EDUS711116B
202012

Engineering Data

Energy Recovery Ventilator

VAM-GVJU

60 Hz

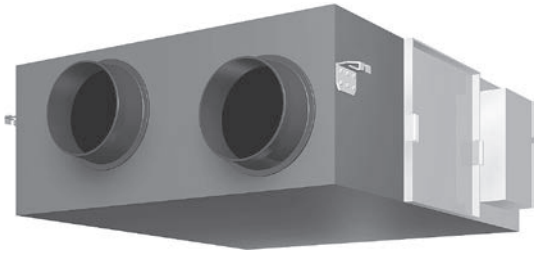


Table of Contents

1. Features and Benefits

- Provides energy saving heat recovery ventilation via a new heat exchanger with high temperature and enthalpy recovery efficiency
- Superior performance such as high static pressure with a high efficiency fan and the capability for use in a wide range of climates (5 to 122°F DB (–15 to 50°C DB)* and 80% RH or less)
- Unique functions such as independent operation, interlock with other HVAC systems and automatic night purge to reduce cooling loads and increase energy savings
- Interlocked simultaneous operation with ***VRV*** indoor units through a single controller
- Auto mode switches the ventilation mode (total heat exchange mode to bypass mode) according to the operating status of air conditioner system
- Pre-cooling/heating control function to delay the start of ventilation during air conditioner start-up for higher energy savings
- Supply and exhaust fresh-up operation modes to control pressure within a space
- Filter sign and display reset notifies when filter changes are required
- ESP as high as 0.76” W.G. (189 Pa)
- Sound levels as low as 25.5 dB(A) for sound sensitive installation locations

* Performance characteristics certified to AHRI Standard 1060 are only applicable to the cooling and heating operating conditions specified in the performance table of this document.
  - The cooling effectiveness shall be based on 95°F DB / 78°F WB for the entering supply air and 75°F DB / 63°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.
  - The heating effectiveness shall be based on 35°F DB / 33°F WB for the entering supply air and 70°F DB / 58°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.

2. Specifications

Model				VAM300GVJU	VAM470GVJU	VAM600GVJU	VAM1200GVJU
Power supply				1 phase, 60 Hz, 208/230 V			
Operating current	Heat exchange mode	Ex-H	A	1.4	3.5	3.7	7.6
		H	A	1.2	3.1	3.2	6.5
		L	A	0.7	2.5	2.6	5.2
	Bypass mode	Ex-H	A	1.4	3.5	3.7	7.6
		H	A	1.2	3.1	3.2	6.5
		L	A	0.7	2.5	2.6	5.2
Power consumption	Heat exchange mode	Ex-H	W	307	776	859	1,720
		H	W	274	672	725	1,484
		L	W	146	545	575	1,154
	Bypass mode	Ex-H	W	307	776	859	1,720
		H	W	274	672	725	1,484
		L	W	146	545	575	1,154
Casing				Galvanized steel plate			
Insulation material				Self-extinguishing urethane foam			
Dimensions (H × W × D)			in.	12–1/16 × 34–5/8 × 31–1/2	15–1/4 × 43–11/16 × 32–3/4	15–1/4 × 43–11/16 × 47–13/16	30–7/8 × 63–3/4 × 47–13/16
Connection duct diameter			in.	ϕ8	ϕ10		ϕ14
Heat exchange system				Air to air cross flow total heat (sensible + latent heat) exchange			
Heat exchanger core				Specially processed nonflammable paper			
Air filter				Multidirectional fibrous fleeces			
Fan	Type			Sirocco fan			
	Motor output		W	2 × 90	2 × 280	2 × 280	4 × 280
	Airflow rate	Heat exchange mode	Ex-H	cfm	305	470	600	1,200
			H	cfm	300	470	600	1,200
			L	cfm	170	390	500	930
		Bypass mode	Ex-H	cfm	305	470	600	1,200
			H	cfm	300	470	600	1,200
			L	cfm	170	390	500	930
	External static pressure		Ex-H	in. H_2O	0.64	0.73	0.76	0.56
			H	in. H_2O	0.26	0.39	0.34	0.16
			L	in. H_2O	0.16	0.33	0.32	0.24
Sound pressure level	ERV mode (208 V)		Ex-H	dBA	34.5	40.0	40.1	43.0
			H	dBA	31.5	37.0	37.0	39.0
			L	dBA	21.5	33.0	33.1	35.0
	ERV mode (230 V)		Ex-H	dBA	37.0	42.0	42.5	44.5
			H	dBA	33.5	38.5	39.0	41.5
			L	dBA	25.5	35.0	36.0	38.5
Sound power level	ERV mode (208 V)		Ex-H	dB	54.0	58.6	57.7	62.2
			H	dB	50.9	56.0	54.9	58.8
			L	dB	42.8	52.9	52.0	51.4
Weight				lbs	71	121	148	346
Unit ambient condition				5°F~122°F DB (★7) 80%RH or less			
Operation mode				ERV mode, Bypass mode, Auto mode			
Accessories				Operation manual, Installation manual			
Drawing No.	Specification			C: 4D073385B	C: 4D073386C	C: 4D073387B	C: 4D073388B
	Sound level (208/230 V)			4D073489/4D073490	4D073491/4D073492	4D073493/4D073494	4D073495/4D073496

