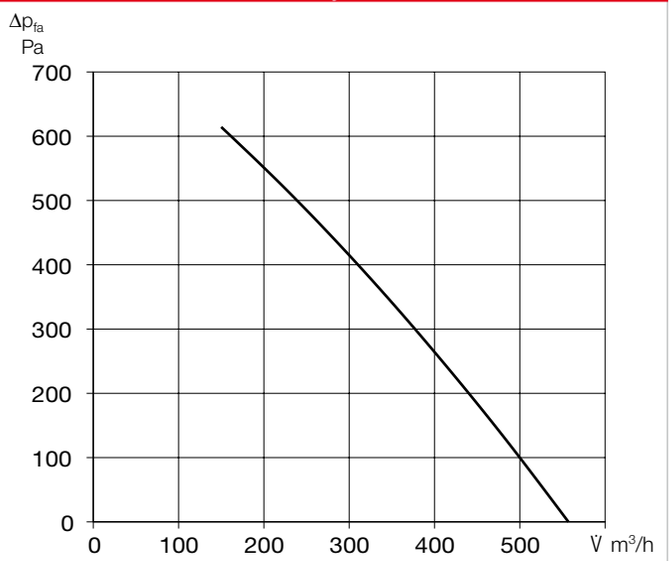
KWL YOGA Style 400



Performance curve KWL YOGA Style 400



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.

Heat exchanger
Large aluminium cross counterflow heat exchanger with up to 90 % heat recovery efficiency. Dismantling is possible in a few steps. Types "ET" are equipped with highly efficient enthalpy heat exchanger for additional humidity recovery of up to 50 %.

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

Sensor system
Integrated CO_2 sensor system. Alternatively, this can be replaced by an external sensor (VOC, CO_2 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.

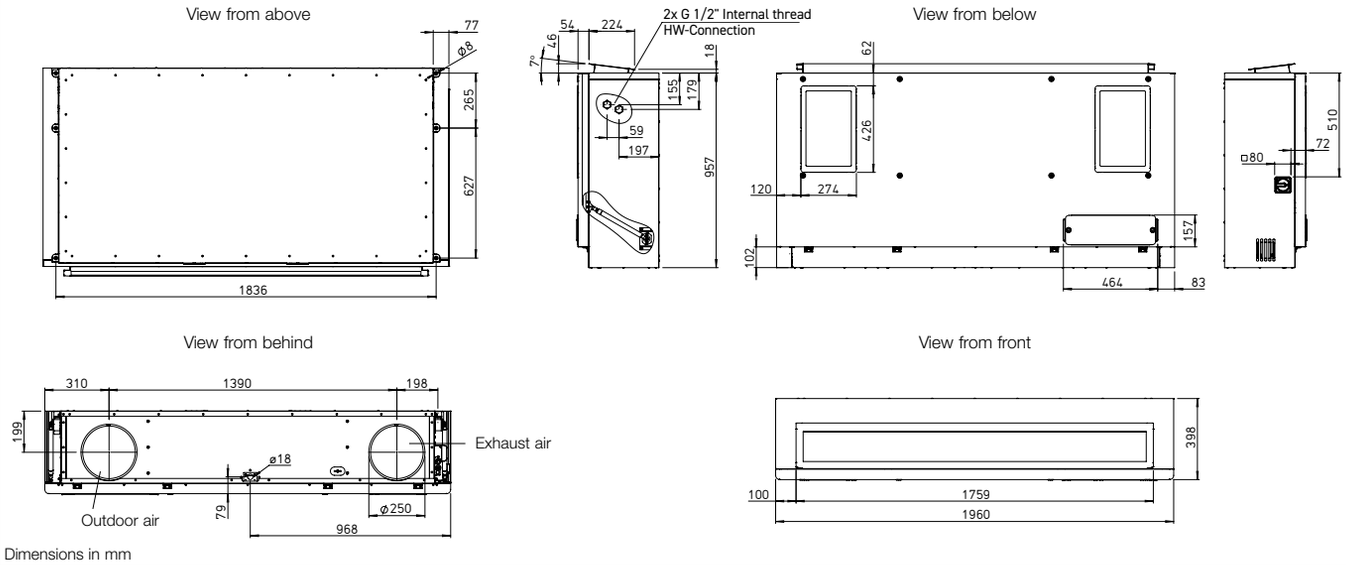
Condensate connection
Condensate connection horizontal (wall side), optionally via ball siphon in surface-mounted or flush-mounted design or via condensate pump.

