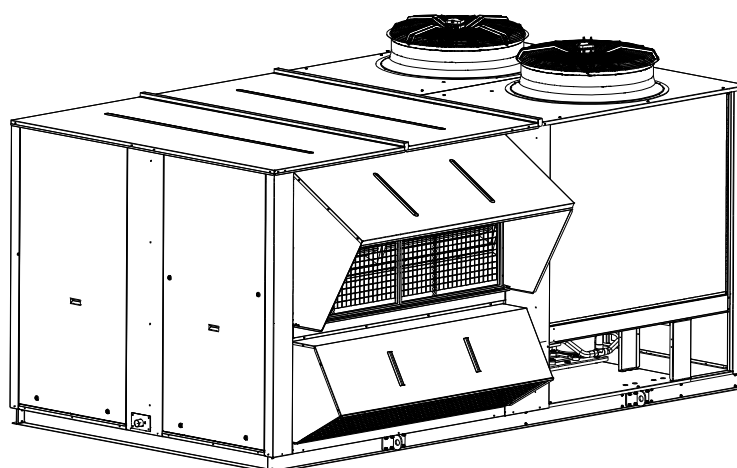




BY JOHNSON CONTROLS

Barometric damper for ROOF TOP ACTIVA 100/175



Options and Accessories, Installation manual

Ref.: N-40431_EN 0913

Index

1	Barometric damper for ROOF TOP ACTIVA 100/175.....	1
1.1	General information.....	2
1.2	Dimensions.....	3
1.3	Installation.....	3
1.3.1	Installation in unit with lower return air inlet.....	3
1.3.2	Installation in unit with side return air inlet.....	5

**Barometric damper for ROOF TOP
ACTIVA 100/175**

1.1 General information

It consists of an assembly of excess pressure dampers (two in 100 / 125 models and three in 150 / 175 models), and rain protection, including a bird protection grille.

This is the most suitable and economical exhaust system for units using an economiser or motorised damper, in installations where the return air operation is preferably carried out without a duct, or with a very short duct, and planned air exhaust is a maximum of 25% of the total supply air flow.

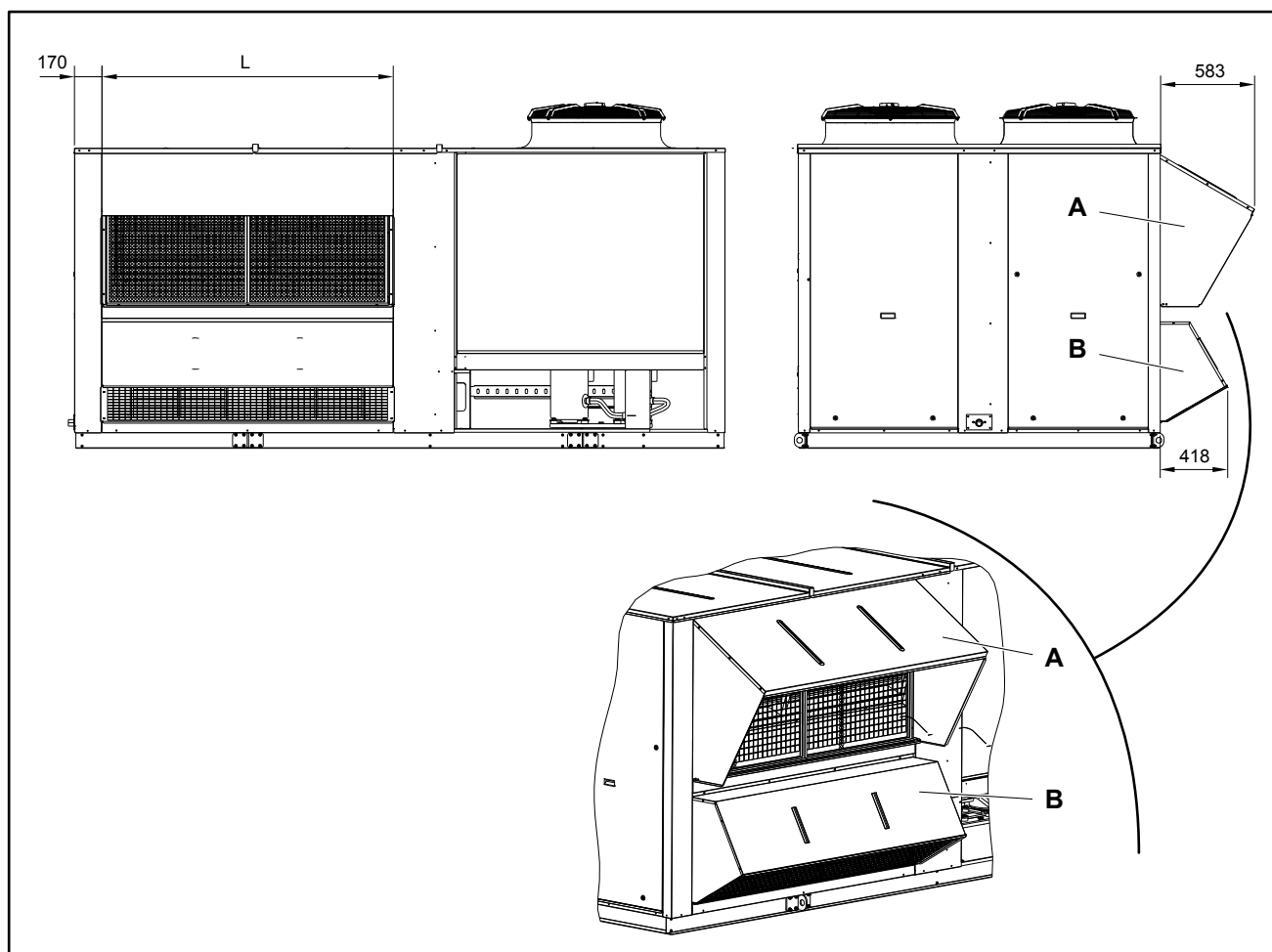
When the economiser operates and the outdoor air inlet opens the return air flow is closed proportionally, and the pressure inside the building increases. When the pressure is slightly greater than atmospheric pressure, the dampers are opened to release any excess air flow directly outdoors.

