
KFB Cupboard fan



Table of contents

1	Introduction	1
1.1	Product description	1
1.2	Intended use	1
1.3	Document description	1
1.4	Product overview	1
1.5	Name plate	2
1.5.1	Type designation	2
1.6	Product liability	2
2	Safety	2
2.1	Safety definitions	2
2.2	Safety instructions	2
2.3	Personal protective equipment	3
3	Transportation and storage	3
4	Installation	4
4.1	To do before the installation of the product	4
4.2	To install the product	4
5	Electrical connection	5
5.1	To do before the electrical connection	5
5.2	To connect the product to the power supply	5
5.3	To reset the motor protection	5
6	Operation	5
6.1	To start and stop the product	5
7	Maintenance	6
7.1	Maintenance schedule	6
7.2	To open the product	6
7.3	To clean the product	6
7.4	Spare parts	7
8	Troubleshooting	8
9	Disposal	8
9.1	To disassemble and discard the parts of the product	8
10	Warranty	8
11	Technical data	9
11.1	Technical data overview	9
11.2	Product dimensions	9
11.3	Wiring diagram for speed controller	10
12	Accessory overview	11
13	EU Declaration of Conformity	12

1 Introduction

1.1 Product description

This product is a cupboard fan made from sheet metal.

The product is not supplied with a cooker hood, flexible connection or external speed control, these parts are available and recommended as accessories.

1.2 Intended use

The product is used for extraction of kitchen odour or air with a high moisture.

The product is intended for indoor environment. The product is applicable for ambient temperatures between -25 °C and 40 °C.

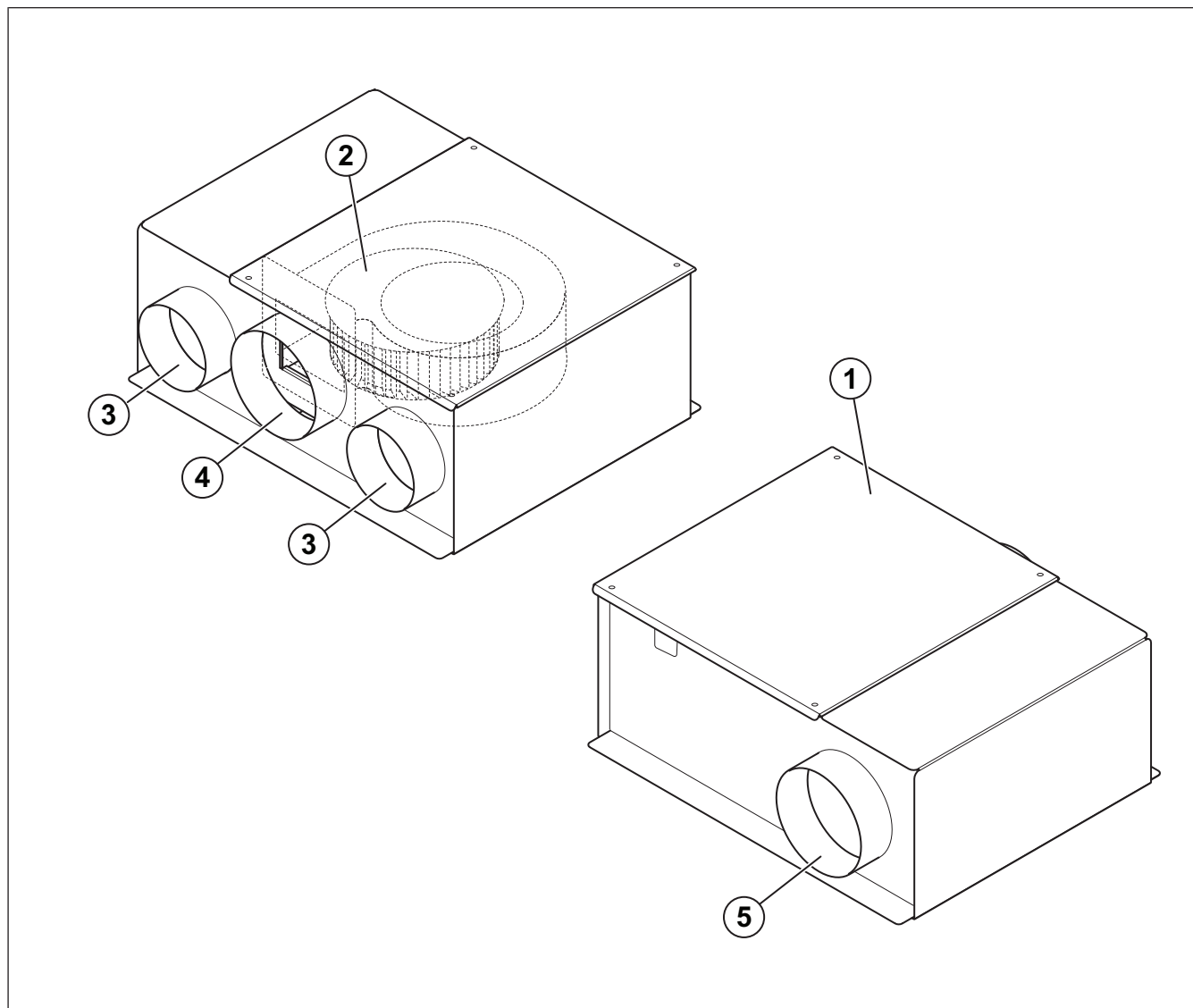
The product is not applicable for air that contains explosive, flammable or aggressive media. The product is not applicable for locations where there is risk for explosion.

