

# Dezenno.MAX

## Air Handling Unit

### Catalogue/Technical Manual



We unleash state-of-the-art values  
and thriving trends  
in the field of temperature-humidity control.



# CONTENTS

|  |    |
|--|----|
| 1. Overview  | 1  |
| 2. Nomenclature  | 2  |
| 3. Dezenno.MAX AHU design features                         | 3  |
| 3.1 Dezenno.MAX unit size specification guidelines         | 3  |
| 3.2 Dezenno.MAX AHU standard features                      | 4  |
| 3.3 Characteristics of the Dezenno.MAX casing construction | 4  |
| 3.4 Thermal-break profile                                  | 5  |
| 3.5 Filter section   | 6  |
| 3.6 Quick air filter selection guide                       | 6  |
| 3.7 Mixing box / damper                                    | 8  |
| 3.8 Coil selection   | 8  |
| 3.9 Drain pan  | 10 |
| 3.10 Face and bypass damper                                | 11 |
| 3.11 Electric heater                                       | 11 |
| 3.12 Steam humidifier                                      | 11 |
| 3.13 Heater recovery wheel                                 | 12 |
| 3.14 Flug fan  | 13 |
| 3.15 Motor   | 15 |
| 3.16 Spring isolator                                       | 15 |
| 3.17 VFD/Frequency Inverter                                | 16 |
| 4. Standard units quick selection table                    | 16 |
| 5. Outline and dimension                                   | 18 |
| 5.1 Horizontal typical configuration                       | 18 |
| 5.2 Vertical typical configuration                         | 25 |
| 6. Filter  | 27 |
| 6.1 Standard filter specification                          | 27 |
| 6.2 Hepa filter specification                              | 28 |

**Dezenno.MAX** air handling unit (AHU) is a product of DeAir Joint Stock Company

**Intended use**

The **Dezenno.MAX** AHU caters to commercial and residential thermal comfort via filtrating exceeded moist. Please read thoroughly structure of components and features before using this unit. Notice that improper use can lead to damage for which the manufacturer is not responsible.

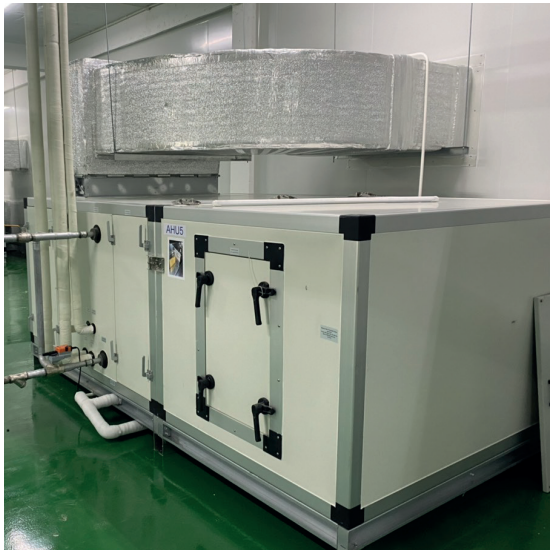
**© Copyright**

*No part of this catalogue may be reproduced in any forms of information storage or retrieval system without prior written authorisation from DeAir JSC.*

# 1. Overview

## to Dezenno.MAX AHU





The **Dezenno.MAX Air Handling Unit** is specifically designed to fulfil the indoor air quality requirements. Its airflow ranges from 1,000 to 51,000 CMH and up to a total static pressure of 2,000 Pa. Owing to the special design, the air flow can reach 100,000 CMH. Besides, **Dezenno.MAX** units are also equipped with the AMCA-certified fans for superior performance and UL certified filters attaining higher dust holding capacity with lower pressure drop.

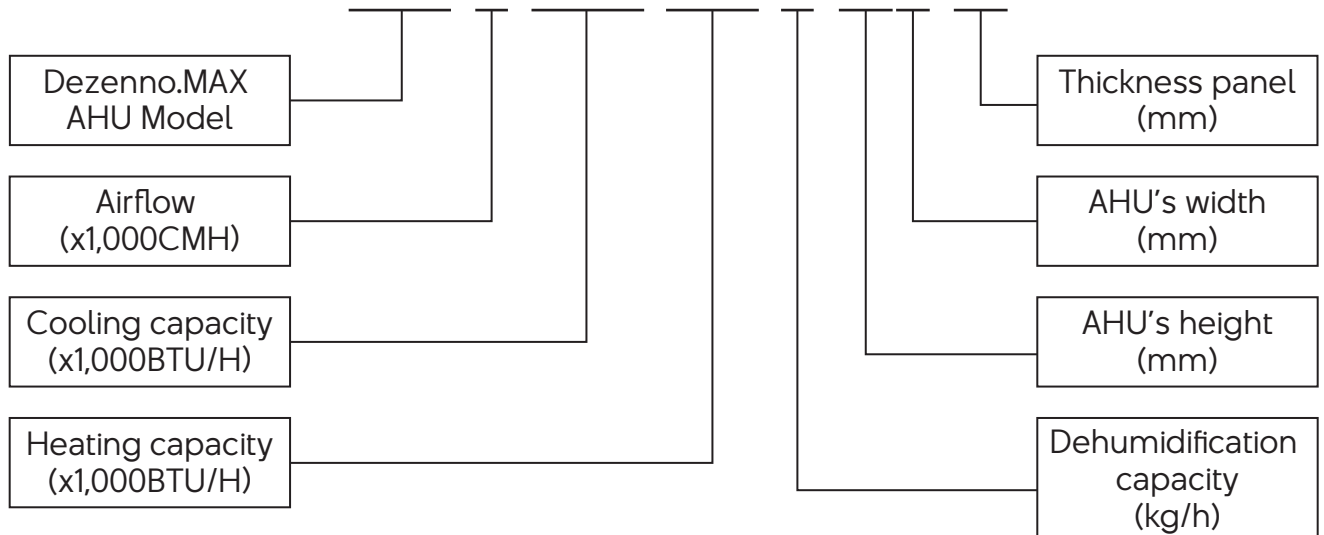
**Dezenno.MAX** AHUs has formulate solid frame based on high- strength extruded Aluminium. Additionally, its thermal-barrier feature uses three leg-fibre plastic corner pieces of 25 or 50mm Polyurethane insulation panel and all frames are the thermal-break profile. The external clip method holding the double skin PU insulation panel is accessible for maintenance while being air tight.

**Dezenno.MAX** AHUs can provide excellent thermal efficiencies and to be airtight. Besides, **Dezenno.MAX** units produced is with flexibility features to meet the indoor air quality, operating efficiency, sound levels and installation requirements for today's extensively commercial and customisable markets. A comfortable environment can enhance human's life quality.



## 2. Nonmenclature

### MAX-4-120C-60H-5-0811-50



## 3. Dezenno.MAX AHU design features



### 3.1 Dezenno unit size specifications guidelines

#### Control dampers, duct connections and mixing units

|   |                    |
|---|--------------------|
| Intake velocity   | $\leq 8\text{m/s}$ |
| Intake angle (damper to functional element, e.g. filter)  | $\geq 35^\circ$    |
| Outlet angle (functional element, e.g. filter, to damper) | $\geq 25^\circ$    |

#### Outdoor units

|                    | Intake velocity      |                      |
|--------------------|----------------------|----------------------|
|                    | Intake side          | Discharge side       |
| Protection grille  | $\leq 2.5\text{m/s}$ | $\leq 4.0\text{m/s}$ |
| Droplet eliminator | $\leq 3.5\text{m/s}$ | $\leq 5.0\text{m/s}$ |
| Hoods              | $\leq 4.5\text{m/s}$ | $\leq 6.0\text{m/s}$ |

#### Filters

|   |  |
|---|--|
| Filter surface                          | min $10\text{ m}^2$ per $1\text{ m}^2$ cross section |
| Intake velocity                         | $\leq 3.2\text{m/s}$                                 |
| Final pressure drop                     | F5 – F7 $\Rightarrow \Delta p_k = 200\text{Pa}$      |
| Final pressure drop                     | F8 – F9 $\Rightarrow \Delta p_k = 250\text{Pa}$      |
| Pressure drop for dimensioning purposes | $\Delta p = (\Delta p_z + \Delta p_k)/2$             |

#### Air heaters and coolers

|                                   | Heater                       | Cooler                       |
|-----------------------------------|------------------------------|------------------------------|
| Intake velocity to finned surface | $\leq 4\text{m/s}$           | $\leq 3.5\text{m/s}$         |
| Water side pressure drop          | $\Delta p \leq 20\text{kPa}$ | $\Delta p \leq 50\text{kPa}$ |
| Fin pitch                         | $\geq 2.0\text{mm}$          | $\geq 2.0\text{mm}$          |

## 3.2 Dezenno.MAX AHU standard features

- › Variable coil casing and drain pan material.
- › Variable dimensioning features for flexible cabinet sizing.
- › Variable frequency drive/ Frequency inverter and thermistor.
- › Kruger/Dezenno.MAX fan/Plenum fan.
- › Multiple section depth.
- › Mixing boxes.
- › Low leakage damper.
- › Face and by-pass dampers.
- › Double sloped drain pan.
- › Different filter grade.
- › Electric heater.
- › Dehumidifier inside.
- › Electrode humidifier inside.
- › Energy recovery section.
- › Accessible and maintenance.

## 3.3 Characteristics of the Dezenno.MAX casing construction

The **Dezenno.MAX** Air Handling Units are designed in accordance with BS EN 1886:2007. They enhance product quality by outperforming the far-reach details of quality requirements in all versions. Thermal transmittance is a measure for an AHU's heat loss per square meter and kelvin. Its coefficients are determined for the overall casing construction. Specifically, it is made of high-strength extruded aluminum pentapost and internal post with double modular skin insulation material. The patented frame channel design allows three identical pieces to be bolted together to form a composite corner piece. Both of this features form the rigid frame of the Dezenno.MAX unit. The unit wall is made by double skin PU insulation panel with 0.48mm aluminised steel as internal and external skin. Besides, there are optional thicknesses: 0.6mm, 0.8mm, 1.0mm and 1.2mm of skin materials. The PU foam insulation thickness can be 25mm, 30mm, 45mm or 50mm with density 40kg/m<sup>3</sup>, which provides an overall thermal conductivity,  $K = 0.017 \text{ W/moK}$ .

This cabinet construction significantly reduces the sound level from the fan of unit. The cabinet construction is maintenance-friendly through easy access to all components. The panels may be removed from all units' sections without compromising the unit rigidity, which is ensured by the aluminum frame. Thus, the Dezenno.MAX unit is designed to minimise both energy consumption and condensation due to high thermal insulation and airtight casing to EN 1886.