Note:

★1. Operating current and power consumption vary depending on the condition.
★2. Operating sound is measured at 59 in. below the center of the unit in an anechoic chamber.
Operating sound level generally becomes greater than this value depending on the operating conditions, reflected sound and peripheral noise.
★3. The sound level at the air discharge port is about 8 dB higher than the above operating sound.
★4. These values are based on AHRI Standard 260 “Sound Rating of Ducted Air Moving and Conditioning Equipment.”
★5. Power level varies depending on operating and ambient conditions.
★6. The specifications, designs and information here are subject to change without notice.
★7. Performance characteristics certified to AHRI Standard 1060 are only applicable to the cooling and heating operating conditions specified in the performance table of this document.
- The cooling effectiveness shall be based on 95°F DB / 78°F WB for the entering supply air and 75°F DB / 63°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.
- The heating effectiveness shall be based on 35°F DB / 33°F WB for the entering supply air and 70°F DB / 58°F WB for the entering exhaust air, at a leaving supply airflow of both 100% and 75% of the rated airflow.

3. Performance Characteristics

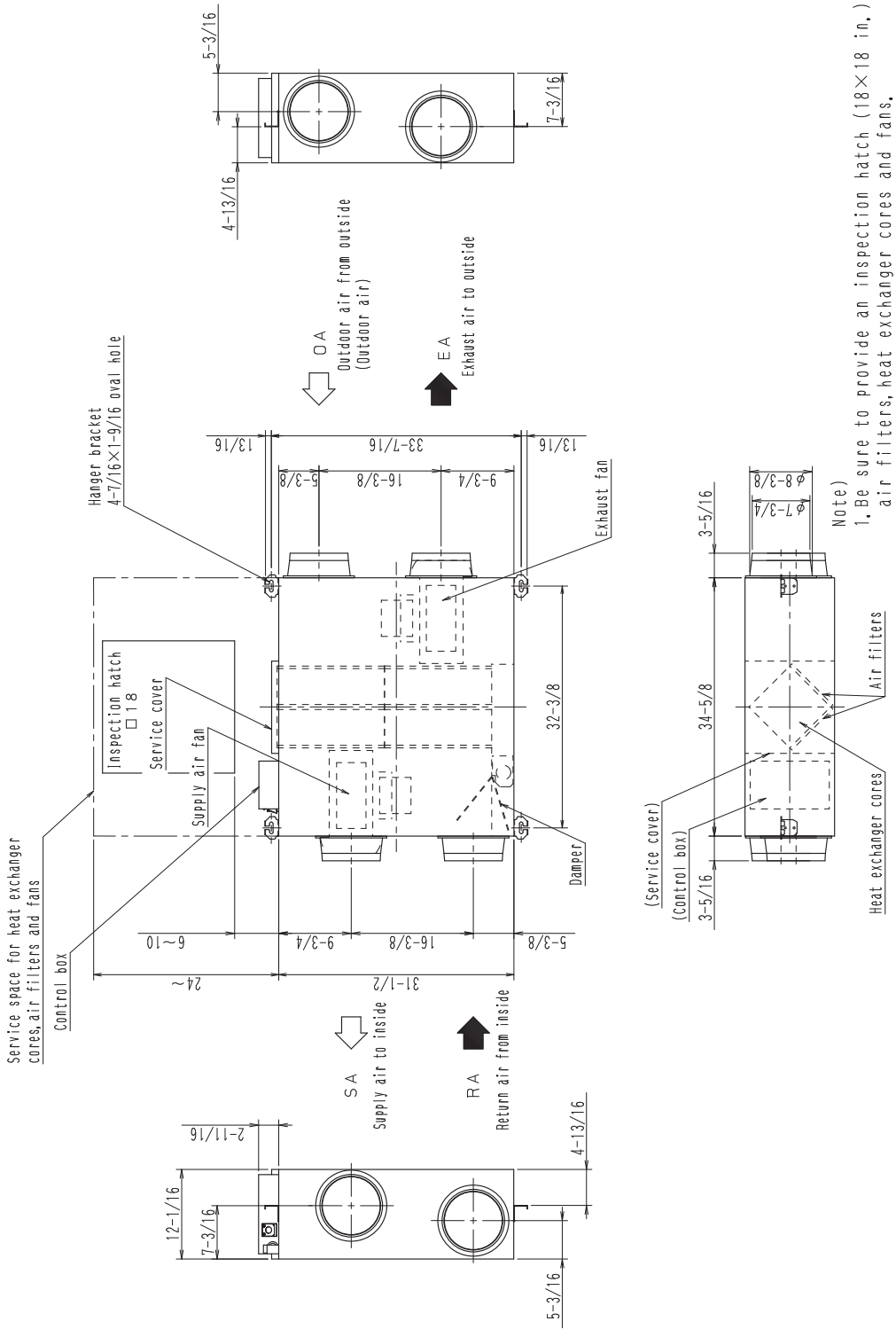
Mode	Airflow	Effectiveness type		VAM300GVJU	VAM470GVJU	VAM600GVJU	VAM1200GVJU
Heating	100%	Sensible	%	60.0	62.0	68.0	68.0
		Latent	%	46.0	48.0	42.0	42.0
	75%	Sensible	%	63.0	66.0	72.0	72.0
		Latent	%	53.0	55.0	47.0	47.0
Cooling	100%	Sensible	%	60.6	63.0	68.0	68.0
		Latent	%	29.0	30.0	34.0	34.0
	75%	Sensible	%	63.9	67.0	72.0	72.0
		Latent	%	40.0	38.0	37.0	37.0

