

# Low sound enclosure

EKLN140A



**-10 dB(A)!**

The smart way for sound reduction





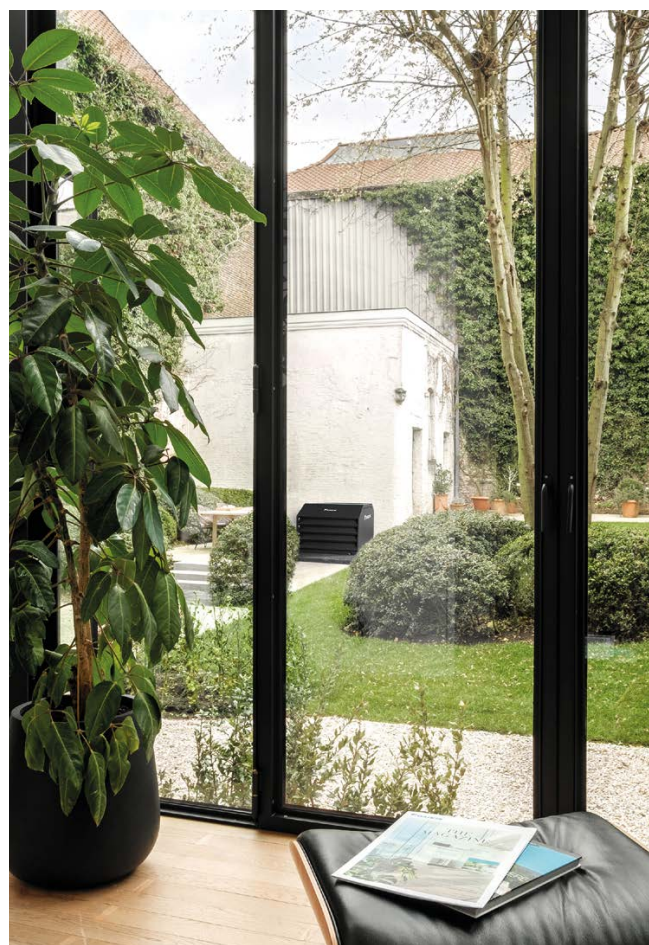


# Designed to be discreet

Our sound enclosure is more than just a technical device that does a quite good job. It is intended for use in sensitive environments. So we spent some time to give it a shape that fits into any surrounding.

These are the visual features:

- › Unobtrusive looks in anthracite colour-tone (RAL 7016)
- › Highly aesthetic finishing and smooth surface
- › Low height
- › Tailor-made design that fits our outdoor units perfectly and keeps the dimensions low



# Great news

for sound sensitive surroundings



Meet strict sound requirements, while increasing flexibility to apply Sky Air and VRV systems thanks to **sound power reduction of up to 10 dB(A)**

- ✓ Specially designed for Sky Air and VRV heat pumps
- ✓ Factory tested and guaranteed data for capacity, efficiency and sound (according to ISO 3744)
- ✓ Minimal capacity reduction
- ✓ No additional calculations needed thanks to factory tested data, reducing design workload

## Tried and tested: values that you can rely on

You want to finish your work faster? You want reliable results? You want your customers to get exactly what they ordered?

Our low sound enclosure eliminates possible problems and reduces your workload significantly:

- › **No incompatibilities** – tested combinations with the outdoor unit that you want to encase
- › **No surprises** – measured and guaranteed sound reduction according to ISO 3744
- › **No calculations** – tested performance values for capacity and efficiency



Sound power level measurement in acoustic chamber



# The solution

that meets the needs

## Minimal capacity reduction – tried and tested

The separated air inlet and outlet plus the exact fit of the sound enclosure prevent any air short circuit. The whole design is optimised to keep the capacity and air

flow as close as possible to the standard conditions. Resulting in great sound attenuation while working in optimal conditions.

