## **Air Purifier**

Models DGAPAXX1625, DGAPAXX2025, DGAPAXX1620, DGAPAXX2020, DGAPAXX2420

# **Quick Start and Installation Guide**

NOTE: A qualified installer or agency is required for proper installation. This guide is for reference only and it is not intended to replace the product Installation Instructions.

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#### RECOMMENDED INSTALLATION PAIRINGS

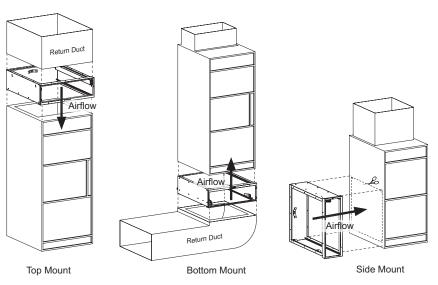
The first two models noted below are designed to be installed with furnaces, while the last three models are designed to be installed with fan coils.

Note: Air Flow Sensor Accessory Kits are available if your installation does not match these recommendations – see KIT160000, or KIT161000.

	DGAPAXX1625	DGAPAXX2025	DGAPAXX1620	DGAPAXX2020	DGAPAXX2420
Furnace	x	x			
Fan Coil			х	х	X

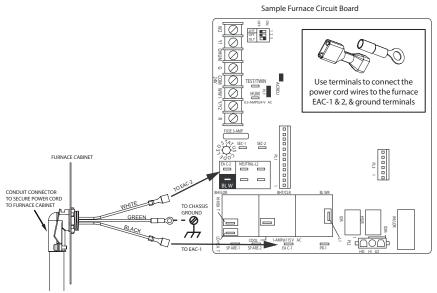
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#### **MOUNTING OPTIONS FOR AIR PURIFIERS**



There are three main mounting options for the air purifier product – top mount, bottom mount, or side mount. The location of the Air Purifier should be readily accessible. Enough room should be provided for periodic replacement of the Air Purifier cartridges.

#### WIRING CONNECTIONS FOR FURNACES



- A. Route the power conduit from the purifier to a knockout on the furnace that provides access to the EAC terminals on the furnace control board. Affix the end of the conduit to the furnace using the included conduit fitting.
- B. Attach the quick connect terminals on the wires exiting the power conduit assembly to the furnace EAC-1 and EAC-2 spade connections. Attach the ground ring terminal on the third wire to furnace chassis ground.

Note: The Air Purifier should only be powered when airflow is present.

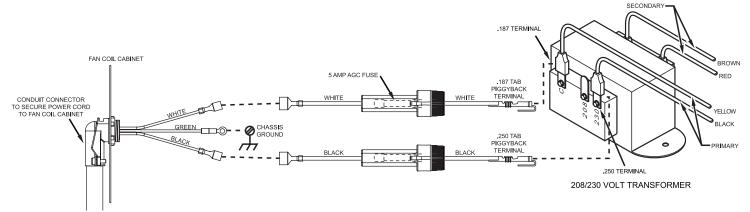
The furnace control EAC spade connections, shown in image at left, provide power only when the furnace blower is operating.

Best Practice Tip: Avoid running high voltage along side 24v wiring.



#### WIRING CONNECTIONS FOR FAN COILS

- A. Route the power conduit from the purifier to a knockout on the fan coil air handler that provides access to the incoming power wiring compartment. Affix the end of the conduit to the fan coil air handler using the included conduit fitting.
- **B.** Remove the yellow and black primary wires from the fan coil air handler transformer terminals and connect the quick connect "piggyback" terminals of the quick connect kit leads exiting the air purifier power conduit assembly to the transformer terminals. Reconnect the yellow and black primary wires to their respective transformer terminals on the "piggyback" terminals. Attach the ground ring terminal on the third wire to the fan coil air handler chassis ground.



Note: Power connections are to be made inside the fan coil wiring compartment per local electrical codes, and the two in-line fuses that are provided with the air purifier must be installed in the fan coil wiring compartment.

For Fan Coil Purifiers: Black Lead – connect to L1; White Lead – connect to L2; Green Lead – connect to Appliance Ground (Chassis).

Best Practice Tip: Avoid running high voltage along side 24v wiring.

#### **Reset Procedure**

When the rapid flashing code occurs on the green light, the controls for the high voltage need to be reset. To reset the controls, the power switch needs to be turned on and off for three cycles.

