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-225 | PSU-260 | PSU-2100 | PSU-2150 |
|--------------------------|------|-------------------------|---------|---------|---------------|----------|
| Pump | | | | | | |
| Туре | : | 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 | 25 | 60 | 100 | 150 |
| Pressure rating | : | PN10 | | PN16 . | | PN20 |
| Max. fluid temp. | : | | | 70°C | | |
| Protection | : | | | IP55 | | |
| Controls | | | | | | |
| Pressure range | : | 0 to 1 | 10 bar | | . 0 to 25 bar | |
| Pressure differentia | ıl : | | | 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 up and down key, on pressing any key 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 acheived in 15mins, the pump will switch OFF and after 1min other pump will start to achieve the required pressure.
 - 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 (PN10) | PSU-225 - 2100 (PN16) | PSU-2150 (PN20) |
|---|-------------------|--------------------------|--------------------|
| L | 600 | 1050 | 1050 |
| w | 500 | 700 | 700 |
| н | 580 | 830 | 1050 |

All dimensions are in mm

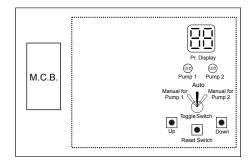


Fig.1 Control Panel

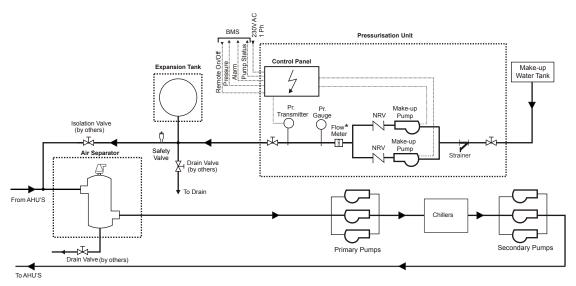


Fig.2 Schematic drawing of pressurisation unit, expansion tank and air separator.

^{*} Flow Meter not included with PN20 units.