

Decentralised compact ventilation units with heat recovery for the supply and extract ventilation of individual rooms, such as classrooms, recreation rooms, offices, commercial units, medical practices and many more. Equipped with highly-efficient aluminium heat exchangers and energy-saving EC motors. Automatic shutters for intake and exhaust prevent cold draughts when the fans are deactivated. The flow-optimised supply air grille allows draught-free ventilation, even in large rooms, through the optimal use of the Coanda effect, Includes a touch control element for easy operation and configuration of unit functions.

#### Casing

Made of galvanised steel sheet, the casing parts are painted white/powder-coated. The double-walled unit casing is equipped with 40 mm thermal and sound insulation on all sides. Easy installation and maintenance due to large inspection panel.

#### Installation

Ceiling installation is carried out using the vibration-damping fastening elements included in the scope of delivery. Alternatively, combined wall-ceiling installation is possible with the wall bracket set (Ref. no. 40067).

#### Heat exchanger

Large aluminium cross counterflow heat exchanger with up to 90 % heat recovery efficiency. Dismantling is possible in a few steps. Note: From Q3/2023 also available with enthalpy heat exchanger

#### Fans

Two low-noise, high-performance EC fans with backward curved impellers for maximum energy efficiency.

## Sensor system

Integrated CO<sub>2</sub> sensor system. Alternatively, this can be replaced by an external sensor (VOC, CO<sub>2</sub> or humidity) positioned in the room. KWL Yoga can also be controlled with a motion sensor (combination not possible!) instead of the sensors.

## Air flow

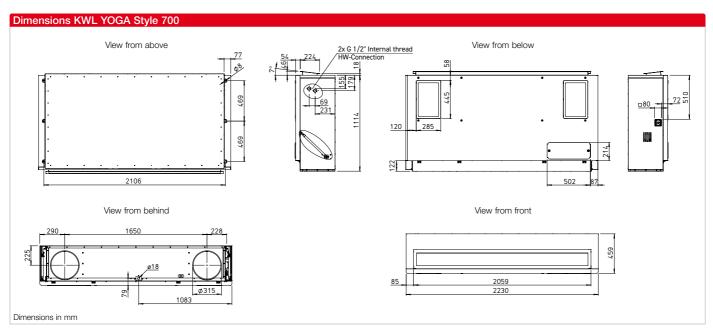
Supply air on front side, two extract air openings on the underside of the unit. Intake and exhaust air connectors are equipped with spring-loaded shutters.

## Condensate connection

Condensate connection horizontal (wall side), optionally via ball siphon in surface-mounted or flush-mounted design or via condensate pump.

	Without electrical preheater/ without electrical after-heater	Without electrical preheater/ with electrical after-heater	Without electrical preheater/ with warm water after-heater	With electrical preheater/ without after-heater	With electrical preheater/with electrical after-heater	
	KWL YOGA Style 700 Ref. no. 40020	KWL YOGA Style 700 EN Ref. no. 40022	KWL YOGA Style 700 WW Ref. no. 40024	KWL YOGA Style 700 EV Ref. no. 40026	KWL YOGA Style 700 EV/EN Ref. no. 40028	
Intake/exhaust air connector diameter	315	315	315	315	315	
Air volume V m <sup>3</sup> /h (Min Max.)	340 - 870	340 - 870	340 - 870	340 - 870	340 - 870	
Radiation $L_{PA}$ dB(A) in 1 m / 3 m (at 0 Pa) - 340 m <sup>3</sup> /h - 500 m <sup>3</sup> /h - 700 m <sup>3</sup> /h - 870 m <sup>3</sup> /h	23 / 17 28 / 22 33 / 27 35 / 29	23 / 17 28 / 22 33 / 27 35 / 29	23 / 17 28 / 22 33 / 27 35 / 29	23 / 17 28 / 22 33 / 27 35 / 29	23 / 17 28 / 22 33 / 27 35 / 29	
Maximum power consumption W – fans – el. preheater / after-heater – total (incl. control)	2 x 170 / 350	2 x 170 /2000 2350	2 x 170 / 350	2 x 170 2000 / 2350	2 x 170 2000 / 2000 4350	
Rated current A  – fans  – el. preheater / after-heater  – total (incl. control)	2 x 1.20 / 2.45	2 x 1.20 / 8.7 11.15	2 x 1.20 / 2.45	2 x 1.20 8.7 / 11.15	2 x 1.20 8.7 / 8.7 19.85	
Voltage / frequency	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	3~, 400 V, 50 Hz	
Protection category IP	20	20	20	20	20	
Temperature operating range °C	-10 to +40	-10 to +40	-10 to +40	-20 to +40	-20 to +40	
Installation temperature °C	+5 to +40	+5 to +40	+5 to +40	+5 to +40	+5 to +40	
Weight approx. kg	200	202	202	202	204	
Wiring diagram no.	1500	1500	1500	1500	1500	





