# DucoBox Energy Comfort (Plus)

The **SMARTEST** MVHR system!









Save up to € 30 per installation



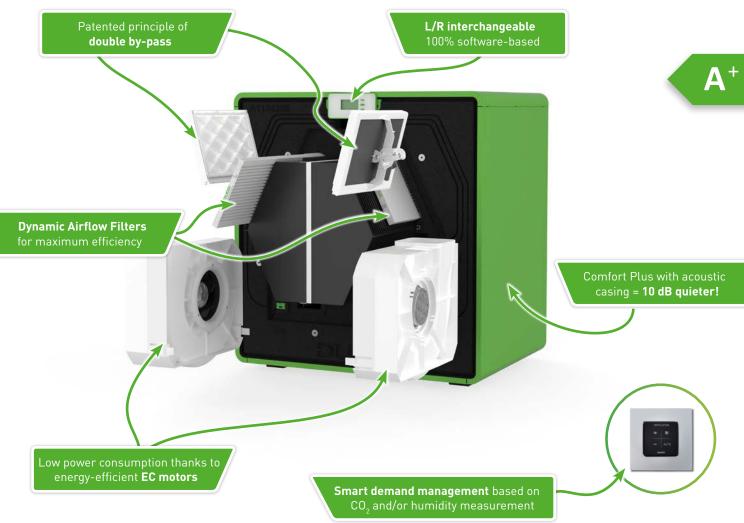
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# DucoBox Energy Comfort (Plus)

First choice for any situation in residential construction

The **DucoBox Energy Comfort Plus** has been developed for application of balanced ventilation with heat recovery. With its various versions and adjustable capacity of up to 550 m<sup>3</sup>/h, this smart and silent ventilation box is the solution for any situation in residential construction. The **left/right exchange** is 100% software-based thanks to a patented principle of **double bypass**. The dynamic air distribution filters, together with the smart demand control based on CO<sub>2</sub> and humidity, ensure exceptional efficiency.





## MAXIMUM RELIEF FOR THE INSTALLER

#### Save time = Save money



Based on the principles of constant pressure calibration , **autocalibration saves 50% on adjustment time**. This quickly means a **saving of € 30 on the installation cost** for a standard calibration! Left/right interchangeable

This unit is very lowthreshold as **physical interventions are not required**. The

left/right exchange is **100% software-based** thanks to the patented principle of double by-pass.

Want to save even more time and money? This is possible thanks to the handy **copy function**. By integrating a copy function into the software, it is possible to take over the settings within similar houses in **serial construction**. This results in an **additional saving of € 15 per installation**.



The external 2-zone valve controls on the basis of CO<sub>2</sub> and provides ventilation only where and when needed. Thanks to the 70% rule, the supply flow rate can be calculated up to **785 m<sup>3</sup>/h**.

### Duco Installation App



The new Duco Installation App ensures perfect calibration of the ventilation system. Moreover, you can use the app to create an official ventilation report in no time.

# Acoustic damping

The acoustic casing ensures quieter operation of the system. The result? Extra attenuation up to 10 dB. Quiet and acoustic ventilation guaranteed.

# **TOTAL VENTILATION SOLUTION**

Looking for a total ventilation solution? Then you prefer to focus on one single address. From ventilation boxes to vents. DUCO has everything you need for a healthy, comfortable and energy-efficient indoor climate. A wellfunctioning ventilation system preferably consists of a global installation with **high-quality components**.



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#### **Physical characteristics**

| Width x Height x Depth<br>(mm): | Comfort D325: 700 x 705 x 525 mm<br>Comfort D400: 756 x 800 x 584 mm<br>Comfort Plus D350/450/550:<br>760 x 803 x 584 mm |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Casing:                         | Coated sheet steel + EPP                                                                                                 |
| Colours:                        | Comfort D325/400: White + black<br>Comfort (Plus) 350/450/550: White +<br>green                                          |
| Connections:                    | Inner diameter D325: Ø 160 mm<br>Inner diameter D400/350/450/550:<br>Ø 180 mm                                            |
| Condensate drain:               | Ø 32 mm (1 ¼") (2x)                                                                                                      |
| Heat exchanger:                 | V1: PP<br>V2: PET/alu                                                                                                    |
| Material of inside section:     | EPP / PP / ABS                                                                                                           |
| Weight:                         | D325: 21 kg<br>D400: 31 kg<br>D350/450/550: 47 kg                                                                        |
| Power cable length:             | 2 m (from top of unit)                                                                                                   |
| Mounting:                       | Wall mounting (standard)<br>Optional floor mounting using support<br>frame                                               |

#### **Electrical characteristics**

| Electrical power:                                             | D325: 130 W (2 x 65 W)<br>D400: 150 W (2 x 75 W)<br>D350: 120 W (2 x 60 W)<br>D450: 200 W (2 x 100 W)<br>D550: 280 W (2 x 140 W) |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Electrical power supply:                                      | 230 V, 50 Hz<br>via 3-core power cable with earthed plug                                                                         |
| Type of motor:                                                | DC                                                                                                                               |
| Efficiency:<br>Ref. Delegated Regulation (EU)<br>n° 1253/2014 | D325: 89%<br>D400: 87,9%<br>D350: 88,9%<br>D450: 87,8%<br>D550: 84,7%                                                            |

|      | F 💽       |
|------|-----------|
| D325 | 0000-4649 |
| D400 | 0000-4707 |
| D350 | 0000-4704 |
| D450 | 0000-4705 |
| D550 | 0000-4706 |

