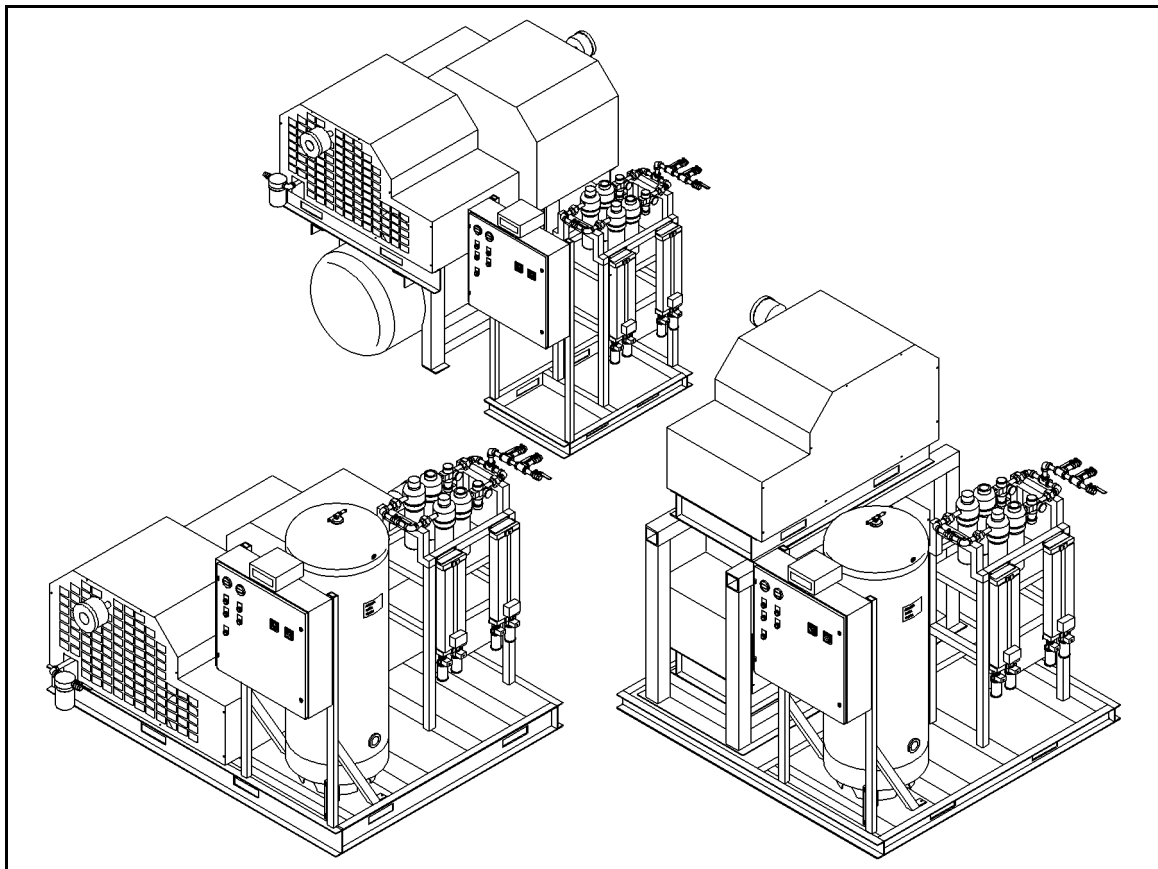


INSTALLATION INSTRUCTIONS

MedPlus® Medical Air Plant—With Desiccant Dryers (All Configurations) From Hill-Rom



Product No. P6916 Series

For Parts or Technical Assistance

Technical Support: (800) 445-3720

Customer Service: (800) 445-3730

Canada: (800) 267-2337

International: Contact your distributor.

www.hill-rom.com

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Revisions

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NOTES:

Subject: MedPlus® Medical Air Plant—With Desiccant Dryers (All Configurations) Installation Instruction Sheet

Tools required:	Allen ^{TM1} wrench set	Filter wrench
	Pipe wrench	Open end wrench set
	Socket wrench set with extension	Screwdriver
	Rubber mallet	

NOTE:

Additional tools may be required to complete the installation.