1.3 Document description

This document contains instructions for installation, operation and maintenance of the product. The procedures must be done by approved personnel only.

Speak to Systemair for more information on how to install the product in different installation locations.

1.4 Product overview



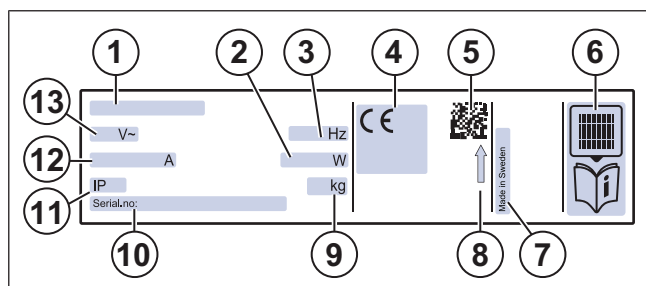
- 1. Service lid
- 2. Fan impeller
- 3. Extra air intake

- 4. Exhaust air
- 5. Connection to cooker hood.

Note:

Cooker hood is not supplied with the product.

1.5 Name plate



1. Type designation: Product name, dimension and motor type. Refer to [1.5.1 Type designation](#)
2. Input power, W
3. Frequency, Hz
4. Certifications
5. Scannable code
6. Find more information about the product on the Systemair documentation portal
7. Country of production
8. Airflow direction arrow
9. Weight, kg
10. Serial number: part number/production number/production date
11. IP class, enclosure class
12. Current, A
13. Voltage, V

Note:

The data on the name plate applies to “standard air” that is specified in the standard ISO5801.

1.5.1 Type designation

Product name	KFB
Dimension	140 S
	140 L
Motor type	AC, 1-phase, 230 V

1.6 Product liability

Systemair is not liable for damages that the product causes in these conditions:

- The product is incorrectly installed, operated or maintained.
- The product is repaired with parts that are not original spare parts from Systemair.
- The product is used together with accessories that are not original accessories from Systemair.
- The product is used without motor protection.

2 Safety

2.1 Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



Warning

If you do not obey these instructions, there is a risk of death or injury.



Caution

If you do not obey these instructions, there is a risk of damage to the product, other materials or the adjacent area.

Note:

Information that is necessary in a given situation.

2.2 Safety instructions



Warning

Read the warning instructions that follow before you do work on the product.

- Read this manual and make sure that you understand the instructions before you do work on the product.
- Obey local conditions and laws.
- The ventilation contractor and the operator are responsible for correct installation and intended use.
- Keep this manual at the location of the product.
- Do not install or operate the product if it is defective.
- Do not remove or disconnect safety devices.
- Make sure that you can read all warning signs and labels on the product when it is installed. Replace labels that have damage.
- Only permit approved personnel to work on the product and to be in the adjacent area during all work on the product.
- Make sure that you know how to stop the product quickly in an emergency.
- Use applicable safety devices and personal protective equipment during all work on the product.
- Before you do work on the product, stop the product and wait until the fan impeller stops. Make sure that there is no voltage on the motor terminals.
- If the maintenance is not correctly and regularly done, there is risk of injury and damage to the product.
- Only do the maintenance as given in this manual. Speak to Systemair technical support if other servicing is necessary.
- Always use spare parts from Systemair.
- Sound levels exceeding 70 dB(A) may occur depending on model and size. Visit www.systemair.com for more detailed information about your product.
- The product is not to be used by persons, including children, with reduced physical, sensory or mental

capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

- Do not allow children to play with the device.

