

# Zehnder ComfoClima 36

Technical specification for air temperation module

always the best climate

## General

The Zehnder ComfoClima 36 air temperation module was developed as the ideal solution for apartments and houses in which high energy efficiency is desired. Thanks to its flexible performance range and retrofit option, the unit can be easily and optimally installed not only in new buildings but also in properties with existing ventilation systems from Zehnder.

With the Zehnder ComfoClima 36 air temperation module you can prevent overheating in residences. The system is combined with the balanced ventilation unit Zehnder ComfoAir Q600, complementing its functions to create a pleasant and healthy indoor climate in an energy-efficient manner. Warm, humid and used up air is removed from the rooms of the residence and fresh, filtered air with a comfortable temperature is supplied.

The system can also provide additional heat in winter. The Zehnder ComfoClima 36 is only intended for combination with a heating system and cannot replace it.

The Zehnder ComfoClima 36 allows temperature control and dehumidification of supply air between 315 m<sup>3</sup>/h and 600 m<sup>3</sup>/h.



## Top benefits

- Quick and easy commissioning thanks to constant airflow and the Zehnder ComfoClima Control app that guides users through the individual steps
- The most advanced room temperature control throughout the year thanks to the ClimateSwitch® technology
- Reduced pollution load in the residence with our filter concept for the supply of clean fresh air into the living area
- Easy and convenient operation: The integrated WLAN connection allows direct control via the Zehnder ComfoClima Control app
- Flexible and reliable planning and installation, because the unit can be set up with a right-hand or left-hand orientation

Complementing the functions of the balanced ventilation unit Zehnder ComfoAir Q600 ST, the system ensures that the system is automatically activated and deactivated. This results in an overall pleasant, healthy and energy-efficient indoor climate.

The aim of the Zehnder ComfoClime 36 is also to combine the “passive” energy recovery of the Zehnder ComfoAir Q with the “active” contribution of a reversible air heat pump that contains today’s most efficient and environmentally friendly coolant (R32). Combined with the ComfoAir Q600, the Zehnder ComfoClime 36 can provide up to 4.3 kW in the cooling mode and up to 6.8 kW in the heating mode (sensible + latent heat). This makes it a fast reacting system that quickly creates a pleasant indoor atmosphere.

In addition, it ensures the highest air quality at all times by using fresh outdoor air without recirculating air, in combination with the filter concept of the Zehnder ComfoAir Q. To ensure that the unit operates as effectively as possible, the time and flow-related filter alarm informs the user when a filter replacement is necessary.

## Flexibility

The Zehnder ComfoClime 36 is distinguished by its easy and flexible installation that allows convenient mounting on a Zehnder ComfoAir Q600 ST. In addition, thanks to the 4 x 45 degree pivoting Zehnder ComfoPipe Compact spigots (ordered and delivered separately) each air connection can be pivoted separately to optimise the mounting options of the system.

For additional planning and installation flexibility the unit is available as a right-hand and left-hand version that is set automatically at the start-up of the Zehnder ComfoAir Q ventilation unit. Thanks to its cleverly conceived design, which focuses on the accessibility of the components, the floor-mounted Zehnder ComfoClime 36 with front operation is also easy to service and maintain.

## Compact configuration

- Extremely compact, precisely fitting on the Zehnder ComfoAir Q600 ST balanced ventilation unit;
- Condensate drain on the side of the Zehnder ComfoClime 36 - free choice of left or right side;
- Pivoting spigots (accessories) ensure optimal connection to the air distribution system;
- Can be used as right or left handed version;
- Plug-and-play installation: simply connect the Zehnder ComfoNet cable to the balanced ventilation unit;
- 2 m-long cable and plug included.

## More benefits

- Low noise operation, even when the unit operates at full capacity
- High heat recovery level with very low energy consumption: Thanks to a tailored heat exchanger and the latest ventilation technology

