AIRFLOW & ZONE CONTROLS

CAR-HP-SS-II

High-Pressure Constant Airflow Regulators for Square or Rectangular Ducting in Supply Air Applications

INSTALLATION
OPERATION
MAINTENANCE

READ AND SAVE THESE INSTRUCTIONS

PRINCIPLE OF OPERATION

The CAR-II-HP is an airflow control device that automatically responds to changes in duct pressure in order to regulate airflow at a constant rate. A damper mechanism within each CAR-II-HP controls the net free area through the device in order to maintain constant velocity and net airflow rates.

INSTALLATION

The round CAR-II-HP is designed for installation in rigid ducts, duct collars, or register boxes without the use of screws or any other mechanical fixing device. (**NOTE:** For applications where the sound generated by the airflow across the CAR-II-HP is a concern, the CAR-II-HP should be located away from the termination device.) The perimeter gasket provides a seal to grip the interior of the duct in which the unit is installed. It may be installed in vertical or horizontal ducting. When installed in horizontal ducting, the CAR-II-HP must be installed with the base downward.

The CAR-II-HP should be installed in accordance with all applicable building and mechanical codes. If installed in a metal duct or duct collar with a flexible duct connector (listed to UL 181), the CAR-II-HP must be inserted at least 0.7 times the duct diameter from the flexible duct and/or duct connector. See Figure 1.

The CAR-II-HP should always be installed so as to be accessible for inspection and removal, if necessary. To prevent potential damage and/or loss of operation, avoid the use of screws, rivets, or other mechanical fasteners in the specific area of duct where the CAR-II-HP is installed. Also protect the CAR-II-HP from construction/gypsum board duct before and after installation.

MAINTENANCE

In most cases the CAR-II-HP requires no regular maintenance. If it is installed in an exhaust duct system without filtration, it is advisable to provide a means of access for inspection and cleaning. If cleaning is required, remove and clean with warm soapy water, dry, and reinstall in the duct.

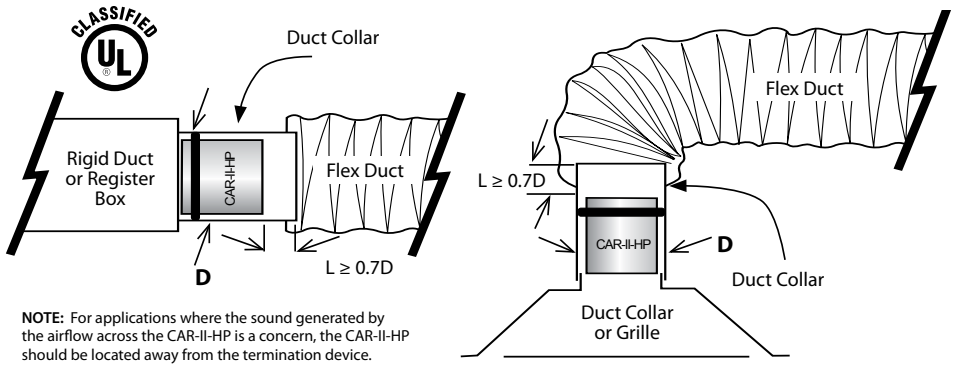
ADJUSTMENT OF AIRFLOWS

The CAR-II-HP is provided with factory-preset airflows. If it is necessary to make adjustment to the calibrated airflow value, contact the factory for assistance.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLTUION
AIRFLOW TOO LOW	Insufficient duct pressure	Check fan ratings. Replace fan if too small.
		Increase fan speed
	Excessive duct air leakage	Seal ducts with mastic or tape
	Incorrect CAR-II-HP installed	Check CFM calibration on CAR-II-HP label. Replace with proper CAR-II-HP.
	CAR-II-HP damper not functioning properly	Check CAR-II-HP for damage and replace.
AIRFLOW TOO HIGH AND/ OR NOISY OPERATION	CAR-II-HP too close to fan	Add manual damper to reduce pressure across CAR-II-HP to normal operating range.
	Fan at too high a speed	Lower fan speed.
	Incorrect CAR-II-HP installed	Check CFM calibration on CAR-II-HP label. Replace with proper CAR-II-HP.
	CAR-II-HP damper not functioning properly	Check CAR-II-HP for damage and replace.
NOISY OPERATION	CAR-II-HP too close to termination device	Relocate CAR-II-HP away from termination device.

FIGURE 1



NOTE: For applications where the sound generated by the airflow across the CAR-II-HP is a concern, the CAR-II-HP should be located away from the termination device.

WARRANTY

American ALDES Ventilation Corporation warrants the CAR-II-HP to be free from manufacturing defects and guarantees the performance within specified limits for a period of five (5) years when installed in normal environmental air systems for general residential and commercial heating, ventilating and air conditioning. This warranty does not include installation in industrial applications or caustic, noxious, or otherwise hazardous air-handling equipment. This warranty is limited to replacement of the product only and does not extend to consequential claims.

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