* Certified in accordance with the AHRI ERV Certification Program, which is based on AHRI Standard 1060. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

4. Dimensions

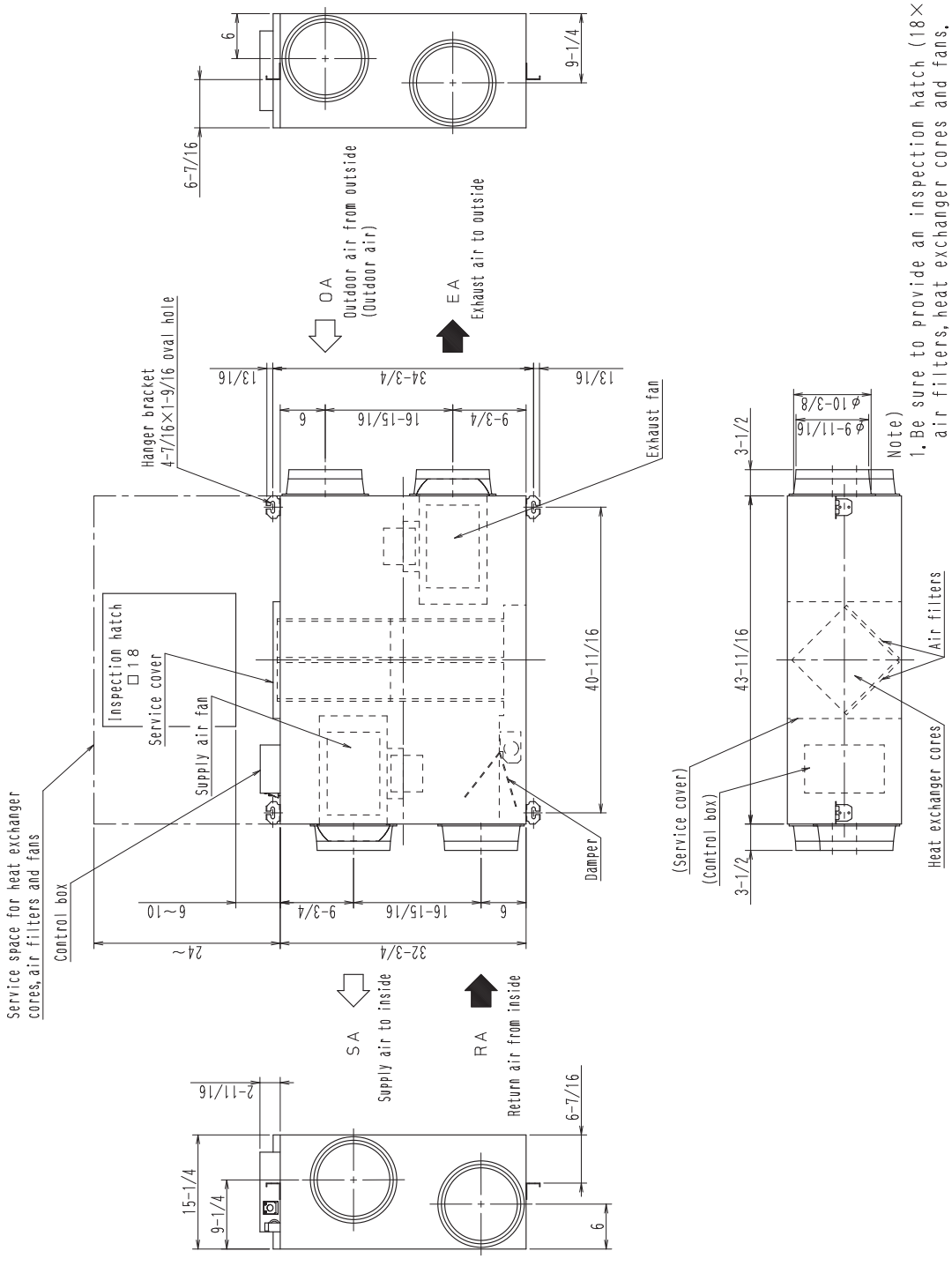
VAM300GVJU

Unit: in.



VAM470GVJU

Unit: in.



Note)
1. Be sure to provide an inspection hatch (18×18 in.) to inspect air filters, heat exchanger cores and fans.

