LPCP

Chilled Water Air Handling Unit

1,000 - 25,000 CFM 50/60 Hz

TRANE®

Ingersoll Rand.
**Economical design to suite for commercial application**
The fully assembled LPCP air handler offers a large selection of configuration to meet a wide range of cooling and ventilating requirements. LPCP is ideally suite for stores, office buildings, schools or other commercial establishments.

**High efficiency performance**
Trane engineered fan and heat transfer system provides maximum cooling and airflow while minimizing vibration, acoustic level and power consumption.

**Complete product selection program**
LPCP is furnished with complete product selection program to ease the product selection process and also generates performance data in professional format for project submission.

**Minimum installation cost**
The modular casing concept creates an easy way for installation, which will help to minimize field labor cost.

**Suitable for retrofit, renovation and replacement**
LPCP is designed to have compact casing to suite the need for retrofit, renovation and replacement market. Small footprint also ensures economical use of building space.

**Excellent condensate management**
Sloping drainpan allows for total condensate removal. A unique feature developed to prevent stagnant water in air handling unit.

**Sturdy construction**
LPCP is sturdily constructed based on a specially designed rigid frame and reinforcement. This means modules can be stacked in a vertical air handler configuration, but also allows removal of panel for unlimited access.

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**Feature and Benefit**

**Casing**
Single wall skin, light-weighted, quiet and superior thermal resistance.

**Coil Module**
High efficient aluminium fin available in 2, 4, 6 & 8 rows with 108, 144 & 168 fin per foot.

**General Construction**
Bolted frame & panel with modular and compact construction.

**Fan Module**
Each unit fully tested & balanced at the factory, ensures quality & reliability.

**Drain Pan**
Sloped, insulated and coated for proper condensate removal, thermal isolation and corrosion protection.
The LPCP air handling unit is easy to select by using quick selection guide table below.

### LPCP QUICK SELECTION GUIDE

<table>
<thead>
<tr>
<th>Unit Model</th>
<th>Unit Size</th>
<th>Coil Face Area ft²</th>
<th>Air flow at 500 fpm cfm</th>
<th>Total Cooling Capacity MBH</th>
<th>External Static Pressure Tons</th>
<th>Dimension L mm</th>
<th>W mm</th>
<th>H mm</th>
<th>Shipping Weight Kg</th>
<th>Water Pressure Drop in.wg</th>
<th>Water Flow Rate ft.wg</th>
<th>Water GPM</th>
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**NOTE:**

1. Above cooling capacities based on standard air flow rate and following conditions:
   - Chilled water temperature: Entering 45°F and Leaving 55°F.
   - Entering air condition: 80°FDB / 67°FWB.
2. Above unit weight shall include forward curved fan section, 4 row 144 fin/foot cooling coil section (1/2" copper tube/aluminium fin), flat filter section (include media).
3. LPCP02-06 are based on coils with turbulators.
4. Product design and specification are subject to change without notice.

**Fan Arrangement**

Arr.1

Arr.2

Arr.3

Arr.4

Arr.5

Arr.6

Arr.7

CFH-SB-5T
Casing Construction
LPCP product line consists of horizontal and vertical configuration. Both configurations have the option of either horizontal or vertical discharge. All sections are insulated with Polyethylene foam insulation. Access panels are available on both sides of casing for fan and mixing box section (optional).

Fan Module
The vibration levels of the complete fan assembly (fan wheel, motor and drives assembled as a whole system) had checked and dynamically balanced in the factory as per ISO 1940.

Fan is double-width, double-inlet, and multiblade type. Fan is forward curved (FC) as required for stable operation, low noise and optimum energy efficiency. Fan had equipped with bearings with an L-50 life (average life) of 200,000 hours. The fan had designed in accordance to AMCA standard.

Motor is TEFC (Totally Enclosed Fan Cooled), 3-phase induction motor, 50 or 60 Hz, IP55 and class F insulation. Motor had mounted integral to a fan assembly furnished by the unit manufacturer. Motor had mounted inside the unit casing on a slide base to permit adjustment of drive belt tension.

Coil Module
All coils are highly efficient aluminum fins, which are mechanically bonded to 1/2 inch seamless copper tubing. Capacity, pressure drop and selection procedure had designed in accordance with ARI Standard 410. Coil casing is galvanized steel. Coils had leak tested at 380 psig. The header had constructed of round steel pipe with BSPT external threaded. All headers had fitted with air venting and water drainable plug.

Drain Pan
Coil had provided with an insulated galvanized sloping drain pan to allow for proper condensate removal. The galvanized drain pan is light gray powder-painted for corrosion protection.

Filter
Filters are available with 2 inch aluminium washable filter.

Option
Trane Proportional Thermostat monitors the adjustable control valve by 0-10 vdc signal, 15°C - 30°C temperature setting and connectable with the external sensor

“TPICCV” Trane Pressure Independent Characterized Control Valves ZOption - 5 Years Warranty) combines a differential pressure regulator with a 2-way control valve which supplies a specific constant flow each degree of valve opening regardless of pressure variation in the system. Recommend to use with Trane Thermostat for precise temperature control.

Trane Control Valve controls the opening and closing of the pipe in the HVAC system for room temperature monitor. Recommend to use with Trane Thermostat for precise temperature control.

Trane AHU Starter Panel particularly controls the HVAC system. Integrated with motor and compressor protection system, reliable according to UL/IEC/NEMA standard and easy to install.

Aeriscoat R removes and protects all microorganisms, biofilm & corrosion in one step certified by CSIRO & approved by USEPA. the effectiveness lasts 5 years and reduces maintenance. Applicable to coil in heat exchanger & evaporator especially for use in humid climate, seaside, factories, hotels, etc.

Mixing Section
The mixing sections are constructed of heavy gauge galvanized steel with two opposed blade dampers. A drive shaft is provided on the damper that can be used with an actuator.

Other options are also available as listed:
• Painted Casing
• Drip Eliminator
• Electric Heater
• Elastometric Close Cell Insulation
• Backward Curved fan
• 2 inch Synthetic Filter
• 2 inch Throwaway Filter
• 15 or 21 inch Bag Filter
• 4 or 12 inch cartridge Filter