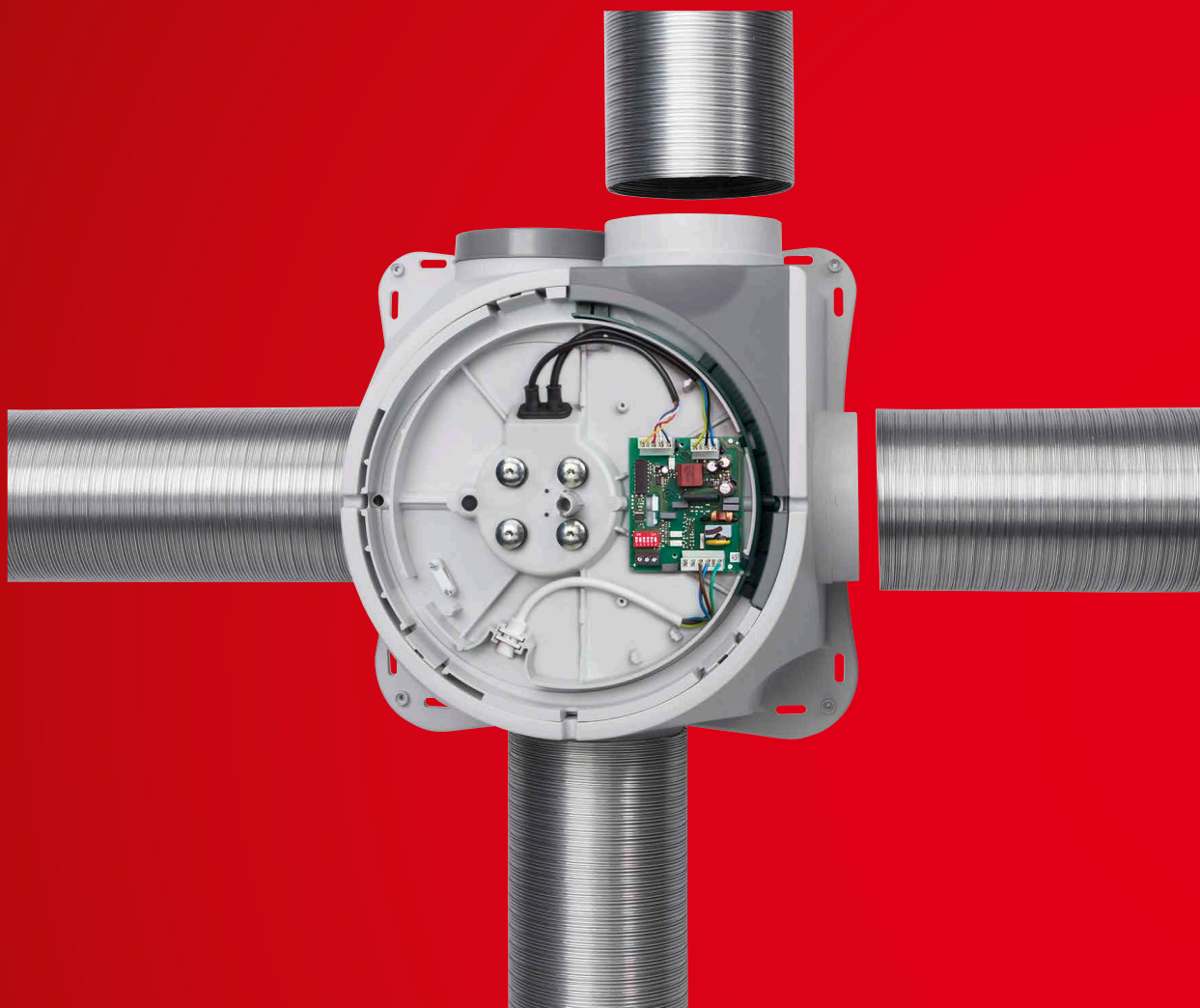


Compact central extract ventilation systems.

