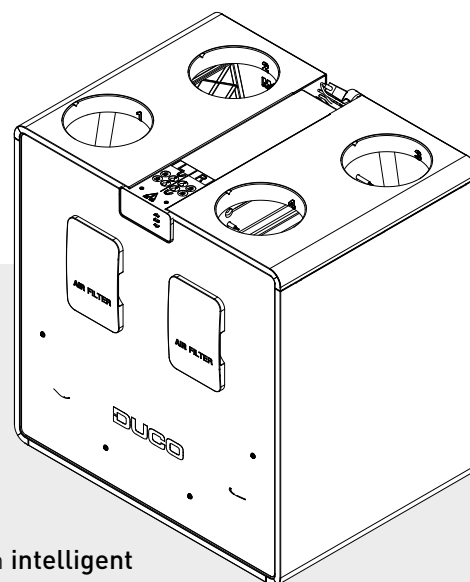


TECHNICAL DATA SHEET

DucoBox Energy Comfort Plus D450



The DucoBox Energy Comfort Plus D450 is a **mechanical ventilation unit with heat recovery**. DucoBox Energy Comfort Plus was developed with the aim of guaranteeing an even quieter operation. Within the DucoBox Energy Comfort range, the left/right exchange is 100% software-driven thanks to the patented principle of the double by-pass.

The demand control of the DucoBox Energy Comfort Plus D450 results in **intelligent and energy-efficient operation**. Together with the smart demand control based on CO₂ and humidity, the dynamic air distribution filters ensure exceptional efficiency within this compact unit.

The compact and quick-to-install 2-zone valves provide the most energy-efficient result that can be achieved with system D. Please note that the zone control reduces the noise by **at least 30%**! Comfort rules!

Versions

Type	Pulsion and extraction capacity at 150 Pa	Pulsion and extraction capacity at 200 Pa	2-zone system	Frost protection	Item number
DucoBox Energy Comfort Plus D450	450 m ³ /h	450 m ³ /h	yes (external)	imbalance or external heater	0000-4705

Optional accessories

Product	Item number
Siphon flat (Energy & Eco)	0000-4376
Communication Print	0000-4251
Humidity Box Sensor (Energy Comfort (Plus))	0000-4723
Standing support frame (Energy Comfort D400 / Plus)	0000-4740
Filter set 2 x Coarse 65% (Energy Comfort D400/Plus)	0000-4741
Filter set Coarse 65% / ePM1 55% (Energy Comfort D400 /Plus)	0000-4742
Coaxial cable set 8 m	0000-4418

Physical characteristics

Width x Height x Depth (mm)	760 x 803 x 584 mm
Casing	Coated sheet steel
Colours	White + green
Connections	Inner diameter: Ø 180 mm
Condensate drain	Ø 32 mm (1 ¼") [2x]
Heat exchanger	v1: PP - v2: PET/Alu
Material of inside section	EPP / PP / ABS
Weight	47 kg
Power cable length	2 m (from top of unit)
Mounting	Wall mounting (standard) Floor mounting as an option using support frame

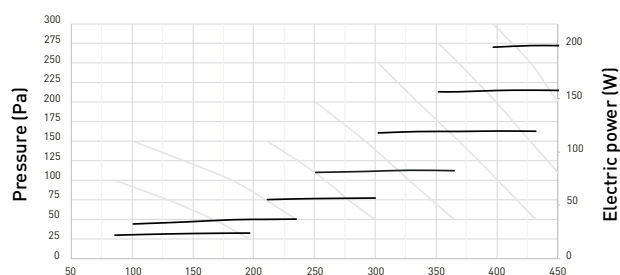
Electrical characteristics

Maximum electrical power	200 W (2 x 100 W)
Power supply	230 V, 50 Hz via 3-core power cable with earthed plug
Contacts	0-10 V in/outputs
Type of motor	DC
Energy conversion efficiency	At 450 m³/h: 81 % At 418 m³/h: 82 % At 377 m³/h: 83 %

