

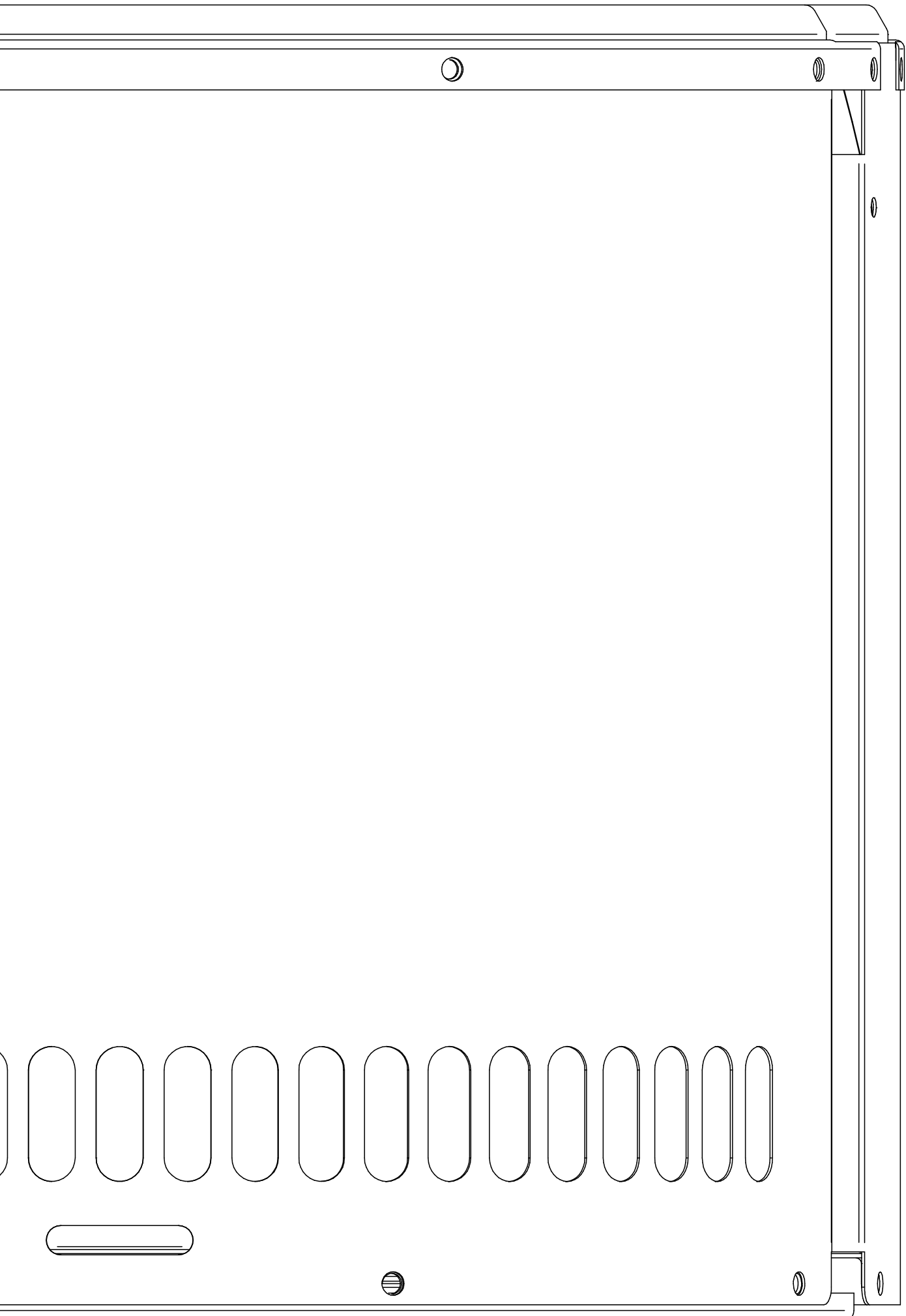
Chimney Fan

RBV1



UK | Read and save these instructions!

exodraft
Your energy. Optimized.



Chimney Fan | RBV1

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How to use this manual

This manual has been prepared based on the specific product and contains relevant technical information and installations guides.

Accessories and spare parts are not covered by this manual. Please refer to the individual manuals of these components.

This installation manual does not contain any system design documentation.

Failure to observe instructions marked with a danger symbol may result in personal injury and/or damage to the product.

Errors and omissions excepted.



Disposal

Electrical and electronic equipment (EEE) often contain materials, components and substances that may harm the environment or be hazardous to your health. Products (WEEE) marked with the 'crossed-out wheeled bin' symbol should be disposed of separately from other waste at the end of its life. Though legislation may differ from country to country we strongly advise that electrical and electronic waste is separated from other waste and disposed of according to national legislation to protect the environment and personnel that may come into contact with waste.

Symbols

The following symbols may be used in the manual to draw attention to danger or risk of personal injury or damage to the product.



General prohibition

Failure to observe instructions marked with the prohibited symbol may result in extreme danger or serious personal injury.



General attention

Marks a dangerous situation that, in the worst-case scenario, can cause serious personal injury or significant damage to the product.



General warning

Failure to observe instructions marked with a danger symbol may result in personal injury and/or damage to the product.



Electricity hazard/High Voltage

Marks a situation in which caution is advised due to the risk of high voltage electric shock which can cause serious personal injury or significant damage to the product.



Connect an earth terminal to the ground

Failure to observe instructions marked with a danger symbol may result in personal injury and/or damage to the product.



Permitted and approved

Permitted and approved method of installation.



Prohibited and not approved

Prohibited and not approved method of installation.



