



The **BEST** or **NOTHING.**

DUCO

We inspire at www.duco.eu

WHY DUCO?

→ One-stop-shop for your end-to-end ventilation solution

Complete range of MEV and MVHR ventilation units, air ducts & accessories.

→ Smart demand control

The room is **only ventilated when necessary** and in the correct amount. CO₂ concentration and air humidity are used as indicators. This helps avoiding unnecessary heat loss while guaranteeing an optimal indoor climate.

→ High energy conversion efficiency

The combination of dynamic air distribution filters and **high performance heat exchangers** results in very high efficiency ratios.

→ The quietest systems

A comfortable indoor climate is created by **whisper-quiet ventilation systems**. DUCO excels in acoustics, especially where it matters most: the living areas and bedrooms.

→ Connectivity

The optional Duco Connectivity Board offers the possibility of integrating the DUCO ventilation systems with home automation and building management systems through **REST API** (local or via the cloud) or **Modbus TCP** (local). Both are possible via Ethernet or Wi-Fi.

→ Automatic calibration

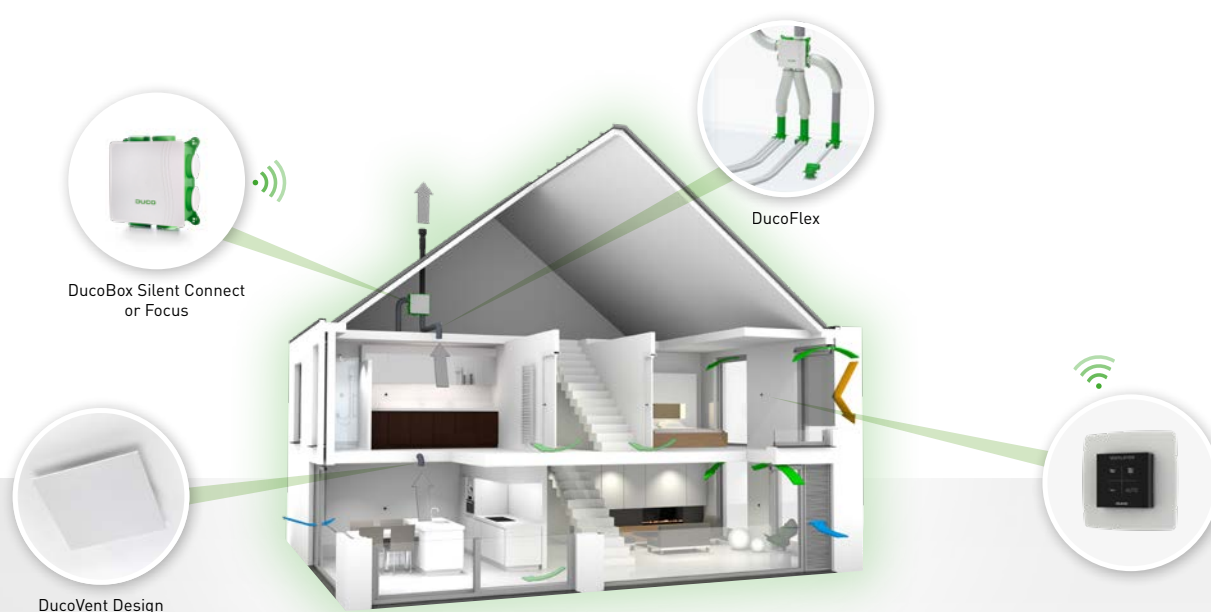
The automatic calibration, whereby the measuring and adjustment technology is based on the principles of calibration under constant pressure, always offers a 100 % guarantee of a **qualitative end result** and translates into a 50 % saving in set-up time for the installer.



UNIQUE AT DUCO

MEV SYSTEM

Unlike a ventilation system that extracts air from the entire house, including healthy air, the **DucoBox Focus** is a ventilation unit that applies **zonal ventilation**. The internal control valves of the DucoBox Focus extract polluted and/or moist air zonally. This means that you only ventilate where necessary, when necessary and in the right amount, to remove the polluted air as quickly as possible.