#### Air filter, VDI-certified

Clean intake air flow via ISO  $ePM_1$  60% filter (F7). Two filters for extract air: ISO Coarse 60% (G4); optionally available: ISO  $ePM_{10}$  60% (M5).

#### Summer operation

Equipped with automatic bypass function (bypassing the heat exchanger to use the cool night air for controlling the room temperature) as standard.

# Heat exchanger frost protection

The standard frost monitoring automatically regulates the supply air flow and the built-in electrical preheater, depending on the selected equipment.

With electrical preheater/ with warm water after-heater
KWL YOGA Style 700 EV/WW Ref. no. 40030
315
340 - 870
23 / 17 28 / 22 33 / 27 35 / 29
2 x 170 2000 / 2350
2 x 1.20 8.7 / 11.15
1~, 230 V, 50 Hz
20
-20 to +40
+5 to +40
204
1500

## After-heater

Unit variants with integrated postheating (warm water or electrical after-heater) ensure the comfortable and energy-efficient post-heating of supply air. The target supply air temperature is set on the control element. The use of hydraulic unit type WHSH HE 24 V (0-10V), (accessories) is recommended for controlling the warm water heating element.

## Power control

The included comfort control element with touch functionality and easy menu navigation provide the following functions:

- Demand-oriented ventilation, optionally with CO<sub>2</sub>, VOC, or humidity sensor (1 sensor can be connected).
- Initial commissioning (automatic determination of system characteristic curve).
- ☐ Fire alarm contact connection.
- Weekly or daily programme.
- Automatic bypass (summer operation: use of cool night air).
- Pressure monitoring of filter contamination.
- Displays required filter replacement.
- □ 5 password-protected function levels can be configured.
- Control via central building control system possible (ModBus RTU and ModBus TCP, BACnet)
- ☐ Including control line cable (10 m)

#### Electrical connection

After removing the left side panel, the connection box is easily accessible on the outside of the casing. The isolator/main switch is located on the outside of the unit for easy maintenance. It can be locked using a padlock to prevent unauthorised access.

### Sensors

**Infrared motion sensor** for detecting the presence of people in the room.

**BWM** Ref. no. 08323 **CO<sub>2</sub> sensor** for measuring the CO<sub>2</sub> concentration.

AIR1/KWL-VOC 0-10V No. 20250 VOC sensor for measuring the mixed gas concentration (VOC).
AIR1/KWL-CO2 0-10V No. 20251 Humidity-temperature sensor for measuring the relative air humidity.

**AIR1/KWL-FTF 0-10V** No. 20252

## 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 for sensors.

#### Installation accessories

## Flush-mounted/wall-mounted siphon

KWL-KS WE Ref. no. 40064 Ball-tube siphon

KWL-KS Ref. no. 40065 Condensate submersible pump KWL-KP-I Ref. no. 40472

Wall bracket console set for combined wall-ceiling installation.

KWL YOGA-WH Ref. no. 40067

Hydraulic unit WHSH HE 24V (0-10V) No. 08318 Facade grille, circular

**FGR 315** Ref. no. 40182

## Filter, VDI-certified

Spare air filter (extract air)\*
ISO Coarse 60% (G4). Unit = 1 pc.
ELF-KWL YOGA 700/VDI/Coarse 60%
Ref. no. 40688

Spare air filter (extract air)\* ISO ePM<sub>10</sub> 60% (M5). Unit = 1 pc. ELF-KWL Y0GA 700/VDI/ePM10 60% Ref. no. 40691

Spare air filter (intake air)
ISO ePM<sub>1</sub> 60% (F7). Unit = 1 pc.
ELF-KWL Y0GA 700/VDI/ePM1 60%
Ref. no. 40694

\*2 extract air filters are required per unit.

Attention: For spare air filters of older unit generations (orders before March 2023): Please contact us at export@heliosventilatoren.de

#### Important note

Further information on accessories can be found on page 148.