

1671 Park Road, Suite 11
 FORT WRIGHT, KENTUCKY 41011
 (859) 331-3160 • Fax (859) 331-8261

DATE	9.11.23	JOB NO.
ATTENTION	Mary	
RE:	DRS F. [unclear]	

TO KW

LADIES / GENTLEMEN:

- WE ARE SENDING YOU Attached Under separate cover via _____ the following items:
- Shop drawings Prints Plans Samples Specifications
- Copy of letter Change order _____

COPIES	DATE	NO.	DESCRIPTION
1		233605-1 RT	VAV Fan Power
1		233605-2 RT	VAV Single Duct
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> FPVAV's PAGE 5 VAV's PAGE 28 </div>			

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Resubmit _____ copies for approval
- For your use Approved as noted Submit _____ copies for distribution
- As requested Returned for corrections Return _____ corrected prints
- For review and comment _____
- FOR BIDS DUE _____ 20 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

COPY TO File

SIGNED: Mark W. [unclear]

Schrudde & Zimmerman inc.

1671 Park Road, Suite 11
 FORT WRIGHT, KENTUCKY 41011
 (859) 331-3160 • Fax (859) 331-8261

LETTER OF TRANSMITTAL

TO Motry

DATE	8.28.23	JOB NO.
ATTENTION	Brian T	
RE:	Fiberglass IRG	

LADIES / GENTLEMEN:

- WE ARE SENDING YOU Attached Under separate cover via _____ the following items:
- Shop drawings Prints Plans Samples Specifications
- Copy of letter Change order _____

COPIES	DATE	NO.	DESCRIPTION
1		233600-1	VAV Fan Power
1		233600-2	VAV Single Duct

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Resubmit _____ copies for approval
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- FOR BIDS DUE _____ 20 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

COPY TO File

SIGNED: Mark W. Zimmerman

SUBMITTAL COVER SHEET



Date: **July 15, 2023**

Job Name: **IRS – Turfway Road**

Customer: **KW Mechanical**

Engineer/Consultant: **Motz Engineering**

Manufacturer: **Price – Fan Powered VAV Boxes**

Submitted By: **Jason Schulte**

The attached **1** sets of submittals are provided for: **X** APPROVAL RECORD

Please provide (1) ONE set of approved submittals prior to release for record.

Please review the items listed below, and reply accordingly to any unresolved questions or discrepancies:

Price Industries – Fan Powered VAV Boxes

Please verify items below:

1. All quantities and sizes
2. Voltages
3. Accessories

Respectfully Submitted,

Jason Schulte
513-332-2095 office

SHOP DRAWINGS

Reviewed

Furnish as Corrected

Rejected

X Revise and Resubmit

This review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: 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 of the work of all trades; and for performing all work in a safe and satisfactory manner.

Note: Errors in shop drawings or undue delays in making corrections are not an acceptable excuse for changing delivery dates from imperfect fabrication.

MOTZ CONSULTING ENGINEERS, INC.

By: **Jeff Haynay** Date: **09/11/2023**

Note: See attached markups and revise to match schedule per conversation. Call with any questions or concerns.



Submittals

Job Name: IRS Turfway
Job Location: Florence
Customer: KW Mechanical
Date Printed: 7/15/2023
Spec Section: 15 - HVAC

Contact: 3930 VIRGINIA AVE
CINCINNATI, OH 45227



All-In-One
 Detailed Submittal Schedule

780 300

#	Qty	Model	Tag	Unit Size	Inlet Dia	Max Primary (CFM)	Min Primary (CFM)	* Max Rad NC 2008	Fan Only Dis 2008	Fan Only Dis 2008	Fan Only Rad NC 2008	Max Dis NC	Fan Motor Voltage	Motor HP	Downstream SP (in. w.g.)	Min Oper PD (in. w.g.)	EC Capacity (kW)	EAT (°F)	LAT (°F)	Volts	Steps	Coil Amps
1	1	FDV5	3-1	3008	8	775	400	26 (4)	--	54, 51, 48, 46, 44, 34	35 (4)	25 (2)	277-ECM	1/2	0.50	0.06	5.00	65.80	84.00	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
2	1	FDV5	3-2	3008	8	775	365	26 (4)	--	54, 51, 48, 46, 44, 34	35 (4)	25 (2)	277-ECM	1/2	0.50	0.06	3.00	66.30	77.70	480-3	SCRV	3.61
SCRV - SCR Control (0-10V Signal)																						
3	1	FDV5	3-4	2010	10	720	375	20 (4)	--	58, 52, 49, 46, 45, 38	34 (3)	--	277-ECM	1/3	0.50	0.01	4.00	65.70	81.40	480-3	SCRV	4.81
SCRV - SCR Control (0-10V Signal)																						
4	1	FDV5	3-6	2010	10	560	290	--	--	56, 50, 46, 43, 41, 32	33 (3)	--	277-ECM	1/3	0.50	0.01	4.00	65.80	85.90	480-3	SCRV	4.81
SCRV - SCR Control (0-10V Signal)																						
5	1	FDV5	3-8	3010	10	900	470	22 (4)	--	56, 52, 50, 48, 46, 38	36 (4)	21 (2)	277-ECM	1/2	0.50	0.02	5.00	65.70	81.30	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
6	1	FDV5	3-13	2006	6	200	100	--	--	55, 49, 45, 41, 39, 29	33 (3)	20 (2)	277-ECM	1/3	0.50	0.04	2.00	70.00	85.80	480-3	SCRV	2.41
SCRV - SCR Control (0-10V Signal)																						
7	1	FDV5	3-16	2010	10	610	320	--	--	57, 50, 47, 44, 42, 34	33 (3)	20 (2)	277-ECM	1/3	0.50	0.01	4.00	65.70	84.20	480-3	SCRV	4.81
SCRV - SCR Control (0-10V Signal)																						
8	1	FDV5	3-20	2010	10	740	385	20 (4)	--	59, 52, 49, 47, 45, 39	34 (3)	20 (2)	277-ECM	1/3	0.50	0.01	4.00	65.70	80.90	480-3	SCRV	4.81
SCRV - SCR Control (0-10V Signal)																						
9	1	FDV5	3-21	2010	10	500	235	--	--	55, 49, 45, 41, 39, 29	33 (3)	--	277-ECM	1/3	0.50	0.01	4.00	66.20	89.80	480-3	SCRV	4.81
SCRV - SCR Control (0-10V Signal)																						
10	1	FDV5	3-22	3010	10	1075	560	24 (4)	--	59, 54, 52, 51, 49, 42	38 (4)	24 (2)	277-ECM	1/2	0.50	0.03	6.00	65.70	81.40	480-3	SCRV	7.22
SCRV - SCR Control (0-10V Signal)																						
11	1	FDV5	3-24	2010	10	750	390	20 (4)	--	59, 52, 50, 47, 45, 39	34 (3)	20 (2)	277-ECM	1/3	0.50	0.01	5.00	65.70	84.50	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
12	1	FDV5	3-25	2010	10	740	385	20 (4)	--	59, 52, 50, 47, 45, 39	34 (3)	20 (2)	277-ECM	1/3	0.50	0.01	5.00	65.80	84.70	480-3	SCRV	6.01