## Technical specifications

### Zehnder ComfoClime 36

Key facts	
Max. air volume	315 to 600 m <sup>3</sup> /h
Length	580 mm
Width	720 mm
Height	840 mm
Height with CA Q	1695 mm
Height with CA Q and base mount	1950 mm
Weight	60 kg
Installation	Floor installation on the ComfoAir Q600 ST and ComfoAir Q450 ventilation unit
Main technical data	
Temperature range	-10 °C to +50 °C during transport and storage; +5 °C to +50 °C and 0 – 90% relative humidity at the installation point
Condensate drain (Ø)	32 mm
Air connection size (Ø)	215 mm (Zehnder ComfoPipe Compact DN200)
Supply voltage	230 V, 50 Hz
Maximum power consumption	1100 W
Electrical consumption	4.87 A
Other technical data	
Housing	Metal sheet
Front panel	White plastic RAL 9003
Internal housing material	Metal sheet, thermal insulation
Heating capacity	Up to 6.8 kW
Cooling capacity	Up to 4.3 kW
Global warming potential / GWP AR4	675
Coolant (weight)	R32 (0.65 kg)
Maximum pressure (PS)	38 bar

### Climate Switch®

It's essential that your ventilation system keeps you warm in the winter and cool in the summer. Zehnder's groundbreaking Climate Switch technology uses advanced algorithms to continuously monitor and adjust your home's temperature, humidity, and airflow, providing optimal comfort and a healthy indoor environment. All of this is done automatically, meaning you don't have to do anything. Climate Switch makes for a more pleasant home and helps you save money by lowering energy consumption.

### Air duct connections

- ODA Outdoor air
- SUP Supply air
- ETA Extract air
- EHA Exhaust air

### Article numbers

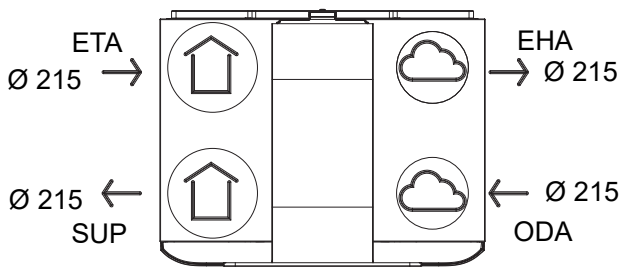
Description	Article number
Zehnder ComfoClima 36 air temperature module	471 420 020
ComfoPipe Compact bend 45° DN160 as unit connection bend	990 328 694
Floor stand for ComfoAir Q	471 502 008

### Control options

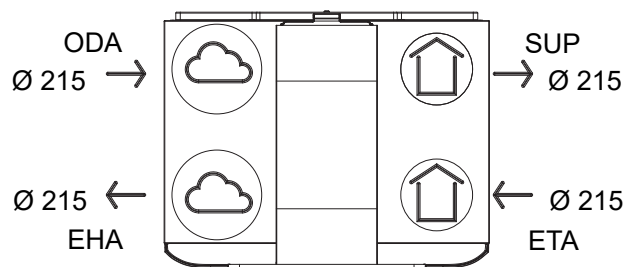
The Zehnder ComfoClima 36 is WLAN compatible as standard and can be conveniently controlled by a smart phone or a tablet with the associated mobile app. What is more, Zehnder ComfoClima 36 allows immediate commissioning thanks to plug-and-play installation.

- Adaptive comfort profile
- A3 comfort levels
- Weekly schedule and manual mode
- Frost protection function

Left-hand alignment of the ComfoAir Q



Right-hand alignment of the ComfoAir Q



## Installation of the Zehnder ComfoClime 36

The entire system must be placed on the floor. Zehnder ComfoAir Q is placed on a base mount (the base mount must be ordered separately). The Zehnder ComfoClime 36 air temperation module is directly connected to the Zehnder ComfoAir Q ventilation unit. For this purpose, the included adapter is placed on top of the ventilation unit.

This way, the Zehnder ComfoClime 36 air temperation module can be easily placed. A ComfoNET interface allows communication of the control with the ventilation unit. Anchoring to the wall via the included adjustable wall bracket is mandatory (tilt protection related to the safety of inspection/maintenance activities). For details, see the installation instructions.

## Installation conditions

The system must comply with the following conditions:

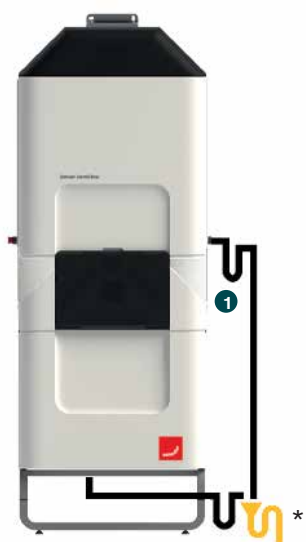
- The outdoor air duct to the unit and the exhaust air duct must be insulated vapour-tight. This means no condensation can form on the outside of the duct;
- The supply air duct inside the residence must also be insulated and vapour-tight. Due to temperature losses in the ducts, we therefore recommend also thermally insulating the supply air ducts;
- A motorised extractor hood should not be connected to the system under any circumstances;
- The ventilation tube connections must have a diameter of at least DN 200 mm. In addition, it must be ensured that the outdoor and exhaust air pipes or openings are designed accordingly;
- The building must have effective sun protection (sun blinds, outdoor blinds);
- Number and size of the outlets must be planned for an air volume of at least 315 m<sup>3</sup>/h.



