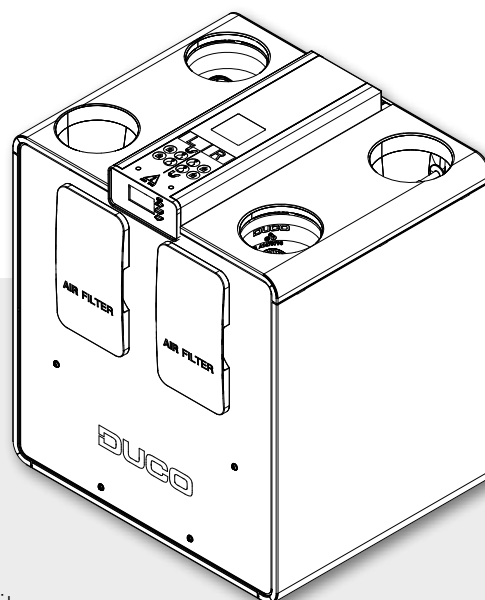


## TECHNICAL DATA SHEET

# DucoBox Energy Comfort Plus D250 (UK)



The DucoBox Energy Comfort Plus D250 is the **most compact Mechanical Ventilation with Heat Recovery (MVHR) unit** within the gamut of The Energy Family.

The 100 % software-based L/R exchange, smart demand control based on CO<sub>2</sub> and humidity, and automatic calibration ensure maximum energy efficiency.

The 2-zone control reduces noise levels by at least 30 %. Thanks to its **quiet operation, automatic calibration, and copy function**, this unit combines maximum installation ease with excellent living comfort. The metal housing of this Plus variant also guarantees **extra acoustic damping** — ideal for apartments and compact homes where comfort is a priority.

## Versions

Type	Supply and extraction capacity at 150 Pa	Supply and extraction capacity at 200Pa	2-zone system	Frost protection	Item number
DucoBox Energy Comfort D250 (UK)	250 m <sup>3</sup> /h	221 m <sup>3</sup> /h	Yes (external - optional)	Imbalance or external heater (optional)	0000-7079

## Physical properties

<b>Width x Height x Depth (mm)</b>	Overall dimensions: 565 x 669 x 491 Box dimensions: 565 x 605 x 456
<b>Casing</b>	Coated sheet steel
<b>Colors</b>	White + green
<b>Connections (mm)</b>	Inner diameter: Ø 125
<b>Condensate drain</b>	Ø 32 mm (1 ¼ in) [2x]
<b>Heat exchanger</b>	Plastic
<b>Material of inside section</b>	EPP / PP / ABS
<b>Weight</b>	29 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</b>	100 W
<b>Power supply</b>	230V, 50Hz via 3-core power cable with earthed plug
<b>Type of motor</b>	DC
<b>IP class</b>	IP40
<b>Energy conversion efficiency</b>	89.5% (EN 13141-7)

## Miscellaneous characteristics

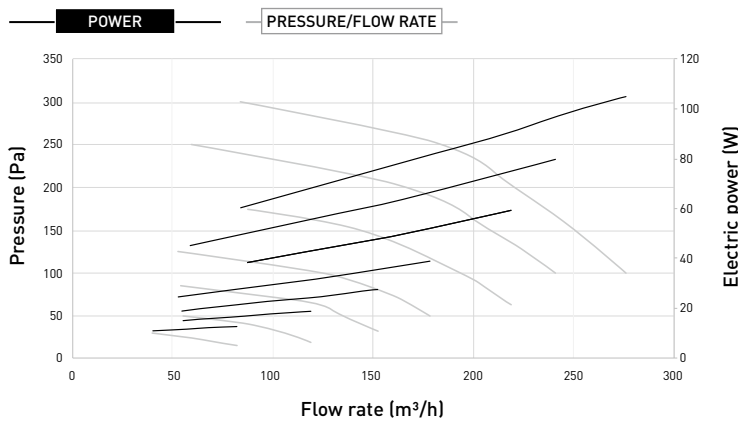
<b>Energy class</b>	With 2 sensors (control factor 0,65): A+ Other: A
<b>Filters</b>	<b>Supply air:</b> Standard: ISO 16890 Coarse 65% (=G4) Optional: ISO 16890 ePM1 55% (=F7) <b>Exhaust air:</b> Standard: ISO 16890 Coarse 65% (=G4)
<b>Fans</b>	EC fan with forward-curved blades
<b>Automatic calibration</b>	Yes (Constant Pressure & Constant Flow)
<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 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)
223	200	91
200	200	80
150	200	59
237	175	95
200	175	74
150	175	54
250	150	100
200	150	70
150	150	49
200	100	58
150	100	39
100	100	28