Warning

To minimise the risk of fire, electric shock, personal injury and/or damage to the product please observe the following:

- Please always read the manual and only use the product in accordance with the manufacturer's instructions. If in doubt, contact one of the Exodraft specialized dealers.
- All installations must be carried out by properly qualified personnel in accordance with national legislation and regulations.
- This product must be earthed. Get assistance from an qualified electrician when in doubt.
- Ensure that the chimney has been swept before mounting the fan to avoid chimney fires.
- Prior to servicing the product, disconnect the power and ensure that it cannot accidentally be reconnected.
- Exodraft recommends that the chimney fan is switched on at least once every three months, to avoid long periods of stagnation for the mechanical parts.
- Exodraft always recommends the use of a smoke alarm when a solid fuel fireplace is installed.
- If the Exodraft fan system has been designed for solid fuel/multi fuel installations, please ensure that the design meets the requirements of BS EN15287-1. If this cannot be achieved, a smoke alarm must be installed in the same room as the heat appliance.
- Note! Fans serving biomass boilers must be cleaned more often due to extensive residue/soot building. It is essential that a regular inspection and cleaning schedule is implemented, especially in the early days of usage, to experience how often regular inspections and cleaning should be carried out.

Product information

The RBV1 is a fan for mounting on top of the chimney. The RBV1 is designed to facilitate ignition and refueling. It is designed for wood burning stoves or closed inserts with a nominal effect of maximum 8 kW. The RBV1 comes with a flexible flange, a 5-meter cord prepared with plug, and an integrated isolation switch. The fan is part of an Exodraft system and should be connected to an Exodraft controller for optimal effect.

The RBV1 comes with a Schuko plug. (Type F) If it is to be used in a country where the installations use a different connector system, a suitable adapter must be used for the product.

This adapter must be purchased locally for each installation.

Incorrect firing may result in problems with soot, chimney fires, etc. which might damage the product. Please check out this site for advice about lighting and maintaining a fire:

www.exodraft.com

Scope of supply

- RBV1
- Assemble kit
- Installation and operation instruction for the RBV1

Warranty

All Exodraft products are covered by a 2-year guarantee as per European consumer rights legislation. For some countries an extended period of guarantee may apply depending on either national legislation or other clearly stipulated conditions. Customer complaints must be handled by a specialised dealer or wholesaler (preferably where the Exodraft product has been bought originally). An updated list of Exodraft specialised dealers can be found on our website for the country in question.

Exodraft products must always be installed by properly qualified personnel. Exodraft reserves the right to change these guidelines without prior notice.

The warranty and liability does not cover instances regarding personal injury or damage to property or the product that can be ascribed to one or more of the following causes:

- Failure to follow this installation and operation manual
- Incorrect installation, start-up, maintenance or servicing
- Improper repairs
- Unauthorised structural modifications made to the product
- Installation of additional components that have not been tested/approved with the product
- Any damage resulting from continued use of the product despite an evident defect
- Failure to use original spareparts and accessories
- Failure to use the product as intended
- Exceeding or failure to meet the limit values in the technical data
- Force majeure

Technical specifications

The RBV1 has been developed to solve draught problems by creating a mechanical draught on chimneys with circular core and a maximum internal diameter of $\varnothing 220$ mm. The RBV1 is designed to withstand high temperatures associated with wood burning at a max. temperature of 250 °C and tolerates continuous operation on stoves and closed inserts.

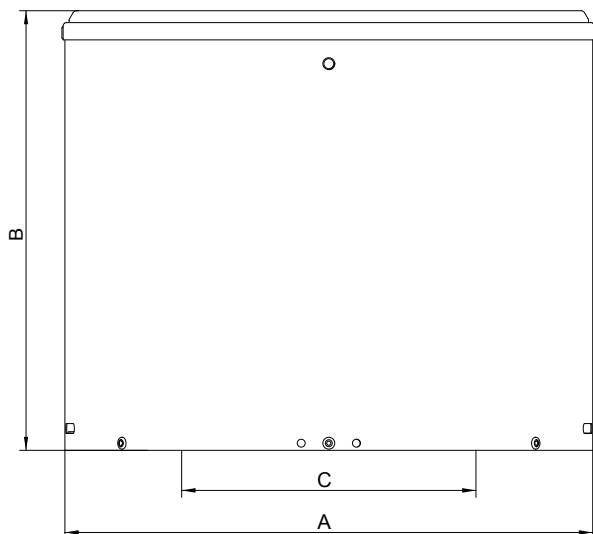
The RBV1 must always be on during start-up (lighting the fire) and during refueling. When the operating temperature in the fireplace, flue and chimney has reached a reasonable level and thus created sufficient draft, you may choose to switch off your RBV1. If you need extra draw-out later, due to e.g. a change in weather, you simply turn on the RBV1 again, leaving it active as long as necessary.



WARNING! To avoid chimney fires – the chimney must be swept before mounting the RBV1!

As the RBV1 is part of a wood-fired installation, please ensure that the design meets the requirements of fresh air supply. It is always recommend to install a smoke alarm in connection with a wood-fired installation. Regardless of usage pattern, you must turn on your RBV1 at least once a month, allowing it to run for 5-10 minutes. Inspect and clean your RBV1 installation at least once a year. The manufacturer cannot be held responsible for water penetration into the chimney.