2.3 Personal protective equipment

Use personal protective equipment during all work on the product.

- Approved eye protection
- Approved protective helmet
- Approved hearing protection
- Approved protective gloves
- Approved protective shoes
- Approved work clothing

3 Transportation and storage



Warning

Make sure that the product does not become damaged or wet during transportation. A damaged or wet product can cause fire or electric shock.

- Before you move the product to the installation location, examine the packaging for damages.
- Do not move the product by the cables, terminal box, fan impeller, protection grille, inlet cone or silencer.
- If lifting equipment is used, make sure that the lifting equipment can hold the weight of the product. Refer to the name plate for information. Do not lift the product by the packaging.



Warning

Do not walk below a lifted product.

- Keep the correct side of the packaging up during transportation. Refer to the arrows on the packaging.
- Load and unload the product carefully.
- Keep the product in a dry and clean location during storage. Make sure that the ambient temperature during storage is between -10 and $+30$ °C. A stable ambient temperature prevents damage from condensation.
- Keep the product in storage for maximum 1 year.

4 Installation

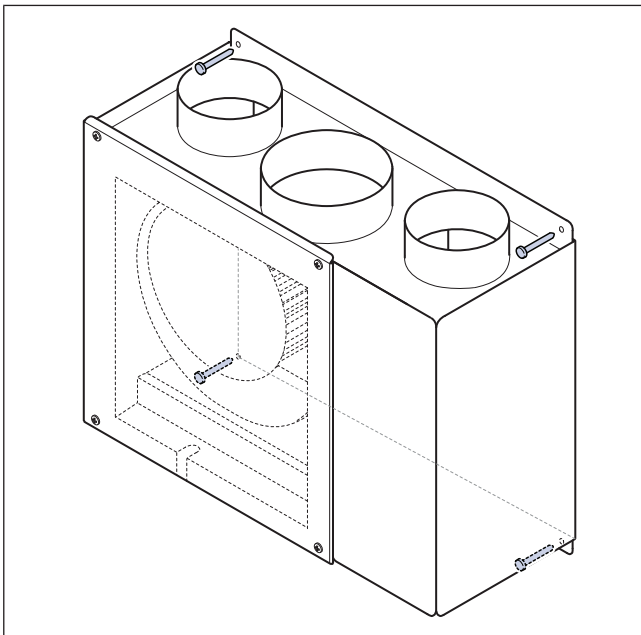
4.1 To do before the installation of the product

- Make sure that you have the necessary installation accessories:
 - Refer to [12 Accessory overview](#) for an overview of the accessories.
- Use installation material with fire resistance rating for the installation location.
- Examine the packaging for transportation damage and remove the packaging from the product carefully.
- Examine the product and all components for damage.
- Make sure that the motor effect and the fan performance agrees with the expectations at the installation location.
- Make sure that the information on the name plate and the motor name plate agrees with the operation conditions.
- Install the product in a location where there is space for commissioning, troubleshooting and maintenance.
- Make sure that the installation location is clean and dry, for full safety during electrical work.
- Make sure that the installation surface has sufficient capacity to hold the weight of the product.
- Refer to the airflow direction arrows on the name plate or on the product to install the product in the correct position.
- Make sure that all cable glands are tight against the cables to prevent leaks.

4.2 To install the product

Install the product behind a cupboard above a kitchen stove together with a cooker hood or on the wall in a laundry room.

- 1 Measure the distance between the mounting holes on the product. Refer to [11.2 Product dimensions](#).



- 2 Mark the installation position on the wall. If the product is installed together with a cooker hood, make sure that the distance between the cooker hood and the product is minimum 120 mm (A).

- 3 Attach the product to the wall with screws. Screws for installation is not supplied by Systemair.