**Wall mounting or positioning the ComfoClime 36 to the side of Zehnder ComfoAir Q is not possible!**

## Installation note

On site, a siphon with a minimum water sealant height of 100 mm must be connected to the condensate drain ①



Zehnder ComfoClime 36 with ComfoAir Q600 ST

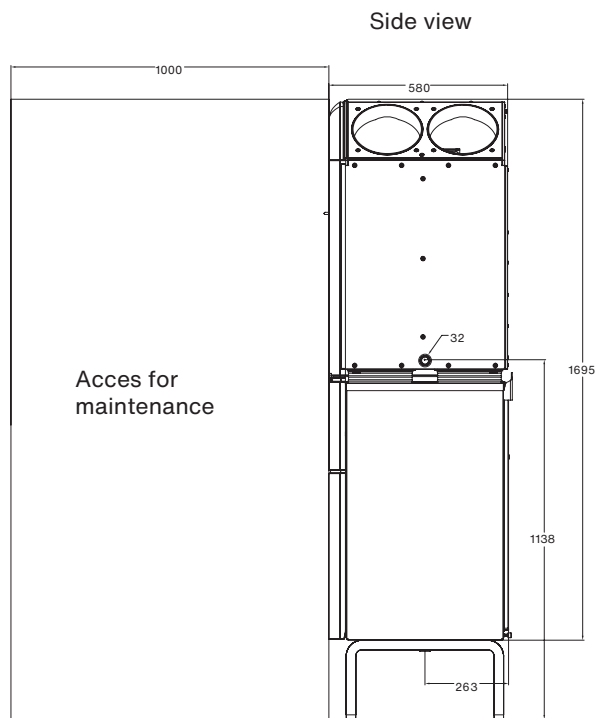
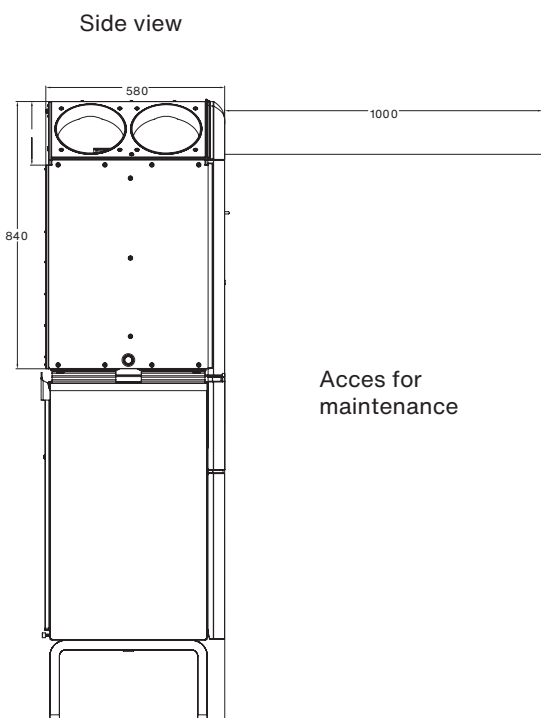
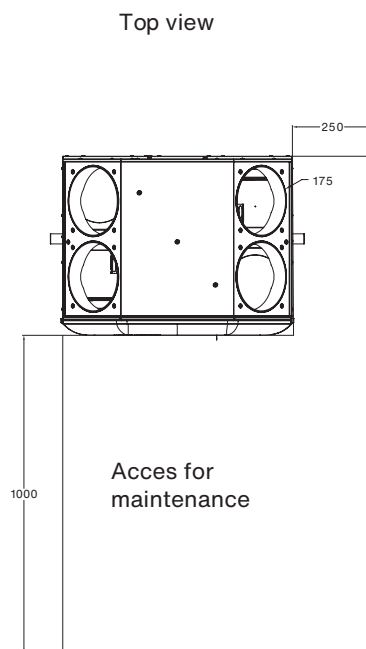
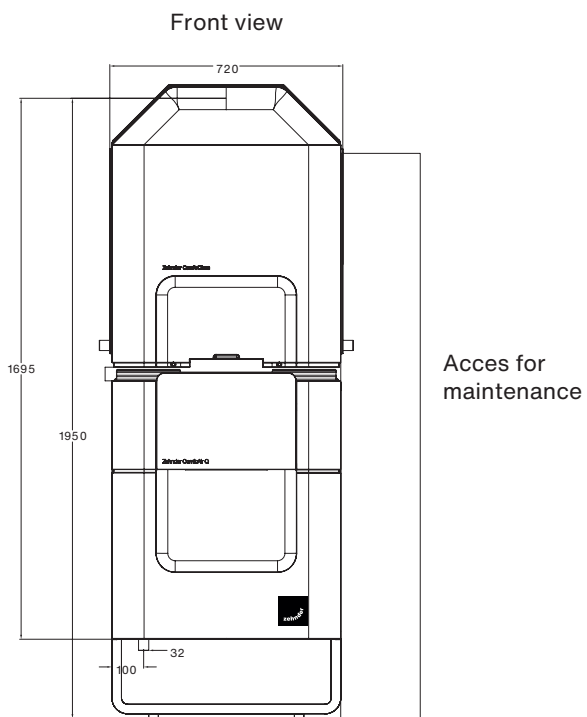


