

GENERAL OVERVIEW

A condensing boiler is a high efficiency modern boiler, incorporating an extra heat exchanger, so that hot exhaust gases lose much of their energy to pre-heat the water in the boiler system.

When working at peak efficiency, the water vapour produced in the combustion process condenses back into liquid form, releasing the latent heat of vaporisation.

The water, known as condensate, is produced as a side-effect and is usually acidic, containing dissolved oxides of sulphur and nitrogen, and has to be piped away to drain.

There are a number of problems which occur when acidic water enters the water system, and simply installing the CalDensate will ensure that the pH is neutralised by means of the specially formulated media which is included in the product.

This easy to fit in-line unit is a by-product of our own successful commercial products. The CalDensate is effective, economical and environmentally friendly due to the fact that the throw away cartridge is biodegradable and the housing never needs replacing and therefore does not harm the environment in terms of waste in landfill sites – this is the only product on the market place with these unique features.

MODEL: CalDensate

Points to consider:-

1. Limited free play in rigid pipework.
2. Ensure that the unit is compact when the pipework has been cut.
3. The condensate is usually discharged periodically in "slugs" by siphonic action.
4. Is suitable for use with all types of condensate discharge overflow pipes.
5. Always consult the boiler manufacturer's installation instructions.
6. Fit in accordance with BS6798.

Contact Calmag for further information

SPECIFICATION DETAILS:

Length: 220mm

Diameter: 55mm (maximum)

Material: Acid compatible – will not corrode

Fittings: Adapted for use with acidic water discharge

Maximum working pressure: 3 bar

Maximum temperature: 80 deg C

Maximum flow rate: 1.08 l/sec (14gpm)

INSTALLATION

Turn off the water supply if necessary.

Turn off the boiler.

The CalDensate should be installed either vertically or alternatively with a slight incline away from the boiler to ensure that the acidic waste falls away naturally with gravity.

Ensure that the installation takes into consideration the need to replace the internal cartridge on an annual basis.

The CalDensate does not have the need for directional flow and can be installed simply and easily in any direction.

Unscrew the cap fitting and slide the gasket and cap onto the boiler condensate discharge pipe.

Push the unit onto the boiler condensate discharge pipe until it hits the stop inside the unit.

Slide the cap and gasket to the unit and firmly screw the cap back onto the unit body. Ensure the angle of the gasket sits neatly into the angle of the body fitting. This only needs to be hand tight - do not use excessive force.

Unscrew the bottom cap fitting and gasket and slide both onto a suitable length of condensate discharge pipe.

Push the condensate discharge pipe to the unit until it hits the stop inside the unit.

Slide the cap and gasket to the unit and firmly screw the cap back onto the unit body. Ensure the angle of the gasket sits neatly into the angle of the body fitting. This only needs to be hand tight - do not use excessive force.

Continue and complete the installation of condensate pipe in accordance to BS6798 (typical installation shown below).

Turn on the water supply if necessary.

Turn on the boiler. Check for leaks.

To maintain the performance of the CalDensate, it is strongly recommended to replace the cartridge in line with the annual service of the condensing boiler.

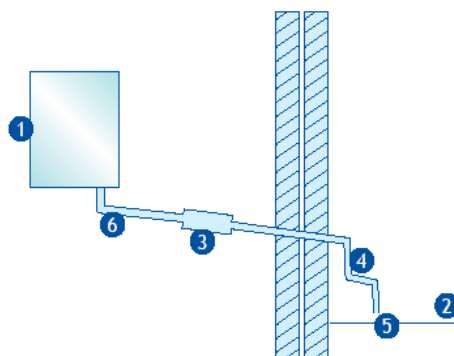
If the unit is installed externally, adequate protection from frost, water and extreme weather conditions must be considered and dealt with accordingly. In situations where the external condensate drainage pipe is less than a nominal diameter of 32mm, the pipe must be protected from frost and also be insulated against potential water.

Please refer to the current British Standards and manufacturer's boiler instructions as at all times.

Typical installation

Key:

- 1 Boiler
- 2 Ground
- 3 In line acidic neutraliser with biodegradable, replaceable cartridge:- CalDensate
- 4 External length of pipe 3m maximum
- 5 Open end of condensate drainage pipe
- 6 Nominal diameter 22mm



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