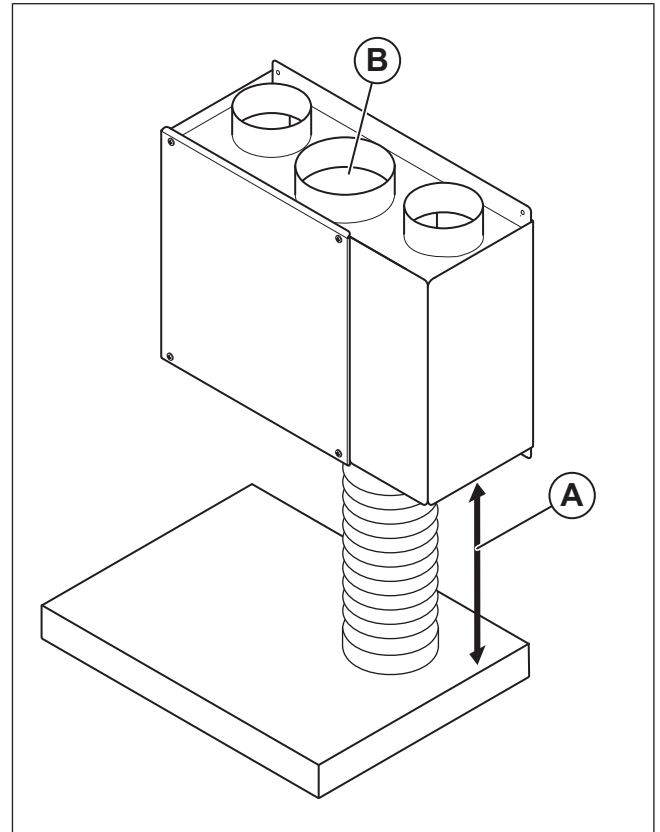
Note:

Make sure that the screws and the material of the wall can hold the weight of the product.

- 4 Connect the duct to the exhaust duct connection (B). Follow local rules and regulation for installation of the ducts.

Note:

Do not lead the outlet (exhaust) to the duct for smoke extraction.



5 Electrical connection

5.1 To do before the electrical connection

- Make sure that the electrical connection agrees with the product specification on the motor name plate.
- Make sure that the environment for electrical connection is clean and dry.

5.2 To connect the product to the power supply

The product is supplied with a 1 m cable and plug for connection to a socket outlet. For article 3994 and 3995 the cable is supplied with a quick connection.

5.3 To reset the motor protection

The product has an built in motor protection, reset by disconnecting the product from power for 60 seconds.

6 Operation

6.1 To start and stop the product

If the product is used together with a cooker hood:

- Start and stop the product with the cooker hood.

If the product is used together with a transformer:

- Start and stop the product with transformer RE 1,2.

7 Maintenance



Warning

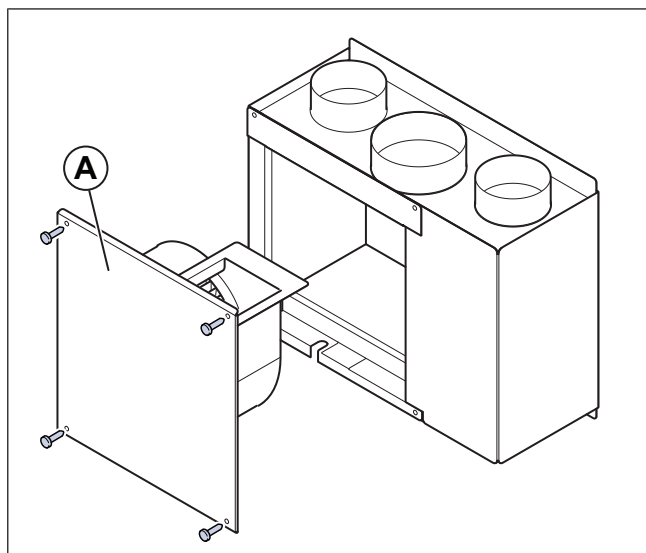
Disconnect the power by removing the plug from the power outlet before any maintenance work.

7.1 Maintenance schedule

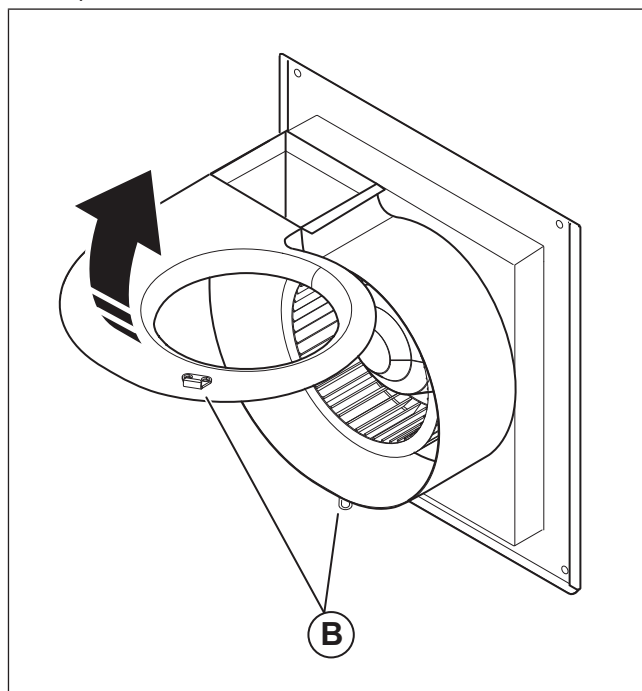
Maintenance task	Each year
Visually examine the product and its components for damage, corrosion and dirt.	X
Examine the fan impeller for damage and imbalance.	X
Clean the impeller.	X

7.2 To open the product

- 1 Disconnect the power supply.
- 2 Unscrew the screws from the lid (A). The fan impeller is attached to the inside of the lid.



