

PRMH20231156



**Heating
Air Conditioning
Refrigeration**

**Contractors Lic# UNIVERI*159RF
Oregon Lic# 160248**

**PROVIDE REPORT OF REQUIRED MANUFACTURES
SPECIFICATION ON SITE FOR INSTALLATION AND ALL
INSPECTIONS**

**Red Dot TI @ Puyallup Logistics Bldg.
2504 East Main Ave.
Puyallup, WA 98372
HVAC Equipment Submittals**

**To:
City of Puyallup**

**From:
Universal Refrigeration, Inc.
Heath Hamblen**

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1. Carrier VRF Outdoor Unit: OHP-1

VRF Outdoor Unit

38VMA096RDS6-1 - Heat Recovery



Submittal Data

Job Data _____ Location _____
 Buyer _____ Buyer PO # _____ Carrier # _____
 Unit Number _____ Model Number _____
 Performance Data Certified By _____ Date _____



Heat Recovery Features

- Modules available from 6 to 28 tons
- Modules have inverter-driven scroll compressors
- Direct-drive, inverter-driven outdoor motor
- Up to 3280 ft (1000 m) actual total system piping (liquid line)
- 656 ft (200 m) actual piping length from outdoor unit to furthest fan coil
- Up to 3937 ft (1200 m) control wiring between the outdoor units and indoor units
- Operating temperature range Cooling (db): 5° to 125°F (-15° to 52°C) Heating (wb): -13° to 64°F (-25° to 18°C)
- Protection: high pressure sensor and switch, low pressure sensor and switch, process controller board fuse, inverter overload protection
- 7-year compressor limited warranty
- 5-year parts limited warranty

Header Unit Model		38VMA096RDS6-1
PERFORMANCE		
Nominal Cooling Capacity	Btu/h	96,000
Nominal Heating Capacity	Btu/h	108,000
Maximum Total Connected Indoor Unit Capacity		50% to 150%
SIMULTANEOUS COOLING AND HEATING EFFICIENCY†		
SCHE, Ducted FCUs		27.70
SCHE, Ductless FCUs		30.00
COOLING EFFICIENCY†		
EER/IEER, Ducted FCUs	Btu/Wh	12.40/24.30
Power Consumption, Ducted FCUs	kW	7.10
EER/IEER, Ductless FCUs	Btu/Wh	13.20/23.70
Power Consumption, Ductless FCUs	kW	6.20
HEATING EFFICIENCY†		
COP at 47°F, Ducted FCUs		3.63
Power Consumption, Ducted FCUs	kW	8.00
COP at 47°F, Ductless FCUs		3.82
Power Consumption, Ductless FCUs	kW	7.20
Fan Type (Qty)		Propeller (2)
Airflow, Standard Range	CFM	7600
Sound Pressure	dBA	61.7
External Static Pressure*	in. wg	0.24

LEGEND

db	— Dry Bulb
COP	— Coefficient of Performance
EER	— Energy Efficiency Ratio
FCU	— Fan Coil Unit
IEER	— Integrated Energy Efficiency Ratio
wb	— Wet Bulb
SCHE	— Simultaneous Cooling and Heating Efficiency

ELECTRICAL		
Power Supply	V/Ph/Hz	460/3/60
Minimum Circuit Amps (MCA)	A	22
Recommended Fuse Size	A	30
COMPRESSORS		
Type (Number)		Inverter Hermetic Scroll (1)
FAN MOTOR		
Motor Type (Steps)		Inverter Direct Driven (13)
Motor Output	kW	2 x 0.21
PHYSICAL DATA		
Pipe Connection Size - Liquid (High Pressure)	in.	3/4 (Brazed)
Pipe Connection Size - Gas (Low Pressure)	in.	7/8 (Brazed)
Refrigerant		R-410A
Factory Charge††	lb	26.5
Unit Width	in.	52-3/4
Unit Height	in.	64-3/8
Unit Depth	in.	31-1/8
Net Weight	lb	672

†Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 1230 Standard.

Cooling: Indoor 80°F (27°C) db/67°F (20°C) wb; Outdoor 95°F (35°C) db

Heating: Indoor 70°F (21°C) db; Outdoor 47°F (8°C) db/43°F (6°C) wb

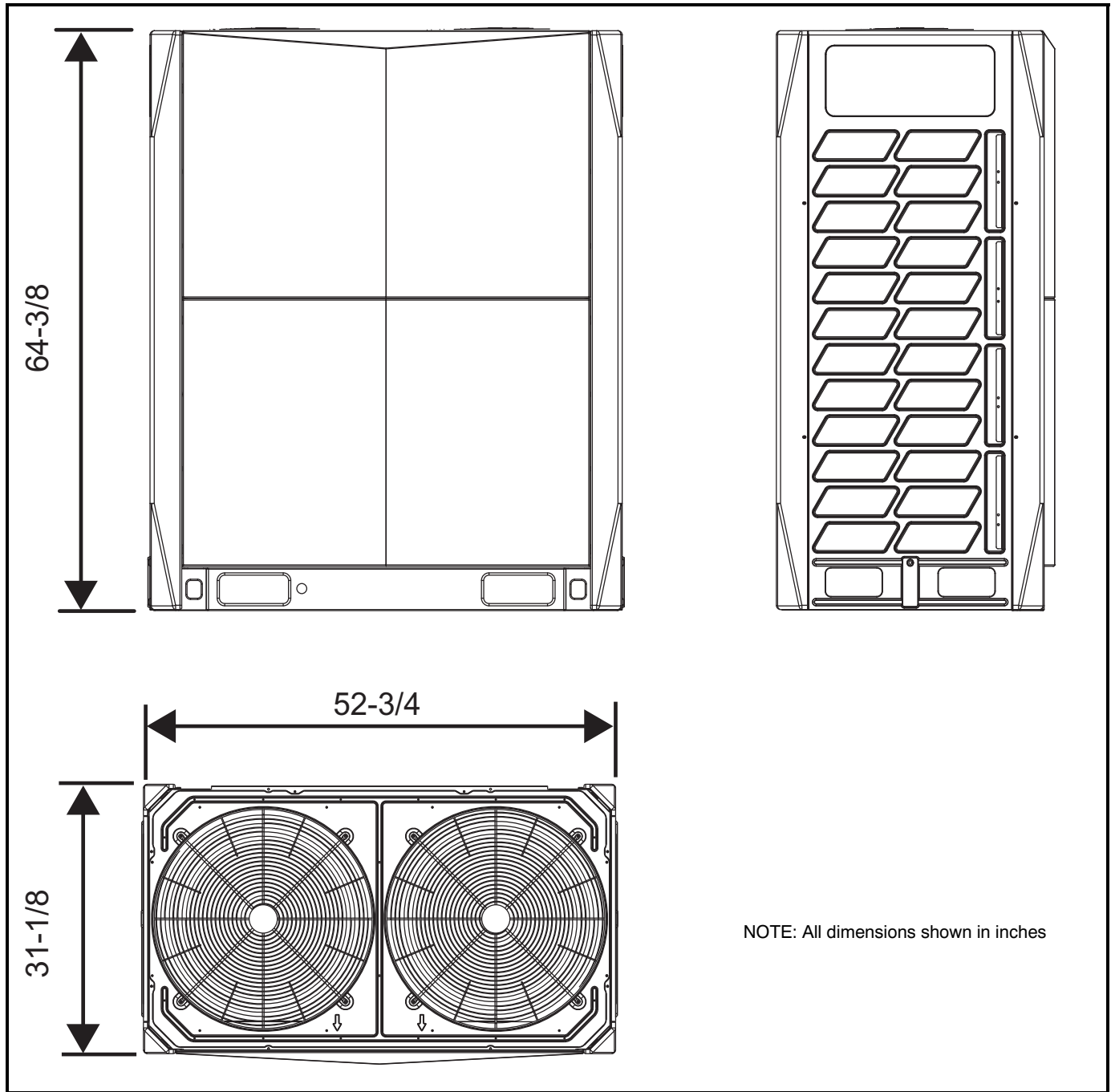
*Requires setting by menu functions.

††Additional charge required.

NOTE: Unit cabinet and coil slab shall be capable of withstanding 500-hour salt spray test.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

DIMENSIONAL DRAWING OUTDOOR UNIT 38VMA096RDS6-1



2. Carrier VRF Indoor Units: FCU-1 thru FCU-5

VRF Indoor Unit 40VMC009A--3—Compact 4-Way Cassette



Submittal Data

Job Name _____ Location _____
Tag _____



STANDARD FEATURES

- Delivers air in all four directions
- Three fan speeds - high, medium, and low
- Built-in condensate lift mechanism
- Condensate lift 23-5/8 inches
- Built in EXV (Electronic Expansion Valve) for installation ease
- Outside air connection
- Branch duct for supply (blank off required)
- Panel/grill (40VMC001----) - ordered separately

INDOOR UNIT MODEL		40VMC009A--3
PERFORMANCE		
Total Cooling Rated Capacity	Btu/h	9,130
Sensible Cooling Capacity	Btu/h	6,330
Total Heating Rated Capacity	Btu/h	10,000
Airflow (H / M / L)	CFM	306 / 282 / 229
Sound Pressure (H / M / L)	dBA	40.4 / 38.5 / 34.7
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/1/60
Indoor Fan Motor Power Consumption (Input)	W	16
Minimum Circuit Amps (MCA)	A	0.38
Maximum Overcurrent Protection	A	15.0
Motor Type		DC

