



***GEOVENT***

## INSTRUCTION MANUAL



## COMPACT ARM

ø160 and 200 mm



## Contents

1.0 General safety precautions . . . . .	3
1.1 Danger . . . . .	3
1.2 Field of application . . . . .	3
1.3 Technical data . . . . .	3
1.4 Construction – table of dimensions . . . . .	3
2.0 Installation . . . . .	4
2.1 Optional equipment . . . . .	5
2.2 Connection . . . . .	5
2.3 Trial run – exact adjustment . . . . .	5
3.0 User instruction – application . . . . .	5
4.0 Maintenance . . . . .	6
5.0 Liability . . . . .	6
6.0 Declaration of conformity . . . . .	7

## 1.0 General safety precautions

**IMPORTANT** – Please study all the instructions before mounting and commissioning.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Do not dismantle any factory-mounted parts, since it impedes the commissioning of the equipment.

An authorised electrician must carry out all electrical installations.

### 1.1 Danger

**Explosive media** – The Extraction arm is not suitable for the extraction of aluminium dust, flour, textile dust nor for sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

Placing the hand between the spring and the carrying arm could involve a risk of mutilation.

Demounting the spring is deadly dangerous.

### 1.2 Field of application

The COMPACT arm is the ideal Extraction arm for the extraction of welding smoke, grinding dust, fumes, etc. when there is only limited space available in the working area.

Since the arm is telescopic, it only requires minimum space, and still it is a perfect combination between the large arms with major suction capacity and the smaller arms, which are easy to position.

The Extraction arm is not suitable for the extraction of aluminium dust, flour, textile dust nor sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

Under no circumstances may the balancer, which is mounted on the ceiling bracket, be loosened or tightened to the extent that the inner spring breaks. Therefore, be careful in order to avoid loading the spring in the outer areas.

The hose may be damaged and leaky via outer loads, e.g. by a screwdriver. Avoid such load in order to safeguard a long life.

## 1.3 Technical data

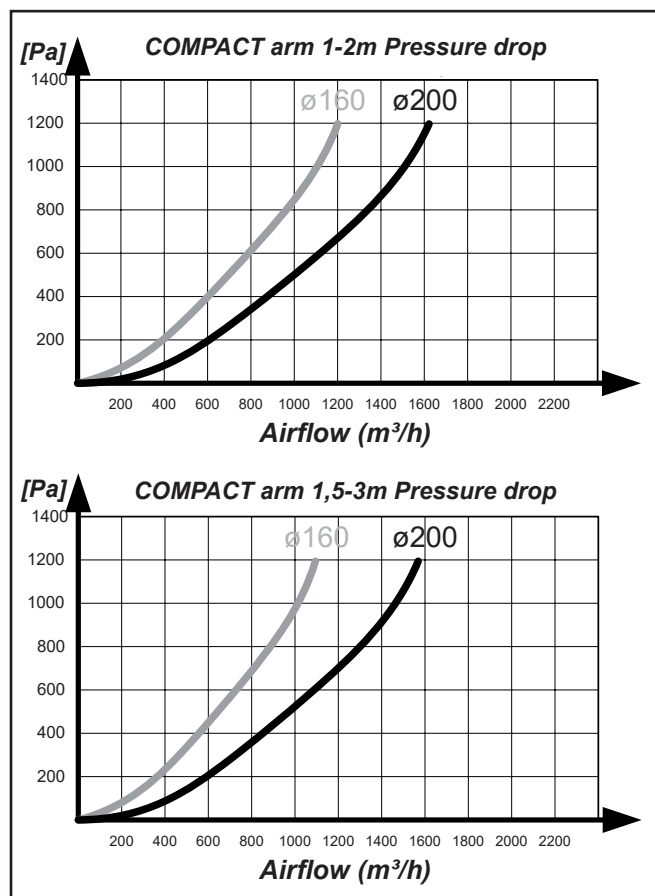
### Recommended flow area

Hose dimension:	
Ø160	800-1000 m <sup>3</sup> /h
Ø200	1000-1500 m <sup>3</sup> /h