Access door or service panel can be supplied with a hinged access door with latch or with removable panel with handles and panel block. Gasket around the full perimeter of the access doors frame is utilised to prevent air leakage. The door swings outward for unit sections under negative pressure. The module-to-module assembly is accomplished with an overlapping splice joint which sealed with gasket on both mating modules to minimise on-site labour along with meeting indoor air quality standards. The unit is mounted on galvanised steel-based frame for easy handling and positioning.

### 3.4 Thermal-break profile

Thermal break aluminum profile can enhance performance of unit. It comprises of two parts of extruded aluminum joined together with thermal barrier made out of nylon. The nylon is sandwiching the inner and outer layers of extruded aluminum. This design can render the formation of an effectively isolated thermal layer between the inner and outer side of the profiles so that the release of thermal energy via unit can be ultimately minimised.

The thermal bridging factor of the assembled Dezenno.MAX AHU is designed to meet BS EN 1886. The thermal break profile is available for all cabinet. The benefits of thermal break property presented below increase the life of unit and save their long-term operational costs. In addition, it is also ideal design for high-end performance.

#### Benefits of thermal-break profile

- › Improving sound insulation.
- › Reducing attempt to achieve energy conservation.
- › Improving efficiency-system energy by lowering heat loss.
- › Mitigating potential hazardous conditions via minimised-exterior unit condensation.
- › Eliminating probability of moisture migration into panel interior, which can degrade the insulation.



### 3.5 Filter section

The filtration plays a pivotal role in maintaining good indoor air quality. There are a wide range of filter options provided by prominent filter manufacturers. Dezenno.MAX AHU has designed to handle primary, secondary & HEPA filtration. Besides, activated carbon filters are available with designed to improve indoor air quality through the effective removal of indoor and outdoor gaseous contaminants which are typically founded in urban environment like VOCs, SOx, NOx, and Ozone.

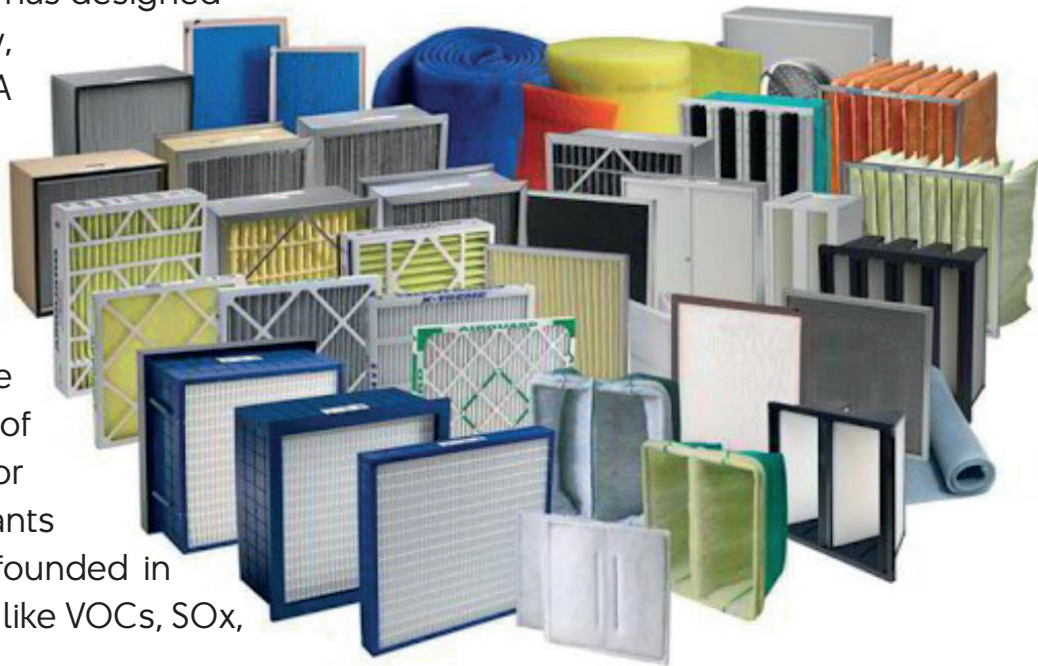


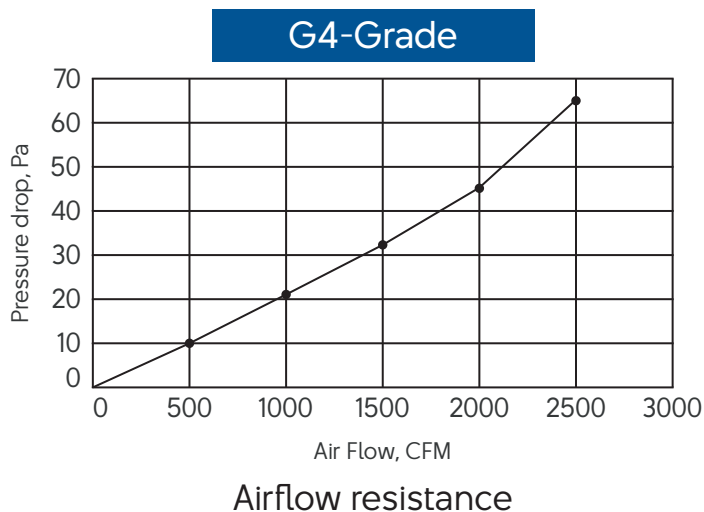
Figure 1: Filter

### 3.6 Quick air filter selection guide

Classification as per EN799

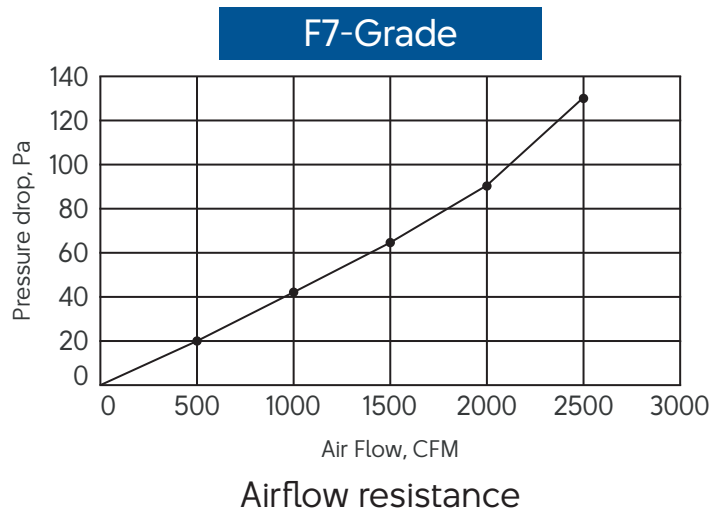
| EN 779 Class            | G2       | G3              | G4              |
|-------------------------|----------|-----------------|-----------------|
| Average Arrestance, Am% | 65<Am<80 | 80<Am<90        | 90<Am           |
| Recommended Filter      | -        | AAF AmerTex R29 | AAF AmerTex R50 |

Table 1: Filter Arrestance for Coarse filters in Class G2-G4



| EN 779 Class            | F5         | F6          | F7                        | F8                          | F9                         |
|-------------------------|------------|-------------|---------------------------|-----------------------------|----------------------------|
| Average Efficiency, Em% | 40<Em<60   | 60<Em<80    | 80<Em<90                  | 90<Em<95                    | 95<Em                      |
| Recommended Filter      | AmAir 500E | DriPak*2000 | DriPak*2000<br>Varicel II | DriPak' 2000•<br>Varicel II | DriPak*2000<br>Varicel VXL |

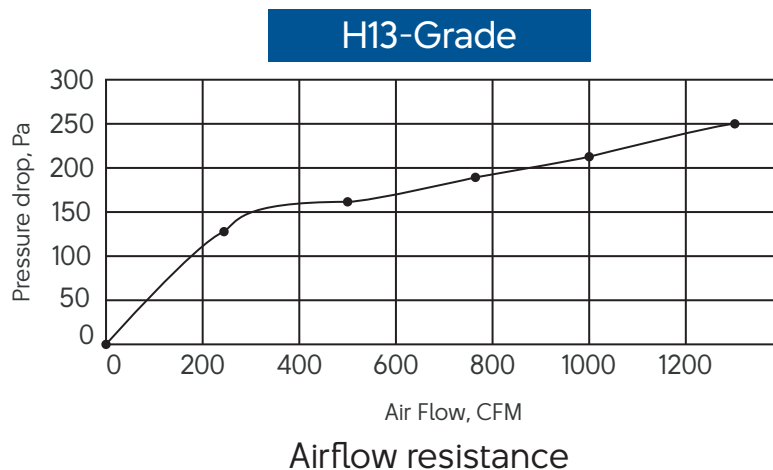
Table 2: Filter Arrestance for fine filters in Class F5-F9



### Classification as per EN 1822

| EN 1822 Class           | H10      | H11 | H12        | H13        | H14        |
|-------------------------|----------|-----|------------|------------|------------|
| Efficiency (% at 0.3@m) | >95      | >98 | >99.99     | >99.997    | >99.999    |
| Efficiency (% at MPPS)  | >85      | >95 | >99.5      | >99.95     | >99.995    |
| Recommended Filter      | BioCel*1 | -   | AstroCel 1 | AstroCel 1 | AstroCel 1 |

Table 3: Filter Efficiency for HEPA Filters Class H10-H14



In addition, filter section can be enhanced by an optional item - filter pressure gauge to ensure regular filter servicing and prevent clogging. Normally, the filter life span can be indicated by pressure gauge value for dirty filter should not exceed 300 Pa.

### 3.7 Mixing box / damper

A mixing box is the section of an air handling unit mixes the return air flow with the outside air flow. It consists of three sets of dampers whose operation is coordinated to control the fraction of the outside air in the supply air while maintaining the supply airflow rate approximately constant. The damper blades are fabricated of aluminum and continuous Thermoplastic Elastomer (TPE) seals are inserted onto every damper blade. The rotated rod of handle is made of brass and handle is fabricated of aluminum casting. There are a few type of arrangement: top, rear and combination of top and rear. The mixing box can make use of free cooling by opening outside air dampers when the ambient air will help to condition the supply air stream. In addition, dampers may be individually sized to provide better mixing effect.



Figure 2: Mixing box

### 3.8 Coil section

Coil is installed such that unit casing enclose headers and return bends. It is designed based on the maximum utilisation of available cross section area to achieve the most efficient heat transfer. Coil connections should be sealed with grommets on interior and exterior and gasket sleeve between outer wall and

liner where each pipe extends through the unit casing to minimise air leakage and condensation inside panel assembly. Coils shall be removable through side and/ or top panels of unit without the need to remove and disassemble the entire section from the unit.

