

KWL® EC 70

The complete solution
for individual rooms
and small residential
units.





(De)centralised solution: Greater flexibility for small residential units.

Bringing fresh air into small residential units has never been easier or more cost-effective: The new KWL EC 70 provides energy-efficient supply and extract ventilation with heat recovery to small apartments, offering maximum installation

flexibility. Whether for an individual room or apartment, surface-mounted or partially wall-integrated – KWL EC 70 is always the perfect fit.

HIGHLIGHTS

- **For new builds and renovations:** With surface-mounted or partially wall-integrated installation, the unit adapts to any structural condition and stands out for its particularly simple installation: Only two core drill holes are required in the external wall for the outside air and exhaust air ducts.
- **For individual rooms and small residential units:** Decentralised and flexible – as a ventilation unit for external wall installation in the installation room with the option to connect a second room, such as an interior bathroom.
- **More power in a compact design:** With an air output of up to 70 m³/h, the KWL EC 70 delivers optimal air quality in student apartments, senior apartments, or studio apartments.

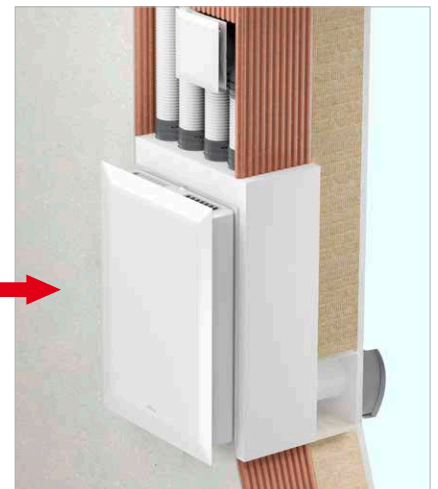
THREE TIMES THE FIRST CHOICE



The **surface-mounted version** was specifically developed for retrofitting and the renovation of existing buildings. This version offers the fastest and simplest installation – ideal for the supply and extract ventilation of individual rooms during (partial) renovations.



With KWL EC 70 in the **partially wall-integrated version**, the unit is elegantly concealed within the external wall, leaving only the stylish inner panel visible. This solution is particularly recommended for new builds and comprehensive energy-efficient renovations.



PARTIALLY WALL-INTEGRATED WITH SECOND ROOM CONNECTION

When ventilation is required for an additional room alongside the main room, the KWL EC 70 with **second room connection for supply and extract air** demonstrates its remarkable strength.

→ More on the next page

Simply transforming decentralised into central:

1



The economical comfort ventilation unit

KWL EC 70

- Efficient ventilation unit with a heat recovery rate of up to 85 %.
- Three installation options: Surface-mounted, partially wall-integrated, and partially wall-integrated with second room connection (as shown here).
- Highly efficient cross-counterflow heat exchanger made of plastic, or an enthalpy heat exchanger for additional moisture recovery.
- Integrated humidity sensor as standard; additional sensors for demand-driven operation are available as optional extras.

2



Flexible yet stable

flexpipe^{plus}

- Ideal for new builds: The **flexpipe** round duct is installed directly into the concrete ceiling.
- For renovations, the **flexpipe** round duct can be installed, for example, within drywall or a suspended ceiling.
- In both cases, the **flexpipe** principle pays off: The tightest bending radii, a minimal number of components, and optimally matched fittings ensure a perfect fit from the outset.

3



Elegant and easy to adjust

DLV 125

- Design ventilation valve for both supply and extract air, available in black or white.
- Precise airflow adjustment by simply rotating the front panel.
- Closed front and integrated filter.
- From a single source: The design of the DLV valves is perfectly coordinated with the inner panel of the ventilation unit.

KWL EC 70
partially wall-integrated



The **partially-integrated variant** offers flexible applications thanks to the second room connection, making it suitable for both individual rooms and entire residential units. It is equally well-suited for new builds and renovation projects, seamlessly blending into the wall in both cases.

Flexible: Ideal for new builds and major renovations, such as the installation of an external thermal insulation composite system.

Multi-room capability: With the option to connect a second room, an entire residential unit can be ventilated with supply and extract air. You can freely select which room is to be ventilated with supply air and which is to be ventilated with extract air.

