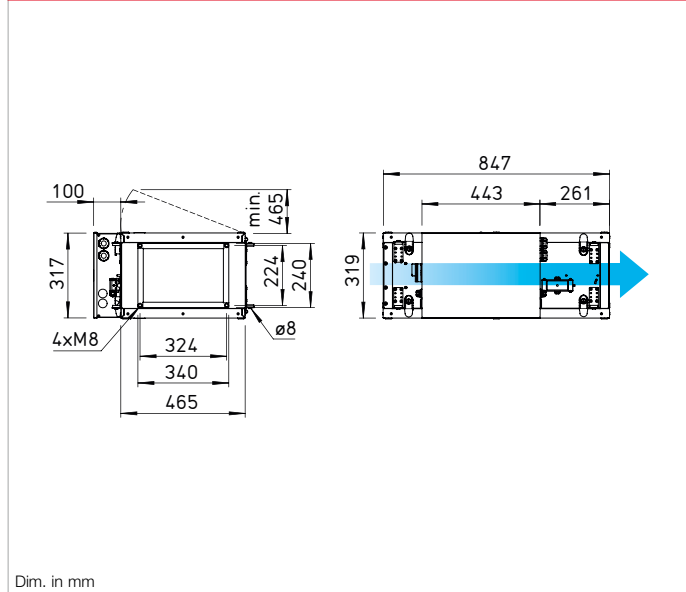


ALB EC 30/20 EH



Dimensions ALB EC 30/20 EH



Dim. in mm

Application /Function
Pleasant indoor climate through the addition of external fresh air which is filtered and automatically heated to the specified temperature.

Operational unit for connection to rectangular duct systems. Suitable for a wide range of commercial applications.

Description/Scope of delivery
The air filter, fan and electric heating element are integrated in a compact flat casing which is thermally and acoustically insulated. The unit is delivered ready for connection and includes an external control unit for controlling the unit, as well as a connection cable (10 metres). Air quality, humidity and temperature sensors (see Accessories) can be connected to the electronics in the terminal box to control the specified setpoints.

Casing
Robust construction made of coated steel sheet, double-walled with 30 mm thick mineral wool lining. The cover is easy to open with screw caps and hinge for cleaning purposes. Rectangular duct connectors on inlet and outlet side, adapted to standard rectangular duct dimensions. No thermal bridges, smooth surface for easy cleaning.

Filter
The large filter for long cleaning intervals is freely accessible by opening the casing cover. Standard version ISO Coarse 90% (G4). Alternatively, filters with higher classifications ISO ePM₁₀ 70% (M5) or ISO ePM₁ 50% (F7) (see accessories) can be used. The volume output reduction must be taken into account. Periodic filter inspection /cleaning is required. A filter monitoring system is integrated. The requirements of VDI 6022 are fulfilled through the integration of a ISO ePM₁ 50% filter.

Fan
The volume flow rate switching is continuously variable with the control unit. Low-noise and high performance centrifugal fan made of galvanised steel sheet. Motor/impeller unit freely accessible for servicing. Drive through energy-saving, speed-controllable EC motor with the highest level of efficiency. Maintenance-free, with lifetime lubricated ball bearings.

Heating element
The electric heating element made of stainless steel with low surface temperature heats the intake air to the specified setpoint temperature. Control via the integrated control board.

The setpoint and the temperature measured by the room sensor (accessories) are constantly compared. The electric heating element is equipped with an automatic safety temperature limiter (+ 50 °C) and a manually resettable safety temperature limiter (+ 115 °C).

Electrical connection
Spacious terminal box in IP20 on outside of casing

Motor protection
Deactivation when overheating is imminent. Automatic reactivation after cool down.

Noise
The type table shows the radiated noise and outlet side air noise as sound pressure at 1 m (free field conditions). If necessary, a cross talk silencer (see Accessories) must be integrated in the duct system on site. The radiated noise as sound pressure level at 1 m (free field conditions) is additionally stated in the type table as well as in the table below the performance curve.

Control
The control element is included in the delivery and offers the following functions:

- Operation with different volume flows.
- Weekly and seasonal timer.
- Temperature control (using room sensor, accessories).
- Control of an EC extract air fan.
- Display of ambient temperature, fan control and filter contamination.