**The unit may not be connected to the on site drain!**

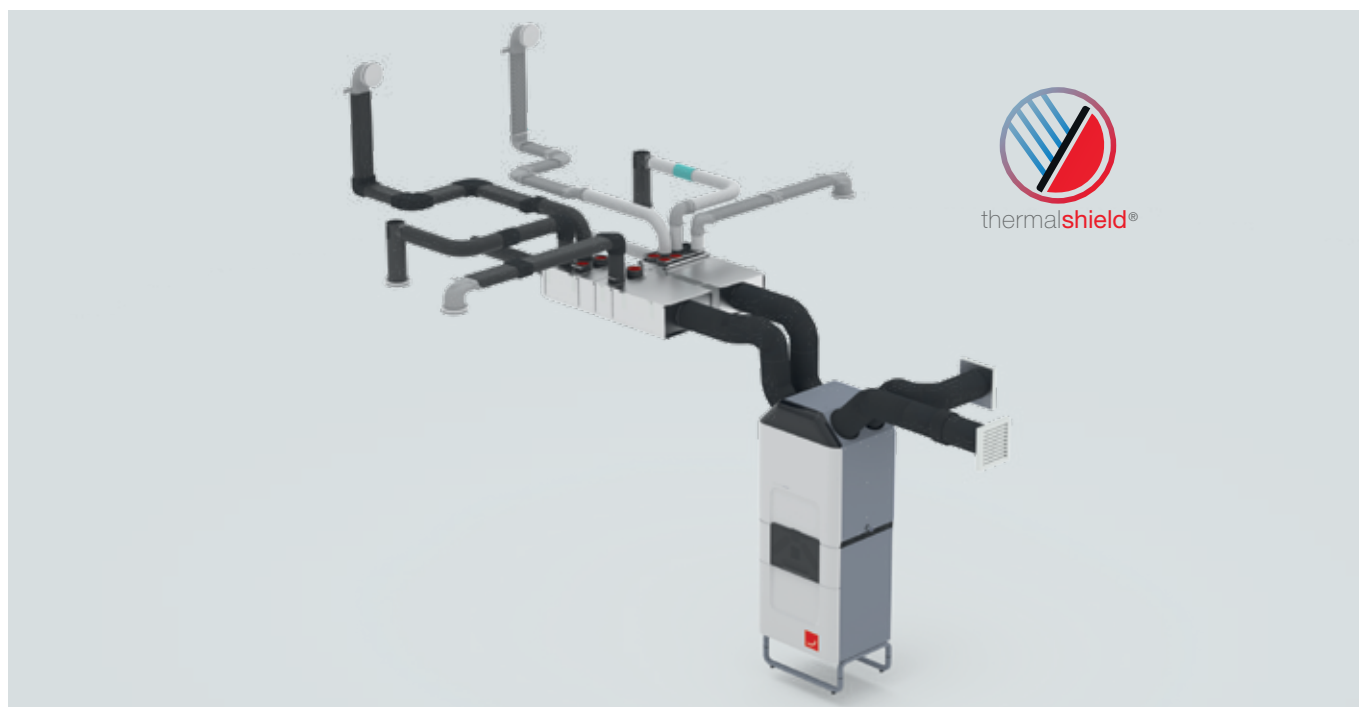
\*only for Germany

### Dimensional drawings

Zehnder ComfoClima 36



## Pre-insulated air distribution components



### Zehnder ThermalShield

- ThermalShield from Zehnder guarantees an indoor environment that is refreshingly cool in the summer and pleasantly heated in the winter.
- Our new pre-insulated air distribution components with ThermalShield are distinguished by their minimum energy loss during the transport of tempered air, thus allowing energy-efficient heating and cooling.
- With ThermalShield you can use your indoor climate system solution sustainably to create a healthy and comfortable room climate.

The product family is complemented by the modular connection and distribution system Zehnder ComfoWell Therm, consisting of an attenuator, two connection modules, one extension module, a mounting plate and an end plate. The modules not only have efficient internal insulation, but also insulated connectors for connection to the insulated ventilation tube Zehnder ComfoTube Therm 90.



Zehnder ComfoTube Therm 90



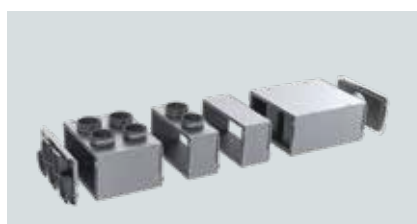
Zehnder ComfoTube Therm flat 51



Zehnder ComfoFit Therm sleeve DN 90



Zehnder ComfoFit Therm convertor  
DN 90 - flat 51, 90°



Zehnder ComfoWell Therm