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

## DucoBox Energy Comfort Plus D250



## Acoustic properties

Standards: ISO 5135:2020

Fan speed	Test mode	Inductive sound power levels, dB relative to 1 rpW									
		Octave band frequencies, Hz								LwA	SPM @ 3m
		63	125	250	500	1k	2k	4K	8K		
100%	Supply	84,9	77,5	74,0	63,8	60,8	56,3	48,0	41,8	68,8	51,3
	Extract	68,0	64,8	57,5	47,2	43,0	39,1	31,8	24,8	54,2	36,7
	Breakout	51,0	50,5	52,7	46,2	43,5	41,0	38,1	28,1	49,8	32,3
80%	Supply	74,4	70,0	69,5	60,2	57,1	52,4	42,5	35,4	64,1	46,6
	Extract	66,4	60,1	53,7	43,8	39,4	34,4	26,7	24,2	50,3	32,8
	Breakout	48,7	47,5	48,2	42,3	39,8	36,2	32,1	24,9	45,5	28,0
60%	Supply	72,7	65,2	61,6	52,3	50,4	40,8	30,0	24,7	56,8	39,3
	Extract	60,9	51,9	46,3	38,1	35,2	26,2	21,5	24,1	43,6	26,1
	Breakout	38,8	39,4	42,5	35,5	33,1	27,1	22,9	24,1	38,9	21,4
40%	Supply	66,6	51,9	47,4	40,8	37,3	25,1	20,6	24,0	44,6	27,1
	Extract	54,0	40,0	32,8	29,2	22,3	19,6	20,5	24,1	32,8	15,3
	Breakout	36,0	31,8	30,6	30,7	23,3	19,8	20,5	24,1	31,2	13,7
20%	Supply	54,1	39,4	34,7	27,5	25,8	20,1	20,5	24,0	33,2	15,7
	Extract	48,1	36,9	33,3	24,4	20,6	19,1	20,5	24,1	31,1	13,6
	Breakout	31,0	27,3	32,5	21,3	18,8	21,6	22,0	24,2	30,3	12,8

### Systems with rigid ductwork only SAP 2005 results

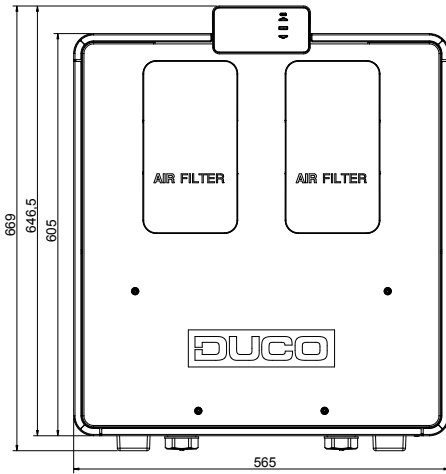
Exhaust terminal configuration	Specific power of fan (W/l/s)	Heat exchange efficiency (%)
Kitchen + 1 additional wet room	0,68	92
Kitchen + 2 additional wet rooms	0,61	91
Kitchen + 3 additional wet rooms	0,64	90
Kitchen + 4 additional wet rooms	0,71	89
Kitchen + 5 additional wet rooms	0,80	89
Kitchen + 6 additional wet rooms	0,92	88
Kitchen + 7 additional wet rooms	1,07	87

