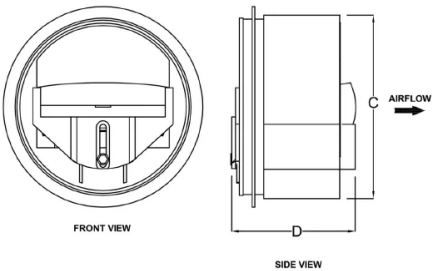
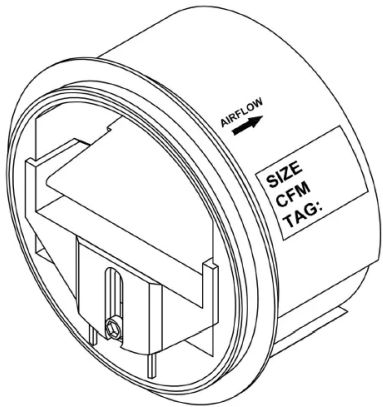


Application and Design

eFlow-CAR is a factory set Constant Airflow Regulator designed to save a significant amount of energy by precisely controlling airflow into and out of space regardless of static pressure, while providing High Indoor Quality (IAQ). eFlow-CAR is composed of fire-resistant UL 94V-0 ABS plastic. eFlow-CAR is UL 2043 safety Classified (File No.R38307).

It contains a self-regulated aero-wing and spring piston design to maintain a factory preset airflow. These CARs are designed to operate in pressure range Low Pressure (0.08"-0.4" w.c.), Standard Pressure (0.2"-1" w.c.) and High Pressure (0.6"-2.4" w.c.). They automatically adjust for variable duct pressures caused by building pressure, thermal stack effect, dust buildup and other variable factors.

This Constant Airflow Regulator creates cost effective answers to balancing air systems for HVAC and ventilation in high rise buildings, without the requirement for on-site balancing, electrical/pneumatic controls or sensors under normal conditions. eFlow-CARs require no maintenance under normal conditions. eFlow-CARs may contribute to meeting USGBC LEED Building and Passive House Certification.



Standard Construction

- UL 2043 safety Classified (File No.R38307)
- Composed of fire-resistant UL 94V-0 ABS plastic
- Filed Adjustable CFM set-point
- No Electricity Required
- Soft Pliable Edge Gasket ensures a tight, no-air leakage fit
- Bi-Directional

DAMPER (NOMINAL)	C	D
<input type="checkbox"/> 3"	3.0"	2"
<input type="checkbox"/> 4"	3.8"	2 ¼"
<input type="checkbox"/> 5"	4.8"	3 ¼"
<input type="checkbox"/> 6"	5.8"	3 ⅝"
<input type="checkbox"/> 8"	7.8"	3 ¾"
<input type="checkbox"/> 10"	9.8"	4 ⅞"

****Size in inches**

☐

Low Pressure Range of Operating Static Pressure	
Minimum	.08" w.c.
Maximum	0.4" w.c.

☐

Standard Pressure Range of Operating Static Pressure	
Minimum	0.2" w.c.
Maximum	1.0" w.c.

☐

High Pressure Range of Operating Static Pressure	
Minimum	0.6" w.c.
Maximum	2.4" w.c.

Job Name:

Location:

Architect:

Engineer:

Contractor:

Application

☐ Supply
 ☐ Exhaust

eFlow-Constant Airflow Regulator CFM Range

AVAILABLE IN STANDARD PRESSURE (0.2" W.C.-1.0" W.C.)						
	CAR DIAMETER					
eFlow-CAR	3"	4"	5"	6"	8"	10"
CFM Range	10-30 CFM	10-30 CFM	10-30 CFM	10-30 CFM	10-30 CFM	10-30 CFM
CFM Range		30-60 CFM	30-60 CFM	30-60 CFM	30-60 CFM	30-60 CFM
CFM Range			60-105 CFM	60-105 CFM	60-105 CFM	60-105 CFM
CFM Range				105-175 CFM	105-175 CFM	105-175 CFM
CFM Range					175-295 CFM	175-295 CFM
CFM Range						265-470 CFM
**blue highlighted CFM Range = standard			*yellow highlighted CFM Range = can be accommodated by special order			