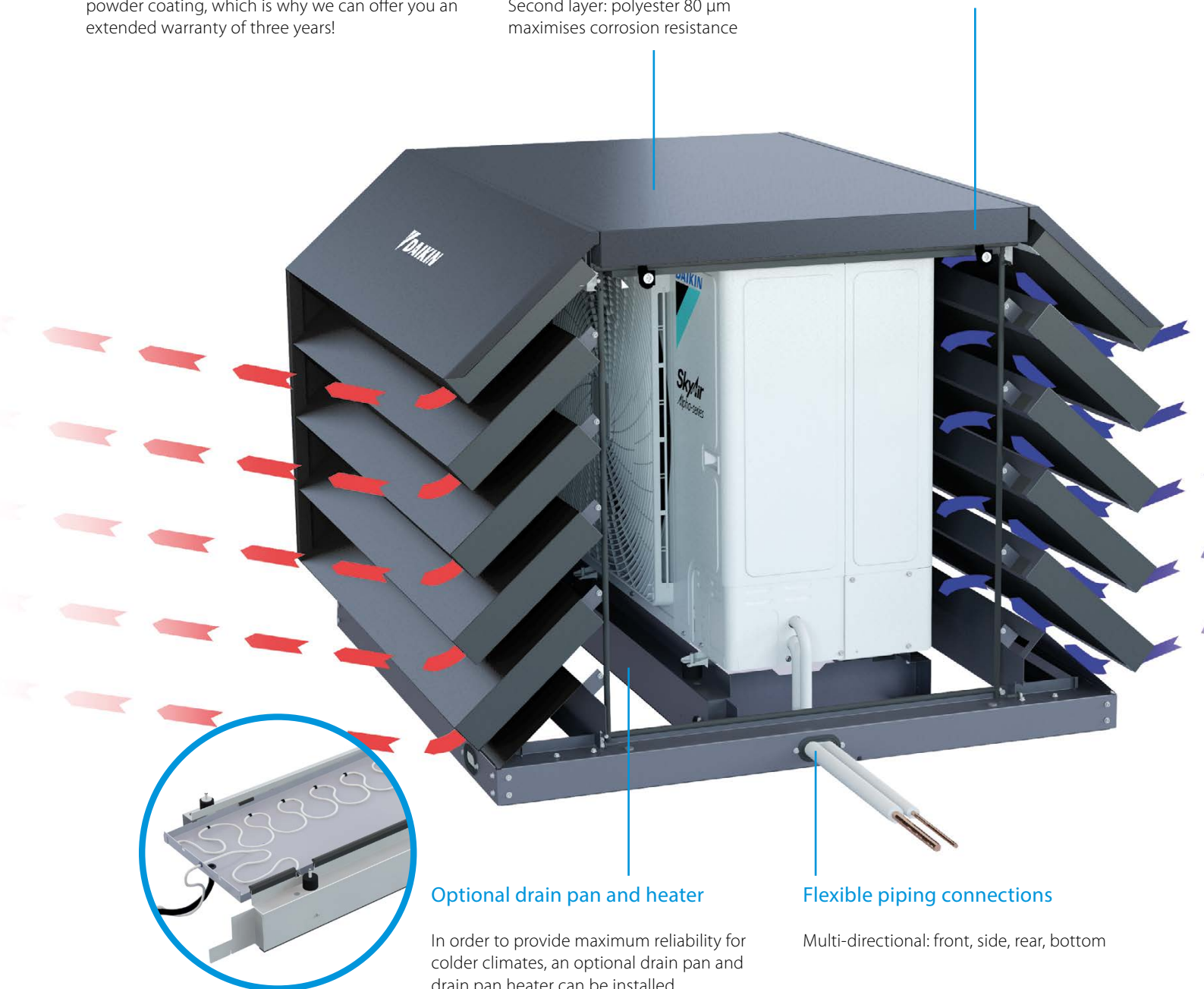
### Durable

You can fully rely on our enclosure. We use high-quality stainless steel with an impact-resistant powder coating, which is why we can offer you an extended warranty of three years!

Double layer of powder coated finishing:  
First layer: epoxy-primer 60 µm  
Second layer: polyester 80 µm  
maximises corrosion resistance

### High-quality sound insulating material

> 70–160 mm thick  
> 20 kg/m<sup>3</sup>



### Optional drain pan and heater

In order to provide maximum reliability for colder climates, an optional drain pan and drain pan heater can be installed.

