

Series
VENTS KAM



This centrifugal fireplace fan is designed for house heating system management. It can be also used as a base for backup heating source.

■ **Application**

Fireplace fans, designed for warm air distribution systems, allow creating fully-featured air heating system based on a fireplace. Such system is optimal for heating seasonal houses that serve as a secondary residence during winter time.

Implementation of air charging system helps to distribute the initial heat from fireplace to other premises in a quick and rational manner. The system is applied at shifted air temperatures ranging from 0 to +150°C.

■ **Construction design**

Fan case is made of zinc-galvanized steel with usage of heat and sound-insulated material made from non-flammable mineral wool. The case is equipped with perforations that allow internal air circulation and motor cooling. The fan is equipped with temperature control device that allows setting temperature level at which the fan shall be switched on/off automatically. Fan startup is allowed within the range of 0 °C to +90°C depending on the air temperature generated inside the fireplace heat-exchanger.

■ **Motor**

The fans are supplied with single-phase motors for operation in 230/50Hz power supply network. Insulation Class F. Motors have built-in thermal protection with automatic restart. The motor is placed off-airflow and is equipped with impeller with forward-curved blades. Ball bearings are used to achieve long term operation.

▶ Fan of KAM Series is equipped with an asynchronous motor with supplementary impeller for motor purging and cooling.

■ **Speed adjustment**

Smooth and step-by-step fan adjustment are both available; it is performed by means of thyristor or auto-connected transformer. Fan speed is regulated within the range of 0 to 100%.

■ **Installation**

Fireplace fans are designed for connection with round air ducts. The fan can be fixed in any position; however airflow direction (indicated on the fan case)

must be taken into consideration. It is also necessary to provide free access for fan maintenance service. Warm-air feed ducts are laid between the fan and each of the heated rooms. Hidden air ducts system with forced warm air distribution to premises allows saving useful space in your house and does not break its stylistic harmony.

■ **Options**

FFK – is a dismountable metal filter for purification of transferred air (Class G3). Filter is fixed to the fan case by lock-latches which allow easy removal of the filter for cleaning.

KFK – is a dismountable metal mixture chamber with built-in thermostatic control valve for purification of transferred air (Class G3). Mixture chamber is fixed to the fan case by lock-latches which allow easy removal of the chamber for cleaning. Fan configuration, that includes KFK mixture chamber, provides cool air supply into the mixture chamber when the temperature of transferred air rises above 90°C. Such configuration also allows removal of hot air while the fan motor is not running.

GFK is a roll over valve. It prevents reverse-direction airflow in the system. Fan configuration, that includes KFK mixture chamber and roll over valve GFK, protects the fan motor from overheating in accordance with BY-PASS system (for example, when motor is not running due to power supply cut-off). Fans with such configuration enable roll over valve closure and hot air discharge through ventilation ducts to the other premises even if the fan motor is not running.

Legend:

Fan series	Flange diameter	Modifications
VENTS KAM	125; 140; 150; 160	
_ -is stocked with temperature controller by default; T1 - without temperature controller		

Accessories



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Options



FFK

KFK

GFK

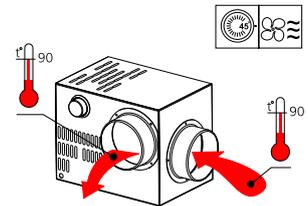
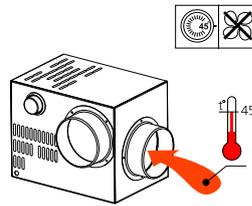
1

Operation principle of the KAM fan



KAM

When the temperature in the fireplace hood reach the value set the fan turns on automatically and distribute the hot air from the fire hood place to other room and turns off when the temperature falls down under a value set.



2

Operation principle of the KAM fan with filter FFK

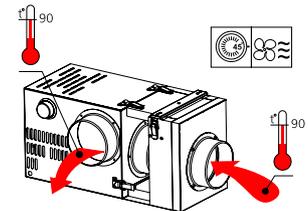
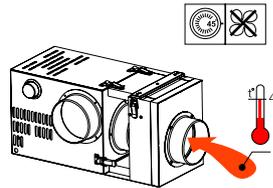


KAM

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FFK



When the temperature in the fireplace hood reach the value set the fan turns on automatically and distribute the hot air purified by filter from the fire hood place to other room and turns off when the temperature falls down under a value set.