SPECIAL CONFIGURATION AVAILABLE IN HIGH PRESSURE (0.6" W.C.-2.4" W.C.)						
	CAR DIAMETER					
eFlow-CAR	3"	4"	5"	6"	8"	10"
CFM Range	15-53 CFM	15-53 CFM	15-53 CFM	15-53 CFM	15-53 CFM	15-53 CFM
CFM Range		53-100 CFM	53-100 CFM	53-100 CFM	53-100 CFM	53-100 CFM
CFM Range			105-176 CFM	105-176 CFM	105-176 CFM	105-176 CFM
CFM Range				176-295 CFM	176-295 CFM	176-295 CFM
CFM Range					295-500 CFM	295-500 CFM
CFM Range						500-765 CFM
**blue highlighted CFM Range = standard			*yellow highlighted CFM Range = can be accommodated by special order			

SPECIAL CONFIGURATION AVAILABLE IN LOW PRESSURE (0.08" W.C.- 0.4" W.C.)						
	CAR DIAMETER					
eFlow-CAR	3"	4"	5"	6"	8"	10"
CFM Range	5-18 CFM	5-18 CFM	5-18 CFM	5-18 CFM	5-18 CFM	5-18 CFM
CFM Range		18-35 CFM	18-35 CFM	18-35 CFM	18-35 CFM	18-35 CFM
CFM Range			35-70 CFM	35-70 CFM	35-70 CFM	35-70 CFM
**blue highlighted CFM Range = standard			*yellow highlighted CFM Range = can be accommodated by special order			

Job Name:

Location:

Architect:

Engineer:

Contractor:

How To Specify eFlow-CAR

STEP 1: Reference the model code bellow and performance details within specifications sheet to select the appropriate CAR.

STEP 2: Select Round Duct Size.

STEP 3: Determine the required Pressure Range based on the static pressure of the system at the installed CAR location.

STEP 4: Select Airflow (CFM) Range.

Model Code Example

CAR-R4-SP-A

PARENT MODEL

Constant Airflow
Regulator

ROUND DUCT SIZE

R3: 3"
R4: 4"
R5: 5"
R6: 6"
R8: 8"
R10: 10"

PRESSURE RANGE

SP: Standard Pressure (0.2"-1" w.c.)
LP: Low Pressure (0.08"-0.4" w.c.)
HP: High Pressure (0.6"-2.4" w.c.)

CFM RANGE

Available in Standard
Pressure

A: 10-30 CFM
B: 30-60 CFM
C: 60-105 CFM
D: 105-175 CFM
E: 175-295 CFM
F: 265-470 CFM

Available in Low
Pressure

A: 5-18 CFM
B: 18-35 CFM
C: 35-70 CFM

Available in High
Pressure

A: 15-53 CFM
B: 53-100 CFM
C: 105-176 CFM
D: 176-295 CFM
E: 295-500 CFM
F: 500-765 CFM

Maintenance

The CAR requires no maintenance when used in normal conditions. If the device is installed in an exhaust application without a filter, maintaining access for future cleaning and inspection is recommended. To clean the CAR, remove the grille, then remove the CAR, wash it with soap and warm water, dry the CAR, and reinstall the product.

Warranty

Guaranteed for 7 years, from date of shipment, against all defects in material or workmanship, provided that the material has been installed and used under normal conditions. This warranty is limited to the repair or replacement of the material. This warranty is not transferable and is limited to the original end user.

