

# ALB EC 250 EH



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 round duct systems. Suitable for a wide range of applications.

### Description / Scope of delivery The air filter, fan, heater with controller and electrical terminal box are integrated in a compact flat casing which is thermally and acoustically insulated. Equipped as standard with a continuously variable, electronic heating controller and 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 galvanised steel sheet, 50 mm thick mineral wool lining on all sides, which is also covered with dirt-repellent glass fabric. The cover is easy to open with screw caps and hinge for cleaning purposes. Round duct connectors on inlet side and outlet side with sealing lips, adapted to standard duct Ø. 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 ePM<sub>2.5</sub> 60% (M5). Alternatively, filters with higher classifications ISO ePM<sub>1</sub> 50% (F7) (see accessories) can be used. The volume output reduction must be taken into account. Periodic filter inspection / cleaning is required. Equipment with automatic monitoring DDS (see Accessories) is recommended.

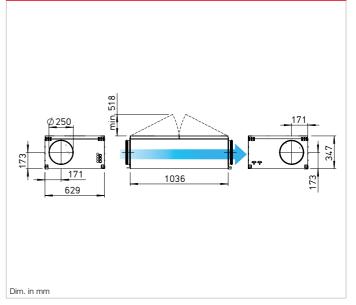
## 📕 Fan

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. Maintenancefree, with lifetime lubricated ball bearings.

#### Heating element

Enclosed sheathed heating elements made of stainless steel with low surface temperature heat the intake air to the specified setpoint temperature. The electronic pulser continuously variably controls the heat output in constant comparison between the setpoint and the temperature measured by the room or duct sensor.

# Dimensions ALB EC 250 EH



#### Turn-off delay

The unit has a fixed turn-off delay time of approx. 2 minutes if the heating element has been activated.

# Electrical connection

Spacious terminal box inside the casing. Cable entry from the front of the unit through three cable glands and another four holes are provided.

#### Motor protection

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

# Noise

The total level and range for the case-radiated sound power and outlet side sound power in dB(A) are specified above the performance diagram. In addition, 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 electronic heating controller. Specification of min./
- max. temperature. Control of an EC extract air fan.
- Display of ambient temperature, outdoor temperature, supply air temperature, fan control and filter contamination (using differential pressure switch, accessories).

### Other inputs and outputs:

- Emergency switch contact.
- Boost switch contact.Input for air quality or humidity
- sensor.
- Input for room temperature sensor.



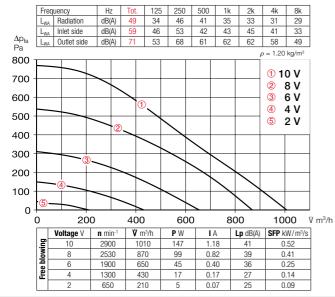
Control element with connection cable (10 m) included in delivery. For flush-mounted installation. Dimensions mm (W x H) 82 x 82

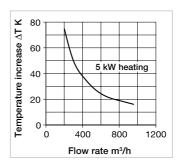
Туре	Ref. no.	Flow rate* free blowing	Max. speed	Freq.	Sound pressure level		Prot.	Voltage	Power con-	Current	Wiring	Max.	Weight
					Case- radiation	Air noise outlet side	category		sumption	consump. max. tot.	diagram	intake temp.	net aprx.
		V m³/h (max.)	min-1	Hz	dB(A) at 1m	dB(A) at 1m		Volt	kW	А	No.	+°C	kg
ALB EC 250 EH	06818	1010	2810	50/60	41	63	IP44	400, 3N~	5.15	13.73	SS-1309	40	36

\* Volume reduction by approx. 15% when using the filter ISO ePM1 50% (F7)



# Performance curves ALB EC 250 EH





# Reference

The integration of air filters ELF-ALB 125 F7 (ISO ePM<sub>1</sub> 50%) and differential pressure switches DDS (accessories) in outdoor installation fulfils the requirements of VDI 6022.

# ReferencePagePlanning information14 ff.

Other accessories	Page		
Silencers	494 ff.		
Flexible ventilation ducts,			
ventilation grilles, fittings,			
shutters,			
Supply air disc valves	584 f.		

### Accessories

Replacement and pollen filter Large cassette filter for long cleaning intervals. Unit = 3 pcs.

 Filter class ISO ePM<sub>2.5</sub> 60% (M5)

 ELF-ALB 250 M5
 No. 07294

 - Filter class ISO ePM<sub>1</sub> 50% (F7)

 ELF-ALB 250 F7
 No. 07305

## Room sensor – Temperature

TFR-ALBRef. no. 40000Room temperature sensor for sur-<br/>face installation.0 - 30 °CTemperature range0 - 30 °CProtection categoryIP20Dim. mmW 87 x H 87 x D 30Weight approx.0.05 kg

# Surface-mounted casing incl.

frameALB-APGRef. no. 00134Casing for surface-mounting of<br/>control element.Protection categoryIP20Dim. mmW 85 x H 85 x D 48

## External wall cover grille

**G 250** Ref. no. 00256 Made of plastic, white. For covering and insertion in round ventilation openings.













# Differential pressure switch

DDS Ref. no. 00445 Adjustable normally closed / normally open contact for monitoring drops in pressure.

Flexible cross talk silencerFSD 250Ref. no. 00680For structure-borne noise-free<br/>connection of fan and piping and<br/>for suspension (1 set = 2 pcs).

# Pipe clamp connectors

**BM 250** Ref. no. 05079 For structure-borne noise-free connection of fan and piping and for suspension (1 set = 2 pcs).

# Duct shutter

**RSK 250** Ref. no. 05673 Automatic, casing made from galvanized steel.

## Automatic duct shutter

**RVS 250** Ref. no. 02592 With spring return, can be installed horizontally in any direction, vertically with throughflow from bottom to top. Shutter opening in flow direction; automatic function through fan operation.

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