| D400                 |                | Sound level Lw* |                     | D3              | 50                   | Sou            | nd level        | Lw*                 |                 |
|----------------------|----------------|-----------------|---------------------|-----------------|----------------------|----------------|-----------------|---------------------|-----------------|
| Flow rate Qv<br>m³/h | Pressure<br>Pa | supply<br>dB(A) | extraction<br>dB(A) | casing<br>dB(A) | Flow rate Qv<br>m³/h | Pressure<br>Pa | supply<br>dB(A) | extraction<br>dB(A) | casing<br>dB(A) |
| 400                  | 200            | 79,5            | 58                  | 65              | 350                  | 200            | 74,5            | 57,5                | 56,5            |
| 300                  | 200            | 72              | 57                  | 62              | 300                  | 150            | 72,5            | 57,5                | 53,5            |
| 300                  | 150            | 72              | 56                  | 61              | 250                  | 100            | 68,5            | 53                  | 48,5            |
| 200                  | 50             | 64,5            | 47                  | 48              | 200                  | 50             | 45,5            | 45,5                | 42,5            |

#### **Miscellaneous characteristics**

| Energy class:                | With 2 sensors (control factor 0.65): A+<br>Other: A                                                                                                                                                                                               |  |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Filters:                     | Dynamic airflow filter supply air<br>Standard: Coarse 65% (= G4)<br>Option: ePm1 55% (=F7)                                                                                                                                                         |  |
|                              | Dynamic airflow filter exhaust air<br>Standard: Coarse 65% (= G4)                                                                                                                                                                                  |  |
| Summer by-pass:              | Completely (100% modulating)                                                                                                                                                                                                                       |  |
| Frost protection:            | Imbalance                                                                                                                                                                                                                                          |  |
| Fans:                        | EC fan with backward-curved blades                                                                                                                                                                                                                 |  |
| Automatic calibration:       | Yes (constant pressure)                                                                                                                                                                                                                            |  |
| Constant flow<br>regulation: | Yes                                                                                                                                                                                                                                                |  |
| Passive cooling:             | Yes                                                                                                                                                                                                                                                |  |
| Cold recovery:               | Yes                                                                                                                                                                                                                                                |  |
| Operation:                   | Integrated display<br>Use via user controls and room sensors                                                                                                                                                                                       |  |
| Sensors:                     | Integrated:<br>pressure, temperature, onboard switch sensor<br>External:<br>CO <sub>2</sub> (via optional room sensor), humidity (via<br>optional sensor or measurement in ETA duct),<br>external switch sensor (voltage-free input)<br>(optional) |  |
| Communication:               | Standard:<br>Duco RF, Duco Wired, Switch sensor<br>Expandable with Duco Connectivity Board:<br>connection possible via REST API (locally or<br>via the cloud) or Modbus TCP                                                                        |  |

| D3                                | D325 Sound le  |                 |                     | Lw*             |  |
|-----------------------------------|----------------|-----------------|---------------------|-----------------|--|
| Flow rate Qv<br>m <sup>3</sup> /h | Pressure<br>Pa | supply<br>dB(A) | extraction<br>dB(A) | casing<br>dB(A) |  |
| 325                               | 150            | 69,5            | 59                  | 61,5            |  |
| 300                               | 150            | 68              | 61                  | 61,5            |  |
| 250                               | 100            | 63,5            | 53                  | 57              |  |
| 200                               | 50             | 58,5            | 47                  | 51,5            |  |

| D450                 |                | Sound level Lw* |                     |                 |  |
|----------------------|----------------|-----------------|---------------------|-----------------|--|
| Flow rate Qv<br>m³/h | Pressure<br>Pa | supply<br>dB(A) | extraction<br>dB(A) | casing<br>dB(A) |  |
| 450                  | 200            | 78,5            | 59                  | 59,5            |  |
| 300                  | 200            | 74              | 56,5                | 53              |  |
| 350                  | 150            | 72              | 56,5                | 54,5            |  |
| 300                  | 100            | 72              | 59,5                | 51,5            |  |

| D5                   | D550           |                 | Sound level Lw*     |                 |  |
|----------------------|----------------|-----------------|---------------------|-----------------|--|
| Flow rate Qv<br>m³/h | Pressure<br>Pa | supply<br>dB(A) | extraction<br>dB(A) | casing<br>dB(A) |  |
| 550                  | 200            | 84,5            | 65                  | 63,5            |  |
| 500                  | 200            | 84,5            | 61                  | 61              |  |
| 450                  | 150            | 81              | 58                  | 59,5            |  |
| 400                  | 100            | 82,5            | 58,5                | 65,5            |  |

Emission of casing measured according to ISO 3741:2010
Supply and extract air noise level according to ISO 5135:1997 (with duct correction)

# SERVICE PLEASE!

### STUDY SERVICE Tailored advice

Thanks to years of know-how in the field of ventilation, DUCO's engineering department has all the expertise needed to offer the most suitable installation for your project. In addition to tailor-made advice, an **installation plan for the ventilation ducts** can be requested for each project. Please contact your trusted DUCO distributor or DUCO contact, or submit your project via the website:

www.duco.eu/yourproject



### HELPDESK Let yourself be guided

Your DUCO distributor is available **to assist you with any practical challenge**. If you need any support during design or installation, feel free to consult them: their experts have been trained by DUCO.

info@duco.eu

### **DUCO CATALOGUE** Your guide to ventilation systems

Looking for a user-friendly tool to quickly and easily guide you through **DUCO's demandcontrolled ventilation systems and their components**? Then the DUCO Catalogue is the perfect solution. The most recent information accurately bundled in one document!

www.duco.eu/catalogue



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