- 1 Open the lid to get access to the motor, refer to [7.2 To open the product](#).
- 2 Loosen the locking device (B) to open the lid to the fan impeller.



7.3 To clean the product



Caution

- Do not clean the product with a high-pressure washer.
- Do not clean the product with steel brushes or sharp objects.
- Do not bend the fan impeller blades.
- Be careful not to move the balance weights on the fan impeller.

- 3 Hold the rotor and turn the fan impeller (C) clockwise to remove the fan impeller.

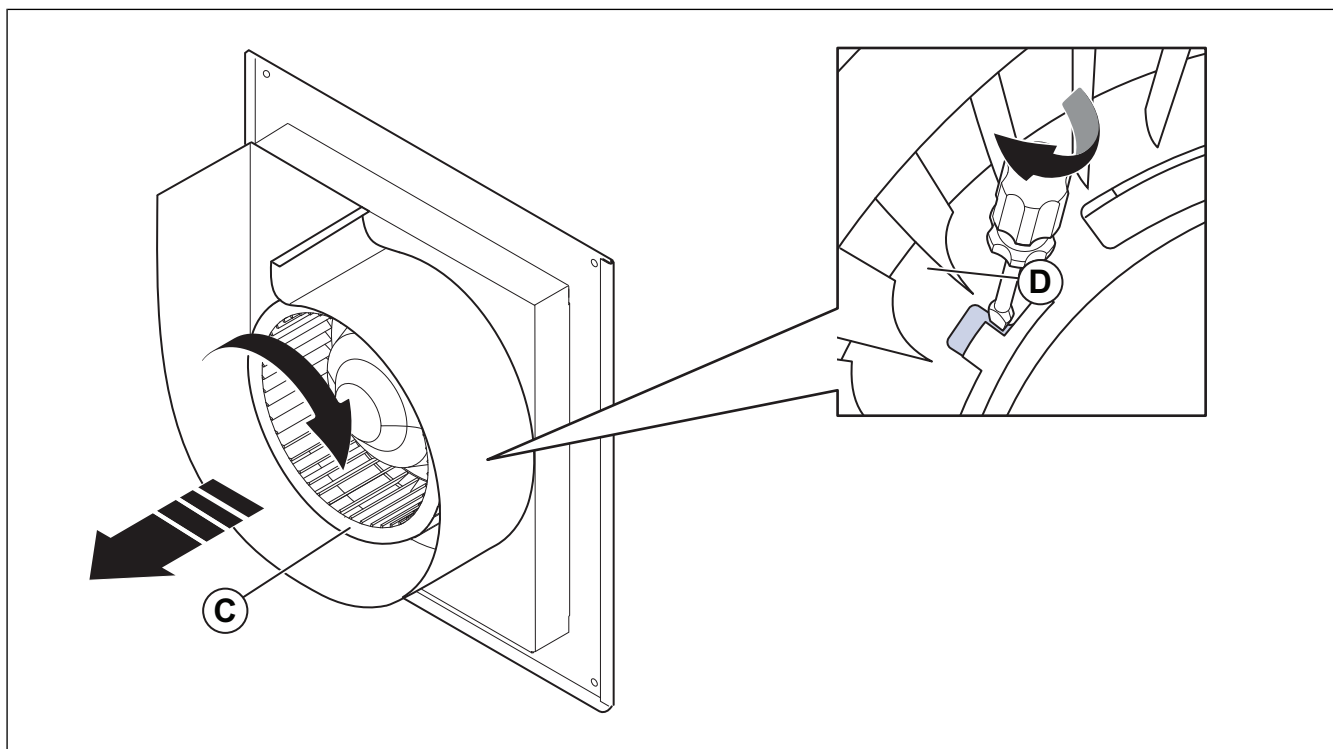
If the fan impeller is firmly attached, do this step:

- Place the screwdriver according to the image (D) and slightly turn the screwdriver clockwise.



Caution

Systemair recommend to use gloves. The fan impeller has sharp edges.