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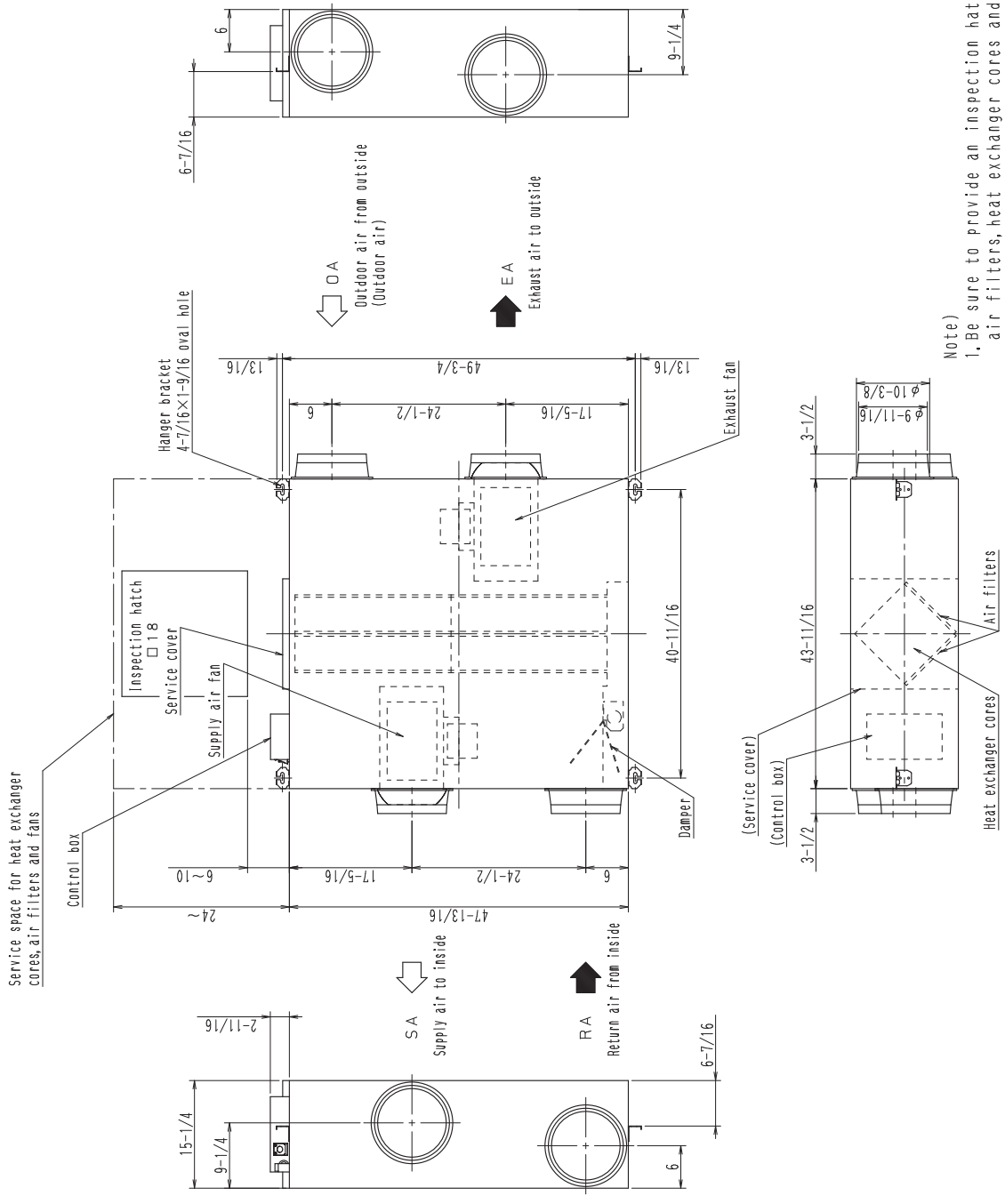
