

CombiMag Dual Digital power flushing filter and heater



Now with digital control for precise control of temperature



- Twin cylinder unit with magnet and heater.
- 11,000 gauss of magnetic power.
- 3kW heater with LED temperature indicator.
- Increases power flushing efficiency; Reduces time taken to power flush a system.
- Prevents re-circulation of debris through the boiler.
- Transparent cylinder gives visible indication of system contamination and the need to clean magnet.
- Built-in by-pass enables filter to be cleaned without interrupting power flush process or heating process.
- Supplied in protective case, with coupling hose.

COMBIMAG DUAL filter module

The CombiMag power flush filter quickly removes circulating black iron oxide contamination from the flushing water, using the power of a large rare earth magnet.

Debris which may lead to blockages in small bore pipe work, is prevented from re-entering the heating system.

Rapid removal of debris prevents saturation of the cleaning solution with black sludge, leading to a

COMBIMAG DUAL heating module

During the chemical application stage of a power flush it is beneficial for the water to be warm, ideally around 50°C.

of contamination with debris from the old system. This may invalidate a boiler warranty.

In situations where the boiler cannot be fired, the CombiMag Dual can be used to raise the water temperature.

CombiMag high power magnetic power flushing filter with digitally controlled 3kW heater. Provides heat when the system boiler is not functional or is isolated to prevent contamination.

The CombiMag Dual unit is installed between the power flushing pump and the heating system. A connection hose is supplied.

The cyclone construction of the magnet chamber directs contaminated water through a powerful magnetic field. Even the smallest of particles are retained on the magnet.

more effective power flush, and a more efficient heating system.

The time savings on each power flush when using a CombiMag will rapidly cover its cost, and reduce disruption for householders.

Debris retained on the magnet is an impressive visual aid. It demonstrates to householders the need for the power flush, and proves that the clean has been professionally carried out.

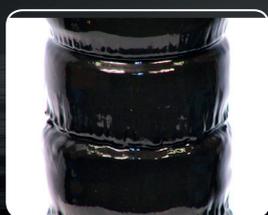
Input of heat enhances the performance of flushing chemicals, and reduces the time taken for a power flush.

If operational, the central heating boiler is often used to heat the system, but if a boiler is being replaced, this may not be possible or desirable.

When installing a new boiler to an existing system, it is not advisable to leave the power flush until the new boiler is operational, because of the risk

The CombiMag Dual is particularly useful when applying heat specifically to one or two problem radiators when normal power flushing has failed to remove heavy, adhesive deposits.

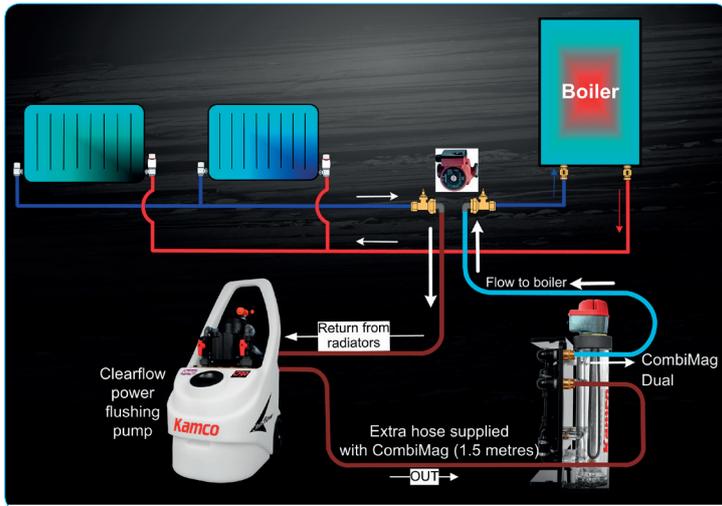
A corrosion resistant element enables the CombiMag Dual to be used with all power flushing chemicals.



Carry case for CombiMag Dual (included)



CombiMag Dual Digital power flushing filter and heater - operating instructions



General instructions for use

Initial set-up should be such that the water flow after leaving radiators passes through the CombiMag Dual before entering the boiler to provide it with a higher level of protection in the early stages of the power flush.

1. Place the CombiMag Dual adjacent to the power flushing pump on a suitable tray.
2. Select the required direction of flow and position the flow reverser lever accordingly.
3. Install the CombiMag Dual on the flow from the flushing pump using the short (1½ metre) coupling hose supplied. Connect the flow to the bottom connection on the filter.
4. Using the power flushing pump flow and return hoses connect the pump and the top connection on the CombiMag Dual to the heating system.

Operating instructions - Filter Module

1. Turn on the power flushing pump and immediately check all connections, and the top of the cylinders for leaks.
2. After initial circulation for approximately ten minutes, turn both three-port valves 180° into the **BYPASS** position.

3. Remove the securing ring from the top of the magnet cylinder and carefully remove magnet.

Note: the magnet is very powerful and is strongly attracted to steel surfaces. Take care not to trap fingers and avoid contact with sensitive

equipment.

4. Inspect the magnet for deposits and, if necessary, clean as follows:
5. Grip the cylinder lid and handle firmly. Whilst wearing disposable gloves, grip and slide the magnetite sludge down and off the magnet (see pictures below).
6. Collect the sludge in a suitable container for later disposal.
7. Re-assemble the CombiMag Dual ensuring that the magnet locates within the circular recess at the base of the cylinder, and turn both three-port valves back into the **CIRCULATE** position.
8. Repeat inspection and cleaning procedure as required during the flushing process.

Cleaning the magnet

It is not necessary to remove all deposits during the intermediate cleans. However, to ensure a long life the magnet should be thoroughly cleaned and dried at the end of each flush.

Caution

The CombiMag generates a very powerful magnetic field. When removed from the cylinder, keep away from electronic equipment, watches, mobile phones, credit cards etc.

General operating instructions - Heating Module

Set the pump flow reverser so that the water flow enters the bottom of the cylinder and leaves at the top. Allow water to circulate through the canister for at least two minutes before switching the element on to ensure that all air has been expelled from the canister.

Ensure that an adequate water level is maintained within the power flushing pump tank (i.e. 15cm above the minimum). Do **NOT** operate the flow reverser or turn the motor off whilst the heating element is on.

Once the desired temperature has been achieved, turn off the power supply to the CombiMag Dual heating element.

For full heating module instructions, including setting adjustment, please read the instructions supplied with the CombiMag Dual digital.

Safety Precautions

All normal safety precautions should be observed when using electrical equipment near water.

The plug must be fitted with a 13 amp fuse. Use with a residual circuit breaker adaptor. PAT test (Portable Appliance Test) electricians annually.

Do not remove or reset the heater thermostat, and always use with the protective cap in place.



Always replace units in the correct cylinder, as labelled, for safety and proper operation.

Technical data

Magnet:	
Strength of magnet:	11,000 gauss
Length of magnet:	400mm
Magnet surface area:	314 cm ²
Heater with digital controller:	
Voltage:	240 volt
Rating:	3 kW
IP Protection:	IP55
Weight of complete unit:	12.7 kg (in case)
Case dimensions (mm):	600 x 400 x 291
Length of supplied coupling hose:	1.5m



Attention - heating element warranty notice:

Ensure that water flow always enters the cylinder at the bottom entry and leaves at the top whilst the heater is on, to ensure that it does not run dry.

As for any electric heating element, the guarantee is not valid if upon examination the heating element has been found to have run dry.