Technical data

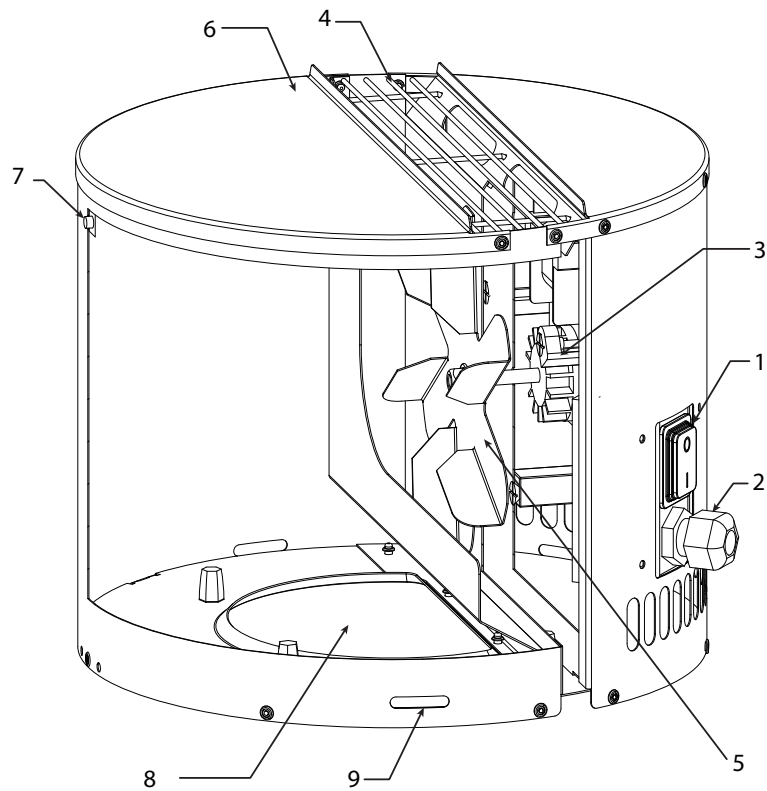
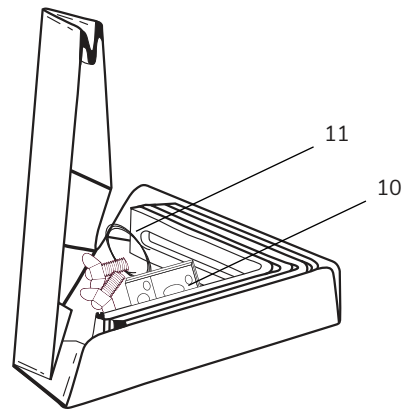


Data	Motor specifications
Discharge	Vertical
Motor	Shaded pole, class H
Voltage	1V x 230 AC
Rev/m	2.000
Current	0.27 Amp
Power consumption	0.036 kW
IP	24D

Data	Motor specifications
Weight	3.2 Kg
A x B x C [mm]	266 x 230 x 140
Impedance protected	Yes
Max. temperature during operation	250 ° C
Max. temperature at standstill	250 ° C

Construction and components

1	Switch
2	Cable screw joint
3	Motor
4	Net / outlet
5	Vane
6	Lid
7	Locking mechanism of lid
8	Inlet air
9	Drainholes
10	wireless outlet with remote control and battery.
11	Assemble kit.



Precautions and user instructions

These instructions, applicable standards and relevant safety procedures from the manufacturer must be followed and at the same time the official provisions in force in the country, where the product is installed, must be observed.

Support system

Prior to installation of a chimney fan, it must be determined if the chimney can safely carry the weight of the chimney fan.

A steel chimney should be well supported at the roof penetration point. If the chimney extends high above the roof, the chimney and the fan should be secured. The manufacturer's instructions must be followed.

Brick chimneys do not usually need any kind of support to carry the weight of the chimney fan.

System type

Fireplaces and wood stoves used in private dwellings normally operate in a relatively stable environment, where no major pressure fluctuations occur. However, to secure an optimal use of the Exodraft system speed adjustments and adjustment of air intakes are required depending on the weather outside and on the stage of the firing process.

Precautions

Be aware

- that it must be installed on top of the chimney
- that it can be mounted on steel as well as brick chimneys
- that it must be mounted with the approved Exodraft accessories
- that the chimney fan must always remain switched on when the fireplace is in use
- that it must be accessible for service and maintenance from the roof or from a ladder/cherry picker
- that the distance to flammable materials must be at least 500 mm
- that the isolation switch must be easily accessible

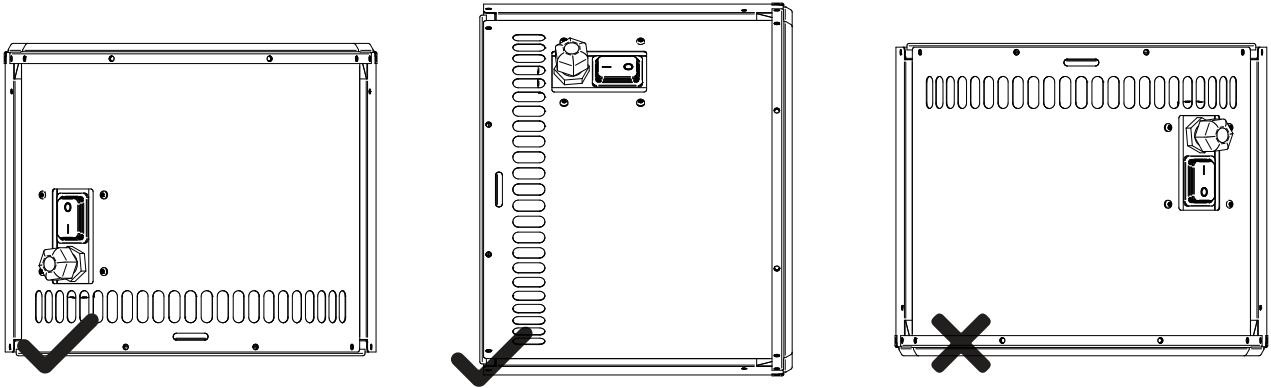


ATTENTION! It is always recommended to install a smoke alarm in connection with a wood fired installation.