Coil constructed with aluminum corrugated fins and seamless copper tubes. Copper fins and hydrophilic fins are anti-corrosive materials which are optional. The fins are designed purposely for better heat transfer efficiency and moisture carry-over limit performance. Capacity, water pressure drop and selection procedure is designed in accordance with ARI Standard 410.

Cooling coils can be used when the face velocity does not exceed 2.5 m/s. For higher face velocity, a moisture eliminator is required to prevent condensed water carry over. For stacked coil in the coil section, drip pan is installed at back between coils to drain condensate to the main drain pans without flooding the lower coil section. The optional intermediate drain pan can be supplied for those needs to access for cleaning between the coils. **Dezenno.MAX** unit can handle both chilled water and direct expansion system.



*Figure 3: Cooling coil*

The **Dezenno.MAX** units can be used for both chilled water system and direct expansion system application. Coils are designed based on application to fully meet the requirements.

Standard Aluminum fins are maximum 12 FPI (fin per inch). Copper fins are also available as option. Fin thickness is 0.115mm and fin hardness is HO and H22 for standard aluminum fin and others fins respectively. Fins can be coated by Hydrophilic fin material as a corrosion protective layer.

Standard coil frame is in 1.5mm thick galvanised steel (GI) while stainless steel (SSTL) is available as an option when copper fin is used to avoid galvanisation effect. Coil casing is designed to have drain holes at the bottom channels to ensure condensate drainage.

For water system, the coil is available in 1, 2, 3, 4, 5, 6, 8, 10 and 12 rows. Header and collar are constructed of steel with copper material as the option. Its size is either 42 or 76 mm. Piping connection is only one sided, either "left" or "right", viewing from return air side. Copper header connection will be brazed joint type and optional for Male Pitch Threaded.

For a direct expansion system, the coil is available in 2, 3, 4, 5, 6 and 8 rows. Header is only available in copper materials. Pipe connection is by brazing joint.

The standard working pressure of the coil is 250 psig. During fabrication, coil leak test are perform at pressure of 350 psig.

### 3.9 Drain pan

The deep and sloped drain pan is designed to discharge the condensate water quickly. It is fabricated by galvanised steel sheet protected with powder coating paint or stainless steel as option. Beneath the drain pan, it is covered with 10mm PE insulation to prevent any occurrence of condensation. For stacked coil, additional drip pan or intermediate drain pan fabricated from same material as main drain pan will be installed at backbetween two coils.



Figure 4: Drain pan

### 3.10 Face and bypass damper

It consists of opposed blades varying air volume through the coil and by pass to attain the desired temperature. It provides very low leakage. In the face and bypass sections. Face and bypass damper can be provided for temperature modulation by bypassing air around the coil. The damper blades are fabricated of aluminum and continuous Thermoplastic Elastomer (TPE) seals are inserted onto every damper blade. The rotated rod of handle is made of brass and handle is fabricated of aluminum casting. The size of damper is decided by the air flow volume (m<sup>3</sup>/s) and air speed (m/s). The air speed go through the damper shall not exceed 7.5 m/s.

### 3.11 Electric heater

It is used to achieve the desired room conditions at certain desired relative humidity. With negligible air pressure drop, accurate controllability, light weight, easy serviceability and inherent freeze protection, electrical heater is valuable alternatives to conventional steam and hot water heating coils. Electric heaters are optional with either single step or multi steps of heating process. It depends much on the heating capacity. Heaters are available in 220-230V and the wiring can be in single-phase / three-phase power for contractor or thyristor control.

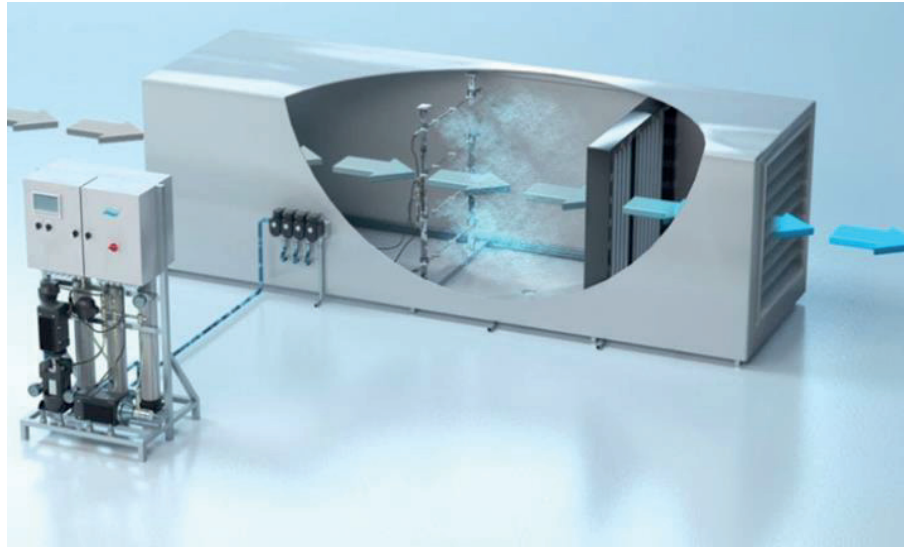


Figure 5: Electric heater

### 3.12 Steam humidifier

There are a few humidifiers are used commercially in **Dezenno.MAX** air handling unit. The first one is electrode steam humidifier, which is categorised as HM series; whilst the second one generates high precision, intellectualised electrode humidifier. It normally requires an empty section to be installed. It is a device used to increase the air relative humidity in atmosphere without steam source.

It works as a constant temperature humidifier whose principle is the common electrode humidifier regulates the generated steam by the way of controlling water level and electrical current. Electrical loop will be built up through salt minerals in the water. Therefore, water will be heated up and boiled until vapor is continuously generated. Water quality in the region must be considered because it reduces the steam capacity. (RO water can be used).



*Figure 6: Humidifier system*

### 3.13 Heat recovery wheel

Since ventilation from outdoors is essential in maintaining desired indoor air quality, heat wheel is available as the option to match this requirement. These energy components can recover 50% or more of the energy normally exhausted from a building. They are working based on this concept - capturing heat from exhaust air as it passes through the air handling unit and transfer it to the supply air stream. Hence, it is able to reduce the cost of heating or cooling the outside air. During the winter, energy recovery components do this by transferring energy from a warm air stream to a colder air stream. On the other hand, during the summer, it is used to cool the air hot air.

It is constructed of aluminum coated with heat transfer material (silica gel or others) which is rotated by an electric motor at constant or variable speed. It is currently known as the most efficient technology.

There are two mandatory sections of fan : exhaust fan and supply fan. The heat wheel rotates at a constant low speeds, capturing and transferring both sensible (heat) energy and latent (moisture) energy. The ability to transfer both sensible

and latent energy gives the heat wheel several advantages. First, it can reduce the capacity of ventilation equipment. Furthermore, heat wheels can work at lower temperature without frosting occurs. The supply air from the heat wheel is not near saturation level, and moisture in the ductwork is not an issue. The benefit includes recover both latent and sensible heat by allowing reduction in system capacity about 30 to 65%. The most significant benefit is to prevent sick building syndrome.

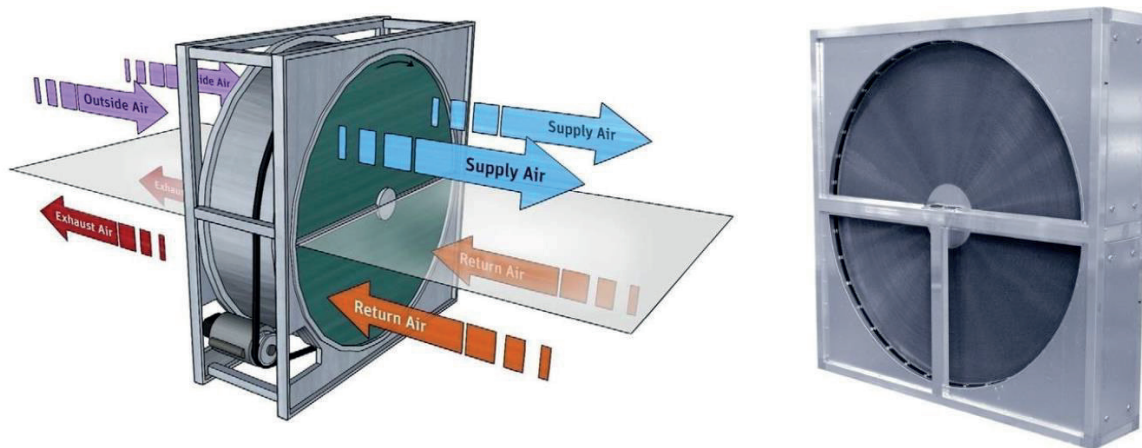


Figure 7: Heat Recovery Wheel

### 3.14 Plug fan

Fans are used extensively in air-conditioning for circulating air over coils. The fan type includes forward, backward, airfoil wheel fan, twin fans with double width double inlet (DWDI) centrifugal fan. The first low cost option will be forward curved fans which are generally used for low static pressure applications. The blade of fan is constructed of galvanised steel. It consists of blade which has tips curving forward that is in the direction of rotation of fan wheel.

Meanwhile, for backward curve fans, it is run at higher speed and therefore has to be sturdier in construction. The blade of backward curved is made of heavy gauge steel or mild steel, painted after manufacturing. It can handle high static pressure system and able to show higher efficiency over a broader range of higher system resistance. For airfoil fans, normally it will be the last option due to the costly components. It is constructed of mild steel. However, it shows higher efficiency, generates low noise level and is able to handle higher static pressure. Kruger housed airfoil fans can operate up to 2240pa of static pressure.

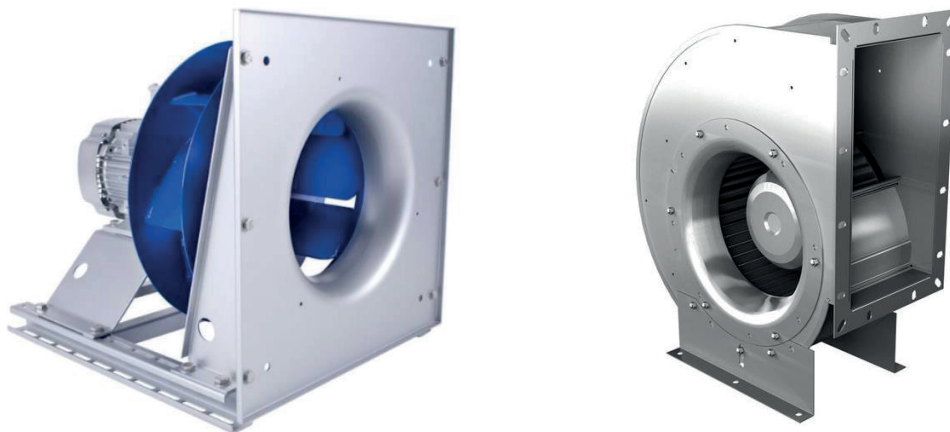


Fan performance of all these fans have been tested and measured in accordance with AMCA Standard 210. The sound level is measure and rated in accordance with AMCA Standard 300. The fan bearing provided will have a minimum L50 life of 200,000 hours, and are available as high as 1,000,000 hours. Bearings are selected for minimum noise level and minimal device. The bearing is lubricated for life and maintenance free, lubrication is optional. Fan is dynamically and statically balanced to Standard ISO 1940. The fan shaft is manufactured from C45 carbon steel. It is coated with a layer of anticorrosion varnish.