#	Qty	Model	Tag	Unit Size	Inlet Dia	Max Primary (CFM)	Min Primary (CFM)	* Max Rad NC 2008	Fan Only Dis NC 2008	Fan Only Dis 2008	Fan Only Rad NC 2008	Max Dis NC	Fan Motor Voltage	Motor HP	Downstream SP (in. w.g.)	Min Oper PD (in. w.g.)	EC Capacity (kW)	EAT (°F)	LAT (°F)	Volts	Steps	Coil Amps
SCRV - SCR Control (0-10V Signal)																						
13	1	FDV5	3-26	3012	12	1415	740	25 (4)	--	63, 56, 56, 56, 54, 48	41 (4)	22 (2)	277-ECM	1/2	0.50	0.01	8.00	65.70	81.60	480-3	SCRV	9.62
SCRV - SCR Control (0-10V Signal)																						
14	1	FDV5	3-28	3010	10	950	495	23 (4)	--	57, 53, 51, 49, 47, 39	37 (4)	21 (2)	277-ECM	1/2	0.50	0.02	6.00	65.70	83.50	480-3	SCRV	7.22
SCRV - SCR Control (0-10V Signal)																						
15	1	FDV5	3-30	3010	10	950	495	23 (4)	--	57, 53, 51, 49, 47, 39	37 (4)	21 (2)	277-ECM	1/2	0.50	0.02	6.00	65.70	83.50	480-3	SCRV	7.22
SCRV - SCR Control (0-10V Signal)																						
16	1	FDV5	3-34	3012	12	1415	740	25 (4)	--	63, 56, 56, 56, 54, 48	41 (4)	22 (2)	277-ECM	1/2	0.50	0.01	8.00	65.70	81.60	480-3	SCRV	9.62
SCRV - SCR Control (0-10V Signal)																						
17	1	FDV5	3-36	3010	10	840	425	21 (4)	--	54, 51, 49, 46, 44, 35	35 (4)	20 (2)	277-ECM	1/2	0.50	0.02	6.00	65.70	86.40	480-3	SCRV	7.22
SCRV - SCR Control (0-10V Signal)																						
18	1	FDV5	3-38	3010	10	840	425	21 (4)	--	55, 51, 49, 47, 45, 36	35 (4)	20 (2)	277-ECM	1/2	0.50	0.02	6.00	65.80	86.30	480-3	SCRV	7.22
SCRV - SCR Control (0-10V Signal)																						
19	1	FDV5	3-41	2006	6	410	215	21 (4)	--	55, 49, 45, 41, 39, 29	33 (3)	26 (2)	277-ECM	1/3	0.50	0.14	5.00	66.70	97.40	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
20	1	FDV5	4-1	3010	10	885	460	22 (4)	--	56, 52, 50, 48, 46, 37	36 (4)	21 (2)	277-ECM	1/2	0.50	0.02	5.00	65.70	81.70	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
21	1	FDV5	4-2	3010	10	750	400	20 (4)	--	56, 52, 50, 48, 46, 37	36 (4)	--	277-ECM	1/2	0.50	0.01	5.00	66.40	83.40	480-3	SCRV	6.01
SCRV - SCR Control (0-10V Signal)																						
22	1	FDV5	4-3	2008	8	350	180	--	--	55, 49, 45, 42, 40, 30	33 (3)	--	277-ECM	1/3	0.50	0.01	3.00	67.70	87.00	480-3	SCRV	3.61
SCRV - SCR Control (0-10V Signal)																						

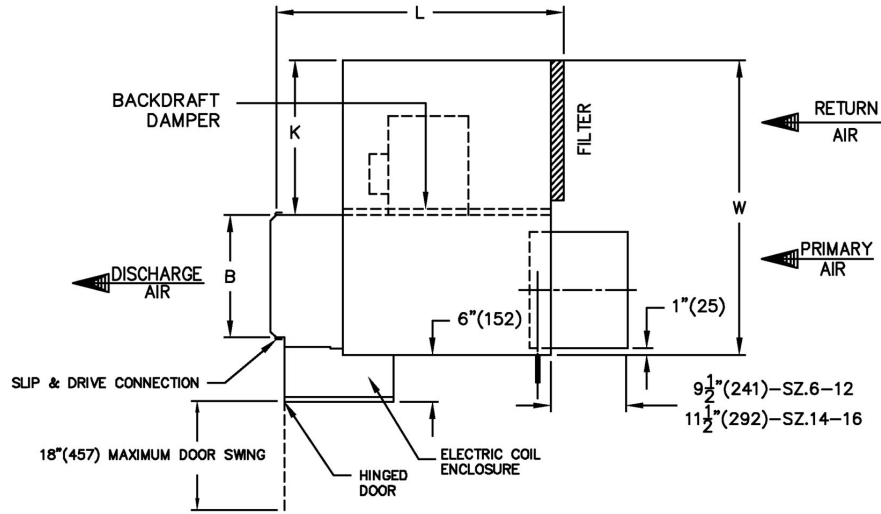


Performance Notes

Date Printed: 7/15/2023

1. Dashes (--) indicate NC values less than 20.
2. NC values are calculated based on procedures outlined in AHRI Standard 885-2008, "A Procedure for Estimating Occupied Space Sound Levels in the Application of Air Terminals and Air Outlets."
3. Sound power levels are given in decibels (dB).
4. "*** Discharge sound power levels 2008" do not include duct end reflection. For the most current data based on ASHRAE Standard 130-2008 and AHRI Standard 880-2011 reference "Discharge sound power levels."
5. 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.
6. Minimum operating pressure is the minimum static pressure required to operate the terminal item assembly at maximum primary flow with a wide open damper.
7. Airflow is given in cubic feet per minute (cfm).
8. 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.).
9. NC values are derived from sound power levels obtained in accordance with ASHRAE Standard 130-2016 and AHRI Standard 880-2017, which include duct end reflection corrections.
10. * NC values are derived from sound power levels obtained in accordance with ASHRAE Standard 130-2008 and AHRI Standard 880-2008.
These values are NOT the most current method for estimating NC values because AHRI 880-2008 does not include duct end reflection corrections.
11. Terminal item assembly is ETL certified in accordance with UL1995 and CSA 22.2.236.

FDV5 Fan Powered Variable Volume, Digital Controls by Others



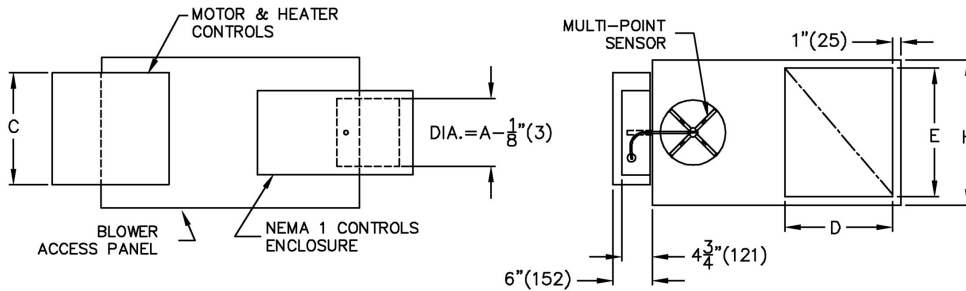
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
3008	1350	8	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
3008	1/2	7.4	4.3	4.0

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/3008/FLD/CFM/277-ECM/470/277-24V/EC/5.0,3.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//SCR-112

SUBMITTAL NO: 258514-A

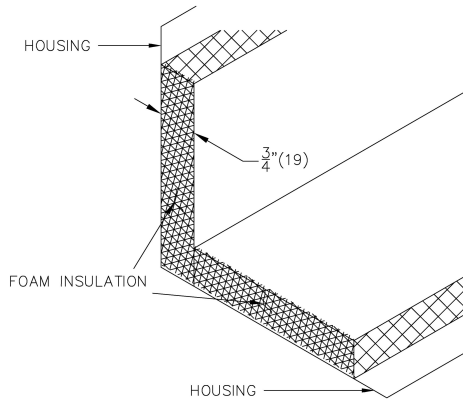
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

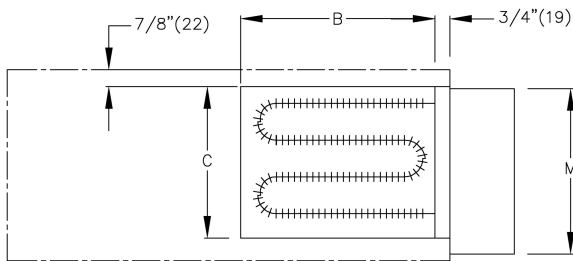
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required
- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
3008	14 x 12 1/2	15

Electrical Configuration

- Supply Voltage:
- 480/3Ø (3 Wire)
- Stages/Control: SCR/V
- SCR voltage control with 0-10 VDC control signal
 - SCR-112 (3 Phase SCR, 10 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/3008/FLD/CFM/277-ECM/470/277-24V/EC/5.0,3.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//SCV-112

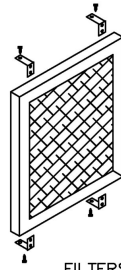
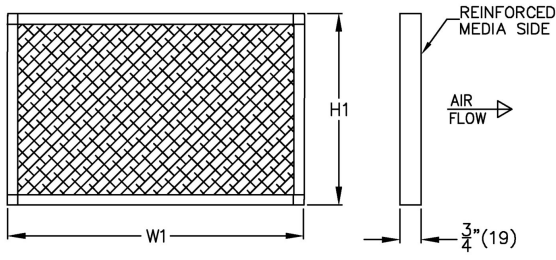
SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter
FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
3008	14 7/8	17 3/8

