

Submittal #233600-04.0 - AIR TERMINAL UNITS - Single Duct - Product Data 233600 - AIR TERMINAL UNITS

Revision	0	Submittal Manager	Connor Galloway (McCownGordon Construction, LLC)
Status	In Review	Date Created	Apr 11, 2023
Issue Date	Apr 11, 2023	Spec Section	233600 - AIR TERMINAL UNITS
Responsible Contractor	Temp-Con, LLC	Received From	
Received Date		Submit By	
Final Due Date	Apr 25, 2023	Lead Time	
Sub Job		Cost Code	
Location		Type	Product Data
Approvers	Connor Galloway (McCownGordon Construction, LLC), Construction Admin (Hoefler Welker, LLC)		
Ball in Court	Connor Galloway (McCownGordon Construction, LLC)		
Distribution	Perry Quick (Hoefler Welker, LLC)		



- Reviewed no exceptions.
- Make corrections noted; resubmittal not required.
- Make corrections noted; revise and resubmit indicated items only.
- Revise and resubmit entire submittal.
- Reviewed for coordination/information only; refer to comments if any.

Response	Attachments
Pending	
Pending	

Review of this submittal is only for general conformance with the design concept of the project and-for general compliance with those portions of the Contract Documents prepared by Smith & Boucher. Notes, corrections or comments made on the submittals during this review do not relieve the Contractor from responsibility for: Compliance with the requirements of the plans and specifications; Dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; Coordination of the Work with that of all other trades; Assemblies of which a specific reviewed item is a component; and performance of all work in a safe and satisfactory manner.

Received: 04/26/2023 2:15:34 PM

Returned: 05/02/2023 By: Kevin Pearson

Project 07-1803 Submittal No. 233600-4.0

REVIEWED ONLY

Contractor's review is for general compliance with the information provided in the Contract Documents and for general conformance with the design concept of the project. Any action noted herein is subject to the requirements set forth in the Contract Documents. Subcontractor/Supplier is responsible for all dimensions which shall be confirmed at the jobsite; all fabrication processes and techniques of construction; the coordination of Subcontractor's work with that of all other trades, and the performance of Subcontractor's work in accordance with the Contract Documents

McCownGordon Construction

cgalloway 8:05:43 AM 04/11/2023

See SB comments.
PQ, HW 5-2-23

HOEFER WELKER

<input type="checkbox"/> Approved	<input type="checkbox"/> Rejected
<input checked="" type="checkbox"/> Approved as corrected	<input type="checkbox"/> Revise and resubmit
<input type="checkbox"/> Approved as corrected/ Partial resubmittal required (see attached comment sheet)	<input type="checkbox"/> Not reviewed/not a required submittal
	<input type="checkbox"/> No action taken

This review is only for general conformance with the design concept of the project and general compliance with the information provided in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans, specifications, and other contract documents. Approval of a specific item shall not include approval of an assembly of which the items is a component. Contractor is responsible for the following: dimensions to be confirmed and correlated at the job site; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences, and procedures of construction; coordination for the work with that of all other trades; and performing all work in a safe and satisfactory manner.

Submittal No: 233600-04

Date: 05/02/2023

By: PQ



Jorban-Riscoe Associates

9808 Alden Street

Lenexa, KS 66215

(913)438-1244 Phone * (913)438-6548 Fax

www.jorban-riscoe.com

SUBMITTAL

Re-Submittal 1

Grain Valley Police

JRA Job #: KJ - 33145

Temp Con

Engineer: Smith & Boucher, Inc

Architect:

Specification Section: 233600-2.1
Manufacturer: Price Industries
Equipment: Single Duct Boxes

Comments:

VAV1-1 PAGE 3	VAV1-7 PAGE 4	VAV2-4 PAGE 5	VAV2-10 PAGE 6
VAV1-2 PAGE 3	VAV1-8 PAGE 4	VAV2-5 PAGE 5	VAV2-11 PAGE 6
VAV1-3 PAGE 3	VAV1-9 PAGE 4	VAV2-6 PAGE 5	
VAV1-4 PAGE 3	VAV2-1 PAGE 4	VAV2-7 PAGE 5	
VAV1-5 PAGE 3	VAV2-2 PAGE 4	VAV2-8 PAGE 5	
VAV1-6 PAGE 3	VAV2-3 PAGE 4	VAV2-9 PAGE 5	

Presented per our interpretation of the specified section by:

Matt Warren

JRA Project Manager

Office Phone: (913) 428-2729

Mobile Phone: (913) 609-4127

Email Address: mattwarren@jorban-riscoe.com

Approval

Please return one (1) set of submittals stamped or signed "Approved as Submitted", or "Approved as Noted" to Jorban-Riscoe.

All equipment submitted herein will be the basis for ordering and shipping of equipment to the customer's designated location. It is the CUSTOMER's responsibility to advise Jorban-Riscoe of any changes in quantities, sizes, performance requirements, etc. ALL CHANGES to these submittals will need to be communicated in writing to Jorban-Riscoe when returning these submittals.



All-In-One Terminals

Entered By	Matt Warren	Contractor	Temp-Con
Rep Job No	KJ-33145	Engineer	Smith & Boucher
Location	Grain Valley, MO	Sales Person	Matt Warren
Customer	Temp-Con		

Tag	VAV-1-1	VAV-1-2	VAV-1-3	VAV-1-4	VAV-1-5	VAV-1-6
Qty	1	1	1	1	1	1
Size 1	8	6	7	9	4	8
Max Primary (CFM)	650	300	550	900	150	700
Min Primary (CFM)	195	90	165	270	45	210
Heat Min (CFM)	325	150	275	450	75	350
Terminal Liner	FF1	FF1	FF1	FF1	FF1	FF1
Inlet SP (in. w.g.)	1.00	1.00	1.00	1.00	1.00	1.00
** Min Discharge Sound Power Levels 2008	63, 60, 52, 51, 46, 45	58, 57, 51, 48, 42, 42	59, 57, 49, 47, 43, 42	54, 53, 42, 41, 41, 40	73, 75, 64, 63, 54, 52	57, 54, 45, 44, 41, 41
** Max Discharge Sound Power Levels 2008	63, 60, 52, 51, 46, 45	64, 64, 58, 55, 47, 46	66, 65, 57, 56, 49, 47	66, 62, 55, 56, 50, 48	73, 75, 64, 63, 54, 52	66, 63, 57, 56, 49, 48
** Max Radiated Sound Power Levels 2008	54, 46, 39, 33, 30, 24	56, 50, 42, 35, 31, 25	58, 50, 45, 36, 32, 27	58, 49, 46, 38, 33, 28	66, 59, 47, 42, 35, 32	59, 50, 43, 37, 33, 26
EC Capacity (kW)	7.00	2.50	4.00	6.00	1.00	6.00
EAT (°F)	55.00	55.00	55.00	55.00	55.00	0.00
LAT (°F)	100.20	100.20	100.20	97.20	66.30	0.00
Volts	277-1	277-1	277-1	277-1	277-1	277-1
Steps	SCR	SCR	SCR	SCR	SCR	SCR

