



# CVD Pipe Roof Fan

*System Brochure*



## CVD Pipe Roof Fan



*CVD on an inclined roof*

### Application

*In situations where an extraction unit type CVE ECO 2 cannot be installed on the inside of the roof, it is possible to mount a ventilator type CVD on top of the roof. The pipe roof fan CVD may be used for individually adjustable, mechanical ventilation systems for both low-rise and high-rise buildings up to 4 floors. This unit is not only suitable for the central extraction in the kitchen, bathroom and toilet of a single-family dwelling but also for smaller areas in both commercial and industrial buildings.*

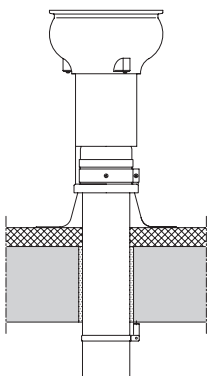
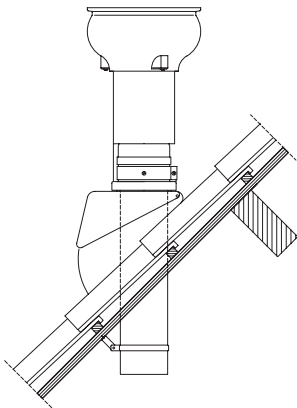
### Description

The CVD pipe roof fan is a radial roof ventilator constructed entirely from synthetic (polyethylene) material. All mounting materials that are exposed to open air are constructed from stainless steel. The ventilator is therefore entirely corrosion-free.

In order to connect the CVD to the vent shafts, a clamp with only one crosshead screw is provided on the underside, allowing for a standard 125mm diameter duct to be easily mounted onto the CVD. Flashing provides an airtight seal between the duct riser and ventilator.



CVD on a flat roof



Internally the unit is equipped with a silencer, in order to obtain an optimum muffling of the rotor and airflow sounds which means that the CVD is able to comply with the requirements according to the NEN 1070. Externally there is an aerodynamic fan housing which accommodates the impellor, motor, condensation drain and controls. The fan housing is designed such that the CVD extracts air vertically.

#### Safety and reliability

The CVD pipe roof fan is equipped with an external running, self-lubricating, ball bearing motor to ensure a high degree of operational safety. Furthermore, the motor is equipped with a thermal cut-off sensor preventing overheating of the rotor in case of a failure.

#### Features

- space-saving thanks to the roof mounting ability
- vertical extraction
- service-friendly module technique
- three fan speeds, including the energy saving mode
- reliable
- entirely constructed from synthetic material
- fast and easy to assemble

#### CVD Pipe Roof Fan

##### Motor/Fan Module

By simply unscrewing a few screws, the service module may be removed as a complete unit. This is extremely useful for service or maintenance. Thanks to the simple clamp construction on the vent shaft, it is also possible to remove the ventilator as a whole for service or maintenance.

##### Service Module

##### Isolating Switch

The ventilator is supplied with a pre-assembled isolating switch and 1.8 metres of 5 core cable.

##### Assembly

The CVD Pipe Roof Fan is supplied as a compact lightweight extract unit. The clamp connection allows for a standard 125mm diameter duct to be easily attached to the intake side. The duct is pushed through a cowl or roofing tile and mounted on the inside of the roof to the boarding, a rafter or wall using the supplied pipe clamp. The construction is sufficiently resistant to every wind load.



### Pipe Clamp for CVD

125mm Diameter Ducting and accessories to ensure a watertight connection are available.

The CVD pipe roof fan may be mounted on both flat and inclined roofs.



If the CVD is mounted on a roof mounting plate or a duct riser larger than 125mm diameter Itho will be able to supply a special cowl to which the CVD may be directly mounted. The

measurements of this cowl will need to be supplied by the client.

### Control

The extraction capacity controller may be regulated in two or three modes as follows:

Using a single pole switch offers a choice of Two modes: Low/medium, Low/high and Medium/high.



Using the Itho controller RS 3 offers three modes: Low, Medium and High.

### Maintenance

The synthetic (polypropylene) fan has backward curved impellers resulting in considerably less pollution and when used normally only needs to be cleaned once every four to five years.