### Flexible piping connections

Multi-directional: front, side, rear, bottom

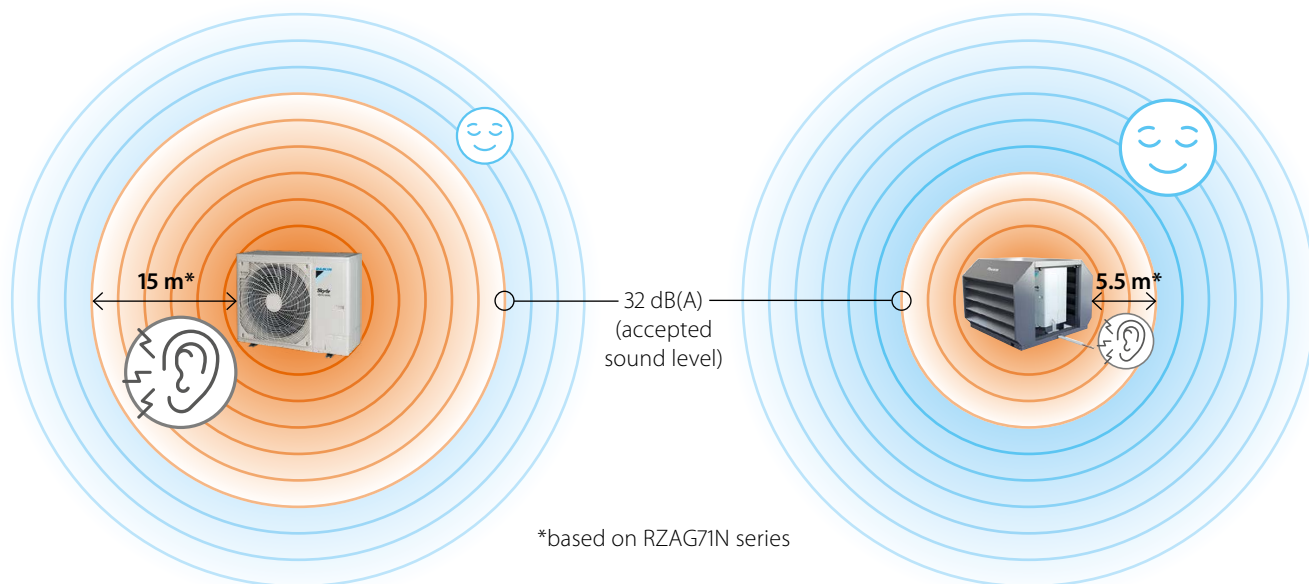
## Increased flexibility to apply heat pumps based on tested data

The reduction of the sound power levels (up to -10 dB(A)) across the entire sound spectrum increases your flexibility significantly. In the example below with the low sound enclosure, the heat pump can be installed as close as 5.5 m

to the next premises, based on the 32 dB(A) threshold (check local regulations). Thanks to the precise Daikin sound and capacity data you can be confident about the solution you are offering.

Without Daikin sound enclosure **you need to maintain a 15 m distance from** your closest neighbour

With the Daikin sound enclosure **you can install as close as 5.5 m** from your closest neighbour



## Installation and maintenance made easy

Our hassle-free solution minimises your workload right from the start. The self-supporting unit can be installed easily on any flat surface – and even retrofitting existing installations is possible. The sound enclosure side panel is equipped with quick locks which guarantee convenient access to the outdoor unit.

In combination with Daikin's wide access area to the outdoor unit, all key components can be easily reached and maintained!

# Tested to ease your work!

Double win with Daikin

## Validated data

The sound enclosure is extensively tested with all suitable outdoor units. We offer measured data for:

- › Sound power (heating/cooling) according to ISO 3744
- › Sound pressure (heating/cooling) at 1 m distance
- › Sound pressure for low noise operation
- › Sound enclosure insertion loss
- › All data delivered in octave band spectra and A-weighted sound level

Click or scan the code to access all technical information



## Sound power reduction values

Range	Outdoor unit name	Cooling sound power		Heating sound power	
		Sound reduction	Nominal sound with sound enclosure	Sound reduction	Nominal sound with sound enclosure
Sky Air Alpha-series	RZAG71NV1/NY1	-9 dB(A)	55	-7 dB(A)	57
	RZAG100NV1/NY1	-8 dB(A)	58	-8 dB(A)	60
	RZAG125NV1/NY1	-10 dB(A)	59	-10 dB(A)	59
	RZAG140NV1/NY1	-9 dB(A)	61	-9 dB(A)	62
Sky Air Advance-series	RZA200D	-7 dB(A)	66	-5 dB(A)	72
	RZA250D	-6 dB(A)	70	-5 dB(A)	75
VRV 5 S-series	RXYSA4AV1/AY1	-7 dB(A)	60	-7 dB(A)	61
	RXYSA5AV1/AY1	-8 dB(A)	60	-9 dB(A)	60
	RXYSA6AV1/AY1	-8 dB(A)	61	-9 dB(A)	61

