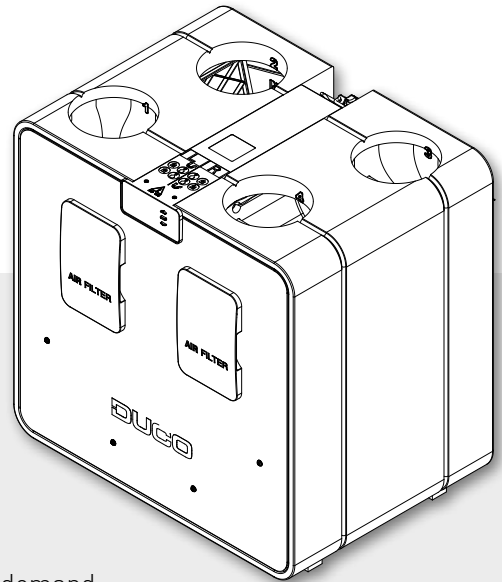


# TECHNICAL DATA SHEET

## DucoBox Energy Comfort D325



The DucoBox Energy Comfort D325 is a **mechanical ventilation unit with heat recovery**. It is a compact and lightweight version of the DucoBox Energy Premium. With a capacity of up to 325 m<sup>3</sup>/h, this is the ideal balanced ventilation solution for apartments and serial housing construction.

The demand control of the DucoBox Energy Comfort results in **intelligent and energy-efficient operation**. Together with the smart demand control based on CO<sub>2</sub> and humidity, the dynamic air distribution filters ensure exceptional efficiency within this compact unit.

The left/right exchange is carried out 100% by software thanks to a patented principle of double by-pass.

Moreover, this lightweight unit weighs just 21 kg. In other words: easy **to install by 1 person**. **Automatic calibration** ensures quick and high-quality installation of the unit.

### Versions

Type	Supply and extraction capacity at 150 Pa	Supply and extraction capacity at 200 Pa	2-zone system	Frost protection	Article number
DucoBox Energy Comfort D325	325 m <sup>3</sup> /h	292 m <sup>3</sup> /h	yes (external - optional)	imbalance or external heater (optional)	0000-4649

### Physical characteristics

<b>Width x Height x Depth (mm)</b>	700 x 705 x 525 mm
<b>Casing</b>	Coated sheet steel + EPP
<b>Colours</b>	White + black
<b>Connections</b>	Internal diameter: Ø 160 mm
<b>Condensate drain</b>	Ø 32 mm (1 ¼") [2x]
<b>Heat exchanger</b>	PET / Polystyrene
<b>Material of inside section</b>	EPP / PP / ABS
<b>Weight</b>	21 kg
<b>Power cable length</b>	2 m (from top of unit)
<b>Mounting</b>	Wall mounting (standard) Floor mounting as an option using a support frame

### Electrical characteristics

<b>Maximum power at 50 Pa</b>	96,5 W
<b>Power supply</b>	230 V, 50 Hz via 3-core power cable with earthed plug
<b>Contacts</b>	0-10 V in/output
<b>Type of motor</b>	DC
<b>IP class</b>	IP40
<b>Energy conversion efficiency</b>	89,0 % [EN 13141-7]

## Miscellaneous characteristics

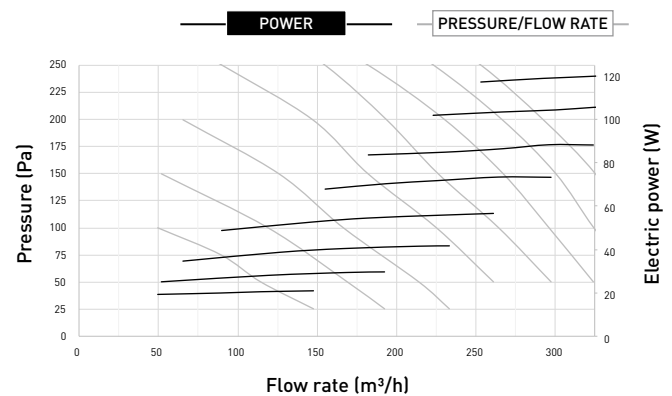
<b>Energy class</b>	With 2 sensors (control factor 0.65): A+ Other: A
<b>Filters</b>	Dynamic airflow filter supply air (460 x 185 x 15 mm) Standard: ISO 16890 Coarse 65 % (= G4) Optional: ISO 16890 ePM1 55% (= F7)  Dynamic airflow filter exhaust air (460 x 185 x 15 mm) Standard: ISO 16890 Coarse 65 % (= G4)
<b>Fans</b>	EC fan with backward curved blades
<b>Automatic calibration</b>	Yes (constant pressure)
<b>Installer App</b>	Via Duco Connectivity Board (if permanently mounted) Via Duco Installation Kit (mobile application)
<b>Passive cooling</b>	Automatic passive cooling control via 'NightBoost' function
<b>Operation</b>	Integrated display Use via remote controls and CO <sub>2</sub> or Humidity Sensors Optional via smartphone/tablet (provided Duco Connectivity Board in device)
<b>Sensors</b>	<b>Integrated:</b> pressure, temperature, onboard switch sensor <b>External:</b> CO <sub>2</sub> (via optional Room sensor), Humidity (via optional Room sensor or measurement in ETA duct), external Switch Sensor (voltage-free input) (optional)
<b>Communication</b>	<b>Standard:</b> Duco RF, Duco Wired, Switch Sensor <b>Expandable with Duco Connectivity Board:</b> Modbus TCP (local), REST API (local or via cloud) - both via Ethernet or Wi-Fi

