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Date: 4/21/2022

Return Request: 4/30/2022

Project: JLM VA – Medical Media Relocation

Supplier: A/C Specialties

Manufacturer: Price

Submittal: Air Terminal Units

Submittal Number: 23 36 00-01

Drawing # and Installation: Mechanical Drawings

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MECHANICAL SUBCONTRACTOR

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Notes:

--

CSUSA PROJECT NO.

22-184

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Department of Veterans Affairs
Central Arkansas Veterans Health Care System

- ☐ Reviewed
- ☒ No Exceptions Taken
- ☐ Furnish as Corrected
- ☐ Revise and Resubmit
- ☐ Rejected

By: Rick Sellers

Submittal Comment Sheet

Project Name: Renovate Medical Media

Project Number:19-030

Date Received:6/2/2022

Date Returned:6/15/2022

Reviewed By: KCK

Comments for 23 36 00 – HVAC Air Terminal Units and Outlets:

1. Air Terminal Units

a. Approved

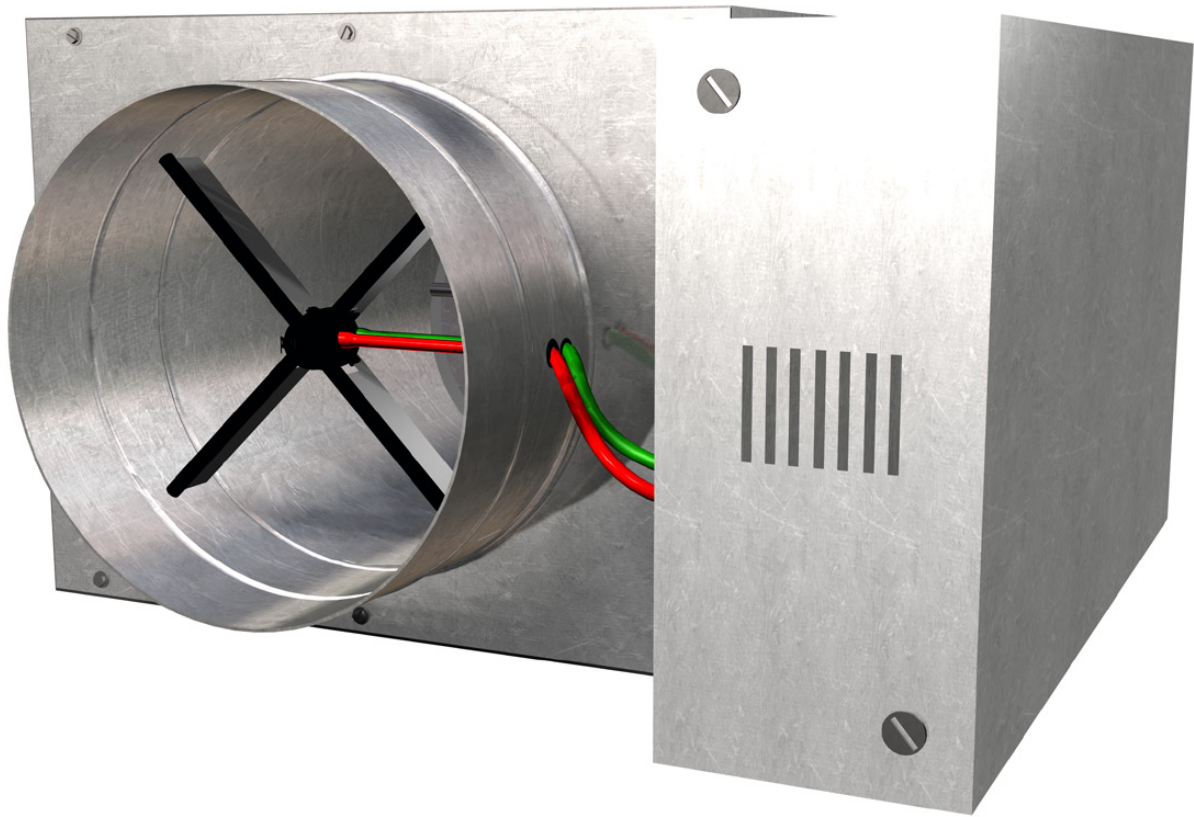
2. Air Outlets and Inlets

a. Approved

End of Comments

THE CONSULTANTS OF RECORD FOR THIS PROJECT HAVE REVIEWED THESE SHOP DRAWINGS. THE CONSULTANTS' COMMENTS AND REVIEW STAMP ARE APPLICABLE FOR THEIR PORTION OF THE WORK. THE REVIEW AND CHECKING OF THE REFERENCED SUBMITTED DOCUMENTS IS FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. REVIEW IS NOT CONDUCTED FOR THE PURPOSE OF DETERMINING THE ACCURACY AND COMPLETENESS OF OTHER DETAILS, SUCH AS DIMENSIONS AND QUANTITIES, FOR SUBSTANTIATING INSTRUCTIONS FOR INSTALLATION OR PERFORMANCE OF EQUIPMENT OR SYSTEMS, OR FOR COORDINATION OF THE WORK OF ALL TRADES, ALL OF WHICH REMAIN THE RESPONSIBILITY OF THE CONTRACTOR AS REQUIRED BY THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR ALL QUANTITIES.





MANUAL – INSTALLATION

Single Duct Variable Volume Control Assemblies - Direct Digital Controls

SDV5 Series

v200 – Issue Date: 01/05/17

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PRICE[®]

SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

TABLE OF CONTENTS

Product Overview

- General 1
- Receiving Inspection 1
- Wiring 1

Installation Instructions

- Installing the SDV5 Terminal Unit 2
- Air Volume Ranges 2
- SP300 Calibration Curves 3

Maintenance

- SP300 Removable Sensor Maintenance Instructions..... 4
- Replacement Parts..... 5

SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

PRODUCT OVERVIEW

General

The SDV5 assembly is designed to accept Direct Digital Controls (DDC) for VAV pressure independent operation.

The terminal unit controls are supplied by the controls contractor and either factory or field mounted and wired.

For information concerning controls, components, sequence of operation, etc., please refer to the documentation provided by the controls contractor.

Receiving Inspection

After unpacking the assembly, check it for shipping damage. If any shipping damage is found, report it immediately to the delivering carrier. During unpacking and installation do not handle by the inlet velocity sensor, damper shaft, or tubing. Damage may result.

Wiring

If controls have been factory mounted, a wiring diagram will be included with the unit indicating the factory mounted components. For field wiring of room sensors and other accessories, refer to the controls contractor's documentation. If the controls have been field mounted, refer to the controls contractor's documentation for all wiring information.

Damper rotation is always clockwise to the open position. An identification mark on the end of the shaft indicates the damper position.

The factory supplied sensing lines are color coded. Red indicates the total pressure or "HI" line which should be located on the upstream side. Green indicates the static pressure or "LO" line which should be located on the downstream side.

An optional protective enclosure may be provided to house the terminal unit control components. The enclosure cover is removable with two sheet metal screws.