### Guarantee

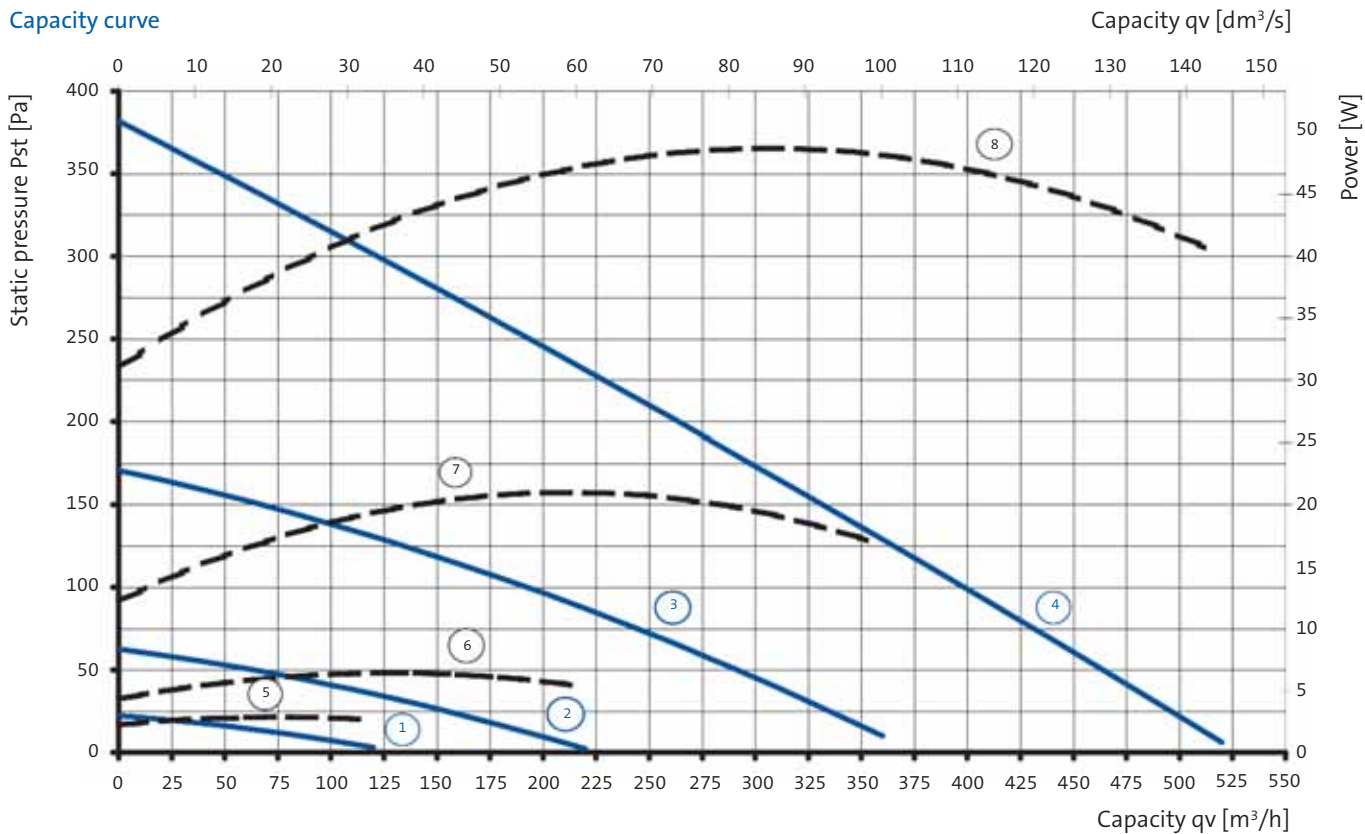
A written guarantee of two years is provided from the date of purchase. The guarantee implies that during this period Itho will supply a replacement motor/fan module free of charge.

### Technical specifications

	Capacity [m <sup>3</sup> /h]	Pressure [Pa]	Power [W]	Current [A]
Mode 1 - Low	110	20	20	0.10
Mode 2 - Medium	250	90	48	0.27
Mode 3 - High	325	150	75	0.30

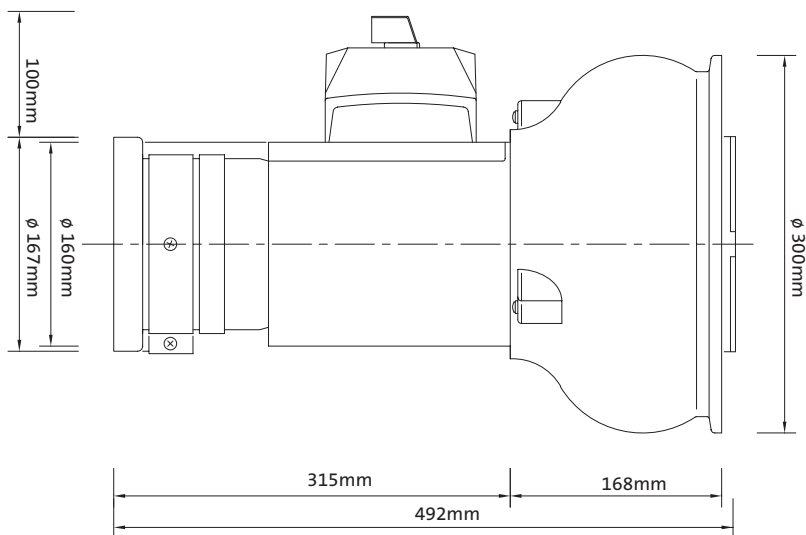
**NOTE:** Speed 2 is an automatic calculation between the chosen High & Low Speeds