Mechanical installation

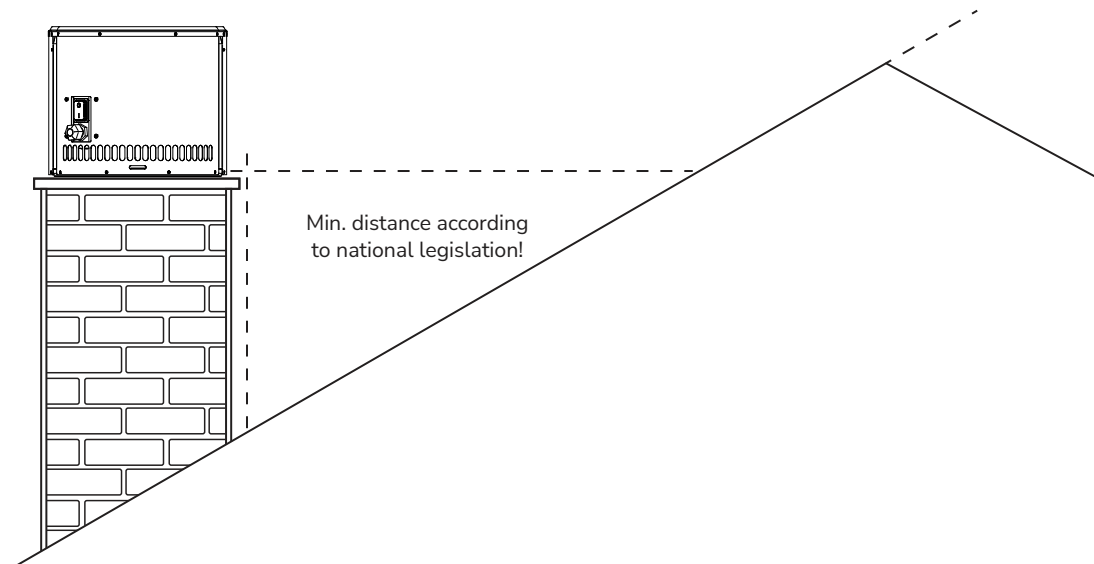
Positioning of the chimney fan

The RBV1 can be mounted horizontally or vertically. Be aware of national law and building regulations!

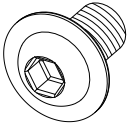

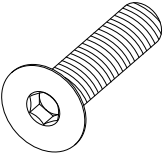
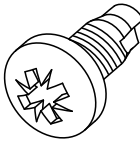
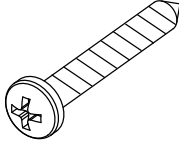
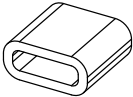
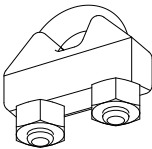

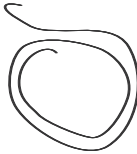

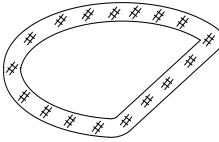
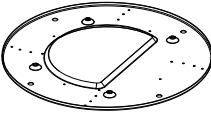


Minimum distance

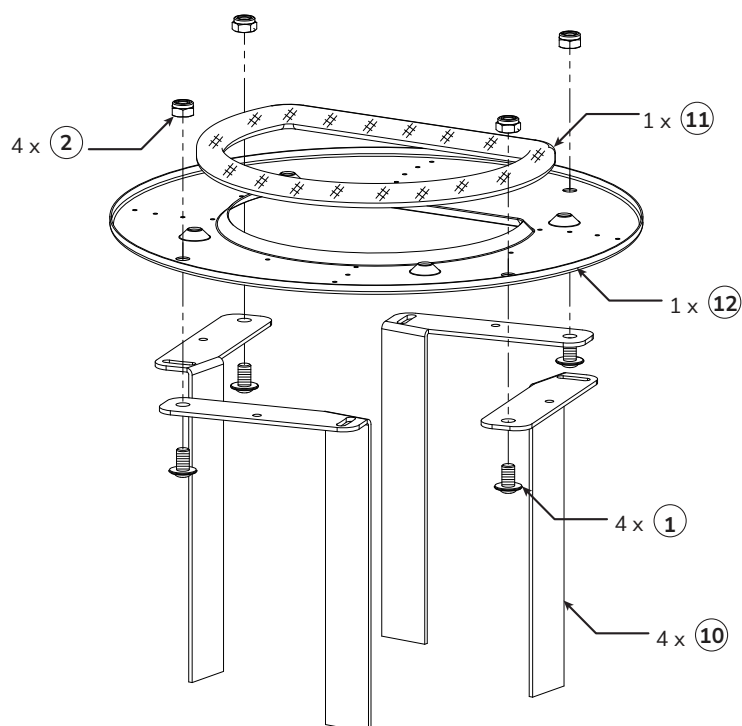
The minimum distance to flammable materials must be at least 500 mm (national legislation must be observed)!