3

Operation principle of the KAM fan with valve KFK



KAM

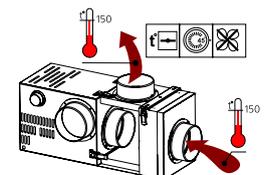
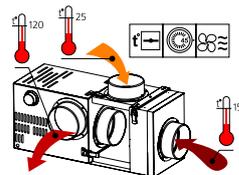
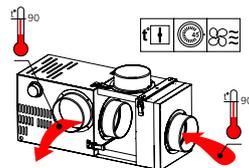
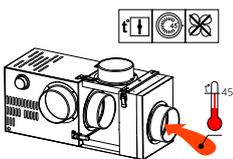
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KFK



When the temperature in the fireplace hood reach the value set the fan turns on automatically and distribute the hot air from the fire hood place to other room and turns off when the temperature falls down under a value set. Fan with valve KFK provides additional supply of hot air to the valve box when the temperature of distributed air is more then 90°C and withdrawal of the hot air if the motor does not work.



4

Operation principle of the KAM fan with valve KFK and BY-PASS system GFK



KAM

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KFK

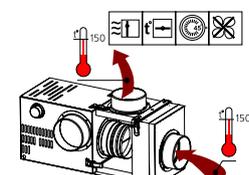
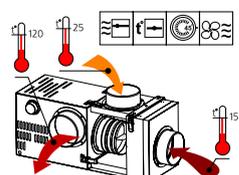
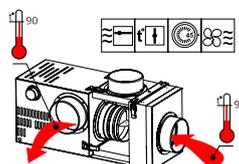
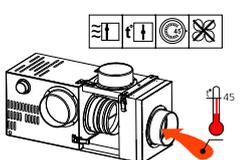


GFK



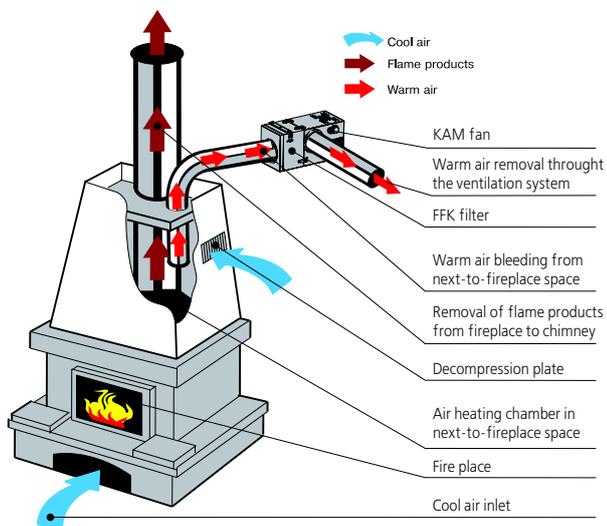
BY-PASS system

When the temperature in the fireplace hood reach the value set fan turns on automatically and distribute hot air from the fire hood place to other room and turns off when the temperature falls down under a value set. **BY-PASS** system protects fan from overheating (f.e. fan's motor does not work due to lack of electricity). It is close damper and rejects hot air through the gap to other room. BY-PASS stabilizes the temperature by damper opening and cold air supplying if the air incoming to the fan is too hot.

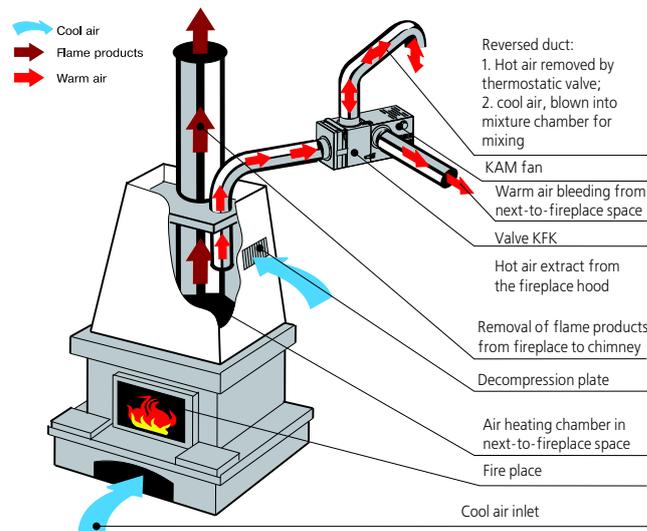


CHIMNEY CENTRIFUGAL FAN

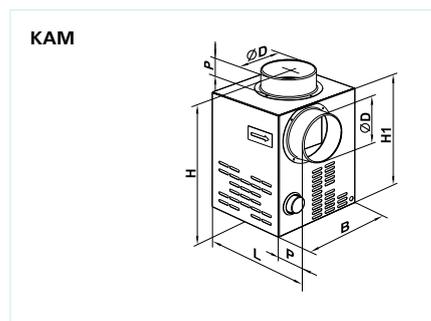
Example of installation and operation of KAM fans, KAM supplied with filter FFK in fireplace system