Length:	1-2 and 1,5-3 m
Via an extension arm up to:	7 m

Hose Max. Temp. (depends on the type) Up to 150°C

## 1.4 Construction

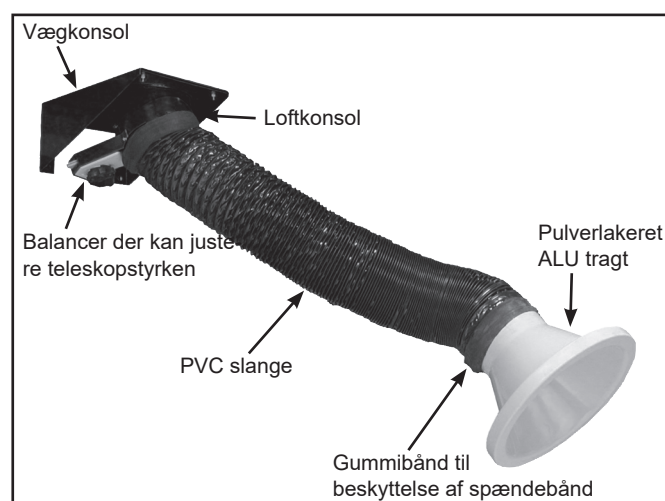


**Ceiling bracket:** Powder enamelled in black RAL 9005 steel bracket, the rotary joint of the bracket can rotate 360°.

**Hood:** The light-weight aluminium hood Ø160 or Ø200 mm is equipped with an integrated handle. The hood is powder enamelled in RAL 1007. May be rotated in all possible positions.

## 2.0 Installation

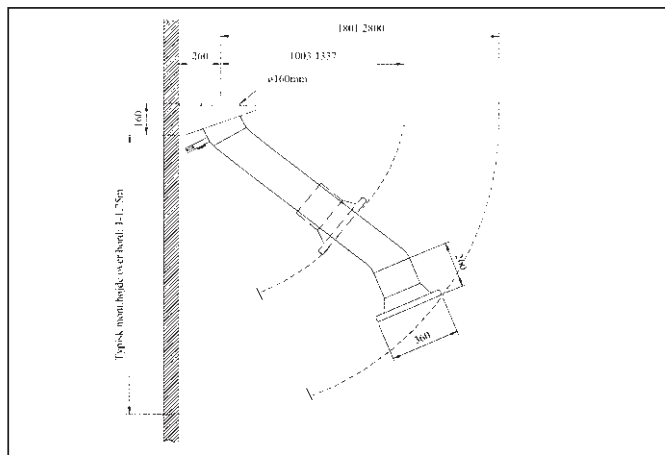
The COMPACT arm is supplied partly assembled. Depending on model, it may consist of one carrying arm, one hood, and one set of hose with clamp and rubber band. As standard, the arm is prepared for ceiling mounting, however, in most cases it will be mounted on a wall by means of a wall bracket (to be ordered separately).



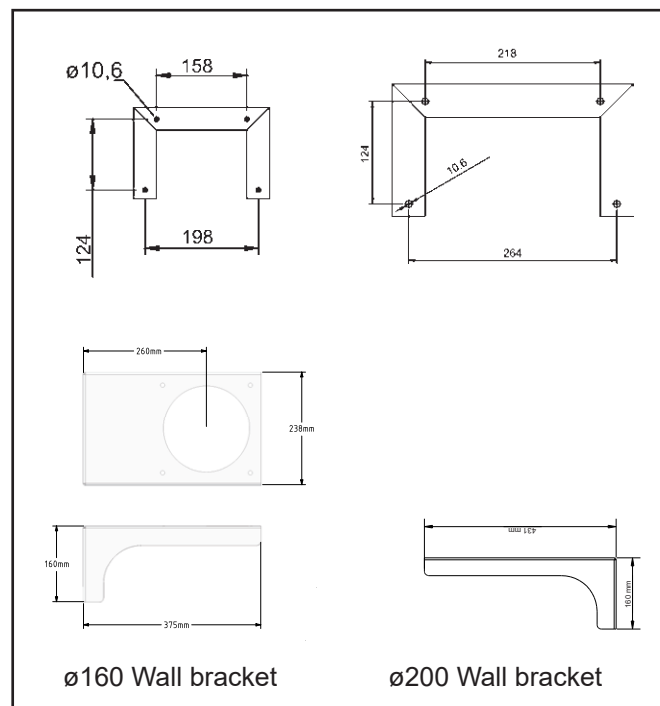
Before mounting the arm, please make sure that the optimum working area is selected. Is there space enough for the satisfactory utilisation of the arm? What about connection possibilities for piping and automatics? The optimum installation height is then to be selected in accordance with the table below:

**Recommended installation height COMPACT arm:**

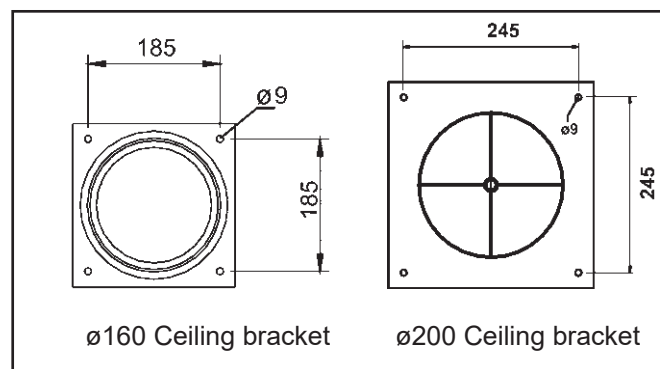
1-2 m	1800 mm
1.5-3 m	2000 mm
3.0 to 7.0 m (incl. extension arm)	2500 mm



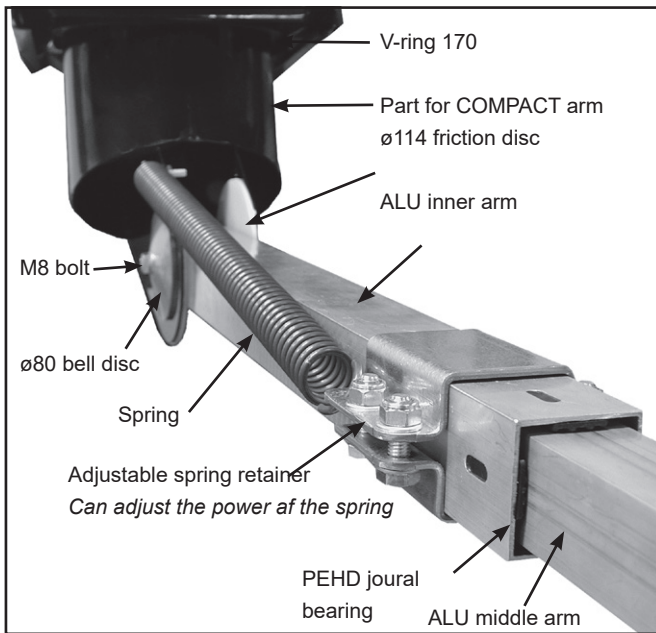
1. For wall mounting, attach the wall bracket firmly to the wall by means of 4 off 10 mm bolts (when using the extension arm, please fix this bracket first – refer to item 2.1).



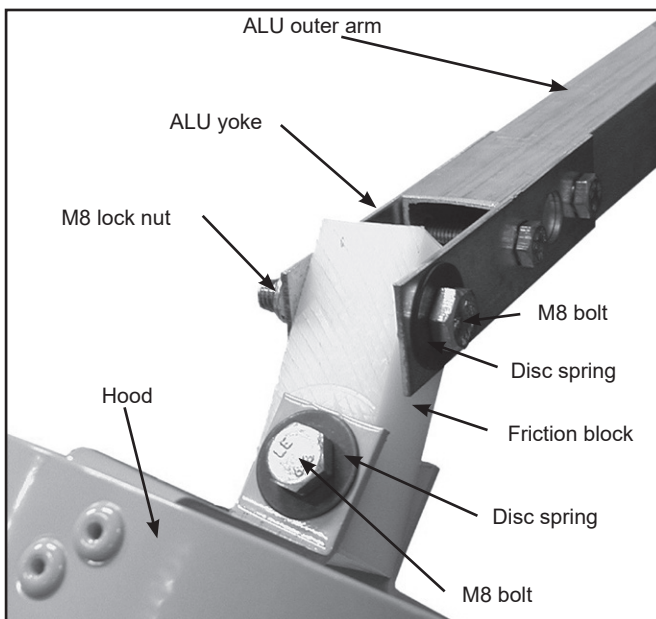
2. Then the ceiling bracket is mounted, either in the ceiling or in the wall bracket (refer to the drawing below). The bracket is fixed via attaching the 4 of 8 mm bolts with 4 of bevel-edged washers and lock nuts.