Fan discharges direction can be vertical (top & bottom) or horizontal discharge. The fan discharge should be square (for both forward and backward wheel fans) in area and flanged and isolated from the casing by the fire retardant grade flexible connection. Only one fan discharge is provided.

Fan selection requires accurate calculation of the air flow resistance through the whole system consisting of the total of two parts; external and internal static pressure. External static pressure is found in the distribution system, external to the air handler. Internal static pressure is the sum of the resistance of the coils and others component. Beside, a comprehensive range of AC & EC plenum fans is available to meet different design criteria. These fans are design to operate unhoused inside the AHUs. The flexible fan section provides a wide combination of discharge arrangements. Plenum fans also contribute to lower overall system pressure drop, thereby reducing energy consumption.

This fan has no spiral housing and is directly driven by an electric motor via its shaft. The electric motor is mounted on the fan frame by a base plate. The fan structural frame is fixed to the unit housing by means of vibration insulators. A flexible duct connection can prevent the fan pressure flange vibrations from transferring to the unit housing. AC motors available.



*Figure 8: Plug Fan*

## 3.15 Motor

Motor is internally mounted integral to an isolated fan assembly. Standard motor shall be horizontally foot mounting, induction motor, squirrel cage, totally enclosed fan-cooled (TEFC or TEFV) with IP 55 protection and class F Insulation. Motor capacity cannot be undersized but oversized for desired running capacity. For the desired operation speed between fan and motor, different poles (2, 4, 6 and 8 poles) can be consider...

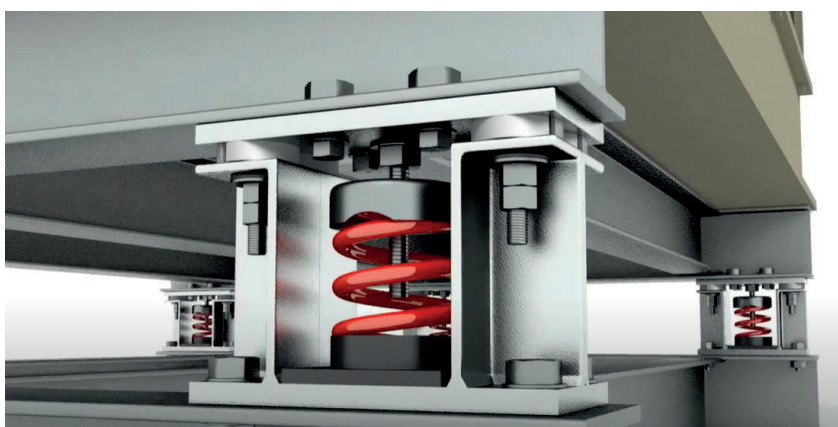
There are a few components which are able to provide safety, efficiency and flexibility features which boosts operations of the **Dezenno.MAX** unit. It includes thermistor, variable frequency drives (VFD), disconnect switch and others. When operating with VFD, frequency within 30 to 60 Hz is highly recommended for standard induction motor.

### Motor option

- › 380-415 Volt / 3 phase/ 50 Hz (standard)
- › Standard efficiency motor (IE1)
- › High & Premium efficiency motor (IE2&IE3)
- › Dual speed motor
- › Motor with space heater & Thermistor
- › Explosion / Flame proof

## 3.16 Spring isolator

The fan in this unit can create substantial vibration that will transform to panels / casing and consequently widespread the generated sound waves. To avoid this, the spring or rubber isolator is mounted between the fan compartment and the rest of the **Dezenno.MAX** unit to avert the transmission of noise and vibration into panels.



*Figure 9: Spring isolator*

There are two types of isolators used:

- › Rubber mounting (for blower  $\leq$  model 355)
- › 25mm deflection spring (for blower  $>$  model 355)

### 3.17 VFD/Frequency Inverter

A VFD provides adjustable speed control of a single fan motor. Normally, an Dezenno AHU which has been installed by VFD can vary the frequency within 30 to 60 Hz in order to control the motor rotation speed. It also provides protection for the motor operation.

## 4. Standard unit quick selection table

Table 4. Return Air

| UNIT SIZE | Air flow | ESP | 4-ROW COOLING COIL |        |               |            |       | 1-ROW HEATING COIL |               |            |       | Motor (kW) |
|-----------|----------|-----|--------------------|--------|---------------|------------|-------|--------------------|---------------|------------|-------|------------|
|           |          |     | S.C                | T.C.C  | OFF COIL (°C) | Water Flow | WPD   | T.C                | OFF COIL (°C) | Water Flow | WPD   |            |
|           | LPS      | Pa  | kW                 | kW     | Dry/Wet       | LPS        | kPa   | kW                 | Dry/Wet       | LPS        | kPa   |            |
| 0808      | 646      | 500 | 7.94               | 8.66   | 16.40/15.65   | 0.43       | 0.81  | 4.75               | 27.70/18.33   | 0.13       | 0.1   | 1.5        |
| 0811      | 1027     | 500 | 13.69              | 16.64  | 15.51/14.78   | 0.83       | 3.19  | 8.92               | 28.92/18.73   | 0.24       | 0.38  | 2.2        |
| 0814      | 1408     | 500 | 19.7               | 25.3   | 14.94/14.23   | 1.27       | 7.86  | 13.17              | 29.53/18.93   | 0.36       | 0.9   | 3          |
| 0817      | 1789     | 500 | 25.74              | 33.99  | 14.59/13.89   | 1.7        | 15.06 | 17.32              | 29.84/19.03   | 0.47       | 1.71  | 4          |
| 1111      | 1670     | 500 | 22.26              | 27.06  | 15.51/14.78   | 1.36       | 5.94  | 14.5               | 28.92/18.73   | 0.39       | 0.6   | 3          |
| 1114      | 2289     | 500 | 32.03              | 41.13  | 14.94/14.22   | 2.06       | 14.2  | 21.4               | 29.53/18.93   | 0.58       | 1.39  | 5.5        |
| 1117      | 2908     | 500 | 41.85              | 55.25  | 14.60/13.89   | 2.77       | 26.5  | 28.16              | 29.84/19.03   | 0.76       | 2.55  | 5.5        |
| 1119      | 3321     | 500 | 48.37              | 64.57  | 14.45/13.75   | 3.24       | 36.98 | 33.27              | 30.14/19.13   | 0.9        | 3.68  | 7.5        |
| 1414      | 3169     | 500 | 44.35              | 56.95  | 14.94/14.22   | 2.86       | 23.55 | 29.63              | 29.53/18.93   | 0.8        | 2.14  | 7.5        |
| 1417      | 4026     | 500 | 57.93              | 76.5   | 14.60/13.89   | 3.84       | 43.38 | 38.99              | 29.84/19.03   | 1.06       | 3.84  | 7.5        |
| 1419      | 4598     | 500 | 66.96              | 89.4   | 14.45/13.75   | 4.48       | 14.47 | 46.06              | 30.14/19.13   | 1.25       | 5.47  | 11         |
| 1423      | 5741     | 500 | 85.58              | 116.69 | 14.15/13.46   | 5.85       | 27.17 | 59.43              | 30.45/19.22   | 1.61       | 9.5   | 11         |
| 1425      | 6312     | 500 | 94.89              | 130.16 | 14.04/13.36   | 6.53       | 35.34 | 65.34              | 30.45/19.22   | 1.77       | 11.72 | 11         |
| 1719      | 5619     | 500 | 81.83              | 109.25 | 14.45/13.75   | 5.48       | 29.83 | 56.29              | 30.14/19.13   | 1.53       | 3.12  | 11         |
| 1323      | 7016     | 500 | 104.58             | 142.61 | 14.15/13.46   | 7.15       | 53.34 | 72.63              | 30.45/19.22   | 1.97       | 5.58  | 15         |
| 1727      | 7715     | 500 | 115.98             | 159.09 | 14.04/13.36   | 7.98       | 33.59 | 79.87              | 30.45/19.22   | 2.17       | 6.99  | 15         |
| 1923      | 7654     | 500 | 114.1              | 155.58 | 14.15/13.46   | 7.8        | 25.92 | 79.23              | 30.45/19.22   | 2.15       | 6.02  | 15         |
| 1925      | 8416     | 500 | 126.52             | 173.54 | 14.04/13.36   | 8.7        | 33.78 | 87.12              | 30.45/19.22   | 2.37       | 7.52  | 15         |
| 2223      | 9568     | 500 | 142.63             | 194.48 | 14.15/13.46   | 9.75       | 26.48 | 99.05              | 30.45/19.22   | 2.69       | 7.59  | 18.5       |
| 2225      | 10520    | 500 | 158.15             | 216.93 | 14.04/13.36   | 10.88      | 34.48 | 108.9              | 30.45/19.22   | 2.96       | 9.41  | 18.5       |
| 2227      | 11473    | 500 | 172.45             | 236.58 | 14.04/13.36   | 11.86      | 42.94 | 120.68             | 30.60/19.27   | 3.28       | 11.82 | 22         |
| 2231      | 13378    | 500 | 192.48             | 254.19 | 14.60/13.89   | 12.75      | 12.69 | 142.96             | 30.75/19.32   | 3.88       | 17.33 | 22         |
| 2431      | 14270    | 500 | 205.31             | 271.14 | 14.60/13.89   | 13.59      | 13.42 | 152.49             | 30.75/19.32   | 4.14       | 18.58 | 30         |
| 2437      | 17300    | 500 | 252.91             | 338.9  | 14.40/13.70   | 16.99      | 22.39 | 187.75             | 30.90/19.37   | 5.1        | 29.79 | 30         |
| 2439      | 18333    | 500 | 269.1              | 361.84 | 14.35/13.66   | 18.14      | 26.04 | 202.03             | 31.05/19.42   | 5.49       | 35.04 | 30         |
| 2443      | 20284    | 500 | 302.5              | 412.3  | 14.14/13.46   | 20.67      | 35.06 | 223.53             | 31.05/19.42   | 6.07       | 44.41 | 37         |
| 2637      | 19482    | 500 | 284.78             | 381.65 | 14.40/13.70   | 19.14      | 24.95 | 211.44             | 30.90/19.37   | 5.74       | 34    | 37         |
| 2643      | 22900    |     |                    |        |               |            |       |                    |               |            |       |            |
| 2943      | 24800    | 500 | 341.39             | 465.47 | 14.15/13.46   | 23.34      | 39.03 | 252.35             | 31.05/19.42   | 6.85       | 50.61 | 37         |