- 4 Clean the fan impeller in dishwasher or by hand. Let the fan impeller dry.
- 5 Attach the fan impeller. Hold the rotor and turn the fan impeller anti-clockwise.
- 6 Close the fan impeller lid and fasten the locking device.
- 7 Fasten the four screws on the lid.

7.4 Spare parts

- When you send an order for spare parts, include the serial number of the product. The serial number is found on the name plate.
- For more information about spare parts, contact technical support.
- Always use spare parts from Systemair.
- To find spare parts, refer to the scannable code on the name plate.

8 Troubleshooting

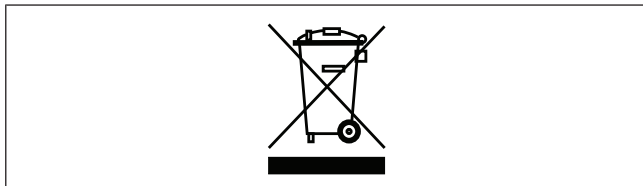
Note:

If you cannot find a solution to your problem in this section, speak to Systemair technical support.

Problem	Cause	Solution
The fan does not operate smoothly	The fan impeller is not correctly balanced	Speak to Systemair technical support.
	There is dirt on the fan impeller.	Clean the impeller carefully. Refer to 7.3 To clean the product .
If the fan does not work		Disconnect the power supply
There is unusual noise when the product starts or operates.	There is strain in the connections of the duct system.	Loosen the connections, align the parts of the duct system correctly and tighten the connections.
The fan speed does not get the nominal value.	The fan impeller cannot turn freely because of mechanical blockage.	Remove the blockage.

9 Disposal

The product follows the WEEE directive. This symbol on the product or the packaging of the product shows that this product is not domestic waste. The product must be recycled at an approved disposal location for electrical and electronic equipment.



9.1 To disassemble and discard the parts of the product

- 1 Disconnect and disassemble the product in the opposite sequence of electrical connection and installation.
- 2 Recycle the product parts and the packaging at an applicable disposal location.
- 3 Obey the local and national requirements for disposal.

10 Warranty

For warranty claims, send a written maintenance plan and the commissioning report to Systemair. The warranty is only applicable for these conditions:

- The product is correctly installed and operated.
- Motor protection is used.
- The instructions in the data sheets are obeyed.
- Maintenance instructions are obeyed.
- The product is operated for a minimum of 1 hour each month.