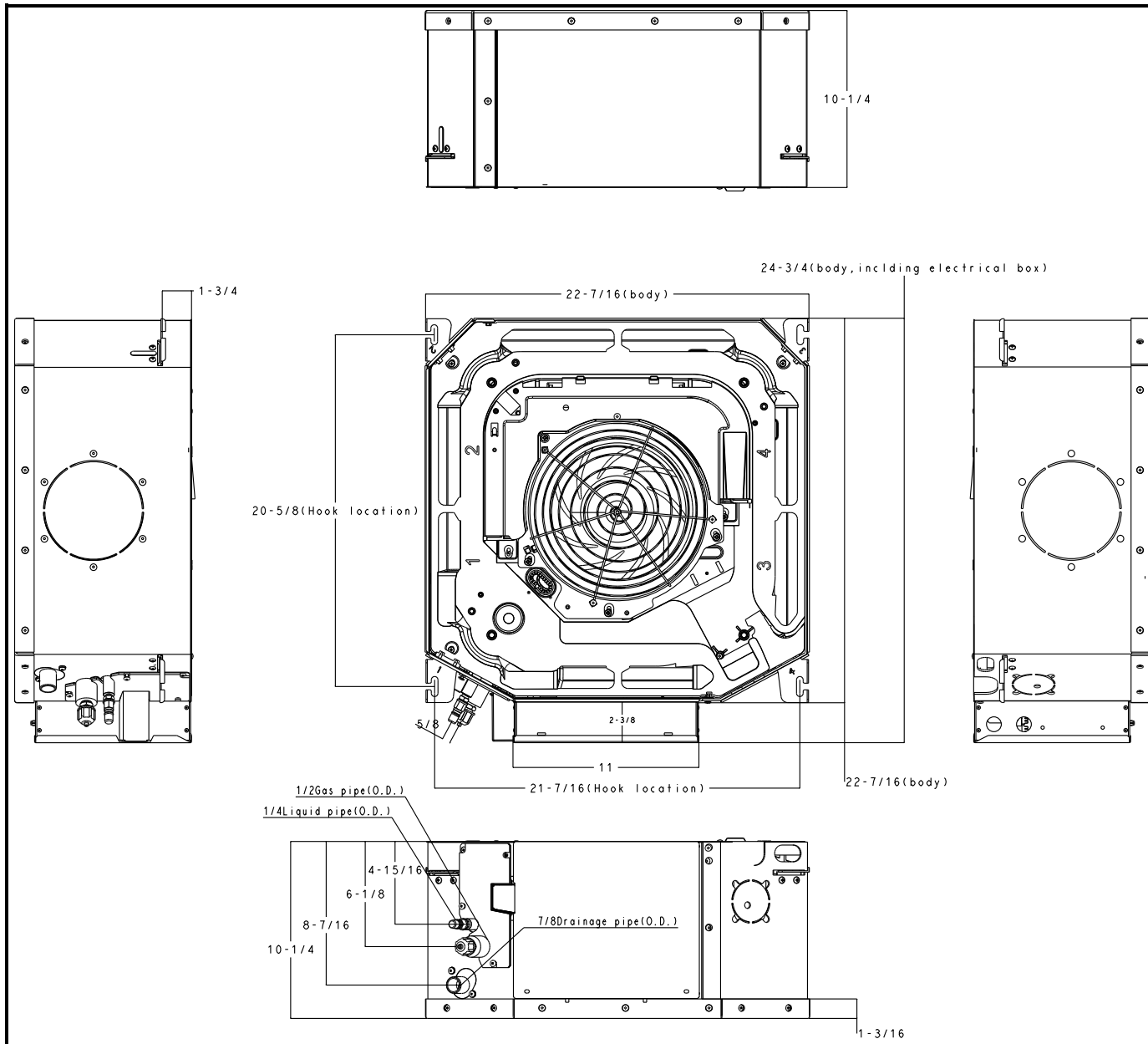
PHYSICAL DATA		
Pipe Connection Size - Liquid	in.	1/4 (OD)
Pipe Connection Size - Suction	in.	1/2 (OD)
Pipe Connection Size - Drain	in.	1 (OD)
Refrigerant		R-410A
Unit Width	in.	24-3/4
Unit Height	in.	10-1/4
Unit Depth	in.	22-7/16
Unit Net Weight	lbs.	40.0
Panel Width	in.	25-1/2
Panel Height	in.	2
Panel Depth	in.	25-1/2
Panel Net Weight	lbs.	5.5

ACCESSORIES

- Wireless Remote Controller 40VM900001
- Wired Remote Controller - Non-Prog. 40VM900002
- Wired Remote Controller - Prog. 40VM900003
- Touch Screen Wired Controller 40VM900005
- 24V Controller 40VM900008
- Button Sensor 40VM900009

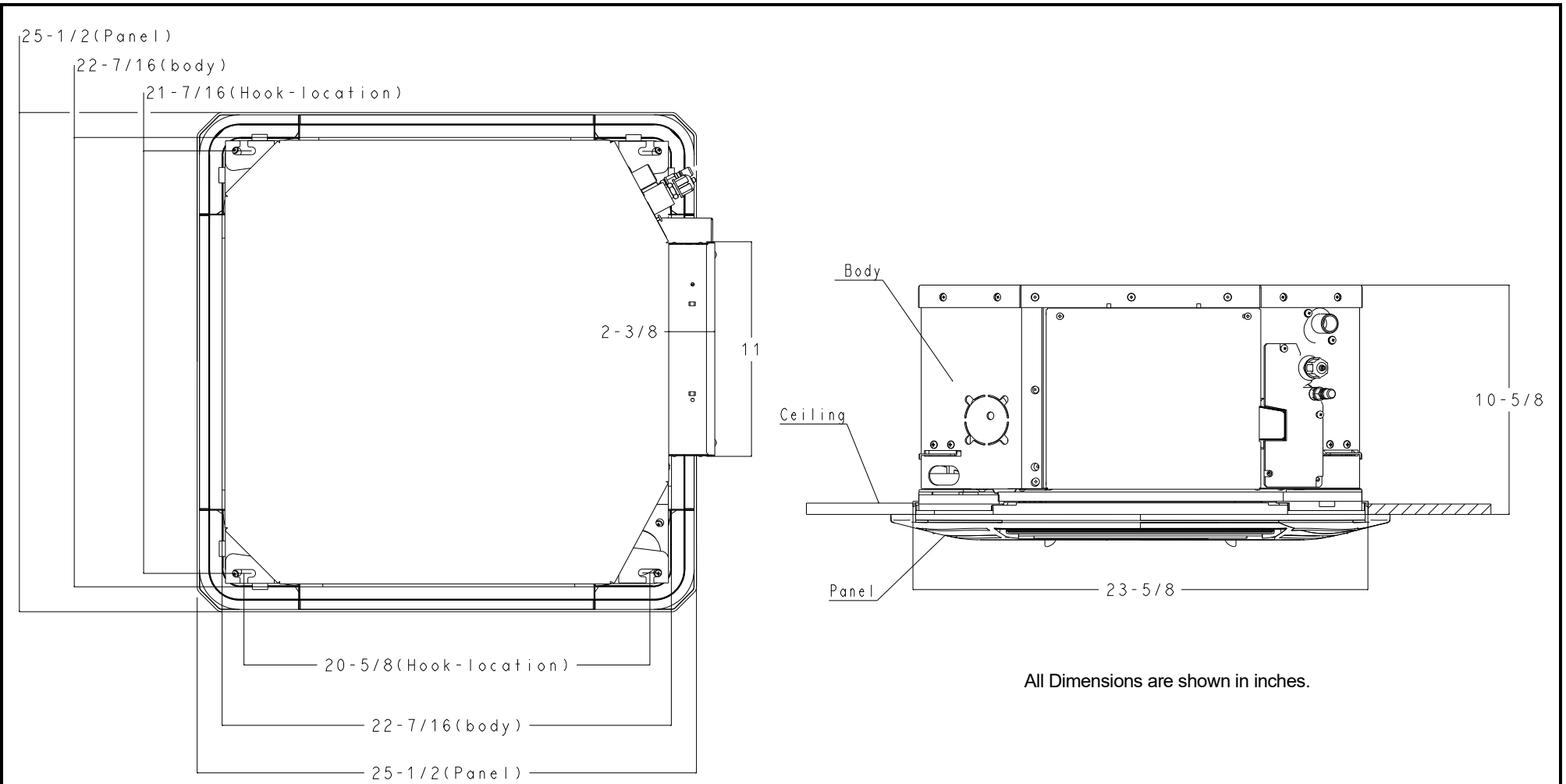
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DIMENSIONAL DRAWING INDOOR UNIT COMPACT 4-WAY CASSETTE 40VMC009A--3