WARNING:

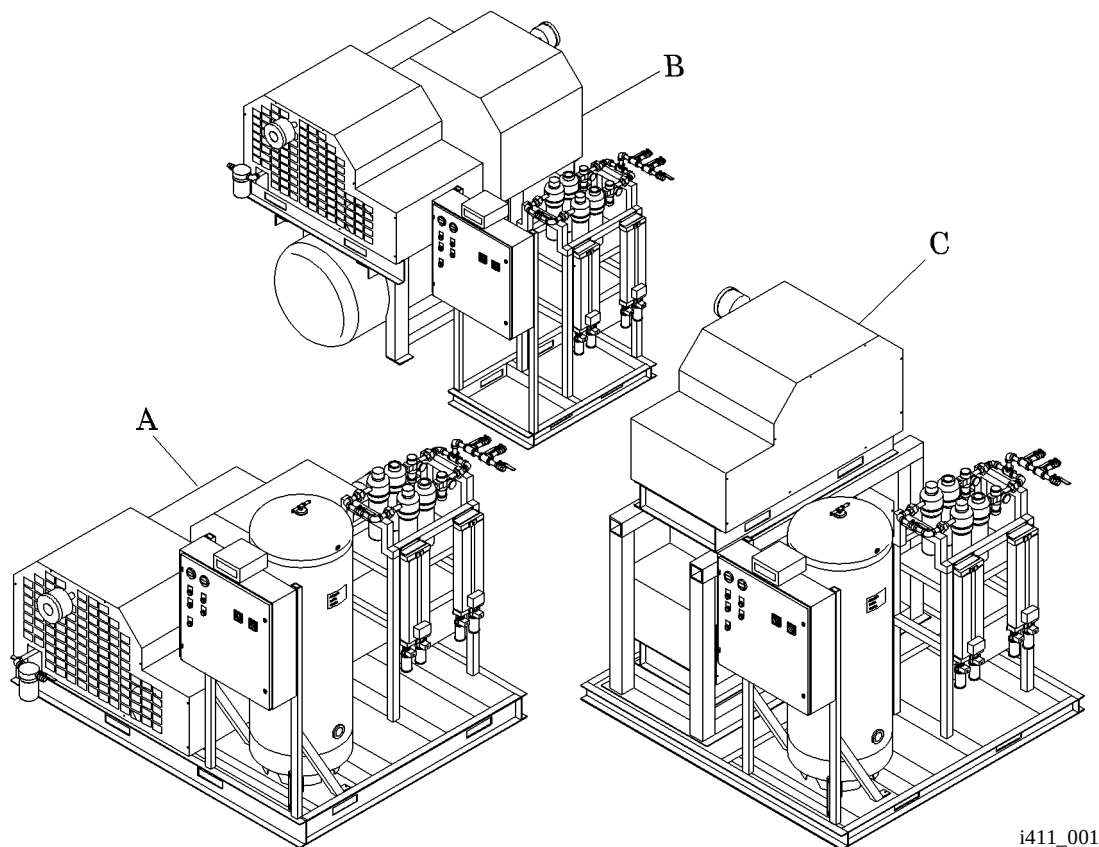
Only facility-authorized personnel should install the MedPlus® Medical Air Plant—With Desiccant Dryers. Installation performed by unauthorized personnel could result in personal injury or equipment damage.

Introduction

These installation instructions describe how to install the MedPlus® Medical Air Plant—With Desiccant Dryers (see figure 1 on page 2). It is important to carefully read and understand all of these instructions before attempting installation. For assistance concerning any aspect of the installation instructions, contact Hill-Rom Technical Support at (800) 445-3720.

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Figure 1. Configuration Identification



The MedPlus® Medical Air Plant—With Desiccant Dryers is either a completely packaged system or a sectional system, which is available in three basic configurations: base-mount (A), tank-mount (B), and stack-mount (C).

Initial Inspection

1. Inspect the outside of the shipping container for damage that may have occurred during shipping.
2. Remove the assembled unit from the shipping containers.
3. Check the packing list and accompanying paper work to ensure receipt of the complete MedPlus® Medical Air Plant—With Desiccant Dryers and all accessories ordered.

NOTE:

Accessory equipment, such as the Dewpoint/CO Monitor, may be packed in a separate box. Most systems contain the following accessories (each purchase order may differ):

- Dewpoint/CO Monitor
- Flexible connectors
- Shutoff valves
- Vibration dampeners (1-5 hp systems only)

4. Also, check the following key information:

- Unit part number
- Horsepower of the motors
- Voltage
- Electrical phase
- Overall system dimensions

5. Inspect the air plant for damage.



CAUTION:

To avoid damage during installation, do not remove the protective covers from the inlet and exhaust ports of the plant until it is ready for connection to the medical system.

6. If the air plant is to be stored prior to installation, protect it from the elements to prevent rust and deterioration of the machined surfaces.
7. Read the operator's manual and become familiar with all the operations before installing or operating the MedPlus® Medical Air Plant—With Desiccant Dryers.



WARNING:

Read and understand the *MedPlus® Medical Air Plant—With Desiccant Dryers Operator's Manual* before attempting to install the unit. Familiarize yourself with the mechanical operation of the plant. Failure to do so may result in bodily injury or damage to the unit.

