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Compact unit with heat recovery for the central supply and extract ventilation of residential buildings and apartments. Perfectly prepared for modern communication and operation with the new Helios easyControls 3.0 control system incl. integrated network connection. Equipped with EC fans for low energy consumption and highly

efficient plastic or enthalpy heat

exchangers for additional mois-

Casing

ture recovery.

Made of galvanised steel sheet, powder-coated in white, double-walled, with 12 mm heat and sound insulation on all sides. Installation-friendly and maintenance-friendly. All elements are easily accessible through removeable front panels.

Heat exchanger

- □ Large cross counterflow heat exchanger made of plastic, heat recovery efficiency up to 90 %.
- Types "ET" are equipped with highly efficient enthalpy heat exchanger for additional moisture recovery.

Fans

Two low-noise high-performance centrifugal fans with energy-saving EC motors ensure the air supply and extraction.

Ducts

Installation-friendly connection of intake, exhaust, extract and supply air through ducts with NW 125 mm using duct connectors (RVBD 125 K, accessories).

■ Condensate connection

Condensate drain at the bottom; ball siphon included in delivery. On-site connection to drain pipe.

Air filter

Clean outdoor air supply via ISO Coarse 75% (G4) filter and 2nd filter stage via optional ISO ePM₁ 50% (F7) or activated carbon filter. Extract air side equipped with an ISO Coarse 75% (G4) filter in front of the heat exchanger.

Summer operation

Equipped with automatic bypass function and heat exchanger cover as standard.

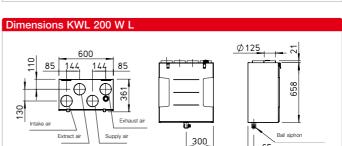
Heat exchanger anti-icing protection

The standard frost monitoring system automatically controls the supply air flow volume and the optionally installed electrical preheater (KWL-EVH 200 W, accessories).

Control system

EasyControls 3.0 is the new, modern control system for all KWL compact units from Helios. The standard LAN interface allows the simple integration of the KWL unit in a network and the integration in Helios Cloud. The unit is optionally controlled via an external control element, on PC/laptop, tablet and Smartphone via the integrated web browser or on the move via the Cloud. See page 104 for functionality. Helios easyControls 3.0 is prepared for:

- The control elements KWL-BE ECO and KWL-BE Touch (optional accessories)
- ☐ The humidity sensor integrated as standard and other optionally available external air quality sensors (KWL-CO2, -FTF,



300

 -VOC, accessories) enable automatic, demand-controlled ventilation.

Dimensions in mm

Dimensions KWL 200 W R

Connection to building control system via integrated Modbus interface or optional KNX module (KWL-KNX Connect, accessories).

Electrical connection

Fixed connection via a mains connection cable $3 \times 1.5 \text{ mm}^2$, approx. 2 m with wire end ferrules.

Accessories – Functional description (see right for details) KWL 200 W can be individually expanded with the following accessories:

□ Control element ECO

- Three ventilation profiles selectable via slide switch.
- Control voltage can be measured directly on the control element.
- Weekly timer (WSUP / WSUP-S, no. 09990 / 09577, accessories) can also be added to implement a further operating level, e.g. night mode.
- LED for visual indication of operating statuses, e.g. filter replacement and faults.

Control element Touch

Touch control element with graphic display and user-friendly menu navigation:

- Commissioning assistant.
- Selection of four ventilation profiles.
- Adjustment of an individual weekly programme.
- Adjustment of parameters for room sensors.
- Indication of e.g. filter replacement, operating statuses and error messages.
- Different access authorisations and child lock.

Other functions (see operating instructions).

☐ KNX/EIB module

For connecting the ventilation unit to the building control system via the KNX Connect module.

Room sensors

Room sensors, which measure the mixed gas, CO₂ concentration or relative room air humidity, are available for automatic operation and optimal air exchange.

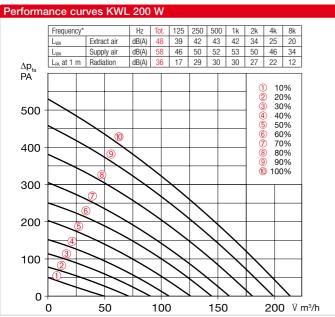
Post-heating

Helios easyControls 3.0 can be used with an electric post-heating element (EHR with KWL-LTK, accessories). The autonomous operation of the warm water heating element can be controlled via an air temperature control (WHS HE, accessories) independently from Helios easy-Controls 3.0.

■ References Page
Helios easyControls 3.0
The innovative KWL
control concept 104 f.

Moisture recovery
through enthalpy heat
exchangers 103





*Sound information relate to Vref, according to ERP data sheet.

