

# INSTALLATION AND OPERATION MANUAL

## InspirAIR® PRONTO Series (PRONTO 20, PRONTO 30)



Read carefully and keep for future reference

**CAUTION**

Always turn off electrical power and verify that the unit is electrically safe before performing any maintenance on the unit. This unit contains high-voltage electrical components.

**CAUTION**

This unit has moving parts. All repairs and maintenance should be performed by a qualified technician to avoid serious injuries.

**IMPORTANT – Read this manual before installation**

- Always turn OFF electrical power and verify that the unit is electrically safe before performing any maintenance on the unit.
- NO modifications shall be made to the unit under any circumstances. WARRANTY will be immediately voided. Do not use this device to EXHAUST steam, inflammable or explosive gases.
- Electrical connections shall be made by a QUALIFIED electrician.
- Airflows shall be as per the APPROVED SUBMITTAL in order for the ventilation system to function properly and the WARRANTY be honored.
- Installation shall be completed in CONFORMANCE with LOCAL construction and safety codes.
- ALL drawings, photos and diagrams contained in this document are for REFERENCE purposes only. Units may differ.
- ALDES reserves the RIGHT to MODIFY unit and its components without prior warning.



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**Warranty**

ALDES products are guaranteed to be defect-free for a period of (2) years from the date of purchase.

- Labor not included.
- **EC** motors are guaranteed for **(1)** year

**Warranty does not apply if:**

- Modifications were made by or for the client.
- Product was **POORLY** installed.
- Maintenance, cleaning and lubrication were **NOT EXECUTED** in accordance with ALDES recommendations.

**Warranty Exclusions**

- ALL installation fees and labor relating to product repairs.
- ALL fees related to a loss of operations, merchandise, inventory or equipment due to a defective ALDES product.

## Unpacking the Unit

Remove the protective wrapping from the unit including the foam protection at each corners. Extra care should be taken to not scratch the painted surfaces. Appropriately dispose of materials accordingly to local and/or project specific requirement.

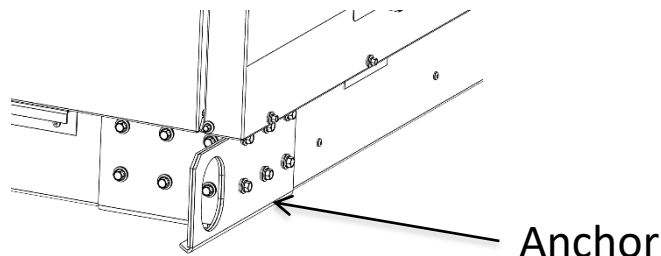
## Inspecting the Unit

Visually inspect the unit to ensure that no sheet metal has been dented or scratched. Verify that the air intake and exhaust hoods have not been damaged in transport.

**Warning:** Do not remove the shipping attachments until the unit has been moved to its final location.

## Transport Method

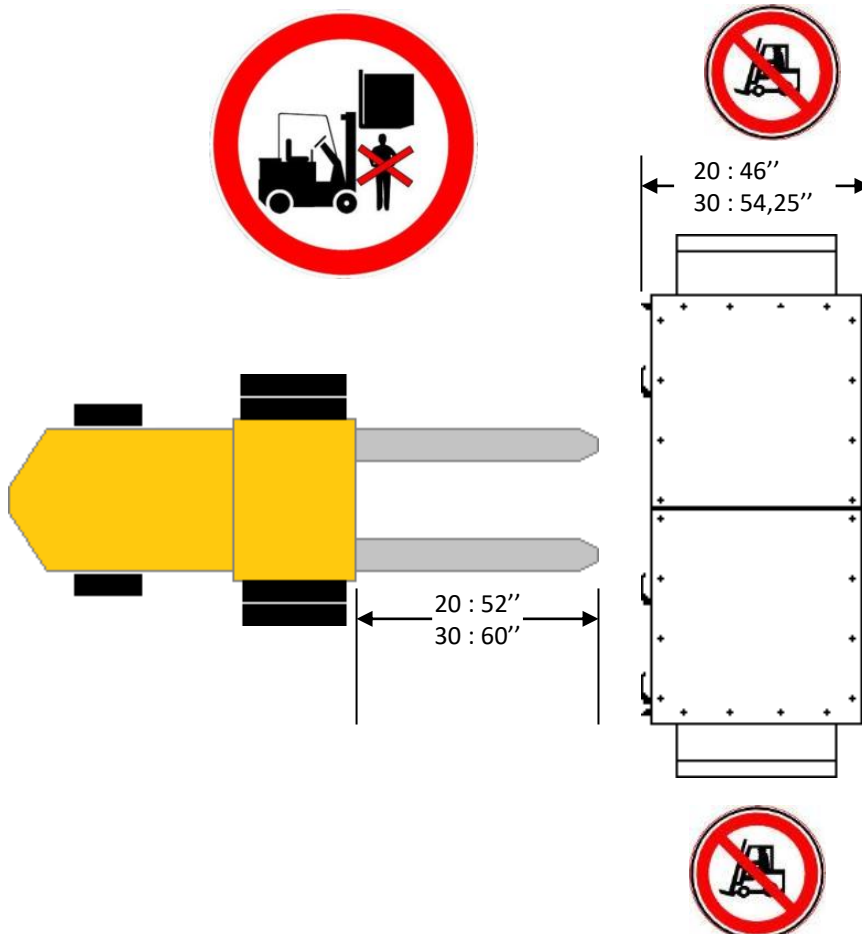
Your unit is equipped with anchors for handling purposes only. Strictly follow Lifting Standards before handling your unit. Always use **ALL** anchors points **SIMULTANEOUSLY**.