- **1.** Turn off power by depressing the power switch.
- **2.** Wait approximately two seconds before turning the power back on.
- **3.** Wait approximately two seconds before turning the power off.
- **4.** Repeat Steps 2 and 3 for two more on/off cycles.

5. After the three on/off cycles are completed, turn on power by depressing the power switch on. The rapid flashing code on the green light should no longer be displayed. If the rapid flashing code on the green light is still displayed, repeat Steps 1 through 5.

**Note:** By resetting the air purifier controls the issue with air purifier will need to be addressed by cleaning or servicing the air purifier.

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#### **ERROR AND STATUS CODES**

For the following three tables, the indicator light mentioned in the first column is the green LED on the front cover, under the power switch.

**Table 1: Operating Status Codes** 

Indicator Light Code	Explanation	Possible Cause	Recommended Action
		Normal operation when airflow is not present for models without flow sensor due to AC power to purifier being off at furnace control board (EAC terminals)	
	No incoming AC power to air purifier control electronics	ON/OFF power switch turned to OFF	Turn purifier power switch to ON position
OFF		Power to entire system is off (furnace and air purifier)	Check that the HVAC system is switched on
		Blown fuse or tripped circuit breaker for HVAC system	Replace fuse or reset circuit breaker, call for service if problem reoccurs
		Misaligned or damaged purifier door	Insure that door is undamaged and properly installed on purifier cabinet
		Damaged or disconnected incoming power wiring	Call for service
ON (continuously)	Air purifier on	Normal operation when airflow is present	
		Normal operation when airflow is not present for models with flow sensor	
		lons detected in airflow due to missing replaceable filter element	Place filter in air purifier
Flacking		Debris is covering airflow sensor (for models including an airflow sensor)	Make sure flow sensor is clean and unobstructed
Flashing (one flash every four seconds)		Flow sensor is damaged (for models including an airflow sensor)	Replace flow sensor, available as replacement kit (KIT160000)
		Flow sensor bypass assembly is damaged (for models without an airflow sensor)	Replace flow sensor bypass assembly, available as replacement kit (KIT161000)
		One or more of the three airflow sensor contact springs on purifier cabinet downstream rail are bent of damaged	Replace flow sensor contact spring assembly, included as part of the flow sensor kits (KIT160000) and flow sensor bypass kit (KIT161000)

### **ERROR AND STATUS CODES**

**Table 2: Start-Up Error Codes** 

Indicator Light Code	Explanation	Possible Cause	Recommended Action
Two flashes		No filter installed	Place filter in air purifier
		Filter installed incorrectly	Install filter in correct orientation as indicated by airflow direction arrows on cabinet and filter
		Wrong type of filter installed	Install a genuine air purifier replacement filter
	Filter ground circuit fault	Wet filter	Call service to locate and eliminate the source of water on the filter and replace the filter with a new filter
		Damaged filter contact spring on door assembly	Verify that filter contact springs mounted on door are properly contacting the aluminum contact pads on the filter and not contacting the cabinet or door back; if springs are broken or damaged replace the door assembly
Rapid flashing (five flashes per second)	LED flashes for 10 seconds when AC power is turned on indicating a previously stored error code; code will be displayed after 10 seconds; purifier will not operate until cause of error condition is rectified and purifier is reset	An error code was registered in the purifier controls prior to the purifier being turned off	The purifier controls may be reset during the 10 seconds in which the LED is flashing rapidly; see the Reset Procedure on previous page; if the problem persists, follow the actions recommended in Table 3 for the stored error code or call service

**Table 3: Operating Error Codes** 

Indicator Light Code	Explanation	Possible Cause	Recommended Action
Four flashes	lonizer/filter current imbalance	Dirty Filter Enhancement Module (FEM)	Clean/service air purifier unit
		Damaged FEM	Replace the filter enhancement modules
Five flashes	Over-current fault	Excessively dirty damaged FEM and/or filter	Clean/service air purifier unit
		Wet damaged FEM and/or filter	Call service to locate and eliminate the source of water in the air purifier, Verify that the purifier FEM and cabinet are clean and replace filter with a new filter
		Damaged filter	Replace the filter element
		Damaged FEM	Replace the filter enhancement module
		Foreign object inside air purifier	Remove foreign object from air purifier and ensure purifier is clean and undamaged
Six flashes	Arc detected	Damaged filter	Replace the filter element
		Damaged FEM	Replace the filter enhancement module
		Foreign object inside air purifier	Remove foreign object from air purifier and ensure purifier is clean and undamaged

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