Slide switch control element KWL BE ECO Ref. no. 20246 Three-step slide switch including operation indicator, for flush-mounted installation. Function see left. Dim. mm (W x H x D) 80 x 80 x 37 Casing for surface installation KWL APG Ref. no. 04270 Dim. mm (W x H x D) 83 x 83 x 41

Touch control element KWL BE Touch bl Ref. no. 20244 (black) KWL BE Touch wh Ref. no. 20245

(white) With graphic display, for flushmounted installation. Function see left. Connection of up to 6 pcs. possible (additional power supply unit may be required). Can be integrated in common switch ranges with the dim. mm (W x H x D) 55 x 55 x 35, Dim. with frame mm (W x H x D) 88 x 88 x 35

Casing for surface installation KWL APG Touch bl No. 40178 KWL APG Touch wh No. 40177 Dim mm (W x H x D) 85 x 85 x 25

Control line cable KWL-SL eC 5m Ref. no. 40179 **KWL-SL eC 10m** Ref. no. 40180



Control line cables in 5 or 10 meters,

suitable for KWL-BE ECO / Touch as

well as room sensor.

Technical data	With p	With plastic heat exchanger Type Ref. no.				With enthalpy heat exchanger Type Ref. no.				
Right-hand version Left-hand version	KWL 200 W R KWL 200 W L			40045 40046		KWL 200 W ET R KWL 200 W ET L				
Flow rate at level 1) 2) Supply air/extract air V m³/h	© 215	3 175	6 129	4 71	2 46	1 90	8 151	6 111	4 73	2 39
Power consumption fans 2xW 1)	40	26	16	8	5	40	26	16	8	5
Voltage/Frequency	1~, 230 V, 50 Hz									
Rated current A - ventilation		1.2								
preheating		4.4								
- max. total		1.2 (5.6 incl. preheater, accessories)								
Electric preheater kW		1.0 kW (accessories)								
Summer bypass		automatic (adjustable), with heat exchanger cover								
Wiring diagram no.		1433								
Temperature operating range		−20 °C to +40 °C								
Installation temperature	+5	+5 °C to $+40$ °C (90 % rel. humidity, non-condensing)								
Weight approx. kg		37					41			

1) At 0 Pa, performance levels adjustable. 2) Volume reduction by approx. 10% when using pollen filter

3) AK = Activated carbon filter

KNX/EIB module

KWL-KNX Connect No. 20253 For integrating the ventilation unit in a KNX system. For switch cabinet installation (1 space unit required).

Room sensors

KWL-CO2 eC Ref. no. 20248 KWL-FTF eC Ref. no. 20249 KWL-VOC eC Ref. no. 20247 For measuring the CO₂, mixed gas (VOC) concentration or relative room air humidity. Please note the maximum number of sensors. additional power supply unit may be required.

Dim. mm (W x H x D) 98 x 98 x 33

Electric preheater

KWL-EVH 200 W No. 04224 Electrical preheater for simple, plugin unit installation. For preheating the intake air at very low outdoor temperatures (heat exchanger anti-icing protection). Mandatory for passive houses. Output: 1000 W.

Extension module

KWL-EM eC Ref. no. 40155 For controlling external post-heating elements.

Dim. mm (WxHxD) 210x210x100

Motion detector

BWM Ref. no. 08323 Motion detector for detecting the presence of persons in the room. Surface-mounted wall installation (cable entry at top or bottom) or installation in flush-mounted box \emptyset 55 mm (cable entry at back).

Electric post-heating element For additional supply air heating. EHR-R 1.2/125 Ref. no. 09433 Rectangular duct temp. sensor KWL-LTK eC (1 pc. req.) No. 40156

Warm water post-heating element

For additional supply air heating. WHR 125 Ref. no. 09480 Rectangular duct temp. sensor KWL-LTK eC (2 pc. req.) No. 40156 Hydraulic unit

WHSH HE 24 V (0-10 V)No. 08318 Alternative:

Air temperature control WHST 300 T38 Ref. no. 08817

■ Replacement air filters

- 2 pcs. ISO Coarse 75% (G4) ELF-KWL 200/4/4 No. 00021 - 1 pc. ISO ePM₁ 50% (F7) No. 00038 ELF-KWL 200/7 - 1 pc. ISO ePM_{2.5} 60 % (AK)³⁾ ELF-KWL 200 AK No. 04198

Reference

Enthalpy heat exchanger (accessories) for retrofitting: KWL-ET 200

No. 00896











Circular duct connector Connector with seal for unit connection to circular duct system with Ø 125 mm.

RVBD 125 K No. 03414

Other accessories	Page						
KWL peripherals	150 ff.						
- Ground heat exchanger	174 ff.						
 Insulated duct system 	164 f.						
- Air distribution systems	166 ff.						
- Control lines, etc.	170 f.						
Heating element, control	486 ff.						
ventilation grilles, ducts,							
roof outlets	561 ff.						
extract air elements, design							
ventilation valves	574 ff.						