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

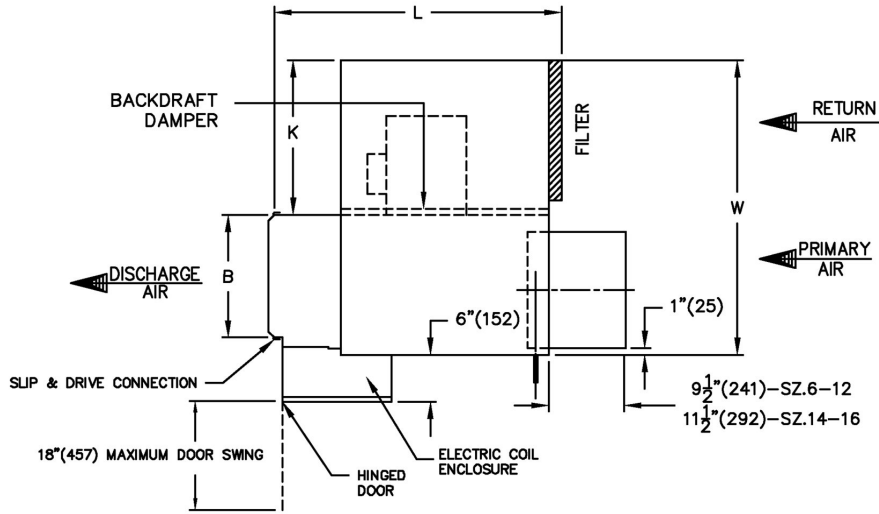
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SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

FDV5 Fan Powered Variable Volume, Digital Controls by Others



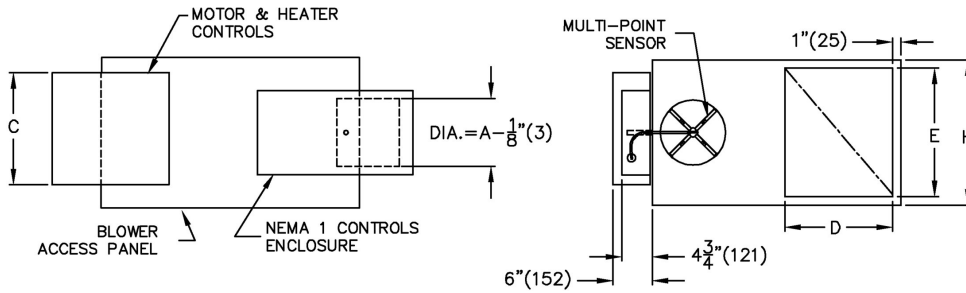
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
2010	750	10	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
2010	1/3	3.9	2.2	2.1

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2010/FLD/CFM/277-ECM/432,340,365,445,300,450/277-24V/EC/4.0,5.0/480-3/SCRV//AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW
 //SC112

SUBMITTAL NO: 258514-A

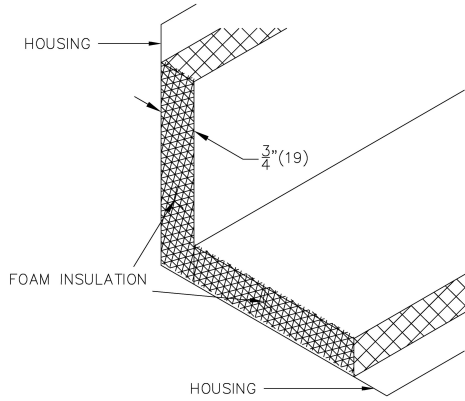
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

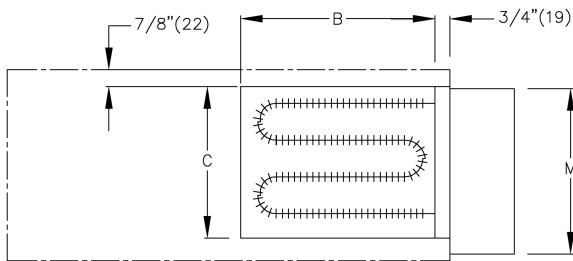
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required
- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
2010	14 x 12 1/2	15

Electrical Configuration

- Supply Voltage:
- 480/3Ø (3 Wire)
- Stages/Control: SCR/V
- SCR voltage control with 0-10 VDC control signal
 - SCR-112 (3 Phase SCR, 10 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2010/FLD/CFM/277-ECM/432,340,365,445,300,450/277-24V/EC/4.0,5.0/480-3/SCRV//AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW
 //SCV-112

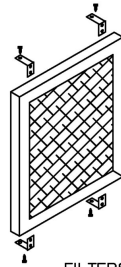
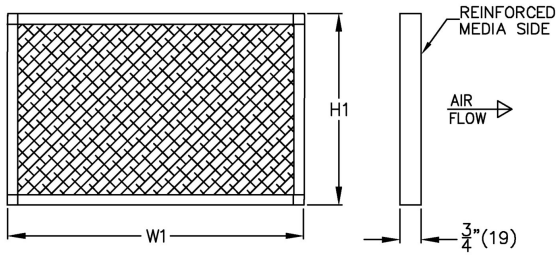
SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter
FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
2010	14 $\frac{7}{8}$	17 $\frac{3}{8}$

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

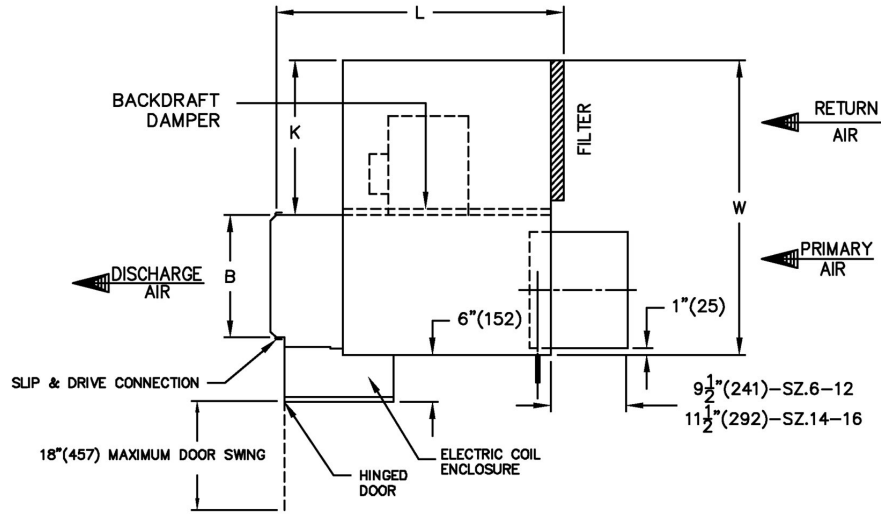
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 ///SCR-112

SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

FDV5 Fan Powered Variable Volume, Digital Controls by Others



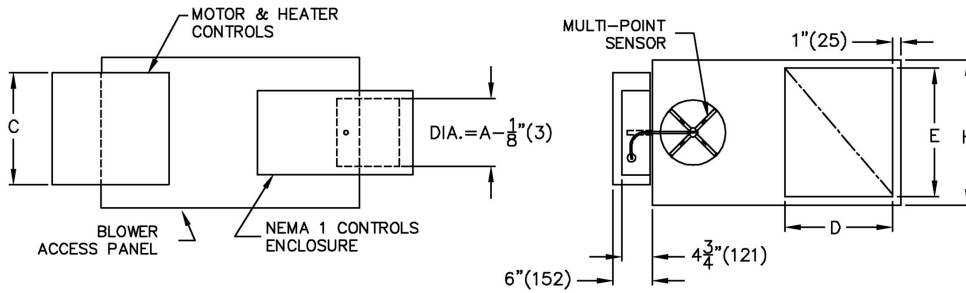
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
3010	1350	10	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
3010	1/2	7.4	4.3	4.0

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5///8001/3010/FLD/CFM/277-ECM/540,650,570,490,500,530/277-24V/EC/5.0,6.0/480-3/SCRV//AFS/IDSW,DP/DP/IDSW///FF/PS/BASV/FTRM 31///DSW//////////SCR-112