Tag	VAV-1-7	VAV-1-8	VAV-1-9	VAV-2-1	VAV-2-2	VAV-2-3
Qty	1	1	1	1	1	1
Size 1	4	5	6	5	6	7
Max Primary (CFM)	100	200	275	200	300	500
Min Primary (CFM)	30	60	85	60	90	150
Heat Min (CFM)	50	100	137	150	150	250
Terminal Liner	FF1	FF1	FF1	FF1	FF1	FF1
Inlet SP (in. w.g.)	1.00	1.00	1.00	1.00	1.00	1.00
** Min Discharge Sound Power Levels 2008	76, 79, 67, 66, 57, 54	70, 69, 62, 60, 53, 50	69, 69, 64, 61, 51, 50	70, 69, 62, 60, 53, 50	51, 50, 43, 40, 36, 37	59, 57, 49, 47, 43, 42
** Max Discharge Sound Power Levels 2008	76, 79, 67, 66, 57, 54	70, 69, 62, 60, 53, 50	69, 69, 64, 61, 51, 50	70, 69, 62, 60, 53, 50	64, 64, 58, 55, 47, 46	65, 64, 56, 55, 48, 46
** Max Radiated Sound Power Levels 2008	69, 62, 51, 45, 38, 34	63, 54, 46, 40, 33, 28	62, 56, 48, 41, 34, 27	63, 54, 46, 40, 33, 28	56, 50, 42, 35, 31, 25	57, 49, 44, 35, 32, 27
EC Capacity (kW)	1.00	1.50	2.00	2.00	3.00	3.00
EAT (°F)	55.00	55.00	55.00	55.00	55.00	55.00
LAT (°F)	64.00	68.60	67.90	73.10	73.10	88.90
Volts	277-1	277-1	277-1	277-1	277-1	277-1
Steps	SCR	SCR	SCR	SCR	SCR	SCR

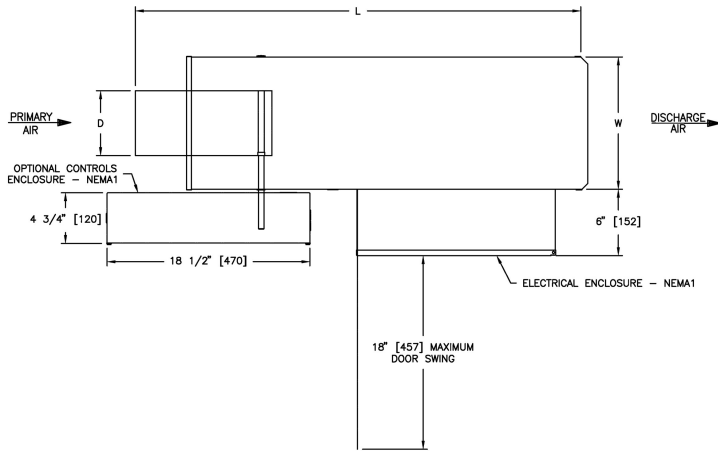
Max Primary (CFM): 600
 Min Primary (CFM): 180
 Heat Min (CFM): 300

Date Printed: 3/15/2023

Tag	VAV-2-4	VAV-2-5	VAV-2-6	VAV-2-7	VAV-2-8	VAV-2-9
Qty	1	1	1	1	1	1
Size 1	12	5	8	6	5	8
Max Primary (CFM)	1400	200	600	300	175	600
Min Primary (CFM)	420	60	350	90	55	180
Heat Min (CFM)	700	100	0	150	87	300
Terminal Liner	FF1	FF1	FF1	FF1	FF1	FF1
Inlet SP (in. w.g.)	1.00	1.00	1.00	1.00	1.00	1.00
** Min Discharge Sound Power Levels 2008	54, 53, 46, 44, 42, 43	70, 69, 62, 60, 53, 50	59, 57, 48, 46, 43, 43	63, 63, 57, 54, 46, 45	72, 72, 64, 62, 55, 52	59, 57, 48, 46, 43, 43
** Max Discharge Sound Power Levels 2008	64, 61, 58, 56, 52, 50	70, 69, 62, 60, 53, 50	65, 62, 55, 54, 48, 47	64, 64, 58, 55, 47, 46	72, 72, 64, 62, 55, 52	65, 62, 55, 54, 48, 47
** Max Radiated Sound Power Levels 2008	56, 48, 46, 38, 35, 29	63, 54, 46, 40, 33, 28	57, 48, 42, 35, 32, 25	56, 50, 42, 35, 31, 25	66, 57, 48, 42, 35, 30	57, 48, 42, 35, 32, 25
EC Capacity (kW)	9.00	1.00	6.00	1.00	1.00	6.00
EAT (°F)	55.00	55.00	0.00	55.00	55.00	0.00
LAT (°F)	95.70	64.00	0.00	66.30	62.50	0.00
Volts	277-1	277-1	277-1	277-1	277-1	277-1
Steps	SCR	SCR	SCR	SCR	SCR	SCR

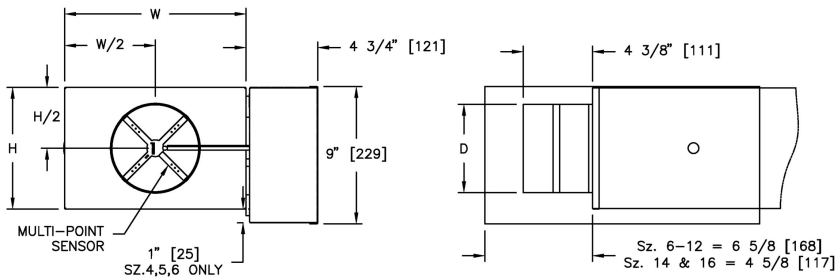
Tag	VAV-2-10	VAV-2-11
Qty	1	1
Size 1	10	4
Max Primary (CFM)	1250	125
Min Primary (CFM)	375	40
Heat Min (CFM)	625	62
Terminal Liner	FF1	FF1
Inlet SP (in. w.g.)	1.00	1.00
** Min Discharge Sound Power Levels 2008	57, 54, 46, 45, 42, 42	79, 81, 69, 68, 59, 56
** Max Discharge Sound Power Levels 2008	67, 63, 58, 58, 51, 51	79, 81, 69, 68, 59, 56
** Max Radiated Sound Power Levels 2008	59, 51, 46, 39, 35, 30	71, 64, 53, 47, 40, 35
EC Capacity (kW)	7.00	1.50
EAT (°F)	55.00	55.00
LAT (°F)	90.50	66.90
Volts	208-1	208-1
Steps	SCR	SCR