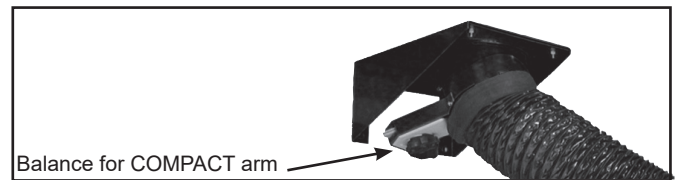
3. Then the arm looks like the one shown on the picture below. The functionality of the arm is tested and the inner joint is tightened up, if necessary.



4. The outer joint for the hood is tested and tightened up, if necessary. The hood must be self-retaining in all positions.



5. Subsequently, the hose is mounted on the ceiling bracket. The rubber band is taken out over the ceiling bracket, after which the hose is fixed by means of a clamp. Bending the edge of the hose is the best way of doing this, so that the steel spiral is pulled/twisted up on the bracket. When the hose has been properly fixed, the rubber band is finally pulled over the clamp.
6. The hose is mounted on the hood by tightening the clamp around the hood and the hose. (NB. Remember first to pull the rubber band over the hood). When the hose has been fixed properly, the rubber band is pulled over the clamp. Subsequently, the arm is connected to the complete piping system.
7. If the telescopic function cannot remain in the required position or if there is too much resistance in the arm, please adjust the balancer at the back of the ceiling bracket.



## 2.1 Mounting of optional equipment

### Mounting of the extension arm

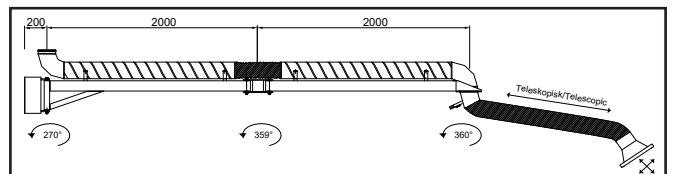
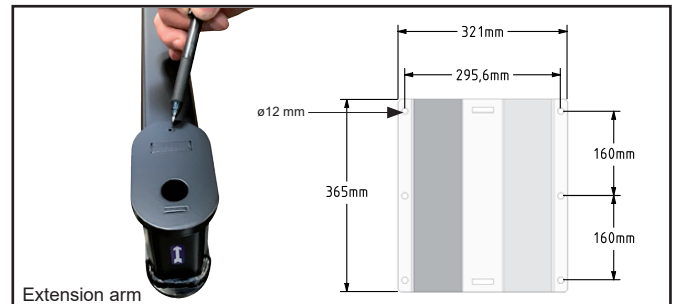
#### 1 meter extension arm:

Start by fixing the extension arm to a solid wall, e.g. a concrete wall. (Please refer to the hole dimensions).

#### Longer extension arms:

Start by fixing the wall bracket of the extension arm to a solid wall e.g. a concrete wall. (see hole dimensions). If one joint, then attach the outrigger.

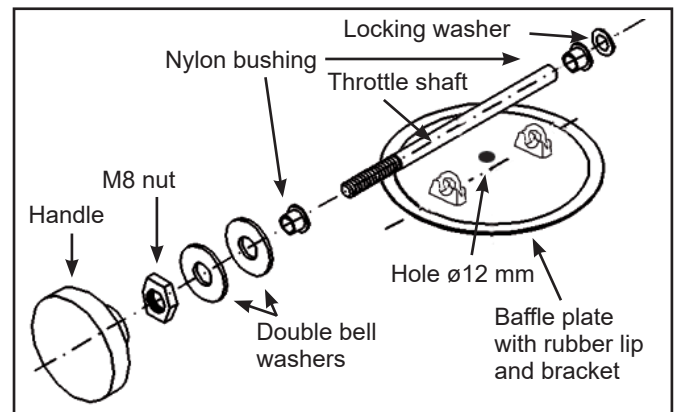
If 2 joints, first mount the inner joint and afterwards the second one. Be sure that the outer arm is mounted correctly - with the pipe holder on the top of the arm.



Next, the spiro pipe is fastened to the extension arm by means of the enclosed self-cutting screws. The gap between the spiro pipes is assembled by means of clamps and the supplied hose. Subsequently, the arm is attached to the extension arm.