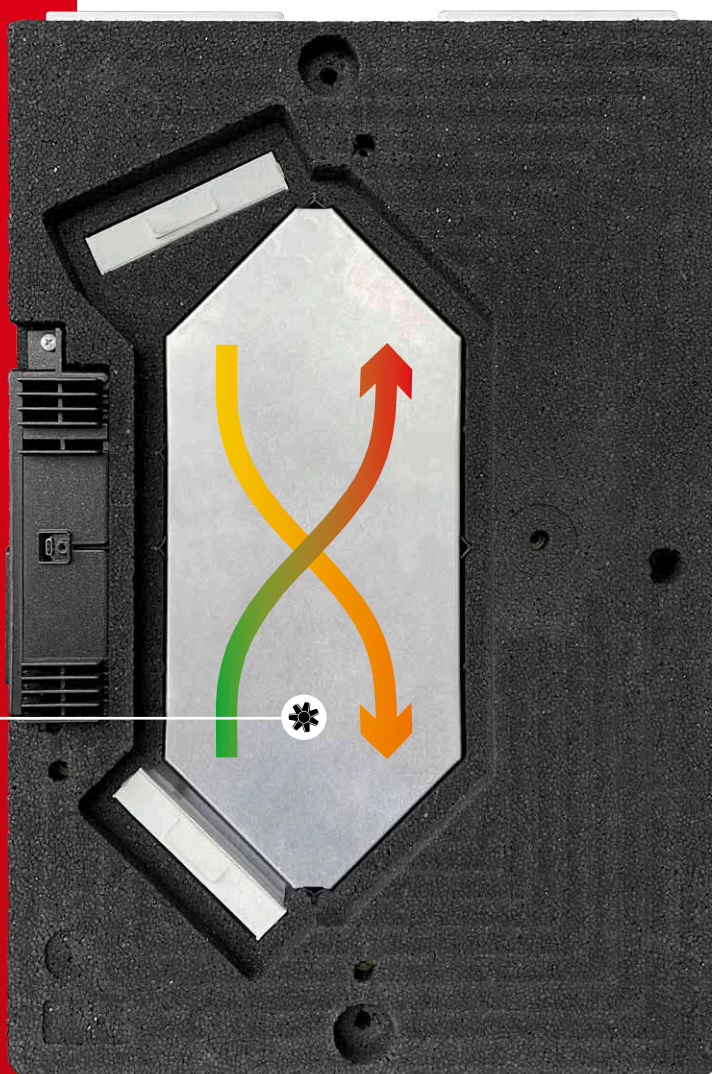
Tip: An ideal, cost-effective solution for easily covering interior extract air rooms.



Here's how it works:

The KWL EC 70 ensures standard-compliant moisture protection ventilation in accordance with DIN 1946-6 and automatically maintains the required minimum air exchange. The highly efficient heat exchanger continuously recovers heat from the extract air and transfers it to the incoming fresh air, supplying the living space with filtered, preheated supply air. Regardless of the installation type, the system reliably separates supply and extract air as well as outside and exhaust air, ensuring maximum hygiene, energy efficiency and living comfort.

■ = Supply air ■ = Outside air
■ = Extract air ■ = Exhaust air



The KWL EC 70 is available in two powerful versions: one with a large cross-counterflow heat exchanger and the other with a highly efficient enthalpy heat exchanger.

The enthalpy version offers double the benefit: it not only ensures energy-efficient heat recovery but also enables hygienic moisture recovery of up to 70% – particularly valuable during the colder months for maintaining a comfortable and healthy indoor climate.

Discreet or concealed:

The outside and exhaust air connection.

Sleek and stylish on the facade: The stainless steel facade panel shines in form and function. And if you prefer an entirely concealed solution, the practical window soffit element takes over. It blends seamlessly into the architecture, ensuring discreet yet effective operation. Both options provide reliable and strictly separated outside air intake and exhaust air flow.



1 SIMPLE AND DISCREET: STAINLESS STEEL FACADE PANEL

- For combined supply and exhaust air flow.
- Made from high-quality, corrosion-resistant stainless steel.
- Available in three surface finishes (uncoated, coated, white).
- Easy installation, adaptable to any on-site conditions.