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
10	10	9 7/8	N/A	14	12 1/2	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//10/FAC//CFM/CLH/FF1//22GA/PS/EC/////0.00/////5.0,6.0/208-1/SCR/SCR-109/SCRV/////IDSW//350,420/1000,1250/0/0/500,625/////2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

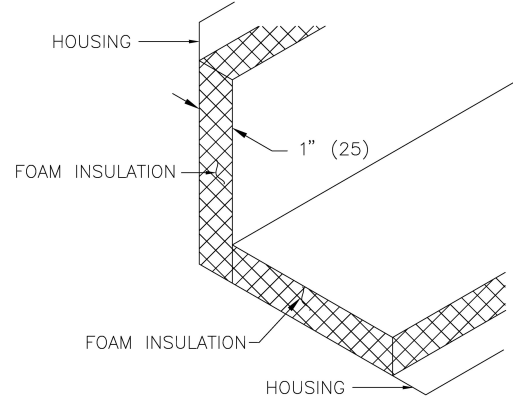
SUBMITTAL DATE: 3/14/2023

Notes

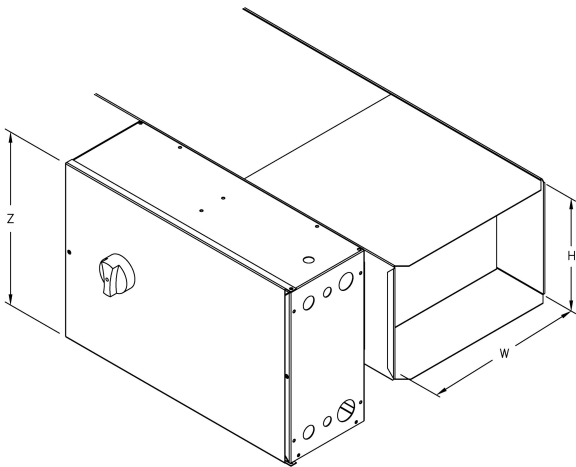
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
10	14	12 1/2	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

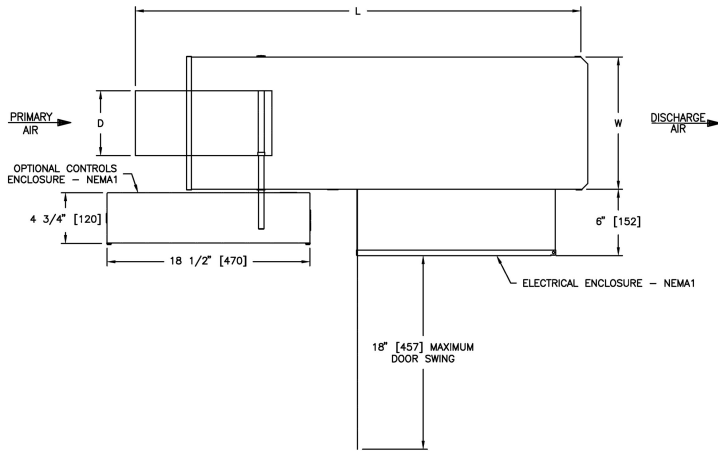
SDV-1-1//10/FAC//CFM/CLH/FF1//22GA/PS/EC/////0.00//////////5.0,6.0/208-1/SCR/SCR-109/SCRV////IDSW//350,420/1000,1250/0/0/500,625/////2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

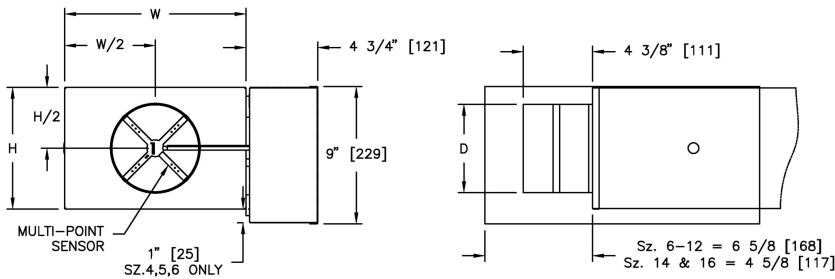
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
6	6	5 7/8	N/A	12	8	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/6/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//1.0/208-1/SCR/SCR-111/SCRV//IDSW//90/300/0/0/150//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

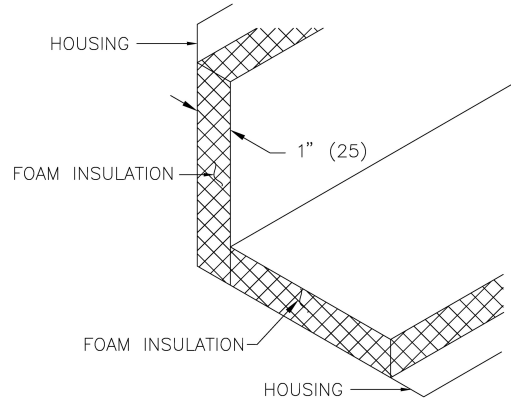
SUBMITTAL DATE: 3/14/2023

Notes

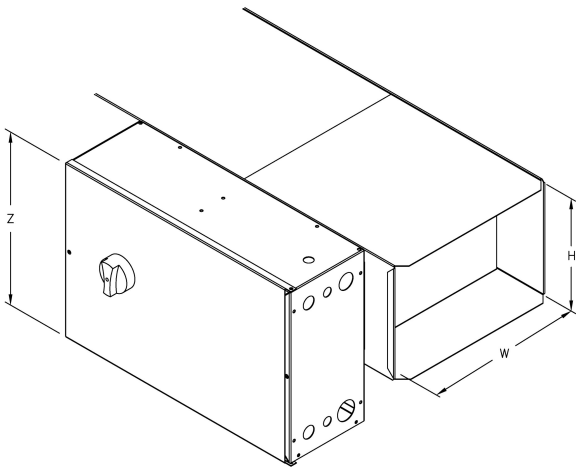
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-111



Unit Size	W	H	Z
6	12	8	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

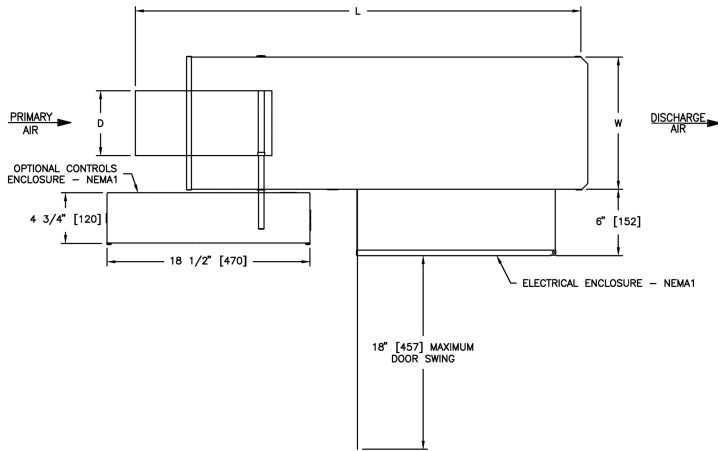
SDV-1-1//1/6/FAC//CFM/CLH/FF1//22GA/PS/EC//1.00//1.0/208-1/SCR/SCR-111/SCRV//IDSW//90/300/0/0/150//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

