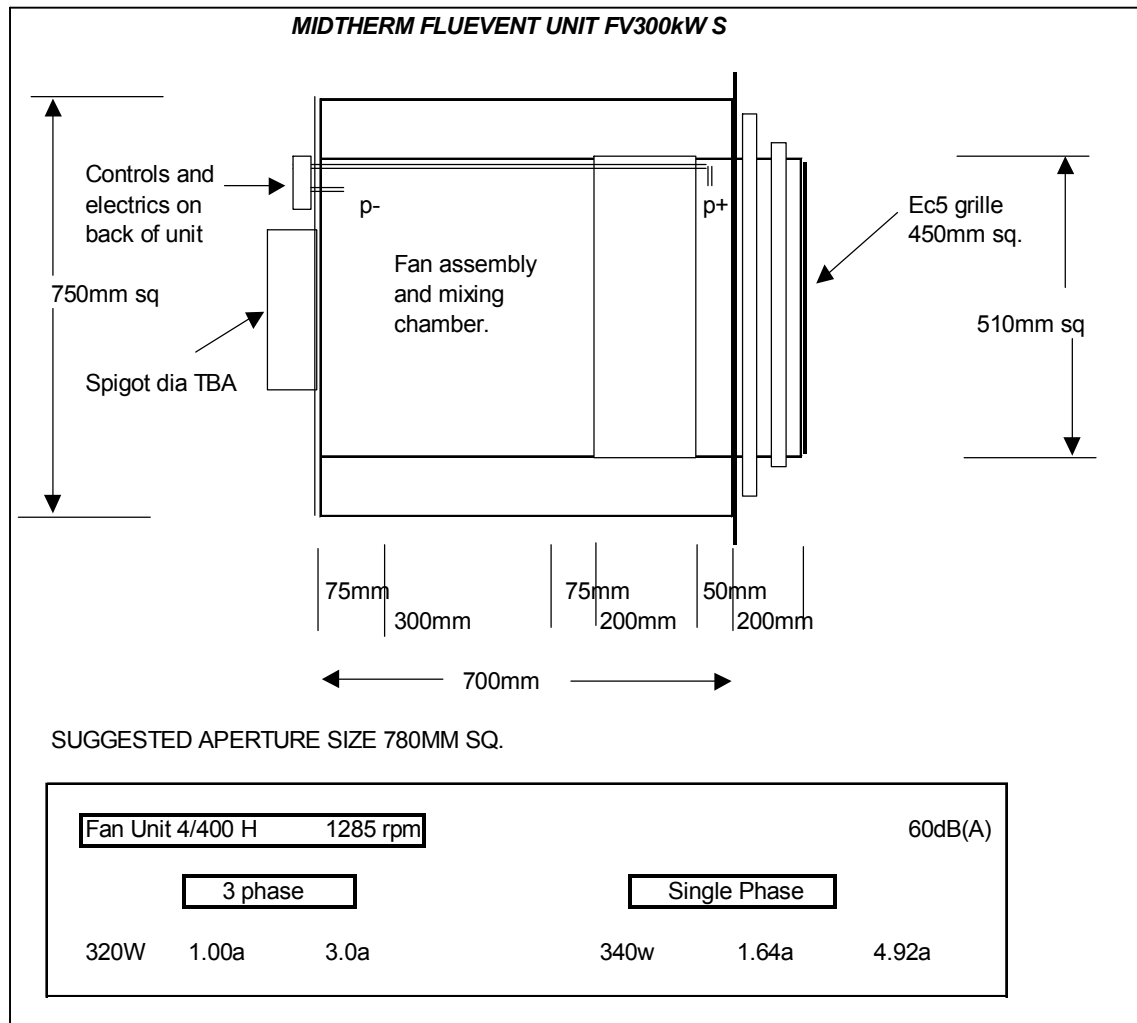


Single unit fan dilution system



Introduction

The Midtherm Fluevent System is a packaged unit that is an alternative to a conventional flue dilution system. The system offers several advantages including:- lower noise levels, a reduction in the amount and size of the duct/flue in the boiler house, easier installation, reduced energy costs, easy maintenance and inspection. The unit offers an aesthetic solution both internally, and externally. All that can be seen on the outside wall is the inlet / discharge all weather louvre, which can be powder coated to any RAL colour.