## Pressure/flow characteristics

Flow rate (m <sup>3</sup> /h)	Pressure (Pa)	Absorbed power* (W)
253	250	117
200	250	91
292	200	119
250	200	92
200	200	72
150	200	55
325	150	120
250	200	82
200	150	63
150	150	49
200	100	49
150	100	35

\* The values mentioned are an estimate and cannot be used as substantiation.

## DucoBox Energy Comfort D325



## Optional accessories

Product	Article number
Siphon flat (Energy)	0000-4376
Duco Connectivity Board	0000-4810
Humidity Sensor (DucoBox Energy Comfort (Plus))	0000-4723
Mounting chair standing (Energy Comfort D325)	0000-4546
Filter set 2 x Coarse 65 % (Energy Comfort D225/325)	0000-4547
Filter set Coarse 65 % / ePM1 55 % (Energy Comfort D225/325)	0000-4661
Set Coaxial cable 8m	0000-4418
Pre-Heater DucoBox Energy Comfort (Plus) 1425W	0000-4807
External Multizone Valves	Miscellaneous

# Acoustic properties

Emission from casing measured in accordance with ISO 3741:2010  
 Supply and extraction noise level according to ISO 5135:1997 (with duct correction)

## 1. Emission from casing

Meas- urement #	Flow rate m³/h	Pressure Pa	LwA emission from casing dB(A)	Octave band frequencies Hz							
				63	125	250	500	1000	2000	4000	8000
1	325	150	61,5	58,3	49,2	62,5	58,9	58,8	53	46,3	34
2	325	100	61	48,4	48,3	62,8	58	55,9	51,8	45,1	32,4
3	300	150	61,5	49,6	47,9	63,6	57,8	56,1	52,2	45,4	32,8
4	300	100	59,5	42,2	47,1	60,5	56,4	54,8	50,5	43,7	30,6
5	250	150	59	43,3	46,4	61,4	55,5	54,1	49,7	43,1	30,3
6	250	100	57	<38.9	44,2	58,1	53,6	52,5	47,9	40,8	26,9
7	250	50	55,5	<39.8	43,7	57,3	52,5	50,7	45,8	38,7	<23.9
8	227,5	50	53,5	<39.6	42,8	54,8	50,9	49	44,2	36,6	22,3
9	245	50	54,5	<39.9	44,1	56,5	52	50	45,2	38,1	23,6
10	200	100	54	<40.3	42,7	56,2	51,1	49,9	44,6	37,5	24,4
11	200	50	51,5	<39.3	39,8	51,6	48,9	47,4	42,1	34	20,2
12	200	25	50	40,5	39,2	50,9	47,9	45,6	40,5	31,9	18,7
13	150	50	47,5	<39.5	38,1	47,2	45,5	43,9	37,6	28,9	18,2
14	150	25	46,5	<39.1	42,8	45,4	43,8	41,9	35,7	25	17,2
15	100	25	40	<38.9	37,2	40,7	38,6	36,3	28,2	<15.1	<8.1

## 2. Supply noise

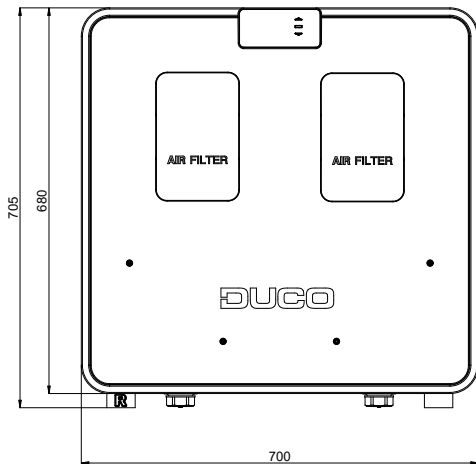
Meas- urement #	Flow rate m³/h	Pressure Pa	LwA supply dB(A)	Octave band frequencies Hz							
				63	125	250	500	1000	2000	4000	8000
1	325	150	69,5	75,9	69,1	73,2	66,5	59,8	58,8	52,5	43,4
2	325	100	69	73,5	68,5	73,4	65,5	58,8	58,1	51,5	41,8
3	300	150	68	73,6	67,6	72,7	64,3	58,1	57,1	50,7	41,4
4	300	100	66	72,3	66,8	70,3	63	56,9	56	49,2	39
5	250	150	64	71,8	65,6	67,7	61,2	55,2	54,1	47,7	38,1
6	250	100	63,5	72,3	64,4	68,6	60,5	54,4	53,2	46,3	35,5
7	250	50	62,5	69,4	63,8	68,1	59,7	53,1	52,2	44,8	32,4
8	228	50	61,5	68,7	62,2	68	58,2	51,1	50	41,9	29,2
9	245	50	62,5	68,9	63,2	68,9	58,9	52,1	51,1	43,4	30,8
10	200	100	62,5	68	61,7	69,9	57,6	50,8	49,3	41,7	30,9
11	200	50	58,5	66,4	60,2	65,5	55,8	48,6	47	38,5	25,5
12	200	25	57	65,3	59,5	63,3	54,9	47,4	46,2	36,8	<22.2
13	150	50	52	<62.4	59,5	55,3	50,4	42,9	39,6	29,7	<16.2
14	150	25	52,5	<61.6	62,8	54	49,2	41,8	38,9	26,7	<12.9
15	100	25	45,5	<59.7	54,8	48,6	44,1	35,4	29,3	<17.4	<9.1