- ✓ **100% automatic**
Demand-controlled ventilation based on CO₂, Humidity and temperature.
- ✓ **Optimal indoor climate**
The Duco Focus System ventilates **only where and when needed, and in the right amount**.
- ✓ **Acoustic comfort**
The **QUIETEST** and **SMARTEST** ventilation boxes on the market.
- ✓ **Aesthetic & minimalist**
DucoVent Design: **Aesthetic and functional** aluminium vents.
- ✓ **Highest energy gain**
Controlled supply and extraction = 100 % controlled ventilation.



DucoBox **Silent Connect**

The **QUIETEST** MEV system!



Intelligent demand control

Room or box sensors based on CO₂ and humidity measurement



Carefree night's sleep

Minimum sound power (< 27 dB(A) in occupied zones)



Save on your energy bill

Financially attractive thanks to energy-efficient DC motor

THE DUCOBX IN FIGURES

Physical characteristics

Dimensions (W x H x D)	480 x 480 x 194 mm
Weight	4,3 kg
Connections	Extract areas 7 x Ø 125 mm Exhaust to the outside 1 x Ø 125 mm



Technical properties

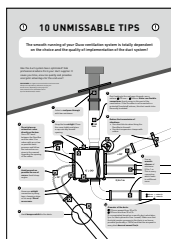
				Sound power level (db(A))*	
Flow rate (m³/h)	Pressure (Pa)	Power consumption (W)	Maximum power (W)	Supply	Casing radiation
LOW DUCTING RESISTANCE					
100	70	10	11	39	35
100	100	13	13	43	36
150	100	15	16	44,5	37
250	100	27	29	50	43,5
300	100	42	44	53,5	44
350	100	57	59	57,5	46,5
HIGH DUCTING RESISTANCE					
150	150	20	22	47,5	39,5
225	150	32	43	50	41,5
250	150	34	48	53	43
300	150	48	63	54,5	46,5
325	150	58	72	55,5	48
350	150	60	76	57,5	49
400	150	81	84	60	52

* tested according to EN ISO 5135/3741



Discover the magic
of zonal ventilation

duco.eu/zonal-ventilation



Please refer to page 82 for essential installation tips!

DucoBox Silent Connect

MEV system

Up to **400 m³/h** at 150 Pa

The DucoBox Silent is an extraction fan that provides **central extraction** within DUCO's Demand-Controlled Natural Ventilation Systems (DCNVS). The DucoBox Silent is both the system's motor and the master unit to which control components can be paired.

This **quiet, compact, durable** and highly **energy-efficient extractor fan** removes moist and/or polluted air when needed and in the right quantity. Simple design and an efficient DC motor ensure long service life.

FEATURES

Width x Height x Depth: 480 x 480 x 194 mm Weight: 4,3 kg Extraction capacity at 150 Pa: 400 m³/h Power supply: 230 VAC Energy label: class B in a system with at least two sensors	Communication: RF and Wired. Expandable with Duco Connectivity Board (see 'Options & accessories') for REST API (local or cloud) and Modbus TCP (local), both via Ethernet / Wi-Fi	Peak power: 84 W Air duct connections: Extraction areas: 7 x Ø 125 mm Extraction to the outside: 1 X Ø 125 mm
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VENTILATION UNIT



Type	Plug	
DucoBox Silent Standard (UK)	G	Only possible in All-in-one kit
DucoBox Silent Connect (UK)	G	Only possible in All-in-one kit

ALL-IN-ONE KITS DucoBox Silent

DUCO All-in-one kits include both an extractor fan and associated control components.

All-in-one DucoBox Silent (UK) + RH	1 x DucoBox Silent Standard (UK) 1 x Humidity Box sensor	0000-4490
All-in-one DucoBox Silent Connect (UK) + RH	1 x DucoBox Silent Connect (UK) 1 x Humidity Box sensor	0000-4808



CONTROL COMPONENTS DucoBox Silent



→ BOX SENSORS

Box sensors can be installed very easily and quickly and provide **CO₂ and/or moisture measurement in an air duct**. They are wired directly to the circuit board. This means that no wiring for room sensors needs to be provided.