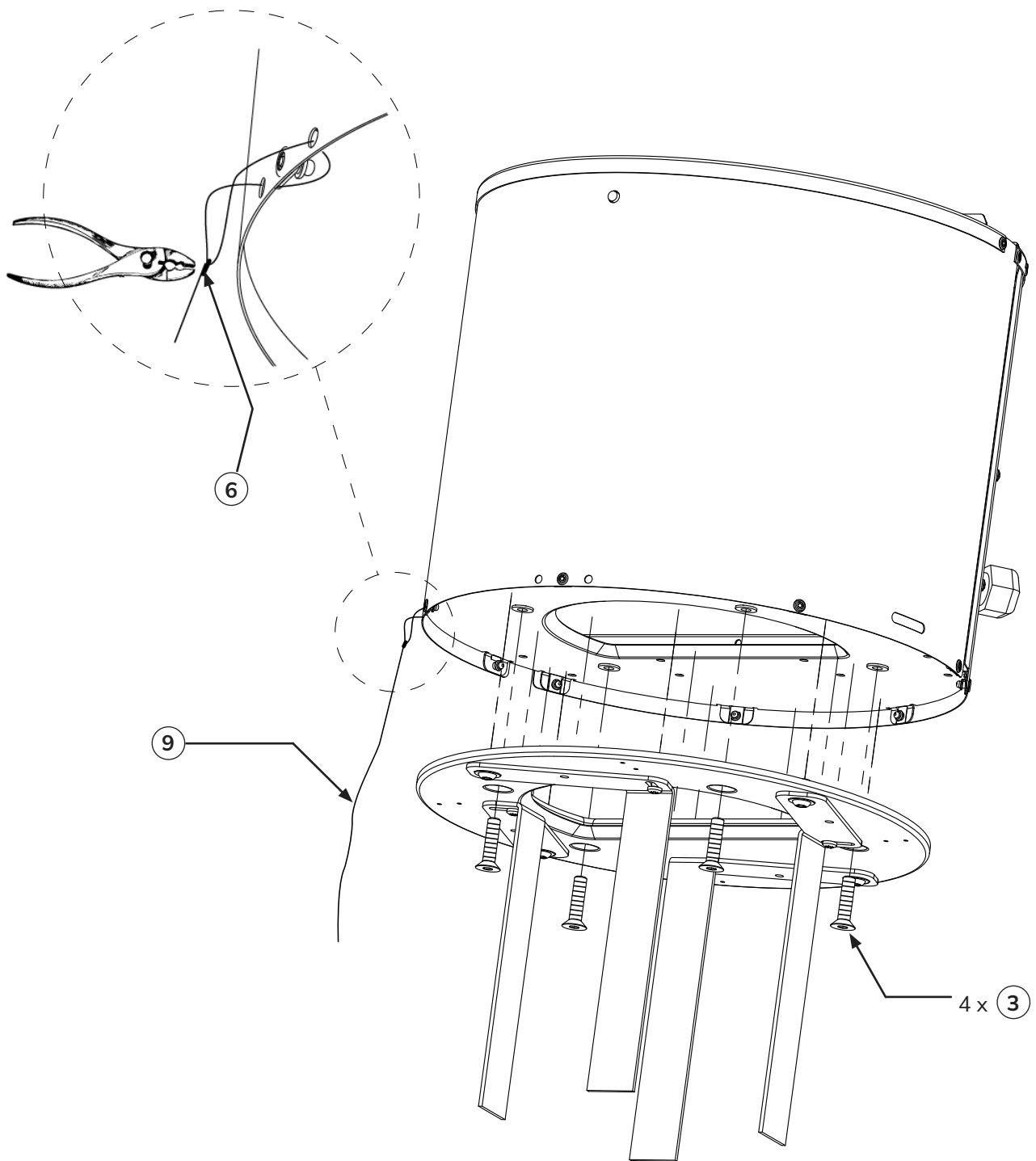
Assembly parts

<p>① 4 x</p> 	<p>② 4 x</p> 	<p>③ 4 x</p> 	<p>④ 4 x</p> 	<p>⑤ 1 x</p> 
<p>⑥ 2 x</p> 	<p>⑦ 1 x</p> 	<p>⑧ 1 x</p> 	<p>⑨ 1 x</p> 	<p>⑩ 4 x</p> 
<p>⑪ 1 x</p> 	<p>⑫ 1 x</p> 			

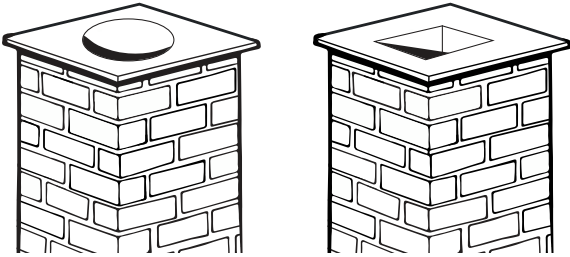
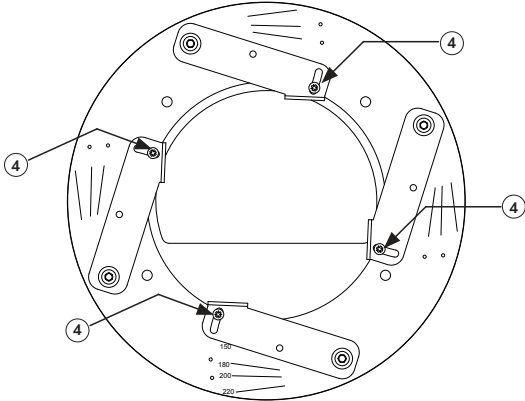
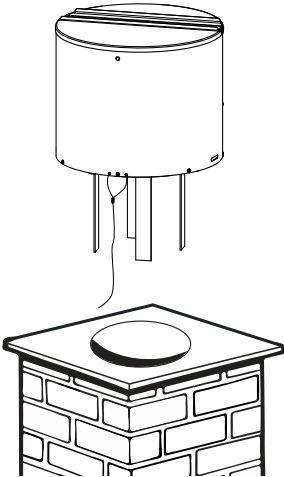
Assembling the bottom flange