2 ALMOST INVISIBLE: WINDOW SOFFIT ELEMENT

- Nothing to see here – the stainless steel grille is discreetly concealed within the window soffit.
- Precisely integrable into an external thermal insulation composite system.
- Optimised air flow within the soffit element enhances sound insulation against external noise.
- Ideal when the ventilation unit is installed during energy-efficient renovation and insulation works.



Control and configuration. Smart and simple.

The KWL EC 70 unit is controlled intuitively via the easily accessible control panel on the unit. The buttons allow you to select from five ventilation levels and three operating modes.

Filter replacement indicator

A flashing code signals when it is time to replace the filter.



Operating mode button

Operating modes from bottom to top:

- ↔ Normal operation
- ← Supply air operation
- Extract air operation

Demand-driven, sensor-controlled ventilation is possible in all operating modes.

+



Sleep function

² Sek. The sleep function switches the unit off for a predefined period (15–180 minutes).



Ventilation level button

Ventilation levels and operating modes are displayed via the LED indicator.



Five levels + OFF

+



Boost ventilation / Party mode

² Sek. This mode enables ventilation at level 5 for a predefined period (15–180 minutes)



Benefit from the efficient and user-friendly solution for commissioning your KWL EC 70 units: With the 'Helios KWL EC 70' software, you can streamline your workflow and save time.

EASY CONNECTION

- Connect the KWL EC 70 to your PC or laptop via the USB port – perfect for quick and straightforward setup.

FAST COMMISSIONING

- Configure and enter key values (e.g., filter replacement intervals, minimum fan levels) in no time.
- Clear, user-friendly interface for intuitive operation.

EFFICIENCY FOR LARGER PROJECTS

- Save configuration settings directly on your PC or laptop.
- Pro tip: Speed up commissioning by creating a template for a residential unit and applying it to multiple units in seconds.

KWL EC 70

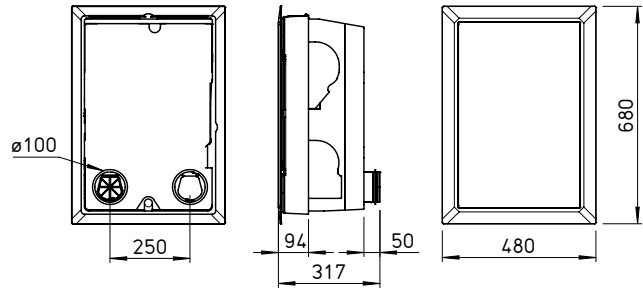


Efficiency class

A+ KWL EC 70



Dimensions KWL EC 70



Dimensions in mm

Compact ventilation unit with heat recovery, suitable for installation on or in an external wall. In addition to the installation room, an optional additional room can be ventilated with supply or extract air. The KWL EC 70 provides an efficient solution for ensuring comfortable indoor air quality while maintaining high energy efficiency.

Thanks to its space-saving design, the KWL EC 70 is highly flexible and can be easily integrated into various residential and usage situations. The maintenance-friendly unit is particularly suitable for smaller living spaces such as apartments, hotel rooms, senior residences, dormitories, or student accommodation. Equipped with energy-efficient EC fans, a highly efficient cross-counterflow or enthalpy heat exchanger, and a user-friendly control concept.

Housing

- Universal housing concept. Unit made of highly insulating EPP. Maintenance-friendly access to filters via hinged inner panel. Surface-mounted: for easy and quick retrofitting during renovation. Partially wall-integrated: discreet appearance through installation within the wall. Second room connection is also possible (supply and extract air).

Heat exchanger

- Large-area cross-counterflow heat exchanger made of plastic, with a heat recovery rate of up to 85 %.
- Type 'ET' is equipped with a highly efficient enthalpy heat exchanger for additional moisture recovery.

Fans

- Two quiet, high-performance centrifugal fans with energy-saving EC motors ensure air supply and extraction.

Condensate drainage

- If condensate forms due to air conditions, it is reliably drained via the facade cover or the soffit element.

Air filter

- Clean outdoor air supply via ISO Coarse 60% (G4) filter or alternatively through ISO ePM₁, 50% (F7) or activated carbon filter. The extract air side is equipped with an ISO Coarse 60% (G4) filter before the heat exchanger. Easy filter maintenance without opening the unit is possible.