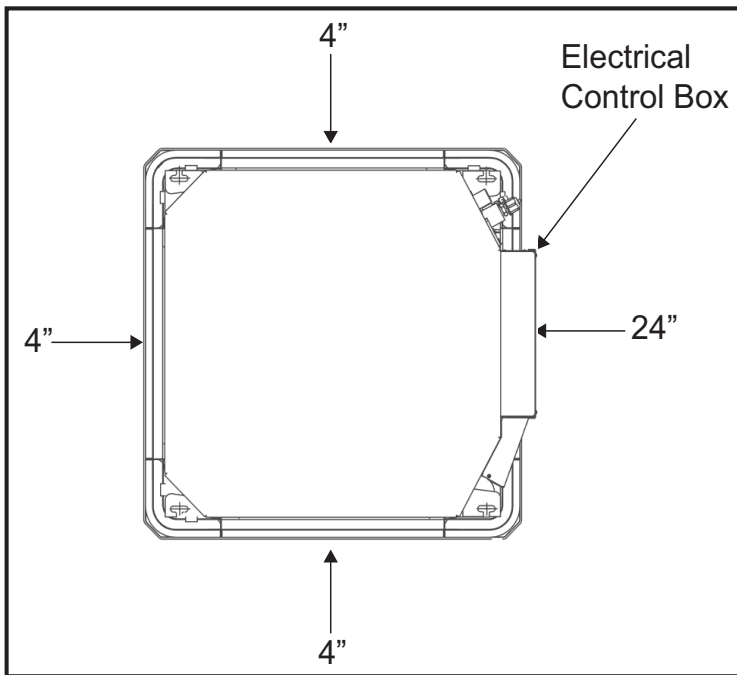


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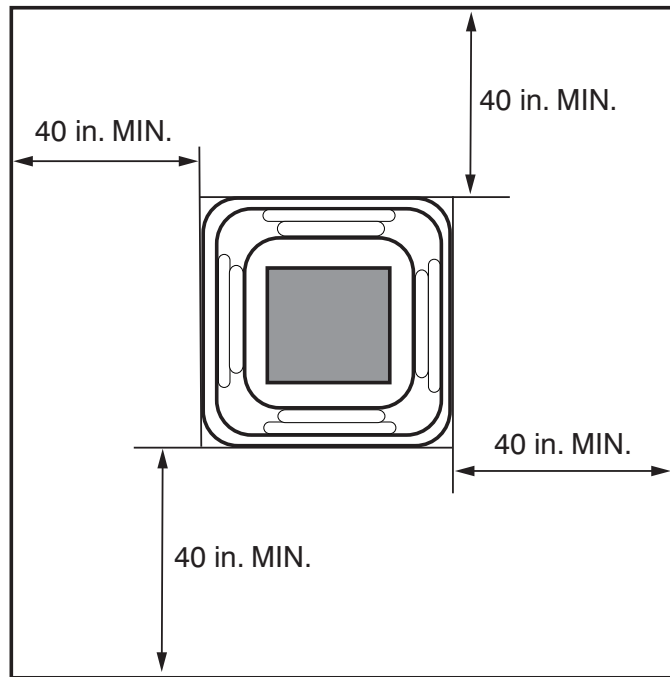
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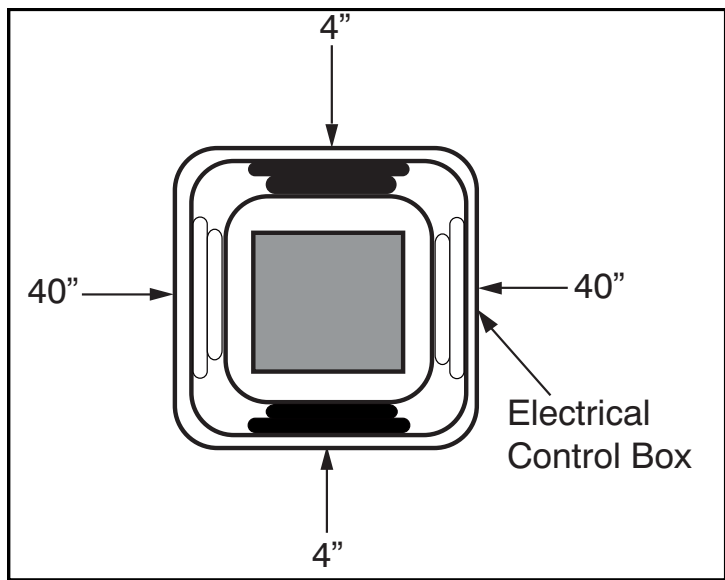
RECOMMENDED SERVICE CLEARANCE



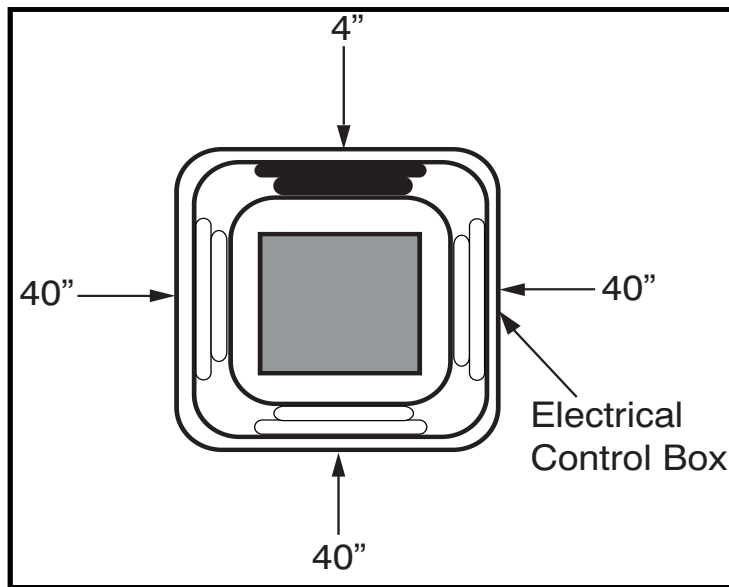
RECOMMENDED AIRFLOW CLEARANCE



RECOMMENDED CLEARANCE FOR BLOCKING OFF LOUVERS / SUPPLY DUCT OPENING



2 Supply Louvers Blocked Off



1 Supply Louver Blocked Off



VRF Indoor Unit 40VMC012A--3—Compact 4-Way Cassette



Submittal Data

Job Name _____ Location _____
Tag _____



STANDARD FEATURES

- Delivers air in all four directions
- Three fan speeds - high, medium, and low
- Built-in condensate lift mechanism
- Condensate lift 23-5/8 inches
- Built in EXV (Electronic Expansion Valve) for installation ease
- Outside air connection
- Branch duct for supply (blank off required)
- Panel/grill (40VMC001----) - ordered separately

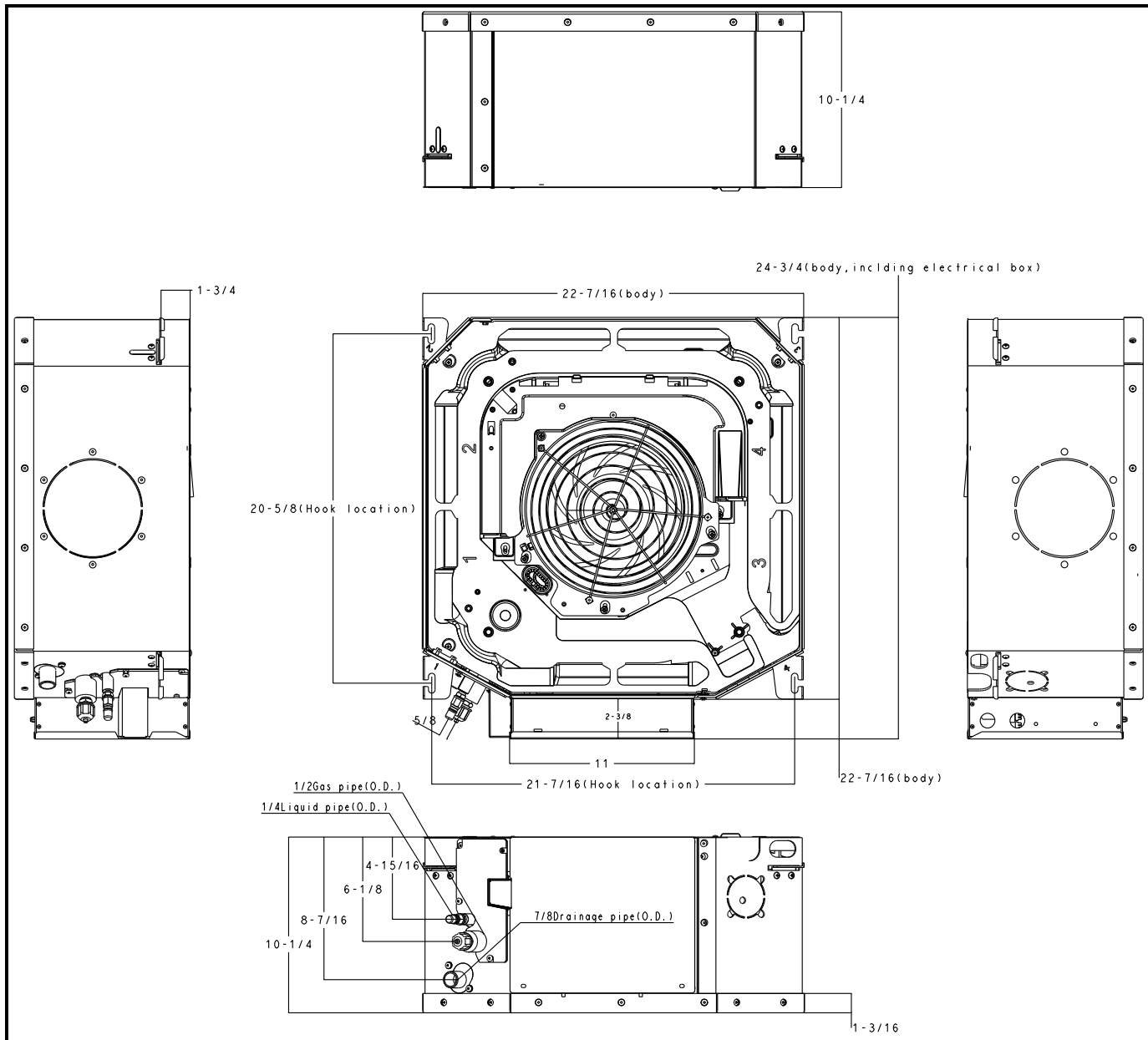
INDOOR UNIT MODEL		40VMC012A--3
PERFORMANCE		
Total Cooling Rated Capacity	Btu/h	12,170
Sensible Cooling Capacity	Btu/h	8,050
Total Heating Rated Capacity	Btu/h	13,000
Airflow (H / M / L)	CFM	359 / 306 / 253
Sound Pressure (H / M / L)	dBA	45.5 / 42.3 / 38.1
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/1/60
Indoor Fan Motor Power Consumption (Input)	W	24
Minimum Circuit Amps (MCA)	A	0.53
Maximum Overcurrent Protection	A	15.0
Motor Type		DC

PHYSICAL DATA		
Pipe Connection Size - Liquid	in.	1/4 (OD)
Pipe Connection Size - Suction	in.	1/2 (OD)
Pipe Connection Size - Drain	in.	1 (OD)
Refrigerant		R-410A
Unit Width	in.	24-3/4
Unit Height	in.	10-1/4
Unit Depth	in.	22-7/16
Unit Net Weight	lbs.	43.0
Panel Width	in.	25-1/2
Panel Height	in.	2
Panel Depth	in.	25-1/2
Panel Net Weight	lbs.	5.5

