Wall installed unit  KWL EC 45
With heat recovery
EcoVent Verso from Helios: decentralized apartment ventilation with heat recovery in switchover mode. 5 ventilation levels in 3 operating modes, ideal for new construction and renovation.

Easily installed – with minimal installation effort in a few simple steps.

Easily configured thanks to a unique setup software. Also in combination with extract air systems a round affair!

EcoVent Verso belongs to the category of regenerative switchover ventilation units with heat recovery.

It is designed for installation in the building outer wall. The air passage takes place on the outside wall via a facade from high-grade steel.

On the wall inside a closable facade made from high quality polymers is used, in which a fibre fleece air filter of the class G3 and a sound insulation are integrated.

The EcoVent Verso has an EC-axial fan, which is operated periodically in reverse mode. In this way supply air phases alternate with extract air phases continuously.

The regenerative heat exchange is carried out using of a ceramic heat accumulator. This takes up heat from the interior air (storage charging) during the extract air mode to transfer it in the next supply air mode to the incoming fresh air (storage discharging). Efficiency up to 85 % (according to the current DIBt test method).

To protect it from dirt a fly-screen is fixed on the outside of the ceramic heat accumulator.

To ensure a balanced ventilation operation, a minimum of 2 units is required for an apartment, which in its operational phase (supply-extract air) work phase-shifted. Depending on the total air demand of the apartment more than 2 units are usually installed, whose individual flow rates are adjusted with the controller automatically on each other.

Highlights EcoVent Verso
- Economical and silent EC-axial fan.
- Elegant and timeless design.
- Tool-free, easy assembly and dismantling of components.
- Integrated sound insulation.
- Integrated G3 air filter, easily accessible and replaceable without tools.
- Simple, intuitive operation via two buttons.
- LED display for current operating mode and fan speed.
- Up to 8 ventilation units can be controlled.
- 5 ventilation levels:
  - 12, 23, 32, 37, 45 m³/h.
- 3 operating modes:
  - Heat recovery (= Reversing mode), cross ventilation and supply air mode.
  - Possibilities of external activation of standby, cross ventilation, supply air or boost mode (highest ventilation level) by using an external contact.
  - Intelligent integration of e.g. demand-controlled extract air fans like Helios ELS or M1 via an extension module (accessory).
  - Filter change indicator.
  - Programming via PC.

Control
The controller enables the control of up to 8 ventilation units. At the controller 5 ventilation levels and 3 operating modes can be adjusted:
- Heat recovery (= Reversing mode), cross ventilation and supply air mode.
- After a preset time period the user is reminded of the filter change by flashing LEDs on the controller.

GUI - Graphic User Interface
With the software "Helios EcoVent Verso" it is possible to connect the controller via the USB interface with a PC or laptop. This way the settings of the controller can be easily and comfortably accessed.

The implementation of the start-up procedure and the input of required values (such as filter change interval or minimum fan speed) can thus be made in the shortest possible time. All provided settings can be changed fast with the program interface and be supported by the respectively suitable help texts user-friendly.

The configurations made can be stored directly on the PC or laptop and loaded or copied when required into the control system. In a larger object the installation costs can be reduced to a minimum. If several identical ventilation systems are installed, the required configuration will be established once for a ventilation system and can then be transferred to any number of controllers.

Elegant external facade from high-grade steel
Wall installed unit EcoVent Verso with EC-technology
For single rooms, with air flows up to approx. 45 m³/h

Ordering and delivery
Coordinated with the assembly steps the following elements are packed separately and have to be ordered individually:

- First fix set facade
Robust wall sleeve made of plastic material, including plaster protective cover for indoor and outdoor. External facia from high-grade steel. Additional aids for the mounting of the wall sleeve with incline included in delivery.

  KWL 45 RSF  No. 3005

- Ventilation unit
Consisting of fly-screen, ceramic heat exchanger, flow straighteners, EC-axial fan with safety guard, pull-out tool (cord), EPP-half shell heat insulation elements and design indoor facia with G3-filter.

  KWL EC 45  No. 3011

- Control set UP
Consisting of controller KWL 45 BEU and switching power supply KWL 45 SNU/H for installation in flush-mounted socket (depth 61 mm). Allows the connection of up to 6 ventilation units. With more than 6 ventilation units an additional KWL SNU is required. Max. 8 ventilation units possible per controller.