Installing the bottom flange and wire on the RBV1

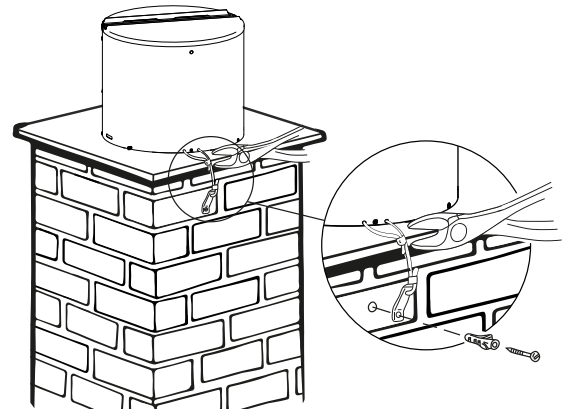


Installation onto a brick chimney

Step	Action	Illustration
1	Measure the inside diameter of the brick chimney.	
2	<p>Adjust the flange legs to fitting the inner diameter of your chimney and fix the legs in this position.</p> <p>The legs must be fastened permanently in the adequate position with the 4 self-tapping screws.</p> <p>* This example shows the setting for an inside chimney diameter of $\varnothing 150$ mm.</p>	
3	<p>The RBV1 can now be lowered into place with the flange legs into the chimney.</p> <p>IMPORTANT! Do not screw or bolt the brackets into the flue pipe!</p>	

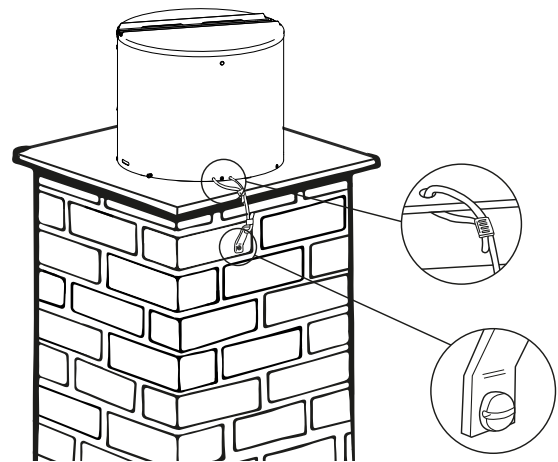
Use the safety wire to secure the RBV1 to the chimney. Apply the supplied screw and rawlplug into the brick chimney. Then mount the wire into the wire lock.

Tighten the safety wire slightly and then tighten the wire lock, so that the chimney fan is secured.



Before taking the fan into operation, please make sure that:

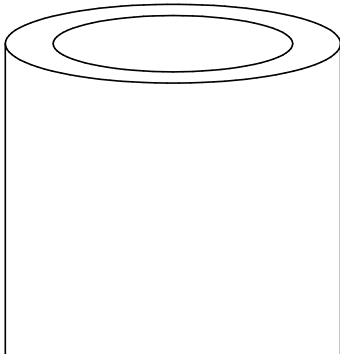
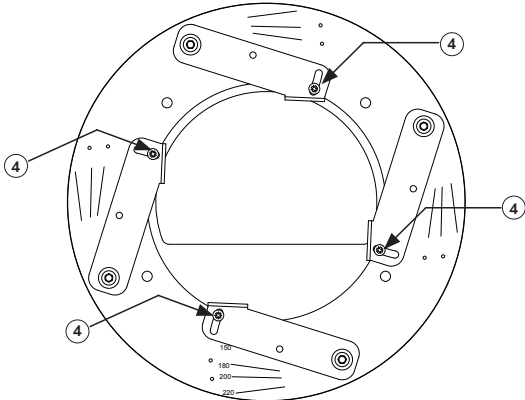
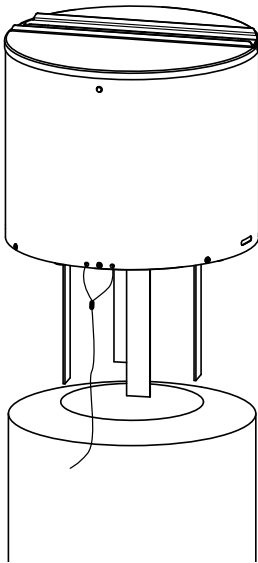
- the nuts in the location brackets have been tightened.
- the safety wire has been fastened to the RBV1 and chimney.
- the safety wire and the wire lock have been tightened.
- the RBV1 is securely closed.



Installation onto a steel chimney

If the fan is to be fitted on a steel chimney, the chimney fan must be installed with an approved flange.

See the installation guide below.

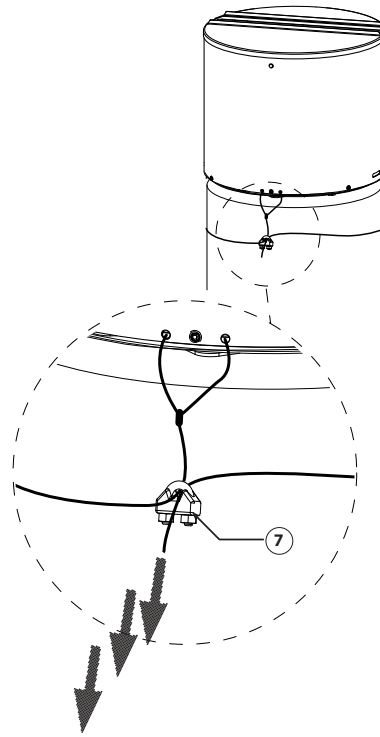
Step	Action	Illustration
1	Measure the inside diameter of the steel chimney.	
2	<p>Adjust the flange legs to fitting the inner diameter of your chimney and fix the legs in this position.</p> <p>The legs must be fastened permanently in the adequate position with the 4 self-tapping screws.</p> <p>* This example shows the setting for an inside chimney diameter of $\varnothing 150$ mm.</p>	
3	<p>The RBV1 can now be lowered into place with the flange legs into the chimney.</p> <p>IMPORTANT! Do not screw or bolt the brackets into the flue pipe!</p>	

3

The supplied steel wire must always be securely fastened both to the RBV1 and to the chimney.

Wrap the wire around the chimney and through the wire lock. Tighten the wire in a downward direction and tighten the wire lock.

