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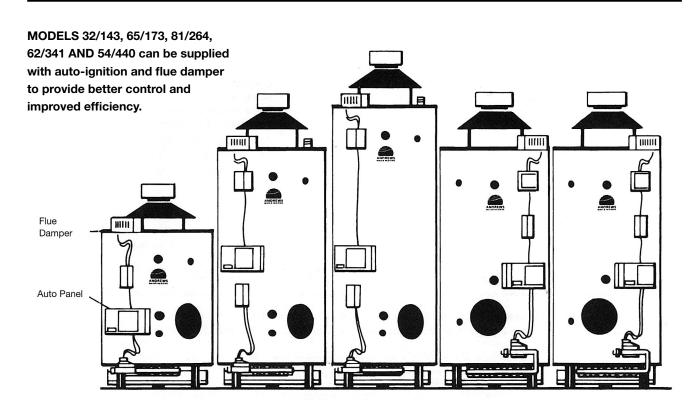
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# NATURAL GAS FIRED STORAGE WATER HEATERS

# **Automatic System for Hi-Flo Models**



THE HI-FLO RANGE OF WATER HEATERS CAN BE SUPPLIED FOR PERMANENT PILOT OPERATION WITH THERMOPILE ENERGISING TO OPEN THE MAIN BURNER VALVE. (No electricity supply required.)

ALTERNATIVELY THEY CAN BE SUPPLIED WITH A 24-VOLT AUTO IGNITION SYSTEM FACTORY FITTED AND TESTED. (220/240 volt electrical supply required.)

THE AUTO IGNITION SYSTEM IS C.E APPROVED TO COMPLY WITH EMC, LOW VOLTAGE AND GAS APPLIANCE DIRECTIVES.

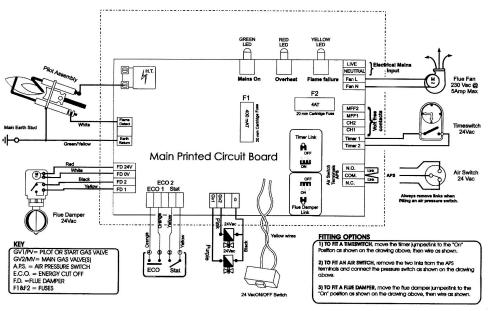
THIS SYSTEM WHILST BEING COMPATIBLE FOR USE WITH ENERGY MANAGEMENT SYSTEM ALSO OFFERS THE FOLLOWING ADDITIONAL FACILITIES.

- Automatic ignition by high voltage discharge to intermittent pilot prior to soft start mainflame.
- Flame monitoring by electronic proven pilot ignition control, complying with EN 298 Ignition Safety Standards.
- Time control if required may be connected to the control panel.
- · A flue damper, to provide greater efficiency, is available as an optional extra, factory fitted, which is wired to the control panel.
- Low voltage components at 24 volts.
- Low flame failure and overheat indication terminals on control panel (volt free).

# INSTALLATION INSTRUCTIONS FOR AUTO IGNITION HI-FLO HEATERS

Wiring diagram opposite shows the Terminal Connections for facilities mentioned overleaf.

- 1. Timer facility with independent 24V or 240V Permanent power supply.
- 2. Flue damper
- 3. Flue fan normally supplied with integral air proving switch. On single installation applications the fan is operated vis the thermostat circuit.



#### **ELECTRICAL SUPPLY - AUTO IGNITION UNITS.** SINGLE HEATER INSTALLATIONS

Wiring External to the water heater must be installed in accordance with the I.E.E Regulations for the wiring of buildings and to any local regulations that may apply.

The auto Ignition Heater is designed to run off 220/240V 1PH 50-Hz supply and the fuse rating is 5 Amp.

The method of connection to the mains electricity supply should facilitate complete electrical isolation of the appliance preferably by use of an unswitched shuttered socket outlet in conjunction with a fused three pin plug both complying with the requirements of BS 1363/A.

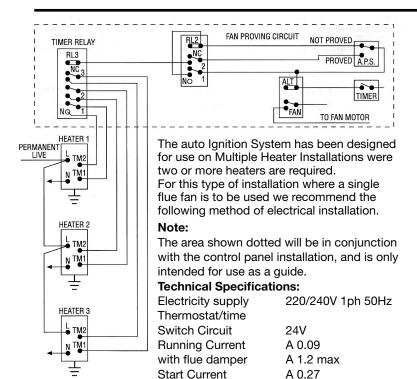
Alternatively a fused double pole switch or fused spur box serving only the heater may be used.

The point of connection to the mains should be readily accessible and adjacent to the appliance.

Connect electrical supply to main Control Panel Terminal Block via the cable glands in the base of the control panel. Mains input cable should be 0.75mm<sup>2</sup> 3 core and should be connected to the mains supply as detailed above.

It is recommended that screen cable is used where the volt-free contacts are to be connected from an external supply. This will eliminate the risk of possible interference from nearby high voltage cables.

## MULTIPLE HEATER INSTALLATIONS



#### WIRING DIAGRAM FOR MULTI HEATER APPLICATIONS WITH SINGLE FLUE FAN

- 1. All heaters to have permanent mains supply to controller.
- 2. All switching on heaters own 24V control line.
- 3. If cooling by through draught is a concern use a flue damper.
- 4. Keep water heaters 24V Power supplies isolated from each other.

## **FEATURES:**

- 1. Fan interlock checks pressure/flow switch faults.
- 2. The pressure switch gives a delay to allow power to be established before ignition can occur.
- 3. The fan must be established before ignition can occur.
- 4. On fan failure the heaters shut off in a safe condition.
- 5. The fan runs constantly and the heater thermostats switch the heaters on and off.



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