www.ekaggoair.com

EKAGGO AIRTECH
INNOVATING COMFORT

Elevating Comfort through **AirTech Innovation**

Gujarat, a leading industrial state in India, finds its hub in Ahmedabad, once known as the Manchester of India, leading Gujarat's industrial revolution.

EKAGGO AIRTECH operates own facility in Kubadthal, Dist. Daskroi, Ahmedabad. Specializing in HVAC components and systems, our skilled engineers ensure cutting-edge air conditioning and circulating equipment. With a strong focus on innovation, our R&D division maintains international standards in air handling technologies.

Core Strengths

- Leading-edge Technology
- Uncompromising Quality
- On-Time Installation
- Client Delight

With a flawless record, we provide high-standard air handling unit design, manufacturing, and installation. Operating for 7 successful years, EKAGGO AIRTECH comprises 50 employees and 20 contract staff, forming a ISO certified organization.

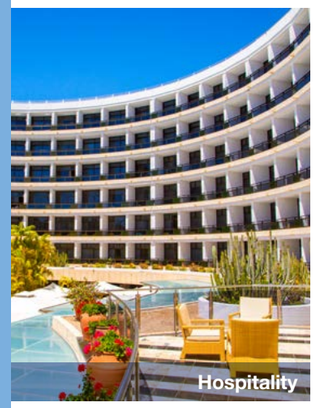
Our state-of-the-art 24,000 sq. ft. facility in Kubadthal, Ahmedabad, features a well-designed shop floor that manufactures our complete product line:

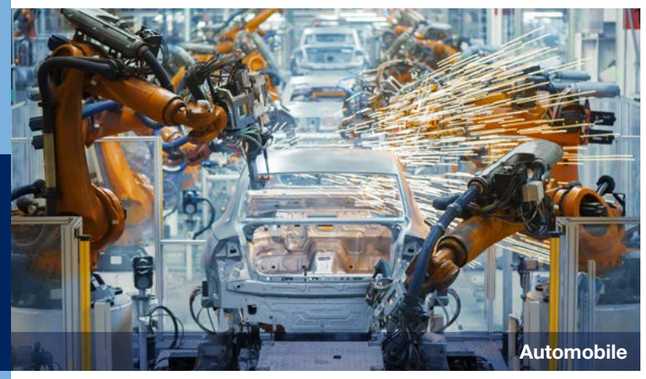
- Air Handling Unit
- Ventilation Air Handling Unit
- Treated Fresh Air Handling Unit
- Exhaust Air Handling Unit
- Air Washer Unit
- Ductable Unit

