

CombiMag DUAL DIGITAL | Magnetic power flushing filter with heater



- * 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 DIGITAL | Heats the system when boiler is not functional.

POWER FLUSHING

The fastest and most effective means to remove sludge and corrosion debris from central heating systems is to use a high flow of water to loosen and ultimately expel debris. Power flushing mobilises large quantities of black iron oxide within the system. Clear water is forced through the system, pushing debris ahead of it. This continues until the dump water finally runs clear, and can take a considerable length of time.

CombiMag DUAL DIGITAL MAGNETIC FILTER MODULE

This filter uses a powerful 11,000 gauss rare earth magnet to quickly capture circulating black iron oxide contamination from the flushing water.

CombiMag DUAL DIGITAL HEATING MODULE

For efficient chemical application during power flushing, it is beneficial for the water to be warm, around 50°C. **CombiMag DUAL DIGITAL** raises and controls the water temperature, ideal when the system boiler is isolated/out of commission.

INSTALLATION

The **CombiMag DUAL DIGITAL** filter is installed in line with any power flushing pump. The cyclone construction directs contaminated water through a powerful magnetic field, such that even the smallest of particles are retained on the central magnet, from which they may be easily cleaned during and after power flushing. Captured debris is prevented from re-entering the heating system, preventing saturation of the cleaning solution with black sludge, leading to a more effective power flush.

BENEFITS

- The time saved on every job when using the **CombiMag DUAL DIGITAL** will rapidly cover its cost and reduce disruption for householders.
- The debris retained on the magnet is an impressive visual aid to demonstrate to householders what has been removed from their heating system and emphasises the benefits of a more efficient heating system and resulting reduction in energy usage.

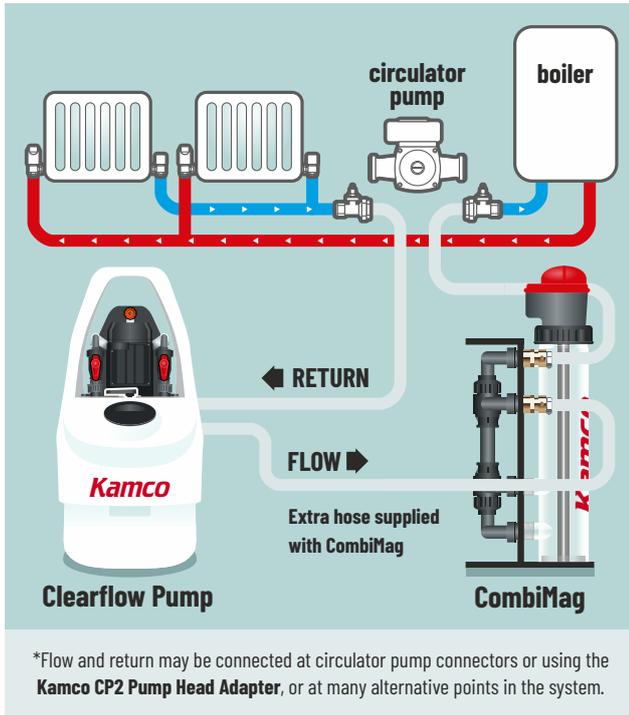


Supplied with protective tool case



PARTS & LABOUR WARRANTY

CombiMag DUAL DIGITAL | 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 Digital** adjacent to the power flushing pump on a suitable drip tray.
- 2 Select the required direction of flow and position the pump flow reverser lever in that direction.
- 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 standard flow and return hoses connect both the pump and the top connection on the **CombiMag** to the heating system.

OPERATION 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 collected deposits and, if necessary, clean as follows:
- 5 Grip the cylinder lid and handle with one hand. 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 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 the 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 whilst power flushing. However, to ensure a long life the magnet should be thoroughly cleaned and dried at the end of each job.

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

OPERATION 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 in 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) electrics annually.

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

CombiMag DUAL TECHNICAL DATA

Weight of unit:	12.7 kg		
Strength of magnet:	11,000 gauss	Dimensions (mm):	600 x 400 x 291
Length of magnet:	400mm	Voltage	Rating
Magnet surface area:	314 sq cm	240V	3kW
			IP Protection
			IP55

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



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