ACCESSORIES

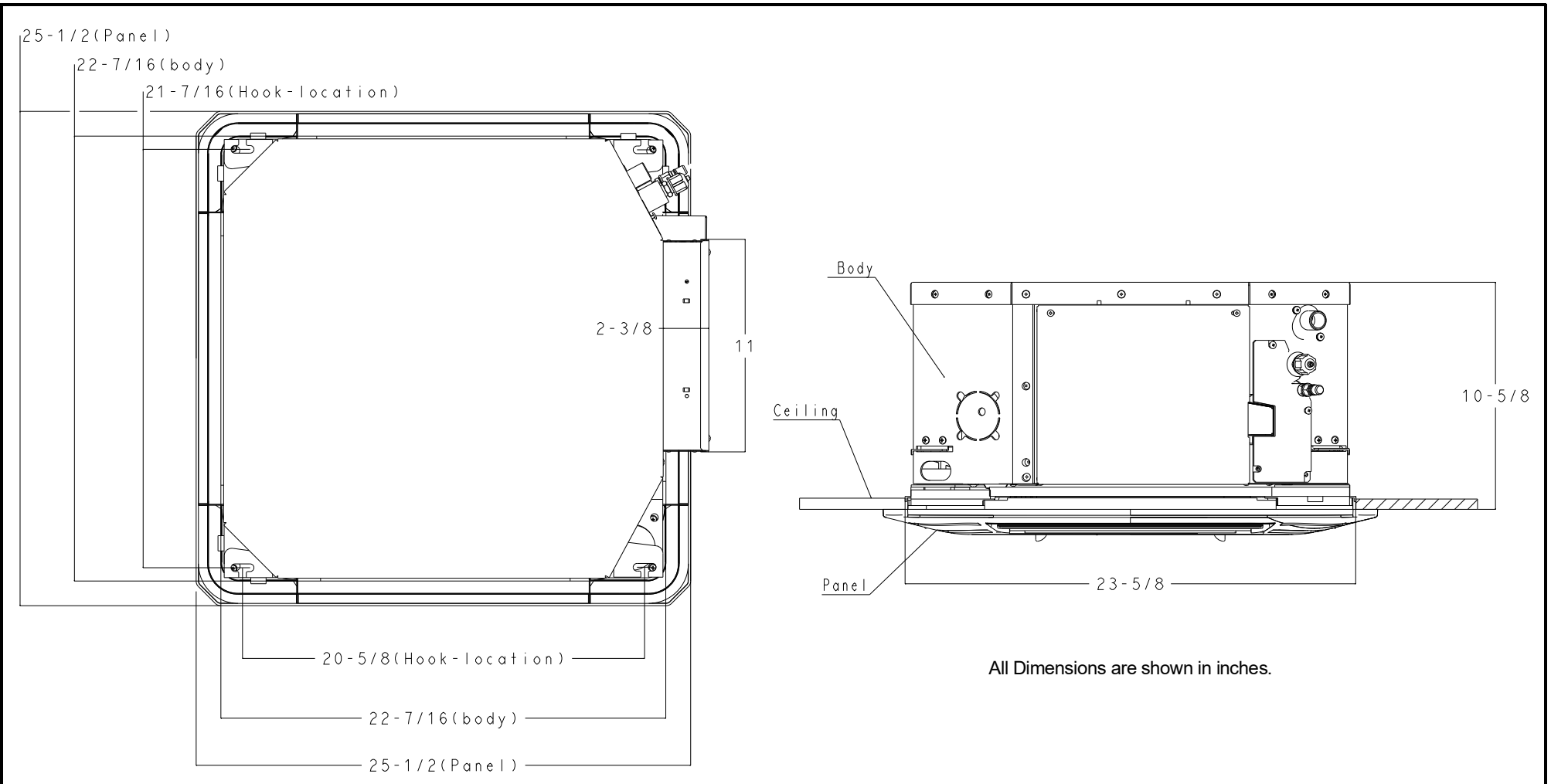
- Wireless Remote Controller 40VM900001
- Wired Remote Controller - Non-Prog. 40VM900002
- Wired Remote Controller - Prog. 40VM900003
- Touch Screen Wired Controller 40VM900005
- 24V Controller 40VM900008
- Button Sensor 40VM900009

DIMENSIONAL DRAWING INDOOR UNIT COMPACT 4-WAY CASSETTE 40VMC012A--3

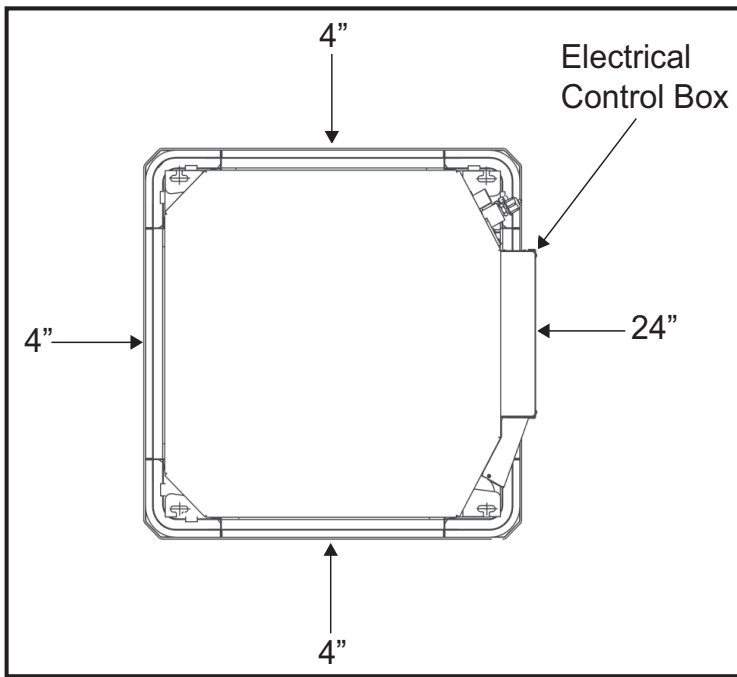


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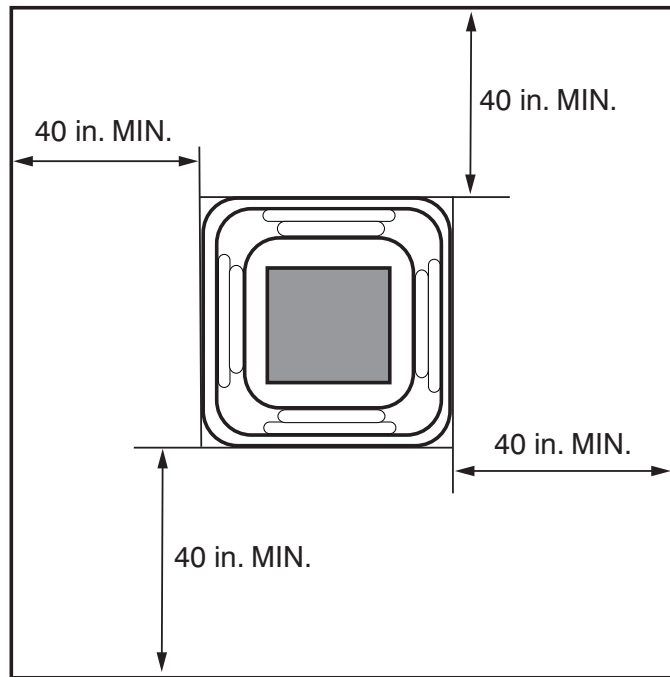
DIMENSIONAL DRAWING INDOOR UNIT COMPACT 4-WAY CASSETTE 40VMC012A--3



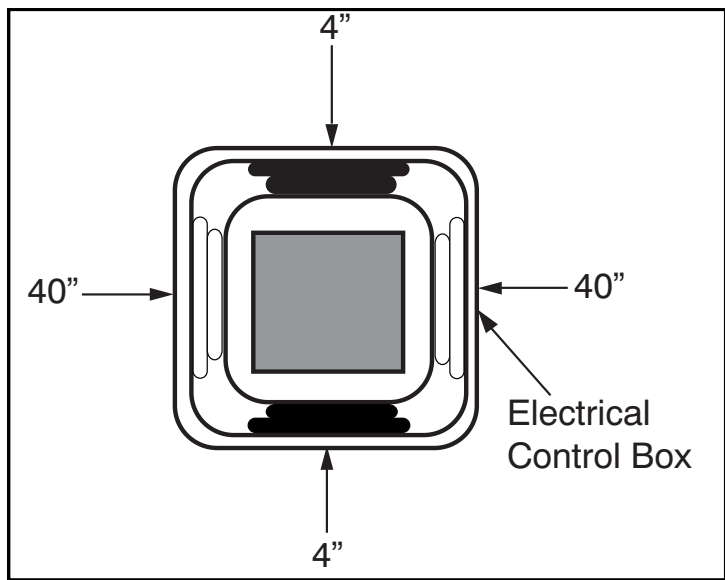
RECOMMENDED SERVICE CLEARANCE



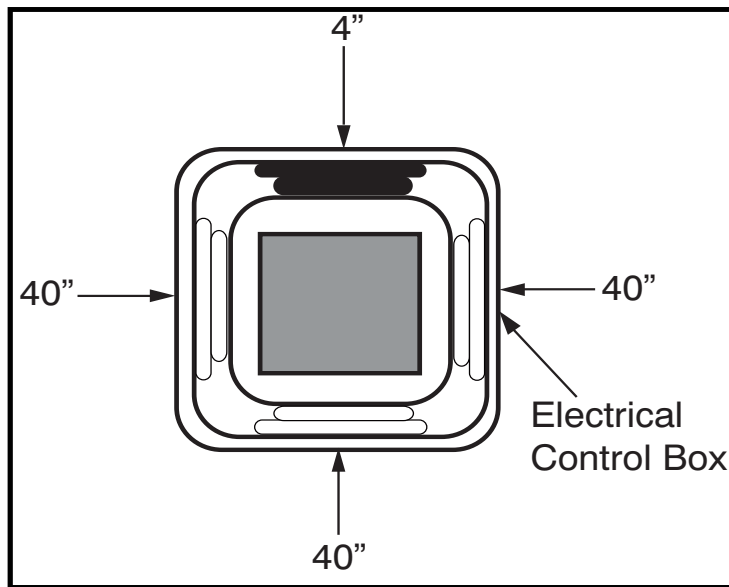
RECOMMENDED AIRFLOW CLEARANCE



RECOMMENDED CLEARANCE FOR BLOCKING OFF LOUVERS / SUPPLY DUCT OPENING



2 Supply Louvers Blocked Off



1 Supply Louver Blocked Off



VRF Indoor Unit 40VMM030A--3—Medium Static Duct



Submittal Data

Job Data _____ Location _____
 Buyer _____ Buyer PO # _____ Carrier # _____
 Unit Number _____ Model Number _____
 Performance Data Certified By _____ Date _____