SUBMITTAL NO: 258514-A

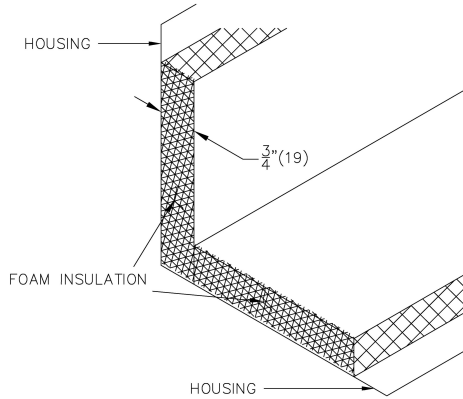
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

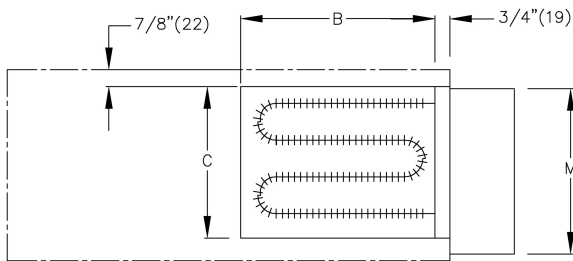
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required

- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
3010	14 x 12 1/2	15

Electrical Configuration

Supply Voltage:

- 480/3Ø (3 Wire)

Stages/Control: SCR/V

- SCR voltage control with 0-10 VDC control signal
- SCR-112 (3 Phase SCR, 10 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/3010/FLD/CFM/277-ECM/540,650,570,490,500,530/277-24V/EC/5.0,6.0/480-3/SCRV//AFS/IDSW,DP/DP/IDSW///FF/PS/BASV/FTRM 31///DSW//////////SCR-112

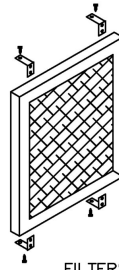
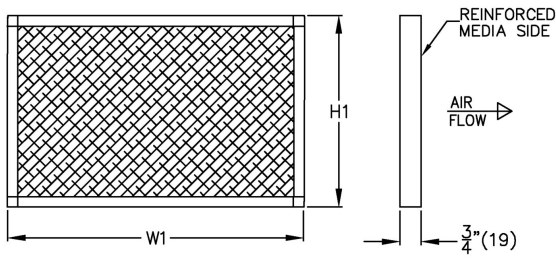
SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter
FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
3010	14 $\frac{7}{8}$	17 $\frac{3}{8}$

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

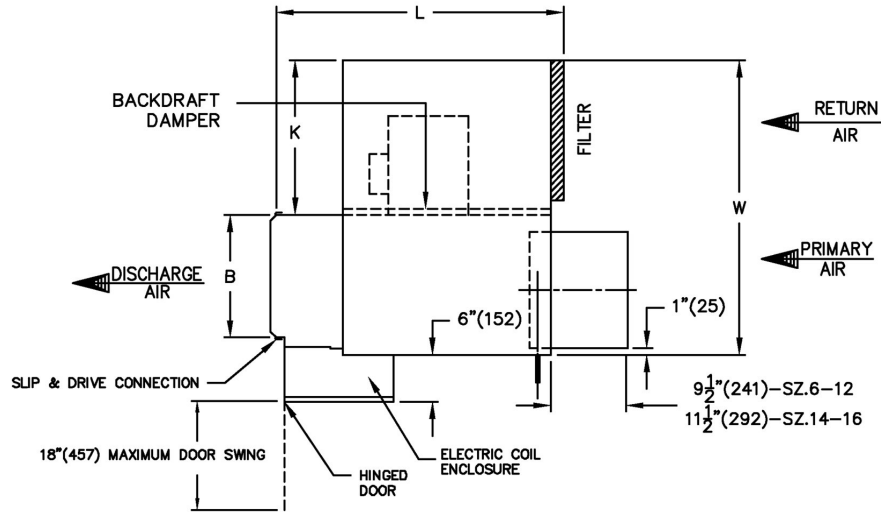
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SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

FDV5 Fan Powered Variable Volume, Digital Controls by Others



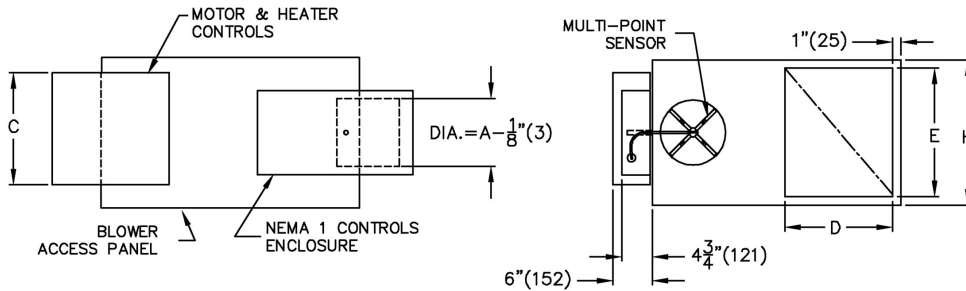
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
2006	750	6	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
2006	1/3	3.9	2.2	2.1

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2006/FLD/CFM/277-ECM/300/277-24V/EC/2.0,5.0/480-3/SCRV/AFS/IDSW,DP/DP/IDSW///FF/PS/BASV/FTRM31///DSW//////////S CR-112

SUBMITTAL NO: 258514-A

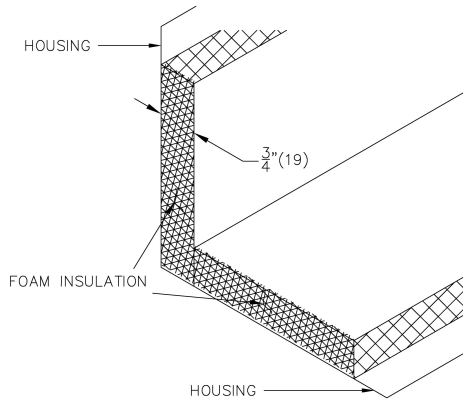
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

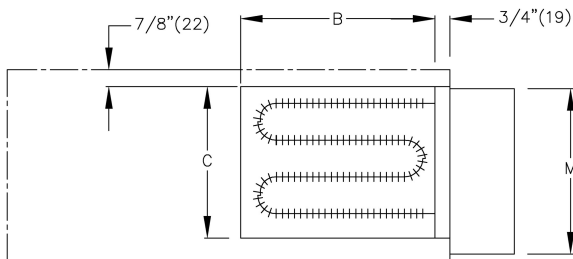
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required
- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
2006	14 x 12 1/2	15

Electrical Configuration

- Supply Voltage:
- 480/3Ø (3 Wire)
- Stages/Control: SCR/V
- SCR voltage control with 0-10 VDC control signal
 - SCR-112 (3 Phase SCR, 10 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2006/FLD/CFM/277-ECM/300/277-24V/EC/2.0,5.0/480-3/SCRV/AFS/IDSW,DP/DP/IDSW///FF/PS/BASV/FTRM31///DSW//////////S
CR-112

SUBMITTAL NO: 258514-A

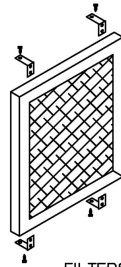
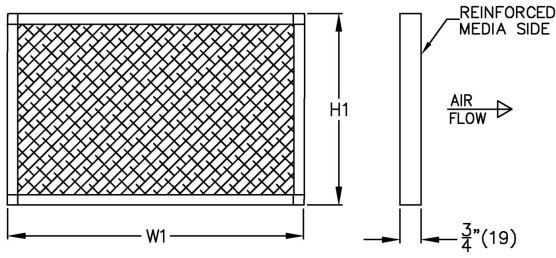
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter

FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
2006	14 $\frac{7}{8}$	17 $\frac{3}{8}$

