Narara Ecovillage

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Reverse Cycle Air Source Heat Pump Hot Water Unit - Specification Sheet

Standards

- National Construction Code (Building Code of Australia)
- AS/NZS 3000 Electrical Wiring Rules
- AS 1677 Refrigerating Systems –Safety Requirements for Fixed Applications
- AS/NZS 3823 Performance of electrical appliances Air conditioners and heat pumps
- AS/NZS 3500 Plumbing and Drainage

Requirement

Provide air source heat pump system, consisting of a singular condensing unit connected to a single hot water storage tank, having the capability of individual set point control, centred on one refrigerant circuit.

Warranty

Provide 5-year factory warranty.

Efficiency

Energy efficiency ratio heating = 3.8 (at 5 °C and 80% RH ambient conditions).

Ambient Conditions

The outdoor (condensing) unit shall be capable of operating within a wide range of ambient temperatures. Select condensing unit to provide heating in the range -10°C DB to 40°C DB. Achieve this by automatic

Condensing Units

Provide fully weatherproofed, factory assembled and pre-wired with all necessary electronic and refrigerant controls. Construct the casing from mild steel panels coated with a baked enamel finish. Provide the condenser coil with a corrosion resistant finish.

Sound Pressure Level: Not to exceed 57 dBA measured horizontally one metre away from the unit and 1.5m above ground level.

Fan Motor Speed Control: Provide multiple speed control to fan motors operation to maintain constant head pressure control in all ambient temperatures and modes of operation. Use fan motors of high static resistance type of 30Pa as standard.

Drain Tray (Field Installed): Provide each outdoor unit with a field supplied condensate tray of galvanised sheet steel construction. Connect the condensate tray with the nearest floor waste with a 25mm (min.) drain.

Compressors: Provide highly efficient hermetic scroll type compressors. Provide the inverter compressor with electronic controls, capable of changing speed to follow the variations in cooling and/or heating loads, using a HIDECS/R circuit (Hi Inverter Drive and Electronic Control System Recovery). Provide inverter control together