For Cooling Coil: EDB = 27°C, EWB = 19.5°C, EWT= 7°C, LWT= 12°C

For Heating Coil: EDB = 21°C, EWT= 60°C, LWT= 50°C

**Table 5. Fresh Air**

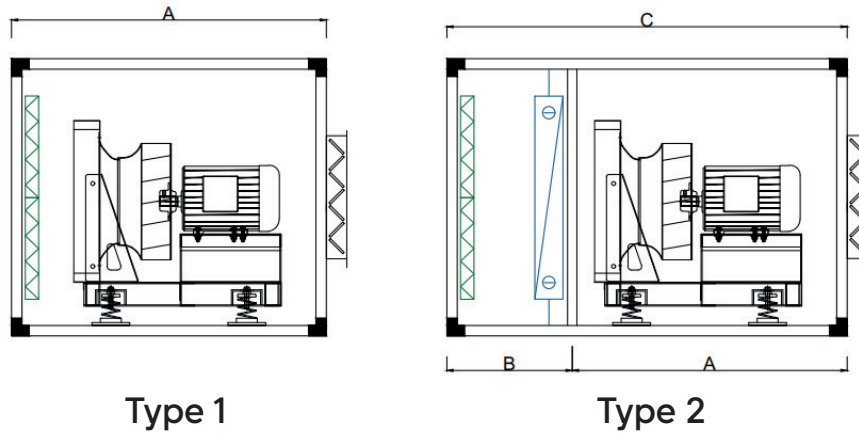
| UNIT SIZE | Air flow | ESP | 4-ROW COOLING COIL |         |               |            |        | 1-ROW HEATING COIL |               |            |        | Motor (kW) |
|-----------|----------|-----|--------------------|---------|---------------|------------|--------|--------------------|---------------|------------|--------|------------|
|           |          |     | S.C                | T.C.C   | OFF COIL (°C) | Water Flow | WPD    | T.C                | OFF COIL (°C) | Water Flow | WPD    |            |
|           | LPS      | Pa  | kW                 | kW      | Dry/Wet       | LPS        | kPa    | kW                 | Dry/Wet       | LPS        | kPa    |            |
| 1414      | 3169     | 500 | 54.05              | 119.76  | 19.66/19.38   | 6          | 88.54  | 52.1               | 15.00/3.83    | 1.41       | 6.32   | 7.5        |
| 1417      | 4026     | 500 | 72.52              | 164.22  | 18.80/18.56   | 8.23       | 166.97 | 68.26              | 15.47/4.08    | 1.85       | 11.22  | 7.5        |
| 1419      | 4598     | 500 | 84.62              | 193.07  | 18.45/18.21   | 9.68       | 18.82  | 79.13              | 15.70/4.20    | 2.15       | 15.39  | 11         |
| 1423      | 5741     | 500 | 109.12             | 251.4   | 17.91/17.70   | 12.6       | 33.39  | 100.28             | 15.94/4.33    | 2.72       | 25.69  | 11         |
| 1425      | 6312     | 500 | 121.3              | 280.19  | 17.72/17.52   | 14.05      | 42.36  | 111.88             | 16.17/4.45    | 3.04       | 32.54  | 11         |
| 1719      | 5619     | 500 | 103.42             | 235.94  | 18.45/18.21   | 11.83      | 90.42  | 96.71              | 15.70/4.20    | 2.63       | 8.44   | 11         |
| 1323      | 7016     | 500 | 133.35             | 307.23  | 17.91/17.70   | 15.4       | 154.78 | 122.55             | 15.94/4.33    | 3.33       | 14.54  | 15         |
| 1727      | 7715     | 500 | 148.26             | 342.46  | 17.72/17.52   | 17.17      | 26.13  | 136.74             | 16.17/4.45    | 3.71       | 18.66  | 15         |
| 1923      | 7654     | 500 | 145.48             | 335.17  | 17.91/17.70   | 16.81      | 21.79  | 133.7              | 15.94/4.33    | 3.63       | 15.8   | 15         |
| 1925      | 8416     | 500 | 161.73             | 373.58  | 17.72/17.52   | 18.73      | 27.97  | 149.17             | 16.17/4.45    | 4.05       | 20.23  | 15         |
| 2223      | 9568     | 500 | 181.36             | 418.98  | 17.91/17.70   | 21.01      | 27.01  | 167.13             | 15.94/4.33    | 4.54       | 20.25  | 18.5       |
| 2225      | 10520    | 500 | 202.16             | 466.98  | 17.72/17.52   | 23.41      | 34.44  | 186.46             | 16.17/4.45    | 5.06       | 25.77  | 18.5       |
| 2227      | 11473    | 500 | 222.83             | 516.16  | 17.54/17.34   | 25.88      | 43.13  | 203.35             | 16.17/4.45    | 5.52       | 31.35  | 22         |
| 2231      | 13378    | 500 | 265.39             | 617.92  | 17.16/16.99   | 30.98      | 64.7   | 240.55             | 16.41/4.58    | 6.53       | 45.67  | 22         |
| 2431      | 14270    | 500 | 283.08             | 659.12  | 17.16/16.99   | 33.05      | 69.04  | 256.59             | 16.41/4.58    | 6.97       | 49.2   | 30         |
| 2437      | 17300    | 500 | 350.44             | 819.82  | 16.79/16.62   | 41.11      | 113.28 | 311.07             | 16.41/4.58    | 8.45       | 76.28  | 30         |
| 2439      | 18333    | 500 | 375.3              | 879.77  | 16.59/16.44   | 44.11      | 132.71 | 334.36             | 16.64/4.70    | 9.08       | 89.42  | 30         |
| 2443      | 20284    | 500 | 417.51             | 979.48  | 16.49/16.35   | 49.11      | 170.57 | 369.94             | 16.64/4.70    | 10.05      | 113.03 | 37         |
| 2637      | 19482    | 500 | 394.6              | 923.23  | 16.79/16.62   | 46.29      | 128.25 | 350.31             | 16.41/4.58    | 9.51       | 87.82  | 37         |
| 2643      | 22900    | 500 | 471.19             | 1105.81 | 16.50/16.35   | 55.44      | 192.86 | 417.65             | 16.64/4.70    | 11.34      | 129.97 | 37         |

*For Cooling Coil: EDB = 35°C, EWB = 28°C, EWT = 7°C, LWT = 12°C*

*For Heating Coil: EDB = 0°C, EWT = 60°C, LWT = 50°C*

# 5. Outline and Dimensions

## 5.1 Horizontal typical configuration



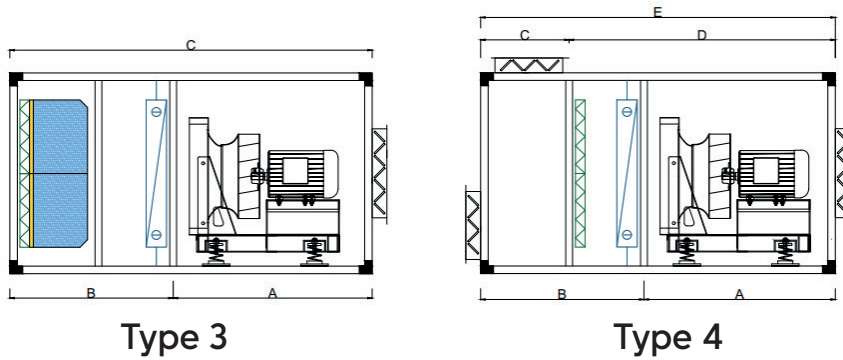
Type 1

Type 2

|           |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Size |   | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |
| LPS       |   | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |
| Height    |   | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |
| Width     |   | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |
| Length    | 1 | A    | 1000 | 1000 | 1100 | 1100 | 1100 | 1100 | 1300 | 1300 | 1300 | 1300 | 1500 | 1500 | 1500 | 1500 |
|           |   | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           | 2 | B    | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  |
|           |   | C    | 1600 | 1600 | 1700 | 1700 | 1700 | 1700 | 1900 | 1900 | 1900 | 1900 | 2100 | 2100 | 2100 | 2100 |

|           |   |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |
|-----------|---|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Unit Size |   | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
| LPS       |   | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17300 | 18333 | 20284 | 19482 | 22900 | 24800 |      |
| Height    |   | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     |   | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 1 | A    | 1700 | 1700 | 1700 | 1700  | 1900  | 1900  | 2100  | 2100  | 2300  | 2300  | 2300  | N/A   | N/A   | N/A  |
|           |   | A    | 1600 | 1600 | 1600 | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           | 2 | B    | 700  | 700  | 700  | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700  |
|           |   | C    | 2300 | 2300 | 2300 | 2300  | 2500  | 2500  | 2700  | 2700  | 2900  | 2900  | 2900  | 2900  | 2900  | 2900 |

Table 6. Horizontal Typical Configuration Type 1 & 2



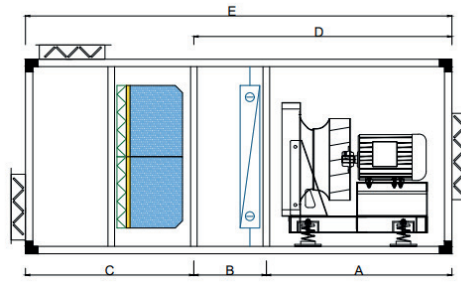
**Type 3**

**Type 4**

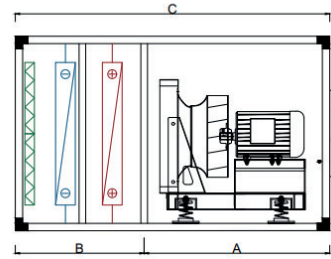
|           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Size | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |      |
| LPS       | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |      |
| Height    | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |      |
| Width     | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |      |
| Length    | 3    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 |
|           |      | C    | 2200 | 2200 | 2300 | 2300 | 2300 | 2300 | 2500 | 2500 | 2500 | 2500 | 2700 | 2700 | 2700 | 2700 |
|           | 4    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 |
|           |      | C    | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  |
|           |      | D    | 1700 | 1700 | 1800 | 1800 | 1800 | 1800 | 2000 | 2000 | 2000 | 2000 | 2200 | 2200 | 2200 | 2200 |
|           |      | E    | 2200 | 2200 | 2300 | 2300 | 2300 | 2300 | 2500 | 2500 | 2500 | 2500 | 2700 | 2700 | 2700 | 2700 |

|           |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |
|-----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Unit Size | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
| LPS       | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |
| Height    | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 3    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1300 | 1300 | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300 |
|           |      | C    | 2900 | 2900 | 2900  | 2900  | 3100  | 3100  | 3300  | 3300  | 3500  | 3500  | 3500  | 3500  | 3500 |
|           | 4    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1300 | 1300 | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300 |
|           |      | C    | 500  | 500  | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500  |
|           |      | D    | 2400 | 2400 | 2400  | 2400  | 2600  | 2600  | 2800  | 2800  | 3000  | 3000  | 3000  | 3000  | 3000 |
|           |      | E    | 2900 | 2900 | 2900  | 2900  | 3100  | 3100  | 3300  | 3300  | 3500  | 3500  | 3500  | 3500  | 3500 |