STANDARD FEATURES

- Rear Return Air Opening is Standard and Bottom Return is Optional
- Three Fan Speeds - High, Medium, and Low
- Knockout for Outside Air
- Built-in Condensate Lift Mechanism
- Built in EXV (Electronic Expansion Valve) for Installation

INDOOR UNIT MODEL		40VMM030A--3
PERFORMANCE		
Cooling Rated Capacity	Btu/h	30,000
Heating Rated Capacity	Btu/h	34,000
Airflow (H / M / L)	CFM	1070 / 900 / 780
Sound Pressure (H / M / L)	dBA	46.7 / 42.3 / 39.4
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/1/60
Indoor Fan Motor Power Consumption (Input)	W	290
Minimum Circuit Amps (MCA)	A	3.13
Maximum Overcurrent Protection	A	15
Motor Type		DC

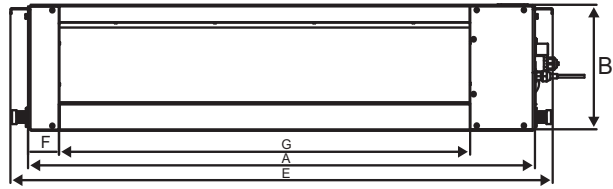
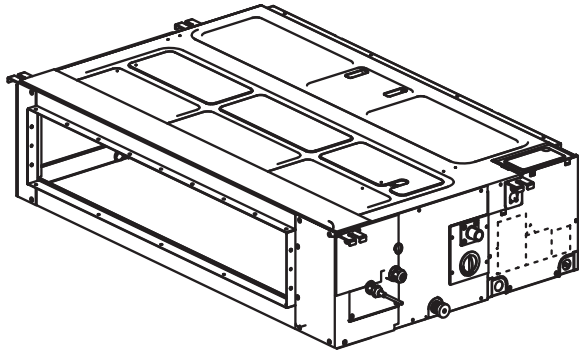
PHYSICAL DATA		
Pipe Connection Size - Liquid	in.	3/8 (OD)
Pipe Connection Size - Suction	in.	5/8 (OD)
Pipe Connection Size - Drain	in.	3/4 NPT
Maximum External Static Pressure (ESP)	in. wg	0.6
Refrigerant		R-410A
Unit Width	in.	50-3/4
Unit Height	in.	11-7/8
Unit Depth	in.	34-1/8
Net Unit Weight	lb	124

ACCESSORIES

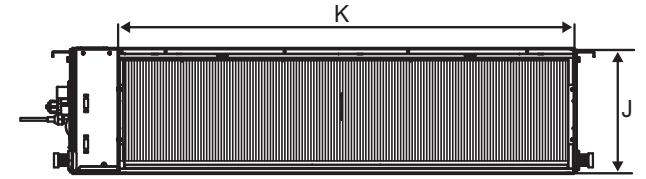
- Wireless Remote Controller 40VM900001
- Wired Remote Controller - Non-Prog. 40VM900002
- Wired Remote Controller - Prog. 40VM900003
- Touch Screen Wired Controller 40VM900005
- Touch Screen Central Controller 40VM900006

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

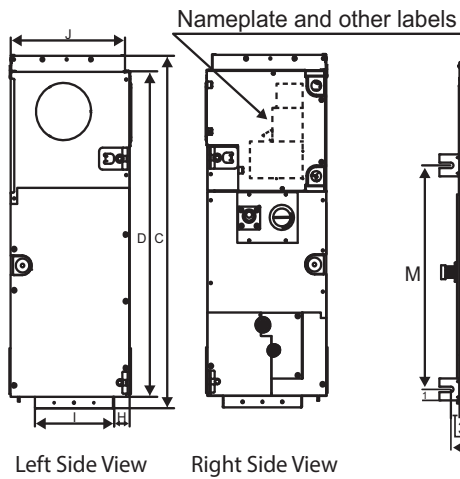
DIMENSIONAL DRAWING INDOOR UNIT MEDIUM STATIC DUCT 40VMM030A--3



Front View

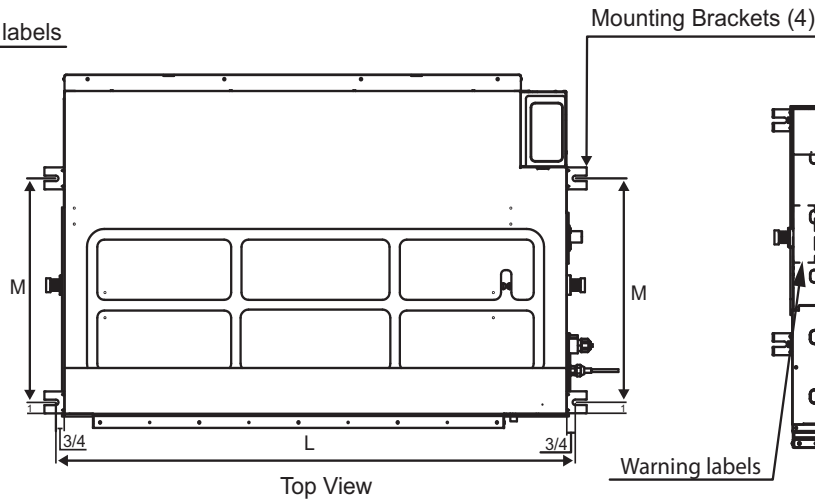


Rear View

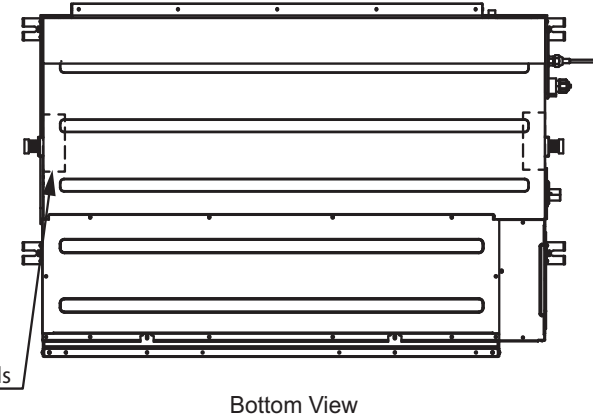


Left Side View

Right Side View



Top View



Bottom View

Note: All dimensions are shown in inches

40VMM Unit Size	Dimensions (inches)												
	A	B	C	D	E	F	G	H	I	J	K	L	M
030	47 1/8	11 7/8	34 1/8	31 1/2	50 3/4	3 1/8	37 7/16	1 1/2	8	11 3/8	43	48 7/8	19 5/8



3. Daikin Energy Recovery Ventilators: ERV-1 thru ERV-3

Submittal Data Sheet

Project Name: _____
 Location: _____
 Engineer: _____
 Submitted to: _____
 Submitted by: _____
 Reference: _____

Approval: _____
 Date: _____
 Construction: _____
 Unit #: _____
 Drawing #: _____

Performance

Indoor Unit Model No: VAM300GVJU
 Rated Cooling Capacity (Btu/hr): N/A
 Sensible Capacity (Btu/hr): N/A
 Cooling Input Power (kW): 0.307
 Rated Heating Capacity (Btu/hr): N/A
 Heating Input Power (kW): 0.307

Indoor Unit Type: VAM
 Rated Cooling Conditions Indoor: N/A
 Ambient: 5 - 122 (80% RH)
 Rated Heating Conditions Indoor: N/A
 Ambient: 5 - 122 (80% RH)
 Rated Piping Length (ft) N/A
 Rated Height Separation (ft) N/A

Indoor Unit Details

Power Supply (V/Hz/Ph): 208-230/60/1ph
 Power Supply Connections: L1, L2, Ground
 Min. Circuit Amps MCA (A): 1.6
 Max. Overcurrent Protection (MOP) (A): 15
 Dimensions (HxWxD): 12-1/16x34-5/8x31-1/2
 Panel (HxWxD): N/A
 Net Weight (lbs): 71
 Net Weight with Panel (lbs): N/A

Airflow Rate (CFM wet coil) 300/300/170
 Moisture Removal (pt/h): _____
 Gas Pipe Connection (inch): _____
 Liquid Pipe Connection (inch): _____
 Condensate Connection (inch): _____
 Sound Pressure Level (dBA): 37
 Sound Power Level (dBA): 25.5
 External Static Pressure/Max (inWg): 0.16 - 0.64
 Controller Name: _____

VAM300GVJU



VAM300GVJU

Std U.S. Warranty: 6 year heat exchanger core,
 1yrs Parts

Project Name: _____
 Location: _____
 Engineer: _____
 Submitted to: _____
 Submitted by: _____
 Reference: _____

