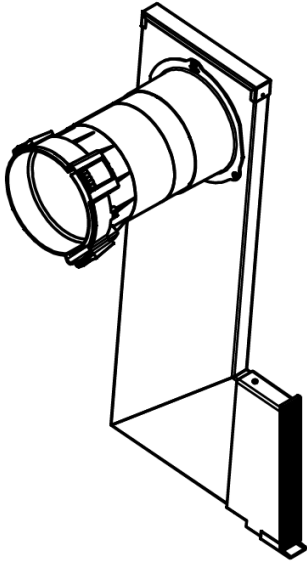
Top view



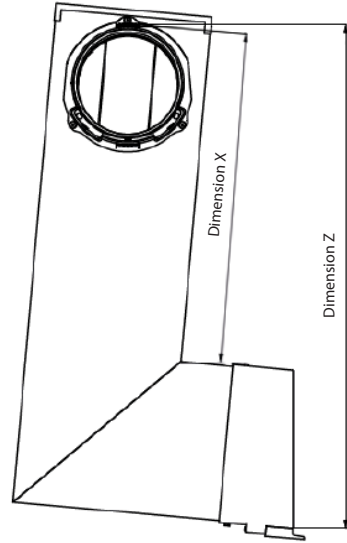
TECHNICAL ILLUSTRATIONS

FAN DESIGN: RS LAL V50/V100

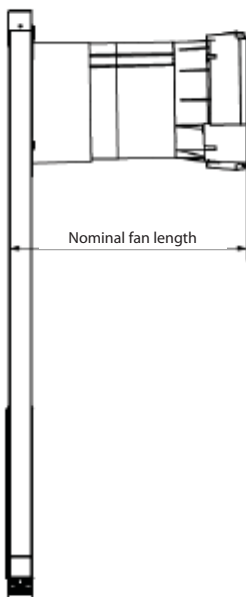
Model view



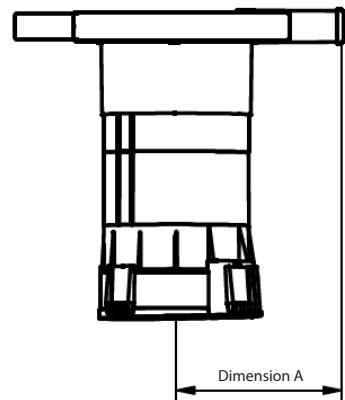
Front view



Side view



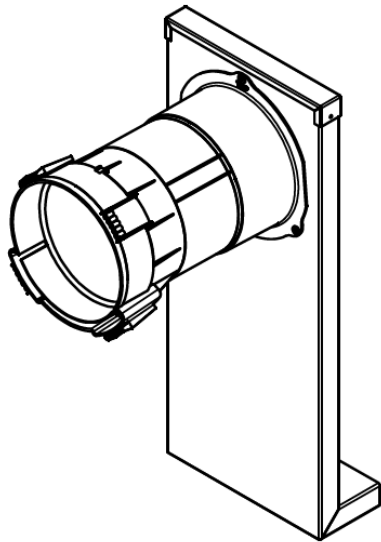
Top view



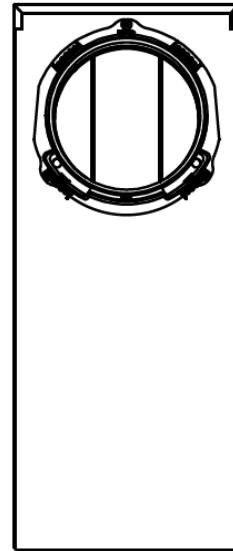
TECHNICAL ILLUSTRATIONS

FAN VERSION: RS LAF3 VU

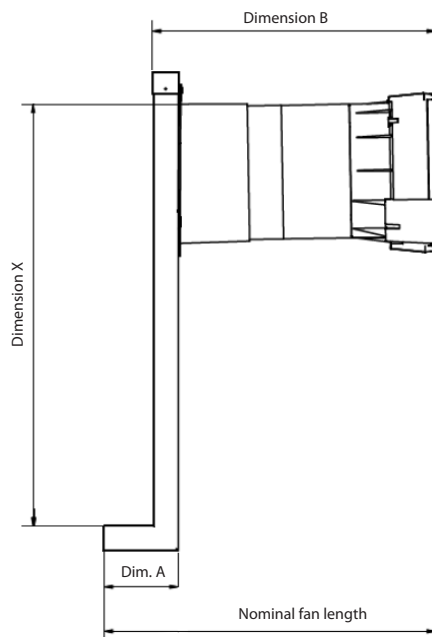
Model view



Front view



Side view



Top view