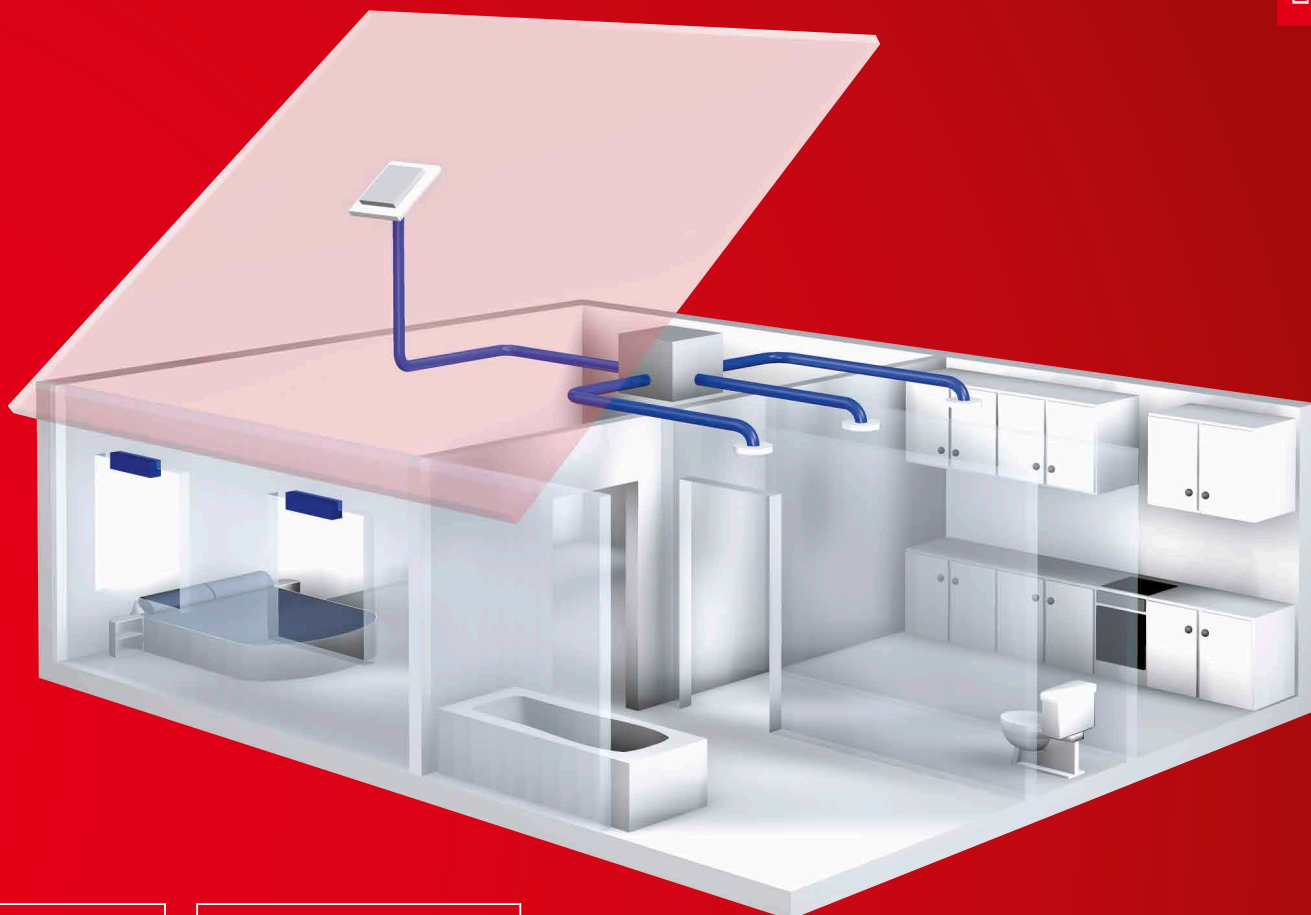


The energy-saving box with powerful performance. Ideal in low-energy houses or apartments.