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

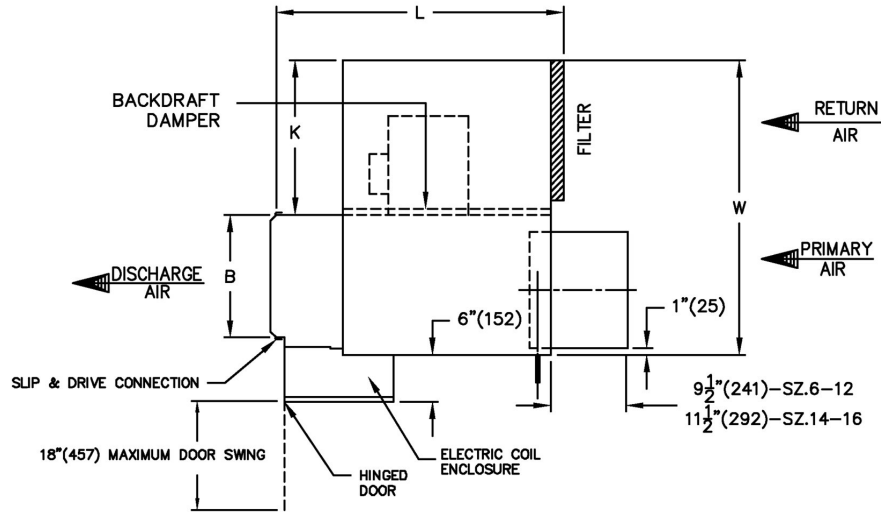
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CR-112

SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

FDV5 Fan Powered Variable Volume, Digital Controls by Others



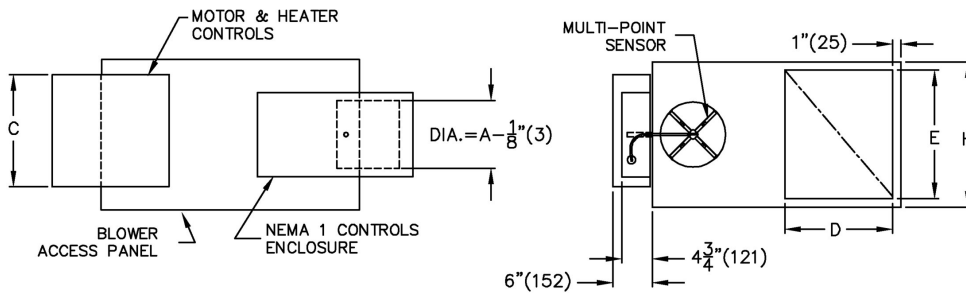
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
3012	1350	12	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
3012	1/2	7.4	4.3	4.0

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/3012/FLD/CFM/277-ECM/850/277-24V/EC/8.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//SC-108

SUBMITTAL NO: 258514-A

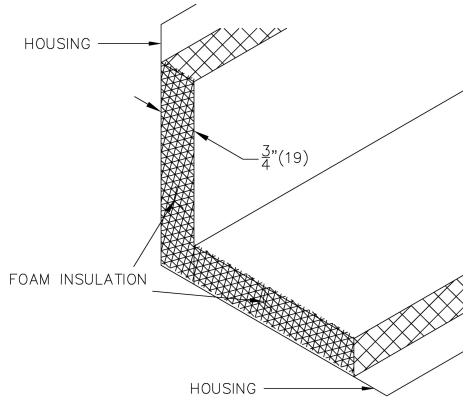
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

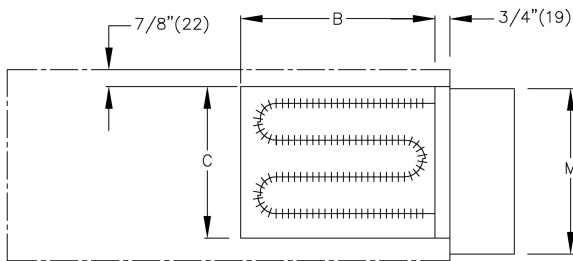
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required
- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
3012	14 x 12 1/2	15

Electrical Configuration

- Supply Voltage:
- 480/3Ø (3 Wire)
- Stages/Control: SCR/V
- SCR voltage control with 0-10 VDC control signal
 - SCR-108 (3 Phase SCR, 25 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/3012/FLD/CFM/277-ECM/850/277-24V/EC/8.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//////////SCR-108

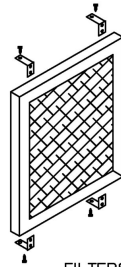
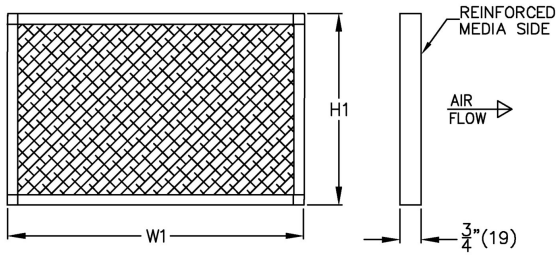
SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter
FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
3012	14 7/8	17 3/8

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

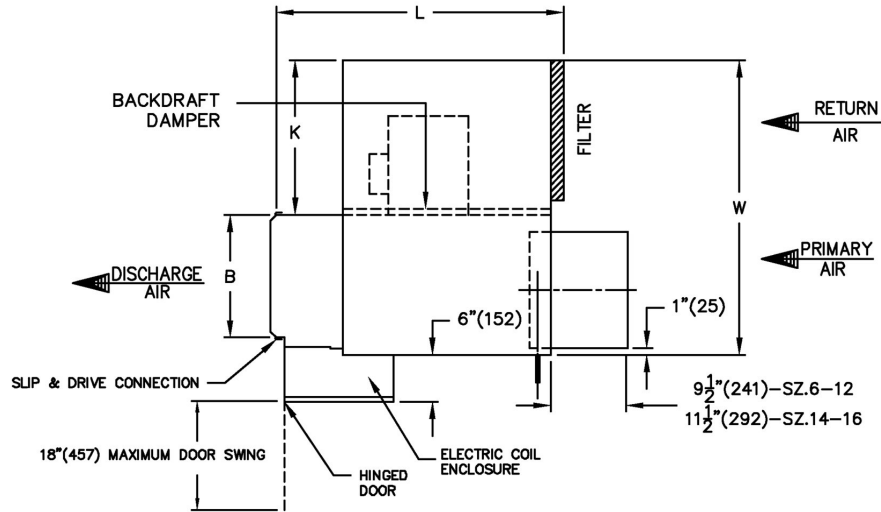
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SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

FDV5 Fan Powered Variable Volume, Digital Controls by Others



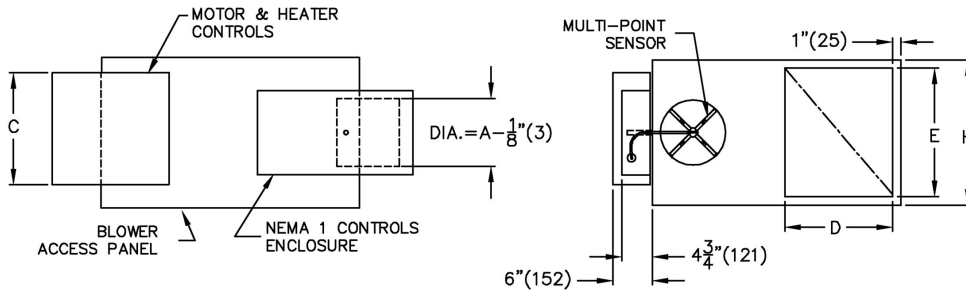
Dimensions - IMPERIAL UNITS (inches)

Unit Size	Maximum Fan CFM	Primary Air Inlet	Return Air Inlet		Outlet Duct		W	H	L	K	Gauge
			D	E	B	C					
2008	750	8	12	15 1/2	14	12 1/2	31	17 1/2	36 1/8	16 1/4	22

ECM Motor

Unit Size	Motor H.P.	Full Load Amps		
		115V	240V	277V
2008	1/3	3.9	2.2	2.1

Controls



- Pressure independent
- Controls are supplied by controls contractor and field installed
- Controls mounted on left hand side of unit
- PS - Controls enclosure included
- 277-24V Control Transformer supplied, factory mounted
- DSW - Disconnect Switch
- Multi-point primary airflow sensor supplied by Price

Notes

- 22 Ga. zinc coated steel casing. Mechanically sealed and gasketed, leak resistant construction
- Primary damper blade constructed of two layers of heavy gauge galvanized steel with a sandwiched peripheral gasket
- 1/2" (13) dia. plated solid steel shaft with end indicator mark showing damper position
- Damper leakage rated below 2% of nominal flow at 3" w.g. (747Pa). Damper closing direction - CCW
- Units not to be used for temporary heat or ventilation during construction
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Refer to submitted box schedule for air volumes and inlet sizes



