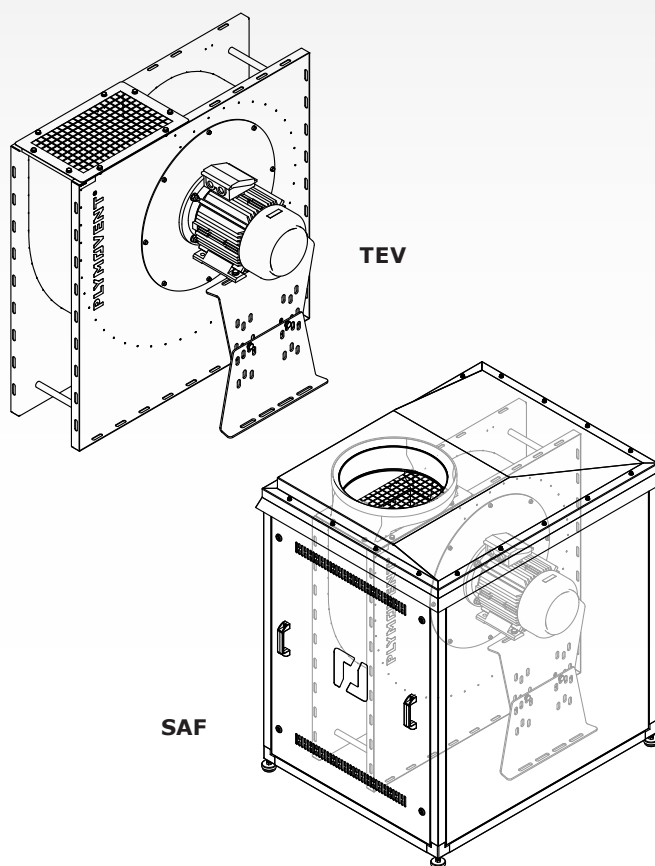


**TEV** | Central extraction fan

**SAF** | Central extraction fan in sound absorbing box

## TEV | SAF



EN

Installation and user manual

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### EN | ORIGINAL INSTRUCTION

All rights reserved. The information given in this document has been collected for the general convenience of our clients. It has been based on general data pertaining to construction material properties and working methods known to us at the time of issue of the document and is therefore subject at any time to change or amendment and the right to change or amend is hereby expressly reserved. The instructions in this publication only serve as a guideline for installation, use, maintenance and repair of the product mentioned on the cover page of this document. This publication is to be used for the standard model of the product of the type given on the cover page. Thus the manufacturer cannot be held responsible for any damage resulting from the application of this publication to the version actually delivered to you. This publication has been written with great care. However, the manufacturer cannot be held responsible, either for any errors occurring in this publication or for their consequences.

*To improve comprehension for people whose first language is not English, we have written parts of this manual in Simplified Technical English (STE). STE is a controlled language originally developed for aerospace industry maintenance manuals. It offers a carefully limited and standardized subset of English, along with specific writing rules.*










## PREFACE

### Using this manual

This manual is intended to be used as a work of reference for professional, well trained and authorised users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

### Pictograms and symbols

The following pictograms and symbols are used in this manual:

	<b>TIP</b> Suggestions and recommendations to simplify carrying out tasks and actions.
	<b>ATTENTION</b> A remark with additional information for the user. A remark brings possible problems to the user's attention.
	<b>CAUTION!</b> Procedures, if not carried out with the necessary caution, could damage the product, the workshop or the environment.
	<b>WARNING!</b> Procedures which, if not carried out with the necessary caution, may damage the product or cause serious personal injury.
	<b>CAUTION!</b> Denotes risk of electric shock.
	<b>WARNING!</b> Fire hazard! Important warning to prevent fire.
	<b>WARNING!</b> Explosion hazard! Important warning to prevent explosions.
	<b>Personal protective equipment (PPE)</b> Instruction to use respiratory protection when you do service, maintenance and repair jobs, as well as during functional testing. We recommend to use a half-face respirator according to EN 149:2001 + A1:2009, class FFP3 (Directive 89/686/EEC).
	<b>Personal protective equipment (PPE)</b> Instruction to use protective gloves when you do service, maintenance and repair jobs.

### Text indicators

Listings indicated by "-" (hyphen) concern enumerations.  
Listings indicated by "•" (bullet point) describe steps to perform.

### Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. He will always be willing to help you. Make sure you have the following specifications at hand:

- product name
- serial number

You can find these data on the identification plate.

## 1 INTRODUCTION

### 1.1 Identification of the product

The identification plate contains, among other things, the following data:

- product name
- serial number



- supply voltage and frequency
- power consumption

### 1.2 General description

The TEV and SAF fans are central extraction fans that are equipped with a lightweight aluminium fan wheel. This makes them suitable to exhaust gases, volatile fumes and dust.

#### 1.2.1 SAF

SAF fans are TEV fans that are built in an additional sound absorbing box with inspection cover. These fans are particularly suitable for outdoor installation, due to:

- a rain cover over the sound absorbing box, including coupler for duct or silencer
- ventilation grids provided with rain cover
- seams of the absorbing box that are fully sealed (except for the inspection cover)

The sound absorbing box is standard equipped with a soft connection at the inlet and outlet opening. The outlet connection is round.

### 1.3 Product combinations

You can use the fans with the following products:

- welding fume extraction systems with filter unit
- welding fume extraction systems without filter unit
- vehicle exhaust systems
- control equipment



### 1.4 Options and accessories

We recommend to use the following options/accessories:

#### 1.4.1 TEV

**Vibration dampers** to isolate noise and vibration in sensitive environments

- TEV-385:	TEV-AV/35	4 pcs
- TEV-585:		
- TEV-765:	TEV-AV/79	6 pcs
- TEV-985:		

**Soft connection** for noise and vibration free connection to ductwork

	Inlet	Outlet
- TEV-385:	SC-160 (Ø 160 mm)	SC-250 (Ø 250 mm)
- TEV-585:	SC-200 (Ø 200 mm)	SC-315 (Ø 315 mm)
- TEV-765:	SC-250 (Ø 250 mm)	SC-400 (Ø 400 mm)
- TEV-985:	SC-315 (Ø 315 mm)	SC-500 (Ø 500 mm)

**Outlet transition** from rectangular to round

- TEV-385:	TOL-250 (Ø 250 mm)
- TEV-585:	TOL-315 (Ø 315 mm)
- TEV-765:	TOL-400 (Ø 400 mm)
- TEV-985:	TOL-500 (Ø 500 mm)

#### 1.4.2 SAF

**Duct silencer**, incl. connection material

- SAS-250 straight	Ø 250 mm
- SAS-250 elbow 90°	
- SAS-315 straight	Ø 315 mm
- SAS-315 elbow 90°	
- SAS-400 straight	Ø 400 mm
- SAS-400 elbow 90°	

- SAS-500 straight - SAS-500 elbow 90°	Ø 500 mm
---	----------

## 1.5 Technical specifications

Refer to Table I on page 9.