Passive houses and low-energy houses set the standard for the watertightness and insulation of building envelopes. Compliance with requirements must be verified in a specific check upon formal acceptance of the building. In order to comply with the German Energy Saving Ordinance (EnEV), ventilation units must be used with maximum

efficiency in full-load mode and control mode. The removal of humidity, odours and pollutants as well as the draught-free, controlled introduction of fresh intake air are prerequisites for a pleasant indoor climate and maintaining a structurally-sound building.

The ZEB system achieves this perfectly, whether in a single-family house, in the floor-by-floor extract ventilation of residential units via a shared central shaft (DIN 18017-3) or in the commercial sector.



■ Extract air

ZEB positioned below the roof or in a secondary room as an extract air box. Operation is manual or automatic. The extract air is removed from rooms with contaminated air such as kitchens, bathrooms and WCs. Innovative extract air elements allow a constant or demand-oriented volume flow, adjusted to individual user requirements or room requirements.

88^f

■ Intake air / Exhaust air

Finely dosed quantities of intake air flow in via pressure differential-controlled intake air elements, which must be placed in the walls or windows of living rooms and bedrooms. Overflow elements ensure the air circulation within the room unit. The exhaust air is discharged to the outside via a roof outlet or wall outlet.

90^f

ZEB 380



Compact ventilation box with four connectors for the attachment of extract air pipes. For versatile use in residential, commercial and industrial locations.

■ Application

- As a central extract air unit for multiple rooms or areas.
- For domestic ventilation according to DIN 18017. Ventilates e.g. kitchen, bathroom, WC in multiple residential units with a central main pipeline in platform-framed buildings. For the ventilation of multiple rooms (e.g. living room, kitchen, bathroom, WC) in one residential unit. Simple installation (in any position) in storage rooms or below the roof.
- For the commercial and industrial ventilation of wet rooms, toilet facilities, extraction of vapours in the workplace, etc.

■ Casing

- Robust casing made of impact-resistant plastic, light grey.
- The three inlet connectors and the outlet connector are designed for pipes NW 100 and 125 mm. One inlet connector is designed for pipes NW 100, 125 and 160 mm.

■ Impeller

Low-noise centrifugal impeller made of steel in an aerodynamically optimised spiral. Inlet via nozzle.

■ Motor

- Enclosed, ball bearing mounted external rotor motor in IP44, with humidity protection, insulation class B, for continuous operation, maintenance-free and radio interference-free.
- Motor/impeller unit can be removed with one hand for cleaning and servicing.

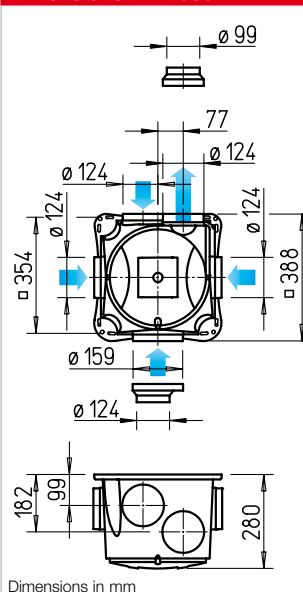
■ Motor protection

Motor protection through integrated thermal contacts, with the winding connected in series, automatic deactivation and re-activation after cooling.

■ Electrical connection

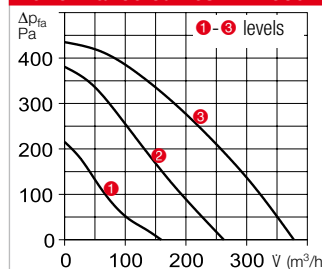
- Service-friendly and connection-friendly. Supplied ready for use with cable and wired terminal box.
- NYM-J 5 x 1,5 mm² required for three level operation.

Dimensions ZEB 380



Dimensions in mm

Performance curves ZEB 380



■ Power control

Variable power adjustment with three speeds using operating switch (accessories).

■ Installation

No restrictions in any position. Preferably away from the room to be ventilated for less noise.

■ Duct system

For example, rigid spiral ducts, flexible aluminium ducts or even plastic ducts can be used. However, the fire protection regulations must be observed for crossing fire sections.