## Using a Forklift to Move the Unit

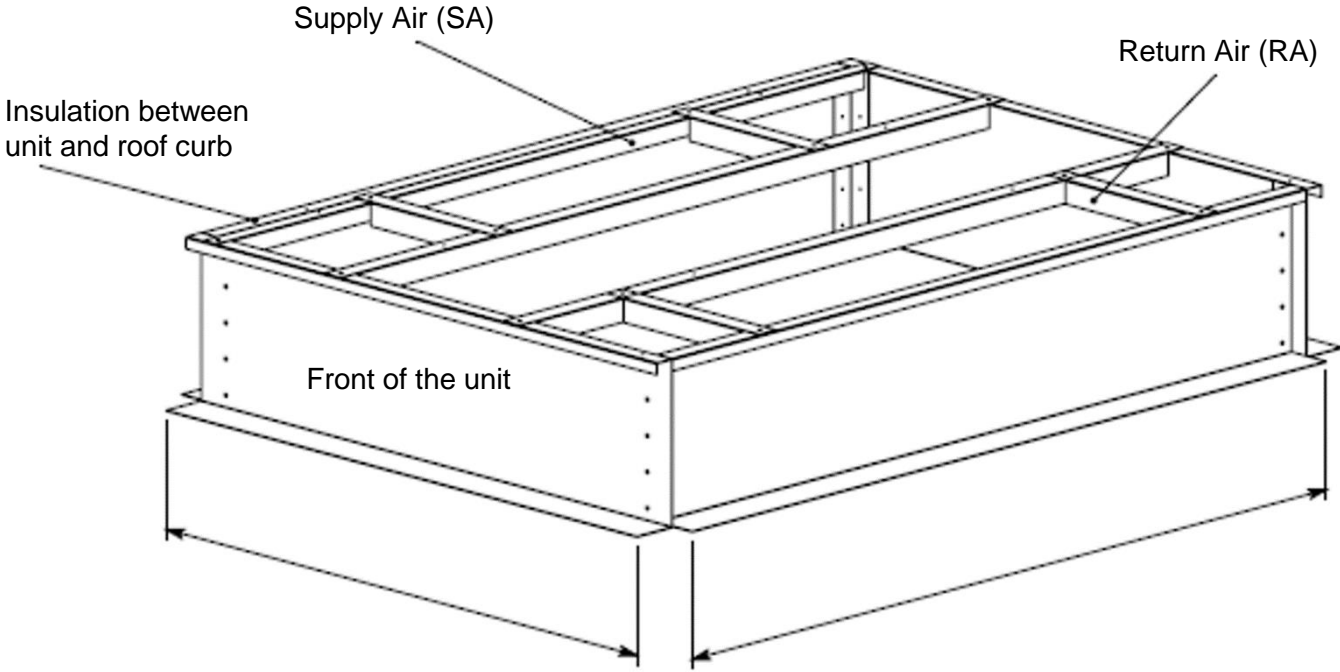
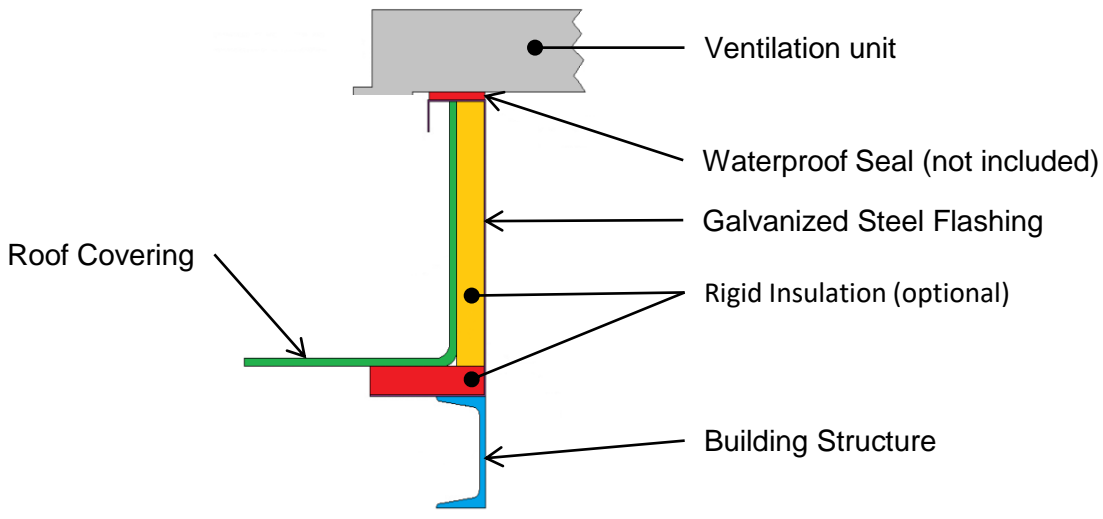
Before using a forklift to move your unit, you must follow several safety rules:

- The capacity of the forklift must exceed the weight of the unit.
- Raise the device as shown in the diagram below. This is the only method authorized by ALDES to move the unit using a forklift.
- Transportation of the unit must be executed by a qualified forklift operator.
- Ensure that the forklift skids are a minimum of 6 inches longer than the width of the unit.



### Roof curb Installation (Outdoor installation only)

Install the roof curb as indicated in the accompanying document provided.

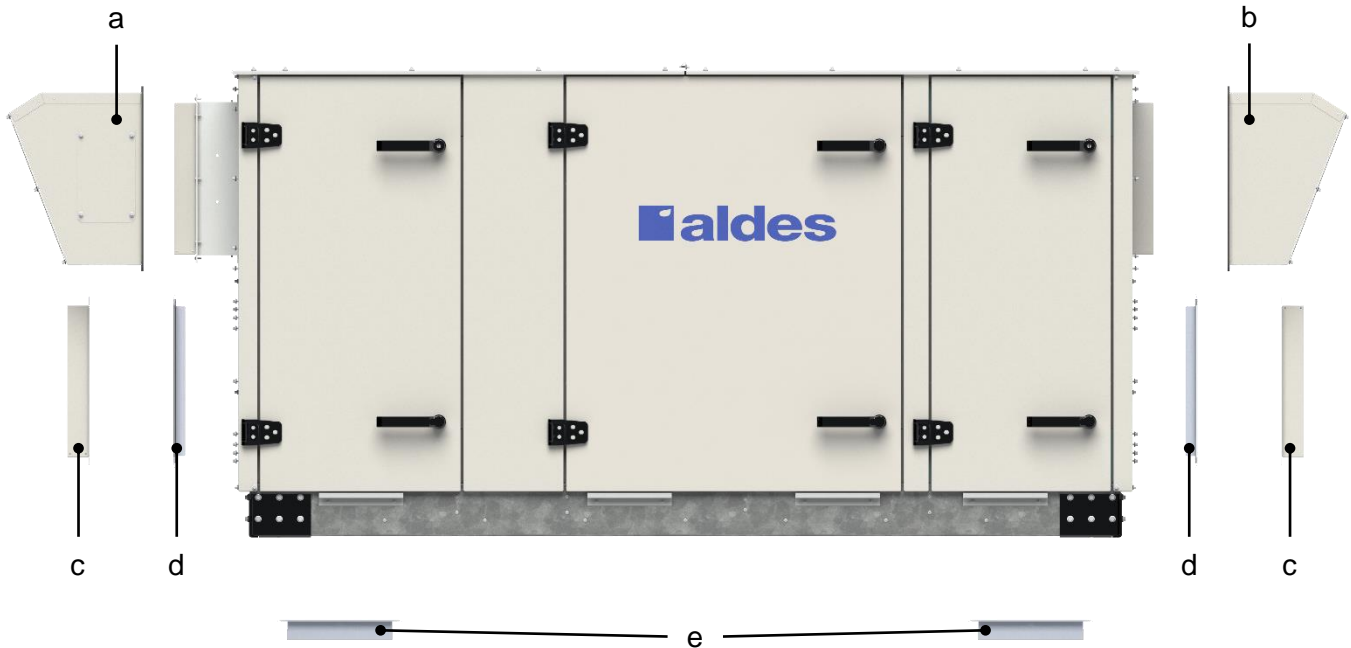


**DANGER**

This device contains high-voltage electrical components. All maintenance shall be done by a qualified technician to prevent serious injuries and possible death. Installation shall be completed in conformance with local building and safety codes.



## Horizontal indoor installation



- Install the flanges (c) on the side opening of supply and return air.
- Install the caps (e) on the bottom opening of supply and return air.
- Install the remaining screws on the hoods fixation holes.
- The hoods (a)(b) and the caps (d) will not be used in this configuration.