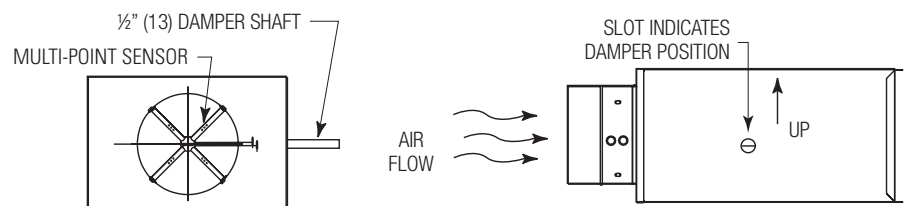
The velocity sensor is normally supplied as standard with the terminal unit. However, in some cases a flow sensing device supplied by the controls contractor may be factory or field mounted. Refer to the submittal drawing for illustration.

The air volume ranges listed are recommended for optimum performance. A minimum value of zero is also acceptable if no heating coils are attached.

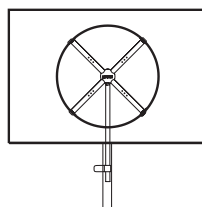
Selection of air flow limits below the listed values is not recommended. Stability and accuracy may not be acceptable at lower than recommended air flow limits. The actual performance will vary depending on the terminal unit controls supplied.

SDV5 ▼

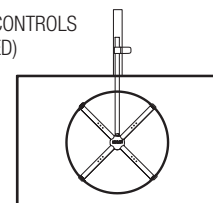
STANDARD CONFIGURATION (CONTROLS SIDE MOUNTED)



CB OPTION (CONTROLS BOTTOM MOUNTED)



CT OPTION (CONTROLS TOP MOUNTED)



SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

INSTALLATION INSTRUCTIONS

Installing the SDV5 Terminal Unit

The basic SDV5 is light enough that it can be supported by the ductwork in which it is installed. Where accessory modules, such as coils, attenuators or multiple outlets are included, the assembly should be supported directly. Use the support method prescribed for the rectangular duct in the job specifications.

NOTE: For optimum performance there should be a minimum of three duct diameters of straight inlet duct, **same size as the inlet**, between the inlet and any transition, take off or fitting.

The assembly should be mounted right side up. It should be level within ± 10 degrees of horizontal, both parallel to the air flow and at right angles to the air flow. The side of the assembly is labelled with an arrow indicating UP. Do not mount the control side of the assembly tight to a wall, pipe or other obstruction. Allow sufficient room for access to the controls.

NOTE: If CB (controls bottom mounted) option is chosen, then the housing is to be installed as noted above with exception of the damper shaft being oriented to the bottom of the housing. If the CT (controls top mounted) option is chosen, then the housing is to be installed as noted above with the exception of the damper shaft being oriented to the top of the housing.

To prevent excess air leakage, all joints should be sealed with an approved duct sealer. This would apply to all accessory module connections as well as the basic assembly.

Air Volume Ranges

Unit Size	CFM Min - Max	L/S Min - Max
4	45-400	21-189
5	60-500	28-236
6	65-550	31-260
7	95-800	45-378
8	125-1100	59-519
9	160-1400	76-661
10	210-1800	99-850
12	300-2600	142-1227
14	430-3700	203-1746
16	575-5000	271-2360
24 x 16	1185-8400	559-3964

NOTE: Factory calibrated controls must be selected within the above flow range limits. A minimum value of zero is also available. When an auxiliary flow setting is specified, the value must be greater than the minimum setting and within the range limits.

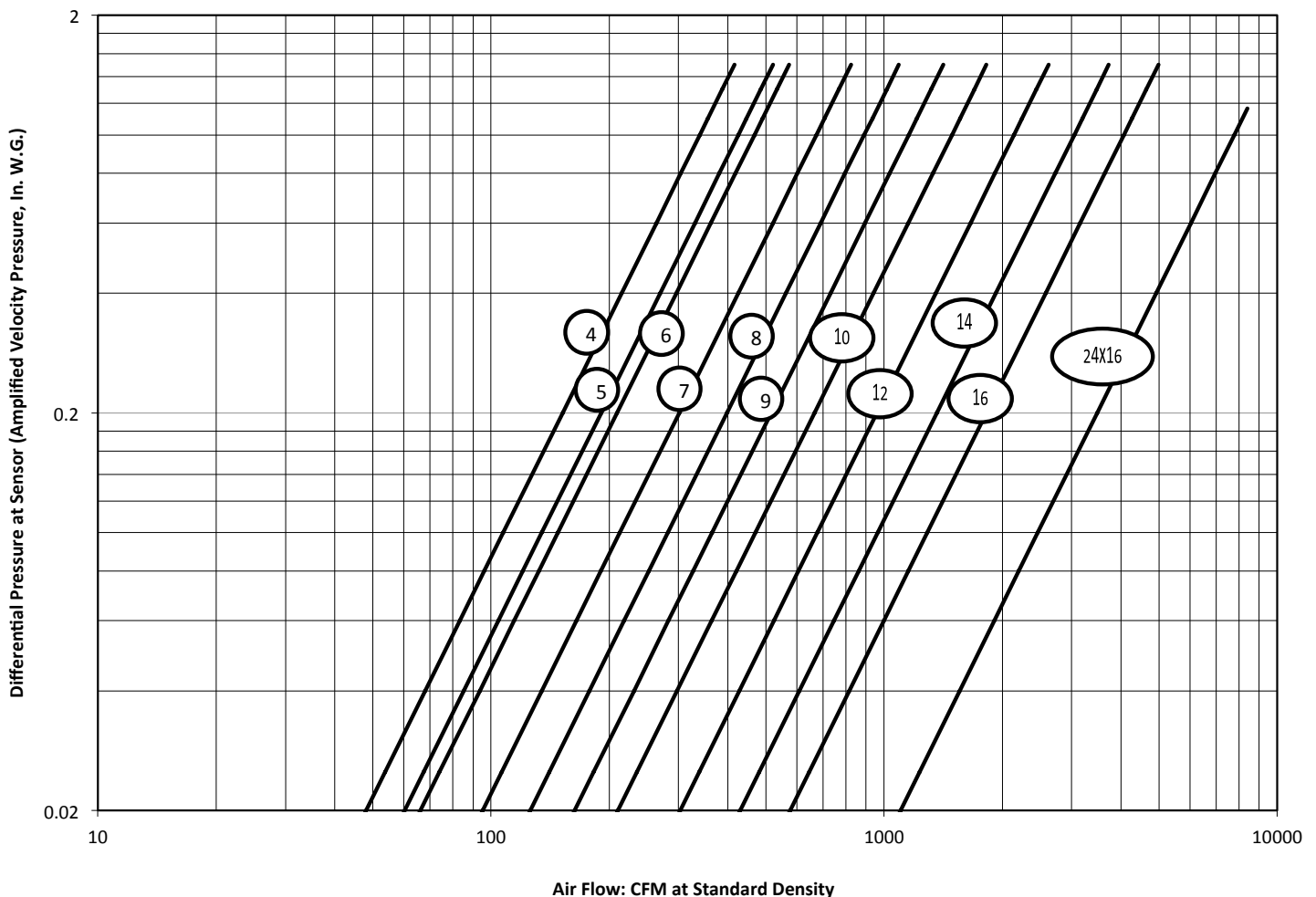
On controls mounted by Price but supplied by others, the air volume ranges are guidelines only.

Selection of air flow limits below the listed values is not recommended. Stability and accuracy may not be acceptable at lower than recommended air flow limits. The actual performance will vary depending on the terminal unit controls supplied.

SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

INSTALLATION INSTRUCTIONS

SP300 Calibration Curves



Calibration Equation

$$VP = \left(\frac{Q}{K}\right)^2$$

VP - differential pressure
at sensor, inches w.g.