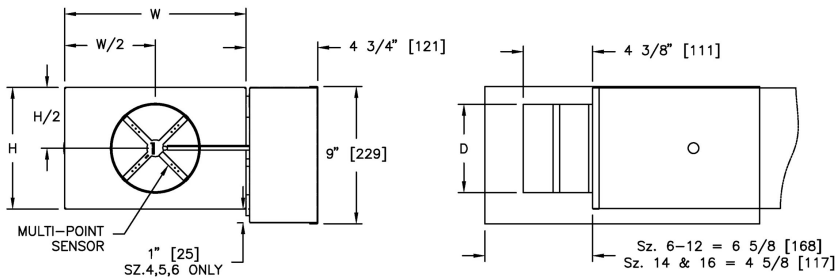
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
7	8	6 7/8	N/A	12	10	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//17/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/208-1/SCR/SCR-109/SCRV//IDSW//280/550,500/0/0/280//20
01

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

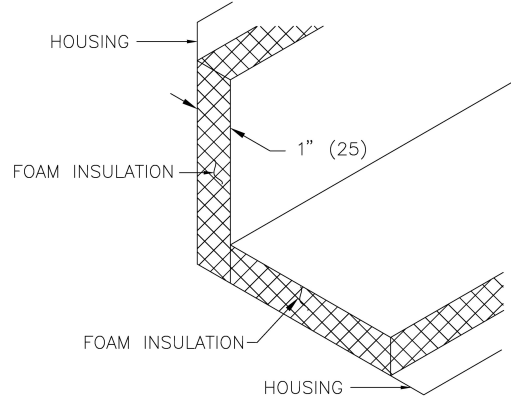
SUBMITTAL DATE: 3/14/2023

Notes

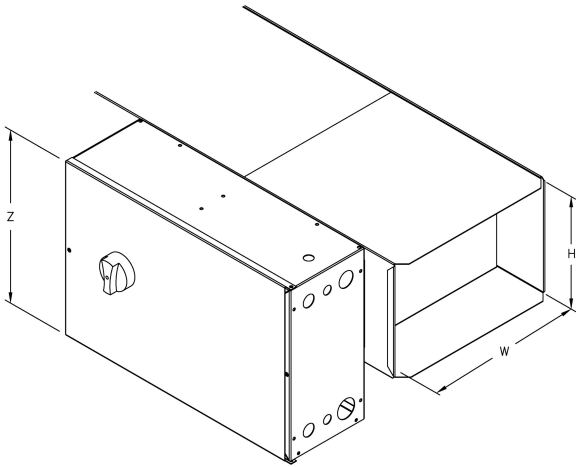
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
7	12	10	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

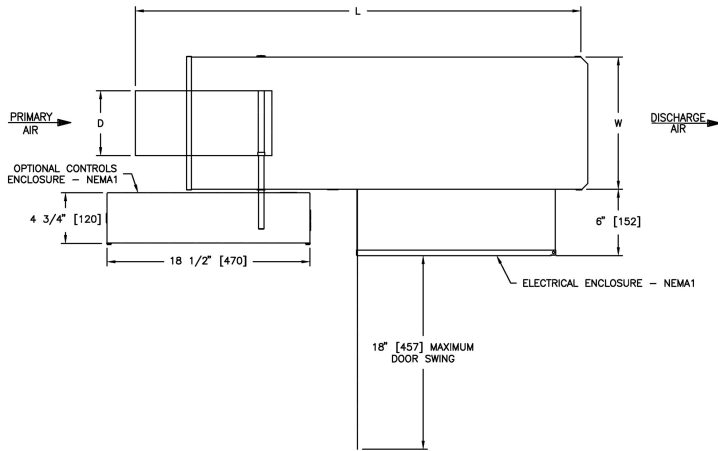
SDV-1-1//17/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/208-1/SCR/SCR-109/SCRV//IDSW//280/550,500/0/0/280//20
01

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

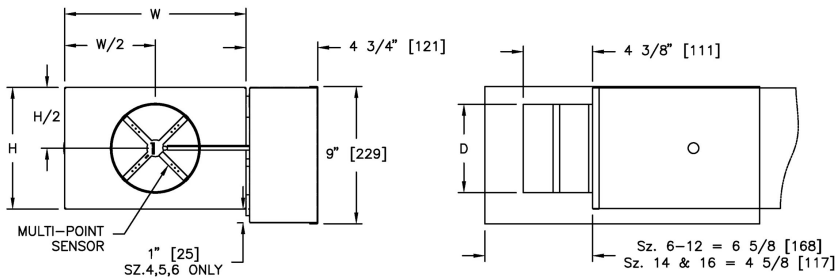
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
9	10	8 7/8	N/A	14	12 1/2	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/9/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/208-1/SCR/SCR-109/SCRV//IDSW//280/900/0/0/450//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

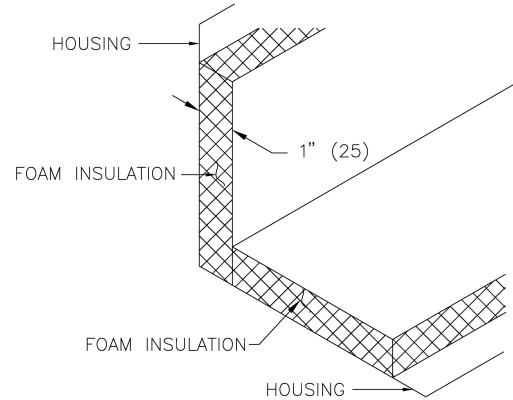
SUBMITTAL DATE: 3/14/2023

Notes

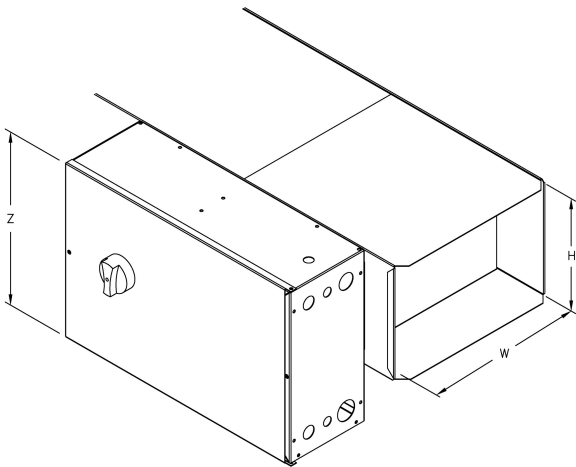
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
9	14	12 1/2	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