A DucoBox Silent contains **a maximum of two box sensors** – one CO₂ Box sensor and/or one Humidity Box Sensor – each of which can be clicked separately into a specific duct opening or together into one duct opening of the DucoBox.

Peak power: < 1 W	Stand-by power: < 1 W	Power supply: From the DucoBox
CO ₂ Box sensor		0000-4216
Humidity Box sensor		0000-4218

→ EXTERNAL CONTROL COMPONENTS

The DucoBox Silent can be connected to the following external control components.

User controls and room sensors	see page 56
Switch sensor (for switch detection)	see page 58



OPTIONS & ACCESSORIES DucoBox Silent Connect



Silent Plus Kit

0000-4182

The Silent Plus Kit provides additional acoustic damping of up to 3 dB(A)! Three composite foam pads per box, placed as close to the extraction as possible, are sufficient.



Duco Connectivity Board

0000-4810

The optional Duco Connectivity Board can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board also enables the Duco Installation App to be used.



Breech Y-piece 2 x 125 to 1 x 160

0000-4334

This piece allows a duct of Ø 160 mm to be connected to two spigots of the DucoBox Silent (Connect) Ø 125 mm). Splitting the flow between two ducts reduces resistance, resulting in quieter and more energy-efficient operation.



Reducer 160/125

0000-4543

Reducer from Ø 125 mm (DucoBox spigot) to Ø 160 mm (air duct).



EasySwitch

0000-5134

This 'universal' plate allows you to replace an outdated ventilation box in a renovation project without cutting and breaking with the DucoBox Silent (Connect) or Focus. After fitting against the wall, the unit can easily be clicked onto the plate, resulting in vibration-free operation during air extraction.



Coaxial cable set 8 m

0000-4418

The set comprises an 8 m long coaxial cable with pre-fitted connectors at both ends. Using this set, the antenna of the DucoBox Silent Connect, DucoBox Focus or DucoBox Energy devices can be moved, if necessary, to a place where the RF range is optimal.



Duco Power supply 230VAC-24VDC/20W + casing

0000-4763

The Duco Power Supply 230VAC-24VDC/20W is the best solution to power Duco Wired components from a central 230V connection. The component comes with a surface-mounted junction box as standard. The sum of the peak power of all connected DUCO components can be 20W at most when using one Power Supply.



Flow regulator 15-50 m³/h Ø125

0000-4836

Flow regulator 50-100 m³/h Ø125

0000-4837

The adjustable flow regulator is an element that is placed in a duct to obtain a constant flow in a pressure range between 50 and 250 Pascal. It is used for both supply and extraction.