Application

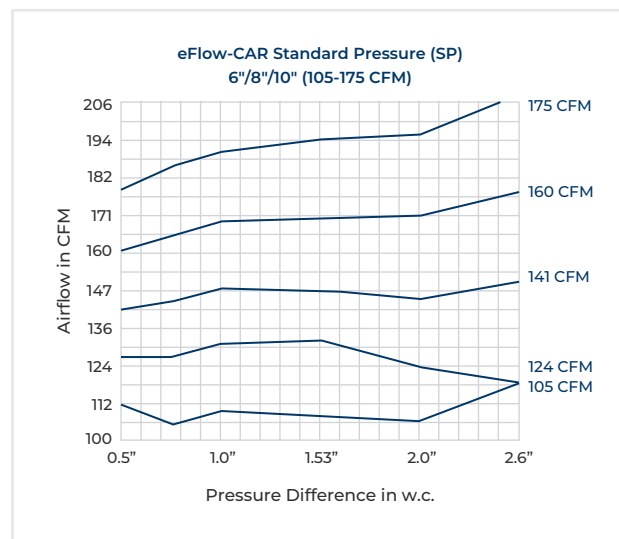
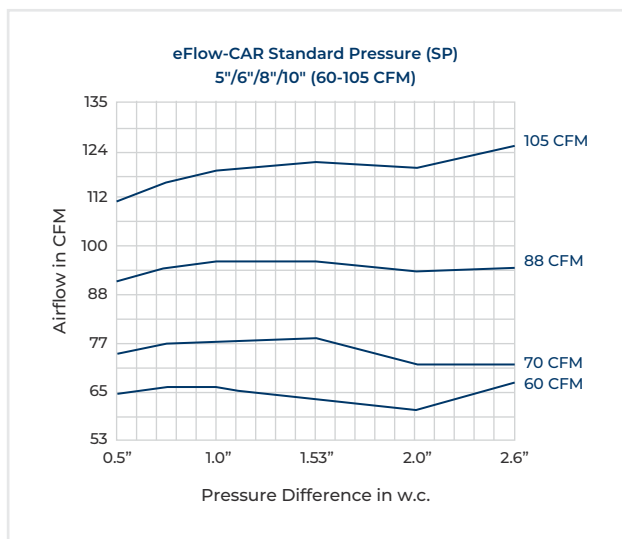
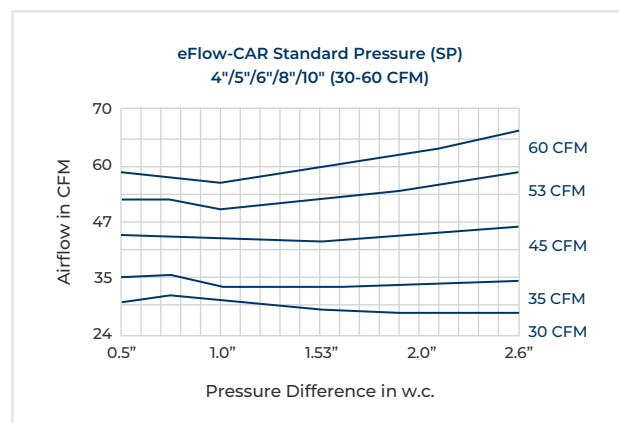
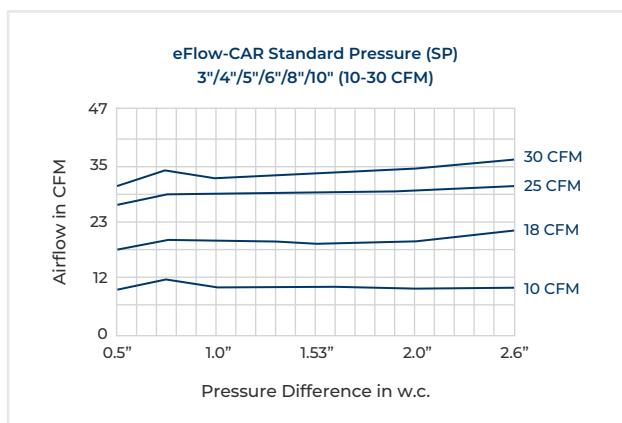
- Automatically balance of round duct
- Sized to fit inside standard rigid round ducting
- Automatically balance exhaust and supply airflow
- Automatically balance bathroom and kitchen exhaust
- Automatically balance airflow supply from roof-top A/C units
- Automatically balance supply and exhaust of heat recovery ventilation systems
- Mitigating stack effect
- Promote energy savings
- Promote high indoor air quality
- Ideal for energy efficiency programs, high-rises, hospitality/hotels, multi-family, affordable housing, healthcare, assisted living facilities, dormitories and school buildings, commercial buildings, government facilities

The performance charts reflect airflow measurements taken at 68-degree F (20 degree C) at 1 atmosphere pressure. eFlow-CAR is designed for system pressure between 0.2" w.c.-1.0" w.c. The charts show the approximate constant volume air flow through the CAR at a given pressure differential. As shown if the pressure across the CAR falls below 0.2 w.c. (50 Pa)

then the airflow volume will be reduced. Likewise, if the pressure across the CAR increases to over 1" w.c. (250 Pa), then the airflow volume will be increased. Please note that these CARs are factory set to the specific airflow. They can be field modified to desired airflow with the help of a standard screwdriver. The graphs shown are averages and can vary by 5%.