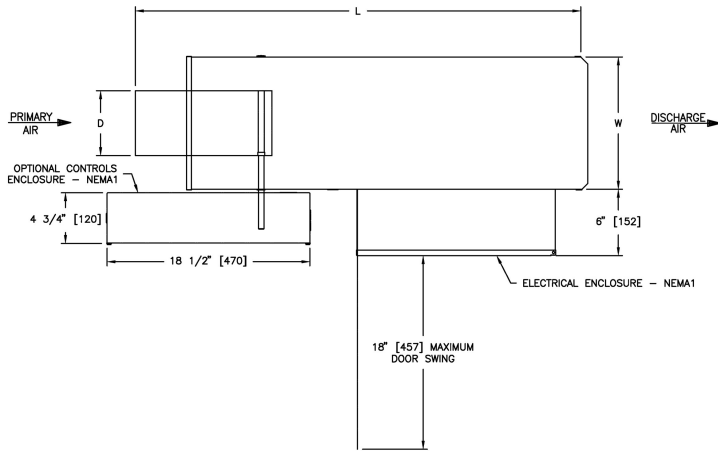
SDV-1-1//1/9/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/208-1/SCR/SCR-109/SCRV//IDSW//280/900/0/0/450//2001

SUBMITTAL NO: 269757-B

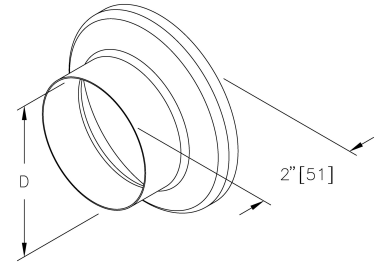
CUSTOMER: ALL BIDDERS

SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Inlet Diameter Reducer Detail

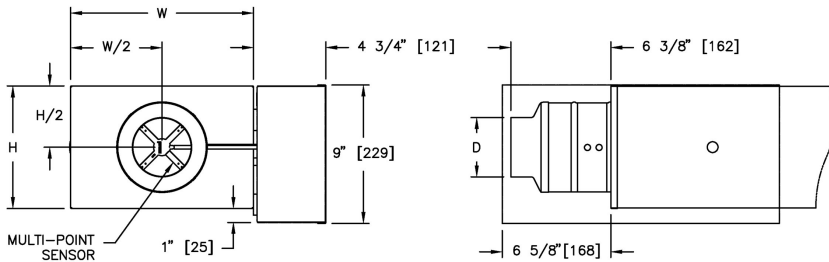


Size 4 and 5 have a 6\"/>

Inlet Reducer Dimensions	
Unit Size	D
4	3 7/8

Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
4	6	3 7/8	N/A	12	8	42 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/4/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0,5.0,5.7/208-1/SCR/SCR-109/SCRV//IDSW//280,350,400/280,350,400/0/0/280,350,400//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

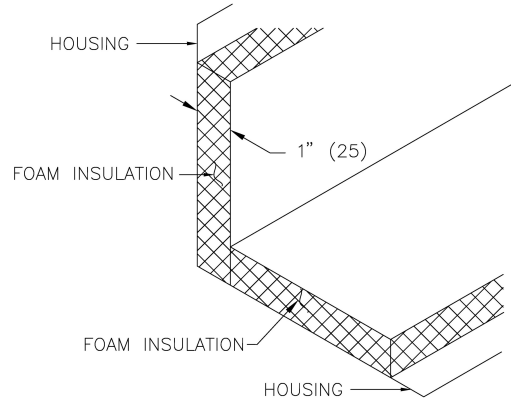
SUBMITTAL DATE: 3/14/2023

Notes

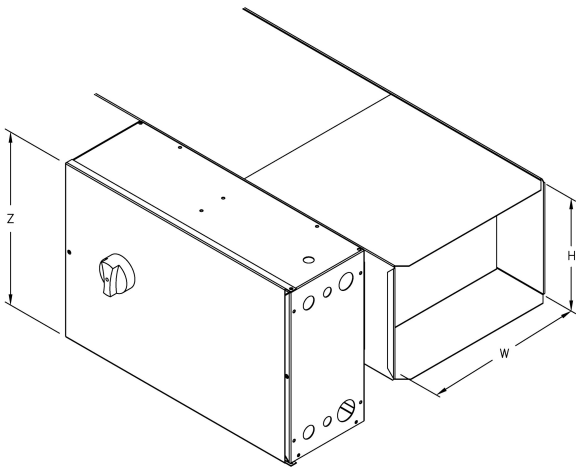
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
4	12	8	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

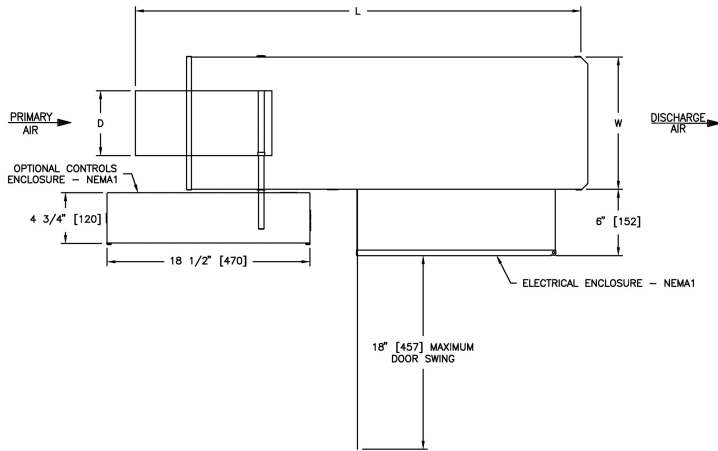
SDV-1-1//1/4/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0,5.0,5.7/208-1/SCR/SCR-109/SCRV//IDSW//280,350,400/280,350,400/0/0/280,350,400//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

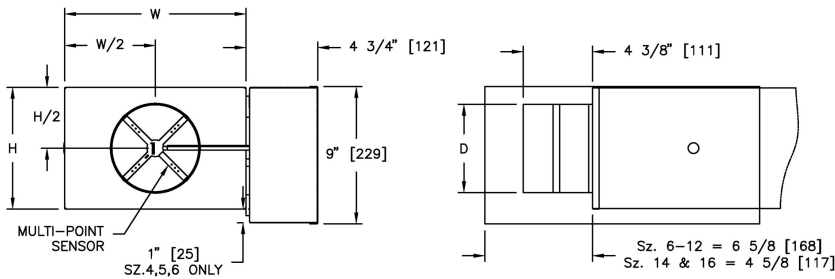
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
8	8	7 7/8	N/A	12	10	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/8/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/120-1/SCR/SCR-109/SCRV//IDSW//280/700/0/0/280//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