For transportation reasons, the assembly dampers is supplied fitted to the side panel of the unit. This is the correct location in the case of facilities where the return air inlet to the unit is at the lower part. See section [Installation in unit with lower return air inlet](#), see on page 3.

- In the case of facilities where the return air inlet to the unit is through a minimal duct on the side, the assembly of dampers must be installed directly on the front face of the return duct itself, as close to the unit as possible. See section [Installation in unit with side return air inlet](#), see on page 5.

The rain protection is supplied separately, for on-site installation. The two side panels, the upper panel, the protection grille, the nuts and bolts and the sealing strips required for installation are located inside the unit in the return zone.

1.2 Dimensions



- A Rainhood economiser
B Rainhood barometric damper or exhaust fan

Model	L
100 / 125	1805
150 / 175	2255

1.3 Installation

1.3.1 Installation in unit with lower return air inlet

The excess pressure damper assembly is already installed on the side of the unit.

In this case, it is not necessary to add a seal in addition to that present on the unit supports.

Install the rain protection (rainhood):

**NOTE**

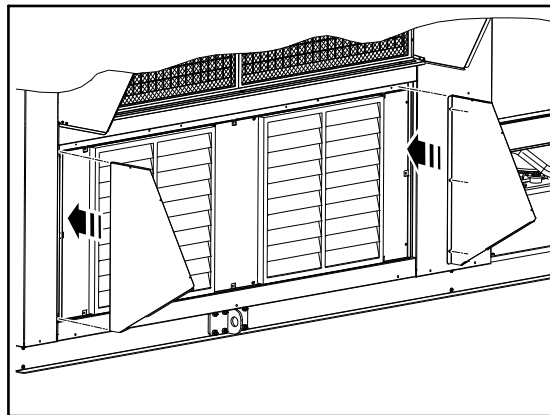
The necessary nuts and bolts are supplied with the panels and the grille of the protection.

1. Place both side panels in the correct position and attach them to the supports of the side of the unit with three bolts for each one.

**NOTE**

The fixing holes in the supports on the unit are hidden under the rubber sealing strip.

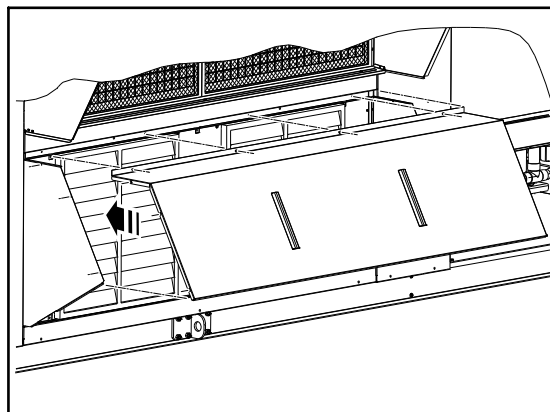
2. Put in place the upper panel supported by the sides and slide it until it makes contact with the side of the unit.



3. Attach the top flange to the unit and to both sides.

**NOTE**

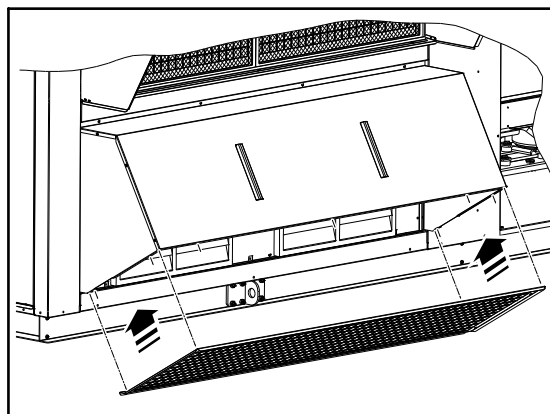
Use bolts and sealing washers.