Intertek

Assembly UL1995 & CSA236 listed

Motor

- ECM electric motor 1 phase, 60 cycle. Speed controller included
- BASV - BAS Input signal 0-10VDC

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2008/FLD/CFM/277-ECM/310/277-24V/EC/3.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//SC-112

SUBMITTAL NO: 258514-A

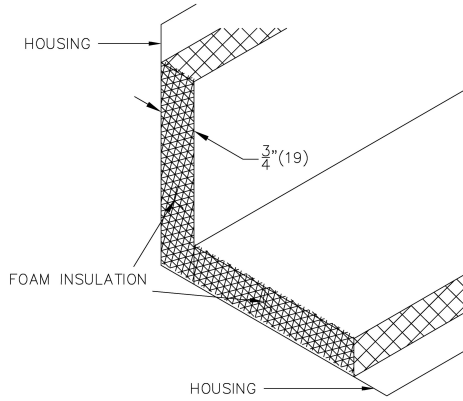
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Liner

FF

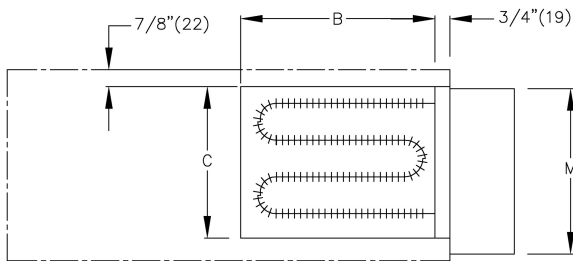
3/4" Fiber Free Foam Insulation



Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, min. 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.

R-value = 3

Electric Coil



Standard Coil Notes

- Automatic reset thermal cutout
- Manual reset thermal cutout
- Refer to submitted control diagrams for standard control components to be supplied
- Hinged access door
- Minimum 0.2" w.g. (50 Pa) external static pressure to operate
- Slip and drive discharge connection
- Magnetic contactors where required
- 20 Ga. galvanized steel construction
- Fan interlocked with heating elements
- Low watt density elements, high grade nickel-chrome alloy
- 70 CFM per kW minimum air flow across heater coils
- Assembly ETL certified to UL1995 & CSA236
- Heater section not insulated

Unit Size	IMPERIAL UNITS (inches)	
	Outlet Duct B x C	M
2008	14 x 12 1/2	15

Electrical Configuration

- Supply Voltage:
- 480/3Ø (3 Wire)
- Stages/Control: SCR/V
- SCR voltage control with 0-10 VDC control signal
 - SCR-112 (3 Phase SCR, 10 Amps Max / 480 Volts Max)

Selected Coil Features

- AFS - Air flow switch
- DP - Dual point power connection
- IDSW - Door Interlock Disconnect Switch

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2008/FLD/CFM/277-ECM/310/277-24V/EC/3.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//////////SCR-112

SUBMITTAL NO: 258514-A

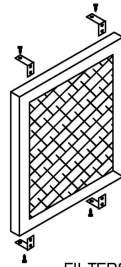
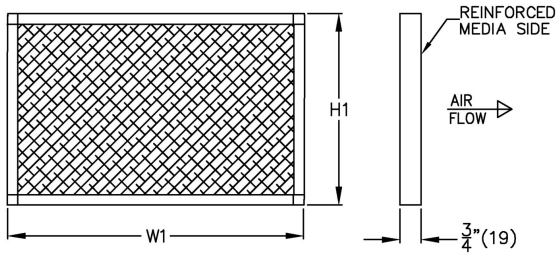
CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

Filter

FTRM31

1" MERV 3 Return Air Filter (Disposable)



FILTERS ARE CLIPPED TO TERMINAL CASING

Unit Size	IMPERIAL UNITS (inches)	
	W1	H1
2008	14 $\frac{7}{8}$	17 $\frac{3}{8}$

- Cardboard Frame
- 1" (25) Nominal Filter Media
- MERV 3 Rating
- Filter clipped to terminal

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Fan Powered, VAV - DDC By Others

FDV5//I/8001/2008/FLD/CFM/277-ECM/310/277-24V/EC/3.0/480-3/SCRV/AFS/DP//IDSW//FF/PS/BASV/FTRM31//DSW//////////SCR-112

SUBMITTAL NO: 258514-A

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023

SUBMITTAL COVER SHEET



Date: **July 15, 2023**

Job Name: **IRS – Turfway Road**

Customer: **KW Mechanical**

Engineer/Consultant: **Motz Engineering**

Manufacturer: **Price - Single Duct VAV Boxes**

Submitted By: **Jason Schulte**

The attached **1** sets of submittals are provided for: **X** APPROVAL RECORD

Please provide (1) ONE set of approved submittals prior to release for record.

Please review the items listed below, and reply accordingly to any unresolved questions or discrepancies:

Price Industries – Single Duct VAV Boxes

Please verify items below:

1. All quantities and sizes
2. Voltages
3. Accessories

Respectfully Submitted,

Jason Schulte
513-332-2095 office



Submittals

Job Name: IRS Turfway
Job Location: Florence
Customer: KW Mechanical
Date Printed: 7/15/2023
Spec Section: 15 - HVAC

Contact: 3930 VIRGINIA AVE
CINCINNATI, OH 45227



All-In-One
 Detailed Submittal Schedule

#	Qty	Model	Tag	Unit Size	Max Primary (CFM)	Min Primary (CFM)	Heat Min (CFM)	Heat Max (CFM)	Inlet SP (in. w.g.)	Min Oper PD (in. w.g.)	Max Dis NC	Max Rad NC	Reheat (CFM)	EC Capacity (kW)	EAT (°F)	LAT (°F)	Volts	Coil Amps	Steps	MOP	MCA
23	1	SDV	3-3	12	1540	500	500	1540	1.00	0.01	21 (3)	21 (4)						0			
12 - Size 12																					
24	1	SDV	3-5	10	1120	460	460	1120	1.00	0.01	24 (2)	20 (2)						0			
10 - Size 10																					
25	1	SDV	3-7	10	1050	440	440	1050	1.00	0.01	24 (2)	--						0			
10 - Size 10																					
26	1	SDV	3-9	6	200	150	150	200	1.00	0.04	25 (2)	--						0			
6 - Size 6																					
27	1	SDV	3-10	6	125	105	75	125	1.00	0.01	--	--	105	1.50	55.00	100.10	480-3	1.80	SCR	15.00	2.50
6 - Size 6 480-3 - 480 Volt / 3 Phase SCR - Silicon Controlled Rectifier																					
28	1	SDV	3-11	6	300	225	225	300	1.00	0.08	26 (2)	--	250	3.00	55.00	92.90	480-3	3.61	SCR	15.00	4.90
6 - Size 6 480-3 - 480 Volt / 3 Phase SCR - Silicon Controlled Rectifier																					
29	1	SDV	3-12	12	1320	400	400	1320	1.00	0.01	20 (3)	--						0			
12 - Size 12																					
30	1	SDV	3-14	6	300	225	225	300	1.00	0.08	26 (2)	--	250	3.00	55.00	92.90	480-3	3.61	SCR	15.00	4.90
6 - Size 6 480-3 - 480 Volt / 3 Phase SCR - Silicon Controlled Rectifier																					
31	1	SDV	3-15	6	330	330	330	330	1.00	0.10	28 (2)	--						0			
6 - Size 6																					
32	1	SDV	3-17	10	840	300	300	840	1.00	0.01	20 (2)	--						0			
10 - Size 10																					
33	1	SDV	3-18	6	300	175	175	300	1.00	0.08	26 (2)	--						0			