Zehnder ComfoPipe Compact flex  
element DN200 as optional unit  
connection

## Thermal output

### Heating capacity

T ODA	rel. hum. ODA	Volume flow	Net thermal output		Electrical power consumption		COP	
			CC 36	Total CA Q + CC 36	CC 36	Total CA Q + CC 36	CC 36	Total CA Q + CC 36
°C	%	m³/h	W	W	W	W		
-7	6	300	1567	4817	830	890	1.89	5.41
		400	1654	5502	749	922	2.21	5.97
		600	1938	6772	824	1134	2.35	5.97
2	1	300	1609	3831	665	727	2.42	5.27
		400	1738	4363	651	757	2.67	5.76
		600	2261	5725	738	972	3.06	5.89
7	6	300	1872	3467	709	770	2.64	4.5
		400	2221	4214	801	905	2.77	4.66
		600	2441	5014	741	985	3.29	5.09

Performance measured with extract air of 20 °C, 40 % rel. humid. acc. to EN 14511 and EN 16573  
All data measured with CA Q with enthalpy exchanger and pre-heater

### Cooling capacity

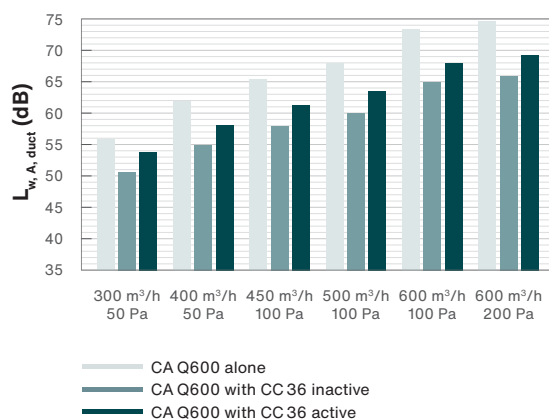
T ODA	rel. hum. ODA	Volume flow	Net cooling performance		Electrical power consumption		EER	
			CC 36	Total CA Q + CC 36	CC 36	Total CA Q + CC 36	CC 36	Total CA Q + CC 36
°C	%	m³/h	W	W	W	W		
35	24	300	1115	2147	416	478	2.68	4.49
		400	1744	3076	592	709	2.95	4.34
		600	2657	4290	928	1201	2.86	3.57
31	22	300	1133	1807	375	437	2.97	4.14
		400	1774	2575	553	667	3.21	3.86
		600	2581	3493	807	1091	3.2	3.2
27	19	300	1149	1057	347	408	3.31	2.59
		400	1706	1592	492	605	3.47	2.63
		600	2468	2233	688	968	3.59	2.31