Blue cells contain preliminary data

## Efficiency and capacity impact

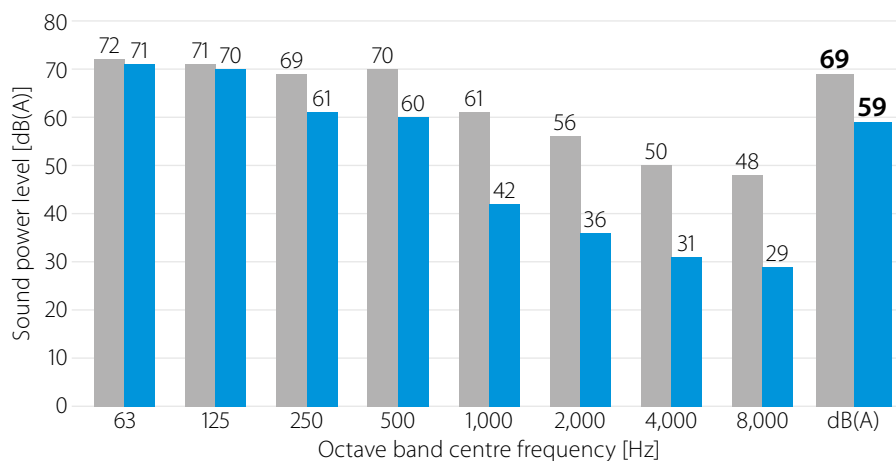
Range & outdoor unit name	Outdoor unit only		With sound enclosure		Outdoor unit only		With sound enclosure		Outdoor unit only		With sound enclosure		Correction factor maximum capacity	
	SEER/η s,c	SCOP/η s,h	SEER/η s,c	SCOP/η s,h	SEER/η s,c	SCOP/η s,h	SEER/η s,c	SCOP/η s,h	SEER/η s,c	SCOP/η s,h	SEER/η s,c	SCOP/η s,h	Cooling	Heating
Sky Air Alpha-series	+ FCAHG71/100/125/140A				+ FCAG71/100/125/140B				+ FBA71/100/125/140A					
RZAG71NV1/NY1	7.90/–	4.56/–	6.72/–	4.10/–	6.83/–	4.22/–	5.81/–	3.80/–	6.50/–	4.20/–	5.53/–	3.78/–	85 %	90 %
RZAG100NV1/NY1	7.70/–	4.75/–	6.62/–	4.44/–	7.14/–	4.53/–	6.07/–	4.14/–	6.47/–	4.36/–	5.50/–	4.01/–	86 %	
RZAG125NV1/NY1	8.02/318	4.53/178	6.96/275	4.26/167	7.14/283	4.34/171	6.26/247	4.15/163	6.56/259	4.37/172	5.92/234	4.12/162	90 %	
RZAG140NV1/NY1	7.93/314	4.44/175	6.84/271	4.21/165	6.80/269	4.34/171	5.83/230	4.17/164	6.42/254	4.34/171	5.62/222	4.14/162		
Sky Air Advance-series	+ FDA200/250A				+ 4 x FCAG50/60B				+ 4 x FBA50/60A					
RZA200D	6.26/247	3.59/141	5.90/233	3.17/124	7.16/283	4.10/161	6.52/258	3.56/140	6.51/257	4.20/165	5.90/233	3.65/143	84 %	80 %
RZA250D	5.38/212	3.55/139	4.91/193	3.14/123	6.95/275	4.10/161	6.18/244	3.56/139	6.69/264	4.33/170	5.95/235	3.78/148		
VRV 5 S-series	+ FXSA**													
RXYSA4AV1	8.2/324	5.1/200	7.2/284	4.9/193									95 %	
RXYSA4AY1	7.9/312	4.9/193	6.9/273	4.7/186										
RXYSA5AV1	7.7/306	4.7/186	6.7/264	4.5/178										
RXYSA5AY1	7.4/295	4.5/179	6.4/254	4.4/172										
RXYSA6AV1	7.6/301	4.7/184	6.5/257	4.5/176										
RXYSA6AY1	7.3/290	4.5/177	6.3/248	4.3/170										