Q - air flow rate, cfm
at standard density.

K - calibration constant

Unit Size	K
4	340
5	426
6	468
7	673
8	890
9	1155
10	1487
12	2141
14	3045
16	4074
24 x 16	7785

1. Setting flow limits for a differential pressure of less than 0.02 inches is NOT recommended. Stability and accuracy of flow limits may not be acceptable due to low velocity pressure signal. Performance will vary depending on the terminal unit controls provided.
2. For field calibration of air flow limits refer to the control contractor's documentation.

SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

MAINTENANCE

SP300 Removable Sensor Maintenance Instructions

1. Detach SP300 high and low signal tubing between sensor and controls at the tee connections as shown in Figure 1.
2. Undo latches holding sensor in unit and remove sensor as shown in Figure 2.
3. Clean sensor by blowing compressed air through both HIGH and LOW signal tubing.
4. Wipe off any foreign particles with a clean rag.
5. Reinstall sensor into unit ensuring that it is in the correct orientation and fasten latches to securely hold sensor in unit.

FIGURE 1 ▼

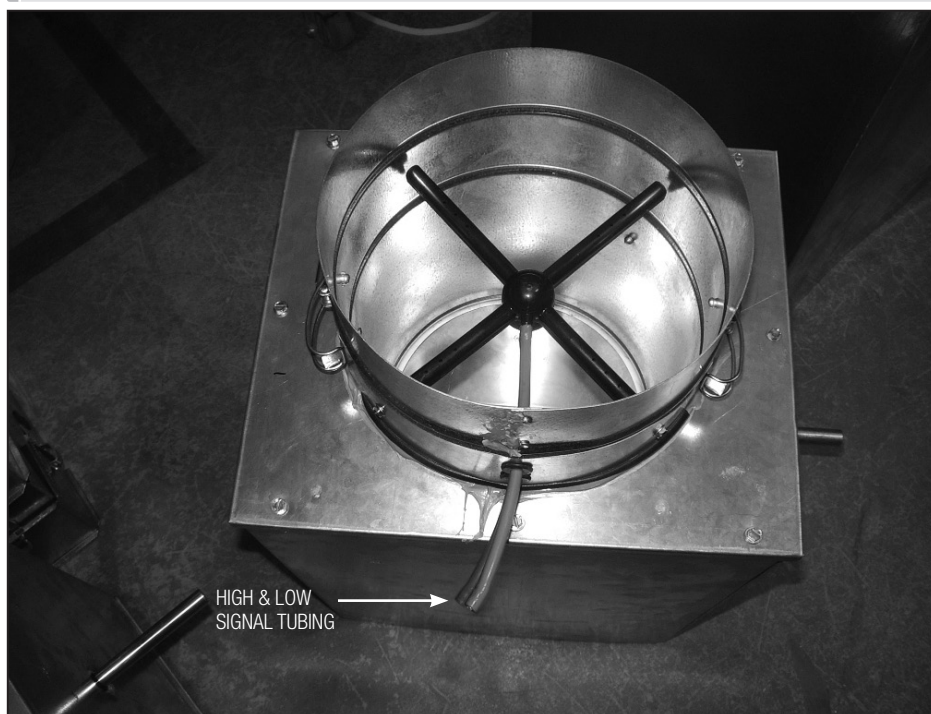
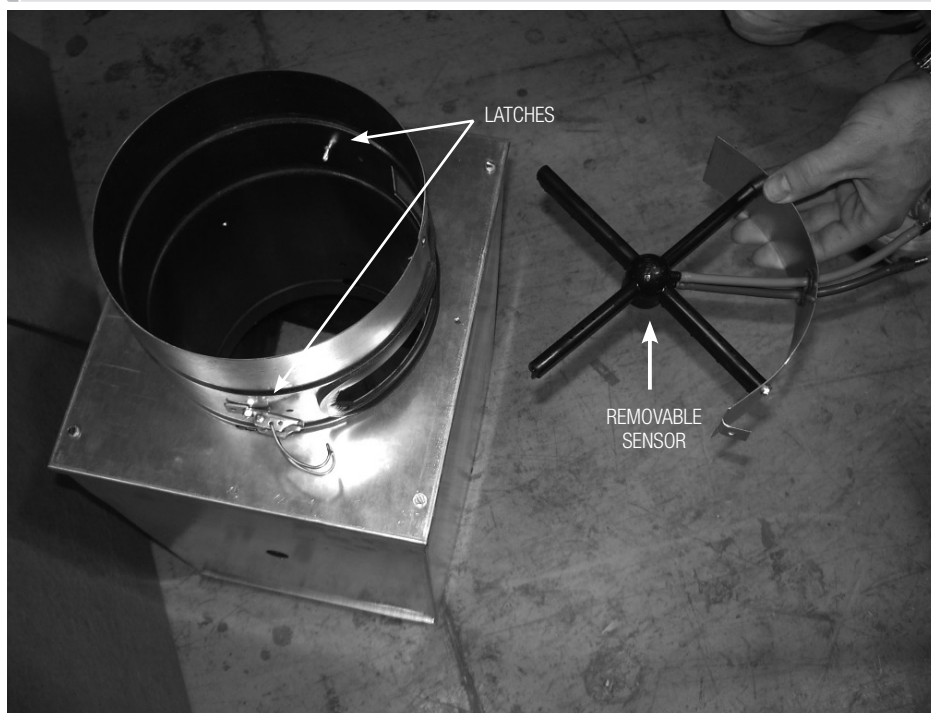


FIGURE 2 ▼



SINGLE DUCT VARIABLE VOLUME CONTROL ASSEMBLIES

MAINTENANCE

Replacement Parts

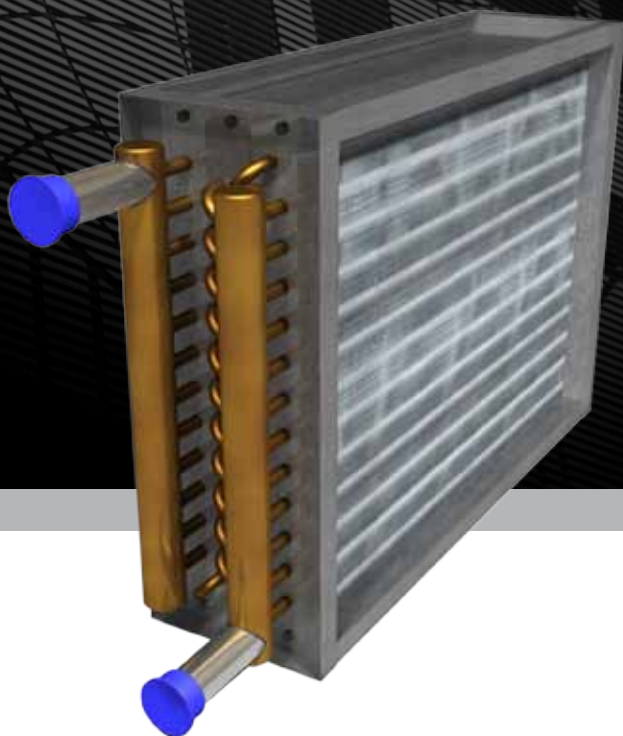
Component	Part#	Description
Removable SP300 Sensor	041688-001	Sensor SP300, Sizes 4,5 & 6
	041688-002	Sensor SP300, Size 7
	041688-003	Sensor SP300, Size 8, Size 24x16 (qty. 4 required)
	041688-004	Sensor SP300, Size 9
	041688-005	Sensor SP300, Size 10
	041688-006	Sensor SP300, Size 12
	041688-007	Sensor SP300, Size 14
	041688-008	Sensor SP300, Size 16
	247072-001	Duct Cover for Removable Sensor Sizes 4,5 & 6
	247072-002	Duct Cover for Removable Sensor Size 7
	247072-003	Duct Cover for Removable Sensor Size 8
	247072-004	Duct Cover for Removable Sensor Size 9
	247072-005	Duct Cover for Removable Sensor Size 10
	247072-006	Duct Cover for Removable Sensor Size 12
	247072-007	Duct Cover for Removable Sensor Size 14
	247072-008	Duct Cover for Removable Sensor Size 16
	203132-999	.250" Green Tubing, Low Signal
	203136-999	.250" Red Tubing, High Signal
	041510-001	Rubber Grommet RB-215
	041683-001	Tee, Brass, .250" x .250" x .250"

