



**VOLTAS LIMITED**  
*ACnR Business Group*

# AIR HANDLING UNIT



A **TATA** Enterprise

## VOLTAS MODULAR AIR HANDLING UNITS

VOLTAS AHUs are backed with design, manufacturing and project execution capabilities of more than 50 Years. These are compact modular units, which enable customized design to meet your needs of varying air volumes and static pressures.

The construction provides a great amount of flexibility to meet any kind of space constraints using horizontal, vertical or two tier designs.

### Salient Features:

- ◇ Capable of delivering 3400 CMH up to 60000 CMH
- ◇ Can cater to Static pressures from 400 Pa to 1500 Pa
- ◇ Available in Double Skin and Single Skin options
- ◇ Range covers Horizontal, Vertical & Ceiling suspended type
- ◇ Suitable for installation in shopping arcades, offices, restaurants, hotels, schools, multiplexes, theatres, control rooms and a variety of other comfort and industrial applications
- ◇ Suitable for Cooling, Heating, Humidification and Clean room applications
- ◇ Software assisted selection ensures optimum design



Vertical AHU



Ceiling Suspended AHU

## CONSTRUCTION FEATURES

### Fan



- ◇ Energy efficient, AMCA certified fans, forward / backward curved. Plug fans are optional
- ◇ Electric motor of TEFC type with IP55 and Class F insulation
- ◇ Fan & Motor are mounted on a common extruded aluminum channel using anti vibration mountings for silent and vibration free operation
- ◇ Electrical interlock trips the fan immediately on opening of AHU door to ensure absolute safe operation

### Coil

- ◇ Optimum Chilled water, DX or Heating coil selection through software assisted program
- ◇ State of the art coil manufacturing facility ensures best quality
- ◇ Free flow Aluminum fin configuration provides excellent heat transfer capability with low airside pressure drop
- ◇ Copper tubes mechanically expanded on to the above fins ensure efficient heat transfer
- ◇ Flexibility in terms of number of rows and circuitry to meet supply air conditions
- ◇ Copper fins, anti-corrosive coating on fins and SS end sheets are available as options



### Condensate Drain Pan

- ◇ Drain pan made of corrosion resistant Stainless steel of grade SS 304 as a standard feature
- ◇ Wider collection area with dual slope ensures quick drainage of condensate, prevents microbial growth and hence maintains Indoor Air Quality
- ◇ Drain pan is insulated with closed cell elastomeric insulation to avoid surface condensation
- ◇ Ultra violet lamps are available as an option to kill fungus and molds, minimizing allergens and allergy causing irritants



## Framework & Panels

- ◇ Rigid framework made of hollow, anodized, and extruded aluminum profile held together by fiberglass corner joints
- ◇ The extruded aluminum profiles are inside covered, as a standard feature to provide smooth edges
- ◇ Double skin sandwiched panels with inner skin of 24G (0.6mm) galvanized sheet conforming to IS277. Out side panel of 24G (0.6mm) is made of pre-painted galvanized sheet
- ◇ Panels are pressure injected with PUF insulation using a CFC free R-141b blowing agent
- ◇ High and uniform PUF density of 40 Kg/ m3 provides better thermal insulation and sound attenuation
- ◇ Double skin panel of 25mm or 46 mm depending upon requirement can be provided
- ◇ Thermal break profiles are available as an option
- ◇ EPDM foam gaskets on aluminum frame provide superior sealing effect to avoid casing leakages
- ◇ A leak proof casing ensures Indoor Air Quality by preventing contaminated air to enter into the system
- ◇ Base frame is rugged in construction, made of galvanized steel with intermediate cross members and has lifting holes for ease of installation