Miscellaneous characteristics

Energy class	With 2 sensors (control factor 0.65): A+ Other: A
Filters	Dynamic airflow filter supply air (520 x 190 x 15 mm) Standard: ISO 16890 Coarse 65 % (= G4) Optional: ISO 16890 ePM1 55% (=F7) Dynamic airflow filter exhaust air (520 x 190 x 15 mm) Standard: ISO 16890 Coarse 65 % (= G4)
Summer by-pass	Fully (100% modulating)
Frost protection	Imbalance or external heater
Fans	EC fan with backward curved blades
Automatic calibration	Yes (constant pressure)
Constant flow regulation	Yes
Passive cooling	Automatic passive cooling control
Operation	Integrated display Use via User controllers and CO ₂ or Humidity Sensors Via smartphone / tablet as an option (provided device has Communication Print)
Sensors	Integrated: pressure, temperature, onboard switch sensor External: CO ₂ (via optional Sensor), Humidity (via optional Sensor or measurement in ETA line), external Switch Sensor (voltage-free input) (optional)
Communication	Standard: Duco RF, Duco Wired, Switch Sensor Expandable with Communication Print: ModBus, PWM-IN, PWM-OUT, Switch Sensor (3x), Ethernet, Micro SD-card slot

DucoBox Energy Comfort D450m³/h

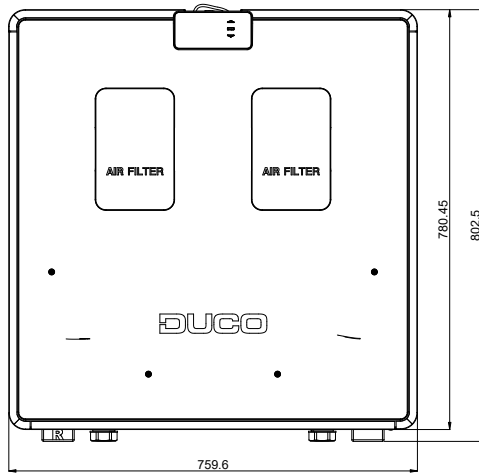


Measurement #	Flow rate Q_v m³/h	Pressure Pa	Noise level L_w^*		
			supply dB(A)	extraction dB(A)	emission from housing dB(A)
1	450	200	78,5	59	59,5
2	400	200	79	58	57
3	350	200	74,5	57,5	56,5
4	300	200	74	56,5	53
5	450	150	78	58,5	58
6	400	150	79	58,5	58,5
7	350	150	72	56,5	54,5
8	400	100	76	55,5	53,5
9	350	100	73	57	53,5
10	300	100	72	59,5	51,5

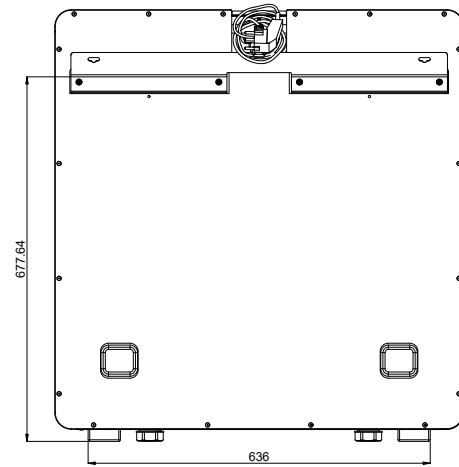
* Emission from housing measured in accordance with ISO 3741:2010
Supply and extraction noise level in accordance with ISO 5135:1997 (with channel correction)

Dimensions of DucoBox Energy Comfort Plus

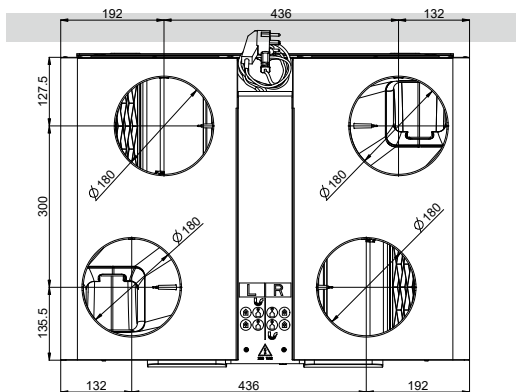
Front view



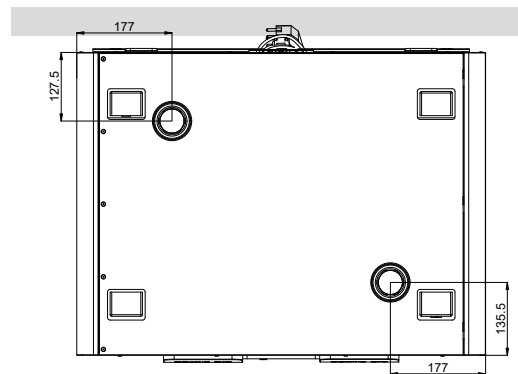
Rear view



Top view



Bottom view



Side view