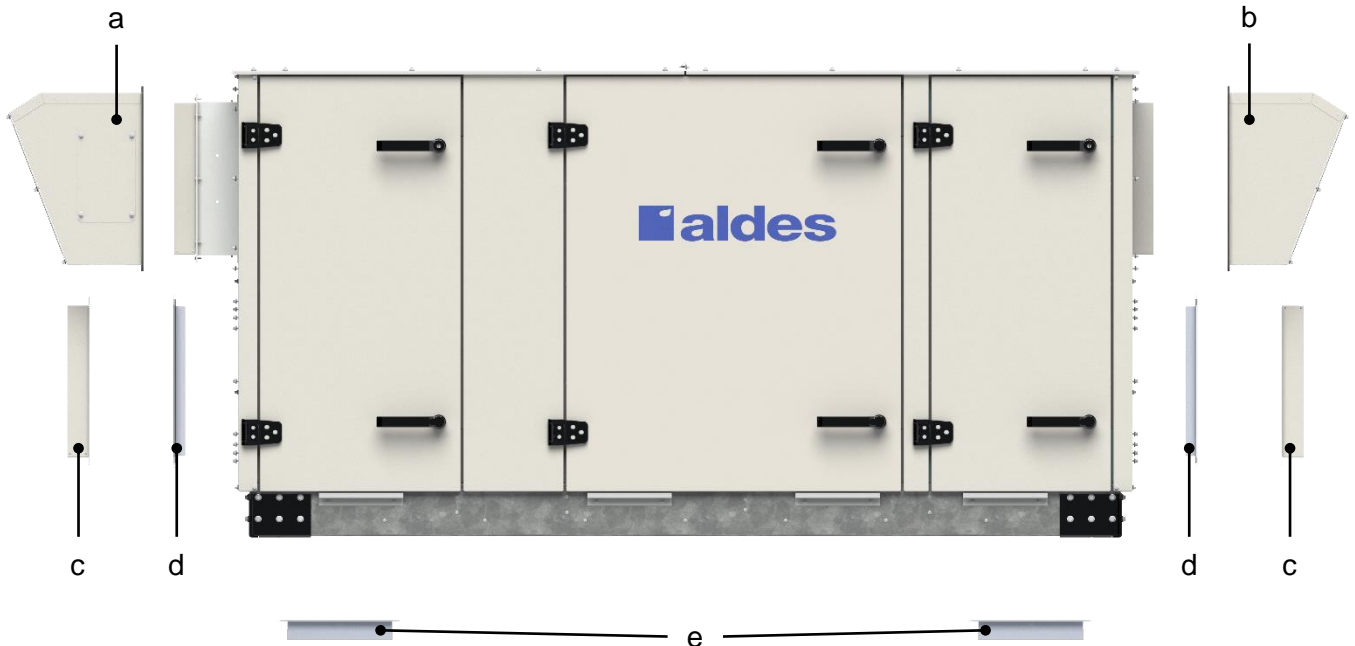


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## Vertical outdoor installation



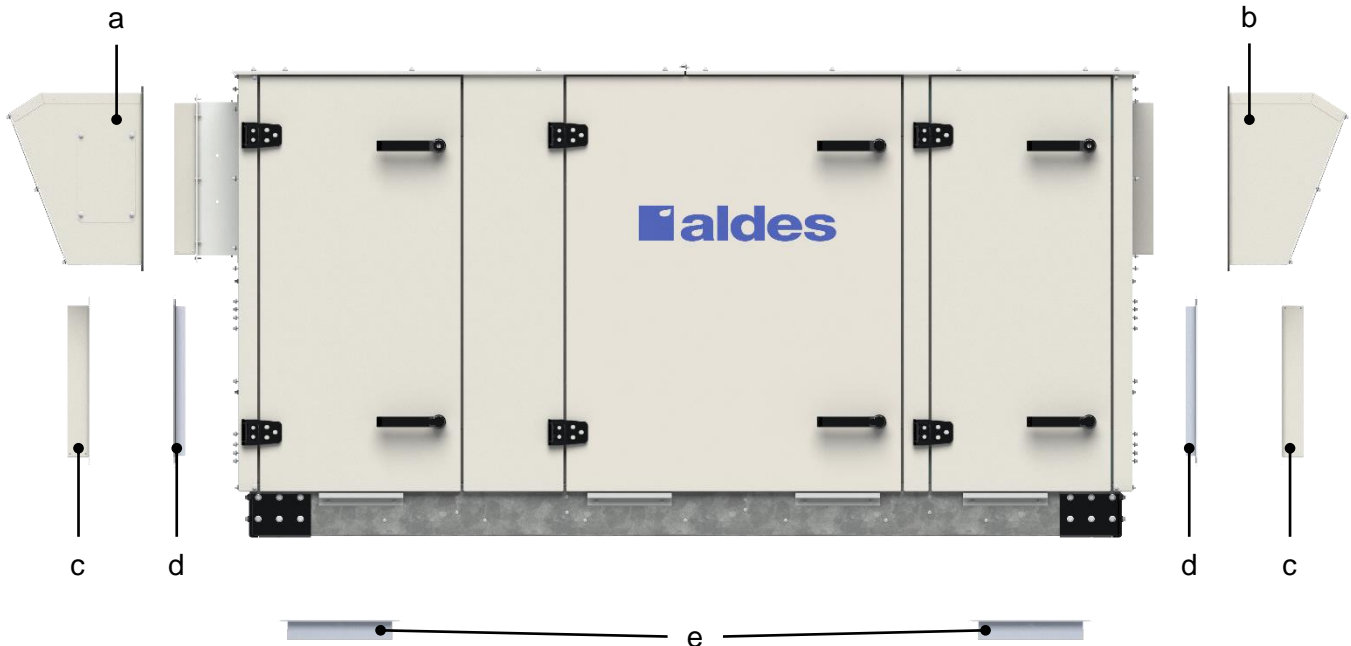
- Install the hoods (a)(b) on the openings of the outside and exhaust air.
- Install the caps (d) on the side opening of the supply and return air.
- Install the remaining screws in the holes of the bottom openings of the supply and return air.
- The caps (e) will not be used in this configuration.