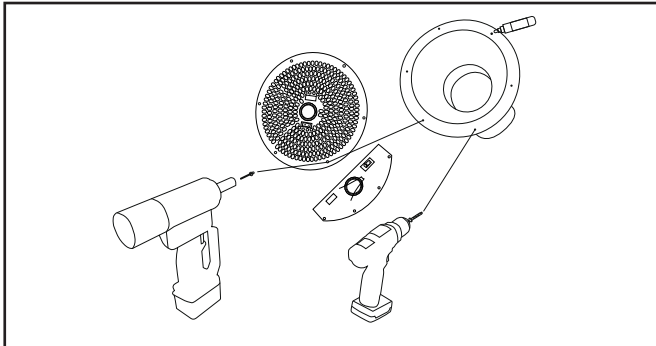
### Mounting of the damper

The mirror is retrofitted, see drawing below. Contact your dealer to order.



## Mounting of a net with light

The net must be pop rivet on the hood. The connection is made by extending the power cord, which is attached inside the arm, where it is to be fixed.



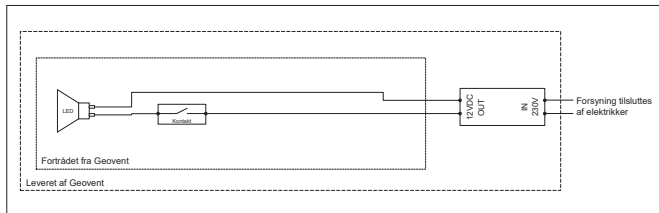
Next, the power cord is connected to the transformer (230V → 12V) which again is connected to the mains. See the drawing below.

### Light specifications:

Type: ..... LED  
 Power: ..... 5 W 36°  
 Voltage: ..... 12 V  
 Supply voltage: ..... 230-240V - 50-60 Hz  
 Trafo-power: ..... 12 VDC, Max 1,25 A, Max 15 W



The power cord from the lamp must be connected to 12 VDC.



## 2.2 Power connection

For connection of various electrical components (e.g. light sensor), please refer to the documentation of the actual product.

The electrical installation is to be carried out by a certified electrician.

## 2.3 Trial run – exact adjustment

After the final mounting, the COMPACT arm should be adjusted to the typical working area for optimum utilisation of the arm. Do so by adjusting the points mentioned in item 2 (3. 4. and 7.) exactly.

## 3.0 User instruction – application

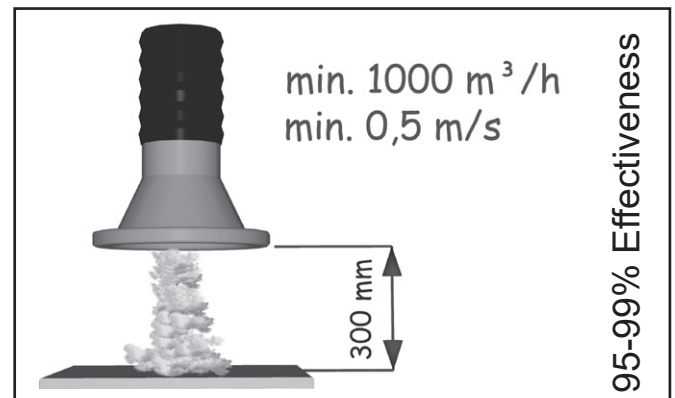
The balancer mounted on the ceiling bracket must not be loosened or tightened so much that the internal spring breaks. Therefore, exercise caution to avoid stressing the spring in the outer areas.

The hose can be damaged by external loads, e.g. from a screwdriver. Therefore, this should be avoided to ensure the longest possible life of the hose.

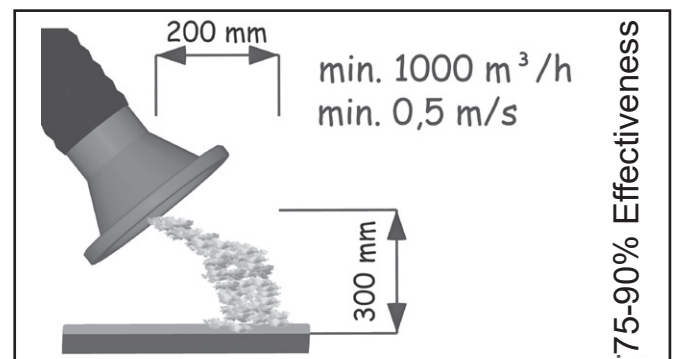
For normal use, the arm is to be self-retaining in the required position within the working area. The bracket of the arm supplies a 360° rotary working area.