Renovation

Duco Silent Connect System

MEV system | Central ventilation (1 zone | Up to 400 m³/h at 150 Pa



ALL-IN-ONE KIT

● All-in-one kit DucoBox Silent Standard (UK) + RH 0000-4490

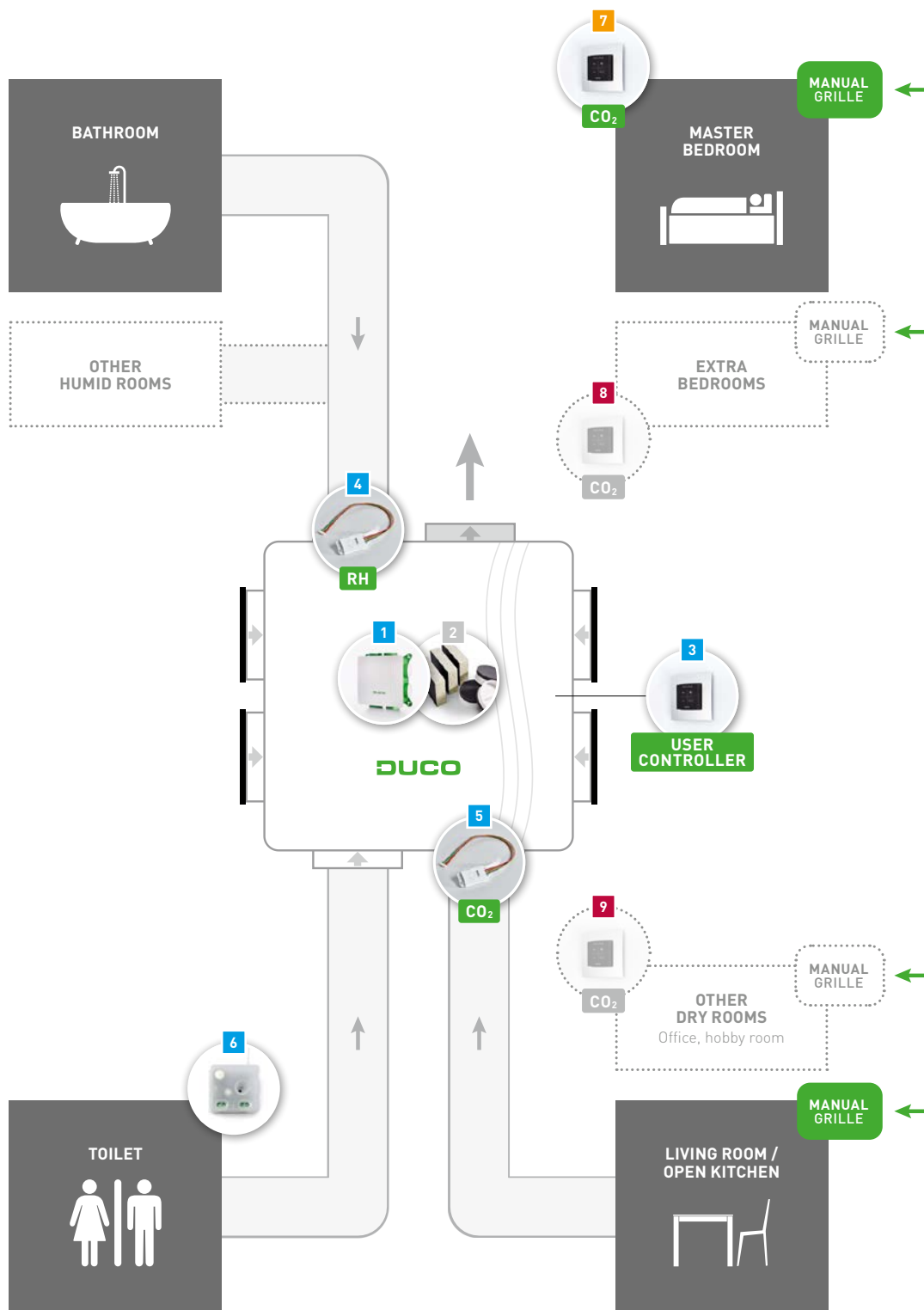
● All-in-one kit DucoBox Silent Connect (UK) + RH 0000-4808

The bullet next to the item numbers below indicates which and how many components the basic kit contains.

COMPONENTS

			Component on diagram
	DucoBox Silent Standard (UK)	① only in All-in-one	
	DucoBox Silent Connect (UK)	① only in All-in-one	1
	Silent Plus Kit (3 damping pads + 3 caps)	0000-4182	2
	CO ₂ Box sensor	0000-4216	5
	Humidity Box sensor	① ① 0000-4218	4
		Black White	
	Remote control RF / Wired	0000-4601 0000-4602	3
	Remote control RF / Battery	0000-4175 0000-4600	
	CO ₂ Room sensor with control RF/Wired	0000-4603 0000-4604	
	CO ₂ Room sensor without control RF / Wired	0000-4636 0000-4637	7 8 9
	Humidity Room sensor with control RF / Wired	0000-4605 0000-4606	
	Switch sensor RF/230 VAC *	0000-4174	6
	Duco Connectivity Board	0000-4810	
	Breach Y-piece 2 x 125 to 1 x 160	0000-4334	

→ See chapter 'Vents' from page 66 for more information on all types of vents.