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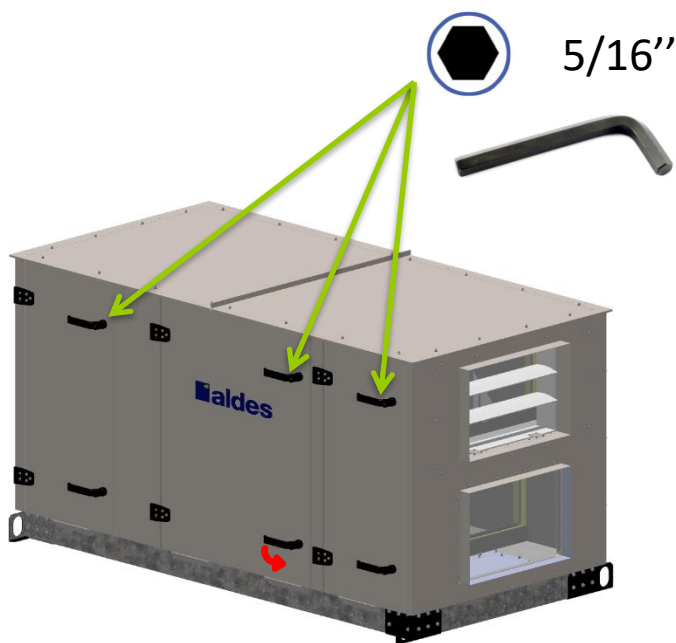
## Horizontal outdoor installation



- Install the hoods (a)(b) on the openings of the outside and exhaust air.
- Install the flanges (c) on the side opening of supply and return air.
- Install the caps (e) on the bottom opening of supply and return air.
- The caps (d) will not be used in this configuration.

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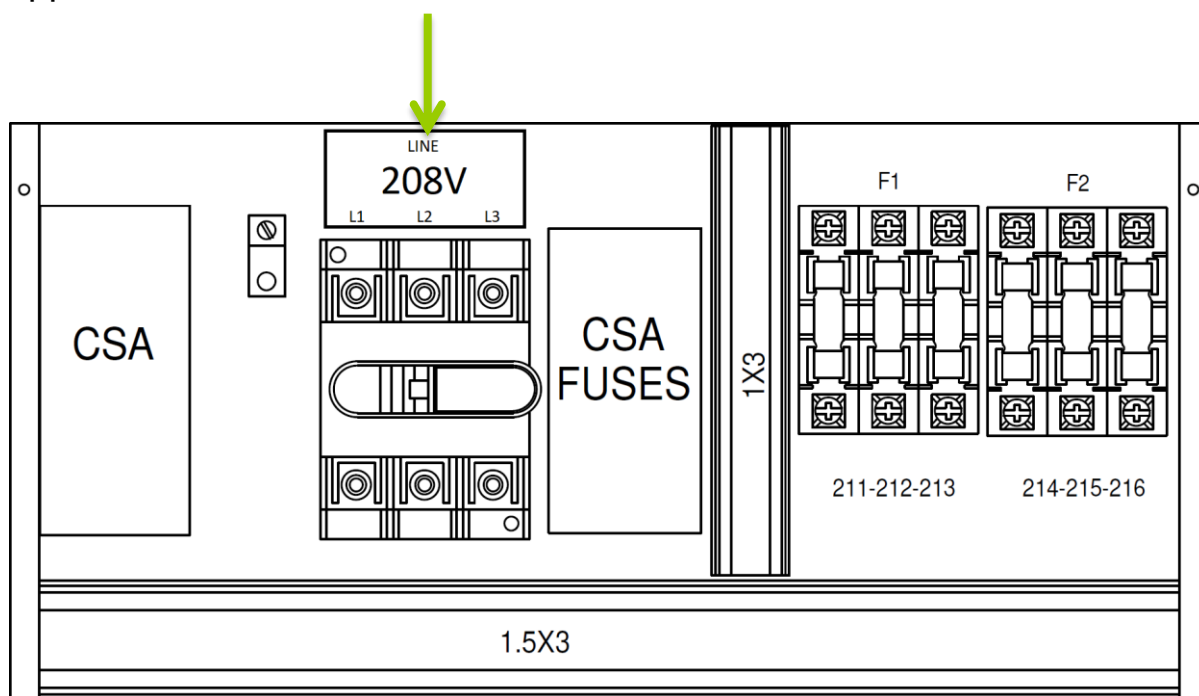
- Open the exterior panel using the handles.
- The appropriate key showed above is needed to open the panel.
- Turn the handles downward as indicated in the picture above