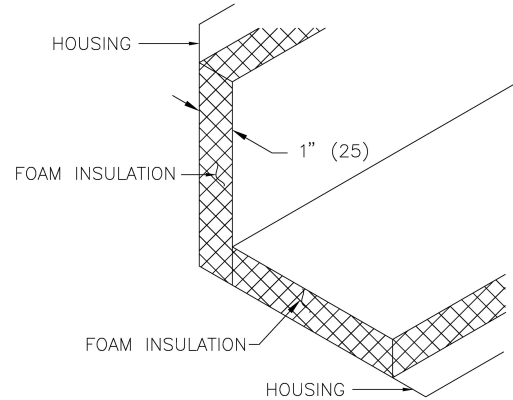
SUBMITTAL DATE: 3/14/2023

Notes

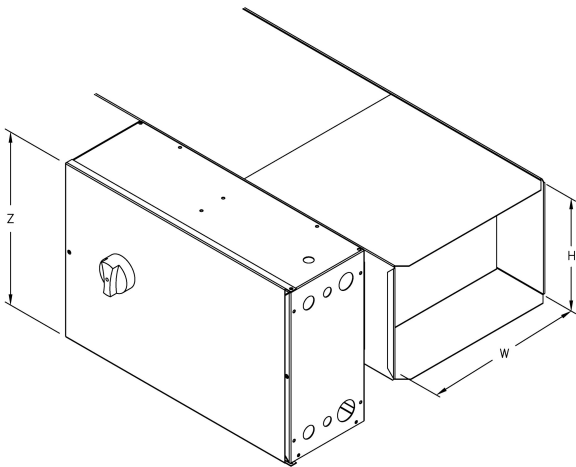
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 120/1Ø
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
8	12	10	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/8/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//4.0/120-1/SCR/SCR-109/SCRV//IDSW//280/700/0/0/280//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

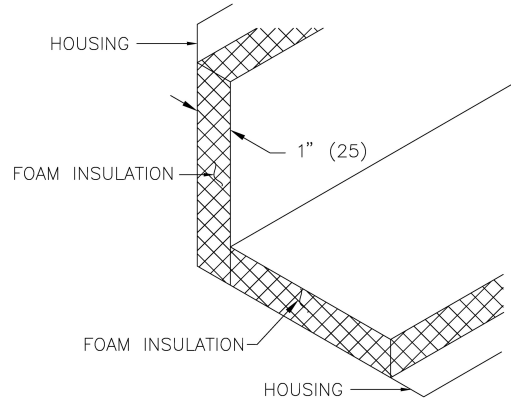
SUBMITTAL DATE: 3/14/2023

Notes

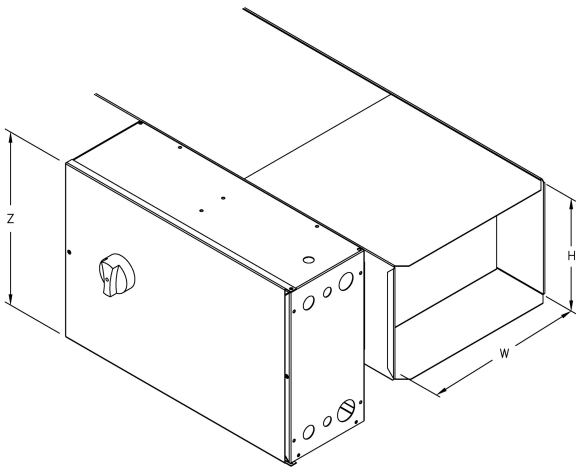
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 120/1Ø
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
5	12	8	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

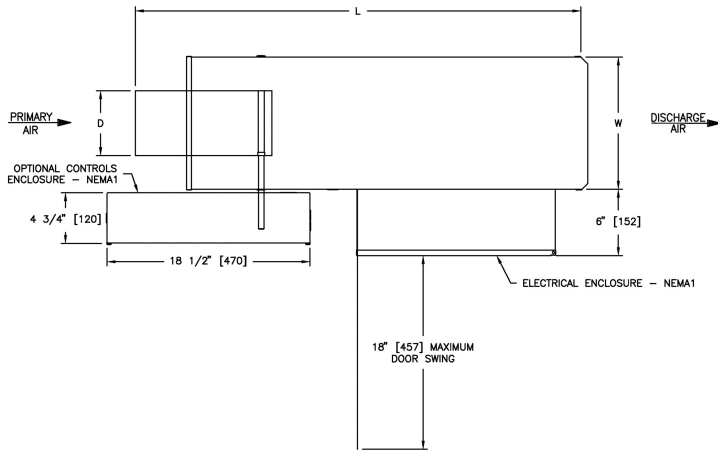
SDV-1-1//1/5/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//5.0/120-1/SCR/SCR-109/SCRV//IDSW//350/350/0/0/350//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

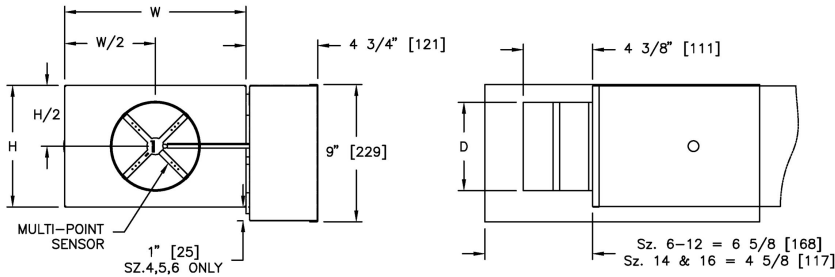
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
6	6	5 7/8	N/A	12	8	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/6/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//6.9,4.0/208-1/SCR/SCR-109/SCRV//IDSW//490,280/490,300/0/0/490,280//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

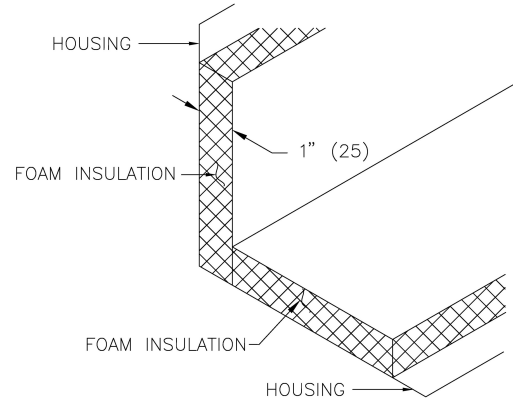
SUBMITTAL DATE: 3/14/2023

Notes

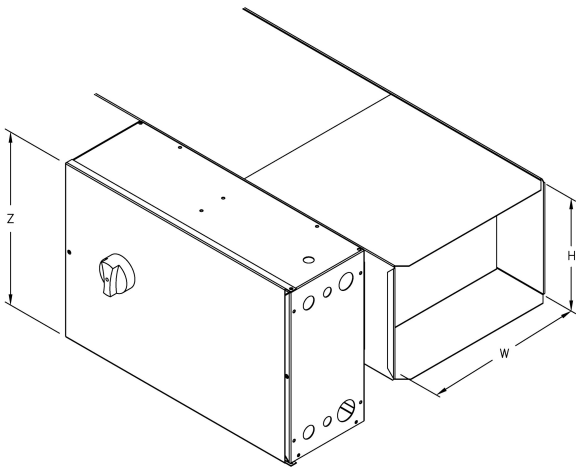
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
6	12	8	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