Energy label	Extraction	Detection	Required components	Optional components
B	Central	High-humidity rooms		
B	Central	Damp areas + master bedroom	+	
B	Central	Damp rooms + all bedrooms	+ +	

Extraction of stale air
 Supply of fresh air



CONTROL COMPONENTS

With DUCO each ventilation system can be custom assembled using modular control components.





USER CONTROLS AND ROOM SENSORS

User controllers and room sensors contain **one or both** of the following functions:

User controller

Using the buttons, the user sets the operation of the ventilation system to the desired level:

- Automatic mode (recommended): CO₂ and/or humidity measurements determine the operation of the ventilation system via intelligent algorithms. This guarantees optimum air quality in the most efficient way.
- Manual settings: the ventilation system ventilates at 10% (setting 1), 50% (setting 2) or 100% (setting 3) of the maximum ventilation capacity.

Measuring air quality

Sensors continuously measure the CO₂ or humidity level (as well as temperature) in the rooms where they are installed. The measurements determine the operation of the ventilation system when it is in automatic mode.

All controls and room sensors also function as RF repeaters (except battery-operated controls).

RF/ Wired models

Power supply: RF: 230 VAC | Wired: 24 VDC
Width x Height x Depth: 69 x 69 x 55 mm
Display: 4 RGB LEDs
Peak power: 1.8 W | **Stand-by power:** 1.2 W
Communication: RF and wired
Colour: Control: black or white | Supplied cover plate: white

Battery-powered model

Battery: CR2430 3V coin cell battery
Width x Height x Depth: 69 x 69 x 17 mm
Display: 1 bicolor LED
Communication: RF
Colour: Control: black or white | Supplied cover plate: white



User controllers + air quality measurement

These contain both a **user controller** and room sensors (CO₂ or humidity) for air quality measurement.

	Black	White
CO ₂ Room sensor with control RF/Wired	0000-4603	0000-4604
Humidity Room sensor with control RF / Wired	0000-4605	0000-4606



User controller only

These contain only a **user controller**. Ideal in rooms where measurement is not required, or where measurement is done by other means (in the duct).

	Black	White
Remote control RF / Battery	0000-4175	0000-4600
Remote control RF / Wired	0000-4601	0000-4602



Air quality measurement only

Room sensors that are only equipped with a CO₂ sensor. Ideal for bedrooms where no user controller is necessary.

	Black	White
CO ₂ Room sensor without control RF / Wired	0000-4636	0000-4637

WIRED COMPONENTS

Wired / 24 VDC components require a **transformer from 230 VAC to 24 VDC**. It is possible to work with a Duco Power supply as a central power supply to power the component from the wall socket. See "Options & accessories" for the ventilation unit.



SWITCH SENSOR

The Switch Sensor can perform either or both of the following functions:

Switch detection: the ventilation system will perform a function when closing a (two-pole) dry contact. Suitable for toilet detection or overrule setting (only one function per switch sensor).

Repeater: the switch sensor is ideally suited as a repeater to strengthen the signal in the event of RF communication problems. In that case the switch sensor must be positioned in such a way that the distance to be bridged and/or interference by obstacles is reduced.

A switch sensor is easy to conceal thanks to its small size.

Width x Height x Depth: 41 x 37 x 20 mm Weight: 21 g Color: white	Peak power: 0.5 W Standby power: 0.4 W	Power supply: 230 VAC Communication: RF
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Note: An external switch sensor is not required if a switch is connected to the onboard dry contact on the circuit board of the 'master' unit (DucoBox or IQ unit). Use a double-pole switch or relay and a 2 x 0.8 mm² cable for this. Refer to the **Onboard dry contact information sheet (L8001001)** for connection instructions.



Switch sensor RF/230 VAC

0000-4174