## DANGER

This device contains high-voltage electrical components. All maintenance shall be done by a qualified technician to prevent serious injuries and possible death. Installation shall be completed in conformance with local building and safety codes.



Connect the unit to the power grid using the disconnect switch. Such connection shall be made by a certified electrician in accordance with the applicable electrical code.



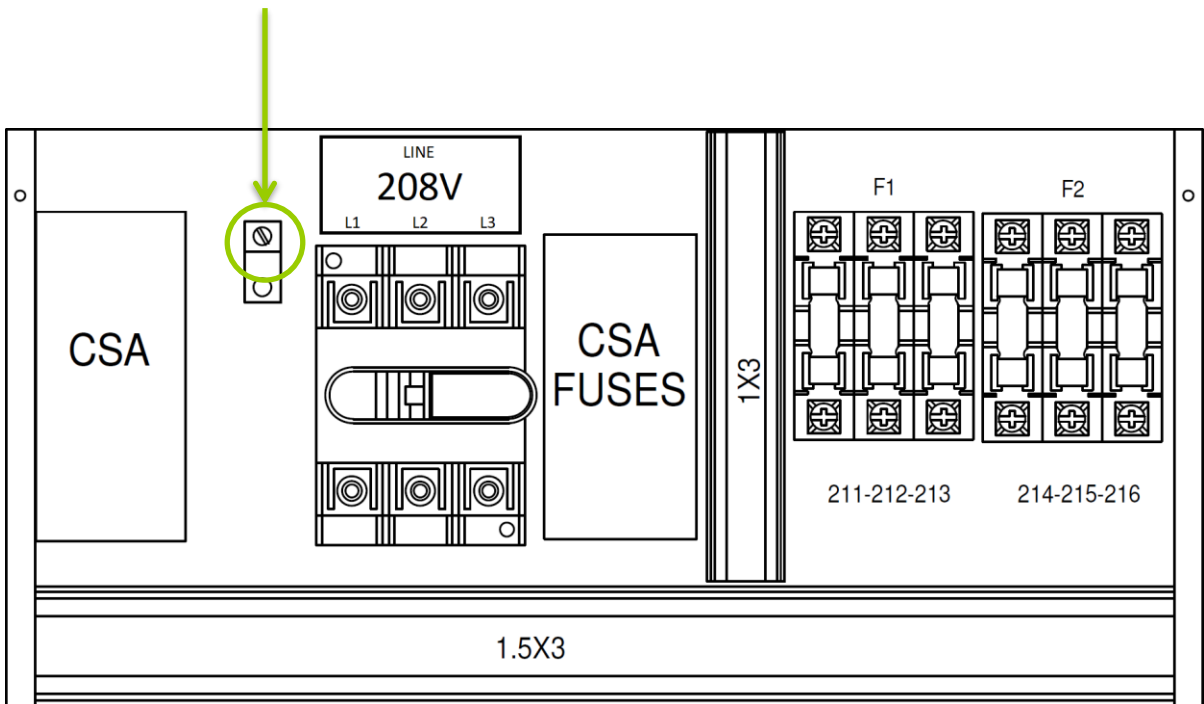
**\* Unit's specific control panel may differ. For reference only.**

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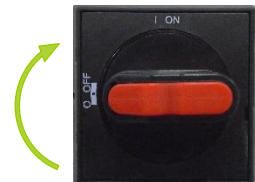
- Measure the voltage of the main circuit breaker and note the values(1 Phase or 3 Phases). Such Measurement shall be made by a certified electrician in accordance with the applicable electrical code.