\*\*4 HP: + 3 x FXSA25A + 1 x FXSA32A    5 HP: + 4 x FXSA32A    6 HP: + 2 x FXSA32A + 2 x FXSA40A

## Sound power levels – cooling and heating, according to ISO 3744

- › dB(A) = A-weighted sound power level (A scale according to IEC)
- › Reference acoustic intensity: 0 dB =  $10^{-12}$  W

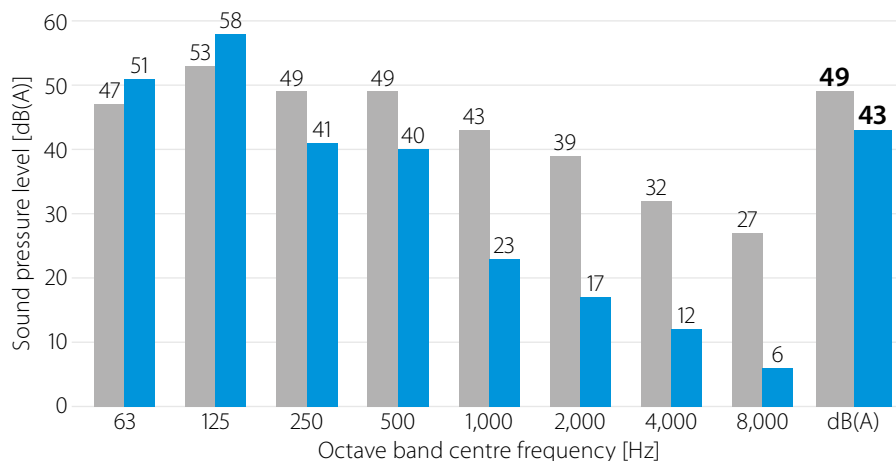
■ RZAG125N  
■ RZAG125N + EKLN140A



## Sound pressure levels – cooling and heating

- › Data is valid at free field condition
- › Data is valid at nominal operation conditions
- › dB(A) = A-weighted sound pressure level (A scale according to IEC)
- › Reference acoustic pressure 0 dB = 20  $\mu$ Pa
- › Microphone location at the discharge side; 1 m from the object; 1.5 m above the ground

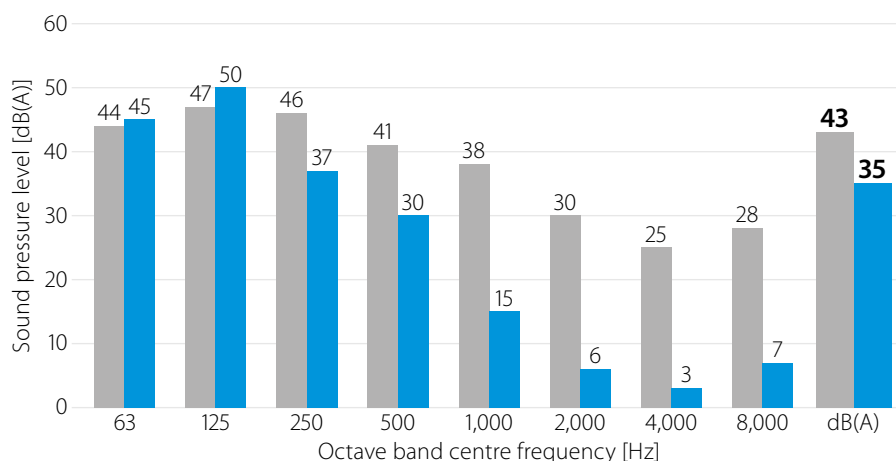
■ RZAG125N  
■ RZAG125N + EKLN140A



## Sound pressure levels – low noise operation (level 3)

- › Data is valid at free field condition
- › Data is valid at nominal operation conditions
- › dB(A) = A-weighted sound pressure level (A scale according to IEC)
- › Reference acoustic pressure 0 dB = 20  $\mu$ Pa
- › Microphone location at the discharge side; 1 m from the object; 1.5 m above the ground