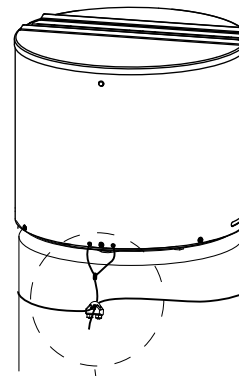
The wire must be tight to secure that the RBV1 stays on the chimney, but not so tight that it makes the RBV1 tilt.



4

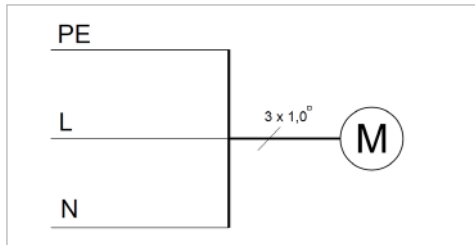
Before taking the fan into operation, please make sure that:

- the nuts in the location brackets have been tightened.
- the safety wire has been fastened to the RBV1 and chimney.
- the safety wire and the wire lock have been tightened.
- the RBV1 is securely closed.



Electrical wiring

The RBV1 must always be connected to an outlet with a protective ground, and it must be wired according to existing national requirements.



DANGER! If the need arises to replace the original RBV1 cord, use a cord of the same type. Otherwise, the insulation can melt or erode, exposing the cord itself.

Startup and configuration

System testing

- Before lighting the fire, turn on the RBV1 (open the air intake completely on the stove)
- Place the wood in the stove
- Make sure that the RBV1 is turned on, before you attempt lighting the fire. Strike a match inside the stove and keep it there, noting if the smoke from the match is being drawn towards the top of the stove and out of the chimney*
- Listen carefully as well. You should be able to hear the blade of the RBV1 revolving**
- Light the fire and make sure that no smoke is escaping from the stove
- Close the doors.
 - Is smoke escaping from the closed stove?
 - Close the air-intake of the stove
 - Open the windows in the room where the oven is located to ventilate the room thoroughly
 - If necessary, call for qualified assistance in order to remedy the problem
 - If defects are detected, these must be repaired before using the RBV1 and the stove again.

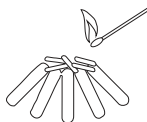
Operating fireplace or stove



Starting the fire (Lighting): Place a few small logs with some kindling & firelighters in the fireplace/stove.



Before lighting the fire, turn on the RBV1 fan and open the air intake completely on your stove/fireplace.



Ignite the fire and make sure there is no spillage of flue gases from the fireplace opening.



When the fire has caught on and all the wood logs are burning, reduce the air intake on your stove/fireplace.



Refueling: *In order to avoid soot and smoke in the room when adding wood to the fire, the fan will still run during the fueling.*

Open the fireplace door and place a few logs in the fire glows.



Closing down: Stop refueling when you want the fire to burn out.

Leave the fan on until the heat in the fireplace and flue has gone down. Hereafter it is safe to turn the fan off.



DANGER! Check that the heating appliance (water heater, furnace, etc.) is working properly after the chimney fan has been switched on. Make sure that no flue gases are spilling out as this can lead to carbon monoxide poisoning!

Maintenance and troubleshooting

Care and cleaning

It is extremely important to keep the flue clean from creosote and deposits as soot is the major cause of chimney fires. The top of the fan is hinged and can be opened to ensure easy cleaning of the fan.

Cleaning intervals depend on the use of the fireplace. The more the appliance is used, the more often the chimney flue must be cleaned.

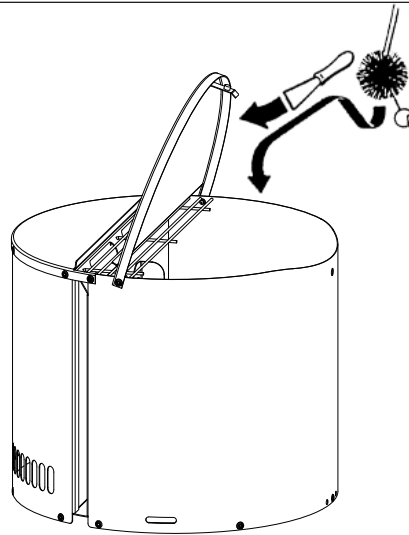
If a fireplace is used regularly (2-3 times a week), a semi-annual cleaning of the chimney and the fan may be required. If used on a daily basis shorter intervals may apply.

No matter how often the fan is used, the fan must be inspected and cleaned at least once a year – for instance when the chimney is inspected and cleaned by your chimney sweep. The chimney should always be cleaned by a trained professional chimney sweep.

Note! Soot and other deposits must be removed from the rotor blades and from the bottom of the motor housing. The run capacitor is considered a wear part and will need to be replaced depending on usage.

Cleaning procedure

Step	Action
1	Switch off the power to the fan and make sure the fan doesn't rotate.
2	Open the lid of the fan.
3	Using a scraper or brush, carefully clean the impeller.
4	Check the path taken by the smoke through the top and bottom sections of the fan for soot deposits, and clean where necessary with a scraper or brush.
5	Make sure that no weights on the centrifugal impeller are removed as this could impair the balance of the impeller.



CAUTION! Do not overfire the fireplace/stove. Small deposits of creosote could be ignited and start a small chimney fire which could cause the chimney flue to reach a dangerously high temperature.



WARNING! Do not open the top section unless the power to the RBV1 has been disconnected!