Refer to the available product data sheets for detailed specifications.

## 1.6 Dimensions

### 1.6.1 TEV

Refer to Fig. II on page 10.

### 1.6.2 SAF

Refer to Fig. III on page 11.

## 1.7 Fan curves

Refer to Fig. IV on page 12.



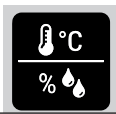
## 1.8 Noise level SAF

Refer to Fig. V on page 12.



Due to the sound absorbing box, the noise level of the SAF fans is approx. 10 dB(A) lower than the TEV fans.

## 1.9 Ambient conditions



	TEV	SAF
Process temperature:		
- min.	-20°C *)	-20°C *)
- nom.	+20°C	+20°C
- max.	+80°C	+80°C
Max. airflow temperature	80°C	80°C
Max. relative humidity	80%	rain resistant
Storage conditions:		
- temperature	5-45°C	5-45°C
- relative humidity	max. 80%	max. 80%
Suitable for outdoor use	yes; protection against precipitation is recommended	yes
*) TEV and SAF fans can operate in temperatures below -20°C if you connect them to a Plymovent VFD (frequency inverter). Contact your Plymovent distributor for more information.		

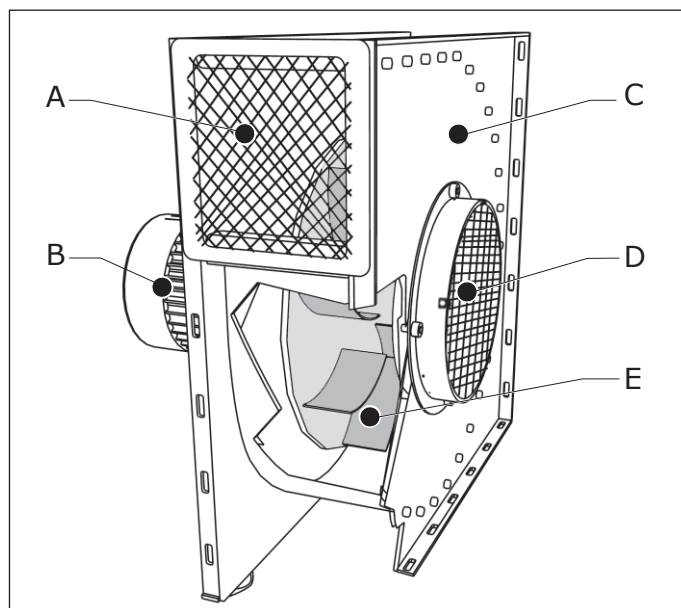


Fig. 2.1 Main components TEV

### 2.1.2 Components SAF

Fig. 2.2

- A Sound absorbing box
- B Outlet panel with soft connection
- C TEV fan
- D Inspection cover
- E Adjusting feet
- F Inlet panel<sup>1</sup> with soft connection
- G Back panel

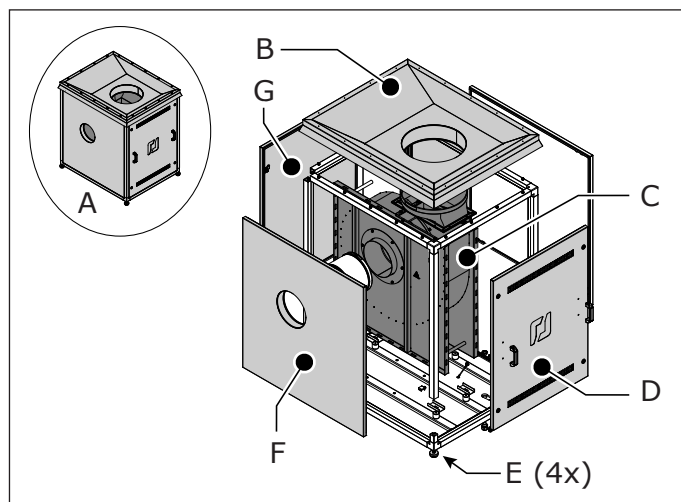


Fig. 2.2 Main components SAF

## 2.2 Operation



The TEV and SAF are radial fans. The inlet of the fan is to be connected to the outlet of a central extraction system. The extracted air is blown out through a duct. Depending on the local regulations, the air can either be recirculated or exhausted to the atmosphere.

## 2 PRODUCT DESCRIPTION

### 2.1 Components

#### 2.1.1 Components TEV

The fan consists of the following main components:

- Fig. 2.1
- A Outlet
  - B Motor
  - C Housing
  - D Inlet
  - E Fan wheel

1. Left or right; also refer to § 4.4.2

### 3 SAFETY



#### General

The manufacturer does not accept any liability for damage to the product or personal injury caused by ignoring of the safety instructions in this manual, or by negligence during installation, use, maintenance, and repair of the product mentioned on the cover of this document and any corresponding accessories.

Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential danger when using the product.

**The user of the product is always fully responsible for observing the local safety instructions and regulations. Obey all applicable safety instructions and regulations.**

#### User manual

- Everyone working on or with the product, must be familiar with the contents of this manual and must strictly observe the instructions therein. The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.
- Do not change the order of the steps to perform.
- Always keep the manual with the product.

#### Pictograms and instructions on the product (if present)

- The pictograms, warning and instructions attached to the product are part of the safety features. They must not be covered or removed and must be present and legible during the entire life of the product.
- Immediately replace or repair damaged or illegible pictograms, warnings and instructions.

#### Users

- The use of this product is exclusively reserved to authorised, trained and qualified users. Temporary personnel and personnel in training can only use the product under supervision and responsibility of skilled engineers.
- Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.
- The product is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children must be supervised not to play with the product.

#### Intended use<sup>2</sup>

The product has been designed as an extraction fan for extracting fumes and gases that are released during the most common welding processes, during grinding, polishing and finishing works, as well as the extraction of exhaust gases. Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damage or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognised safety regulations. Only use this product when in technically perfect condition in accordance with its intended use and the instructions explained in the user manual.

#### Technical specifications

Do not change the specifications given in this manual.

2. "Intended use" as explained in EN-ISO 12100-1 is the use for which the technical product is suited as specified by the manufacturer, inclusive of his directions in the sales brochure. In case of doubt it is the use which can be deduced from the construction, the model and the function of the technical product which is considered normal use. Operating the machine within the limits of its intended use also involves observing the instructions in the user manual.

#### Modifications

Modification of (parts of) the product is not allowed.

#### Product combinations

If the product is used in combination with other products or machines, the safety instructions in the documentation of these products also apply.

#### Installation

- The installation of this product is exclusively reserved to authorised, trained and qualified engineers.
- The electric connection must be executed in accordance with the local requirements. Ensure compliance with the EMC regulatory arrangements.
- During installation, always use Personal Protective Equipment (PPE) to avoid injury. This also applies to persons who enter the work area during installation.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Do not install the product in front of entrances and exits which must be used for emergency services.
- Mind any gas and water pipes and electric cables.
- Make sure that the workspace is well illuminated.
- Stay alert and keep your attention to your work. Do not install the product when you are under the influence of drugs, alcohol or medicine.
- Air containing particles such as chromium, nickel, beryllium, cadmium, lead etc., should never be recycled. This air must always be brought outside the working area.