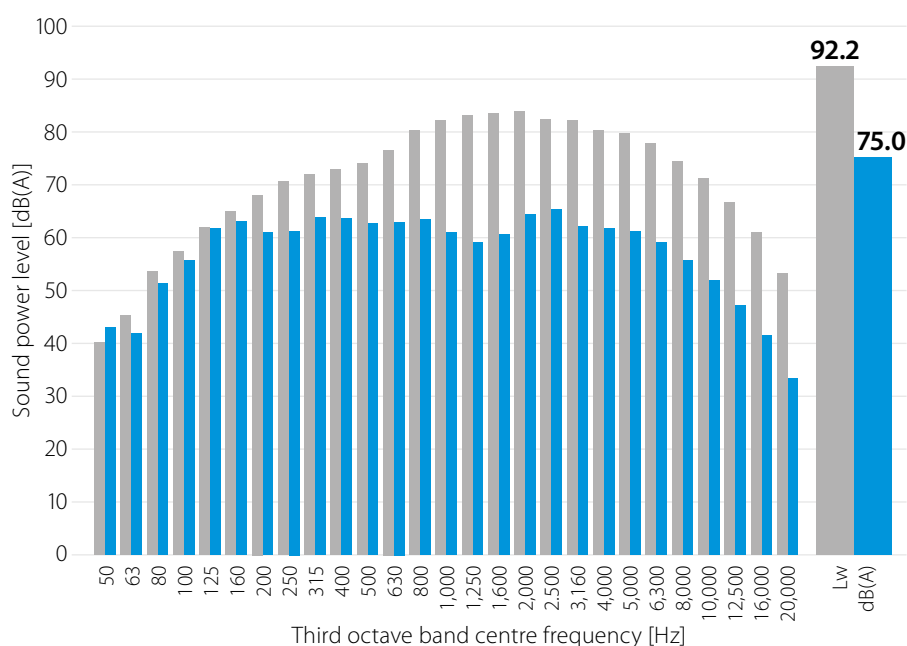
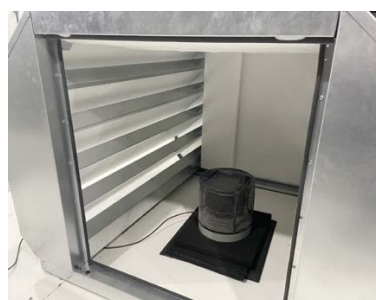
■ RZAG125N  
■ RZAG125N + EKLN140A



## Insertion loss values

- › Insertion loss measurement of standalone enclosure with calibrated sound source

■ Sound power level [dB(A)]  
■ Reference sound source (RSS): B&K Type 4204 RSS







Sound enclosure				EKLN140A
Casing	Colour			Anthracite (RAL 7016)
	Material			Sheet metal
Dimensions	Unit	Height	mm	1,100
		Width	mm	1,400
		Depth	mm	1,500
	Packed unit	Height	mm	1,017
		Width	mm	1,517
		Depth	mm	917
Weight	Unit	kg		152
	Packed unit	kg		186
Combines with	Sky Air Alpha-series			RZAG-NV1/NY1
	Sky Air Advance-series			RZA-D
	VRV 5 S-series			RXYS-AV1/AY1

## Benefits

- ✓ **Dedicated Daikin option for:**
  - › Sky Air Alpha-series
  - › Sky Air Advance-series
  - › VRV 5 S-series
- ✓ **Fully optimised and tested in Daikin factory**
  - › Guaranteed performance levels (sound, capacity, efficiency)
- ✓ **Outdoor unit sound reduction of up to -10 dB(A) on sound power levels**
  - › Enabling to meet local sound requirements
  - › Increased flexibility to apply outdoor units
  - › Reduces sound on the entire sound spectrum
- ✓ **Minimal capacity reduction**
  - › Separated air intake and discharge to prevent air flow short circuit
  - › No additional calculations needed thanks to factory tested data
- ✓ **Easy to integrate**
  - › Anthracite (RAL 7016), highly aesthetic finishing
  - › Mechanically designed to perfectly suit the Sky Air Alpha/Advance and VRV 5 S-series casings
  - › Self-supporting; can be installed on any flat surface
- ✓ **Fast & easy installation & servicing**
  - › 100 % weather resistant
  - › Easy opening to access most system components
- ✓ **Durable**
  - › 3 years warranty on all components
  - › Made of stainless steel with robust double layer powder coating, ensuring maximum corrosion resistance

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