This document contains the most current product information as of this printing.
For the most up-to-date product information, please go to priceindustries.com

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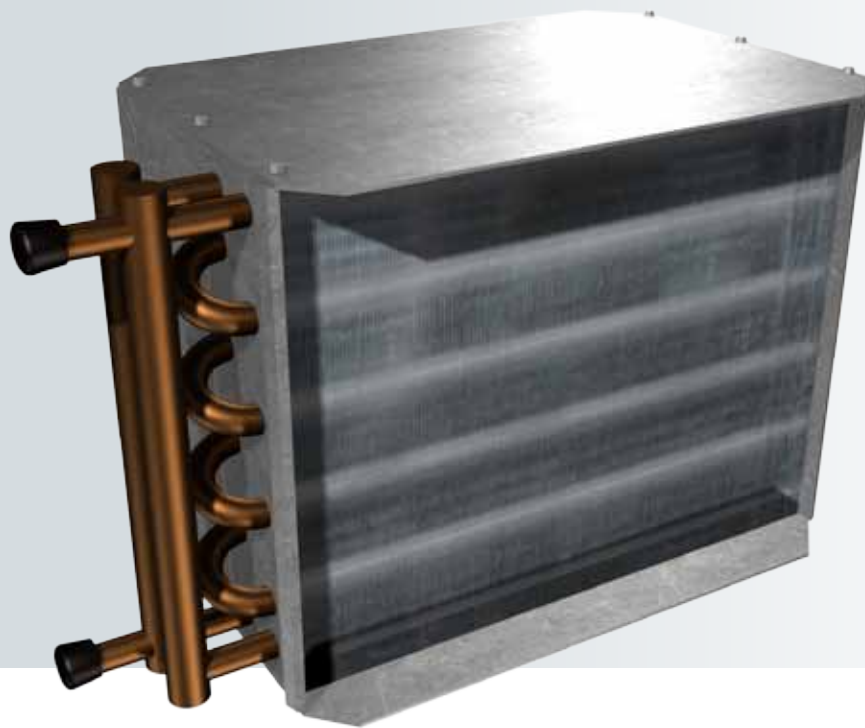
Water Coils

Installation Manual

price®

Contents

General	2
Safety Precautions	3
Receiving Inspection	4
Installation	4
Water System Balancing	5
Maintenance and Service	5
Cleaning	6



General

➔ The coil is built of copper tubes and aluminum fins. The profile fins with staggered tubes have been developed for effective and economic heat transfer between the circulating medium and the air. The finned coil body is fabricated of tubes mechanically expanded to the fins.

Safety Precautions

➔ Read all the instructions before you handle, install or do any maintenance work on the product. Permit only trained persons who have knowledge of the product and appropriate safety precautions to carry out any work on the coil.

- A. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
B. Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer:

in the United States	in Canada	International Export Sales Office
PRICE INDUSTRIES	E.H. PRICE LIMITED	PRICE INDUSTRIES
2975 Shawnee Ridge Court	638 Raleigh Street	638 Raleigh Street
Suwanee, Georgia	Winnipeg, Manitoba	Winnipeg, Manitoba
USA 30024	Canada R2K 3Z9	Canada R2K 3Z9
(770) 623-8050	(204) 669-4220	204) 669-4220
Fax (770) 663-6404	Fax (204) 663-2715	Fax (204) 663-9810

- C. Before servicing or cleaning unit, switch power off at service panel and lock service panel to prevent power from being switched on accidentally.
D. Protect flammable materials nearby when brazing, Use flame and heat protection barriers where needed. Always have a fire extinguisher ready.
E. The manufacturer assumes no responsibility for personal injury or property damage resulting from improper handling, installation, service or operation of the product.

- Before lifting the coil insure the coil is empty of water.
- Do not use the headers as handles to lift the coil.
- Do not let the fins come in contact with any object that can damage them.
- The coil must be used in a system that does not exceed the design pressure of the coil.
- Connect the coil to the pipe work in such a manner that the expansion forces or the deadweight of the pipe work will not be applied to the liquid connections.

- Protect the connections against shocks, external tension and stress.

CAUTION! Deadweight and Shocks can damage the tubes of the coil.

- The various components of the coil, such as the headers and casing can become hot while the coil is in use. Even air blown out of the coil may be hot as it leaves the coil. Caution should be used when handling the coil in these conditions.

➔ When installing air heaters, which use 212° F or hotter water great care should be exercised when opening air vents or gate valves in the system.

Failure to do this may result in serious damage through water hammering or a discharge of steam. Price Industries assumes no responsibility for the connection of air heaters to the heating system, or for any damage, which may arise through faulty planning, installation or maintenance of such system. Piping, valves, etc. should be sized according to pressure drop and function and not according to the size of the air heater connections.

Receiving Inspection

➡ All Price Water Coils are inspected before shipment. If damage is found, report it immediately to the delivery carrier.

- Check that the coil hasn't been damaged during transport or while being unloaded. It is especially important to check the condition of the fins on the coil surface, lifting lugs, headers and the tube bends on the backside of the coil.
- To avoid damage to the finned surface area, carefully remove the coil from the shipping package. If necessary, damaged fins can be straightened using an appropriate fin comb.

Installation

➡ Prior to installation, check the coil hand designation to insure that it matches the system. Generally, water and glycol coils are plumbed with the supply connection located on the bottom of the leaving air-side of the coil and the return connection at the top of the entering air-side of the coil. This arrangement provides counter flow heat exchange and positive coil drainage. If a universal coil is supplied, cap off the two unused connections.

- To insure ability to drain, standard coils must be mounted level. Coils with intermediate headers can be pitched 1/8" per foot of coil finned length towards the coil's header/connection end.
 - Maintain proper clearance between the coil and other structures such as the fan, filter racks, transition areas, etc.
- ➡ All field piping must be self-supporting. System piping should be flexible enough to allow for thermal expansion and contraction of the coil.

Mounting:

The coil shall be firmly secured at its location.

Inlet for the heating medium:

The coil is provided with copper connectors with the customers requested ends. If pipe fittings have been furnished use a back-up wrench to install or un-install the coil.

Venting/Draining:

Typically Price coils do not have provisions for venting or draining as these are typically provided by others in the field. For products where the headers of the water coil are equipped with plugged connections for venting and drainage as requested by the customer. The system must be adequately vented to operate effectively. If freezing is likely, blow compressed air into the coil. This will ensure that it has been thoroughly drained.