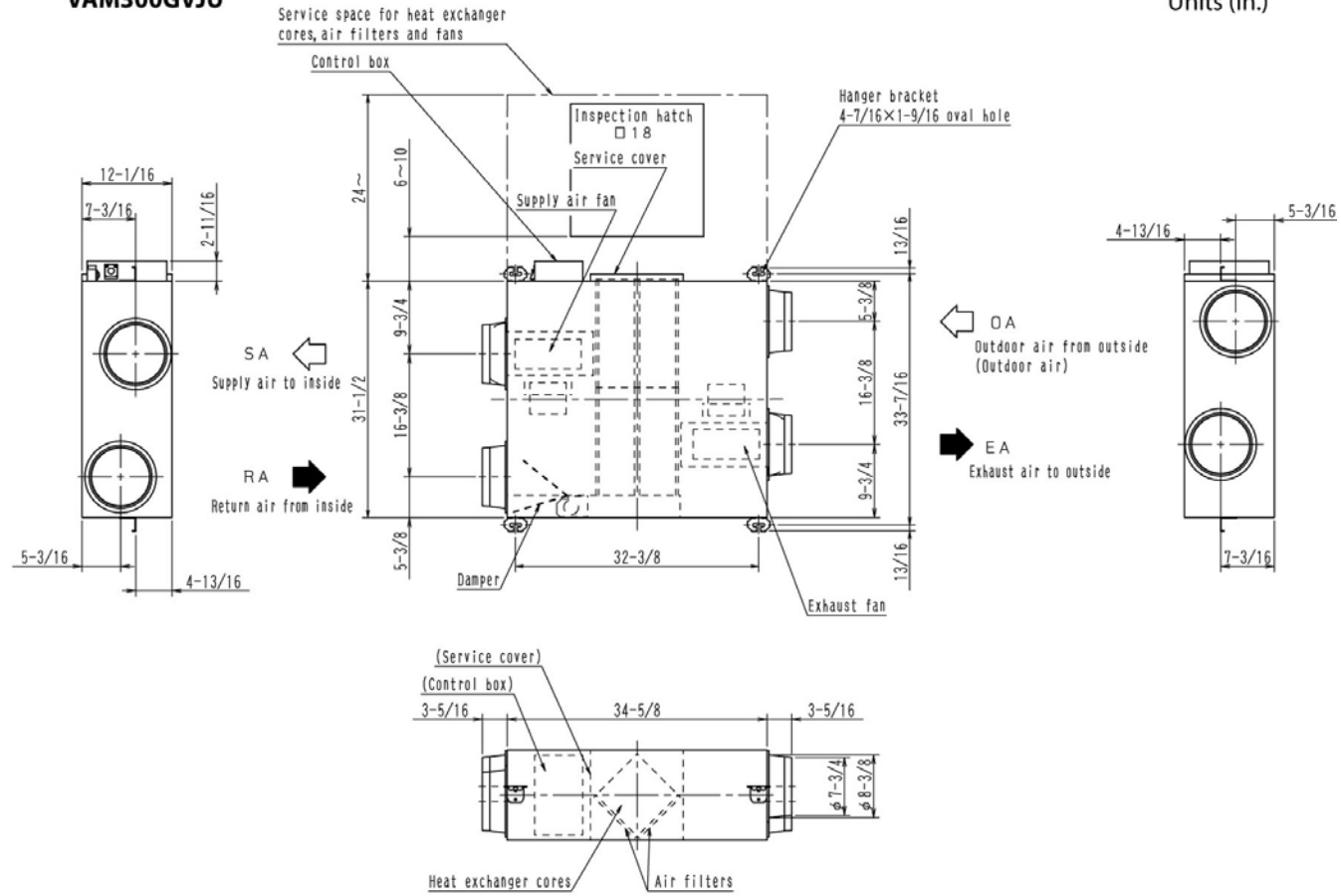
Approval: _____
 Date: _____
 Construction: _____
 Unit #: _____
 Drawing #: _____

Dimensional Drawing - Indoor Unit

VAM300GVJU

VAM300GVJU

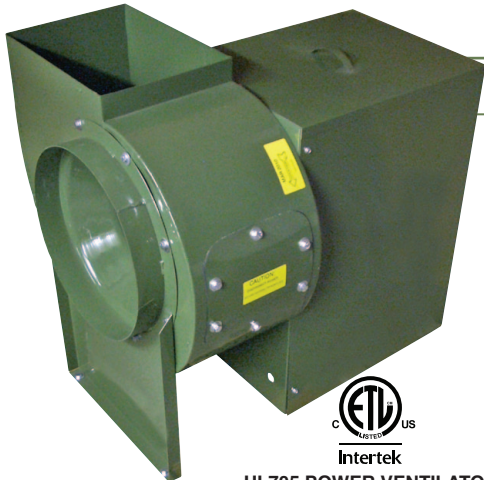
Units (in.)



4. Delhi Roof Mounted Exhaust Fans: EF-1 & EF-2

BI-RM SERIES

Belt Drive Utility Blowers



UL705 POWER VENTILATOR
FOR RESTAURANT
EXHAUST APPLIANCES

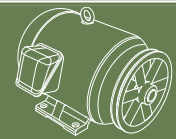
BI-RM/BI-RM-HS SERIES



MOTOR AND DRIVE COMPARTMENT WITH COVER REMOVED TO ILLUSTRATE 3 SIDE MOTOR ACCESS AND SLOPED MOTOR BASE FOR BELT TENSIONING.

FEATURES - BI-RM SERIES

- Complete range of sizes from 10" to 36".
- Full AMCA Class 1 Operation.
- Non-overloading backward inclined (BI) welded wheels.
- Aluminum wheel - (AMCA type B classification for spark resistant construction) - available as an option.
- Aluminum wheels only on BI-RM-30 to BI-RM-36.
- Discharge position can be field rotated to any of 8 discharge positions.
- Counter clock wise rotation is standard. Clock wise available.
- Outlet flanges on models BI-24 to BI-36.
- Temperature Ratings - without a heat slinger 250° F with a heat slinger, steel wheel 400° F, aluminum wheel 300° F.
- Motor access from 3 sides.
- Sloped motor base for ease of motor installation.
- Vented motor and drive compartment cover, with handles, for safety & weather protection.
- 16 gauge or heavier blower housing.
- Heavy duty pillow block ball bearings.
- UL 705 Supplement SC - Power Ventilator for Restaurant Exhaust Appliances Listed for removal of cooking vapours.
- Meets NFPA 96 guidelines.
- Upblast discharge directs exhaust away from roof.
- Integral handles for single person removal of motor and drive compartment cover.
- Continuously welded 16 gauge or heavier blower housing.
- Bolted clean out door.
- 2" drain for easy removal of cleaning solutions.
- Complete range of sizes from 10" to 36".
- Vinyl shaft seal.



AVAILABLE WITH MOTORS & DRIVES FACTORY INSTALLED. CONSULT OUR DELAIR FAN SELECTION SOFTWARE FOR DETAILS.

TYPICAL MAXIMUM CFM @ SP

MODEL	1" SP	2" SP	3" SP	4" SP	5" SP	Min HP	Max HP
BI-RM-10	2300	2050	1700	1500	1300	1/2	2
BI-RM-12*	3200	2950	2675	2350	1925	-	3
BI-RM-13	3900	3625	3400	2975	2450	1/2	5
BI-RM-15*	4775	4450	4075	3650	3000	-	5
BI-RM-16	5700	5350	4900	4300	3500	3/4	7 1/2
BI-RM-18	6175	5600	4925	3900	-	3/4	7 1/2
BI-RM-20	8400	7775	7050	6200	4650	1	7 1/2
BI-RM-22*	10000	9550	8700	7600	5550	-	10
BI-RM-24	11100	10100	8800	6600	-	1 1/2	15
BI-RM-27	15250	14050	12750	11150	8250	1 1/2	15
BI-RM-30-AW	18000	17000	16000	14000	11750	2	15
BI-RM-33-AW	22500	21000	19000	17000	14000	-	20
BI-RM-36-AW	27000	25000	23000	20000	16000	3	25

Power rating (BHP) does not include transmission losses. Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings do not include the effect of appurtenances (accessories).

CFM values listed above are summarized for convenience.

FOR FAN CURVES & FULL PERFORMANCE DATA, CONSULT OUR DELAIR SOFTWARE. DOWNLOAD DELAIR @ WWW.CANARM.COM/DELAIR

*SPECIAL ORDER

BI-RM-HS SERIES

Belt Drive Utility Blowers with Heat Slinger for Smoke & Heat

The smoke and heat model of the BI & BI-RM series is suitable for use in clean, dry air with a maximum ambient temperature of 204°C (400°F).

They are designed to exhaust smoke in the event of a fire. It is in compliance with smoke control systems requirements of 500°F for 4 hours and 1000°F for 15 minutes.

FEATURES - BI-RM-HS SERIES

- Sizes from 10" to 24".
- Non-overloading backward inclined (BI) welded steel wheels only.
- Counter clockwise rotation is standard.
- Outlet flanges on model BI-24.
- Heat slinger with vinyl shaft seal.
- Upblast discharge directs exhaust away from roof.



Canarm certifies that the BI-RM Series shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Programme.

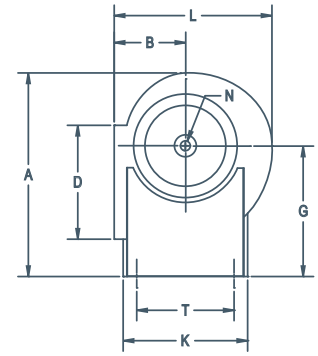
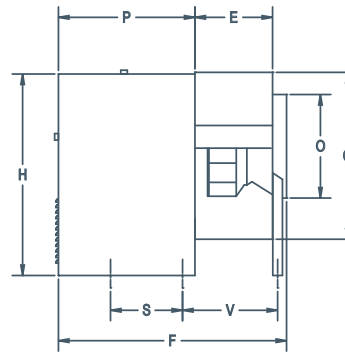
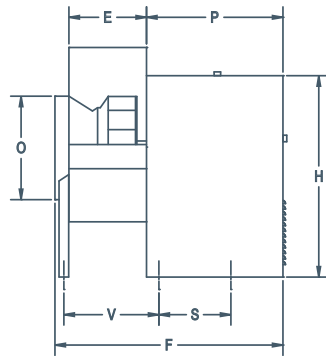
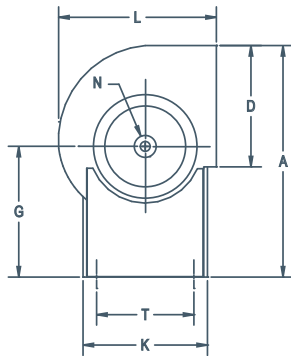


UL705 Supplement SC - Power Ventilator for Restaurant Exhaust Appliances certified, refer to our UL705 Supplement SC - Power Ventilator for Restaurant Exhaust Appliances Catalogue page C in *Roof Mount Ventilation* for all installation requirements