#### Use



#### WARNING!

Fire hazard! Do **not** use the product for:

- polishing applications in combination with grinding, welding or any other application that generate sparks (fibers from polishing or abrasive flap disks are highly flammable and pose a high risk of filter fires when exposed to sparks)
- arc-air gouging
- extracting flammable, glowing or burning particles or solids or liquids
- extracting of aggressive fumes (such as hydrochloric acid) or sharp particles
- extracting dust particles which are released when welding surfaces treated with primer
- sucking cigarettes, cigars, oiled tissues, and other burning particles, objects, and acids



#### WARNING!

Explosion hazard! Do **not** use the product for explosion-hazardous applications, e.g.:

- aluminium laser cutting
- grinding aluminium and magnesium
- explosive environments or explosive substances/gases



#### WARNING!

Do **not** use the product for:






- extraction of hot gases (more than 80°C continuously)
- flame spraying

- Inspect the product and check it for damage. Verify the functioning of the safety features.
- During use, always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Check the working environment. Do not allow unauthorised persons to enter the working environment.

- Protect the product against water and humidity.
- Make sure the room is always sufficiently ventilated; this applies especially to confined spaces.
- Make sure that the workshop, in the vicinity of the product, contains sufficient approved fire extinguishers (suitable for fire classes ABC).
- Do not leave any tools or other objects in or on the unit.

### Service, maintenance and repairs

- Obey the maintenance intervals given in this manual. Overdue maintenance can lead to high costs for repair and revisions and can render the guarantee null and void.
- Always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Make sure the room is sufficiently ventilated.
- Use tools, materials, lubricants and service techniques which have been approved by the manufacturer. Never use worn tools and do not leave any tools in or on the product.
- Safety features which have been removed for service, maintenance or repairs, must be put back immediately after finishing these jobs and it must be checked that they still function properly.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Clean the area afterwards.

	<b>ATTENTION</b> Service, maintenance and repairs must be performed in accordance with directive TRGS 560 and TRGS 528 by authorised, qualified and trained persons (skilled) using appropriate work practices.
	<b>ATTENTION</b> Before carrying out service, maintenance and/or repair jobs: - disconnect the connected control equipment from the mains - disconnect the compressed air supply - de-energize any connected external device
 	<b>Personal protective equipment (PPE)</b> Wear respiratory protection and protective gloves during service, maintenance and repairs.
	<b>WARNING</b> The industrial vacuum cleaner used during service and maintenance must meet dust class H according to EN 60335-2-69 or HEPA class (efficiency $\geq 99.97\%$ at $0.3 \mu\text{m}$ ).

## 4 INSTALLATION

### 4.1 Tools and requirements

You need the following tools and requirements to install the filter system:

- basic tools



### 4.2 To be sourced locally

#### 4.2.1 TEV fan with optional vibration dampers

- Mounting hardware to install the vibration dampers to the floor (material depending on the floor type)
- Electric cables and connection material

#### 4.2.2 SAF fan with optional duct silencer

- Self-tapping screws
- Electric cables and connection material

### 4.3 Unpacking

Check that the product is complete. The package contains:



#### 4.3.1 TEV

- Extraction fan

#### 4.3.2 SAF

- Extraction fan in sound absorbing box
- Cable gland (2)
- Square key 8 mm (to lock/unlock the back panel and inspection cover)

### 4.4 Mounting

- For TEV fans, continue with § 4.4.1.
- For SAF fans, continue with § 4.4.2.



#### 4.4.1 TEV

##### TEV-385 | TEV-585

You can choose the outlet position of these fans freely, on the top, side or bottom, as long as the outlet is free.

##### TEV-765 | TEV-985

You can change the outlet position of these fans, as long as the motor is supported.



Refer to Fig. VI on page 13 for mounting examples.

### Positioning

- Position the outlet of the fan in the desired direction.
- Put the fan in a vertical position on the floor or on a platform.



#### ATTENTION

Do not position the TEV fan where it is exposed to vibrations or shocks.

### Vibration dampers (recommended option)

We recommend to use vibration dampers to isolate noise and vibration in sensitive environments.

To install the vibration dampers and install the TEV fan to the floor or platform, do the following:

Fig. 4.1

- **TEV-385 | TEV-595:**  
Install the vibration dampers (B) (4 pcs) below the fan and tighten them with the bolts (A).
- **TEV-765 | TEV-985:**  
Install the vibration dampers (B) (6 pcs) below the fan and motor support and tighten them with the bolts (A).
- Use the mounting holes<sup>3</sup> (C) and suitable hardware (not supplied, material depending on floor type) to install the vibration dampers to the floor.

3. TEV-385 | TEV-595:  
- vibration dampers type TEV/AV-35; mounting holes  $\varnothing 8 \text{ mm}$  ( $\frac{3}{8} \text{ in.}$ )  
TEV-765 | TEV-985:  
- vibration dampers type TEV/AV-79; mounting holes  $\varnothing 11,5 \text{ mm}$  ( $\frac{1}{2} \text{ in.}$ )

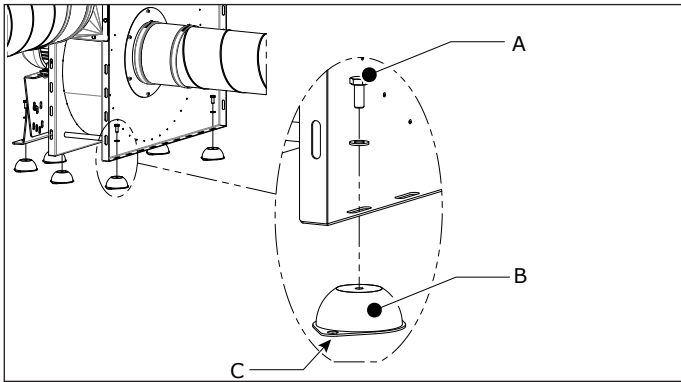


Fig. 4.1 Vibration dampers

### Connection of the fan inlet

#### Soft connection (recommended option)

We recommend the use of a soft connection at the inlet to reduce the noise and vibrations of the fan.

To connect the inlet of the fan to a duct or hose, do the following:

Fig. 4.2

- Put the soft connection (I) over the inlet of the fan.
- Tighten the first hose clamp (G).
- Put the other side of the soft connection over the duct or hose.
- Tighten the second hose clamp (H).

### Connection of the fan outlet

#### Soft connection and outlet transition (recommended options)

We recommend the use of a soft connection at the outlet to reduce the noise and vibrations of the fan and to avoid damage to the duct. In addition, we recommend the use of an outlet transition (from square to round).