- L1 – L2 : \_\_\_\_\_
- L1 – L3 : \_\_\_\_\_
- L2 – L3 : \_\_\_\_\_
- L1 – G : \_\_\_\_\_
- L2 – G : \_\_\_\_\_
- L3 – G : \_\_\_\_\_

**A maximum deviation of  $\pm 5\%$  is acceptable.**



- Use the Electrical Wiring Diagram (supplied separately) as a reference to , close the Start/stop and Occupancy control Dry contact.
- Close the main disconnect switch, the unit will start



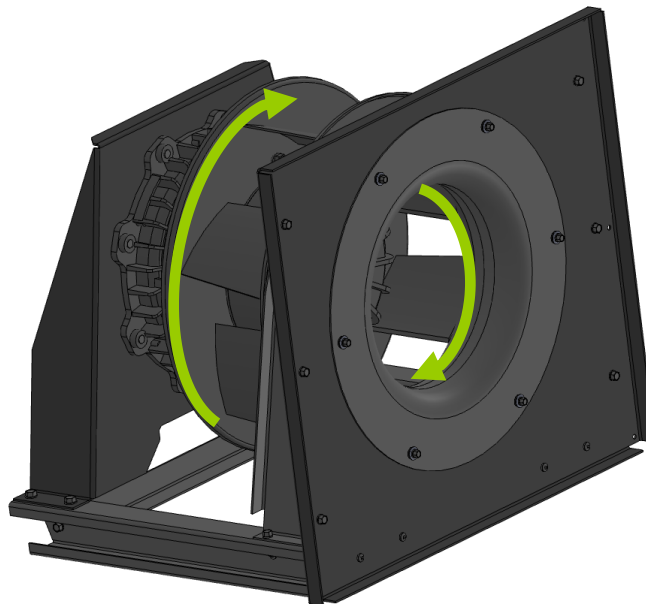
**WARNING:** from this point on, the unit is no longer electrically safe.

### DANGER

This device contains high-voltage electrical components. All maintenance shall be done by a qualified technician to prevent serious injuries and possible death. Installation shall be completed in conformance with local building and safety codes.



- Verify that the motors are rotating in the proper direction.



### DANGER

This device has moving parts. All repairs should be made by a qualified technician in order to avoid serious injury.



## RECOMMENDATION

Before turning on your new device, inspect the condition of the ventilation ducts. Clean the ducts before turning on your device. If building construction has not yet been completed, we recommend that you wait until work has been finished before starting up your device. An abnormal volume of dust in the air could clog the device filters and cause damage to the motors. Ensure that all diffusers are opened to their maximum capacity before turning on your device. It is common to notice a faint smell of burning upon the first start-up.



## CAUTION

This device should be installed and balanced by a specialized contractor in ventilation services.



## WARNING

Electrical currents remain at the capacitors for 5 minutes after circuits disconnect have been opened. The following electrical components may not be electrically safe immediately:

- Variable Frequency Drive for the blower motors.





## IMPORTANT



The following options may not be included with your device. Consult the specifications form provided with your device for more information.

### *Standard*

#### **Dirty filters contact:**

The dry contact closes, when the outside or exhaust air filter is clogged. If your unit is equipped with a display, the clogged filter message will appear.

#### **Blowers rotation detection:**

When a fault on the fan rotation is detected, the unit stops. If your unit is equipped with a display, an error message will appear.

#### **End switch on Dampers:**

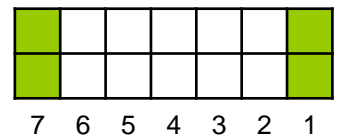
For the unit to start-up, the dampers must be completely opened.

**IMPORTANT**

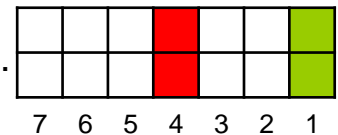
Options listed below may not be included with your device. Consult the specifications form provided with your device for more information.

**Controls options****Relay mode:**

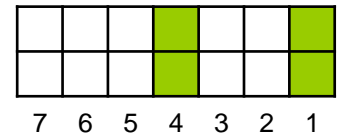
The unit can be controlled with a dry contact. The jumper should be removed to use an ALDES wall controller.

**Position of the jumpers****Fan Options****2 Speeds:**

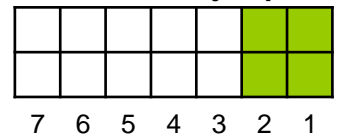
The blower is preprogrammed with 2 speeds. The unit goes into high speed using a dry contact.

**Position of the jumpers****Variable speed:**

The variable speed is controlled using a 0-10 VDC signal provided by others.

**Position of the jumpers****Reduced speed:**

The speed is reduced to  $\frac{3}{4}$  for low airflow operation.