## 3. Extraction noise

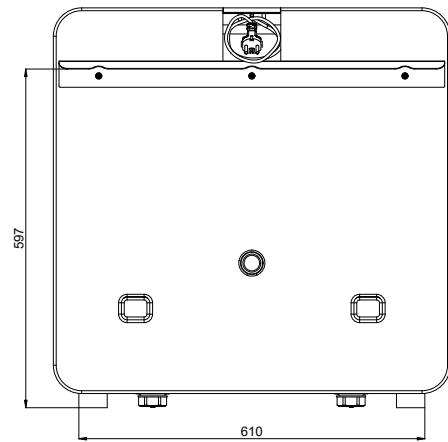
Meas- urement #	Flow rate m³/h	Pressure Pa	LwA extraction dB(A)	Octave band frequencies Hz							
				63	125	250	500	1000	2000	4000	8000
1	325	150	59	66,4	69,6	64,6	52,2	47	40,1	32,4	<20.0
2	325	100	59,5	65,5	66,5	65,6	50,6	46,2	39,1	31,3	<18.6
3	300	150	61	65,7	68,6	66,8	50,7	46,1	38,6	31,2	<18.5
4	300	100	58	64,4	65,6	64,4	48,7	44,8	37,9	29,7	<16.7
5	250	150	56,5	<62.3	63,9	63,4	48,2	44	36,3	28,5	<15.3
6	250	100	53	<61.5	61,6	59,7	46,5	42,3	35	26,6	<13.1
7	250	50	51	<61.1	60	56	48,2	40,7	33,4	24,8	<10.9
8	228	50	48,5	<59.0	58,9	54,4	44	39	31,6	<22.7	<9.9
9	245	50	50,5	<61.3	59,8	55,7	48,1	40,6	33,1	24,6	<10.8
10	200	100	50	<59.3	62,2	55,7	43,4	39,4	31,1	22,9	<11.5
11	200	50	47	<58	58,7	53,6	41,6	37	28,9	<20.2	<11.7
12	200	25	46,5	<57.9	57,6	53,5	40	35,6	27,8	<18.4	<9.3
13	150	50	45	59,6	57,4	51	37,7	33,1	23,8	<14.1	<8.4
14	150	25	42,5	<54	54,8	47	35,4	31,1	21,9	<10.5	<7.1
15	100	25	37	<52	50,3	41,1	30,4	25,7	<13.7	<3.6	<7.0

# Dimensions of DucoBox Energy Comfort D325

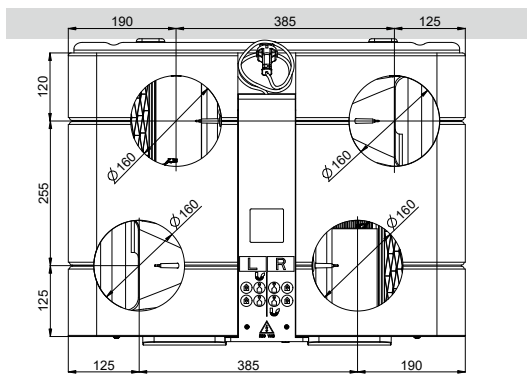
Front view



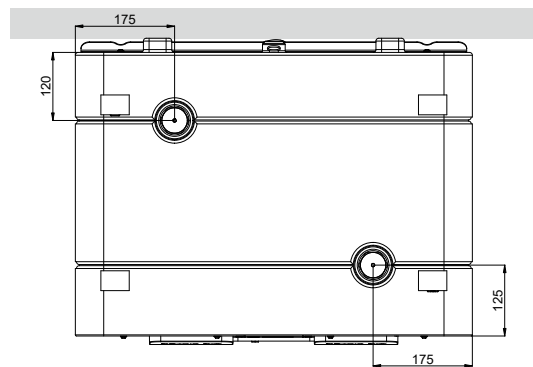
Rear view



Top view



Bottom view



Side view