Frost protection for the heat exchanger

- The standard frost monitoring system automatically adjusts the supply air volume.

Control

- A discreet membrane keypad is located on the housing, allowing for the adjustment of 5 ventilation levels.
- Operating modes: Pure supply air / Pure extract air / Heat recovery.
- After a pre-set time interval, the user is reminded of the filter replacement via an optical signal.
- The unit features an integrated humidity sensor for demand-based automatic operation. Additional air quality sensors (VOC, CO₂) are available as accessories for integration into the device or external variants for installation in the room.

Electrical connection

- Fixed line connection via an NYM cable 3 x 1.5 mm².

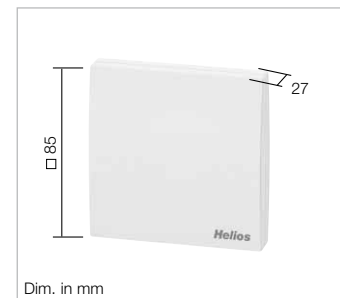
Commissioning

- User-friendly configuration via the KWL EC 70 setup tool for PC or laptop, allowing the ventilation unit to be connected via USB.
- The commissioning process, as well as the input of all setting parameters (such as filter replacement interval or minimum fan speed), is simple and quick through the programme interface, supported by context-sensitive help texts.
- The configurations made can be saved directly on the PC or laptop and reloaded into the control system if needed.
- The configuration made on one device can be saved and transferred to other units, minimising commissioning efforts in larger projects.
- The set values can be secured in the software using a PIN.

Accessories

Room sensors

- AIR1/KWL-VOC 0-10V No. 20250
 - AIR1/KWL-CO₂ 0-10V No. 20251
 - AIR1/KWL-FTF 0-10V No. 20252
- For detecting the CO₂, mixed gas (VOC) concentration or relative room air humidity.
Dim. mm (W x H x D) 85 x 85 x 27



Internal sensors

- KWL-VOC-I Ref. no. 40867
 - KWL-CO₂-I Ref. no. 40866
- Internal sensor for detecting the CO₂, or mixed gas (VOC) concentration.

Replacement air filters

- 1 pc. ISO Coarse 60% (G4)
ELF-KWL 70/Coarse 60%
Ref. no. 40849
- 1 pc. ISO ePM₁, 50% (F7)
ELF-KWL 70/ePM₁ 50%
Ref. no. 40868
- 1pc. ISO ePM₁, 50% (AK/F7)¹⁾
ELF-KWL 70/ePM₁ 50% AK
Ref. no. 40869

Units	With cross-counterflow heat exchanger		With enthalpy heat exchanger	
	Type	Ref. no.	Type	Ref. no.
	KWL EC 70	40787	KWL EC 70 ET	40788

¹⁾ AK = Activated carbon filter

**PARTIALLY WALL-INTEGRATED
INSTALLATION**
Wall installation element
KWL 70 WEE Ref. no. 40852

Wall installation element made of EPS, incl. 2 wall installation sleeves (500 mm) with protective cover, as well as rectangular protective cover for the unit insert.

Adaptor
KWL 70 PS Ref. no. 40853

For completing the wall installation element with a full wall opening.

Flexible ventilation duct
FRS-R 75 Ref. no. 02913

Corrugated plastic duct made of PE-HD in quality-assured design, odour-neutral and antistatically treated, high flexibility and ring strength according to DIN EN 9969 (STIS > 10 kN/m²). Outer diameter: 75 mm, inner: 63 mm. For flow rates up to 30 m³/h. Unit: 1 bundle of 50 m.

**Seal ring for ventilation duct
75 mm**
FRS-DR 75 Ref. no. 02916

Seal ring for FRS-R 75. Required at every connection point. Set of 10 pieces.

Ceiling/wall box DN 125
FRS-DWK 2-75/125 No. 03857

Ceiling/wall box for max. 2 round ducts FRS-R 75. For connection of supply/extract air valves DN 125. Height marks can be shortened to fit. Per 1 pc. connector blind DN 75, DN 125. Integr. mounting clips, duct mounting brackets (4 pcs.), made of impact-resistant polypropylene.