11 Technical data

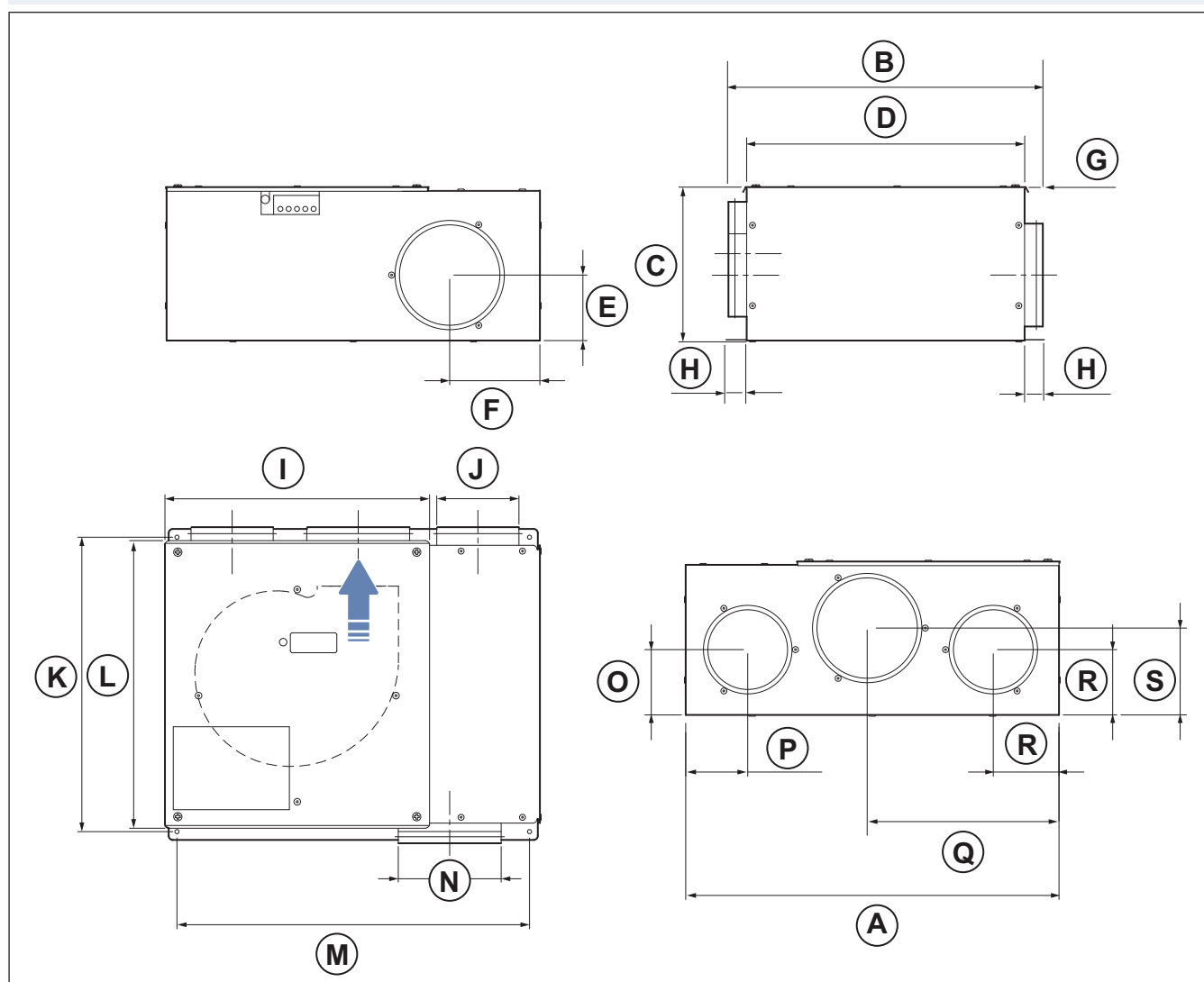
11.1 Technical data overview

Maximum temperature of transported air, °C	Refer to the data sheet in the online catalogue at www.sys-temair.com .
Sound pressure, dB	
IP class	
Voltage, current, frequency, weight	Refer to 1.5 Name plate
Motor data	Refer to the motor name plate or the technical documentation from the motor manufacturer.

11.2 Product dimensions

Note:

If the unit of measure is not specified, the dimensions are given in millimetres.



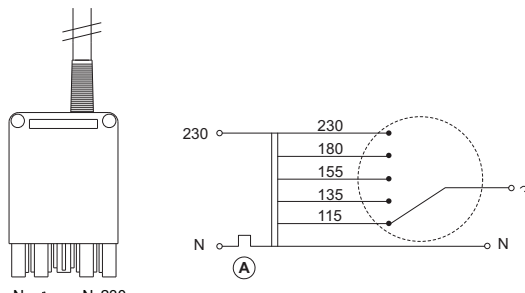
	A	B	C	D	E	F	G	H	I	øJ
KFB 140 S	450	375	185	335	79	109	22	20	319	100 (2x)
KFB 140 L	450	375	185	335	79	109	22	20	319	100 (2x)

	c/cK	L	c/cM	øN	O	P	Q	R	S
KFB 140 S	355	347	425	125 (2x)	79	75	231	79	105
KFB 140 L	355	347	425	125 (2x)	79	75	231	79	105