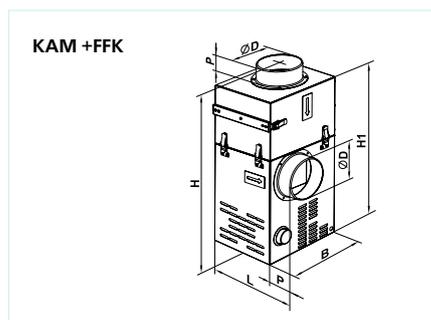
Example of installation and operation of KAM fans supplied with KFK valve, KAM fan supplied with KFK and GFK valves ("BY-PASS") in the fireplace system



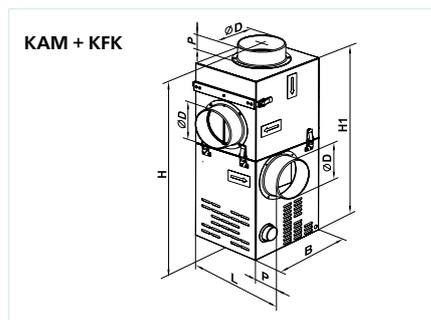
Type	Dimensions, mm						Weight, kg
	∅D	B	H	H1	L	P	
KAM 125	124	245	350	300	260	50	4,5
KAM 140	139	285	350	300	300	50	5,7
KAM 150	149	285	350	300	300	50	5,7
KAM 160	159	285	350	300	300	50	5,7