Facade panel
KWL 70 FB-E Ref. no. 40857

Stainless steel panel for the external facade.

KWL 70 FB-B Ref. no. 40858

With additional coating for environments with high levels of air pollution or high salt concentrations in the air (near the coast).

KWL 70 FB-W Ref. no. 40859

With white coating.

Design ventilation valve
DLV 125 Ref. no. 03049

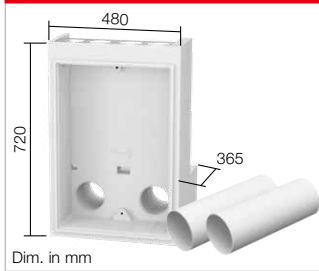
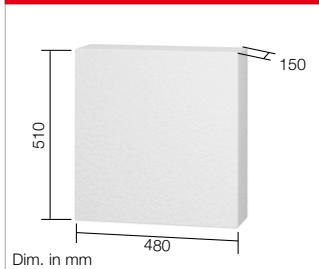
Design ventilation valve with integrated filter and supply and extract air operation, DN 125, adjustable.

DLV 125 black Ref. no. 40786

Second room connection
KWL 70 ZAS Ref. no. 40854

For the connection of an additional room. Set consists of:

- 2 × connectors for FRS-R75
- 4 × bracket FRS-FK
- 1 × cover for supply or extract air grille
- 1 × EPDM seal for adhesion to unit

KWL 70 WEE

KWL 70 PS

FRS-R 75

FRS-DWK 2-75/125

KWL 70 FB

DLV 125 / DLV 125 black

**COMPONENTS FOR
SURFACE-MOUNTING**
Surface-mounted housing
KWL 70 AG Ref. no. 40865

For installing the KWL EC 70 on the wall. Incl. mounting material for the unit. Material: Plastic

Wall installation sleeve
Length 500 mm
KWL 70 WH Ref. no. 40855

Set of 2 pieces. Diameter 100 mm. Material: PVC. Incl. 4 x protective cover, for hygienic sealing during the shell construction phase as well as mounting wedges for fixing the wall installation sleeve and a mounting template.

Length 800 mm
KWL 70 WH L Ref. no. 40865

Facade panel
KWL 70 FB-E Ref. no. 40857

Stainless steel panel for the external facade.

KWL 70 FB-B Ref. no. 40858

With additional coating for environments with high levels of air pollution or high salt concentrations in the air (near the coast).

KWL 70 FB-W Ref. no. 40859

With white coating.

**INSTALLATION IN THE
WINDOW SOFFIT**
Installation kit Soffit
KWL 70 LE-RP Ref. no. 40860

Soffit channel with plaster frame and adapter for wall installation sleeves. Made of EPP, fire protection class B1. Can be installed on the left or right side of the window.

Stainless steel soffit grille
KWL 70 LG-E Ref. no. 40861

External grille including stainless steel condensate drain and seal.

With additional coating
KWL 70 LG-B Ref. no. 40862

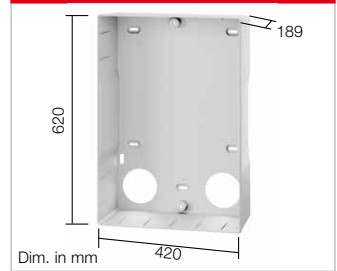
For use in environments with high levels of air pollution or high salt concentrations in the air (near the coast).

With white coating
KWL 70 LG-W Ref. no. 40863

Soffit grille with white coating.

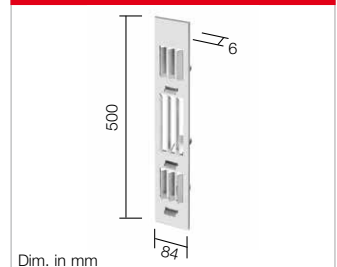
Insect screen
KWL 70 ISL Ref. no. 40864

Made of stainless steel. For Installation kit Soffit (KWL 70 LE-RP). Suitable for retrofitting.

KWL 70 AG

KWL 70 WH

KWL 70 FB

KWL 70 LE-RP

KWL 70 LG

KWL 70 ISL




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