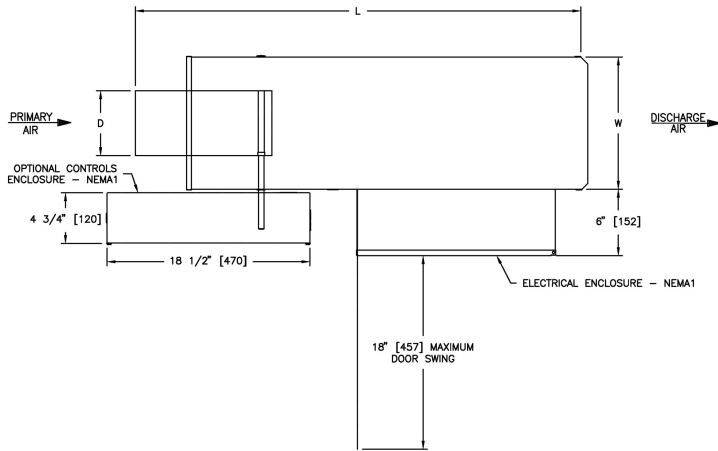
SDV-1-1//1/6/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//6.9,4.0/208-1/SCR/SCR-109/SCRV//IDSW//490,280/490,300/0/0/490,280//2001

SUBMITTAL NO: 269757-B

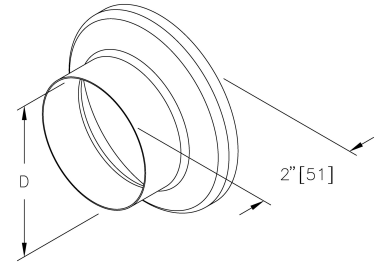
CUSTOMER: ALL BIDDERS

SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Inlet Diameter Reducer Detail

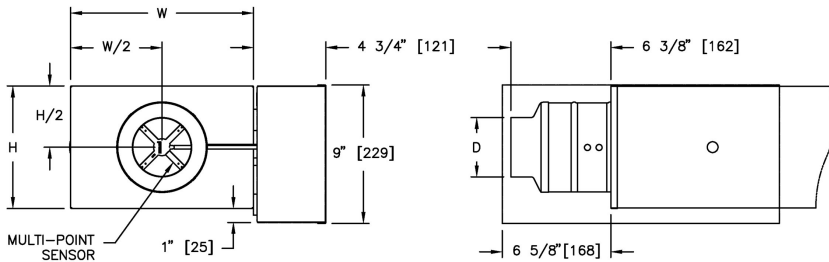


Size 4 and 5 have a 6" diameter duct with inlet reducer as shown

Inlet Reducer Dimensions	
Unit Size	D
5	4 7/8

Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
5	6	4 7/8	N/A	12	8	42 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/5/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//5.0,6.0/208-1/SCR/SCR-109/SCRV//IDSW//350,420/350,420/0/0/350,420//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

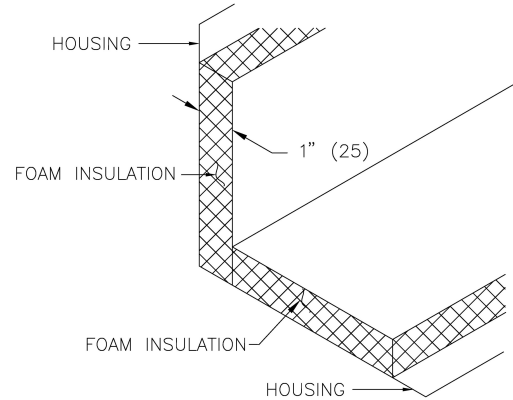
SUBMITTAL DATE: 3/14/2023

Notes

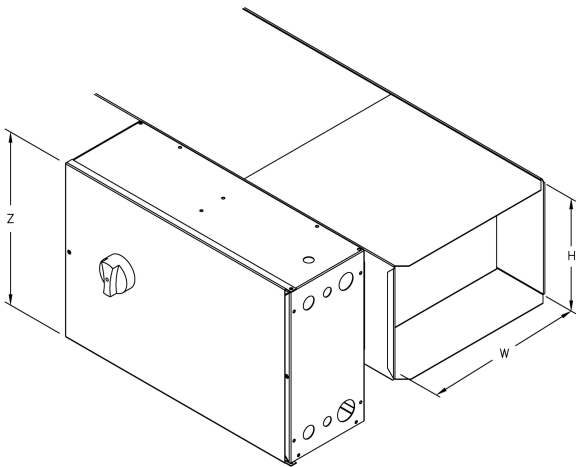
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
5	12	8	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

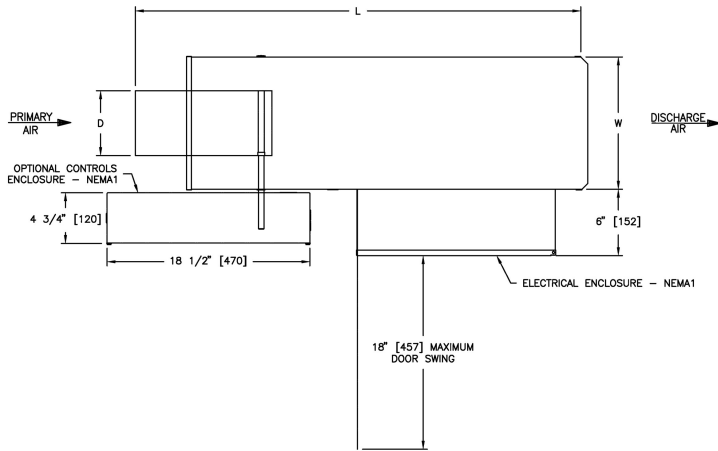
SDV-1-1//1/5/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//5.0,6.0/208-1/SCR/SCR-109/SCRV//IDSW//350,420/350,420/0/0/350,420//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