**Table 7. Horizontal Typical Configuration Type 3 & 4**



**Type 5**

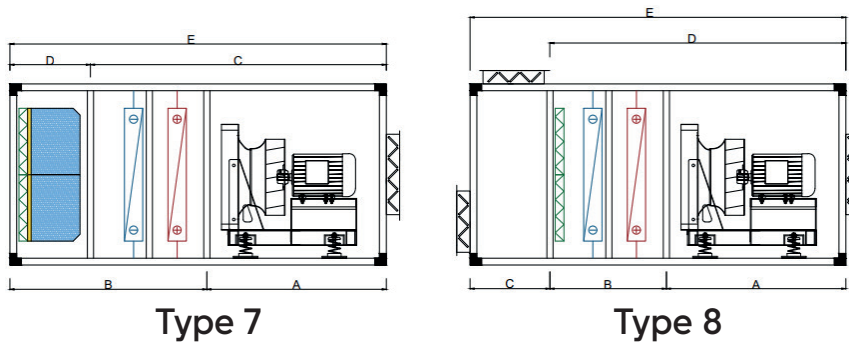


**Type 6**

|           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Size | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |      |
| LPS       | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |      |
| Height    | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |      |
| Width     | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |      |
| Length    | 5    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  | 600  |
|           |      | C    | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
|           |      | D    | 1500 | 1500 | 1600 | 1600 | 1600 | 1600 | 1800 | 1800 | 1800 | 1800 | 2000 | 2000 | 2000 | 2000 |
|           |      | E    | 2700 | 2700 | 2800 | 2800 | 2800 | 2800 | 3000 | 3000 | 3000 | 3000 | 3200 | 3200 | 3200 | 3200 |
|           | 6    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 |
|           |      | C    | 2200 | 2200 | 2300 | 2300 | 2300 | 2300 | 2500 | 2500 | 2500 | 2500 | 2700 | 2700 | 2700 | 2700 |

|           |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |
|-----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Unit Size | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
| LPS       | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |
| Height    | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 5    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 600  | 600  | 600   | 600   | 600   | 600   | 600   | 600   | 600   | 600   | 600   | 600   | 600  |
|           |      | C    | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200 |
|           |      | D    | 2200 | 2200 | 2200  | 2200  | 2400  | 2400  | 2600  | 2600  | 2800  | 2800  | 2800  | 2800  | 2800 |
|           |      | E    | 3400 | 3400 | 3400  | 3400  | 3600  | 3600  | 3800  | 3800  | 4000  | 4000  | 4000  | 4000  | 4000 |
|           | 6    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1300 | 1300 | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300  | 1300 |
|           |      | C    | 2900 | 2900 | 2900  | 2900  | 3100  | 3100  | 3300  | 3300  | 3500  | 3500  | 3500  | 3500  | 3500 |

**Table 8. Horizontal Typical Configuration Type 5 & 6**

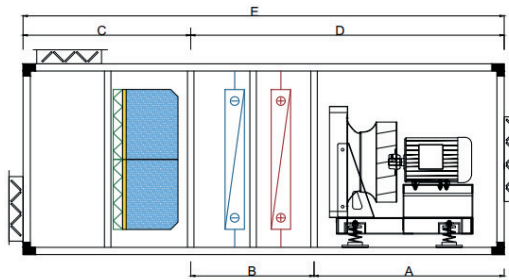


| Unit Size | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| LPS       | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |
| Height    | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |
| Width     | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |
| Length    | 7    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
|           |      | C    | 2100 | 2100 | 2200 | 2200 | 2200 | 2200 | 2400 | 2400 | 2400 | 2400 | 2600 | 2600 | 2600 |
|           |      | D    | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  |
|           |      | E    | 2800 | 2800 | 2900 | 2900 | 2900 | 2900 | 3100 | 3100 | 3100 | 3100 | 3300 | 3300 | 3300 |
|           | 8    | A    | 900  | 900  | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
|           |      | C    | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  |
|           |      | D    | 2300 | 2300 | 2400 | 2400 | 2400 | 2400 | 2600 | 2600 | 2600 | 2600 | 2800 | 2800 | 2800 |
|           |      | E    | 2800 | 2800 | 2900 | 2900 | 2900 | 2900 | 3100 | 3100 | 3100 | 3100 | 3300 | 3300 | 3300 |

| Unit Size | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
|-----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| LPS       | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |
| Height    | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 7    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1900 | 1900 | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 |
|           |      | C    | 2800 | 2800 | 2800  | 2800  | 3000  | 3000  | 3200  | 3200  | 3400  | 3400  | 3400  | 3400  | 3400 |
|           |      | D    | 700  | 700  | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700  |
|           |      | E    | 3500 | 3500 | 3500  | 3500  | 3700  | 3700  | 3900  | 3900  | 4100  | 4100  | 4100  | 4100  | 4100 |
|           | 8    | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1400 | 1400 | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400 |
|           |      | C    | 500  | 500  | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500  |
|           |      | D    | 3000 | 3000 | 3000  | 3000  | 3200  | 3200  | 3400  | 3400  | 3600  | 3600  | 3600  | 3600  | 3600 |
|           |      | E    | 3500 | 3500 | 3500  | 3500  | 3700  | 3700  | 3900  | 3900  | 4100  | 4100  | 4100  | 4100  | 4100 |

Table 9. Horizontal Typical Configuration Type 7 & 8



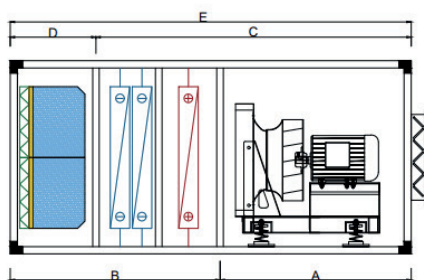


**Type 9**

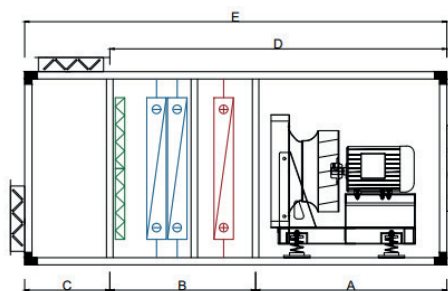
|           |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Size |   | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |      |
| LPS       |   | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |      |
| Height    |   | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |      |
| Width     |   | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |      |
| Length    | 9 | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |      |
|           |   | B    | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
|           |   | C    | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
|           |   | D    | 2100 | 2100 | 2200 | 2200 | 2200 | 2200 | 2400 | 2400 | 2400 | 2400 | 2400 | 2600 | 2600 | 2600 | 2600 |
|           |   | E    | 3300 | 3300 | 3400 | 3400 | 3400 | 3400 | 3600 | 3600 | 3600 | 3600 | 3600 | 3800 | 3800 | 3800 | 3800 |

|           |   |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |      |
|-----------|---|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| Unit Size |   | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |      |
| LPS       |   | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |      |
| Height    |   | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |      |
| Width     |   | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |      |
| Length    | 2 | A    | 1600 | 1600 | 1600 | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200  | 2200 |      |
|           |   | B    | 1200 | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200 | 1200 |
|           |   | C    | 1200 | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200 | 1200 |
|           |   | D    | 2800 | 2800 | 2800 | 2800  | 3000  | 3000  | 3200  | 3200  | 3400  | 3400  | 3400  | 3400  | 3400  | 3400 | 3400 |
|           |   | E    | 4000 | 4000 | 4000 | 4000  | 4200  | 4200  | 4400  | 4400  | 4600  | 4600  | 4600  | 4600  | 4600  | 4600 | 4600 |

**Table 10. Horizontal Typical Configuration Type 9**



**Type 10**

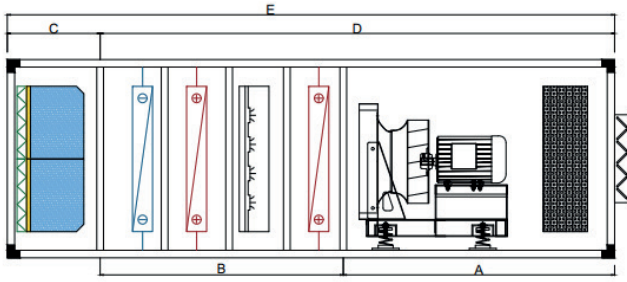


**Type 11**

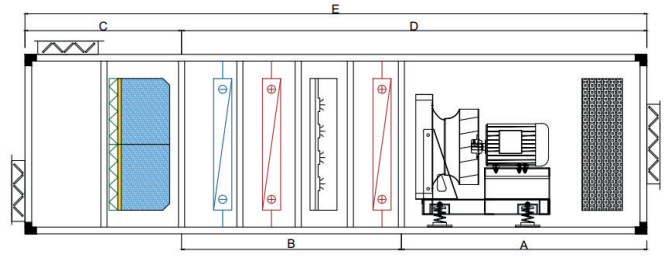
|           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Size | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |
| LPS       | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |
| Height    | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |
| Width     | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |
| Length    | 10   | A    | 900  | 900  | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 | 2300 |
|           |      | C    | 2500 | 2500 | 2600 | 2600 | 2600 | 2600 | 2800 | 2800 | 2800 | 2800 | 3000 | 3000 | 3000 |
|           |      | D    | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  |
|           |      | E    | 3200 | 3200 | 3300 | 3300 | 3300 | 3300 | 3500 | 3500 | 3500 | 3500 | 3700 | 3700 | 3700 |
|           | 11   | A    | 900  | 900  | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |      | B    | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|           |      | C    | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  |
|           |      | D    | 2700 | 2700 | 2800 | 2800 | 2800 | 2800 | 3000 | 3000 | 3000 | 3000 | 3200 | 3200 | 3200 |
|           |      | E    | 3200 | 3200 | 3300 | 3300 | 3300 | 3300 | 3500 | 3500 | 3500 | 3500 | 3700 | 3700 | 3700 |