4. Place the lower grille in its position and attach it to both side panels and the upper panel.

**NOTE**

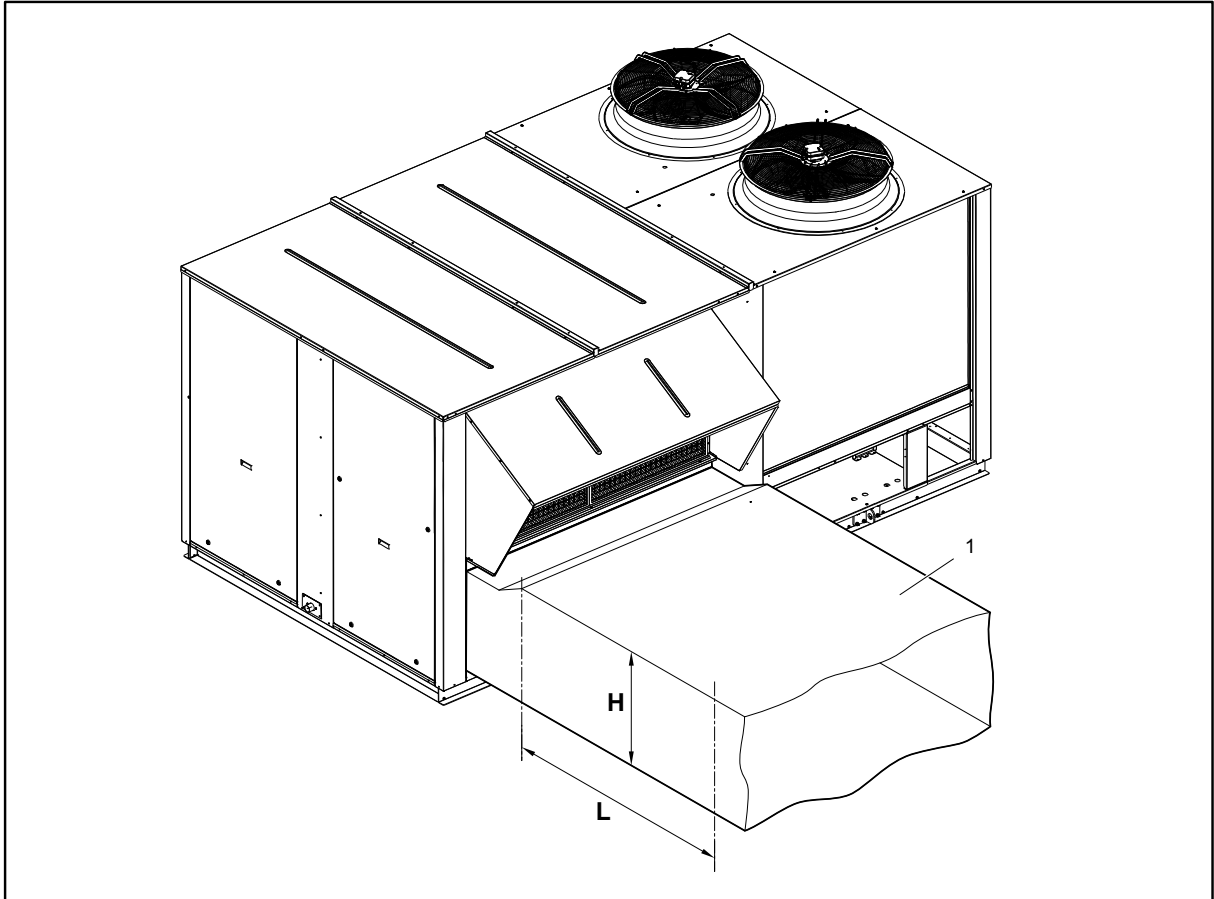
Use bolts and sealing washers.



1.3.2 Installation in unit with side return air inlet

Remove the excess pressure damper assembly from the unit and then directly install it on the front face of the return duct itself, as close as possible to the unit.

A flat front surface is required on the return duct with minimal dimensions.



ATTENTION

The total weight of the excess pressure dampers assembly and the rain protection is:

- 28 kg in 100 / 125 models.
- 37 kg in 150 / 175 models.