  KWL 45 STS-UP  No. 3006

- Control set HS
Consisting of controller and switching power supply for DIN rail (2 TE). Allows the connection of up to 4 ventilation units. With more than 4 ventilation units an additional KWL 45 SNH is required. Max. 8 ventilation units possible per controller.

  KWL 45 STS-HS  No. 3007

Accessories

Switching power supply UP
To extend the controller set KWL 45 STS-UP to up to 8 ventilation units.
Input 230 V AC, 50/60 Hz.
Output 12 V DC / 1.9 A for flush-mounting in insulated wall.
Output voltage to SELV protection class 3.
According to DIN EN 60335-1.

  KWL 45 SNU  No. 3008

Switching power supply HS
To extend the controller set KWL 45 STS-HS to up to 8 ventilation units.
Input 230 V AC, 50/60 Hz.
Output 12 V DC / 1.5 A for installation in the distribution box (2 TE).
Output voltage to SELV protection class 3.
According to DIN EN 60335-1.

  KWL 45 SNH  No. 3001

Extension module
For the combined operation of an extract air system, e.g. Helios ELS or M1 with KWL EC 45 (hybrid ventilation).

  KWL 45 EM  No. 3012

Casing for surface-mounting
For the included controller in the control set KWL 45 STS-UP.
Dimensions mm (W x H x D) 83 x 83 x 41

  KWL-APG  No. 4270

Technical data

<table>
<thead>
<tr>
<th>Ventilation unit(1)</th>
<th>KWL EC 45(1)</th>
<th>Ref.-No. 3011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air flow volume on speed step</td>
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<tr>
<td>Supply/Extract V m³/h</td>
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<tr>
<td>Efficiency(2)</td>
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<tr>
<td>Supply voltage</td>
<td>Input 230 V-, 50/60 Hz / Output 12 V-</td>
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<tr>
<td>Nominal current mA</td>
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<td>32</td>
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<td>El. lead power supply unit</td>
<td>NYM-O: 2 x 1,5 mm²</td>
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<tr>
<td>El. lead supply of control</td>
<td>NYM-O: 2 x 1,5 mm²</td>
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<tr>
<td>El. lead to fan</td>
<td>J-Y (ST) Y 3 x 0,8 mm</td>
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<td>Wiring diagram no.</td>
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<td>Weight approx. kg</td>
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(1) The first fix set required for this (KWL 45 RSF, Ref. - No. 3005) must be ordered separately (see above for details).
(2) According to latest DIBti-test methods.

Note
For the controller and for each installed switching power supply KWL 45 SNU a flush-mounted socket (depth 61 mm) is required.

Replacement air filter
- 2 pcs G3-filter
ELF-KWL 45/3/3  No. 3069
System solution for single rooms

**Ventilation solution „ECO“**

The ventilation of individual rooms is used mainly in the partial renovation application where an automatic, user-independent ventilation solution is needed. As a quick and easy realizable possibility it is particularly suitable, if economic aspects are in the foreground.

List of materials system example:
- 3 piece First fix set facade (KWL 45 RSF)
- 3 piece Ventilation unit (KWL EC 45)
- 1 piece Control set UP (KWL 45 STS-UP)

**Ventilation solution „DIN“**

The calculated amount of air according to DIN 1946-6 for reduced ventilation forms the basis of the ventilation consideration of the whole apartment. In damp locations (kitchen, bathroom) provide two EcoVent Verso each for the necessary exchange of air. The layout is carried out fast and simple with the Helios online planning software KWLeasyPlan.

List of materials system example:
- 7 piece First fix set facade (KWL 45 RSF)
- 7 piece Ventilation unit (KWL EC 45)
- 3 piece Control set UP (KWL 45 STS-UP)

**Ventilation solution „HYBRID“**

The hybrid ventilation allows the intelligent operation of an extract air system (Helios ultraSilence® ELS or MiniVent® M1) with the EcoVent Verso. This ventilation form is of particular interest to vent internal rooms / bathrooms in accordance with DIN 18017-3. The extension module enables the simple combination of both systems.

List of materials system example:
- 3 piece First fix set facade (KWL 45 RSF)
- 3 piece Ventilation unit (KWL EC 45)
- 1 piece Control set UP (KWL 45 STS-UP)
- 2 piece Extension module (KWL 45 EM)
- 2 piece Helios ELS/M1 (f.e. with humidity control)