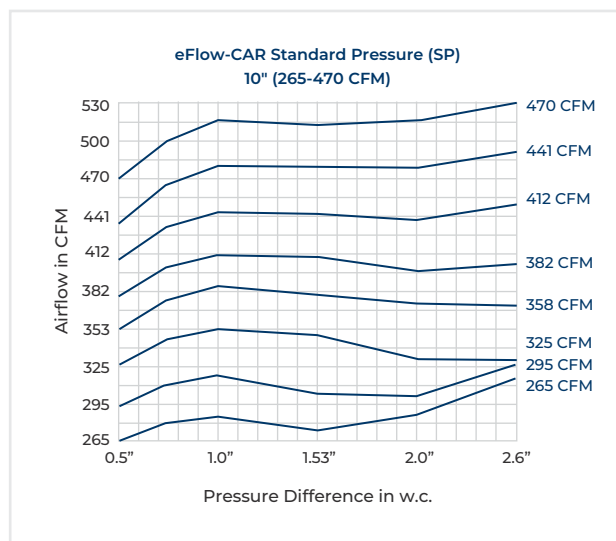
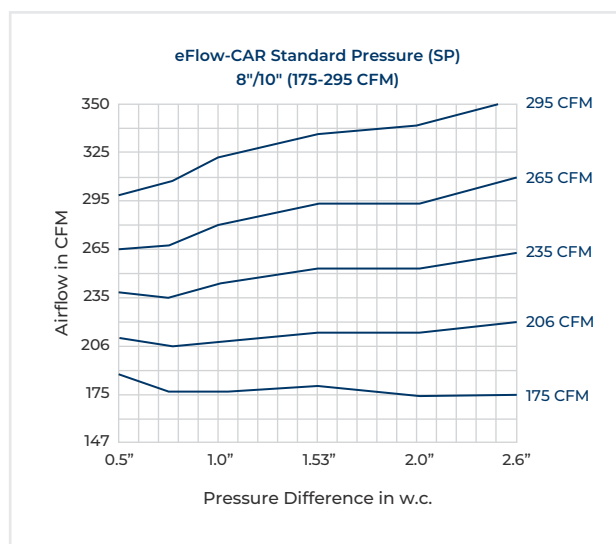
Standard Pressure eFlow-CAR Performance Curves

Volume (cfm) vs Static Pressure



Standard Pressure eFlow-CAR Performance Curves

Volume (cfm) vs Static Pressure



Job Name: _____

Location: _____

Architect: _____

Engineer: _____

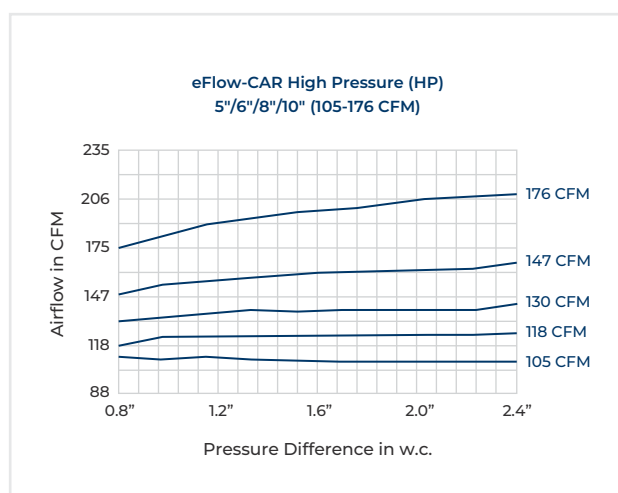
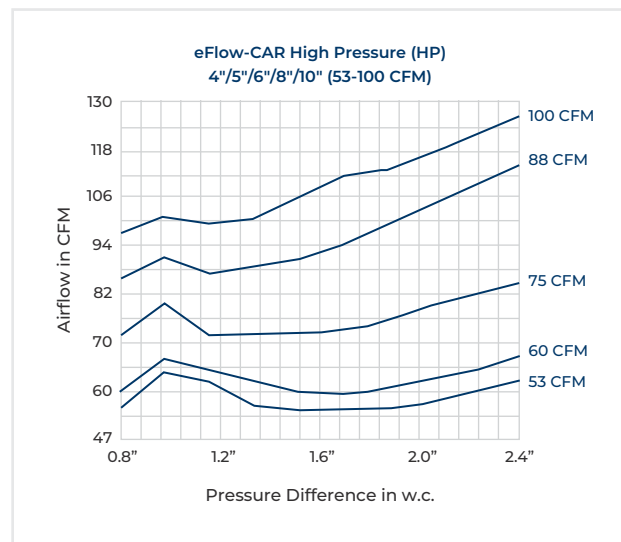
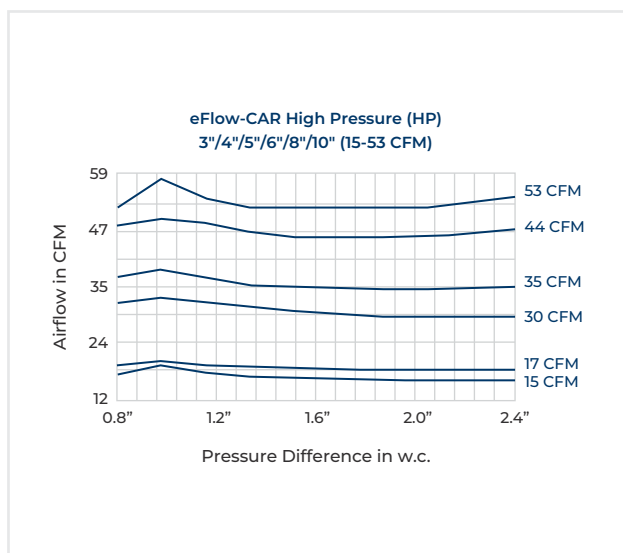
Contractor: _____