**Position of the jumpers**

**IMPORTANT**



Options listed below may not be included with your device. Consult the specifications form provided with your device for more information.

**Defrost strategy**

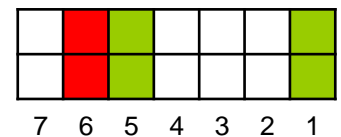
**Fan defrost cycles :**

The unit is monitoring the temperature of the outside air. If the temperature of the outside air fall below the set point, then, the supply air fan will shut down, the supply air damper will close and the unit goes into an exhaust cycle. The defrost cycle is preprogrammed in the control borad. Once the temperature goes back higher the set point, then the unit will go back to a normal exchange mode.

**Signle speed defrost:**

The fans keep the same actual speed in defrost And exchange mode.

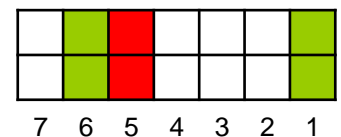
Position of the jumpers



**Extended defrost:**

The amount of defrost is extended for areas with extreme temperature level, when a normal defrost is not sufficiant.

Position of the jumpers



Fixed plate exchanger			
°C	°F	Defrost time	Exchange time
T° > -10°C	T° > 14°F	N/A	Continu
-10°C > T° > -18°C	14°F > T° > 0°F	7 min	32 min
-18°C > T° > -25°C	0°F > T° > -13°F	7 min	29.5 min
-25°C > T°	-13°F > T°	7 min	20 min

**IMPORTANT**

Options listed below may not be included with your device. Consult the specifications form provided with your device for more information.

***Components Options******Components sold separately*****MERV 13 Filters:**

Replacement of the original filters by a HE filters (MERV 13).  
Product number **607071**

**Programmable timer****Compatible BACnet controller kits:**

The unit is controlled by a compatible BACnet controller. Two (2) communication modes are available:

- MS/TP – Product number **699626**
- IP – Product number **699627**

**Remote display:**

Only with BACnet controller – Product number **608429**

## IMPORTANT



Options listed below may not be included with your device. Consult the specifications form provided with your device for more information.

### Unit Features

#### Roof curb:

14 inches in height, insulated or non-insulated, in 18-calibre galvanized steel.

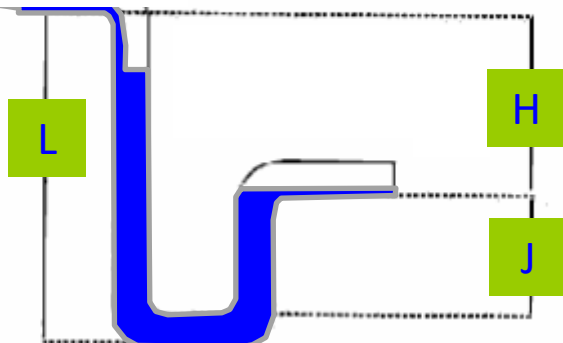
#### Piping connection for core drain pan:

Located under the unit, near the doors.

Always consult a professional plumber to connect the drain pans.

Typical installation uses a properly sized P-Trap. (For outdoor installation, the P-trap can be removed to avoid frozen condensation).

### P-trap Dimensions Negative Pression



- Use the submittal sheet as reference to calculate H, J and L
- $H = 1''$  for each 1'' of maximum negative static pressure + 1''.  $J = \text{Half of } H$ .  $L = H + J + \text{Pipe diameter} + \text{Insulation}$

## CAUTION

Always turn off electrical power before performing device maintenance. Device contains high-voltage electrical components.



### Every 3 months

- Check the condition of the filters and make replacements if necessary.
- Check the condition of ventilators and clean if needed.

### Every 12 months

- Clean the energy recovery cores with a vacuum
- Clean the inside of the unit with a vacuum cleaner.



**IMPORTANT**  
Please read the following before placing a service call

Before making a service request, please have the following information ready concerning your device:

- Device series number
- Model number

This information is necessary in order to address your problem as quickly as possible. The information is available on the specification card located on your device (see photo below).




 CAN: 1-800-262-0916  
 USA: 1-800-255-7749



**aldes** **PRONTOxx** ← Model number

VOLTS	208	PH	3	HZ	60
MCA	XX.X	MOP	XX	SCCR	5KA
Mot.1:	x.xHP		Mot.2:	x.xHP	
KW (Electr.):			Temp.:		
N° Série/Serial N°:	PRONTOxxaammiii ← Serial number				
Projet/Project:	Pronto-xx(ERV)				



CONFORME SELON UL 1995  
 CONFORMS TO UL 1995  
 CERTIFIÉ SELON CSA C22.2 NO.236  
 CERTIFIED TO CSA C22.2 NO.236  
 MADE IN CANADA - FABRIQUÉ AU CANADA

 **aldes**