Description

The Midtherm Fluevent Single Unit is of rigid construction and is manufactured from stainless steel, with framework or braketry as required, and is pre-assembled and tested before delivery, ensuring efficient installation. Single Units are available for use on boilers ranging from 100 up to 300kW output.

Specification

Fully welded watertight systems can be for use with condensing boilers. (The standard unit is not suitable for use on condensing boilers). The unit is suitable for wall mounting.

There are 2 options available:-

Option 1 - Stainless steel 304 grade.

Option 2 - For condensing boilers, 304 grade stainless steel flanged and welded.

Quiet Operation

The units are energy efficient because the amount of ductwork needed in the system is reduced, therefore friction and energy losses are lower, resulting in reduced noise levels, compared to conventional systems.

Flue Gas Dilution

In accordance with the Clean Air Act, combustion products and air from the inlet are mixed by the fan in the centre of the system until the required dilution of 1% CO₂ is achieved. The diluted flue gases are then exhausted through the outlet.

Installation

Base of discharge outlet must be 2 metres above ground level.

Operation, maintenance, Inspection

The required safety interlock/fan-proving device is provided by a pressure differential switch, which must be connected in accordance with the wiring diagram. This should be checked for correct operation, as part of the annual boiler maintenance schedule.

The fan unit should also be inspected annually, and access to this is from the rear of the unit.

The fan motor has sealed bearings with lubrication for life, allowing quiet operation in any position, and requiring no maintenance.

Double unit fan dilution system

Introduction

The Midtherm Fluevent System is a packaged unit which is an alternative to a conventional flue dilution system. The system offers several advantages including:- lower noise levels, a reduction in the amount and size of the duct/flue in the boiler house, easier installation, reduced energy costs, easy maintenance, inspection, and finally the unit offers an aesthetic solution both internally, and externally. All that can be seen on the outside wall is the inlet and discharge all weather louvres.

Description

The Midtherm Fluevent System is of rigid construction and is manufactured from stucco aluminium, with framework or brackery as required, and is pre-assembled and tested before delivery, ensuring efficient installation, and trouble free commissioning. Units are available for use on boilers ranging from 100 to 1000kW output.

Stainless steel construction is an option, and welded watertight systems can also be designed and supplied for use with condensing boilers. (The standard unit is not suitable for use on condensing boilers). The unit can be wall mounted horizontally or vertically dependent on the application and space available. It is possible for us to vary certain dimensions to suit non-standard applications. Additional noise attenuation can be incorporated into the unit as an optional extra if required.

Specification

There are 3 options available:-

Option 1 - (Standard), manufactured in 1.2mm thk Aluminium, stucco finish.

Option 2 - Stainless steel 304 grade.

Option 3.- For condensing boilers, 304 grade stainless steel flanged and welded. (Please state when ordering if required for use with condensing boilers.)

The fan units are fitted with IP-55 electric motors, with thermal overload protection in case of overheating, or overloading caused by supply voltage fluctuations, or incorrect operation, etc.

Quiet Operation

The units are energy efficient because the amount of ductwork needed in the system is reduced, therefore friction and energy losses are lower, resulting in reduced noise levels, compared to conventional systems.

Flue Gas Dilution

In accordance with the Clean Air Act, combustion products and fresh air from the inlet are mixed in the system until the required dilution of 1% CO₂ is achieved. The diluted flue gases are then exhausted through the outlet.

Positioning & Installation

Vertical or horizontal positioning is optional, and where square discharge louvres are used these can be repositioned through 90° as required. Please specify horizontal or vertical mounting when ordering. NB. Base of outlet must be 2 metres above ground level for installations below 1000kW.

Operating, Maintenance & Inspection

The required safety interlock/fan-proving device is provided by a pressure differential switch, which must be connected in accordance with the wiring diagram. This should be checked for correct operation, as part of the annual boiler maintenance schedule.

The fan unit should also be inspected annually, and access to this is by unbolting all but two bolts, (on the same corner), this will then form a hinge for the fan housing to swing out, (or down). This hinge system allows easy maintenance and inspection.

On the standard unit it is not necessary to disconnect the flue in order to gain access to the fan assembly. The fan motor has sealed bearings with lubrication for life, allowing quiet operation in any position, and requiring no maintenance.