Performance measured with extract air of 27 °C, 47 % rel. humid. acc. to EN 14511 and EN 16573  
All data measured with CA Q with enthalpy exchanger and pre-heater

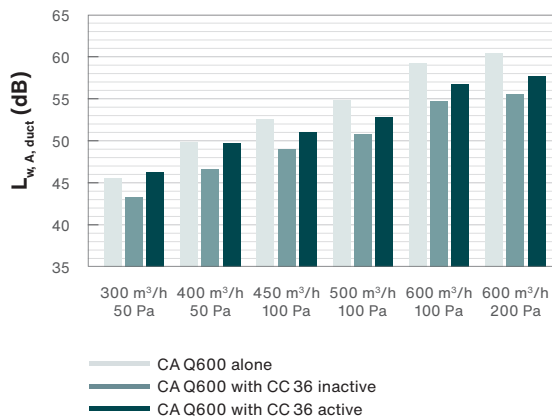


**Acoustic data Zehnder ComfoClima 36 with Zehnder ComfoAir Q600**

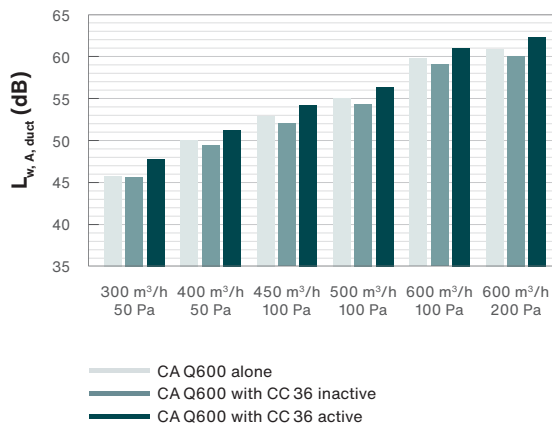
**Noise level SUP Zehnder ComfoAir Q 600**  
with and without Zehnder ComfoClima 36



**Noise level ETA Zehnder ComfoAir Q 600**  
with and without Zehnder ComfoClima 36

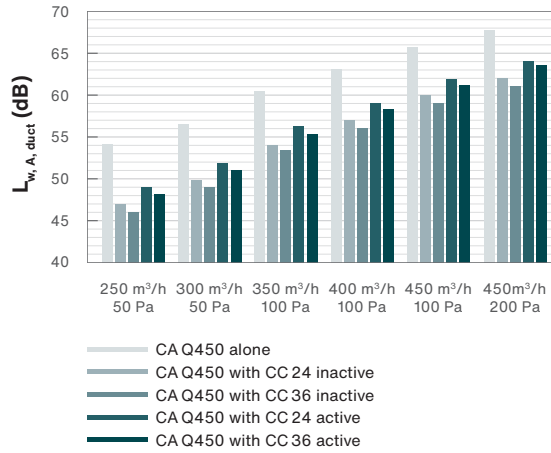


**Unit radiant heat Zehnder ComfoAir Q 600**  
with and without Zehnder ComfoClima 36

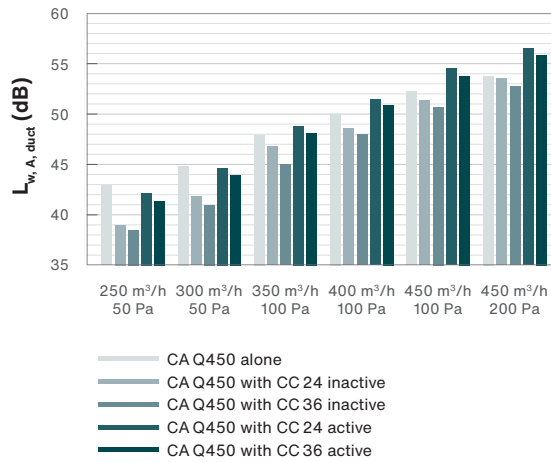


**Acoustic data Zehnder ComfoClima 36 with Zehnder ComfoAir Q600**

**Noise level SUP Zehnder ComfoAir Q 450**  
with and without Zehnder ComfoClima 24 / 36



**Noise level ETA Zehnder ComfoAir Q 450**  
with and without Zehnder ComfoClima 24 / 36



**Unit radiant heat Zehnder ComfoAir Q 450**  
with and without Zehnder ComfoClima 24 / 36