11.3 Wiring diagram for speed controller

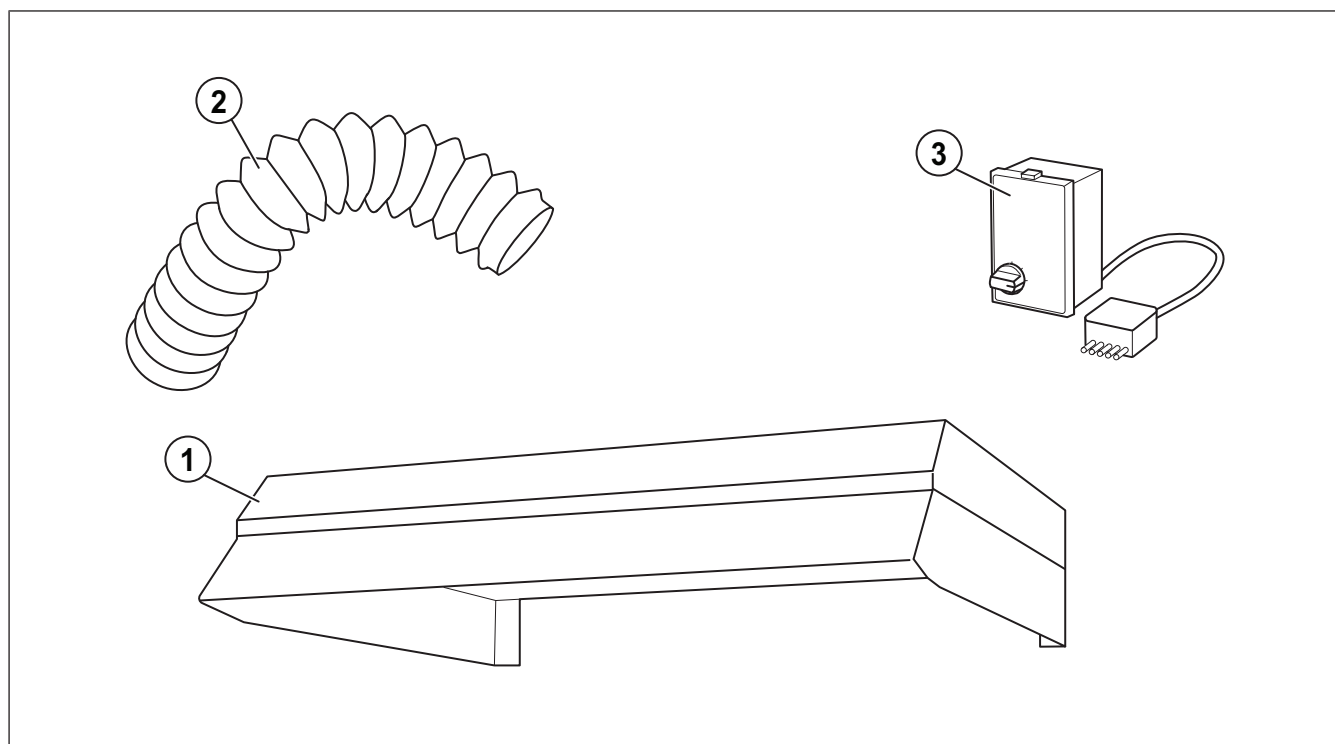
Note:

The selection of electrical accessories must be done in line with the technical parameters of the product.

RE 1,2	
Manual 5-step transformer.	

A. Thermal fuse

12 Accessory overview



- 1. Cooker hood
- 2. Flexible hose for cooker hoods
- 3. RE 1,2 transformer

Note:

The selection of accessories shown are not supplied with the product. For more information and other available accessories, refer to www.systemair.com or speak to Systemair technical support.

13 EU Declaration of Conformity

We, the manufacturer

Manufacturer	Systemair Production AB
Address	Industrivägen 3 739 30 Skinnskatteberg Sweden

declare under our sole responsibility that the products

Machine	Cupboard fan
Type/Model	KFB

fulfils the relevant provisions of following directives and standards

Machinery Directive 2006/42/EC

EN ISO 12100:2010

Safety of machinery – General principles for design - Risk assessment and risk reduction

EN ISO 13857:2019

Safety of machinery – Safety distances to prevent hazard zones being reached by upper or lower limbs

EN 60204-1:2018

Safety of machinery – Electrical equipment of machines – Part 1: General requirements

EN 60335-1:2012

Household and similar electrical appliances – Safety Part 1: General requirements.

EN 60 335-2-80:2003

Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans.

EN 50106:2008

Safety of household and similar appliances – Particular rules for routine tests referring to appliances under the scope of EN 60 335-1.

EN 60529:2014

Degrees of protection provided by enclosures (IP Code).

Directive electromagnetic compatibility (EMC) 2014/30/ EU

EN 62233:2008

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure

EN 61000-6-2:2005

Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments.

RoHS Directive 2011/65/EU and amendment (EU) 2015/ 863

EN IEC 63000:2018

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Ecodesign Directive 2009/125/EC

327/2011 Requirements for fans above 125W

1253/2014 Requirements for ventilation units above 30W

1254/2014 Requirements for energy labelling of residential ventilation units

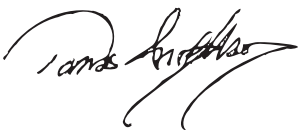
EN ISO 5801:2017

Fans – Performance testing using standardized airways.

EN 13142:2021

Ventilation for buildings – Components/Products for residential ventilation – required and optional performance characteristics.

Persons authorized to compile the technical file:



Tomas Angelhag

Head Of Engineering

This declaration relates exclusively to the machinery in the state in which it was placed on the market and excludes components which are added or operations carried out subsequently by the final user.

Skinnskatteberg, Sweden 2024-12-01



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