

### Series SPL2000... Universal A.H.U. Controller



**A Comprehensive AHU Controller complete with Free Cooling & Heat Recovery Functions**

#### Features

- Power Supply 230 or 115 Vac
- Power board mounts close to unit with :

#### 0–10 Vdc Modulating Outputs for control of:

- HWS & CW valves.
- Main damper control
- Free Cooling on Dampers
- Air Quality function on dampers
- Heat Recovery coil damper

#### Switched outputs for:

- Fan start / stop
- HWS circulating pump.
- Compressor start / stop

#### Sensor Inputs for:

- Return air temp. – Discharge air temp.
- Outdoor temp. – Mixed air temp.
- Air quality

#### Features - Continued

##### Room Display Unit-

- Remote Mount for user convenience, provides for adjustment of:
  - Temp. setpoints & differentials
  - Sensor settings & differentials
  - Weekly Programme.- Mon to Fri.. + Sat + Sun.
  - Fan Speeds (3) – including Auto-Speed option .
  - Modes: Heat – Cool – Auto Heat/Cool, Fan Only.

##### Display of :

- Setpoint temps.
- Space//Return Air & Outdoor Temps.
- Temp. sensor settings
- Ambient air quality levels
- Alarm conditions
- Weekly programme of 4 time periods/day
- Filter hours run.

##### Alarm Outputs for:

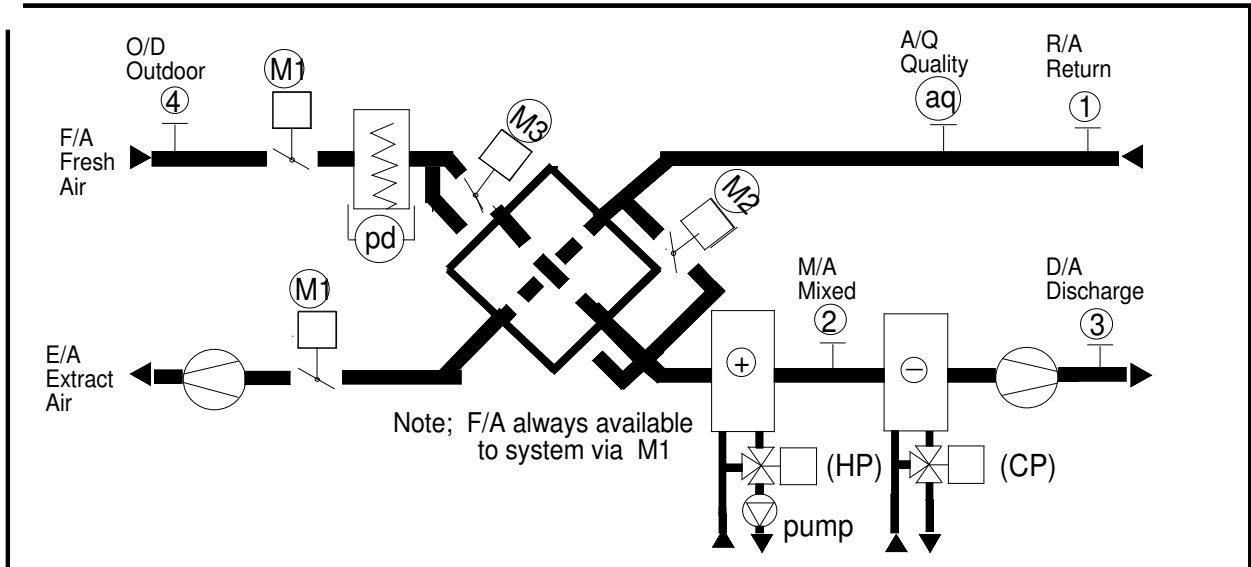
- Filter dirty
- Fan failure
- General alarms, as required

##### Options include:

- Air quality function
- Free cooling.
- Infra-Red Control.

## Technical Information

### Schematic



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#### Temp. Sensors:

- T1 = Return Air (R/A)
- T2 = Mixed Air (M/A)
- T3 = Discharge Air (D/A)
- T4 = Outdoor Air (O/A)

#### Air Quality Sensor: = (AQ)

#### Dampers:

- M1 = Fresh Air (F/A) & Extract Air (E/A)
- M2 = Recirculation Air (R/A)
- M3 = heat Recovery Coil (H/R)

#### Control Valves:

- Heating = (HP)
- Cooling = (CP)

#### Switched Outputs:

- CO = Compressor
- PUMP = HWS Circulating Pump
- FANS = Fresh & Extract Air

#### Alarms:

- F1 = System Fault
- F2 = General purpose Fault
- DP = Air. Diff. Press Fail – or – Filter dirty