BI & BI-RM SERIES

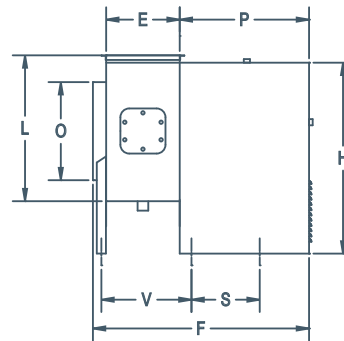
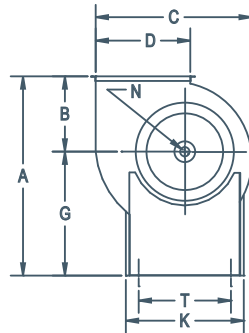
Belt Drive Utility Blowers

DIMENSIONS



MODELS BI-10 TO BI-27
(STANDARD TOP HORIZONTAL DISCHARGE)

MODELS BI-30 TO BI-36
(STANDARD BOTTOM HORIZONTAL DISCHARGE)



MODELS BI-RM(-HS)-10 TO BI-RM(-HS)-24
(UL 762 LISTED FOR REMOVAL OF COOKING VAPOURS)

MODEL	OUTLET										SHAFT DIA.	INLET					WEIGHT (lbs) without motors	
	A (STANDARD MODELS)	A (BI-RM MODELS)	B	C	D	E	F	G	H	K (CABINET WIDTH)		L	N	O	P	S		T
BI-10	26 3/4"	23 5/8"	8 3/8"	19 3/16"	11 5/16"	8 1/4"	27 3/4" No Leg	15 5/6"	21 5/16"	13 1/4"	17 1/2"	3/4"	11"	17 1/4"	11 5/8"	11 1/4"	-	78
BI-12	33 3/16"	30 3/16"	9 15/16"	27 7/16"	13 1/16"	9 7/8"	33 5/16"	20 3/16"	29 1/8"	16 3/4"	20 9/16"	1"	12 7/16"	21 3/16"	11 1/2"	14 3/4"	13 1/16"	112
BI-13	34 1/2"	30 15/16"	10 3/4"	24 1/2"	14 3/8"	10 3/4"	34 1/4"	20 3/16"	29 1/8"	16 3/4"	22 7/16"	1"	14 3/8"	21 1/4"	11 1/2"	14 3/4"	14"	134
BI-15	35 15/16"	31 15/16"	11 3/4"	27 1/4"	15 13/16"	12 3/4"	36 1/4"	20 3/16"	29 1/8"	16 3/4"	24 7/8"	1"	15 7/8"	21 3/16"	11 1/2"	14 3/4"	16"	140
BI-16	39 7/16"	34 11/16"	12 11/16"	29 15/16"	17 1/2"	13 1/8"	36 5/8"	22"	30 15/16"	16 3/4"	26 15/16"	1 3/16"	17 3/8"	21 1/4"	11 1/2"	14 3/4"	16 1/2"	162
BI-18	41 5/16"	35 7/8"	13 13/16"	33 3/16"	19 3/8"	14 1/2"	38 1/4"	22"	30 15/16"	16 3/4"	29 9/16"	1 3/16"	19 3/8"	21 1/2"	11 1/2"	14 3/4"	17 7/8"	172
BI-20	49 3/16"	42 15/16"	14 15/16"	36 7/16"	21 3/16"	15 3/4"	46 3/8"	28"	40 15/16"	25 1/8"	32 3/16"	1 3/16"	21 1/4"	27 5/8"	14 9/16"	22 3/4"	19 3/4"	289
BI-22	51 9/16"	44 3/8"	16 3/8"	40 7/16"	23 9/16"	17 3/4"	48 7/16"	28"	40 15/16"	25 1/8"	35 9/16"	1 3/16"	23 5/8"	27 5/8"	14 9/16"	22 3/4"	21 13/16"	322
BI-24	58 3/16"	49 15/16"	17 15/16"	44 11/16"	26 1/8"	19 3/8"	51 5/16"	32 1/8"	46 11/16"	28 15/16"	39 1/8"	1 7/16"	26"	28 15/16"	18 5/16"	26 3/8"	23 3/8"	385
BI-27	60 11/16"	51 1/2"	19 1/2"	49"	28 11/16"	21 1/4"	53 1/8"	32 1/8"	46 11/16"	28 15/16"	42 13/16"	1 7/16"	28 5/8"	28 7/8"	18 5/16"	26 3/8"	25 1/4"	411
BI-30	65 15/16"	68 3/16"	24 7/8"	54 1/2"	31 7/8"	23 5/8"	58 5/8"	43 5/16"	65 5/16"	44 5/16"	50 15/16"	1 11/16"	31 3/4"	32"	17"	40"	29"	517
BI-33	68 3/16"	68 5/8"	25 3/8"	58 15/16"	34 7/8"	25 15/16"	60 15/16"	43 5/16"	65 5/16"	44 5/16"	53 7/8"	1 11/16"	35"	32"	17"	40"	31 5/16"	607
BI-36	70 7/8"	69"	25 1/2"	66 3/16"	38 9/16"	28 11/16"	63 11/16"	43 5/16"	65 5/16"	44 5/16"	56 15/16"	1 15/16"	38 3/4"	32"	17"	40"	34 1/16"	747

ACCESSORIES

- V-Cap
- Bolted Clean Out Door
- Heat Slinger
- Vibration Isolators

- Shaft Seal
- Corrosion Resistant Coating
- Aluminum Wheel
- Back Draft Dampers

- Inlet & Outlet Screens
- 2" Drain Fitting

For more information on accessories, see page C14.

5. NCA Model CA-XAD-6 Louver



*MODEL CA-XAD-6
COMBINATION LOUVER
DRAINABLE BLADE. AMCA LICENSED.*



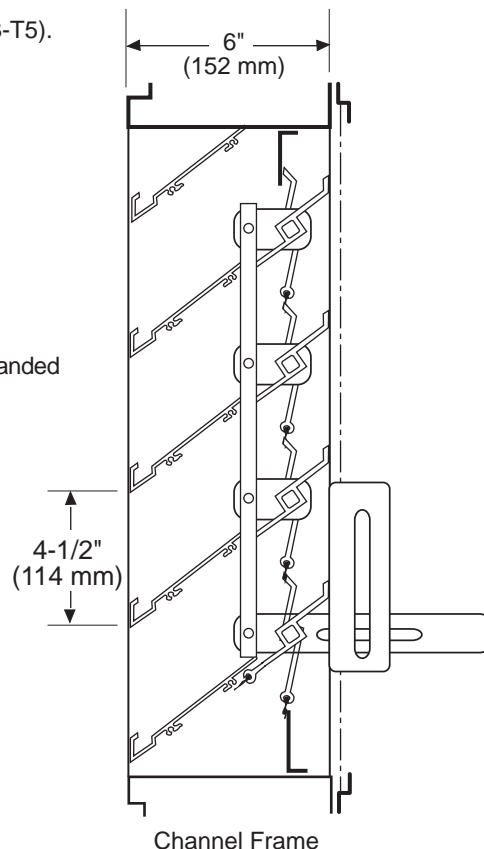
Standard Construction:

- Frame:** 6" x .080 (152 mm x 2.0 mm) extruded aluminum (6063-T5).
Stationary Blades: .081 (2.1 mm) extruded aluminum (6063-T5) approximately 4-1/2" (114 mm) on centers.
Adjustable Blades: .125 (3.2 mm) extruded aluminum (6063-T5).
Blade Angle: 37.5°
Bearings: Permanently lubricated oilite bronze, press fit into frame.
Axles: 3/8" (9.5 mm) square plated steel.
Linkage: Plated steel, concealed in jamb.
Operator: Wing nut side bracket.
Blade Seals: Extruded Vinyl.
Jamb Seals: Flexible stainless steel.
Screen: Bird screen - 3/4" x .050 (19 mm x 12.7 mm) flattened expanded aluminum in a removable frame on interior of louver.
Finish: Mill aluminum.
Minimum Section Size: 12"w x 12"h (25.4 mm x 25.4 mm)
Maximum Section Size: 48"w x 72"h (1219 mm x 1829 mm)

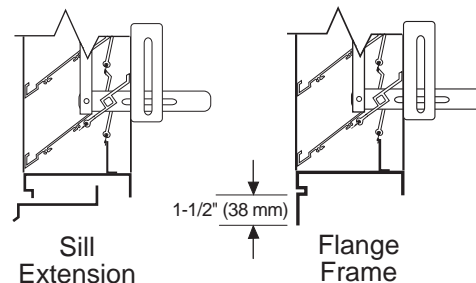
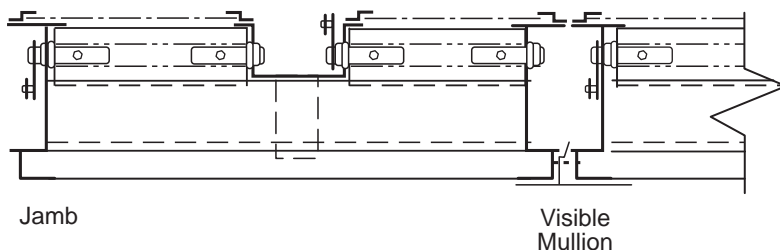
Options:

- Screens:** Insect screen - 18 x 16 mesh aluminum.
 Other: _____
Finish: Prime Coat.
 Baked Enamel.
 Clear Anodize - 204-R1 & 215-R1.
 Integral Color Anodize
 Kynar 500 Enamel.
 Other: _____
Sill Extensions:
Flange: 1-1/2" (38 mm) (front or rear)
Frame: .125 (3.2 mm) Extruded Aluminum
Stationary Blade: .125 (3.2 mm) Extruded Aluminum
Other Operator - _____

Notes: Louvers fabricated 1/4" (6.4 mm) under opening size unless otherwise noted.