The performance charts reflect airflow measurements taken at 68-degree F (20 degree C) at 1 atmosphere pressure. eFlow-CAR is designed for system pressure between 0.6" w.c.- 2.4" w.c. The charts show the approximate constant volume air flow through the CAR at a given pressure differential. As shown if the pressure across the CAR falls below 0.6 w.c. (150 Pa) then the

airflow volume will be reduced. Likewise, if the pressure across the CAR increases to over 2.4" w.c. (600 Pa), then the airflow volume will be increased. Please note that these CARs are factory set to the specific airflow. They can be field modified to desired airflow with the help of a standard screwdriver. The graphs shown are averages and can vary by 5%.

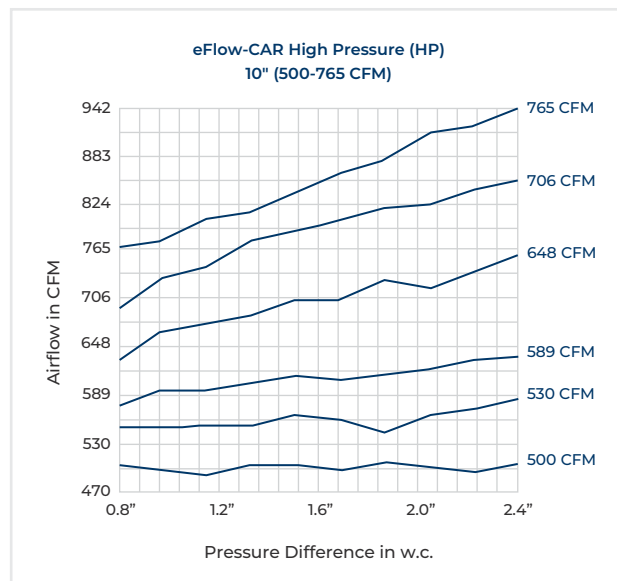
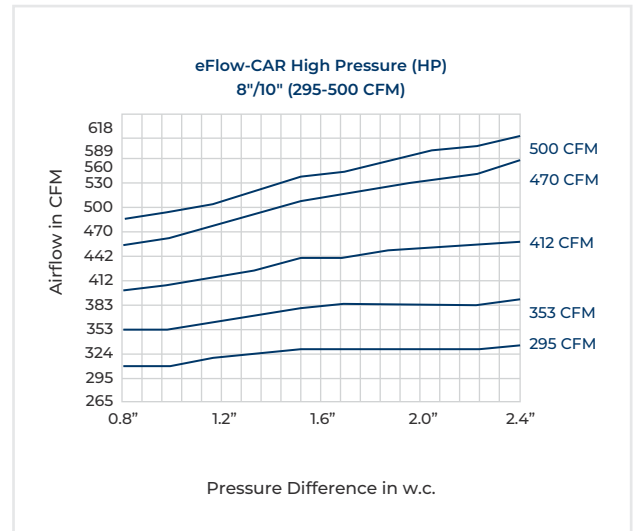
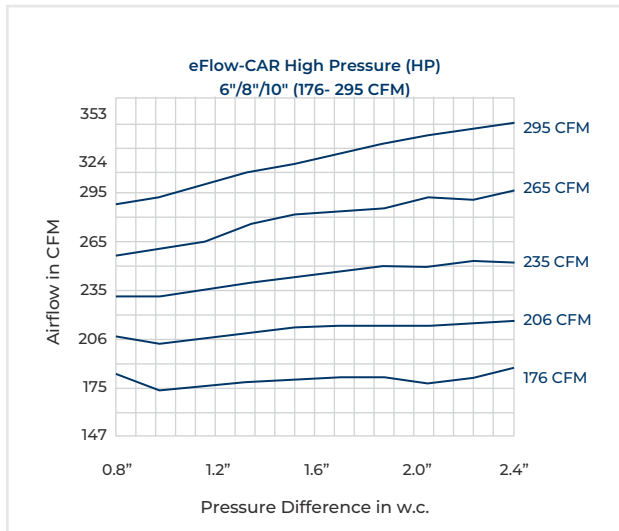
High Pressure eFlow-CAR Performance Curves