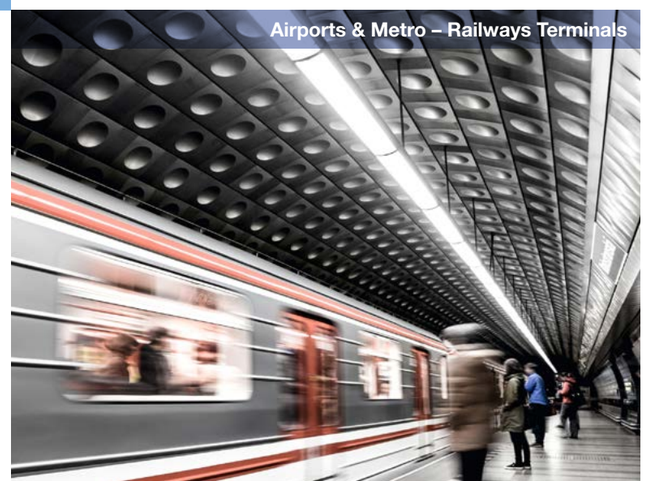
Vision

Quality Leading to Growth

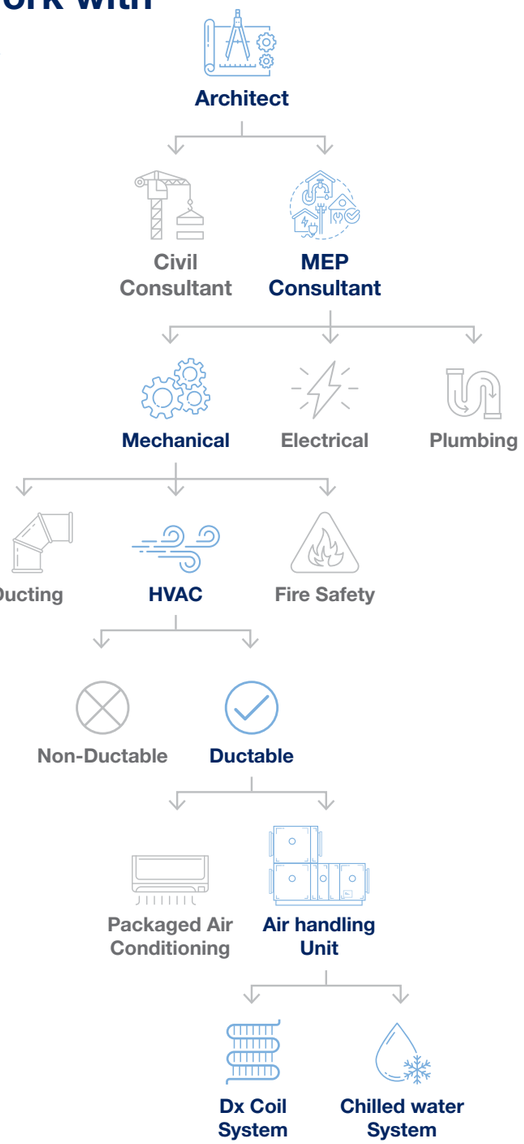
Our vision integrates top-notch HVAC&R excellence with expansive progress. We aim to establish industry benchmarks, driven by innovation, dependability, and worldwide influence, solidifying our stature as the preferred air handling solutions provider.







Who do we work with



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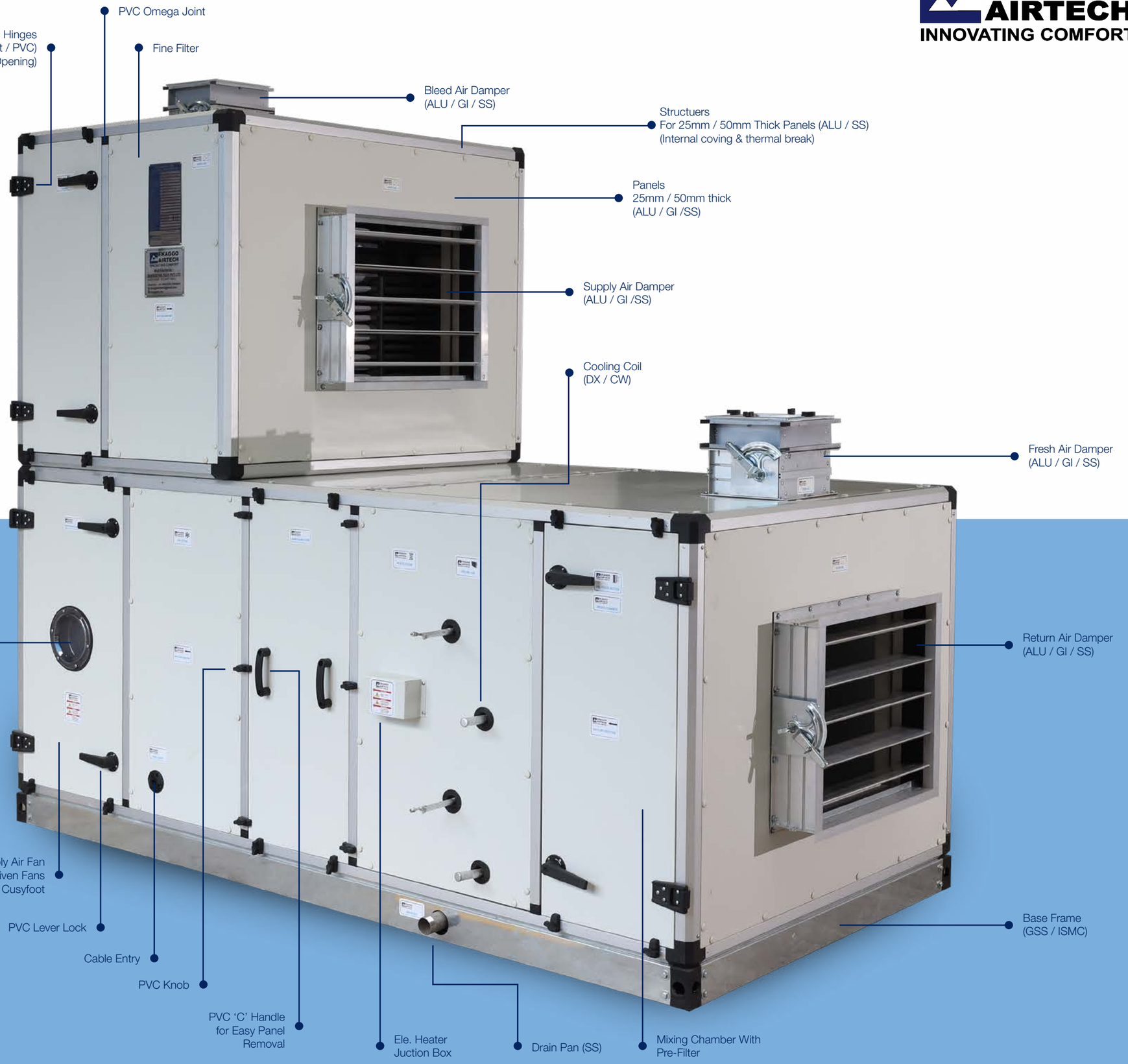
Enhancing Comfort

Air Conditioning Tailored for Individuals

“Air Management” encompasses the manipulation of indoor air qualities to sustain temperature, humidity, cleanliness, and air movement at levels well-suited for human health, comfort, and the efficient execution of industrial procedures.



Smart **AHU**

Presenting our market-leading AHU with integrated control – the latest all-in-one solution in our lineup. Choose from 36 models (1000 to 1,00,000 CFM), customizable for IAQ, humidity, DCV, and Automation. Real-time monitoring ensures efficiency while delivering 25% energy savings. Elevate your air management with unmatched innovation.

Benefits

- 25% energy and cost savings
- 24/7 operations oversight
- Real-time monitoring
- Personalized I/O with analytics
- Compact, tailored design
- Efficient fans, motors & low dB
- VRV/VRF compatible
- CFC-free panels
- Eco-friendly with zero ODP

Features

- Customizable for various air needs
- Ideal for pharmaceuticals, commercial, residential, and offices
- Wireless compatibility for smart control
- Integrates with BMS and fire alarms
- Built-in display panel for easy access

Features

- Personalized fresh air solutions with treatment.
- Option for heat recovery and intelligent automation.
- Choice of aluminum or stainless steel casing.
- Compatible with Building Management Systems (BMS)
- Optional PHI-CELL®/REME-HALO® for microbe neutralization.

Fresh Air Handling Unit **(FAHU/TFA)**

Vital for occupant well-being, our Fresh Air Handling Units (FAHUs) introduce external air, treating it for cleanliness and comfort. They provide cooling, heating, humidification, dehumidification, advanced filters, sound control, and more, ensuring optimal indoor conditions.

Benefits

- Oxygen infusion combats SBS/BRI.
- Efficiently dilutes airborne infections.
- Reduces particulates and harmful gases.
- Utilizes demand-controlled ventilation.

Benefits

- Energy efficient customized solutions
- Hot water coils / Heaters
- EC/IE-3/ IE-4 motors
- Units compatible with VRF/VRV ODUs

Cleanroom **AHU**

AHUs are crucial for delivering contaminant-free air to Pharmaceuticals. Hygiene is paramount, especially in cleanrooms, healthcare, and microelectronics. Our tailored AHU range (1000-100000 CFM) aligns with GMP standards, ensuring quality compliance for critical applications, including cleanrooms, healthcare, and microelectronics.

Features

- Thermal break profile with inner coving
- Sturdy framework, 45/50 mm thick panels
- Airtight door locks
- Highly efficient low-leakage dampers
- Custom units with:
  - » Heat recovery (HRW/Heat pipe/CFHE)
  - » Hygienic series (REMI/PHI/UV light/HEPA)
  - » Extended volume and static pressure capabilities

Ceiling Suspended **AHU**

Ekaggo Airtech offers ceiling-suspended AHUs ranging from 2550 CMH to 15300 CMH. Their innovative Low Height & Compact Design ensures seamless installation within false ceiling spaces. Enhanced heat transfer is achieved through optimal coil and fin combinations.

Features

- Maximize space efficiency.
- Smooth fit in false ceilings.
- Enhance heat transfer with improved coils and fins.

Air Washer

Utilizing evaporation's natural cooling, an Air Washer ensures healthy air circulation by bringing in fresh outside air while expelling indoor staleness. Our offerings include personalized single or double-skin builds with compact, low-height profiles and multi-centrifugal fan configurations. The range spans 1000-3,00,000 CFM, featuring single or double-stage evaporative cooling options.

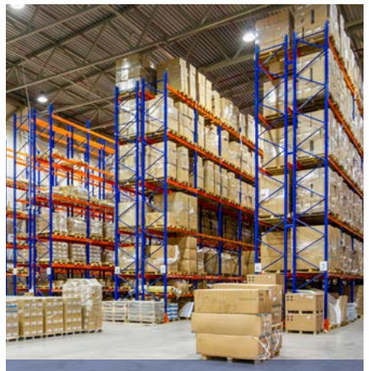
Features

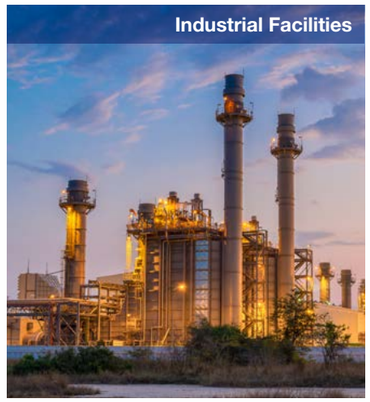
- Specifically engineered tray for even water distribution
- Promotes health with 100% fresh air operation
- Utilizes highly efficient double-stage IDEC air washers
- Facilitates increased air changes per hour
- Significantly lowers power usage compared to central AC systems

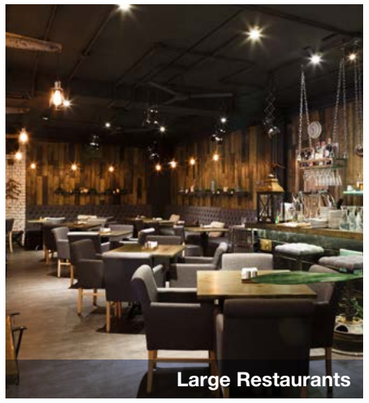
Benefits

- Ensures dust-free surroundings
- Delivers odorless air conditioning
- Operates with minimal running costs
- Optionally incorporates smart features

Applications







Basement Ventilation Unit

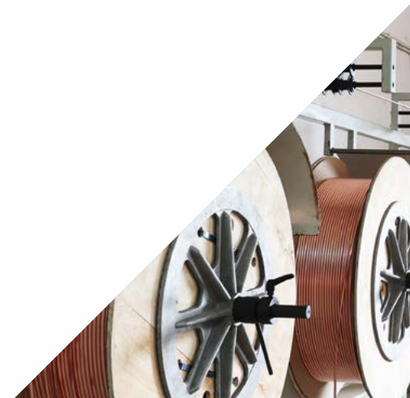
Utilizing Active Carbon Filters, Nox Filters, and Higher MERV Filters, originate BAC Unit whose main purpose is to bag the contaminant (CO, HC, and NOX) in the basement because of the discharge from the vehicle moment. The capacity & running time of the BAC unit depend on the quantum of Vehicles & the volume of the basement.
The discharged Air from the BAC Unit resulted in a weighty reduction of the Quantity of vehicle emission gases such as CO, HC & NOX from the Basement Contaminant Air.
The Air in BACU will be filtered in 3 Phases, Phase 1 - Filtration of Suspended particles in the air is done by a 10-micron & 2.5-micron filter. Phase 2 - Filtration for VOC by passing air through an activated carbon filter. Phase 3 - Filtration for Oxides of Nitrogen by passing air through the NOX filter.