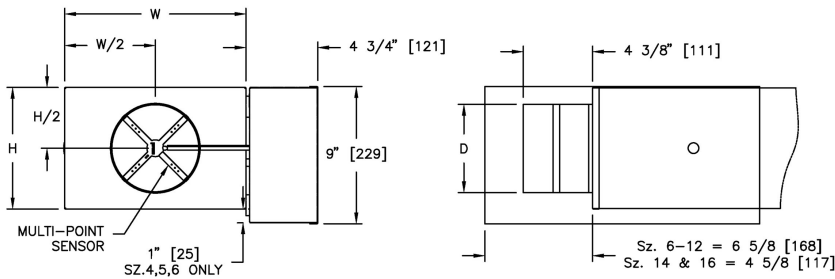
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
12	12	11 7/8	N/A	16	15	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//12/FAC//CFM/CLH/FF1//22GA/PS/EC/////0.00/////6.0/208-1/SCR/SCR-109/SCRV/////IDSW//420/1400/0/0/700/////200

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

SUBMITTAL DATE: 3/14/2023

Notes

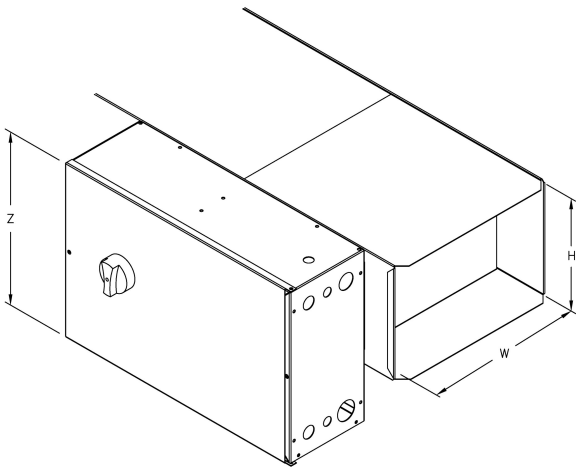
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
12	16	15	17

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

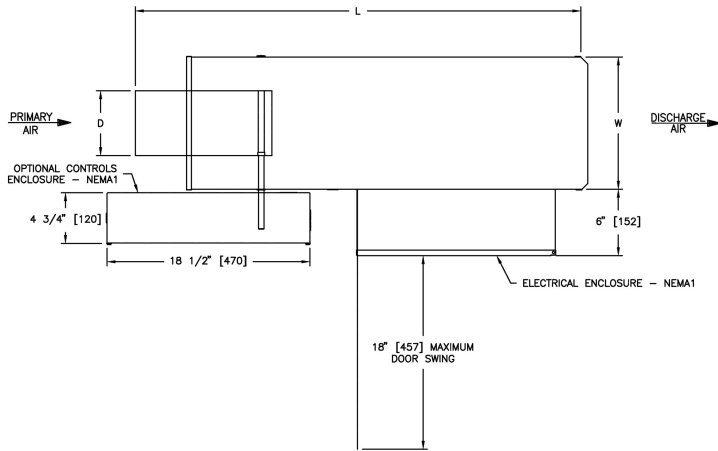
SDV-1-1//12/FAC//CFM/CLH/FF1//22GA/PS/EC/////0.00//////////6.0/208-1/SCR/SCR-109/SCRV////IDSW//420/1400/0/0/700//////////200
1

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

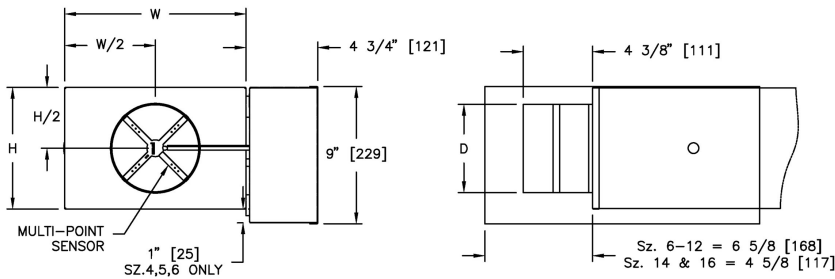
SUBMITTAL DATE: 3/14/2023

SDV Single Duct w/ Electric Coil



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
8	8	7 7/8	N/A	12	10	40 3/16

Controls Type



- Multi-point, center averaging airflow sensor.
- For left hand controls, unit orientation is mirrored from main image.
- Controls are factory mounted and supplied by controls contractor.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1-11/8/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//5.0/208-1/SCR/SCR-109/SCRV//IDSW//350/600/0/0/350//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

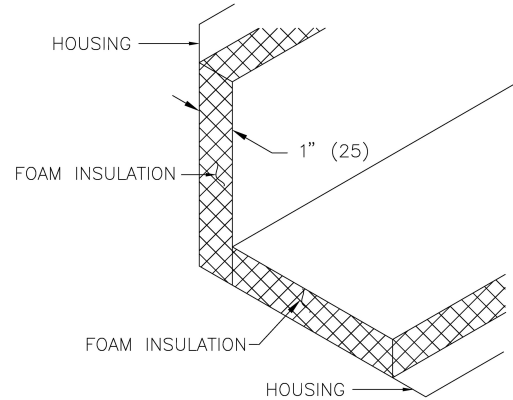
SUBMITTAL DATE: 3/14/2023

Notes

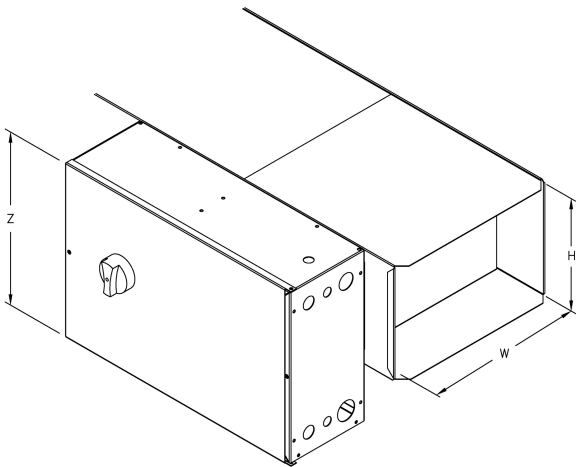
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF1

- Internal Insulation - Fiber Free Foam 1" (25mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181
- R-Value=4



Electric Coil



Electric Coil Notes

- Supply Voltage: 208/1Ø (3 Wire)
- Automatic / manual reset thermal cutout.
- Low watt density elements, high grade nickel-chrome alloy.
- Air flow switch included.
- Hinged access door included.
- Refer to submitted control diagrams for standard control components to be supplied.
- Magnetic contactors included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-109



Unit Size	W	H	Z
8	12	10	12

PROJECT: Grain Valley PD

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/8/FAC//CFM/CLH/FF1//22GA/PS/EC//0.00//5.0/208-1/SCR/SCR-109/SCRV//IDSW//350/600/0/0/350//2001

SUBMITTAL NO: 269757-B

CUSTOMER: ALL BIDDERS

SUBMITTAL DATE: 3/14/2023