Volume (cfm) vs Static Pressure



High Pressure eFlow-CAR Performance Curves

Volume (cfm) vs Static Pressure



Job Name: _____

Location: _____

Architect: _____

Engineer: _____

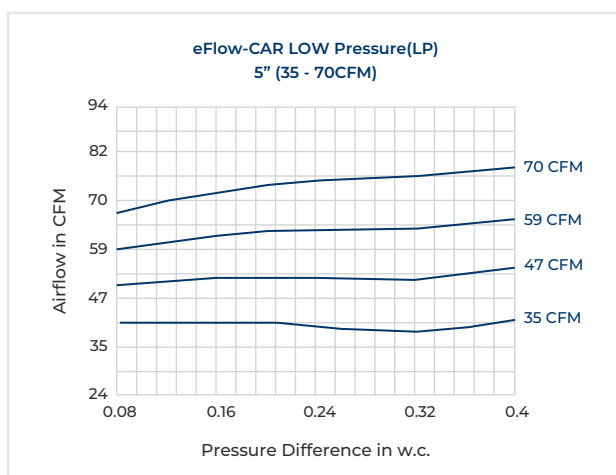
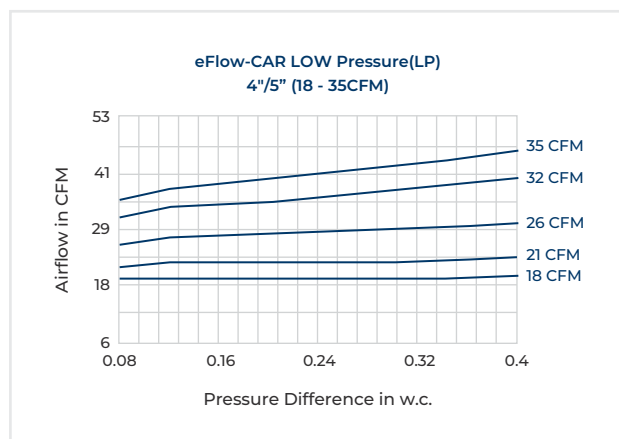
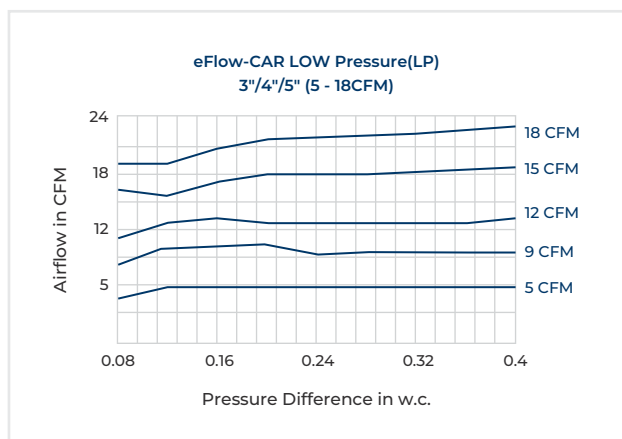
Contractor: _____

The performance charts reflect airflow measurements taken at 68-degree F (20 degree C) at 1 atmosphere pressure. eFlow-CAR is designed for system pressure between 0.08" w.c.-0.4" w.c. The charts show the approximate constant volume air flow through the CAR at a given pressure differential. As shown if the pressure across the CAR falls below 0.08 w.c. (20 Pa) then the airflow volume will be reduced. Likewise, if

the pressure across the CAR increases to over 0.4" w.c. (100 Pa), then the airflow volume will be increased. Please note that these CARs are factory set to the specific airflow. They can be field modified to desired airflow with the help of a standard screwdriver. The graphs shown are averages and can vary by 5%.

Low Pressure eFlow-CAR Performance Curves

Volume (cfm) vs Static Pressure



Job Name:

Location:

Architect:

Engineer:

Contractor: