

# Pharma / Hospital Grade Package Type Air Conditioner



# Pharma / Hospital Grade Packaged AHU

Cool Point Pharma / Hospital Grade Packaged Air Conditioning Units are specially designed for the classified areas e.g. Pharmaceuticals, Operation Theaters, Hospitals & All Kind of Clean Room applications.

These unit have 2 segments:

- · Evaporator Side Air Handling Unit
- Condensing Unit

### **ECONOMICAL DESIGN, EFFICIENT WORKING**

- Complete packaged concept of economy and efficiency comes in these units.
- No field piping is required which decreases the installation time and cost.
- · Units are design on plug and play concept.
- · Units are factory gas charged which reduces the chance of leakage and overcharging.
- These Units are manufactured on a common based which reduces mechanical and transportation damages.
- Any kind of filtration configuration can be achieved in Air Handling Unit side for different classified areas.
- 16-Basic Models starting from 4-tons to 42 tons.
- Condensing units comes with scroll / reciprocating compressor options.

### FEATURES THAT MAKE DIFFERENCE

1. Air Handling Unit cabinet design simulation / performance calculation is done with AHU Designing Software in accordance with ARI / ASHRAE / EUROVENT Standards.







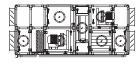
Cooling coils (DX / Chilled Water) are designed and performance is calculated by using state of the art software. This software enables the designer to design and select the best performing coil for any specific parameter.

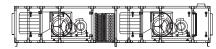


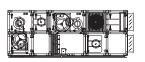


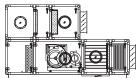


Variable AHU dimensioning features for flexible cabinet sizing & configuration.





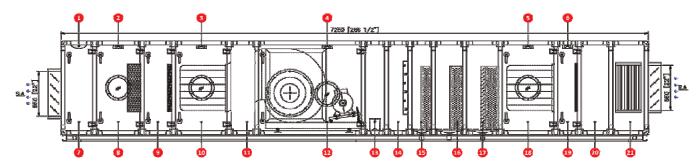




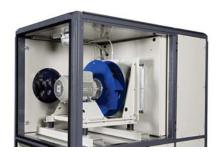




- 4. Almost zero leakage AHU cabinet available in 25 mm, 50 mm PU filled panels. Suitable for indoor and outdoor applications.
- 5. Double sloped drain pan, powder coated and SS (Optional)
- 6. Multiple sections e.g. mixing box, filter section, coil section, fan section, heat recovery wheel section or customized options are available.
  - 1. UV Light
  - 2-6 Marine Light
  - 7. Supply Air Plenum Section
  - 8. HEPA Filter Section
  - 9. Mini Pleated Filter Section
  - 10. Bag Filter (F-9) Section
- 11. Plenum
- 12. Fan Motor Section
- 13. Humidifier
- 14. Electric Heater
- 15. Hot Water Coil
- 16. Cooling Coil Section (L)
- 17. Coil with Eliminator (L1)
- 18. Bag Filter (F-6) Section
- 19. Filter section
- 20. Plenum
- 21. Mixing Box



7. AMCA Certified fans selection included forward curved, backward curved, plug fans and airfoil type to cater any static pressure demands.







8. Robust framing structure with special profile (2-options are available)

Thermal barrier profile for Classic Series AHU

Standard Profile (Aluminum)



In Pharma grade package unit, Condensing side are available both in water and air cooled application. Condensing Unit has following main components and features:

9. Units should be capable to operate from 60°F (15°C) to 125°F (52°C) ambient temperature, and shall be selected in accordance with project requirements and installed as per Installation, Operation & Maintenance Manual.







### 10. Compressor

Compressor(s) shall be hermetic reciprocating, refrigerant gas cooled, furnished with internal overload protection device, internal pressure relief valve, crankcase heater & shall be mounted on spring vibration isolators. These compressors conform to internationally recognized standards like NF, VDE, CSA & UL.

### 11. Condenser Coil

Coils shall be air cooled with integral sub cooler, constructed of seamless copper tubes 3/8" OD mechanically expanded into wavy plate type aluminum fins with maximum 12 fpi (2.1mm) spacing. These coils shall be tested against leakage by air pressure of 450 psig (3100 Kpa) under water, cleaned & dehydrated at the factory. Coil shall conform to ARI410/91.







### 12. Fan & Motor

Fans shall be direct driven propeller type discharging air vertically upward, equipped with statically & dynamically balanced aluminum alloy blades, inherent corrosion resistant shaft & PVC coated steel wire fan guard.

Condenser fan motor(s) shall be Totally Enclosed Air Over (TEAO), 6 poles with classF insulation, minimum IP55 protection & wired to unit control panel.





13. Outer skin is 0.5 mm sheet metal coated with aluzinc powder coated with plastic protective film and inner 0.5 mm galvanized sheet metal texture structure with special aluminum profile









### **Lahore Office:**

Adda Plot, Sharaiz Avenue, Jatti Umra Road, Raiwind Road, Lahore. Ph: 0092-42-35322612-7 Fax: 0092-42-35322618

Email: info@coolpoint.net.pk
URL: www.coolpoint.net.pk

## **Islamabad Office:**

Office No. 11, 1st Floor, Zaki Center, I-8 Markaz, Islamabad.

Ph: 051-4861371 Fax: 051-4861372

Email: isboffice@coolpoint.net.pk

URL: www.coolpoint.net.pk

### **Karachi Office:**

Office No. 201-A, 2nd Floor, Plot No. DC-4, Clifton Center, Clifton Block No. 5, Karachi. Ph: 021-5810981, 5810982

Fax: 021-5821219

Email: khioffice@coolpoint.net.pk

URL: www.coolpoint.net.pk