If the equipment has been correctly dimensioned, the hood of the arm should be placed in vertical position 300-500 mm over the blanks to be welded. That is just above the pollutant. Thus up to 99% of the polluting particles will be caught.

### Optimal welding situation



### Less optimal welding situation



Always check that the correct volume of air is extracted by the suction head/hood.

The arm does not work if ...

- unauthorised parts have been mounted on the arm (e.g. power point on the hood)
- the arm is pushed towards the required position. Instead, please move the arm to the required position and wait a moment until the friction discs have locked the arm.
- something has been hung on the extension arm. It is only meant to be capable of carrying the weight of the actual arm.

## 4.0 Maintenance

### Periodic maintenance

- When it becomes difficult to position the arm, e.g. if it will not remain in the required position, please adjust the movable joints or the balancer (please refer to item 2).



- Please check the condition of the hose, the spring, the balancer as well as the friction discs, and exchange them if necessary. Please contact your dealer in respect of spare parts.

At least once annually, the whole point extraction plant should be overhauled by an authorised serviceman.

## 4.1 Problem solving

### *Problems with positioning*

#### **The arm slides out in the telescopic fittings.**

The balancer at the back of the ceiling bracket needs to be adjusted, see chapter 2.7.

#### **The arm cannot hold itself.**

The inner joint (M8 bolt) must be tightened and if necessary the spring holder must be adjusted. See chapter 2.3.

### *Problems with connection*

Sound of flowing air when connecting to the piping system. Gasket between upper and lower part of ceiling bracket may be misaligned.

## 5.0 Dismantling, disabling and scrapping

Deactive the product by disconnection the electrical mains. Dismantle compressed air pipes and other pipes or wires etc.

Dismantle the filter cartridge by unscrewing the finger screws and remove the service hatch.

Turn the filter cartridge so that it loosens from the latches at the top of the cartridge.

Carefully remove the contaminated filter cartridge, place it in a plastic bag and seal the bag.

Dispose of it according to local regulations.

The inside of the product must be cleaned by means of a vacuum cleaner with a filter which suits the purpose. The inside of the product must be cleaned by means of a vacuum cleaner with a filter which suits the purpose.

Dismantle plastic parts and dispose of it according to local regulations.

Dismantle the metallic parts by unscrewing screws and bolts. Afterwards cut the larger pieces into smaller pieces and dispose of it according to local regulation.

Dismantle plastic parts and dispose of it according to local regulations.

The packing material must be sorted according to local regulation in order to be able to reuse the material.

## 6.0 Liability

### **Warranty**

Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects

are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after the date of shipment.

No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear on parts such as filter cartridges and hose is not included in the warranty.

### **User liability**

In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this instruction manual in all respects.

Under no circumstances may the products be changed in any way, without prior written agreement with Geovent A/S.

Please refer to the current sales and delivery conditions at [www.geovent.com](http://www.geovent.com)

## 7.0 Declaration of conformity

The manufacturer: GEOVENT A/S  
HOVEDGADEN 86  
DK-8831 LØGSTRUP

Hereby declares that:

The product: Extraction arm  
Model: COMPACT arm

Complies with the relevant parts of the following directives and standards:

Directive 2006/42 / EC of the European Parliament and of the Council of 17 May 2006 on machines and amending directives 95/16 / EC.

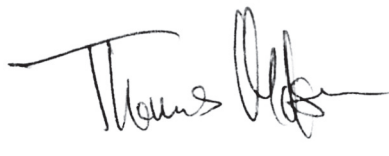
This declaration is no more valid if changes are made to the product by others than the manufacturer.

Authorized to collect the technical file:

Lise Cramer

Date: 25.10.2022

Position: Director  
Name: Thomas Molsen

Signature: 





***GEOVENT***

HOVEDGADEN 86 • DK-8831 LØGSTRUP  
(+45) 8664 2211 • salg@geovent.dk