Anti-freeze protection:

Anti-freeze protection can be a mechanical device. Mechanical devices should be discussed with the mechanical contractor installing the coils or equipment. We do not make any recommendations for this and it is up to the customer to add these devices if needed.

Water System Balancing

A complete knowledge of the hydronic system, its components, and controls is essential to proper water system balancing and this procedure should not be attempted by unqualified personnel. The system must be complete and all components must be in operating condition BEFORE beginning water system balancing operations. Each hydronic system has different operating characteristics depending on the devices and controls in the system. The actual balancing technique may vary from one system to another. After the proper system operation is established, the appropriate system operating conditions such as various water temperatures and flow rates should be recorded in a convenient place for future reference. Before and during water system balancing, conditions may exist which can result in noticeable water noise or undesired valve operation due

to incorrect system pressures. After the entire system is balanced, these conditions will not exist on properly designed systems.

Prior to the water system start-up and balancing, the chilled/hot water systems should be flushed to clean out dirt and debris, which may have collected in the piping during construction. During this procedure, all unit service valves must be in the closed position. This prevents foreign matter from entering the unit and clogging the valves and metering devices. Filters should be installed in the piping mains to prevent this material from entering the units during normal operation. During system filling, air venting from the unit is accomplished by the use of the standard manual air vent fitting installed on the coil. The air vent screw should be turned counterclockwise no more than 1-1/2 turns to operate the air vent.

CAUTION! The air vent provided on the unit is not intended to replace the main system air vents and may not release air trapped in other parts of the system. Inspect the entire system for potential air traps and vent those areas as required, independently. In addition, some systems may require repeated venting over a period of time to properly eliminate air from the system.

Maintenance and Service

The coil should be regularly inspected to prevent stoppages. The following should be checked:

1. Fasteners – Check that no supporting bolts are defective.
2. Finned-tubed body - Check that it isn't dirty or damaged.

If freezing is likely, do one of the following:

- Fill the heat exchanger with an appropriate quantity of suitable anti-freezing agent.
- Drain all the water from both the pipe work and the coil. Do not refit the drain plugs to the coils until just before the system is filled with water. Blow compressed air through the coils to make certain that all water has been drained.
- All air vents should be opened so that air is eliminated from within the coil circuitry and headers. Verify that all vents and drains discharge a stream of water and are not obstructed.
- Fill the coil with water then close all vents.
- Conduct an initial hydrostatic leak test of all brazed, threaded or flanged joints, valves and interconnecting piping. Recheck the coil level and correct if necessary. Discharge and discard initial water charge when the setup is found to be leak free. It is important that all grease, oil, flux, and sealing compounds present from the installation be removed.

Cleaning

Not even an effective air filter can remove all the dust from the air.

Any dust deposits on the heat transfer surfaces will obstruct the airflow and impair the heat transfer. Coils must therefore be kept clean. Cleaning can suitably be carried out by any of the following methods or combinations of them.

1. Vacuum cleaning.
2. Blowing with compressed air, towards normal air direction.
3. Blowing clean with steam, towards normal air direction. **CAUTION! Not to be used on coils that contain evaporative refrigerant.**
4. Hosing or flushing with water (max. permissible water temp. 104F for coils that contain evaporative refrigerant). If the heating surfaces are coated with greasy dust, first spray the entire coil with environmentally compatible solvent under low pressure. Then clean the coil with water using a high-pressure jet after 10-12 minutes.

CAUTION: It is important to hold the nozzle perpendicular to the fins and not closer than 150 mm to prevent damaging the fins.

Use a fin comb (ACEW LANCE) to straighten any deformed fins. The fin comb can be ordered most HVAC supply house. The finned-tube body must not contain any traces of solvent after cleaning as remaining solvent will bind new dust. After cleaning, remove all fallen dust before starting the fan.

If you are cleaning cooling coils, also clean the drip tray, if one is fitted and cleaning is necessary. It is important to clean the drains between the collection boxes and the drip tray. Also check that the water trap is filled with water, if one is fitted.

Dismantling

Whenever a coil is to be dismantled and removed from a system, it is important that the coil be emptied of liquid. Further particulars see the paragraph dealing with venting/drainage above.

CAUTION! Liquids that are hazardous to the environment shall be collected in a vessel and be handed over for deposition or recycling. The coil must not be lifted before it has been emptied of liquid.

Heating coils

Ensure that the outlet water temperature does not drop by an abnormal amount and that the water is always in circulation. Make sure that the valves are open, the pipes and the coils are thoroughly vented and the circulation pump is running, even if heating is temporarily interrupted.

Cooling coils

Cooling coils shall be emptied, if the air temperature is likely to drop below the freezing point of the cooling medium. Do not insert and tighten the drain plugs because the shut-off valves may leak and refill the coil with cooling medium. Blow compressed air through the coils to make certain that all water has been drained.

Notes:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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- Canadian Head Office
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- Winnipeg Manufacturing Facility



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Vaughan, Ontario Canada L4K 4X9

- Toronto Manufacturing Facility



Grilles & Diffusers



Critical
Environments



Terminals &
Controls



Sustainable
Building



Noise Control



Sheet Metal / Air Distribution Submittal Data

Project Name:

Relocate Medical Media at JLM VA Hospital
4300 West 7th Street
Little Rock, Arkansas

Mechanical Contractor:

Comfort Systems USA (AR) Inc.
PO Box 16620
Little Rock, AR 72231
Jon Davis, Project Manager

Specification Section 23 36 00 – AIR TERMINAL UNITS

Price® VAV Terminals

For Information Contact:

Seth Capel / Tracy Hayes
A-C Specialties, Inc.

April 12, 2022



Terminals Submittals

Job Name: VA Relocate Medical Media

Job Location: Little Rock, AR

Customer: AC Specialties

Date Printed: 4/11/2022

Spec Section: 15 - HVAC

Contact: Airetech Corporation
7631 Northshore Place
N. Little Rock, AR 72118

Phone: 501-280-0404
Email: dustin@airetechcorp.com



All-In-One
Detailed Submittal Schedule
Terminals

Tag	7E-114	7E-112	7E-111	7E-111B
#	1	2	3	4
Qty	1	1	1	1
Model	SDV	SDV	SDV	SDV
Size 1	10	8	8	4
Unit Size	10	8	8	4
Inlet Dia	10	8	8	4
Max Primary (CFM)	1300	600	800	150
Min Primary (CFM)	390	180	240	45
Allowable Airflow Min (CFM)	390	180	240	45
Inlet SP (in. w.g.)	1.00	1.00	1.00	1.00
Differential PD (in. w.g.)	0.06	0.41	0.19	0.70
Downstream SP (in. w.g.)	0.25	0.25	0.25	0.25
Terminal Liner	FG50	FG50	FG50	FG50
Reheat (CFM)	650	300	400	75
WC Capacity (MBH)	34.30	13.20	17.30	4.70
EAT (°F)	55.00	55.00	55.00	55.00
LAT (°F)	103.60	95.00	95.00	111.00
Coil Amps	0	0	0	0
Fluid Flow (GPM)	2.00	0.44	0.64	0.16
FPD (ft. w.g.)	0.80	0.04	0.09	0.01
Rows	2R	2R	2R	2R
Max Coil APD (in. w.g.)	0.69	0.34	0.56	0.05
Coil	WC	WC	WC	WC
Sequence	2000	2000	2000	2000
Aux/Fan/Mix (CFM)	650	300	400	75
Accessories 2	CRH	CRH	CRH	CRH
Accessories 5	HB	HB	HB	HB
Accessories 6	DSW	DSW	DSW	DSW
Weight (lbs)	29	22	22	20