To connect the outlet of the fan to a duct, do the following:

Fig. 4.2

- Loosen the bolts, washers and nuts of the outlet grid (F).
- Remove the grid<sup>4</sup>.
- Attach the outlet transition (E) to the fan with the bolts (A), washers and nuts of the grid. Tighten the bolts.
- Put the soft connection (D) over the outlet transition.
- Tighten the first hose clamp (B).
- Put the soft connection over the duct.
- Tighten the second hose clamp (C).

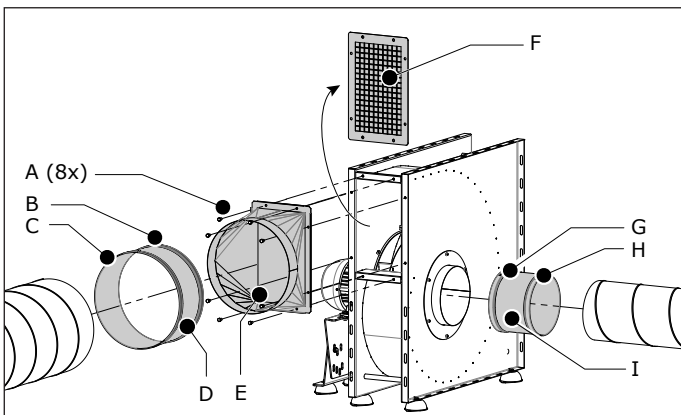


Fig. 4.2 Connection of the fan inlet and outlet

4. The grid becomes redundant



#### CAUTION

In case you have not installed the fan directly next to the filter system (if any), make sure that the connection duct is sufficiently supported to avoid damage.

### 4.4.2 SAF

The inlet panel (refer to Fig. 2.2F) is on the **left** side of the box. If you prefer to have it on the **right** side, you can interchange the inspection cover (refer to Fig. 2.2D) and back panel (refer to Fig. 2.2G).

If desired:

- Unlock the back panel and the inspection cover with the supplied square key.
- Install them on the opposite side.
- Turn the box 180 degrees. The inlet panel is now on the right side.

### Positioning

- Install the fan at the desired position.
- Make sure that the fan is level. If necessary, use the adjusting feet to put the fan in fully horizontal position.



#### ATTENTION

Do not position the SAF fan where it is exposed to vibrations or shocks.

### Duct silencer (recommended option)

To install the duct silencer, do the following:

Fig. 4.3

- Put a duct connector (C) in the outlet opening (D) of the fan. Attach it with 8 self-tapping screws.
- Put the other duct connector (A) on top of the silencer (B). Attach it with 8 self-tapping screws.
- Put the silencer on the lower duct connector (C). Attach it with 8 self-tapping screws.

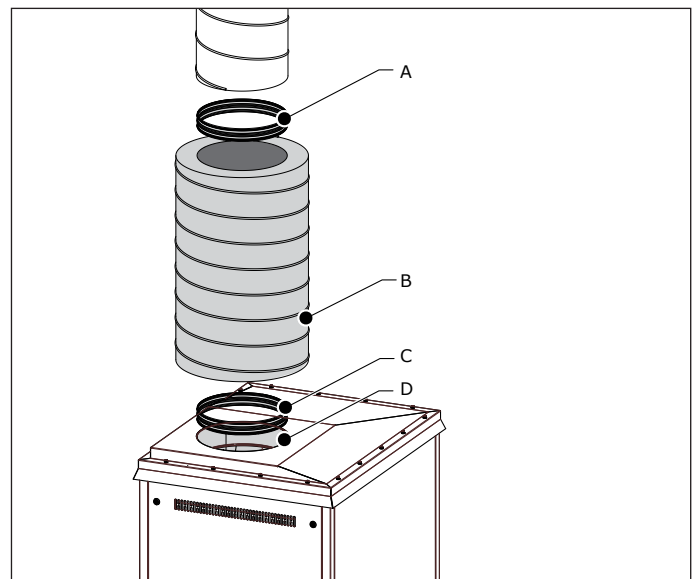


Fig. 4.3 Mounting of the duct silencer

## Electric connection

### SAF:

You must connect the cables through the bottom of the box with the supplied cable glands.



#### CAUTION!

Electric connection must be executed in accordance with local requirements. Ensure compliance with the EMC regulatory arrangements.



#### WARNING!

Make sure that the fan is suitable for connection to the local mains. You can find information about the connection voltage and frequency on the identification plate. The cables must be connected in conformance with the local rules and regulations and can only be carried out by qualified and authorised technicians.

The default setting of the fan is 400V. If another voltage is used, you must change the wiring according to the instructions on the identification plate of the motor.

To connect the starting device, do the following:

- Connect the fan to the selected starting device according to the information on the identification plate of the motor.
- Connect the starting device to the mains according to the separately supplied electrical diagram.
- Make sure that the direction of rotation of the motor is correct. For this purpose the fan contains an arrow that indicates the prescribed direction of rotation. The rotation is visible through the grid of the motor.
- If necessary, invert the connection of the phases.

## 4.5 Installation checklist



#	Check	OK
1.	In case of a fan with frequency inverter <sup>5</sup> : Is the PTC cable connected with the frequency inverter?	
2.	Is the star-delta connection correct?	
3.	Is the direction of rotation of the fan correct? An arrow on the fan or motor indicates the correct direction.	
4.	Is the fan completely level?	
5.	Is the entire installation airtight?	

## 5 USE

Refer to the documentation supplied with the selected control equipment how to control the fan.

## 6 MAINTENANCE

The fans require no specific maintenance.



## 7 TROUBLESHOOTING

If the fan does not function (correctly), consult the checklist below to see if you can remedy the error yourself. Should this not be possible, contact your supplier.



#### WARNING

Obey the safety regulations that are written in chapter 3 when you carry out the activities below.



#### CAUTION!

Always switch **off** the fan and disconnect it from the mains before you carry out the activities below.

Symptom	Problem	Possible cause	Solution
Motor does not start	Fan does not function	No mains voltage	Check the mains voltage
		Mains cord defective	Repair or replace mains cord
		Loose contacts	Repair the contacts
		Motor protection switch defective	Replace the motor protection switch
Motor makes a humming noise, but does not run	Fan does not function	Motor defective	Repair or replace motor
		Motor uses 2 phases instead of 3	Repair the phase connection
Motor stops automatically	Fan does not function	Motor defective	Repair or replace the motor
		PTC activated	See error message on the frequency inverter and investigate the cause
Poor suction	Fan does not function properly	Inverted direction of rotation of the motor	Change the direction of rotation
		Motor defective	Repair or replace the motor
		Fan blades polluted	Clean the fan blades
Vibrations in the fan	Fan not steady	Extraction of false air	Check or replace the sealing material
		Imbalance in the fan	Clean the fan
		Fan is not level	Use the adjusting feet to put the fan in fully horizontal position (SAF only)

## 8 SPARE PARTS

Refer to the exploded view Fig. VII on page 13.



## 9 ELECTRICAL DIAGRAM

Refer to the separately supplied electrical diagram.



5. VFD or VFD/Panel



## 10 DISPOSAL

Dismantling and disposal of the fan must be done by qualified persons.



### Personal protective equipment (PPE)

Wear respiratory protection and protective gloves when you dismantle and dispose of the system.

### 10.1 Dismantling

To safely dismantle the fan, obey the safety instructions that follow.

Before dismantling of the fan:

- disconnect it from the mains
- clean the outside

During dismantling of the fan:

- make sure that the area is sufficiently ventilated, e.g. by a mobile ventilation unit

After dismantling of the fan:

- clean the dismantling area

### 10.2 Disposal

Dispose of the pollutants and dust in a professional manner in accordance with federal, state or local regulations.

## CE DECLARATION

### CE declaration of conformity for machinery



We, Plymovent Manufacturing B.V., Koraalstraat 9, 1812 RK Alkmaar, the Netherlands, herewith declare, on our own responsibility, that the products:

- TEV-385 | TEV-585 | TEV-765 | TEV-985
- SAF-3 | SAF-5 | SAF-7 | SAF-9

which this declaration refers to, are in accordance with the conditions of the following Directives:

- Machine Directive 2006/42 EC
- EMC 2014/30 EU
- LVD 2014/35 EU
- ErP Directive 2009/125 EC
- Supply of Machinery (Safety) Regulations 2008 (UKCA)

Alkmaar, Netherlands, 1 November 2023

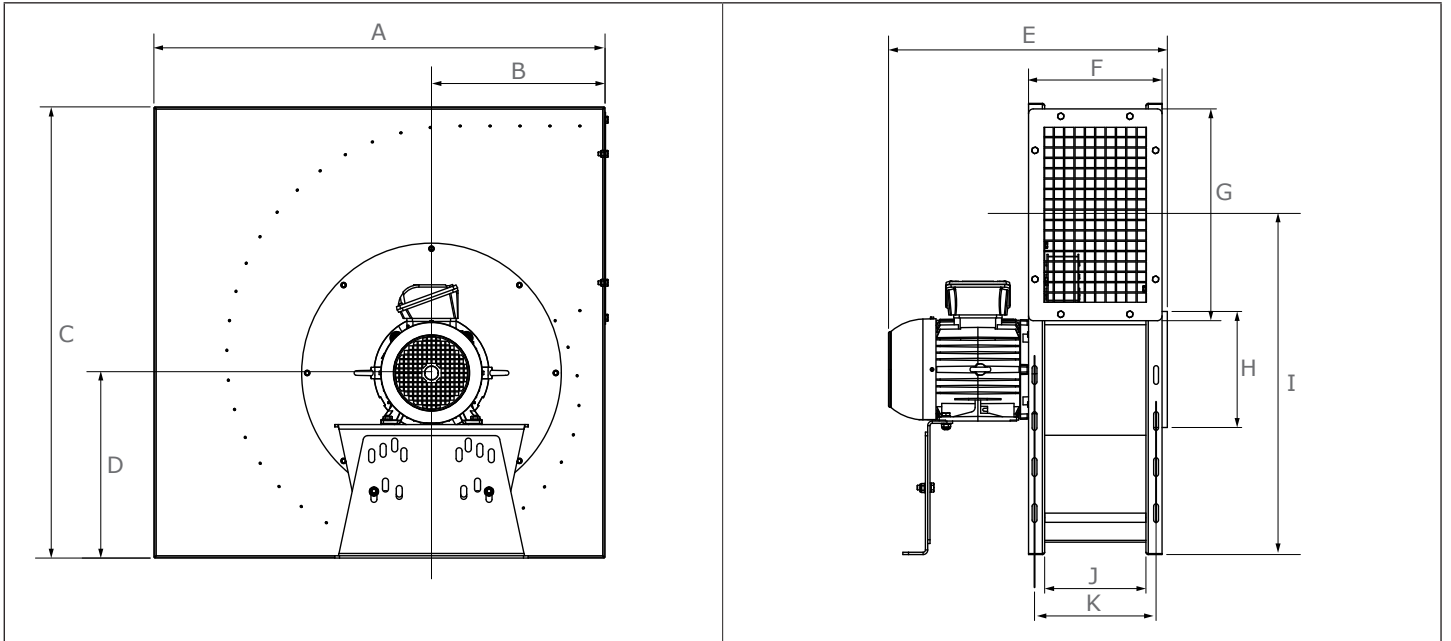
Kees Janssen  
Product Manager

An **installation** is defined as a combination of several finished products or components that are assembled by an installer at a given place. The various parts of the installation are intended to operate together in a particular environment and to perform a specific task. The entire installation must comply with the relevant directives and standards. The assembly instructions given by the manufacturer, as well as the whole method of installation, must be in accordance with good engineering practices within the context of installations, as well as installation rules. Considering the above, the installer will be responsible for completing the installation and issuing the final CE Declaration of Conformity.

**Table I Technical specifications**

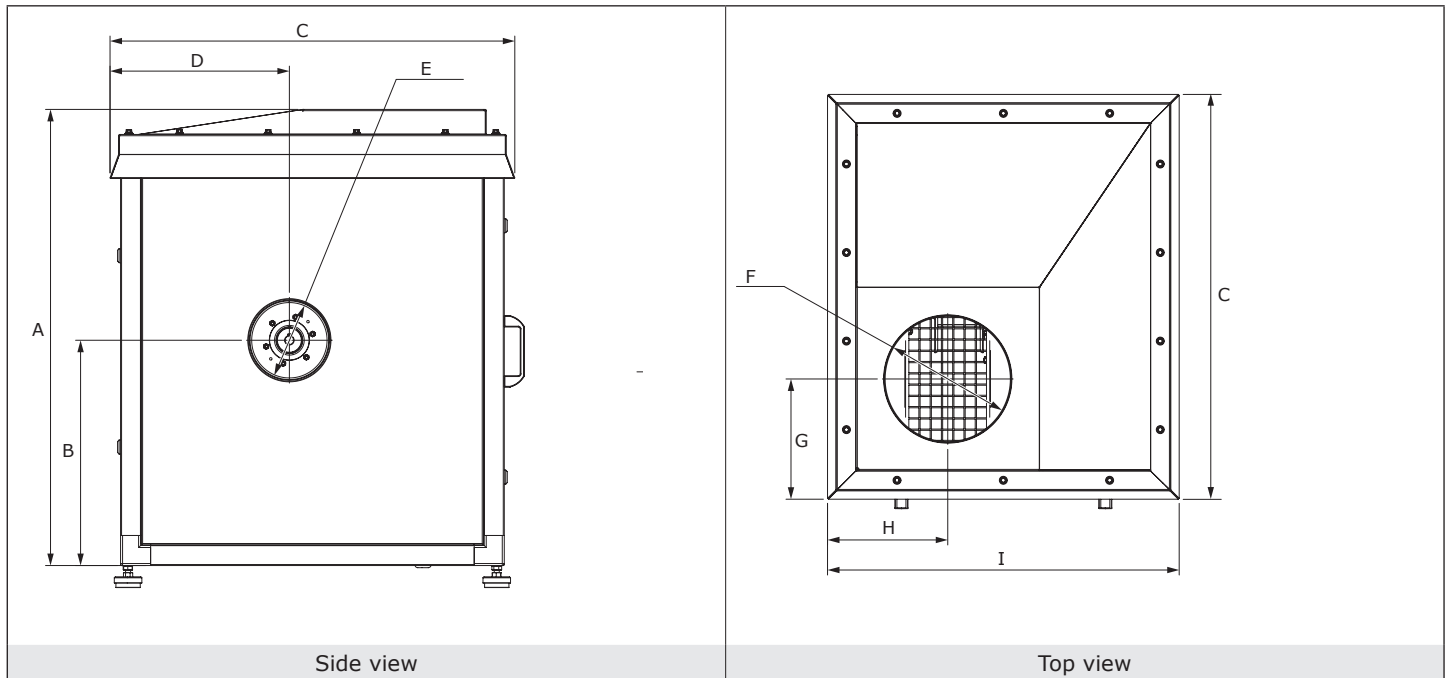
<b>GENERAL</b>								
Fan type	radial							
Speed of revolutions	2800 rpm							
Efficiency level	IE3							
Insulation class	F with PTC							
Protection class: - motor - housing	- IP 33 - IP 55							
Max. starts/stops per hour	30							
Design conditions	20°C at sea level							
	<b>TEV-385</b>	<b>SAF-3</b>	<b>TEV-585</b>	<b>SAF-5</b>	<b>TEV-765</b>	<b>SAF-7</b>	<b>TEV-985</b>	<b>SAF-9</b>
Weight	30 kg	111 kg	42 kg	165 kg	85 kg	239 kg	87 kg	311 kg
Possible outlet positions	- top - side - bottom	top	- top - side - bottom	top	- top - side - bottom	top	- top - side - bottom	top
Noise level <sup>*) **)</sup>	73 dB(A)	60 dB(A)	76 dB(A)	64 dB(A)	74 dB(A)	63 dB(A)	81 dB(A)	71 dB(A)
	<b>TEV-385   SAF-3</b>		<b>TEV-585   SAF-5</b>		<b>TEV-765   SAF-7</b>		<b>TEV-985   SAF-9</b>	
Connection voltage	230-400V/3~/50Hz		230-400V/3~/50Hz		230-400V/3~/50Hz		400-690V/3~/50Hz	
Power	0,75 kW		2,2 kW		4 kW		7,5 kW	
Nominal current - 230 V - 400 V - 690 V	3,02 A 1,7 A -		7,98 A 4,61 A -		13,32 A 7,69 A -		- 14,1 A 8,2 A	
*) According to ISO 3746								
**) Noise level data of SAF fans with additional duct silencer; refer to § 1.4.2								

Fig. II Dimensions TEV



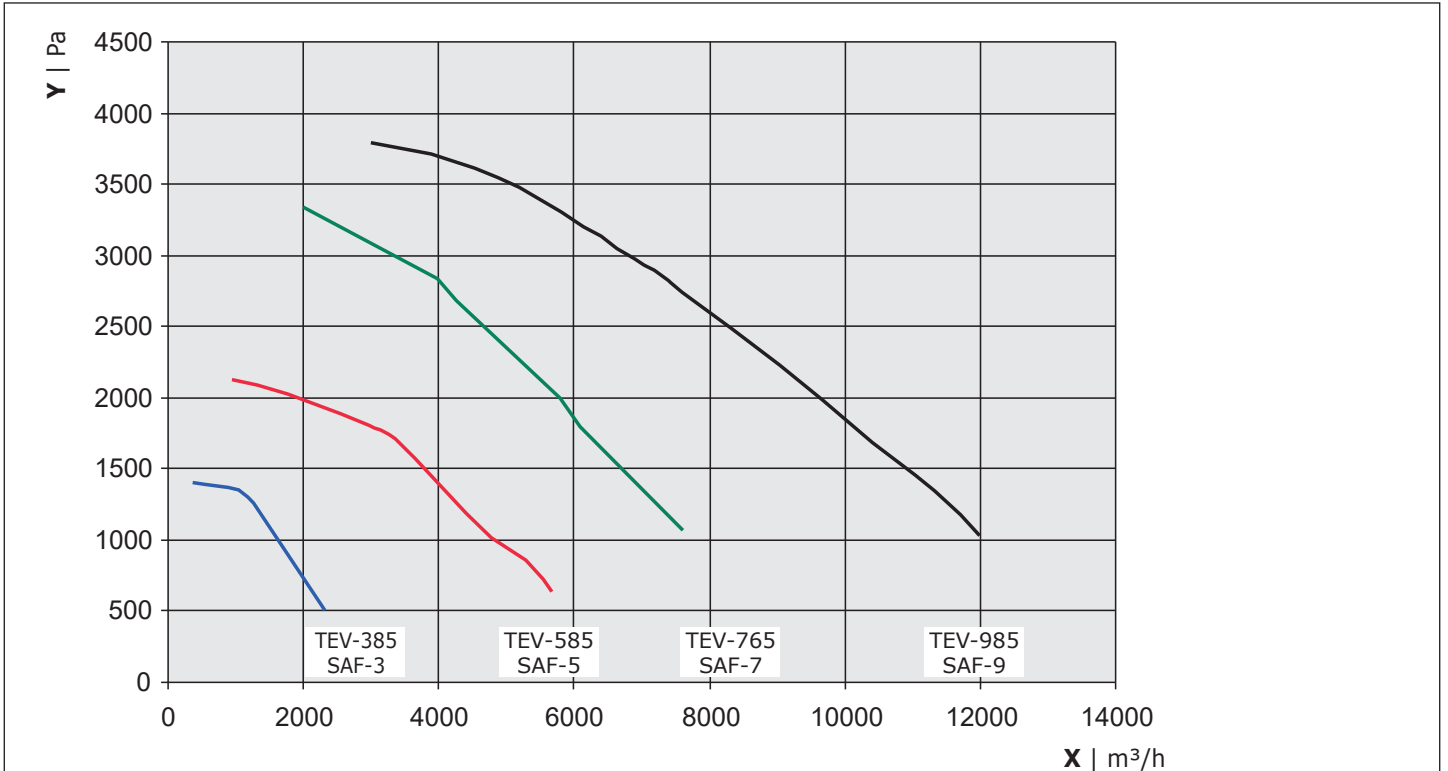
	TEV-385		TEV-585		TEV-765		TEV-985	
	mm	inch	mm	inch	mm	inch	mm	inch
A	640	25¼	783	30⅞	980	38⅝	1100	43¼
B	285	11¼	339	13⅜	377	14⅞	479	18⅞
C	640	25¼	783	30⅞	980	38⅝	1100	43¼
D	267	10½	310	12¼	402	15⅞	447	17⅞
E	446	17½	532	21	606	23⅞	673	26½
F	230	9	270	10⅝	290	11⅜	320	12⅝
G	312	12¼	380	15	460	18⅝	508	20
H	∅ 162	∅ 6⅜	∅ 200	∅ 7⅞	∅ 252	∅ 9⅞	∅ 317	∅ 12½
I	477	18¾	602	23¾	741	29⅞	829	32⅝
J	160	6¼	200	7⅞	220	8⅝	250	9⅞
K	204	8	244	9⅝	264	10⅜	294	11⅝
Fan wheel (not shown):								
- Diameter	∅ 315	∅ 12⅜	∅ 400	∅ 15¾	∅ 500	∅ 19⅝	∅ 560	∅ 22
- Width	85	3⅜	85	3⅜	65	2½	85	3⅜

Fig. III Dimensions SAF



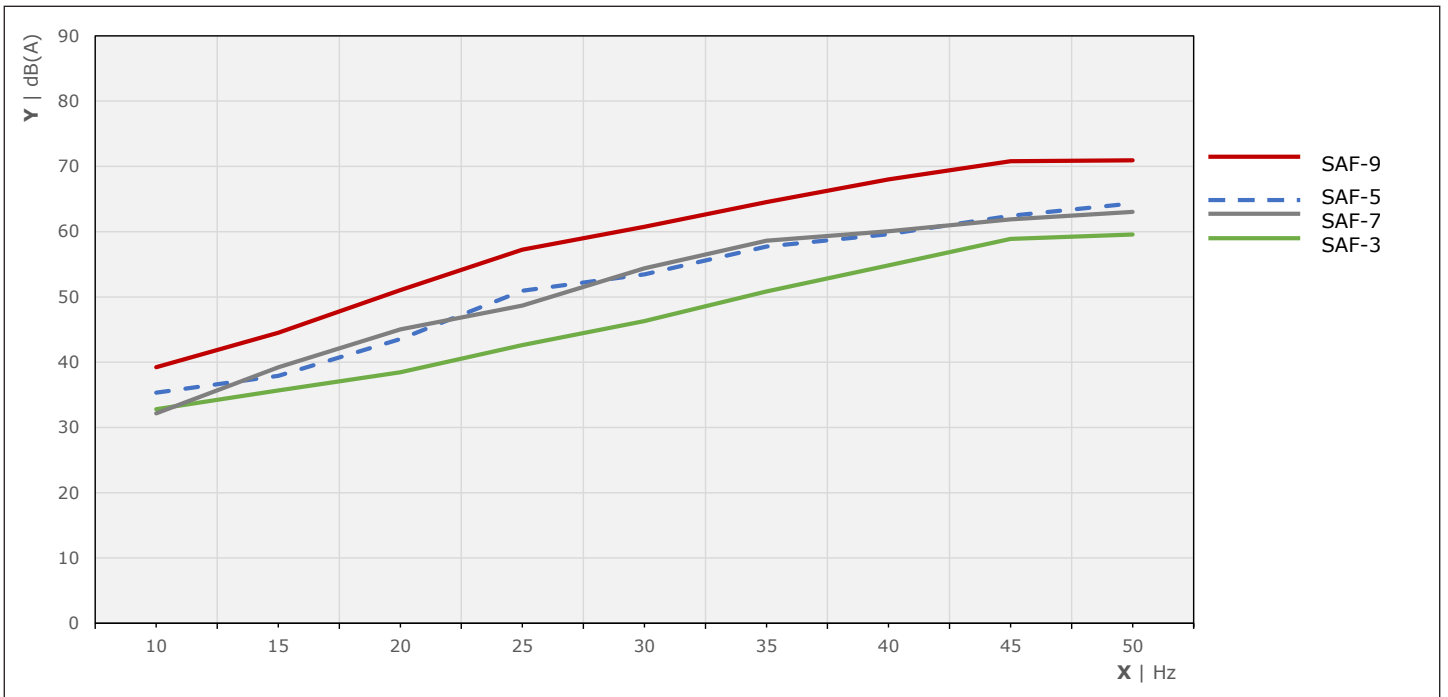
	SAF-3		SAF-5		SAF-7		SAF-9	
	mm	inch	mm	inch	mm	inch	mm	inch
A	911	35 <sup>7</sup> / <sub>8</sub>	1092	43	1277	50 <sup>1</sup> / <sub>4</sub>	1389	54 <sup>5</sup> / <sub>8</sub>
B	450	17 <sup>3</sup> / <sub>4</sub>	539	21 <sup>1</sup> / <sub>4</sub>	698	27 <sup>1</sup> / <sub>2</sub>	716	28 <sup>1</sup> / <sub>4</sub>
C	808	31 <sup>3</sup> / <sub>4</sub>	988	38 <sup>7</sup> / <sub>8</sub>	1192	46 <sup>7</sup> / <sub>8</sub>	1338	52 <sup>5</sup> / <sub>8</sub>
D	358	14 <sup>1</sup> / <sub>8</sub>	401	15 <sup>3</sup> / <sub>4</sub>	493	19 <sup>3</sup> / <sub>8</sub>	538	21 <sup>1</sup> / <sub>8</sub>
E	Ø 160	Ø 6 <sup>1</sup> / <sub>4</sub>	Ø 200	Ø 7 <sup>7</sup> / <sub>8</sub>	Ø 250	Ø 9 <sup>7</sup> / <sub>8</sub>	Ø 315	Ø 12 <sup>3</sup> / <sub>8</sub>
F	Ø 250	Ø 9 <sup>7</sup> / <sub>8</sub>	Ø 315	Ø 12 <sup>3</sup> / <sub>8</sub>	Ø 400	Ø 15 <sup>3</sup> / <sub>4</sub>	Ø 500	Ø 19 <sup>5</sup> / <sub>8</sub>
G	240	9 <sup>1</sup> / <sub>2</sub>	312,5	12 <sup>1</sup> / <sub>4</sub>	362,5	14 <sup>1</sup> / <sub>4</sub>	417,5	16 <sup>3</sup> / <sub>8</sub>
H	240	9 <sup>1</sup> / <sub>2</sub>	312,5	12 <sup>1</sup> / <sub>4</sub>	362,5	14 <sup>1</sup> / <sub>4</sub>	417,5	16 <sup>3</sup> / <sub>8</sub>
I	702	27 <sup>5</sup> / <sub>8</sub>	854	33 <sup>5</sup> / <sub>8</sub>	961	37 <sup>7</sup> / <sub>8</sub>	1071	42 <sup>1</sup> / <sub>8</sub>

Fig. IV Fan curves TEV | SAF



X = Airflow | m³/h  
 Y = Static pressure | Pa

Fig. V Noise level SAF (with additional duct silencer)



X = Motor frequency | Hz  
 Y = Sound level | dB(A)