## Filters



- ◇ A complete line of filters are available to meet all kinds of filtration needs
- ◇ Single or Multi stage filtration to suit different applications conforming to ASHRAE & EUROVENT (EU-4 of EU-779 specifications) standards
- ◇ Separate pre- filter, fine and HEPA filter sections provided
- ◇ The filters are arranged in a grid in heavy-duty specially designed galvanized sheet steel frame to avoid air bypass and are removable from front
- ◇ Pre filters are of flange type provided with handles for easy removal & are washable
- ◇ Fine & HEPA filter sections are provided with access door panel with positive locking. The door is provided with aluminum die cast powder coated heavy duty hinges & nylon handles

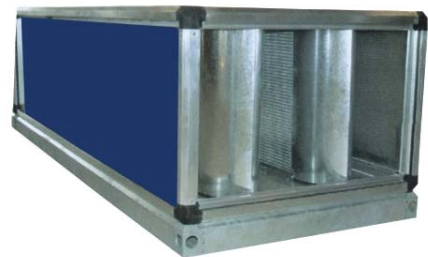
## Accessories: Standard

- ◇ Hinged service door: For ease of access to the fan and motor
- ◇ Marine lamp: For better visibility during servicing
- ◇ View port : Provided for inspection during AHU operation
- ◇ Door limit switches : Automatically trips the motor to ensure safety
- ◇ GI / powder coated, opposed blade volume control dampers for air balancing



## Accessories: Optional

- ◇ Mixing box section for efficient mixing of return and fresh air intake
- ◇ Steam and spray humidifier section integral with the unit
- ◇ Face and by pass dampers of opposed blade type
- ◇ Cross flow type and wheel type heat recovery sections can be provided for energy saving
- ◇ 2 pass GI / PVC or 4 pass GI / PVC Droplet eliminator sections can be provided to prevent spray water carryover into fan section
- ◇ Sound attenuation section with sound absorbing walls and sound traps in the fan and discharge areas to meet critical sound level requirements



OFFICE	TELEPHONE	FAX
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### NORTHERN REGION

DELHI (Branch)	(011)55505550 (011)55505570	(011)26950022 (011)26950081
Chandigarh	(0172)2663669	(0172)2604625
Gurgaon	(0124) 5060504	
Jaipur	(0141)5179983	(0141)5179983
Ludhiana	(0161)2500223	
LUCKNOW (Branch)	(0522)2238538 (0522)2237869	(0522)2238532
Dehradun	(0135)2750401	

### WESTERN REGION

AHMEDABAD (Branch)	(079)55301100 (079)25602835	(079)55301180 (079)55301190
Ankleshwar	(02646)238199	
Rajkot	(0281)2578124	
Silvassa	(0260)2640363	
Surat	(0261)2422761	(0261)2412824
Vadodra	(0265)2351706	(0261)2332098
MUMBAI (Branch)	(022)56656754-61 (022)56656783-85	(022)56656797 (022)56656768
Goa	(0832)2463664	
Indore	(0731)2498616	
Nagpur	(0712)5618846	
Nashik	(0253)2455169	
PUNE (Branch)	(020)56025600 (020)56046602	(020)56046600 (020)56046601
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### EASTERN REGION

JAMSHEDPUR (Branch)	(0657)2431062 (0657)2434322	(0657)2432201
Patna	(0612)2232717	
Raipur	(0771)5059303	
KOLKATA (Branch)	(033)22540234 (033)22540300	(033)22300108
Guwahati	(0361)2463073	

### SOUTHERN REGION

BANGALORE (Branch)	(080)22275150 (080)22273691	(080)22270172 (080)22998508
Mangalore	(0824)2453316	
CHENNAI (Branch)	(044)55510666 (044)55510669	(044)24342178
Coimbatore	(0422)2211188	(0422)2211188
Madurai	(0452)2535818	
HYDERABAD (Branch)	(040)55208100 (040)55208103	(040)55203882
Vijaywada	(0866)2435282	(0866)2431507
Visakhapatnam	(0891)2754051	(0891)2562096
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Backed by: Voltas countrywide after sales service.



## VOLTAS LIMITED

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