|           |      |      |      |      |       |       |       |       |       |       |       |       |       |       |      |
|-----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Unit Size | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
| LPS       | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |
| Height    | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 10   | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 2300 | 2300 | 2300  | 2300  | 2300  | 2300  | 2300  | 2300  | 2300  | 2300  | 2300  | 2300  | 2300 |
|           |      | C    | 3200 | 3200 | 3200  | 3200  | 3400  | 3400  | 3600  | 3600  | 3800  | 3800  | 3800  | 3800  | 3800 |
|           |      | D    | 700  | 700  | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700  |
|           |      | E    | 3900 | 3900 | 3900  | 3900  | 4100  | 4100  | 4100  | 4300  | 4500  | 4500  | 4500  | 4500  | 4500 |
|           | 11   | A    | 1600 | 1600 | 1600  | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |      | B    | 1800 | 1800 | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800 |
|           |      | C    | 500  | 500  | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500   | 500  |
|           |      | D    | 3400 | 3400 | 3400  | 3400  | 3600  | 3600  | 3800  | 3800  | 4000  | 4000  | 4000  | 4000  | 4000 |
|           |      | E    | 3900 | 3900 | 3900  | 3900  | 4100  | 4100  | 4100  | 4300  | 4500  | 4500  | 4500  | 4500  | 4500 |

**Table 11. Horizontal Typical Configuration Type 10 & 11 (Note: dehumidifier inside)**



**Type 12**



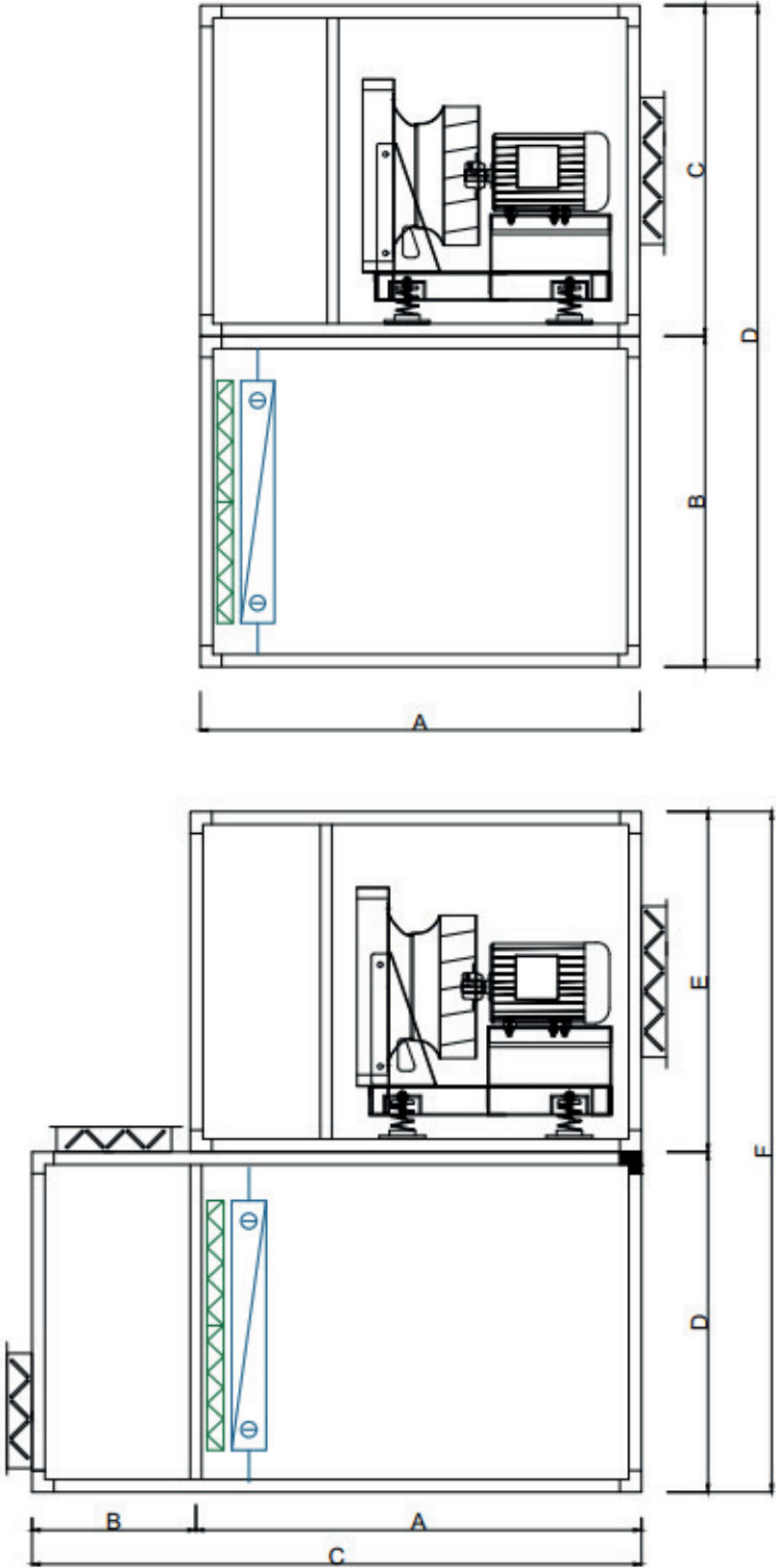
**Type 13**

| Unit Size |    | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 |      |
|-----------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| LPS       |    | 646  | 1027 | 1408 | 1789 | 1670 | 2289 | 2908 | 3321 | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 |      |
| Height    |    | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 |      |
| Width     |    | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 |      |
| Length    | 12 | A    | 900  | 900  | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |    | B    | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
|           |    | C    | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  | 700  |
|           |    | D    | 2300 | 2300 | 2400 | 2400 | 2400 | 2400 | 2600 | 2600 | 2600 | 2600 | 2800 | 2800 | 2800 | 2800 |
|           |    | E    | 3000 | 3000 | 3100 | 3100 | 3100 | 3100 | 3300 | 3300 | 3300 | 3300 | 3500 | 3500 | 3500 | 3500 |
|           | 13 | A    | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 |
|           |    | B    | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
|           |    | C    | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 |
|           |    | D    | 2300 | 2300 | 2400 | 2400 | 2400 | 2400 | 2600 | 2600 | 2600 | 2600 | 2800 | 2800 | 2800 | 2800 |
|           |    | E    | 3500 | 3500 | 3600 | 3600 | 3600 | 3600 | 3800 | 3800 | 3800 | 3800 | 4000 | 4000 | 4000 | 4000 |

| Unit Size |    | 1725 | 1923 | 1925 | 2223 | 2225  | 2227  | 2231  | 2431  | 2437  | 2439  | 2443  | 2637  | 2643  | 2943  |      |
|-----------|----|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| LPS       |    | 7715 | 7654 | 8416 | 9568 | 10520 | 11473 | 13378 | 14270 | 17318 | 18333 | 20284 | 19482 | 22913 | 24835 |      |
| Height    |    | 1700 | 1900 | 1900 | 2200 | 2200  | 2200  | 2200  | 2400  | 2400  | 2400  | 2400  | 2600  | 2600  | 2900  |      |
| Width     |    | 2500 | 2300 | 2500 | 2300 | 2500  | 2700  | 3100  | 3100  | 3700  | 3900  | 4300  | 3700  | 4300  | 4300  |      |
| Length    | 12 | A    | 1600 | 1600 | 1600 | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |    | B    | 1400 | 1400 | 1400 | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400 |
|           |    | C    | 700  | 700  | 700  | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700   | 700  |
|           |    | D    | 3000 | 3000 | 3000 | 3000  | 3200  | 3200  | 3400  | 3400  | 3600  | 3600  | 3600  | 3600  | 3600  | 3600 |
|           |    | E    | 3700 | 3700 | 3700 | 3700  | 3900  | 3900  | 4100  | 4100  | 4300  | 4300  | 4300  | 4300  | 4300  | 4300 |
|           | 13 | A    | 1600 | 1600 | 1600 | 1600  | 1800  | 1800  | 2000  | 2000  | 2200  | 2200  | 2200  | 2200  | 2200  | 2200 |
|           |    | B    | 1400 | 1400 | 1400 | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400  | 1400 |
|           |    | C    | 1200 | 1200 | 1200 | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200  | 1200 |
|           |    | D    | 3000 | 3000 | 3000 | 3000  | 3200  | 3200  | 3400  | 3400  | 3600  | 3600  | 3600  | 3600  | 3600  | 3600 |
|           |    | E    | 4200 | 4200 | 4200 | 4200  | 4400  | 4400  | 4600  | 4600  | 4800  | 4800  | 4800  | 4800  | 4800  | 4800 |

**Table 12. Horizontal Typical Configuration Type 12 & 13**

# 5.2 Horizontal typical configuration



|           |   |   |      |      |      |      |      |      |      |      |
|-----------|---|---|------|------|------|------|------|------|------|------|
| Unit Size |   |   | 0808 | 0811 | 0814 | 0817 | 1111 | 1114 | 1117 | 1119 |
| LPS       |   |   | 646  | 1027 | 1408 | 1789 | 1670 | 2288 | 2908 | 3321 |
| Width     |   |   | 800  | 1100 | 1400 | 1700 | 1100 | 1400 | 1700 | 1900 |
| Length    | 1 | A | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 |
|           |   | B | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 |
|           |   | C | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 |
|           |   | D | 1600 | 1600 | 1600 | 1600 | 2200 | 2200 | 2200 | 2200 |
|           | 2 | A | 900  | 900  | 1000 | 1000 | 1000 | 1000 | 1200 | 1200 |
|           |   | B | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  |
|           |   | C | 1400 | 1400 | 1500 | 1500 | 1500 | 1500 | 1700 | 1700 |
|           |   | D | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 |
|           |   | E | 800  | 800  | 800  | 800  | 1100 | 1100 | 1100 | 1100 |
|           |   | F | 1600 | 1600 | 1600 | 1600 | 2200 | 2200 | 2200 | 2200 |

|           |   |   |      |      |      |      |      |      |      |      |
|-----------|---|---|------|------|------|------|------|------|------|------|
| Unit Size |   |   | 1414 | 1417 | 1419 | 1423 | 1425 | 1719 | 1725 |      |
| LPS       |   |   | 3169 | 4026 | 4598 | 5741 | 6312 | 5619 | 7715 |      |
| Width     |   |   | 1400 | 1700 | 1900 | 2300 | 2500 | 1900 | 2500 |      |
| Length    | 1 | A | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 | 1400 | 1600 |
|           |   | B | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 | 1700 | 1700 |
|           |   | C | 1100 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 | 1600 |
|           |   | D | 2500 | 2600 | 2600 | 2800 | 2800 | 3100 | 3300 | 3300 |
|           | 2 | A | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 | 1400 | 1600 |
|           |   | B | 500  | 500  | 500  | 500  | 500  | 500  | 500  | 500  |
|           |   | C | 1700 | 1700 | 1900 | 1900 | 1900 | 1900 | 1900 | 2100 |
|           |   | D | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1700 | 1700 |
|           |   | E | 1100 | 1200 | 1200 | 1400 | 1400 | 1400 | 1400 | 1600 |
|           |   | F | 2500 | 2600 | 2600 | 2800 | 2800 | 3100 | 3300 | 3300 |