CA-XAD-6 - 02-05



Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

© JULY, 2000 NCA Manufacturing

Project:

Contractor:

Location:

Address:

Architect:

P.O. Number:

Engineer:

Date:



*MODEL CA-XAD-6
COMBINATION LOUVER
DRAINABLE BLADE. AMCA LICENSED.*

PERFORMANCE DATA

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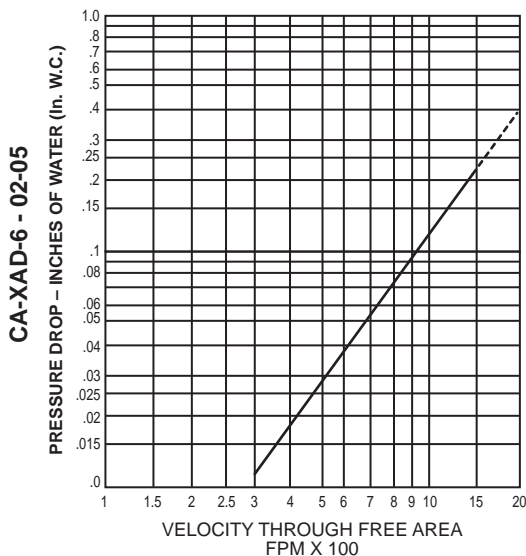
Specifications

Furnish and install where shown model **CA-XAD-6** louver, manufactured by **NCA Manufacturing**. Louvers shall be the **combination drainable** type with a frame depth of **6 inches**. Frames and stationary shall be .081 inches thick 6063-T5 extruded aluminum alloy. Adjustable blades to be .125 inches thick 6063-T5 extruded aluminum alloy. Blades shall be located on a **37-1/2** degree blade angle. Screens shall consist of 3/4" expanded aluminum, with an extruded frame, mounted to the louver interior, and be removable for cleaning. Louvers shall be finished with Polyurethane Acrylic enamel, Kynar 500, Anodize or other finishes selected by the architect from NCA standard color charts.

CA-XAD-6 Free Area in Sq. Ft.

Width – Inches

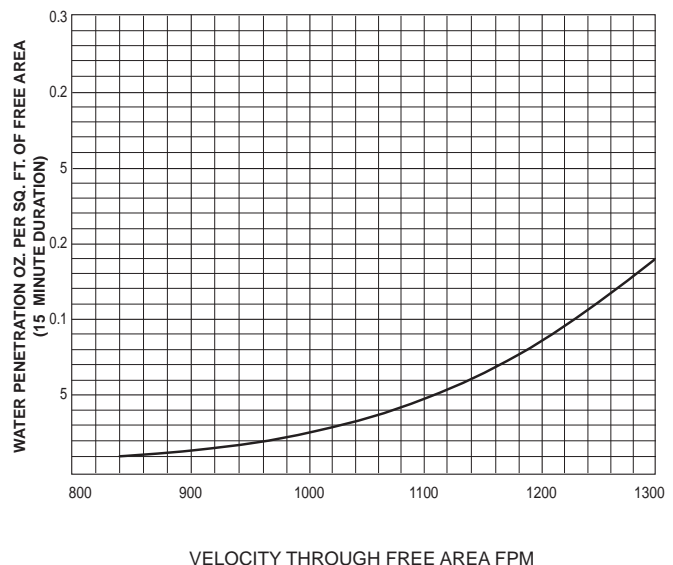
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
12	.22	.37	.52	.67	.81	.96	1.11	1.26	1.41	1.56	1.71	1.86	2.01	2.16	2.31
18	.44	.75	1.05	1.35	1.66	1.96	2.26	2.38	2.68	2.98	3.29	3.59	3.89	4.20	4.50
24	.66	1.11	1.57	2.02	2.47	2.93	3.38	3.75	4.23	4.70	5.18	5.66	6.14	6.62	7.10
30	.84	1.42	2.00	2.58	3.16	3.74	4.32	4.53	5.11	5.69	6.27	6.85	7.43	8.01	8.58
36	1.10	1.85	2.61	3.36	4.11	4.87	5.62	5.91	6.66	7.41	8.17	8.92	9.67	10.43	11.18
42	1.31	2.21	3.12	4.02	4.92	5.82	6.72	7.28	8.21	9.13	10.06	10.99	11.92	12.85	13.78
48	1.50	2.53	3.56	4.59	5.62	6.65	7.68	8.06	9.09	10.12	11.15	12.18	13.21	14.24	15.27
54	1.76	2.96	4.16	5.37	6.57	7.78	8.98	9.43	10.64	11.84	13.05	14.25	15.46	16.66	17.86
60	1.93	3.26	4.58	5.91	7.23	8.56	9.89	10.38	11.71	13.03	14.36	15.68	17.01	18.34	19.66
66	2.16	3.64	5.12	6.60	8.08	9.56	11.04	11.59	13.07	14.55	16.03	17.51	18.99	20.47	21.95
72	2.38	4.07	5.72	7.39	9.03	10.69	12.34	12.96	14.62	16.27	17.93	19.58	21.24	22.89	24.55
78	2.56	4.31	6.07	7.82	9.58	11.34	13.09	13.75	15.50	17.26	19.01	20.77	22.52	24.28	26.03
84	2.81	4.75	6.68	8.61	10.54	12.47	14.40	15.12	17.05	18.98	20.91	22.84	24.77	26.70	28.63
90	3.04	5.12	7.20	9.28	11.37	13.45	15.53	16.49	18.60	20.70	22.81	24.91	27.02	29.12	31.23
96	3.22	5.42	7.63	9.83	12.04	14.24	16.45	17.28	19.48	21.69	23.89	26.10	28.30	30.51	32.72



PRESSURE DROP INTAKE

NCA Manufacturing, Inc. certifies that the Model CA-XAD-6 louver shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings program.

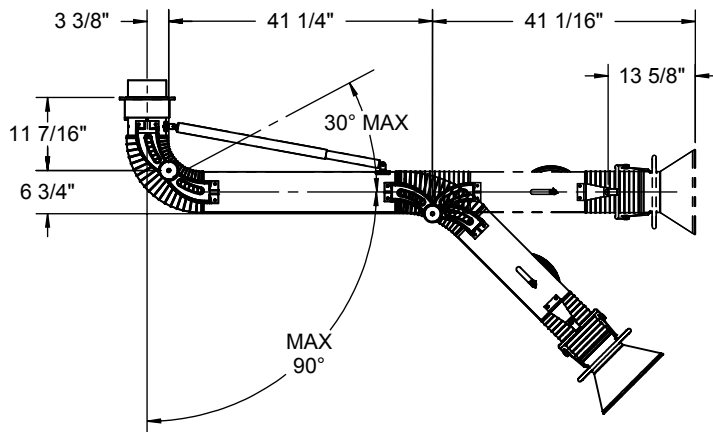
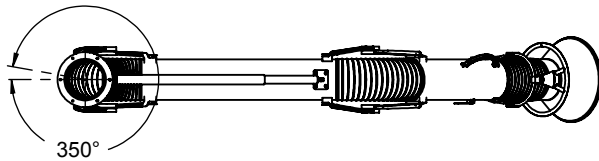
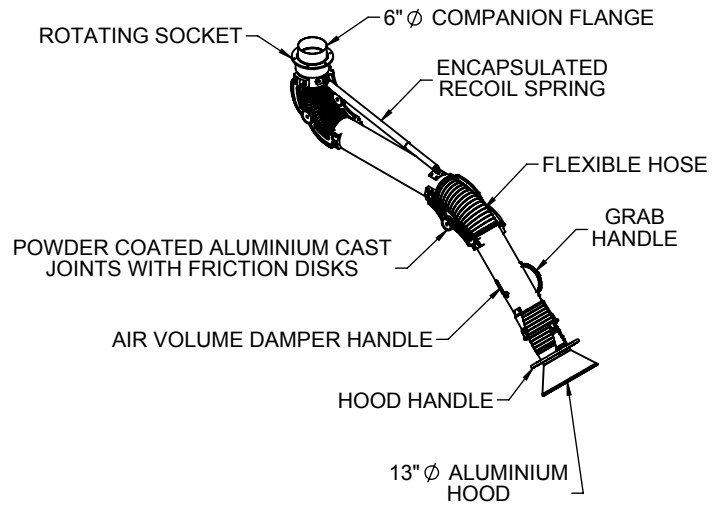
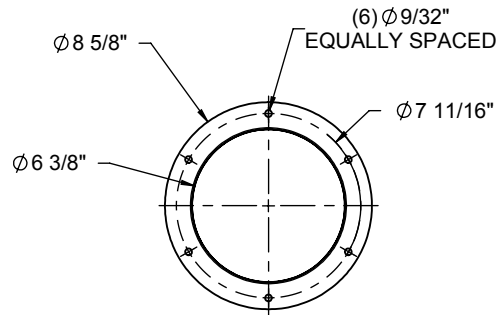
The AMCA Certified Seal applies to air performance ratings and water penetration ratings.



Water Penetration

Water Penetration Data applies to test unit size 48" x 48" only. Beginning of Water Penetration is 840 FPM Free Area Velocity. Performance shown is at standard air density 0.075 lbs./ft³.

6. Maxair Exhaust Fume Hoods



SPECIFICATIONS:

- 6" dia. hanging capture fume arm
- 26 gauge steel tubes, powder coated grey
- No internal adjustment
- Smooth tubes, low static pressure
- Self-locking joints
- Grab handle for arm positioning
- Velocity air diverter within the hood
- 13" aluminium hood (yellow paint)
- Air volume damper
- Weight: 44 lb

NOTES

- Typical applications:
 - Medium to heavy welding
 - Thick smoke
 - Plasma cutting
 - Grinding and sanding
 - Foundries
 - Large dusts applications
 - Gouging
- Shipped fully assembled

OPTIONS (CHECKED IF INCLUDED)

- Light kit 24V LED in hood
- Fan control switch on hood
- Wire mesh inside hood
- High temperature hose at joints

DUST COLLECTORS AND FUME CAPTURE EQUIPMENT MANUFACTURER
www.aqcdust.com
1.866.629.4356

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MAXAIR HANGING - 6" X 7'

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