### Capacity curve



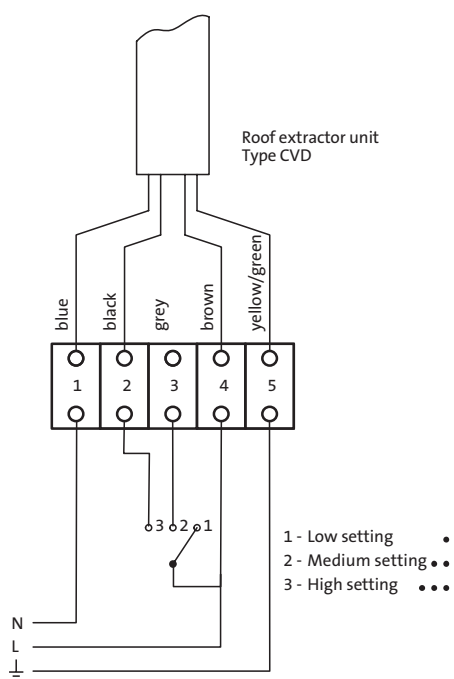
- 1 capacity low
- 2 capacity medium
- 3 capacity high
- 4 capacity max
- - - 5 power low
- - - 6 power medium
- - - 7 power high
- - - 8 power max

### Dimensioned sketch

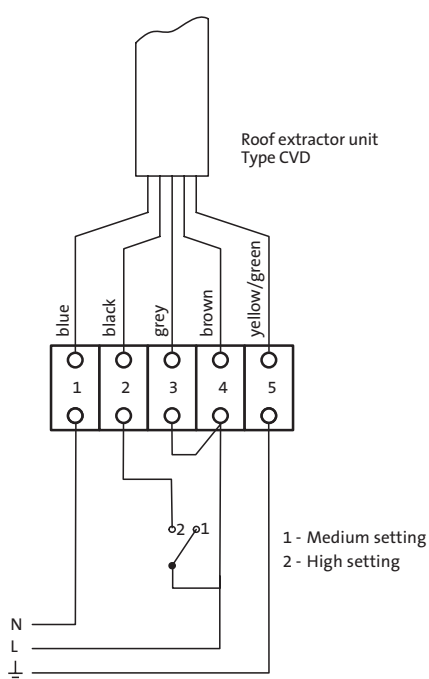


## Wiring diagrams

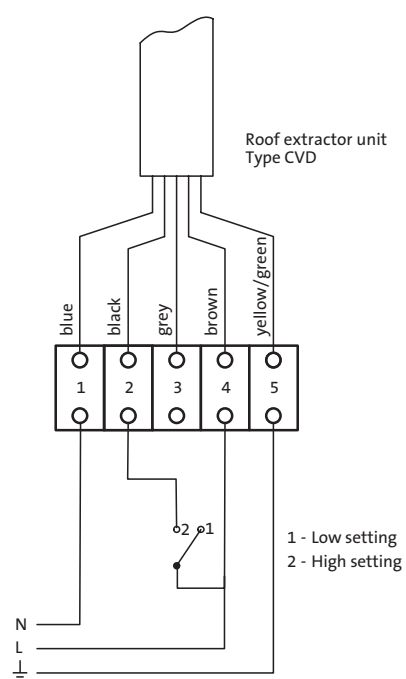
### Connection diagram - 3 Speeds



### Connection diagram - 2 Speeds (Medium and High)



### Connection diagram - 2 Speeds (Low and High)





Energy-efficient climate control systems that add to your comfort - Itho proves it can be done.

Wherever you are, live and work...chances are that you will be confronted with the products and services of Itho nearly every day. This is because we develop climate control systems for all those places where people are working, ranging from houses to offices and industrial units, from shops to restaurants, and from sports complexes to hotels and museums.

Whenever and wherever, the residents, users and owners of all these buildings ultimately have the same two wishes.

On the one hand, they want the highest possible comfort. On the other, they want the lowest possible consumption in energy.

These demands appear to be contradictory. However, here at Itho we set ourselves the objective to prove that these two demands can be combined. We possess the professionalism, drive and innovative power needed to actually deliver the evidence through figures, test results and particularly through satisfied and enthusiastic clients and users.



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