Other inputs and outputs:

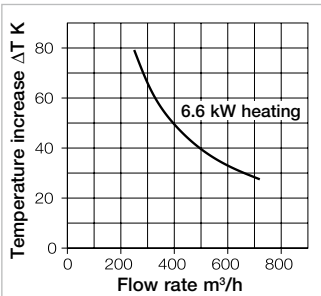
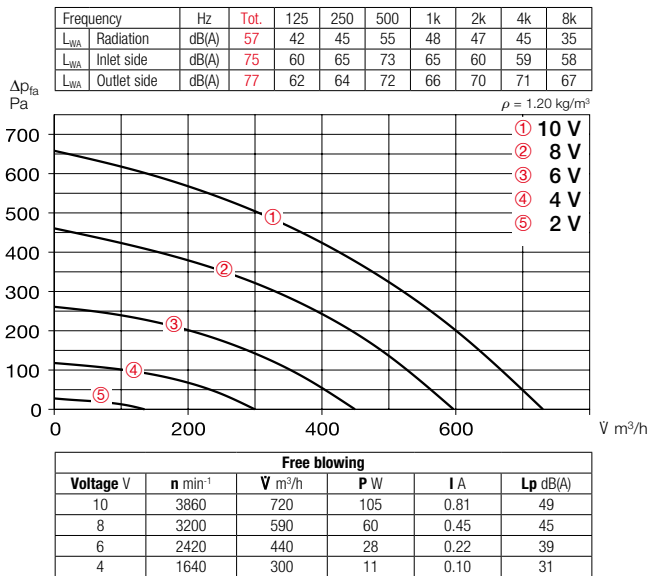
- Emergency switch contact.
- Boost switch contact.
- External switch.
- Input for air quality or humidity sensor.
- Input for room temperature sensor.
- Output for shutter control.



Type	Ref. no.	Flow rate* free blowing V m³/h (max.)	Max. speed min-1	Sound pressure level		Voltage 50/60 Hz Volt	Power consump.		Current consump. max. tot. A	Wiring diagram No.	Maximum intake temp. +°C	Weight net aprx. kg
				Case-radiation dB(A) at 1m	Air noise outlet side dB(A) at 1m		Motor kW	Heating kW				
ALB EC 30/20 EH	06538	720	3900	49	69	230, 1~	0.12	6.60	10.4	1371	40	36

* Volume reduction by approx. 5% when using the filter ISO ePM₁₀ 50% (M5), by approx. 15% when using the filter ISO ePM₁ 50% (F7).

Performance curves ALB EC 30/20 EH



Reference

The integration of air filters ELF-ALB 30/20 F7 (ISO ePM₁, 50% (F7)) in intake air systems fulfils the requirements of VDI 6022.

Reference	Page
Planning information	10 ff.

Other accessories	Page
Silencers	486 ff.
Flexible ventilation ducts, ventilation grilles, fittings, shutters,	
Supply air disc valves	576 f.

Accessories

Replacement and pollen filter
– ISO Coarse 90% (G4)
ELF-ALB 30/20 G4 No. 07284
– Filter class ISO ePM₁₀ 70% (M5)
ELF-ALB 30/20 M5 No. 07285
– Filter class ISO ePM₁ 50% (F7)
ELF-ALB 30/20 F7 No. 07319
Large cassette filter for long cleaning intervals. Unit = 3 pcs.



Room sensor – Air quality
AIR1/KWL-CO2 0-10V No. 20251
AIR1/KWL-FTF 0-10V No. 20252
For measuring the CO₂ concentration or relative room humidity. Maximum total of one sensor can be connected.
Dim. mm (W x H x D) 85 x 85 x 27



Room sensor – Temperature
TFR-ALB/KWL Ref. no. 07277
For measuring the room temperature and controlling the ventilation unit according to the setpoint.
Incl. 20 m control line.
Dim. mm (W x H x D) 80 x 80 x 25



Connection cable – 20 metres long
ALB EC-SK 20 Ref. no. 06816

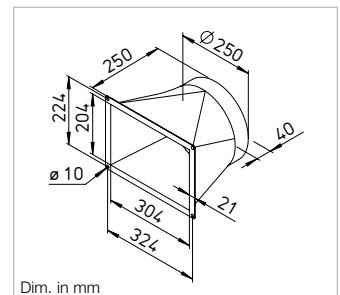
– 40 metres long
ALB EC-SK 40 Ref. no. 06817
Attach between ALB and control element as well as between ALB and TFR-ALB/KWL.



Transition piece – Symmetrical
KWL-ÜS 700 D Ref. no. 04206
From unit flange to round duct systems.

Flexible connecting sleeve
FM 250 Ref. no. 01672
For acoustic decoupling, incl. 2 pcs. hose clamps.

Angle flange ring
FR 250 Ref. no. 01203
Made of galvanised steel sheet, for duct connection.



Duct shutter, motorised
RVM 250 Ref. no. 02576
Prevents cold draughts when the unit is at a standstill. Automatic function through fan operation, with mounted spring return motor. Installation in any position, closing force adjustable corresponding to fan power and installation position.



EC box fans