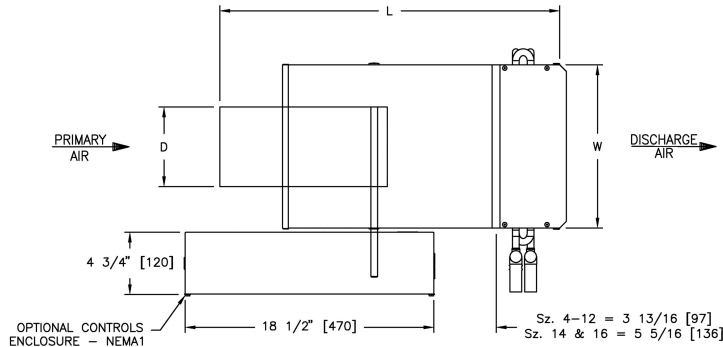


Performance Notes

Date Printed: 4/11/2022

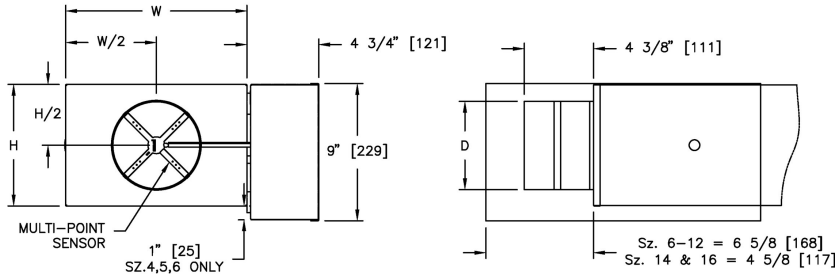
1. Dashes (--) indicate NC values less than 20.
2. Sound power levels are given in decibels (dB).
3. Dashes (--) indicate sound power levels below 36-29-26-22-19-17 for each octave band; values below these sound power levels are considered below significance per AHRI 880.
4. Minimum operating pressure is the minimum static pressure required to operate the terminal item assembly at maximum primary flow with a wide open damper.
5. Airflow is given in cubic feet per minute (cfm).
6. Air pressure drop is given in inches water gauge (in. w.g.), and water pressure drop is given in feet of water gauge (ft. w.g.).
7. Water coil performance is rated and certified in accordance with the latest edition of AHRI Standard 410.

SDV Single Duct w/ Hot Water Coil



Unit Size	Casing Size	Max CFM	Inlet		Casing		Length
			D	E	W	H	L
10	10	1800 CFM	9 7/8	N/A	14	12 1/2	25 1/8

Controls Type



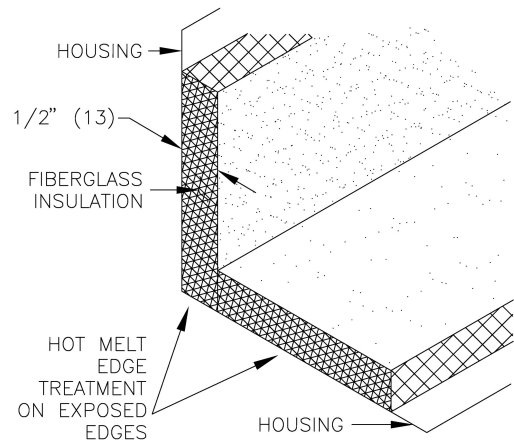
- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- DSW - Disconnect switch included.
- PS - Nema 1 controls enclosure included.
- Pressure independent

Notes

- 22 Gauge zinc coated steel housing. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL50.
- Damper blade constructed of two layers of galvanized steel with a sandwiched peripheral gasket.
- 1/2" (13) diameter zinc coated damper shaft with position indicator.
- Units not to be used for temporary heat or ventilation during construction.

Insulation: FG50

- Internal Insulation – Fiberglass 1/2" (13mm) thick, 1.75 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=2.1



PROJECT: VA Relocate Medical Media

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//10/FLD//CFM/CRH/FG50//22GA/PS/WC/2R//0.00//0.0//390/1300/0/0/650//HB//DSW//2000

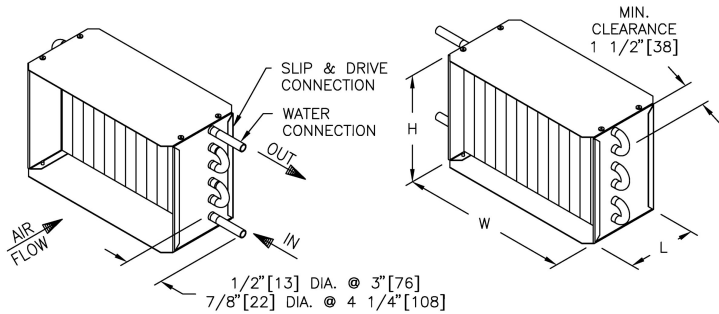
SUBMITTAL NO: 269757-B

CUSTOMER: AC Specialties

SUBMITTAL DATE: 4/11/2022

Water Coil: 2R

2 Row Right Hand



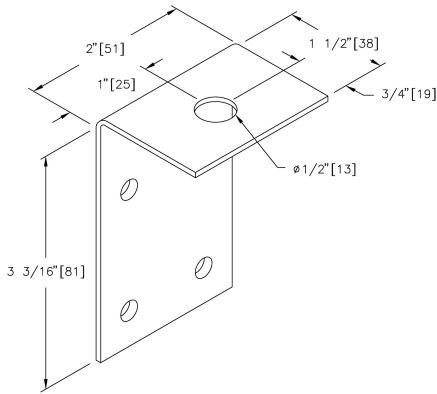
Unit Size	Coil Rows	W	H	L	Coil Connection
10	2	14	12 1/2	5	7/8

*Hand of water coil connections is determined when viewed from air inlet side.

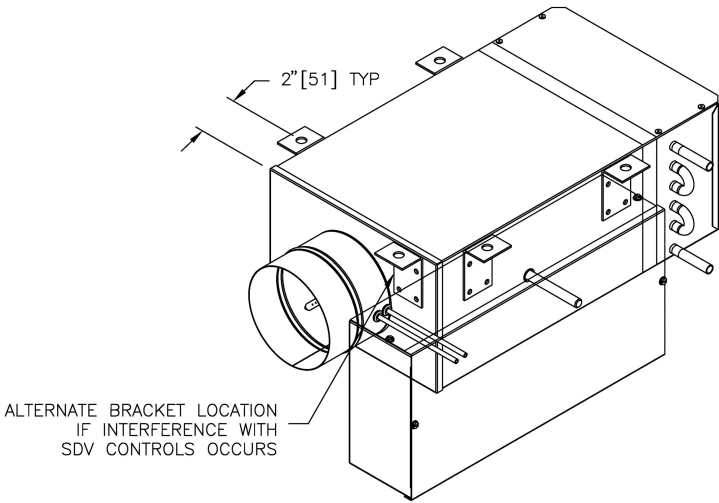
Water Coil Notes

- Fabricated from 22 gauge galvanized steel. Mechanically sealed, leak resistant construction.
 - Hot water coils have copper tubes and aluminum fins with O.D. sweat connections.
 - Refer to submitted terminal unit schedule for air volumes and reheat coil capacities.
 - Method of venting reheat coil is to be provided by installing contractor.
- Water coil handing matches unit handing.
 - Configuration of coil connection varies with size & rows of coil.
 - Water coil performance rated and certified in accordance with the current edition of AHRI standard 410.
 - Standard coils supplied with 10 fins per inch.