■ Accessories	Page
Overview	90 f.
■ Accessory details	Page
Flexible ventilation ducts, roof outlets, shutters and ventilation grilles	561 ff.
Extract air elements	574 ff.
Intake air elements	586 ff.
Fire protection elements for use in multi-fl. const.	590 ff.
Control and regul. units	599 ff.

■ Accessories

Three level speed and operating switch with 0 position.

Convenient flush-mounted speed switch. Room light not switchable in parallel. Installation in flush-mounted switch box.

Dim. mm (WxHxD) 80 x 80 x 23
DSEL 3 Ref. no. 01611

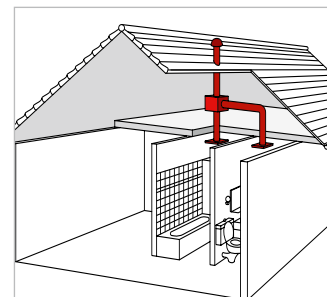


Fig. DSEL 3

Weekly timer

Digital timer with LCD display for autom. control of operating mode, can be programmed for every day of the week. For surface and flush-mounted installation.

Dim. mm (WxHxD) 84 x 84 x 40
WSUP Ref. no. 09990

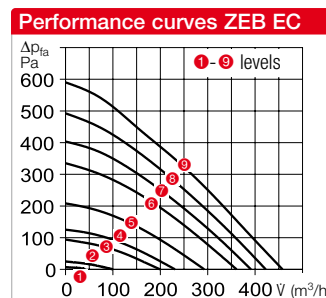
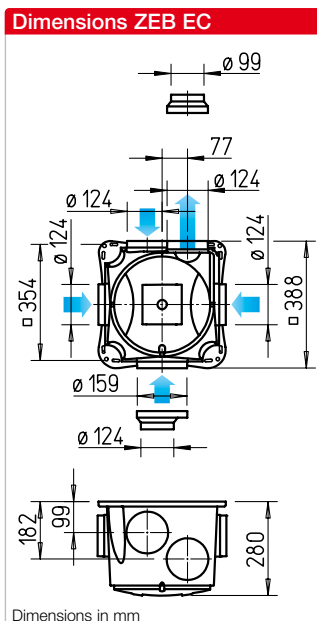
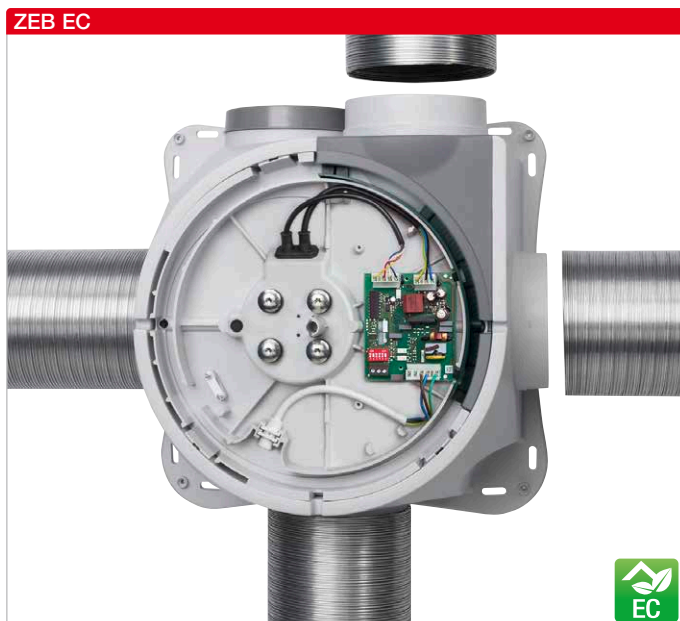
For switch cabinet installation (2 space units required).
Dim. mm (WxHxD) 36 x 90 x 63
WSUP-S Ref. no. 09577



Fig. WSUP

Type	ZEB 380
Ref. no.	01456
Flow rate free blowing m ³ /h*	380 / 260 / 160
Speed min ⁻¹ approx.	max. 2730
Voltage / Frequency	230 V~, 50 Hz
Power consumption max. W*	67 / 38 / 20
Rated current max. A*	0.28 / 0.23 / 0.17
Sound pressure level, case-radiated noise at 4 m*	33 / 26 / 19
L _{WA} inlet side dB(A)*	62 / 57 / 45
L _{WA} outlet side dB(A)*	69 / 63 / 52
Wiring diagram no.	908
Max. permissible temperature °C	+ 40
Weight approx. kg	5.9

* Values refer to the three performance levels (see performance diagram).



ZEB with EC technology – when equipped with a DC motor, the EC variant of the ZEB becomes the “energy-saving ventilation box”, which is ideal for use in low-energy houses. Brushless DC motors operate with extremely low losses and also with higher efficiency than conventional motors, even in control mode. This results in compelling advantages:

- ☐ Short amortisation period due to high energy saving.
- ☐ Simple and convenient speed control at nine possible power levels.

■ Application

- ☐ For controlled domestic ventilation according to DIN 18017-3 and DIN 1946-6.
- ☐ Ideal in low-energy houses.
- ☐ For ventilation via a shared main pipeline in single-family houses as well as apartments and multi-floor residential units.

■ Casing

- ☐ Robust casing made of impact-resistant plastic, light grey.
- ☐ The three inlet connectors and the outlet connector are designed for pipes NW 100 and 125 mm. One inlet connector is designed for pipes NW 100, 125 and 160 mm.

■ Impeller

Low-noise centrifugal impeller made of steel in an aerodynamically optimised spiral. Inlet via nozzle.

■ Motor

- ☐ DC motor, electronically commutated, with high efficiency, even in control mode. Ball bearing mounted external rotor motor in IP44 continuous operation, maintenance-free and radio interference-free.
- ☐ Motor/impeller unit can be removed with one hand for cleaning and servicing.

■ Motor protection

Motor protection through integrated thermal element which monitors the winding temp. together with the electronics.

■ Electrical connection

- ☐ Service-friendly and connection-friendly. Supplied ready for use with wired terminal box.
- ☐ Direct connection to 230 V mains power.
- ☐ NYM-J 5 x 1,5 mm² required for three level operation.

■ Power control

Fan operation in three levels using operating switch (accessories).

series). 9 speeds are available for individual power adjustment due to the DIP switch in the drive electronics.

■ Installation

No restrictions in any position. Preferably away from the room to be ventilated for less noise.

■ Accessories

Three level speed and operating switch with 0 position.

Convenient flush-mounted speed switch. Room light not switchable in parallel. Installation in flush-mounted switch box (depth min. 55 mm).

Dim. mm (WxHxD) 80 x 80 x 23
DSZ Ref. no. 01598

Weekly timer

Digital timer with LCD display for autom. control of operating mode, can be programmed for every day of the week. For surface and flush-mounted installation.

Dim. mm (WxHxD) 84 x 84 x 40
WSUP Ref. no. 09990

For switch cabinet installation (2 space units required).

Dim. mm (WxHxD) 36 x 90 x 63
WSUP-S Ref. no. 09577

Electronic control system

For continuously variable control or regulation of single phase and three-phase EC fans.

Dim. mm (WxHxD) 223 x 200 x 131
EUR EC Ref. no. 01347

Three level switch 10 V / 0–10 V

For three level control of EC fans or frequency converters, with a 0–10 V DC control input. For surface and flush-mounted installation.

Dim. mm (WxH) 80 x 80
SU-3 10/SA-3 10 no. 04266/04267

■ Duct system

For example, rigid spiral ducts, flexible aluminium ducts or even plastic ducts can be used. However, the fire protection regulations must be observed for crossing fire sections.

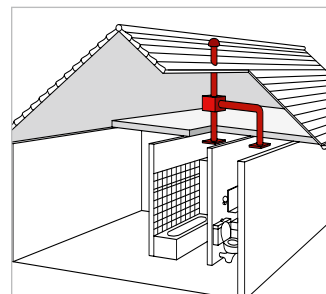


Fig. DSZ 3



Fig. WSUP

Type	ZEB EC
Ref. no.	01457
Flow rate free blowing m ³ /h*	460/430/400/360/300/230/200/100/40
Speed min ⁻¹ approx.	max. 3200
Voltage / Frequency	230 V~, 50 Hz
Power consumption max. W*	69/55/44/34/19/11/8/3/2
Rated current max. A*	0.58/0.47/0.38/0.30/0.18/0.10/0.08/0.04/0.04
Sound pressure level, case-radiated noise at 4 m*	37/36/34/32/27/21/< 20/< 20/< 20
L _{WA} inlet side dB(A)*	65/63/62/61/57/53/47/37/34
L _{WA} outlet side dB(A)*	74/72/70/68/62/57/54/39/26
Wiring diagram no.	1115
Max. permissible temperature °C	+ 40
Weight approx. kg	5.9

* Values refer to the three performance levels (see performance diagram).

■ Extract air elements



Ready-to-install extract air elements with mounting ring made of plastic.

For insertion in ducts with ND 125. With demand-controlled and basic ventilation level, electric, humidity, motion and time-controlled for use according to the adjacent table. Types AE and AE GB come with self-regulating constant volume flow control. Humidity-controlled types AE Hygro or type AE FV with filter and volume adjustment are preferable in kitchens and bathrooms.

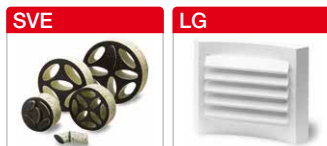
Attachment filter element VFE

For installation in front of AE in case of greasy, contaminated room air. Details on product page.

□ Extract air (alternative to AE)



Automatic volume flow stabiliser for insertion in ventilation ducts and pipe fittings. Realises the rated output in the differential pressure range from approx. 50–250 Pa.



Sound insulation elements for simple sound insulation and volume control through duct insertion. Also for pressure control.

Ventilation grilles and disc valve, especially for living spaces.

■ Intake air elements

□ Installation in wall openings



Universally applicable automatic disc air elements and thermostat supply valves for demand-based intake air volume control. See Intake air elements page for detailed description.

□ Installation in window frames



Intake air element with volume flow control and limitation. See Intake air elements product page for detailed description. Ideal for retrofitting and new constructions.

Bathroom		WC		Kitchen	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Extract air element , with self-regulating constant volume flow control					
AE 45*	02031	AE 30*	02030	AE 75*	02033
Like above , but with two volume flows (demand-controlled and basic ventilation)					
AE GB 20/75*	02036	AE GB 15/30*	02035	AE GB 45/120*	02038
Like AE GB , with additional electr. time control (without constant volume flow control)					
AE GBE 30/60*	02047	AE GBE 15/30*	02044	AE GBE 45/120*	02048
Like AE GBE , but with presence detector					
		AE B 15/30*	02055		
Humidity-controlled extract air element with variable, limited volume flow					
AE Hygro 10/45*	02049				
Like AE Hygro , with additional electrically controlled demand-controlled ventilation level					
AE Hygro GBE 5/40/75*	02053			AE Hygro GBE 10/45/120*	02054
Extract air element AE FV , with filter and volume adjustment					
AE FV 125	09478			AE FV 125	09478
Attachment filter element VFE					
– for AE / AE GBE, AE Hygro, prevents contamination of the extract air element and duct system					
				VFE 70/VFE 90	02552/02553

*Volume flow in m³/h

V m³/h	Ø 80		Ø 100		Ø 125	
	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
15-50	VKH 80/15-50	00001	VKH 100/15-50	00002	VKH 125/15-50	00004
50-100			VKH 100/15-100	00003	VKH 125/50-100	00005
100-180					VKH 125/100-180	00006

Ø 80		Ø 100		Ø 125	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Sound insulation elements					
SVE 80	08309	SVE 100	08310	ZSVE 125	08311
Ventilation grille (for covering types VKH and SVE)					
LGK 80	00259	LGM 100	00254	LGM 125	00258
Plastic disc valves, for extract air					
KTVA 75/80	00940	KTVA 100	00941	KTVA 125	00942

Ø 80		Ø 100		Ø 160	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Automatic supply air element – Automatically temperature-controlled incl. thermostat disc valve, sound insulation and external grille					
ZLA 80	00214	ZLA 100	00215	ZLA 160	00216
Disc air element – Manually controllable in four levels incl. disc valve with drawcord, sound insulation and external grille					
		ZLE 100	00079		
Thermostat disc valve – For installation in existing ventilation openings					
ZTV 80	00078	ZTV 100	00073	ZTV 160	00074

Automatic supply air element ZLA 125 see product pages.

V m³/h	Type	Ref. no.	Type	Ref. no.
Intake air element for installation in window frames				
– with volume flow control and limitation				
30	ALEF 30	02100	ALEFS 30	02102
45	ALEF 45	02101	ALEFS 45	02103
Intake air element for installation in window frames				
– humidity-controlled, with volume flow control and limitation				
5/45	ALEF Hygro 5/45	02056	ALEFS Hygro 5/45	02057

■ Ducts, fittings

Ducts, fittings



■ Duct reduction

RZ



■ Silencers, shutters

FSD

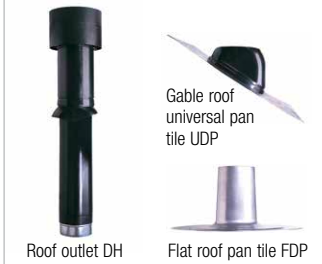


RVE



■ Wall duct, roof duct

DH, UDP, FDP



■ Overflow

LTG



Ø 80		Ø 100		Ø 125	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Fully flexible ventilation duct					
ALF 80	05711	ALF 100	05712	ALF 125	05713
Duct connector – Made of steel sheet, galvanised					
RVB 80	05993	RVB 100	05994	RVB 125	05995
Hose clips – Metal band with turnbuckle, unit = 10 pcs.					
SCH 80	05722	SCH 100	05722	SCH 125	05723
T-pieces – Made of steel sheet, galvanised					
		TS 100	01479	TS 125	05720

Ø 80		Ø 100		Ø 125	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Duct reductions – Made of plastic					
		RZ 100/80	05223	RZ 125/100	05222
Flexible cross talk silencer – Made of flexible aluminium pipe					
		FSD 100	00676	FSD 125	00677
Duct shutters – Automatic, made of plastic					
		RSKK 100	05106	RSKK 125	05107
Inline duct shutters – Airtight, for duct insertion					
RVE 80	02584	RVE 100	02587	RVE 125	02588

Ø 80		Ø 100		Ø 125	
Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Telescopic wall kit – For wall outlet from supply air pipes and extract air pipes					
		TMK 100	00844	TMK 125/150	00845
Universal roof outlet* DDF – Adjustable to all types of tile on gable and flat roofs					
				DDF 125	01964
Roof outlet, pan tiles for gable/flat roofs and pipe joints					
– Roof outlet*		DH 100 S	02015	DH 125 S	02017
– Gable roof universal pan tile*		UDP 100 S	02021	UDP 125 S	02021
– Flat roof pan tile		FDP 100	02024	FDP 125	02013
– Pipe joint		STV 100	02026	STV 125	02027

* See product page for other colour designs.

Door grilles

Unobtrusive, sight screening ventilation grille made of break-resistant plastic for installation in door leaf. See Ventilation grilles product page for detailed description.

LTGW Ref. no. 00246
Made of plastic, white.

LTGB Ref. no. 00247
Made of plastic, brown.

■ Reference	Page
Dimensions, further technical information and other sizes:	
Ventilation grilles,	
Ducts, Fittings,	
Roof ducts	561 ff.
Extract air elements	574 ff.
Intake air elements	586 ff.
Fire protection elements	
for use in multi-fl. const.	590 ff.
Control and regul. units	599 ff.