### Systems with rigid ductwork only SAP 2012 results

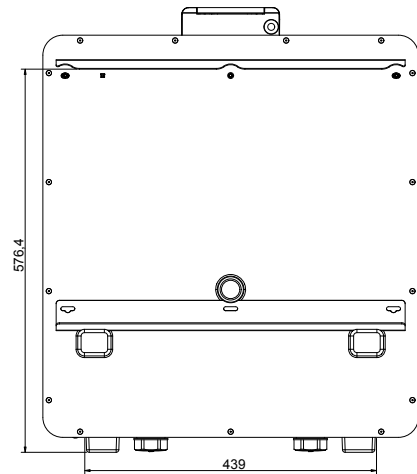
Exhaust terminal configuration	Specific power of fan (W/l/s)	Heat exchange efficiency (%)
Kitchen + 1 additional wet room	0,64	91
Kitchen + 2 additional wet rooms	0,68	90
Kitchen + 3 additional wet rooms	0,76	89
Kitchen + 4 additional wet rooms	0,93	88
Kitchen + 5 additional wet rooms	1,11	87
Kitchen + 6 additional wet rooms	1,37	87

## Dimensions DucoBox Energy Comfort Plus D250 (UK)

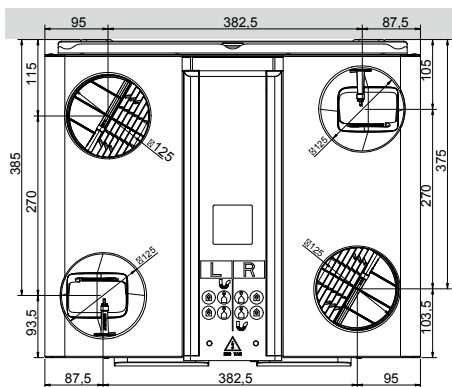
Front view



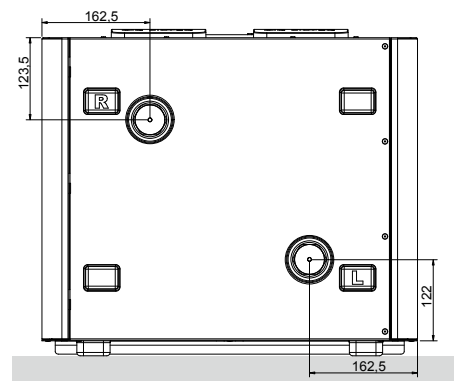
Rear view



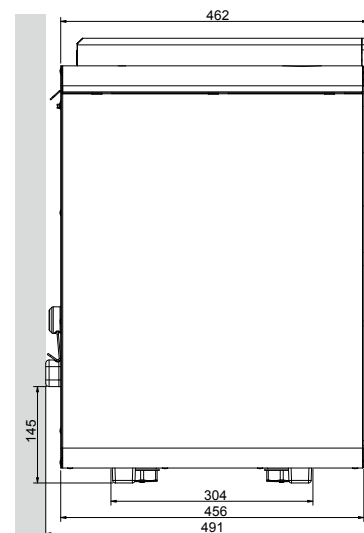
Top view



Bottom view



Side view



### Optional accessories

Product	Article number
Siphon Flat (Energy)	0000-4376
Duco Connectivity Board 2.0	0000-4945
Humidity Box Sensor Energy Comfort	0000-4723
Mounting chair standing (Energy Comfort (Plus) D250)	0000-7134
Filter set 2 x Coarse 65 % (Energy Comfort (Plus) D250)	0000-7132
Filter set Coarse 65 % / ePM1 55 % (Energy Comfort (Plus) D250)	0000-7133
Set Coax cable 8 m	0000-4418
Pre-Heater DucoBox Energy Comfort (Plus) 1150 W (UK)	0000-7003
External multi-zone valves	Miscellaneous
Remote controls and room sensors	Miscellaneous
(Insulated) connection piece with joint	Miscellaneous