Installing the Air Plant

NOTE:

Sound levels of 77 to 85 dBA are to be anticipated from the MedPlus® Medical Air Plant—With Desiccant Dryers. Although not excessive, this should be taken into consideration when locating the unit.



CAUTION:

When moving the medical air plant, be careful that it does not tilt. Tilting it may cause damage to the unit.

1. To ensure that the air plant does not tilt when moved, walk the route the unit must travel, and note key dimensions.
2. Install the air plant unit indoors in a clean, well ventilated area.
3. Allow a minimum of 4' (122 cm) clearance on all sides of the unit for cooling and for maintenance accessibility to all components.
4. Maintain an average temperature in the area of approximately 70°F (21°C).
5. Ensure that the ambient temperature does not fall below 40°F (4°C) or go above 100°F (38°C).
6. Provide adequate cross air circulation to remove heat generated by the pumps.
7. Carefully remove the air plant from the base support crating so that the frame is not bent or twisted.
8. Mount the MedPlus® Medical Air Plant—With Desiccant Dryers on a suitable, raised, concrete base supplied by the installing contractor.
9. Bolt the unit securely to the concrete base, and level it to within 1/16" (1.6 mm) of the mounting surface at all points.
10. Shim the frame as necessary to prevent bowing.

**CAUTION:**

If the MedPlus® Medical Air Plant—With Desiccant Dryers is not mounted on the ground floor, the engineer may wish to consider an inertia pad or Elasto-Rib vibration dampeners for 1-5 hp systems only. Use of spring-type mounting devices between the unit frame and mounting surface is not recommended unless included as part of the package or properly sized by an engineer. Failure to size the spring isolators properly may cause damage to the equipment.

11. After mounting the medical air plant, ensure that the frame does not overhang the mounting surface and that it is not bowed, twisted, or uneven.

Piping Connections

**WARNING:**

The air inlet must be placed in an area free of toxic or hazardous contaminants such as ETO gas exhaust vents, vacuum exhaust vents or areas close to automotive exhausts. Failure to do so could result in equipment damage.

1. Select an area that is free of toxic and hazardous contaminants, such as ETO gas exhaust vents, vacuum exhaust vents, and automotive exhausts.
2. Pre-clean pipe to be used for the air intake line according to NFPA 99.

**CAUTION:**

Pipe must be adequately sized so as not to restrict the inlet air flow. Failure to do so could result in equipment damage.

3. Select pipe size that is large enough not to restrict air flow.
4. Install the air intake line to the outside air in accordance with National Fire Protection Association (NFPA) 99.
5. Turn the pipe down, and screen it to prevent contamination.

**CAUTION:**

The intake air supply lines must be large enough that they do not restrict discharge from the air plant and they do not create an excessive pressure drop in the system. A maximum pressure drop of 3" of water (7kPa) is permitted.

6. Install the intake air supply lines to the air plant.

Electrical Installation

**WARNING:**

Disconnect all electrical power to the medical air plant before performing any electrical procedures. Failure to do so could result in personal injury.

1. Disconnect all electrical power to the air plant.
2. Before starting any installation or maintenance procedures, refer to the specific electrical wiring schematic included in the control cabinet of the air plant.
3. Do all wiring in compliance with the National Electrical Code®¹ (NEC®²) and applicable state and local codes.

NOTE:

The electrical contractor is to furnish and install wiring of the proper size and type to the pre-wired control cabinet.

NOTE:

Electrical power for the MedPlus® Medical Air Plant—With Desiccant Dryers must be supplied from the equipment system of the essential electrical distribution.

4. Before starting the electrical installation, check the motor voltage, phase, and amp ratings.
 - a. Ensure that the voltage supplied by the hospital is the same.

1. National Electrical Code® is a registered trademark of National Fire Protection Association, Inc.

2. NEC® is a registered trademark of National Fire Protection Association, Inc.

- b. Ensure the wire size should be ample enough to handle the peak motor amp load of all operating units.
- 5. Check all electrical connections on the air plant as they may have loosened during shipment.
- 6. Use a qualified electrician to make power connections to the control cabinet.
- 7. Verify that the normal electrical supply and the emergency generator system are of the same voltage and phase and that the emergency generator has the capacity to supply the medical air system.

NOTE:

Three-phase power supplied from the emergency generator(s) must match that of the normal supply to ensure the correct direction of motor rotation at all times.

- 8. Check for proper motor rotation by jogging motors and watching sheave rotation in relation to rotational arrow labels on the package. Adjust to achieve proper motor rotation.

Final Inspection



CAUTION:

Prior to putting the MedPlus® Medical Air Plant—With Desiccant Dryers into operation, you must have a Hill-Rom Service Representative start the system. Failure to do so may void the air system warranty.

Contact Hill-Rom Technical Support at (800) 445-3720 to arrange for a Service Representative to inspect and start the air plant.