Troubleshooting

Observation	Problem	Solution
<i>There is no power to the RBV1</i>	The isolation switch may be on off	Check isolation switch
	The speed control is turned off	Turn speed control on
	Loose electrical connection	Check wiring and correct problem
<i>There is power to the RBV1 but it is not working</i>	Loose electrical connections	Check and remedy the problem with the connections
	The voltage setting is too low	Change the battery
<i>There is power to the RBV1 but it hums and does not turn</i>	The capacitor may be worn out	Check capacitor and replace if necessary
	Soot makes the axial vane/impeller stick	Clean the fan
<i>The RBV1 seems to work fine, but there is not enough draught</i>	The fan may be undersized	Replace with a larger fan
	The capacitor may be worn out	Check capacitor and replace if necessary
	The flue is damaged/blocked	Check the flue (chimney sweep)
<i>The RBV1 vibrates</i>	The motor shaft may be bent	Replace motor
	The RBV1 needs cleaning	Clean the RBV1
	Incorrect installation	Check installation guide in this manual
<i>There is airflow noise from the fireplace opening</i>	The fan is running too fast	Reduce the fan speed
<i>Mechanical noise can be heard</i>	Soot or tar may impair the axial vane/impeller	Clean the axial vane/impeller
	Motor bearings may be worn out/over-heated	Replace bearings
	Incorrect installation	Check installation guide in this manual



UK Conformity Assessed



**Exodraft a/s
Industrivej 10
DK-5550 Langeskov**

Hereby declares that the following products:

RBV1B01, RBV1B02, RBV1S01, RBV1S02

Were manufactured in conformity with the provisions of the following regulations:

The Supply of Machinery (Safety) Regulations 2008

Electrical Equipment (Safety) Regulations 2016

Electromagnetic Compatibility Regulations 2016

Langeskov, 01-11-2022
Managing Director
Anders Haugaard



Declaration of Conformity

DK: EU-Overensstemmelseserklæring
 GB: Declaration of Conformity
 DE: EU-Konformitätserklärung
 FR: Déclaration de conformité de l'Union Européenne
 NO: EU-Samsvarserklæring
 PL: EU Deklaracja zgodności

NL: EU-Conformiteits verklaring
 SE: EU-Överensstämmelsedeklaration
 FI: EU-Vaatimustenmukaisuusvakuutus
 IS: ESS-Samræmisstaðfesting
 IT: Dichiarazione di Conformità Unione Europea



Exodraft a/s
Industrivej 10
DK-5550 Langeskov

Erklærer på eget ansvar, at følgende produkter:
 Hereby declares that the following products:
 Erklärt hierdurch auf eigene Verantwortung, daß folgende Produkte:
 Déclare, sous sa propre responsabilité, que les produits suivants:
 Erklærer på eget ansvar at følgende produkter:
 Niniejszym oświadczam, że następujące produkty:

Veklaart dat onderstaande producten:
 Deklarerar på eget ansvar, att följande produkter:
 Vastaa siltä, että seuraava tuote:
 Staðfesti à eigin àbyrgð, að eftirfarandi vörur:
 Dichiaro con la presente che i seguenti prodotti:

RBV1B01, RBV1B02, RBV1S01, RBV1S02

Som er omfattet af denne erklæring, er i overensstemmelse med følgende standarder:
 Were manufactured in conformity with the provisions of the following standards:
 Die von dieser Erklärung umfaßt sind, den folgenden Normen:
 Auxquels s'applique cette déclaration sont en conformité avec les normes ci-contre:
 Som er omfattet av denne erklæring, er i samsvar med følgende standarder:
 Zostały wyprodukowane zgodnie z warunkami określonymi w następujących normach:

Zijn vervaardigd in overeenstemming met de voorschriften uit de hieronder genoemde normen en standaards:
 Som omfattas av denna deklaration, överensstämmer med följande standarder:
 Jota tämä selvitys koskee, on seuraavien standardien mukainen:
 Sem eru meðtalin í staðfestingu Pessari, eru í fullu samræmi við eftirtalda staðla:
 Sono stati fabbricati in conformità con le norme degli standard seguenti:

EN 60335-1, EN 60335-2-80, DS/EN ISO 12100: 2011

I.h.t bestemmelser i direktiv:
 In accordance with
 Entsprechen gemäß den Bestimmungen der folgenden Richtlinien:
 Suivant les dispositions prévues aux directives:
 I.h.t bestemmelser i direktiv:
 Zgodnie z:

En voldoen aan de volgende richtlijnen:
 Enligt bestämmelserna i följande direktiv:
 Seuraavien direktiivien määräysten mukaan:
 Med tilvisun til ákvarðana eftirlits:
 In conformità con le direttive:

Maskindirektivet:
 The Machinery Directive:
 Richtlinie Maschinen:
 Directive Machines:
 Maskindirektivet:
 Dyrektywę maszynową:

De machinerichtlijn:
 Maskindirektivet
 Konedirektiivi:
 Vælaeftirlitið:
 Direttiva Macchinari:

2006/42/EF-EEC/-EWG/-CEE

Lavspændingsdirektiv:
 The Low Voltage Directive:
 Niederspannungsrichtlinie:
 Directive Basse Tension:
 Lavspændingsdirektivet:
 Dyrektywę Niskonapięciową

De laagspanningsrichtlijn:
 Lågspänningsdirektivet:
 Pienjännitedirektiivi:
 Smáspennueftirlitið:
 Direttiva Basso Voltaggio:

2014/35/EC

EMC-direktivet:
 And the EMC Directive:
 EMV-Richtlinie:
 Directive Compatibilité Electromagnétique:
 EMC-direktivet:
 Dyrektywę EMC – kompatybilności elektromagnetycznej

En de EMC richtlijn:
 EMC-direktivet:
 EMC-direktiivi:
 EMC-efirlitið:
 Direttiva Compatibilità Elettromagnetica:

2014/30/EC

Langeskov, 01-11-2022
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 Managing Director
 Anders Haugaard

Algemeen directeur
 Geschäftsführender Direktor
 Président Directeur Général
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