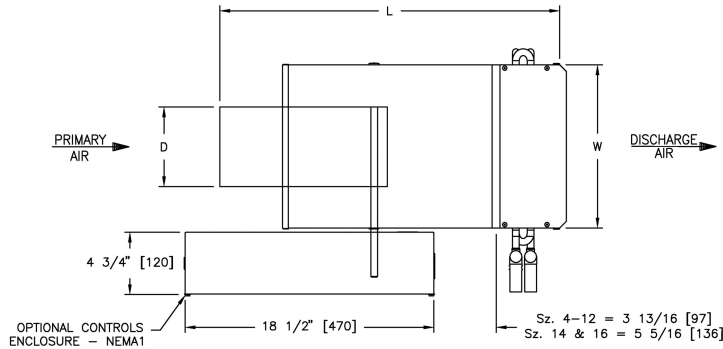
Hanger Bracket: HB



Suggested HB Location

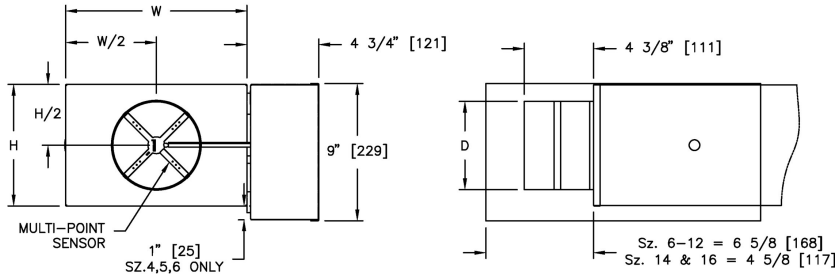


SDV Single Duct w/ Hot Water Coil



Unit Size	Casing Size	Max CFM	Inlet		Casing		Length
			D	E	W	H	L
8	8	1100 CFM	7 7/8	N/A	12	10	25 1/8

Controls Type



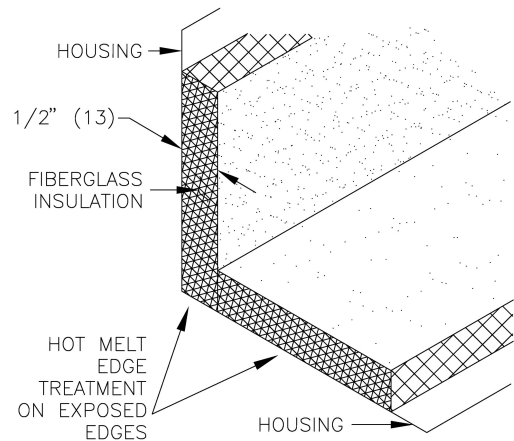
- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- DSW - Disconnect switch included.
- PS - Nema 1 controls enclosure included.
- Pressure independent

Notes

- 22 Gauge zinc coated steel housing. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL50.
- Damper blade constructed of two layers of galvanized steel with a sandwiched peripheral gasket.
- 1/2" (13) diameter zinc coated damper shaft with position indicator.
- Units not to be used for temporary heat or ventilation during construction.

Insulation: FG50

- Internal Insulation – Fiberglass 1/2" (13mm) thick, 1.75 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=2.1



PROJECT: VA Relocate Medical Media

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1/118/FLD///CFM/CRH/FG50//22GA/PS/WC/2R///0.00/////////0.0/////////180,240/600,800/0/0/300,400////HB/DSW/////////2000

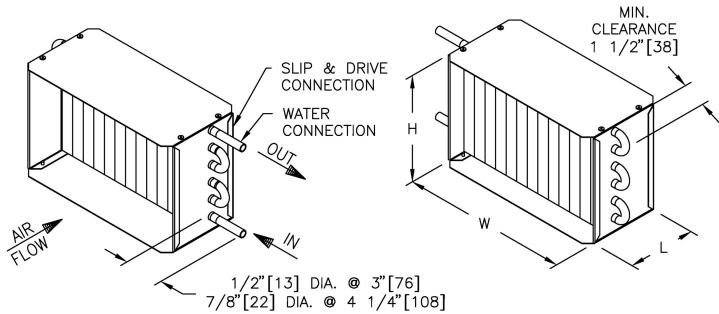
SUBMITTAL NO: 269757-B

CUSTOMER: AC Specialties

SUBMITTAL DATE: 4/11/2022

Water Coil: 2R

2 Row Right Hand



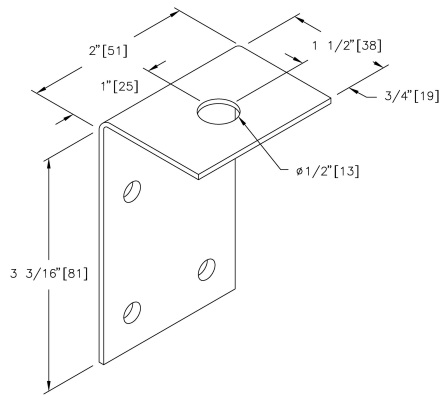
Unit Size	Coil Rows	W	H	L	Coil Connection
8	2	12	10	5	7/8

*Hand of water coil connections is determined when viewed from air inlet side.

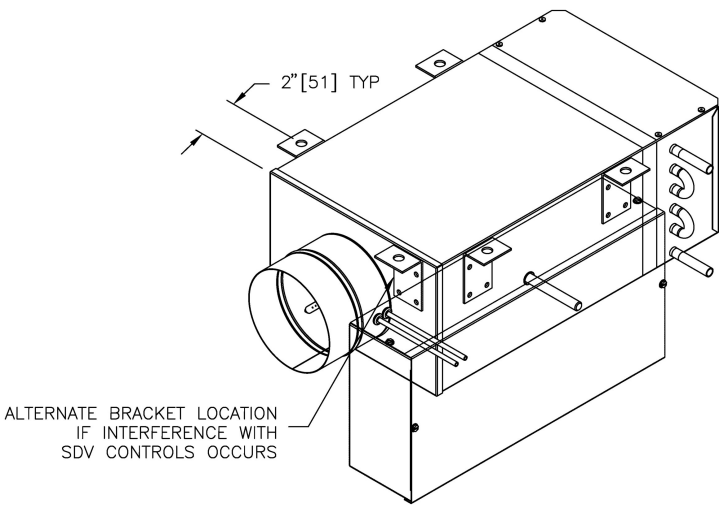
Water Coil Notes

- Fabricated from 22 gauge galvanized steel. Mechanically sealed, leak resistant construction.
- Hot water coils have copper tubes and aluminum fins with O.D. sweat connections.
- Refer to submitted terminal unit schedule for air volumes and reheat coil capacities.
- Method of venting reheat coil is to be provided by installing contractor.
- Water coil handing matches unit handing.
- Configuration of coil connection varies with size & rows of coil.
- Water coil performance rated and certified in accordance with the current edition of AHRI standard 410.
- Standard coils supplied with 10 fins per inch.

