



INTERNATIONAL



# Air-Handling Units

UKS-Series

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CHILLED WATER DX-PACKAGE TYPE DX-SPLIT TYPE FAN COIL UNITS

# Key Features



## ENERGY-EFFICIENT OPERATION

- Plug (EC) Fans
- Direct Driven Operation
- NIDEC/DANFOSS VFDs
- Reduced Maintenance and Stable Performance
- Lower System Pressure Losses



## DURABLE CONSTRUCTION

- Imported Aluminium Profiles with Thermal Break
- Stainless Steel Drain Pans as Standard
- Stainless Steel / Powder Coated Sandwich Panels
- Vibration isolators for smooth operation
- Powder-Coated Cooling Coils available as an Option



## MAINTENANCE FRIENDLY DESIGN

- Hinged Access Doors for easy maintenance
- Removable Droplet-Eliminators for easy Cleaning
- Access Windows at Filter and Fan section
- Easily removable PU panels for cleaning and maintenance



## EUROVENT CERTIFIED FILTRATION

- Filtration Class available from G4-F9 and above
- Configuration options for Bag and rigid body filters
- Pressure sensors in Filter sections for easy maintenance
- Easy access to filters with sliding mechanism for easy maintenance

# Applications & Customization

Versatile Solutions for Diverse Needs

## DIVERSE APPLICATIONS

- ▼ Our Air Handling Units are designed for a wide range of applications. They serve industrial buildings, commercial buildings, hospitals, and cleanrooms, ensuring optimal air quality and comfort. Each unit is engineered to meet specific operational demands, providing reliable performance in harsh ambient conditions.

## TAILORED CUSTOMIZATION

- ▼ Customization options include airflow capacity, **static pressure**, casing materials, and filtration grades. Clients can select from various fan types, coil configurations, and filtration systems tailored for their unique applications. Our units are adaptable for indoor or outdoor installation, ensuring comprehensive solutions meet specialized requirements across multiple sectors.

## AUTOMIZATION CAPABILITIES

- ▼ Unitech Air Handling Units can be supplied with advanced automation and control capabilities for reliable operation in commercial and industrial environments. The AHU control system can be integrated with Building Management Systems (BMS) for centralized monitoring, scheduling, alarm indication, and performance control. For **climate mitigation** and equipment protection, the system can be configured to automatically deactivate the AHU and close/control dampers during severe weather conditions such as storms, and automatically reactivate the AHU once safe operating conditions are restored. In industrial applications, AHU automation can also be designed to maintain positive pressure inside halls, clean areas, production rooms, and process spaces by controlling fan speed, fresh air intake, return air, exhaust air, and damper position according to pressure sensors and site requirements. This helps improve indoor air control, reduce contamination risk, protect equipment, and maintain stable environmental conditions.

# Technical Range & Configuration Matrix

Units are selected and manufactured according to project airflow, cooling capacity, static pressure, filtration level, site conditions, and consultant specifications

Parameter	Chilled Water AHU	DX Package AHU	Fan Coil Unit (ductless)
Airflow Range	4,000-60,000 m <sup>3</sup> /h	4,000-60,000 m <sup>3</sup> /h	4,000-30,000 m <sup>3</sup> /h
Cooling Capacity	8TR-100TR	8TR-100TR	8TR-50TR
ESP	300Pa-500Pa	300Pa-500Pa	50Pa-100Pa
Installation	Indoor/Outdoor	Indoor/Outdoor	Indoor

Technical parameters are indicative and subject to project requirements. Final unit selection is based on airflow, cooling load, external static pressure, entering air conditions, coil duty, filtration requirements, site dimensions, and control philosophy.



# CHILLED WATER AIR-HANDLING UNITS

ISO 9001  
ISO 14001  
ISO 45001

Specification	Available Configuration
Airflow Range	4,000-60,000 m <sup>3</sup> /h
Cooling Medium	Chilled Water (7°C-12°C)
Coil Type	Copper Tube / Aluminium Fins (11 FPI) (available with Hydrophobic Powder Coating as an option)
Fan Type	Backward Curved Plug Fan (EC) with Nidec/Danfoss VFD
Filtration	G4/M5/F7/F9 as per customer's requirements
Construction	Double Skin Sandwich Panel (30mm) (Stainless Steel/Powder coated)
Insulation	Thermal break (Aluminium Profiles) PU injection (Body panels)
Controls	Complete with Control Panel / VFD / BMS-Compatible automation Temperature controller with Thermostat and Chilled Water Control Valve
Drain Pans	Stainless Steel as standard for all sections for ease of maintenance
Pressure Sensors	Standard across all Models for Filter Choking Mitigation Alarm
Droplet Eliminators	Stainless steel/Aluminium Droplet eliminators come as standard with all Units
Base Frame	Epoxy Coated, U-Channel base Frame, Standard for all Units

# DX PACKAGE/SPLIT AIR-HANDLING UNITS

ISO 9001  
ISO 14001  
ISO 45001

Specification	Available Configuration
Airflow Range	4,000-60,000 m <sup>3</sup> /h
Cooling Medium	Refrigerant (407-c) (134-a) (customised solutions available as per client's environment Policies)
Coil Type	Copper Tube / Aluminium Fins (11 FPI) (available with Hydrophobic Powder Coating as an option)
Fan Type	Backward Curved Plug Fan (EC) with Nidec/Danfoss VFD
Filtration	G4/M5/F7/F9 as per customer's requirements
Construction	Double Skin Sandwich Panel (30mm) (Stainless Steel/Powder coated)
Insulation	Thermal break (Aluminium Profiles) PU injection (Body panels)
Controls	Complete with Control Panel / VFD / BMS-Compatible automation/Temperature controller with Thermostat.
Drain Pans	Stainless Steel as standard for all sections for ease of maintenance
Pressure Sensors	Standard across all Models for Filter Choking Mitigation Alarm
Droplet Eliminators	Stainless steel/Aluminium Droplet eliminators come as standard with all Units
Base Frame	Epoxy Coated, U-Channel base Frame, Standard for all Units

# DUCT-LESS FAN-COIL UNITS

ISO 9001  
ISO 14001  
ISO 45001

Specification	Available Configuration
Airflow Range	4,000-30,000 m <sup>3</sup> /h
Cooling/heating Medium	Chilled Water (7°C-12°C) / Steam / Hot Water
Coil Type	Copper Tube / Aluminium Fins (11 FPI) (available with Hydrophobic Powder Coating as an option)
Fan Type	AXIAL FANS
Filtration	G3/G4
Construction	Single Skin insulated Panel (Stainless Steel/Powder coated)
Insulation	Internal Adhesive type Insulation
Controls	Temperature controller with Thermostat and Chilled Water Control Valve
Drain Pans	Stainless Steel as standard for all sections for ease of maintenance
Base Frame	Epoxy Coated, U-Channel base Frame, Standard for all Units

# Project Based AHU and FCU Selection



Required Input	Details
Application	Office / hospital / factory / clean area / Industrial
Required Airflow	CFM or m <sup>3</sup> /h
Cooling Capacity	TR or kW
Entering Air Conditions	DB/WB temperature and RH
Leaving Air Conditions	Required supply air temperature
Type Of System	Cooling (DX or Chilled Water) / Heating (Steam or Hot water)
Filter Requirements	G4 / M5 / F7 / F9 / HEPA



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