

PRESSURISATION UNITS

FEATURES

- Used for pressurising chilled water system in HVAC applications.
- Provides make up water to pressurise the water system.
- Double pump, (1 working + 1 stand-by).
- Microprocessor based control panel with dry run protection & duty cycling.
- Multistage centrifugal type pumps - quiet, reliable and rugged.
- Flow meter to measure the make up water quantity.
- All Components, i.e. pumps, pressure transmitter, flow meter, interconnecting piping and control panel factory mounted on a compact steel frame.

BENEFITS

- Ensures positive pressure throughout the system thus preventing vapour/air locks.
- Automatic operation.
- BMS Compatible option.

TECHNICAL DATA

| | | | | | | |
|--------------------------|---|-------------------------------------|---------|-------------------------|----------|----------|
| Model | : | PSU-225 | PSU-230 | PSU-260 | PSU-2100 | PSU-2150 |
| Pump | | | | | | |
| Type | : | Multistage, Centrifugal | | | | |
| Power(KW) | : | 0.55 | 0.55 | 1.1 | 1.5 | 2.2 |
| Power supply (AC, 50Hz) | : | 230V, 1Ph | | 415V, 3Ph | | |
| Max. flow rate (CMH) | : | 2 | 2 | 2 | 2 | 2 |
| Max. head (mWC) | : | 25 | 30 | 60 | 100 | 150 |
| Pressure rating | : | PN10 | | PN16 | | |
| Max. fluid temp. | : | 70°C | | | | |
| Protection | : | IP55 | | | | |
| Controls | | | | | | |
| Pressure range | : | 0 to 10 bar | | 0 to 20 bar | | |
| Pressure differential | : | 1 bar | | | | |
| Control panel protection | : | IP55 | | | | |

INSTALLATION AND COMMISSIONING

1. Mount on a PCC foundation.
2. Connect water supply to the inlet connection.
3. Connect outlet to the expansion tank.
4. Control Panel's (fig.1) functions are described below:

- ① **Set Point** - The Set point of the pressure is set by turning the pressure setting knob. On turning the knob, display starts blinking and shows the set-point. It again shows the actual pressure when it is left idle for 15secs.
- ② **Auto Mode** - Pump switches OFF when the pressure exceeds the set-point and is switched ON, as the pressure goes below (one bar) the set-point. If the pressure is not achieved in 15mins, the pump will switch OFF and after 1min other pump will start to achieve the required pressure.
- ③ **Manual Mode** - Operation can be switched from Auto mode to Manual mode for Pump 1/ Pump 2 by the toggle switch. In manual mode, the pump operates continuously for 30mins, then stops for 10mins before restarting.
- ④ **Alarm** - A NO contact of relay is provided for the alarm which closes when an alarm is raised. In case of alarm, press reset key to clear alarm or switch OFF & then switch ON the mains.

DIMENSIONS

| | PSU-225 | PSU-230 - 2100 | PSU-2150 |
|----------|---------|----------------|----------|
| L | 520 | 1050 | 1050 |
| W | 500 | 700 | 700 |
| H | 550 | 900 | 1000 |

All dimensions are in mm

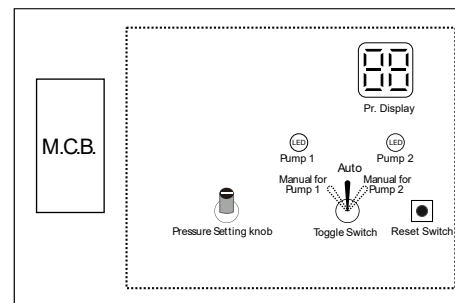


Fig.1 Control Panel

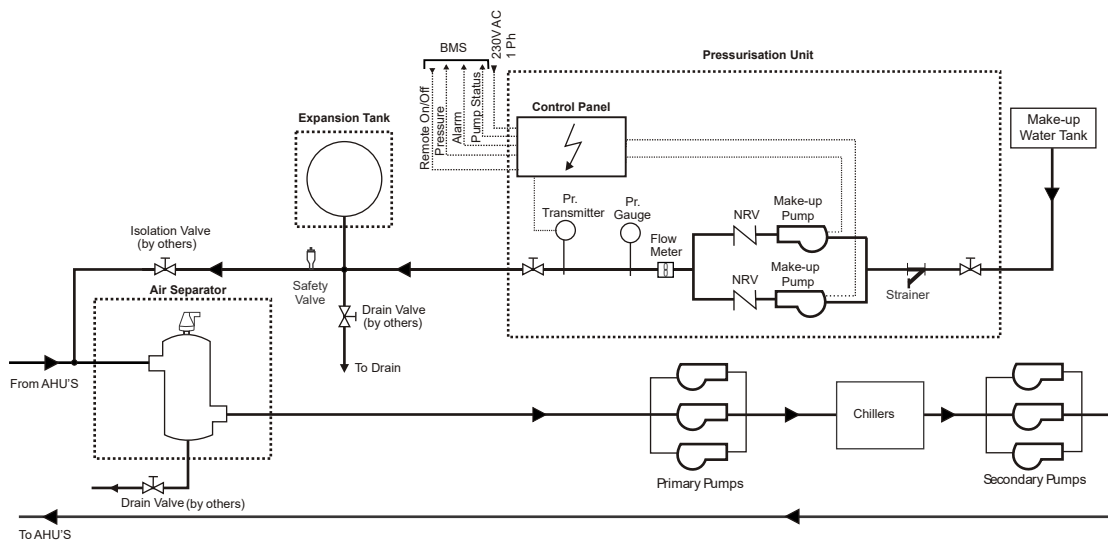


Fig.2 Schematic drawing of pressurisation unit, expansion tank and air separator.