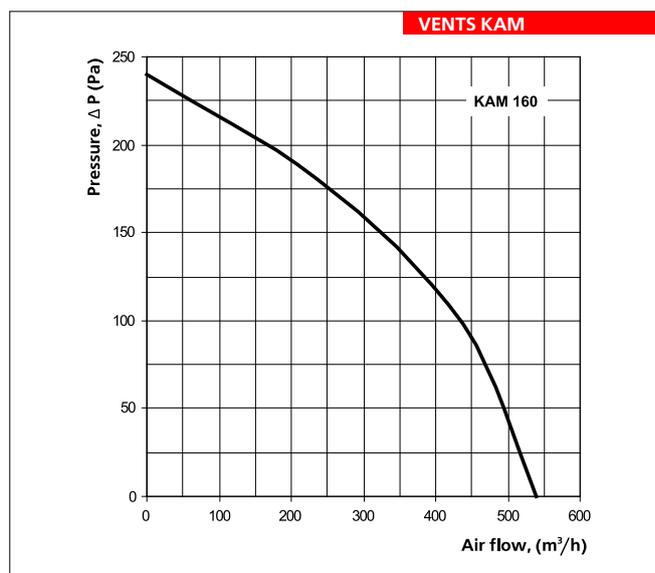
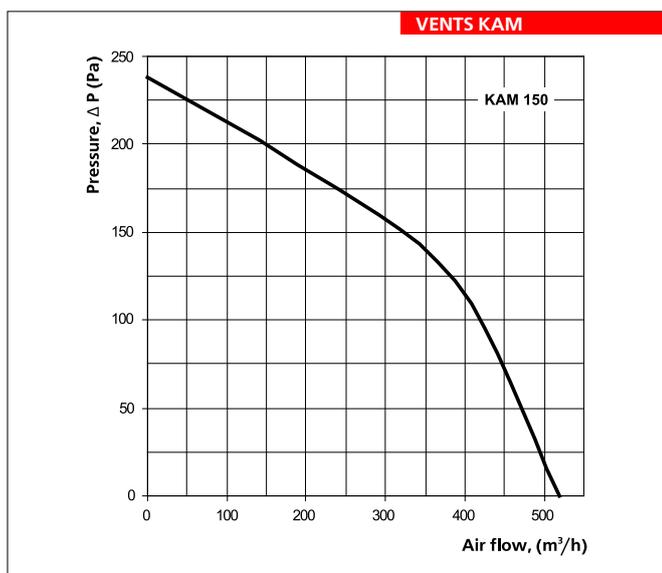
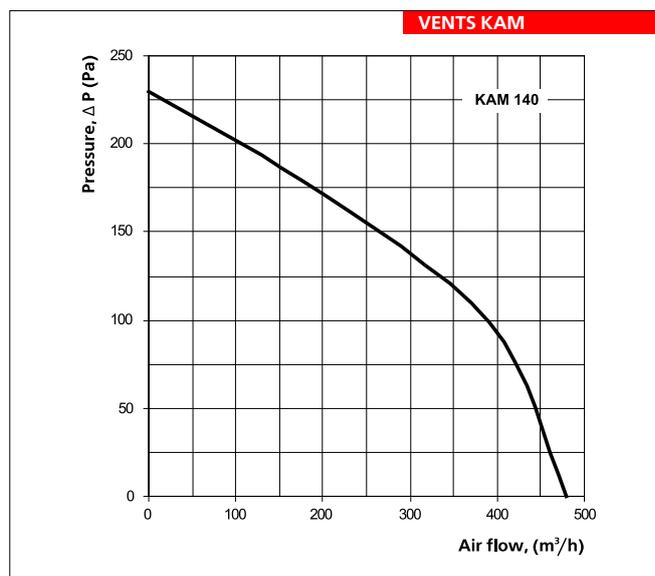
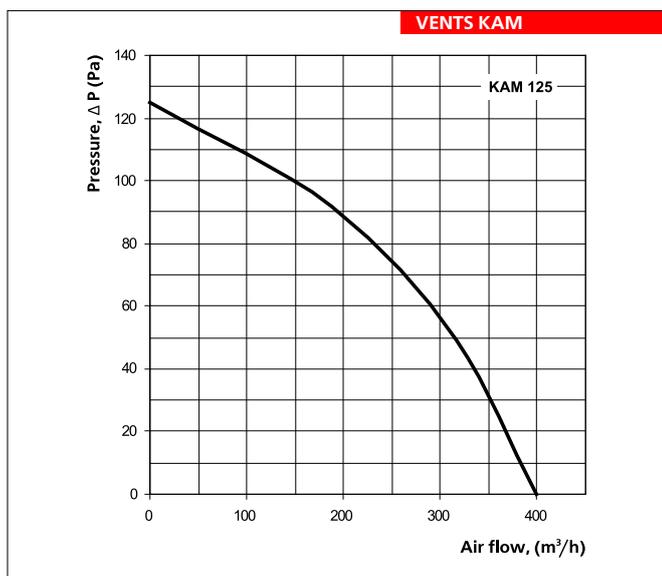
Type	Dimensions, mm						Weight, kg
	∅D	B	H	H1	L	P	
KAM 125 + FFK 125	124	245	530	480	260	50	6,7
KAM 140 + FFK 140	139	285	540	490	300	50	8,7
KAM 150 + FFK 150	149	285	540	490	300	50	8,7
KAM 160 + FFK 160	159	285	540	490	300	50	8,7



Type	Dimensions, mm						Weight, kg
	∅D	B	H	H1	L	P	
KAM 125 + KFK 125	124	245	610	560	260	50	8,3
KAM 140 + KFK 140	139	285	650	600	300	50	9,7
KAM 150 + KFK 150	149	285	650	600	300	50	9,7
KAM 160 + KFK 160	159	285	650	600	300	50	9,7



	KAM 125	KAM 140	KAM 150	KAM 160
Voltage, V/50Hz	230	230	230	230
Power consumption, W	108	110	115	116
Current, A	0,81	0,82	0,84	0,86
Maximum air consumption, m ³ /h	400	480	520	540
RPM	1300	1290	1280	1270
Noise level at 3 m, dBA	42	42	42	42
Maximal temperature of transferred air, °C	+20 + 150	+20 + 150	+20 + 150	+20 + 150
Index of protection	IP X2	IP X2	IP X2	IP X2



FAN SERIES VENTS KAM

CORRESPONDS TABLE OF ELECTRICAL ACCESSORIES

	Thyristor speed controllers					Transformer speed single phase controllers				Temperature controllers	Sensors			
KAM 125														
KAM 140	RS-1-300	RS-1-400	RS-1,5-PS	RS-1 N(V)	RS-1,5-T	RSA5E-2-P	RSA5E-1,5-T	RSA5E-1,5-TA	RSA5E-2-M	RT-10	T-1,5 N(V)	TH-1,5 N(V)	TF-1,5 N(V)	TR-1,5 N(V)
KAM 150														
KAM 160														