Features

- Available in Wet and Dry Scrubbing Options.
- Available in 2000, 4000, and 6000 CFM As per Basement Requirements.
- BACU is a Plug & play machine which will operate without any trained workforce.
- Machine can be floor or ceiling mounted as per the requirement of the Project.AHRI-410 Certification
- BACU adopts the most cost effective method to treat air.
- BACU is designed to be pocket friendly, hence making its most pragmatic solution for car parking basements.

Benefits

- Specifically Design for scaling down Vehicle Emissions in the Mega basement.
- Enhance Commercial Building Basement Indoor Air Quality.Operates with minimal running costs
- Reducing Carbon Footprints
- It reduces the risk to human health caused to air pollution.
- BACU uses no chemicals and heating elements to treat air hence has a less maintenance cost.



Fluid Bed Dryer (FBD) & Autocoted Air Handling Unit

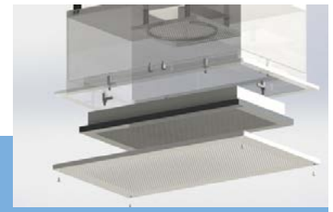
Operation

The FLUID BED DRYER introduces heated air beneath material-filled containers, propelled by induced draught via blowers and fresh air intake.

Heated by electric, steam, or thermic fluid heaters, the incoming air creates controlled turbulence, known as fluidisation, creating near-perfect drying conditions. Fluidisation ensures vigorous agitation, as each particle is enveloped by hot air, guaranteeing highly efficient and uniform heat transfer for swift drying without significant heat loss. Filter bags act as sentinels, preventing particle escape. In essence, the FLUID BED DRYER is an ingeniously efficient system, harnessing fluidisation's power for effective and contained drying.

Suitability

The traditional tray drying method proves inadequate and cumbersome, consuming space and time while yielding uneven results. Conversely, Fluid Bed Dryers excel in efficiency, demanding less space and labor, boasting swift operation, and guaranteeing uniform drying. Temperature consistency permeates the product, enabling rapid heat transfer, elevating production rates due to reduced drying times. These dryers delicately preserve product integrity, catering to heat-sensitive items through low-temperature, short-duration contact with drying air. Continuous product movement curtails issues like lump formation and case hardening. Ideally suited for pharmaceuticals, fine chemicals, dyes, and food processing, Fluid Bed Dryers excel in handling granular, crystalline, and coarse materials. It's vital to note their unsuitability for liquids or pasty substances. In essence, Fluid Bed Dryers epitomize efficient, uniform, and delicate drying in a range of industries.



HEPA Filter Housing Box

- Standard and Custom dimensions
- Filtration efficiency 99.99% to remove particles
- greater than 0.3 microns
- Hermetically sealed
- Room side replaceable filter access
- Welded construction for strength and leak-free operation
- Easy access for filter testing
- Vertical or horizontal flow applications
- Adjustable butterfly damper

Riser

- MOC: 18 / 20 Swg. CRCA
  - » Galvanize Powder Coated
  - » Stainless Steel 304
- Construction for Suitable of Wall Mounted Top / Side Connection With Arrangement of Manually Operated Volume Control Damper , Aluminum`Powder Coated / SS 304 Capsule Perforated Grill & 20u HDPE Washable Cassette Type Pre Filter.

Damper

Dampers, vital for flow regulation, adjust air passage via horizontally pinned blade rotation.

Essential in heat recovery and air mixing units, they finely control flow rates with economic efficiency. Crafted from standard aluminum, opposing blades ensure precise airflow adjustment with minimal resistance. Hidden gear bearings protect against dust, guaranteeing durability. Hermetic seals enhance sealing, while servo motors and automated systems control damper position. Impermeable 40 mm unperforated flanges secure attachment. Critical for system protection, a manometer senses pressure, preventing damage during manual damper adjustment. Dampers operate up to 2000 Pa differential pressure, within -20 °C to 120 °C, at a max 15 m/s airflow.

Damper Motors (Normal & Spring Return)

a) Normal: Air flow is used to control the control dampers in heating-cooling and ventilation systems.

b) Spring return: Air flow that has a safety function in heating-cooling and ventilation systems is used to control the control dampers (e.g. freeze protection, smoke control, hygiene).

Ekaggo Airtech Private Limited

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