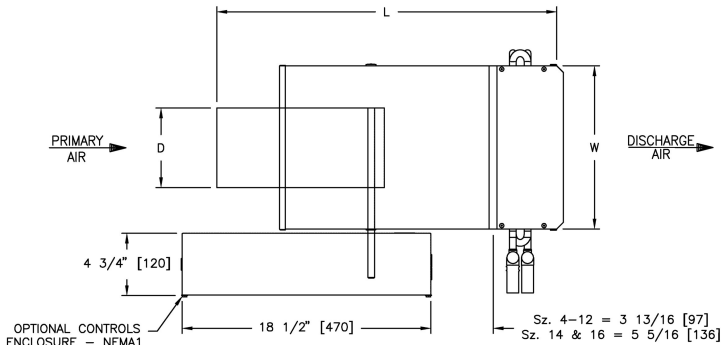
Hanger Bracket: HB



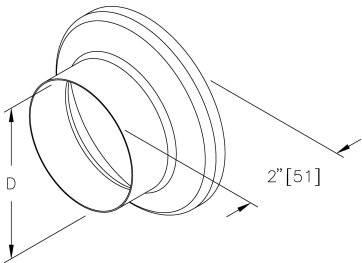
Suggested HB Location



SDV Single Duct w/ Hot Water Coil



Inlet Diameter Reducer Detail

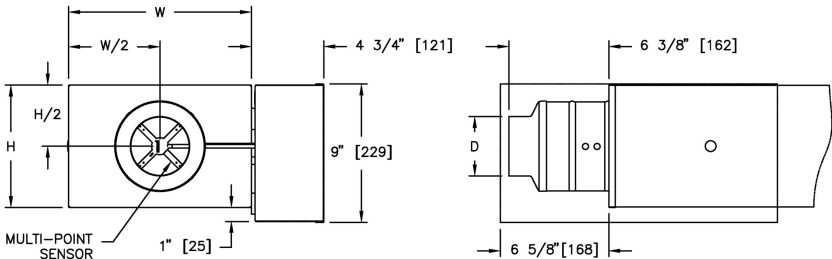


Size 4 and 5 have a 6" diameter duct with inlet reducer as shown

Inlet Reducer Dimensions	
Unit Size	D
4	3 7/8

Unit Size	Casing Size	Max CFM	Inlet		Casing		Length
			D	E	W	H	
4	6	400 CFM	3 7/8	N/A	12	8	27 1/8

Controls Type



- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- DSW - Disconnect switch included.
- PS - Nema 1 controls enclosure included.
- Pressure independent

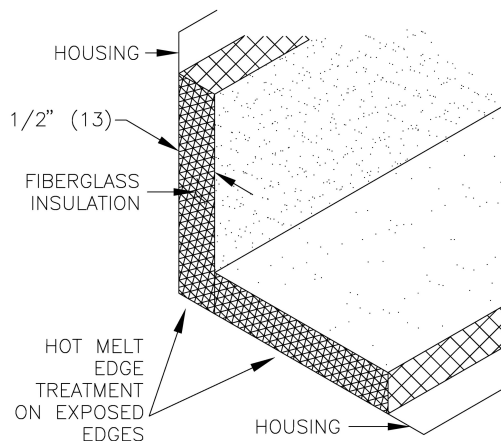
Notes

- 22 Gauge zinc coated steel housing. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL50.
- Damper blade constructed of two layers of galvanized steel with a sandwiched peripheral gasket.
- 1/2" (13) diameter zinc coated damper shaft with position indicator.
- Units not to be used for temporary heat or ventilation during construction.



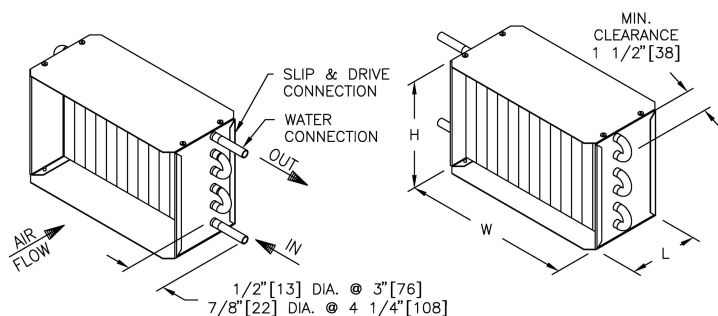
Insulation: FG50

- Internal Insulation – Fiberglass 1/2" (13mm) thick, 1.75 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=2.1



Water Coil: 2R

2 Row Right Hand



Unit Size	Coil Rows	W	H	L	Coil Connection
4	2	12	8	5	7/8

*Hand of water coil connections is determined when viewed from air inlet side.

Water Coil Notes

- Fabricated from 22 gauge galvanized steel. Mechanically sealed, leak resistant construction.
- Hot water coils have copper tubes and aluminum fins with O.D. sweat connections.
- Refer to submitted terminal unit schedule for air volumes and reheat coil capacities.
- Method of venting reheat coil is to be provided by installing contractor.
- Water coil handing matches unit handing.
- Configuration of coil connection varies with size & rows of coil.
- Water coil performance rated and certified in accordance with the current edition of AHRI standard 410.
- Standard coils supplied with 10 fins per inch.

PROJECT: VA Relocate Medical Media

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

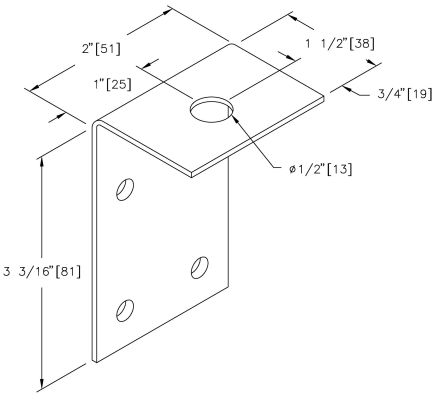
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SUBMITTAL NO: 269757-B

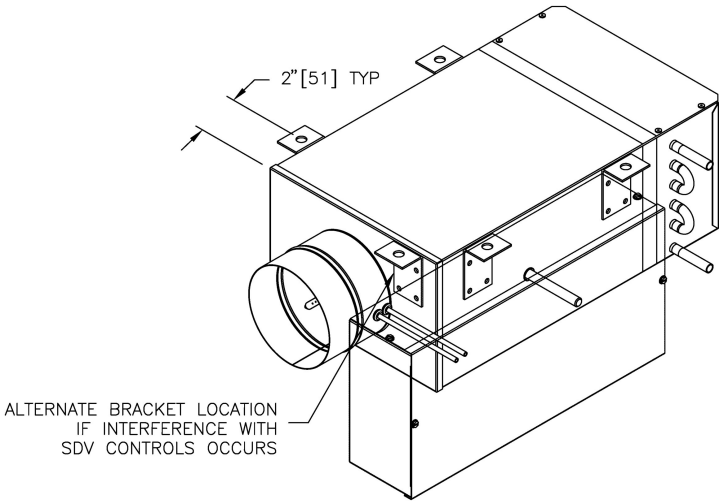
CUSTOMER: AC Specialties

SUBMITTAL DATE: 4/11/2022

Hanger Bracket: HB



Suggested HB Location



PROJECT: VA Relocate Medical Media	SUBMITTAL NO: 269757-B	SUBMITTAL DATE: 4/11/2022
ENGINEER:	CUSTOMER: AC Specialties	
DESCRIPTION: Single Duct Variable Volume		
SDV-1-1//1/4/FLD//CFM/CRH/FG50//22GA/PS/WC/2R///0.00////////0.0////////45/150/0/0/75////HB//DSW////////2000		