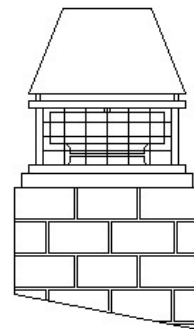


Chimney top fans

Series KA

Safe suction of flue gas

- Safety
 - Cleanliness
 - Comfort



Chimney top fan Type KA

Chimney top fans

for

- Fireplaces
- Oil and gas boilers
- Solid fuel boilers
- Blacksmith forges
- Barbecue grille
- Smokers
- Room ventilation

TECHNICAL DESCRIPTION AND IMPLEMENTATION

Description

NOLTE- fans are mounted on top of the chimney. If there is insufficient natural draft, they safely boost flue gas by means of vacuum to the chimney cap.

Unhealthy and dirty combustion products do not enter living rooms or basement. Sooting can often be avoided.

The KA series is a chimney fan with a centrifugal ventilator driven by an electric motor which is located outside of the flow. The flue gases flowing out of the chimney are drawn in axially by the high-performance centrifugal impeller, deflected by 90° in the impeller and discharged horizontally on all sides at the chimney head below the motor mounting plate.

The temperature resistant special construction allows for an operating temperature of 250° C. If ordered, the equipment can be equipped or retrofitted for a maximum operating temperature of 350° C.

Operation note

Before use and during the entire period of operation of the hearth, the fan must be switched on.

Field of application

Chimney top fans can be used for all conventional heating and combustion plants, especially for fireplaces, oil and gas boilers, solid fuel boiler, single ovens, BBQ facilities, smoking ovens and forges.

Temperatures

The normal application range extends to a flue gas temperature of 250 ° C. For higher temperatures (stoves, straw furnaces, annealing furnaces, etc.) special constructions or side air base are used.

Flue gas volumes

Volume flows up to 2,500 m³ per hour at low to medium draft boost are delivered by the standard devices.

Larger units are available

Materials

➤ **Model B**

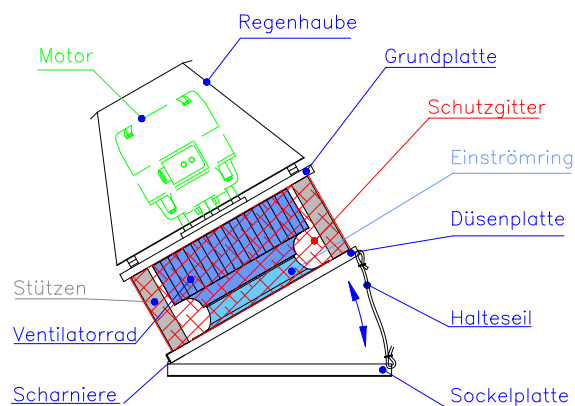
In the stainless steel version (B) all fan parts, wheel and inlet are completely made of stainless steel (stainless),
Material 1.4301

➤ **Model C**

In the model (C) all fan parts are made of stainless steel (1.4301), but wheel and inlet are galvanized steel.

Design

The assembly consists of base plate and nozzle plate (fitted with hinges), base plate with insulated cover, 4 supports, fan wheel and Inflow and guard, adjustable AC motor with rain hood. All parts are screwed and to be dismantled easily.



Notes for assembly of NOLTE- Chimney Top Fans



Hinweis

The operator is responsible for the approval, professional installation and safe operation of a flue gas system. The interaction of professionals in manufacturing, installation and commissioning, and correct operation are responsible for the safe, long-lasting and successful operation of mechanical flue gas handling equipment.

Changes to existing systems or starting up new plants are subject to approval and must be approved and accepted by the local heating engineer.

Chimney fans are mounted on the chimney cap with a minimum external dimension of 40 x 40 cm. Surpluses from neighboring chimneys must be avoided.

The chimney cap is flat and the brickwork must be stable. Smaller bumps can be covered by an insulating jacket. The base plate cannot be moved after mounting.

Installation on a round chimney pipe is possible by means of a carrier plate (accessory).

Wiring and setup must be carried out by a licensed electrical installation company.

Note Motor data!

Do not forget motor protection!

A review of the fan for wear and durability of the attachment must be made at intervals of not more than 6 months.

Electrical connection

The mantel fans are delivered with adjustable 230V / 50Hz AC motors. Under the terms of the motor must be protected in accordance with and within walking distance from the fan an all-pole disconnecting isolator (not part of delivery) to mount. During assembly, the local lightning protection regulations must be observed. In the field of heat-carrying system parts to be used for the electrical connection flexible 4-pole silicone cable. The cable entry under the cover should take place on the hinge side of the fan. To protect against thermal and electrical overload, the motors are equipped with separately out thermal contacts (TK). These TK can be connected "in series" with the motor cable, or act on a motor protection unit (accessory).

Control

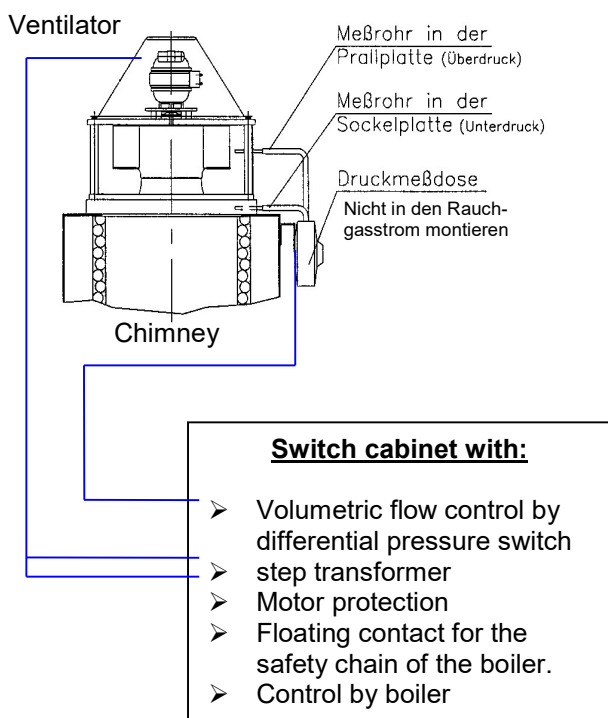
The fan motors can be controlled in speed. By stepwise or stepless speed control optimum adaptation of the flow and the suction force to existing operating conditions is possible. For the speed control only transformers (stepwise or continuously) to be used.

Control of constant draft

By installing a three-phase motor, an automatic speed regulation can be constructed for setting a constant coating in connection with a frequency converter and a pressure sensor.

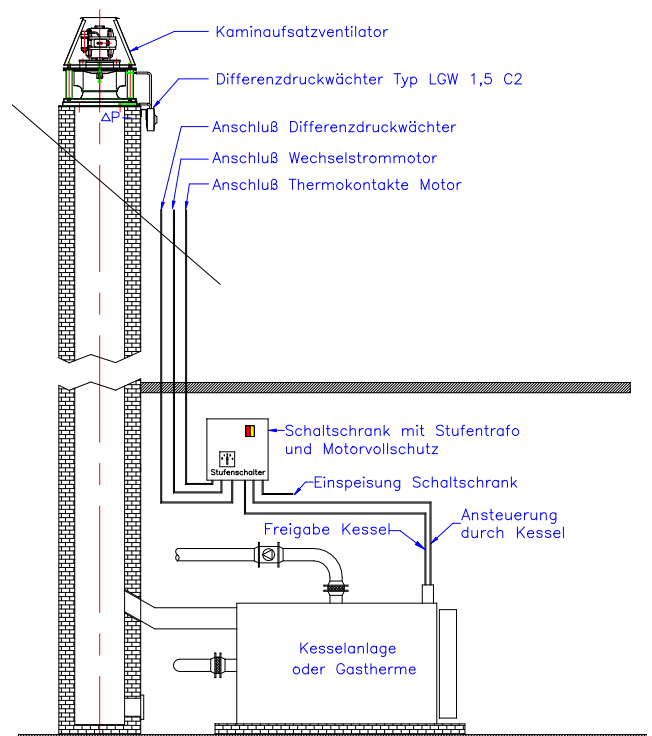
SIWA: Safety control combination for Emissions Monitoring

- Monitors the fan motor
- Monitors the flow volume by means of pressure measuring
- Provides enable signal for heating.
- provides alarm signal when a fault

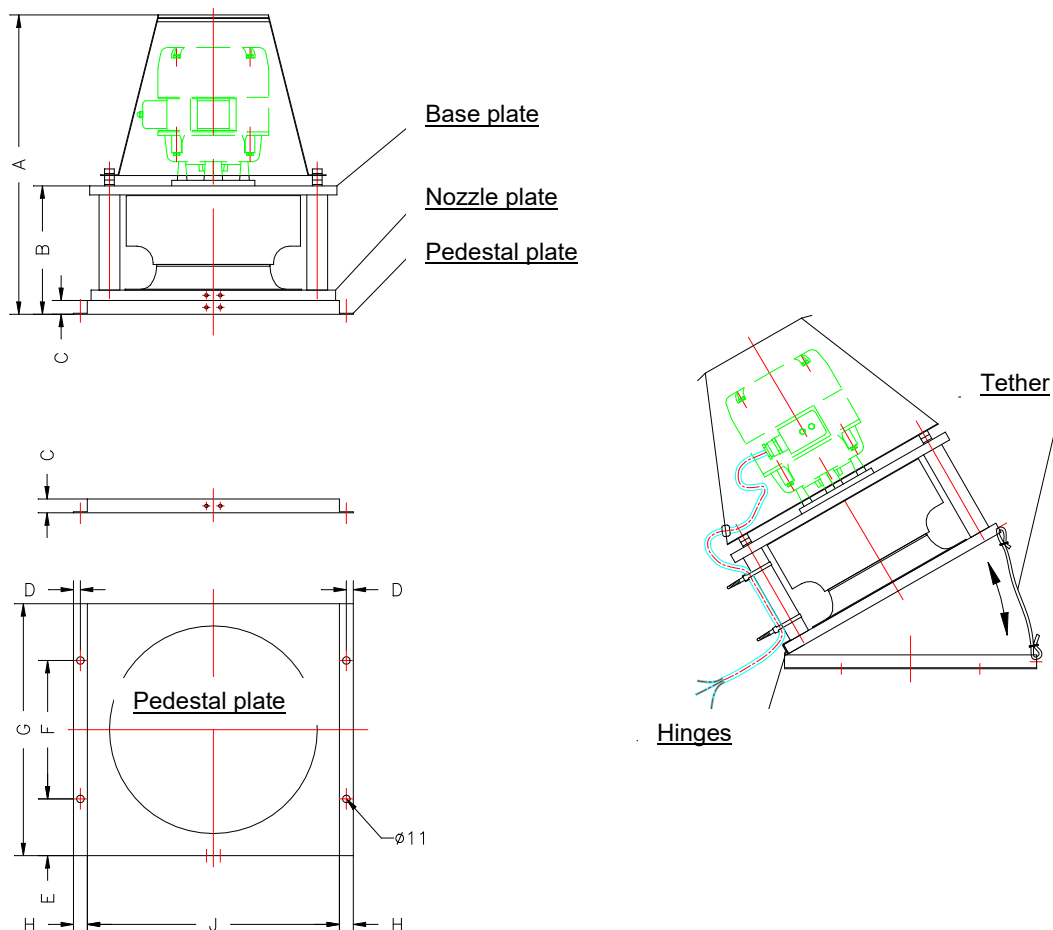


Accessories

- Infinitely variable speed control
- Gradual speed controller
- SWA I: Safety-related switching combination in the control cabinet for exhaust gas flow monitoring incl differential pressure switch and an integrated step transformer to reduce the fan performance.
- SWA II: Safety control combination as SWA I, however, for two-stage burner or double units
- Motor circuit breakers (required when no speed controller is used)
- Motor protection unit (required when using a speed controller)
- Differential pressure switch
- Kit in stainless steel
- Insulationmat
- Carrier plate made of stainless steel for mounting on tubes
- Secondary air base, stainless steel



Dimensions and performance



Type	De-liv-ery-Volume	stat. pressure (draft)	Motor-power	weight	Dimensions [mm]								
	[m ³ /h]	[Pa]	[W]	[kg]	A	B	C	D	E	F	G	H	J
KA I	400	100	80	21	435	186	20	10	82	200	364	20	364
	600	50											
KA II	500	120	80	21	455	206	20	10	82	200	364	20	364
	800	50											
KA III	700	150	80	21	470	222	20	10	82	200	364	20	364
	1.200	50											
KA IV	1.750	220	250		500	262	25	12,5	25	400	450	25	450
	2.500	50											

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