# MINI PRESSURISATION UNITS OPERATING AND MAINTENANCE INSTRUCTIONS





The Mini Pressurisation Unit is a compact wall mounted unit housing either one or two small pressurisation pumps and associated control equipment for connecting to small Heating or Cooling installations within large domestic dwellings or small industrial / commercial installations.

All the equipment is mounted within an a white powder coated casing with a flush mounted pressure gauge, mounted on the front of the unit, to indicate the system pressure.

Within the cabinet, is housed a small make-up tank complete with a system filling valve assembly, complying with the Water Regulations Guide, a small hydraulic pump capable of producing a pressure of between 0.7 to 2.4 bar, pressure control switch, control circuit fuse, terminals and all necessary wiring to achieve the correct operation.

Suitable connections are provided to allow system makeup, tank overflow and connection to the system pipework as well as electrical terminals for connecting the single phase, live, neutral and earth supply.

## Installation:-

The mechanical and electrical installation of the unit should be carried out in accordance with the relevant Water Authority Regulation and current addition of the Electrical Regulations.

### **Essential requirements:-**

- 1. Locate units in a well ventilated environment.
- 2. Ensure supply voltage and overload protection is correct.
- 3. An isolating valve should be fitted to the incoming water supply.
- 4. Electrical installation should be carried out by a competent electrical engineer.
- Covers and guards should not be removed during operation or without isolating the unit first.
- **Note:-** An anti-gravity loop with a minimum height of 2m (or an immediate vessel) **must** be installed to provide thermal protection to the unit

No pipework lagging is required between the system and the expansion vessel(s). The unit should be wall mounted, ensuring sufficient clearance is left to allow the cover to be removed.

The pipework to the expansion vessels should be sized according to the size and number of vessels and should be at least the same as the tank connection. Any expansion vessels should be fitted with individual drain cocks and isolating valves to facilitate initial set-up and future maintenance.

#### THE SYSTEM SHOULD BE INITIALLY FILLED VIA A QUICK FILL LOOP BEFORE OPERATING THE UNIT. THE PUMP IS NOT CAPABLE OF FILLING ANY SIZE OF SYSTEM

**Electrical connections:-** The unit should be connected to 240V single phase supply. The unit is internally fused with a 2A fuse.

**Customer connections:-** Customer connections are accessed from the bottom of the unit. All connections are on 52 mm centres from the rear face of the unit. See drawing **Adjustment of Control pressure switch:-** The control pressure switch is factory set for 1 Bar. In the unlikely event that this pressure is not acceptable and has to be adjusted within the operating range of the pump, i.e. maximum 2.4 Bar, the following procedure should be adopted:- Isolate the unit and remove cover screws and cover to access the pressure switch. The pressure setting can be adjusted by turning the knurled knob on the pressure switch to the desired value, using the pressure gauge as a guide.

## **Technical data:-**

**Pump Unit** - Self priming piston pump, type 508LA, max. flow 80 litres/hour max. generated pressure 2.4Bar. Pump connection 1/8". Nominal power consumption 25W

**Make up tank** - 4.5 litre capacity. Complies to WRC byelaw 11 regulation. System connection 1/4" BSPF, Water inlet connection 1/2"BSPM, overflow connection 3/4"

**Pressure switch -** Type 100SS, adjustment range 0.7bar to 6.0bar, 15amp @ 250VAC. Overpressure 10bar (Note that pump maximum pressure is 2.4 bar)

Pressure gauge - 50 mm diameter Scaled 0..6 bar (Dual scale)

**Weights and Dimensions:-** Weight 8.5Kg empty. Dimensions 350 x 300 x 200mm (W x H x D)