#	Qty	Model	Tag	Unit Size	Max Primary (CFM)	Min Primary (CFM)	Heat Min (CFM)	Heat Max (CFM)	Inlet SP (in. w.g.)	Min Oper PD (in. w.g.)	Max Dis NC	Max Rad NC	Reheat (CFM)	EC Capacity (kW)	EAT (°F)	LAT (°F)	Volts	Coil Amps	Steps	MOP	MCA
6 - Size 6																					
34	1	SDV	3-19	6	300	225	225	300	1.00	0.08	26 (2)	--	250	3.00	55.00	92.90	480-3	3.61	SCR	15.00	4.90
6 - Size 6 480-3 - 480 Volt / 3 Phase SCR - Silicon Controlled Rectifier																					
35	1	SDV	3-23	10	840	300	300	840	1.00	0.01	20 (2)	--						0			
10 - Size 10																					
36	1	SDV	3-27	10	1320	550	550	1320	1.00	0.01	26 (2)	21 (2)						0			
10 - Size 10																					
37	1	SDV	3-29	6	225	165	165	225	1.00	0.05	26 (2)	--						0			
6 - Size 6																					
38	1	SDV	3-31	6	275	275	275	275	1.00	0.07	29 (2)	--						0			
6 - Size 6																					
39	1	SDV	3-32	6	275	275	275	275	1.00	0.07	29 (2)	--						0			
6 - Size 6																					
40	1	SDV	3-33	6	275	275	275	275	1.00	0.07	29 (2)	--						0			
6 - Size 6																					
41	1	SDV	3-35	6	325	265	265	325	1.00	0.10	28 (2)	--						0			
6 - Size 6																					
42	1	SDV	3-37	10	940	400	400	940	1.00	0.01	22 (2)	--						0			
10 - Size 10																					
43	1	SDV	3-39	6	400	350	350	400	1.00	0.14	30 (2)	23 (3)						0			
6 - Size 6																					
44	1	SDV	3-40	6	125	75	75	125	1.00	0.01	--	--						0			
6 - Size 6																					
45	1	SDV	3-42	6	200	110	110	200	1.00	0.04	25 (2)	--						0			
6 - Size 6																					
46	1	SDV	3-43	6	300	225	225	300	1.00	0.08	26 (2)	--	250	3.00	55.00	92.90	480-3	3.61	SCR	15.00	4.90

#	Qty	Model	Tag	Unit Size	Max Primary (CFM)	Min Primary (CFM)	Heat Min (CFM)	Heat Max (CFM)	Inlet SP (in. w.g.)	Min Oper PD (in. w.g.)	Max Dis NC	Max Rad NC	Reheat (CFM)	EC Capacity (kW)	EAT (°F)	LAT (°F)	Volts	Coil Amps	Steps	MOP	MCA
6 - Size 6 480-3 - 480 Volt / 3 Phase SCR - Silicon Controlled Rectifier																					
47	1	SDV	4-4	6	200	160	160	200	1.00	0.04	25 (2)	-						0			
6 - Size 6																					
48	1	SDV	4-5	10	1800	900	900	1800	1.00	0.01	30 (2)	25 (2)						0			
10 - Size 10																					
49	1	SDV	4-6	12	1400	900	900	1400	1.00	0.01	20 (3)	20 (4)						0			
12 - Size 12																					

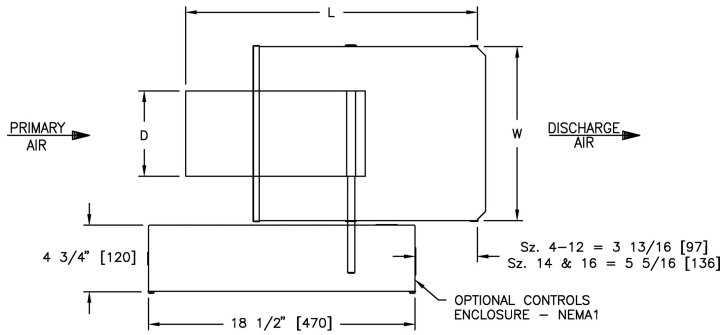


Performance Notes

Date Printed: 7/15/2023

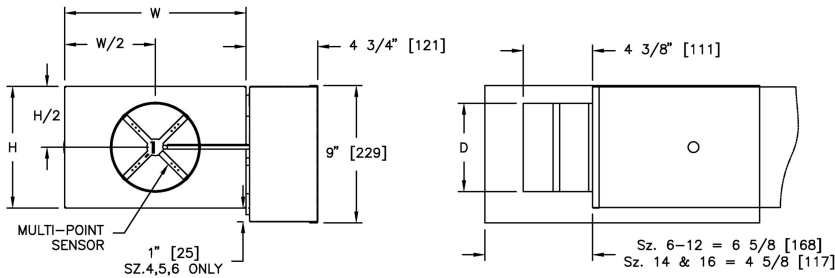
1. Dashes (--) indicate NC values less than 20.
2. NC values are calculated based on procedures outlined in AHRI Standard 885-2008, "A Procedure for Estimating Occupied Space Sound Levels in the Application of Air Terminals and Air Outlets."
3. Sound power levels are given in decibels (dB).
4. Dashes (--) 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.
5. Minimum operating pressure is the minimum static pressure required to operate the terminal item assembly at maximum primary flow with a wide open damper.
6. Airflow is given in cubic feet per minute (cfm).
7. 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.).
8. NC values are derived from sound power levels obtained in accordance with ASHRAE Standard 130-2016 and AHRI Standard 880-2017, which include duct end reflection corrections.

SDV Single Duct



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
12	12	11 7/8	N/A	16	15	20 1/8

Controls Type



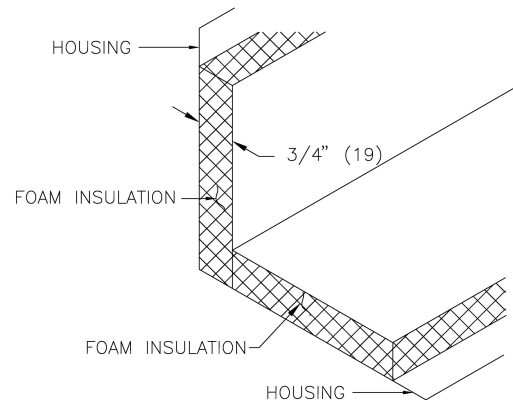
- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- PS - Nema 1 controls enclosure included.
- Pressure independent

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: FF75

- Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=3



PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

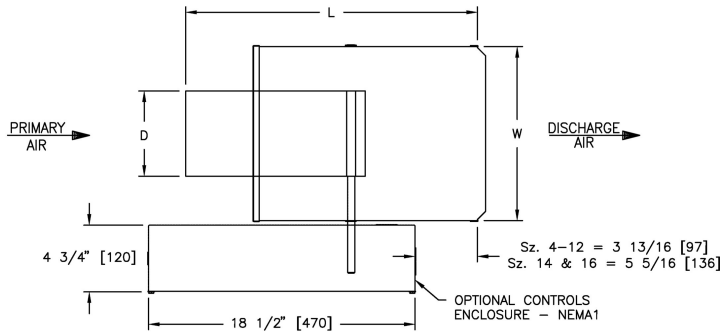
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SUBMITTAL NO: 269757-B

CUSTOMER: KW Mechanical

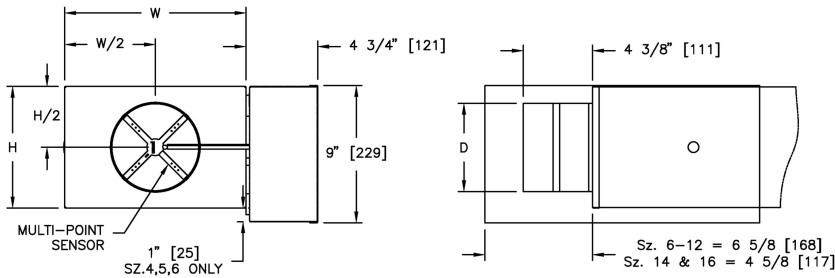
SUBMITTAL DATE: 7/15/2023

SDV Single Duct



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
10	10	9 7/8	N/A	14	12 1/2	20 1/8

Controls Type



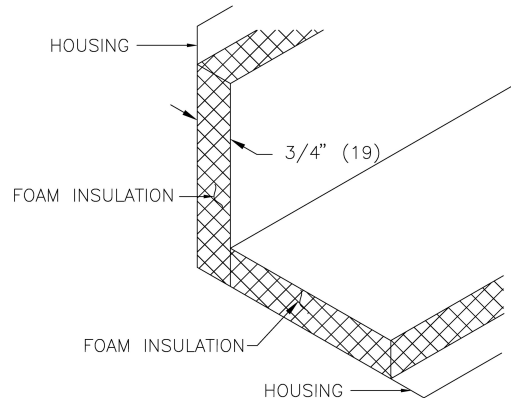
- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- PS - Nema 1 controls enclosure included.
- Pressure independent