Fig. VI Mounting examples TEV

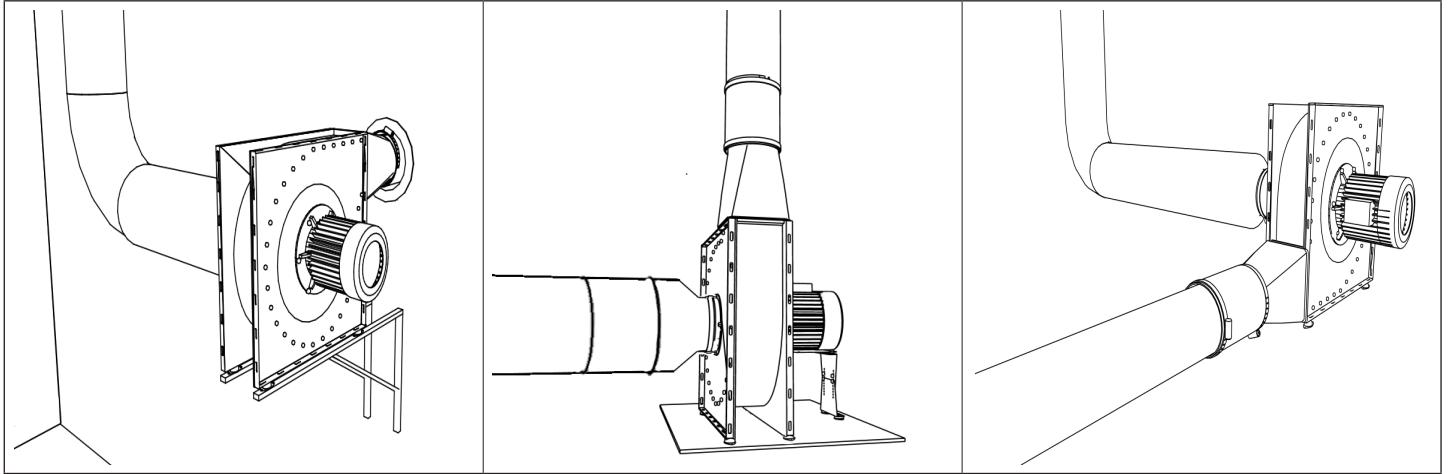
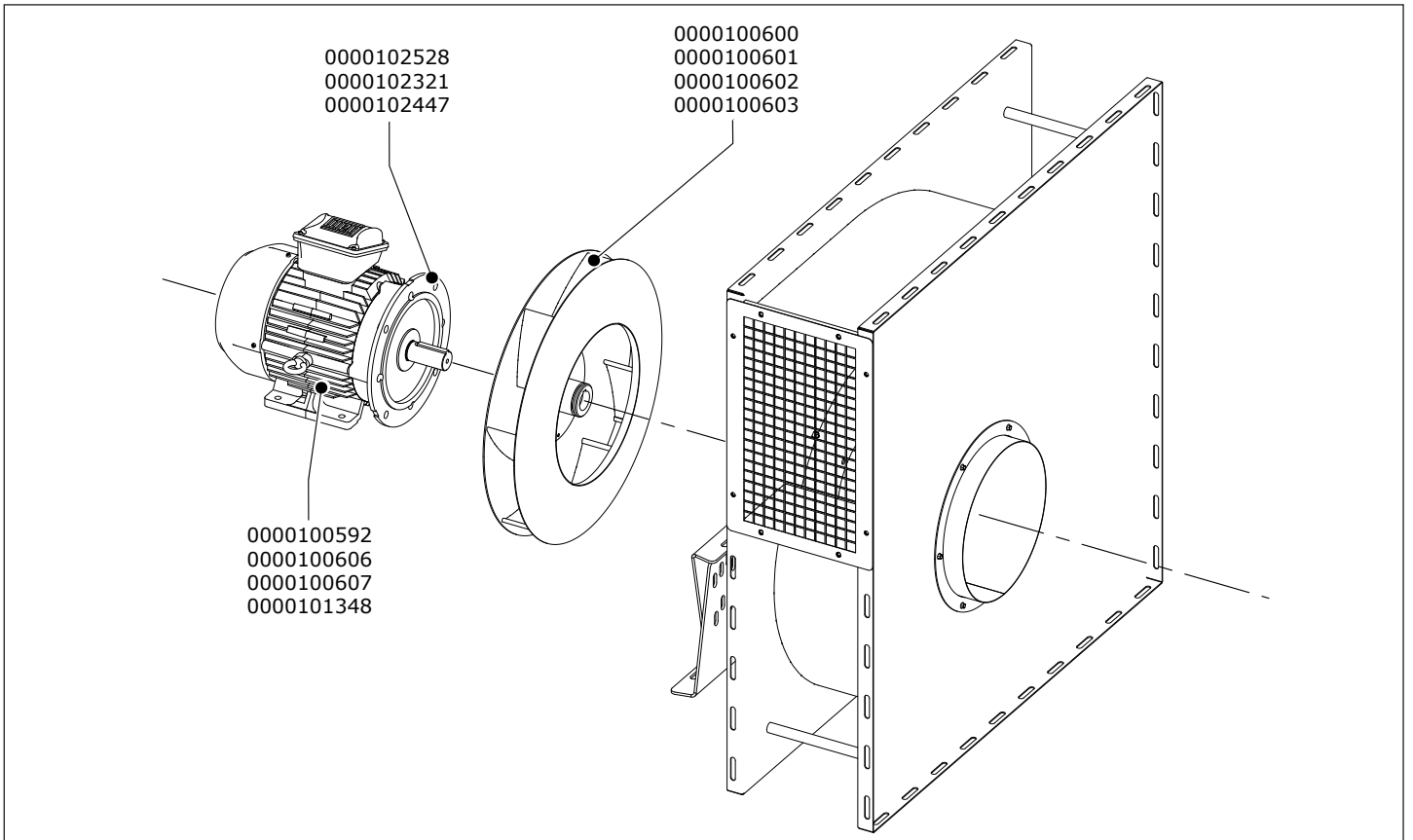


Fig. VII Exploded view



Article no.	Description
<b>TEV-385   SAF-3</b>	0,75 kW (230-400V/3ph/50Hz)
0000100592	Motor 0,75 kW; 230-400/460V/3ph/50-60Hz (IEC)
0000100600	Fan wheel TEV-385 (IEC)
<b>TEV-585   SAF-5</b>	2,2 kW (230-400V/3ph/50Hz)
0000100601	Fan wheel TEV-585 (IEC)
0000101348	Motor 2,2 kW; 230-400V/3ph/50Hz (IEC)
0000102528	Motor plate FUA-4700/TEV-585 (IEC)

Article no.	Description
<b>TEV-765   SAF-7</b>	4 kW (230-400V/3ph/50Hz)
0000100602	Fan wheel TEV-765 (IEC)
0000100606	Motor 4,0 kW; 230-400V/3ph/50Hz (IEC)
0000102321	Motor plate TEV-765 (IEC)
<b>TEV-985   SAF-9</b>	7,5 kW (400-690V/3ph/50Hz)
0000100603	Fan wheel TEV-985 (IEC)
0000100607	Motor 7,5 kW; 400-690V/3ph/50Hz (IEC)
0000102447	Motor plate TEV-985 (IEC)