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.

	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 400 Ref. no. 40008 **KWL YOGA Style 400 ET** Ref. no. 40667	**KWL YOGA Style 400 EN** Ref. no. 40010 **KWL YOGA Style 400 EN ET** Ref. no. 40668	**KWL YOGA Style 400 WW** Ref. no. 40012 **KWL YOGA Style 400 WW ET** Ref. no. 40669	**KWL YOGA Style 400 EV** Ref. no. 40014 **KWL YOGA Style 400 EV ET** Ref. no. 40670	**KWL YOGA Style 400 EV/EN** Ref. no. 40016 **KWL YOGA Style 400 EV/EN ET** Ref. no. 40671	
Intake/exhaust air connector diameter	250	250	250	250	250	
Air volume V m³/h (Min. - Max.)	200 - 600	200 - 600	200 - 600	200 - 600	200 - 600	
Radiation L_{PA} dB(A) in 1 m / 3 m (at 0 Pa)						
– 150 m³/h	26 / 20	26 / 20	26 / 20	26 / 20	26 / 20	
– 200 m³/h	28 / 22	28 / 22	28 / 22	28 / 22	28 / 22	
– 300 m³/h	31 / 25	31 / 25	31 / 25	31 / 25	31 / 25	
– 560 m³/h	38 / 32	38 / 32	38 / 32	38 / 32	38 / 32	
Maximum power consumption total (incl. control) W	350	1850	350	1850	3350	
Rated current total (incl. control) A	2.45	9.0	2.45	9.0	15.51	
Voltage / frequency	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	1~, 230 V, 50 Hz	1~, 230 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	167	169	169	169	171	
Wiring diagram no.	1500	1500	1500	1500	1500	

Dimensions KWL YOGA Style 400



Dimensions in mm

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.

After-heater

Unit variants with integrated post-heating (warm water or electrical after-heater) allow for convenient post-heating of the 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.

	With electrical preheater/ with warm water after-heater
	KWL YOGA Style 400 EV/WW Ref. no. 40018 **KWL YOGA Style 400 EV/WW ET** Ref. no. 40672
	250
	200 - 600
	26 / 20 28 / 22 31 / 25 38 / 32
	1850
	9.0
	1~, 230 V, 50 Hz
	20
	-20 to+40
	+5 to+40
	171
	1500

Power control

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

- ▢ Demand-oriented ventilation, optionally with CO_2, 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_2 sensor for measuring the CO_2 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
ALB EC-SK 20 20m No. 06816
ALB EC-SK 40 40m No. 06817
8-pin AWG24 twisted pair cable for the control element.

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

Hydraulic unit
WHSH HE 24V (0-10V) No. 08318

Facade grille, circular
FGR 250 Ref. no. 40181

Filter, VDI-certified

Spare air filter (extract air)*
ISO Coarse 60 % (G4). Unit = 1 pc.
ELF-KWL YOGA 400/VDI/Coarse 60% Ref. no. 40687

Spare air filter (extract air)*
ISO ePM_{10} 60 % (M5). Unit = 1 pc.
ELF-KWL YOGA 400/VDI/ePM10 60% Ref. no. 40690

Spare air filter (intake air)
ISO ePM_1 60 % (F7). Unit = 1 pc.
ELF-KWL YOGA 400/VDI/ePM1 60% Ref. no. 40693

*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 158.