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: FF75

- Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=3



PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

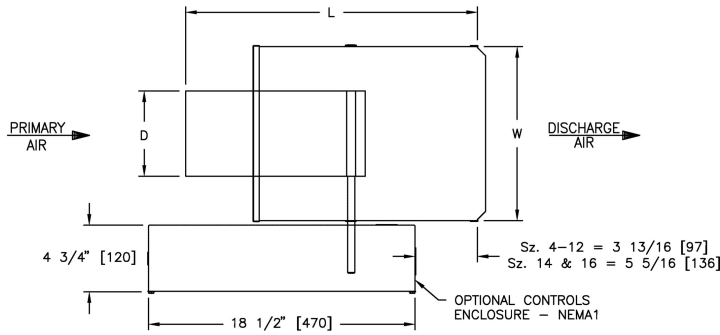
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SUBMITTAL NO: 269757-B

CUSTOMER: KW Mechanical

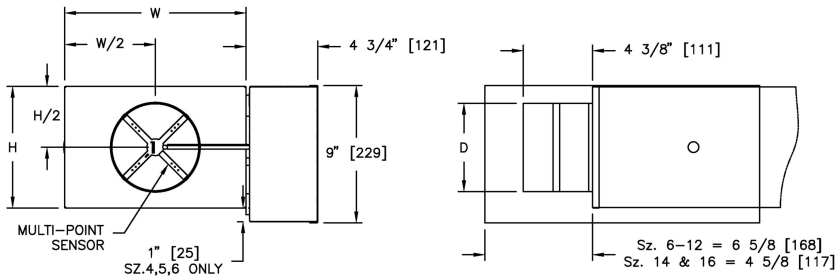
SUBMITTAL DATE: 7/15/2023

SDV Single Duct



Unit Size	Casing Size	Inlet		Casing		Length
		D	E	W	H	L
6	6	5 7/8	N/A	12	8	20 1/8

Controls Type



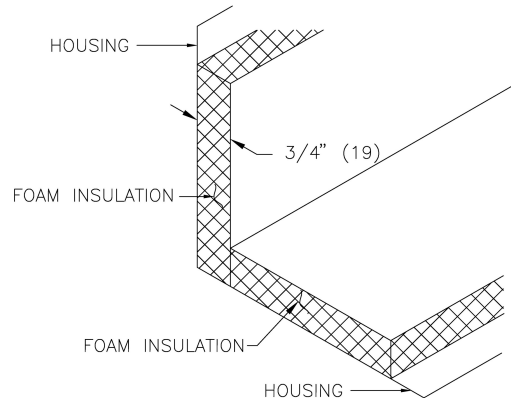
- Multi-point, center averaging airflow sensor.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- PS - Nema 1 controls enclosure included.
- Pressure independent

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: FF75

- Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=3



PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

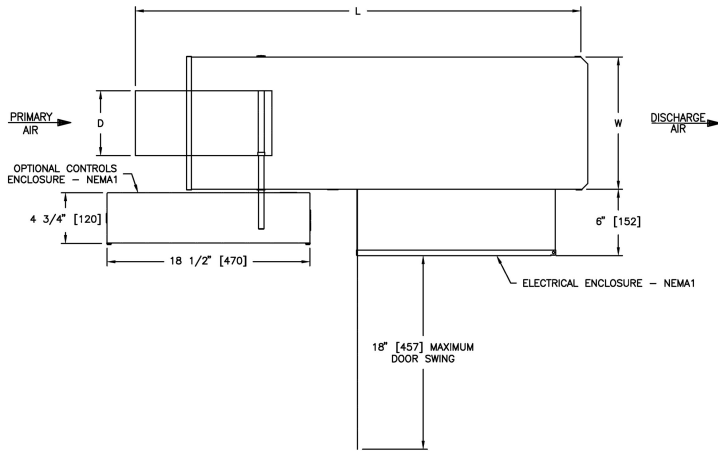
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SUBMITTAL NO: 269757-B

CUSTOMER: KW Mechanical

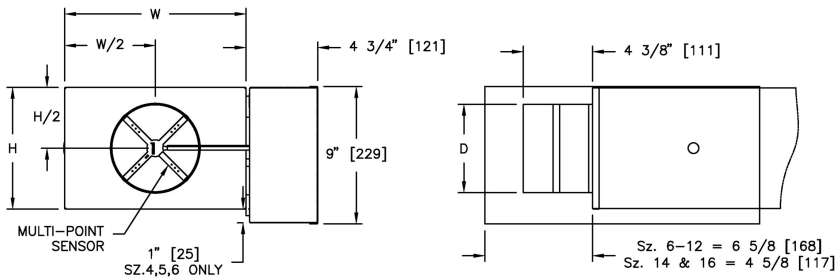
SUBMITTAL DATE: 7/15/2023

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.
- Controls enclosure will be supplied as illustrated on right hand side.
- Controls are supplied by controls contractor and field installed.
- PS - Nema 1 controls enclosure included.
- Pressure independent

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1-1/1/6/FLD///CFM/CRH/FF75//22GA/PS/EC/////0.00////////1.5,3.0/480-3/SCR/SCR-112/SCRV////IDSW//105,225/125,300/75,225/125,300/105,250//////////2000

SUBMITTAL NO: 269757-B

CUSTOMER: KW Mechanical

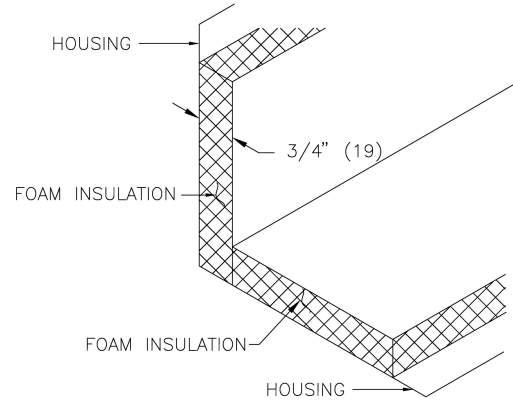
SUBMITTAL DATE: 7/15/2023

Notes

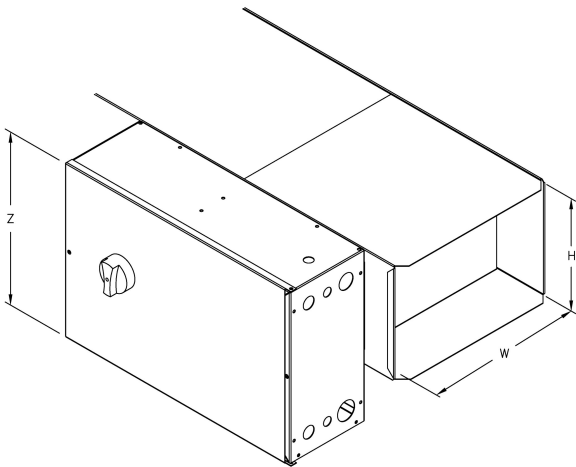
- 22 Gauge zinc coated steel housing with 20 gauge electric coil. Mechanically sealed, leak resistant construction.
- Rectangular discharge opening with slip and drive cleat duct connection.
- Assembly ETL certified to UL1995 & CSA236.
- Heater section is not insulated.
- Minimum air volume is zero (shut-off).
- 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: FF75

- Internal Insulation - Fiber Free Foam 3/4" (19mm) thick, 1.5 lb/cu.ft density, meets requirements of NFPA90A and UL 181.
- R-Value=3



Electric Coil



Electric Coil Notes

- Supply Voltage: 480/3Ø (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.
- 24 VAC / 50 VAC Class 2 Transformer included.
- IDSW - Door interlock disconnect switch included.
- SCR - 0 to 10 VDC control signal included.

Electrical Configuration

EC Type: SCR
EC SCR Type: SCR-112



Unit Size	W	H	Z
6	12	8	12

PROJECT: IRS Turfway

ENGINEER:

DESCRIPTION: Single Duct Variable Volume

SDV-1-1//1/6/FLD//CFM/CRH/FF75//22GA/PS/EC/////0.00////////1.5,3.0/480-3/SCR/SCR-112/SCRV////IDSW//105,225/125,300/75,225/125,300/105,250/////////2000

SUBMITTAL NO: 269757-B

CUSTOMER: KW Mechanical

SUBMITTAL DATE: 7/15/2023