1 Side return duct

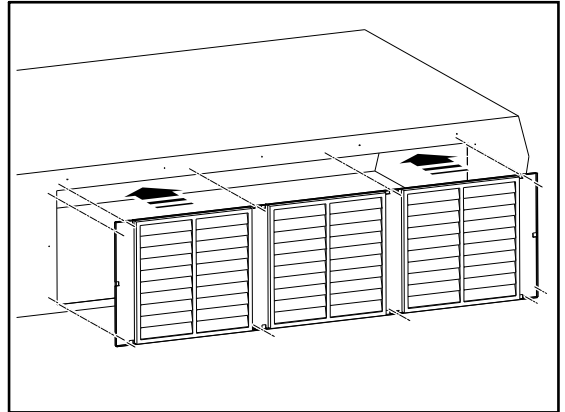
Model	L	H
100 / 125	1880	705
150 / 175	2330	705

3. Install and attach the panel damper assembly in the rectangular opening.



NOTE

Use the bolts supplied.



1.3 Installation

4. Install the rain protection.

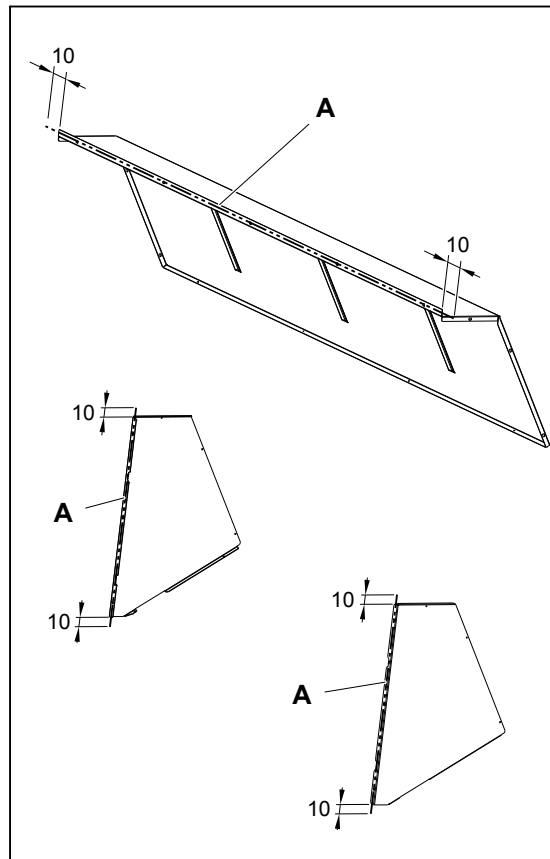
- a. Apply rubber sealing strip (supplied with the nuts and bolts kit) in the supporting flanges of both side panels and the upper panel.

**NOTE**

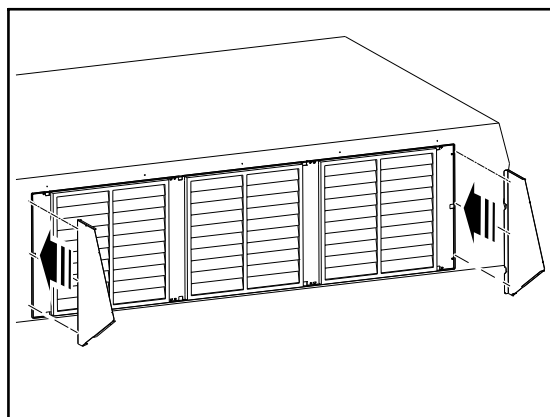
- *It must be applied in a continuous strip, without cuts.*
- *There must be approximately a 10 mm excess on the end of the flange in all cases.*

A

Rubber sealing strip



- b. Place the side panels in the correct position and attach them to the front face of the duct with three bolts on each panel.
- c. Put in place the upper panel supported by the sides and slide it until it makes contact with the front face of the duct.



- d. Attach the top flange to the face of the duct and the sides.



NOTE

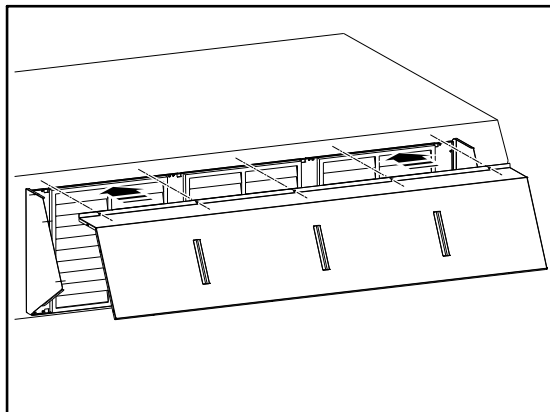
Use bolts and a sealing washer.

- e. Place the lower grille in its position and attach it to the side panels and the upper panel.



NOTE

Use bolts and a sealing washer.



- f. Make sure that the joint of the upper panel with the contact surface of the duct is sealed.
- If you have any doubts, apply a silicone bead along all its length -A-.