Table 13. Vertical Typical Configuration Type 1 & 2

# 6. Filter

## 6.1 Standard filter specification

| Model | Filter Media Size and Quantity |                        |         |                        |                              |                        |                        |         |                        |                              |
|-------|--------------------------------|------------------------|---------|------------------------|------------------------------|------------------------|------------------------|---------|------------------------|------------------------------|
|       | Sliding Filter Frame           |                        |         |                        |                              | Universal Filter Frame |                        |         |                        |                              |
|       | 24"x24"                        |                        | 24"x12" |                        | Total Area (m <sup>2</sup> ) | 24"x24"                |                        | 24"x12" |                        | Total Area (m <sup>2</sup> ) |
|       | Qty                            | Area (m <sup>2</sup> ) | Qty     | Area (m <sup>2</sup> ) |                              | Qty                    | Area (m <sup>2</sup> ) | Qty     | Area (m <sup>2</sup> ) |                              |
| 0808  | 1                              | 0.37                   | 0       | 0.00                   | 0.37                         | 1                      | 0.37                   | 0       | 0.00                   | 0.37                         |
| 0811  | 1                              | 0.37                   | 1       | 0.19                   | 0.56                         | 1                      | 0.37                   | 1       | 0.19                   | 0.56                         |
| 0814  | 2                              | 0.74                   | 0       | 0.00                   | 0.74                         | 2                      | 0.74                   | 0       | 0.00                   | 0.74                         |
| 0817  | 2                              | 0.74                   | 1       | 0.19                   | 0.93                         | 2                      | 0.74                   | 1       | 0.19                   | 0.93                         |
| 1111  | 1                              | 0.37                   | 2       | 0.00                   | 0.74                         | 1                      | 0.37                   | 2       | 0.00                   | 0.74                         |
| 1114  | 2                              | 0.74                   | 2       | 0.19                   | 1.11                         | 2                      | 0.74                   | 2       | 0.19                   | 1.11                         |
| 1117  | 2                              | 0.74                   | 3       | 0.37                   | 1.30                         | 2                      | 0.74                   | 3       | 0.37                   | 1.30                         |
| 1119  | 3                              | 1.11                   | 3       | 0.37                   | 1.67                         | 3                      | 1.11                   | 3       | 0.37                   | 1.67                         |
| 1414  | 4                              | 1.49                   | 0       | 0.56                   | 1.49                         | 4                      | 1.49                   | 0       | 0.56                   | 1.49                         |
| 1417  | 4                              | 1.49                   | 2       | 0.56                   | 1.86                         | 4                      | 1.49                   | 2       | 0.56                   | 1.86                         |
| 1419  | 6                              | 2.23                   | 0       | 0.00                   | 2.23                         | 6                      | 2.23                   | 0       | 0.00                   | 2.23                         |
| 1423  | 6                              | 2.23                   | 2       | 0.37                   | 2.60                         | 6                      | 2.23                   | 2       | 0.37                   | 2.60                         |
| 1425  | 8                              | 2.97                   | 0       | 0.00                   | 2.97                         | 8                      | 2.97                   | 0       | 0.00                   | 2.97                         |
| 1719  | 6                              | 2.23                   | 3       | 0.37                   | 2.79                         | 6                      | 2.23                   | 3       | 0.37                   | 2.79                         |
| 1725  | 8                              | 2.97                   | 4       | 0.56                   | 3.71                         | 8                      | 2.97                   | 4       | 0.56                   | 3.71                         |
| 1923  | 6                              | 2.23                   | 5       | 0.93                   | 3.16                         | 6                      | 2.23                   | 5       | 0.93                   | 3.16                         |
| 1925  | 8                              | 2.97                   | 4       | 0.74                   | 3.71                         | 8                      | 2.97                   | 4       | 0.74                   | 3.71                         |
| 2223  | 9                              | 3.34                   | 3       | 0.56                   | 3.90                         | 9                      | 3.34                   | 3       | 0.56                   | 3.90                         |
| 2225  | 12                             | 4.46                   | 0       | 0.00                   | 4.46                         | 12                     | 4.46                   | 0       | 0.00                   | 4.46                         |
| 2227  | 12                             | 4.46                   | 0       | 0.00                   | 4.46                         | 12                     | 4.46                   | 0       | 0.00                   | 4.46                         |
| 2231  | 15                             | 5.58                   | 0       | 0.00                   | 5.58                         | 12                     | 4.46                   | 3       | 0.56                   | 5.02                         |
| 2431  | 15                             | 5.58                   | 5       | 0.93                   | 6.51                         | 12                     | 4.46                   | 7       | 1.30                   | 5.76                         |
| 2437  | 18                             | 6.69                   | 6       | 1.11                   | 7.80                         | 15                     | 5.58                   | 8       | 1.49                   | 7.06                         |
| 2439  | 18                             | 6.69                   | 6       | 1.11                   | 7.80                         | 18                     | 6.69                   | 6       | 1.11                   | 7.80                         |
| 2443  | 21                             | 7.80                   | 7       | 1.30                   | 9.10                         | 18                     | 6.69                   | 9       | 1.67                   | 8.36                         |
| 2637  | 24                             | 8.93                   | 0       | 0.00                   | 8.93                         | 20                     | 7.43                   | 4       | 0.74                   | 8.18                         |
| 2643  | 28                             | 10.41                  | 0       | 0.00                   | 10.41                        | 24                     | 8.93                   | 4       | 0.74                   | 9.66                         |
| 2943  | 28                             | 10.41                  | 7       | 1.30                   | 11.71                        | 24                     | 8.93                   | 10      | 1.86                   | 10.78                        |

Table 14

## 6.2 Standard filter specification

| Model | HEPA Filter Size c/w Frame and Quantity/Unit |                        |         |                        |       |                        |
|-------|--|------------------------|---------|------------------------|-------|------------------------|
|       | 24"x24"                                      |                        | 24"x12" |                        | Total |                        |
|       | Qty  | Area (m <sup>2</sup> ) | Qty     | Area (m <sup>2</sup> ) | Qty   | Area (m <sup>2</sup> ) |
| 0808  | 1  | 0.37                   | 0       | 0.00                   | 1     | 0.37                   |
| 0811  | 1  | 0.37                   | 1       | 0.19                   | 2     | 0.56                   |
| 0814  | 2  | 0.74                   | 0       | 0.00                   | 2     | 0.74                   |
| 0817  | 2  | 0.74                   | 0       | 0.00                   | 2     | 0.74                   |
| 1111  | 1  | 0.37                   | 2       | 0.37                   | 3     | 0.74                   |
| 1114  | 2  | 0.74                   | 2       | 0.37                   | 4     | 1.11                   |
| 1117  | 2  | 0.74                   | 2       | 0.37                   | 4     | 1.11                   |
| 1119  | 2  | 0.74                   | 3       | 0.56                   | 5     | 1.30                   |
| 1414  | 4  | 1.49                   | 0       | 0.00                   | 4     | 1.49                   |
| 1417  | 4  | 1.49                   | 0       | 0.00                   | 4     | 1.49                   |
| 1419  | 4  | 1.49                   | 2       | 0.37                   | 6     | 1.86                   |
| 1423  | 6  | 2.23                   | 0       | 0.00                   | 6     | 2.23                   |
| 1425  | 6  | 2.23                   | 2       | 0.37                   | 8     | 2.60                   |
| 1719  | 4  | 1.49                   | 2       | 0.37                   | 6     | 1.86                   |
| 1725  | 6  | 2.23                   | 2       | 0.37                   | 8     | 2.60                   |
| 1923  | 6  | 2.23                   | 3       | 0.56                   | 9     | 2.79                   |
| 1925  | 6  | 2.23                   | 5       | 0.93                   | 11    | 3.16                   |
| 2223  | 9  | 3.34                   | 0       | 0.00                   | 9     | 3.34                   |
| 2225  | 9  | 3.34                   | 3       | 0.56                   | 12    | 3.90                   |
| 2227  | 12   | 4.46                   | 0       | 0.00                   | 12    | 4.46                   |
| 2231  | 12   | 4.46                   | 3       | 0.56                   | 15    | 5.02                   |
| 2431  | 12   | 4.46                   | 7       | 1.30                   | 19    | 5.76                   |
| 2437  | 15   | 5.57                   | 8       | 1.49                   | 23    | 7.06                   |
| 2439  | 15   | 5.57                   | 8       | 1.49                   | 23    | 7.06                   |
| 2443  | 18   | 6.69                   | 6       | 1.11                   | 24    | 7.80                   |
| 2637  | 15   | 5.57                   | 8       | 1.49                   | 23    | 7.06                   |
| 2643  | 18   | 6.69                   | 6       | 1.11                   | 24    | 7.80                   |
| 2943  | 24   | 8.92                   | 0       | 0.00                   | 24    | 8.92                   |

Table 15



## ▶ ABOUT Dezenno.MAX

**Dezenno.MAX** Air Handling Unit (AHU) is a product manufactured in congruence with the European benchmarks. The team of research and development with over 20 years of experiences have been undertaking temperature-moisture treatments for copious domestic and foreign constructions. Manufactured in Vietnam, the unit acknowledges high-quality standards and appropriate cost.

**Dezenno.MAX** always provides the most optimal and effective solutions.

### DeAir Joint Stock Company

---

#### Ho Chi Minh City

442/8, National Highway 1A,  
An Phu Dong Ward, District 12  
(+84) 925 977 579

#### Hung Yen

No. 29, Nhu Quynh Street, Nhu Quynh Town, Van Lam  
District, Hung Yen Province.  
(+84) 914 205 850