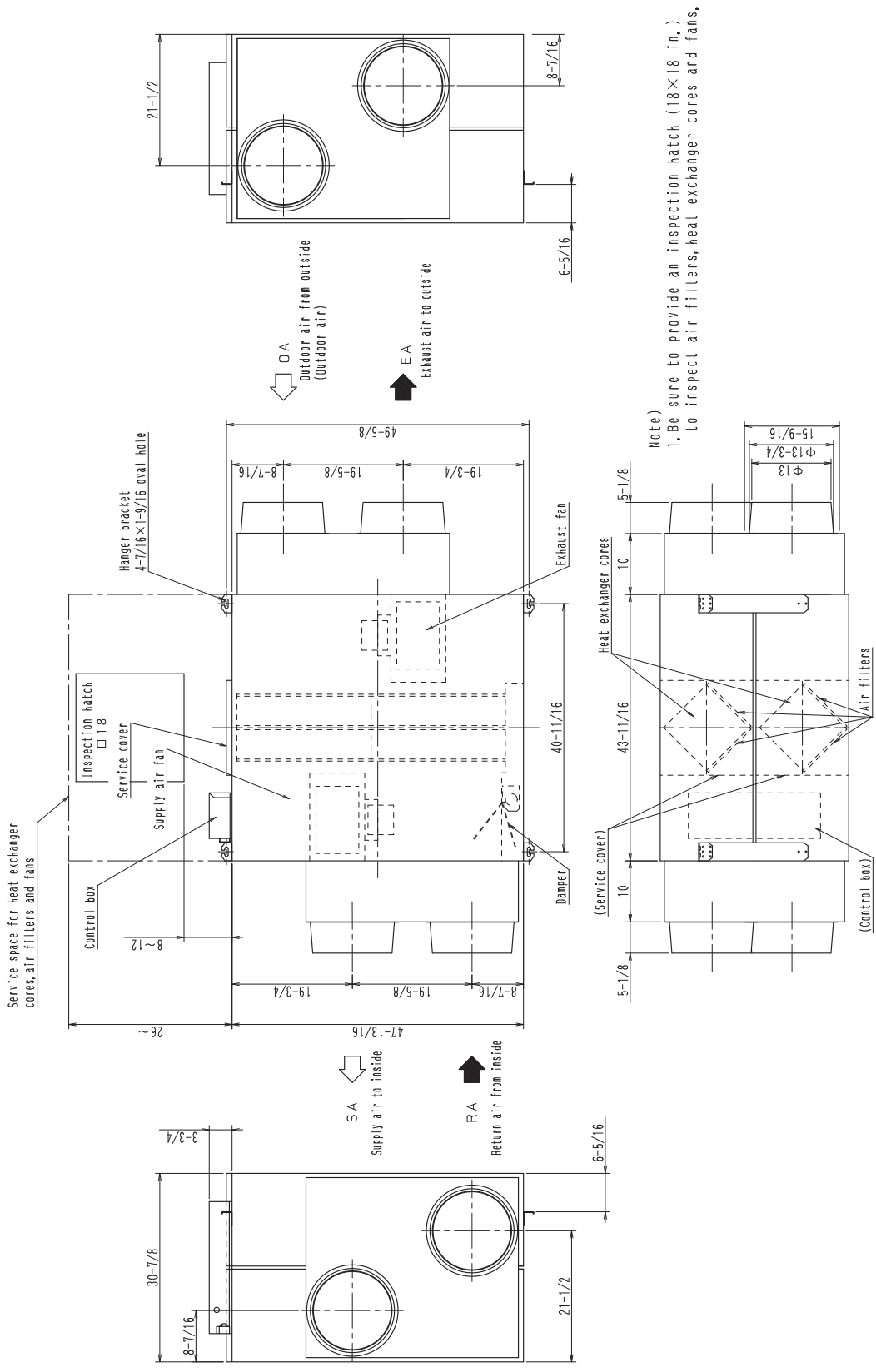
VAM600GVJU

Unit: in.



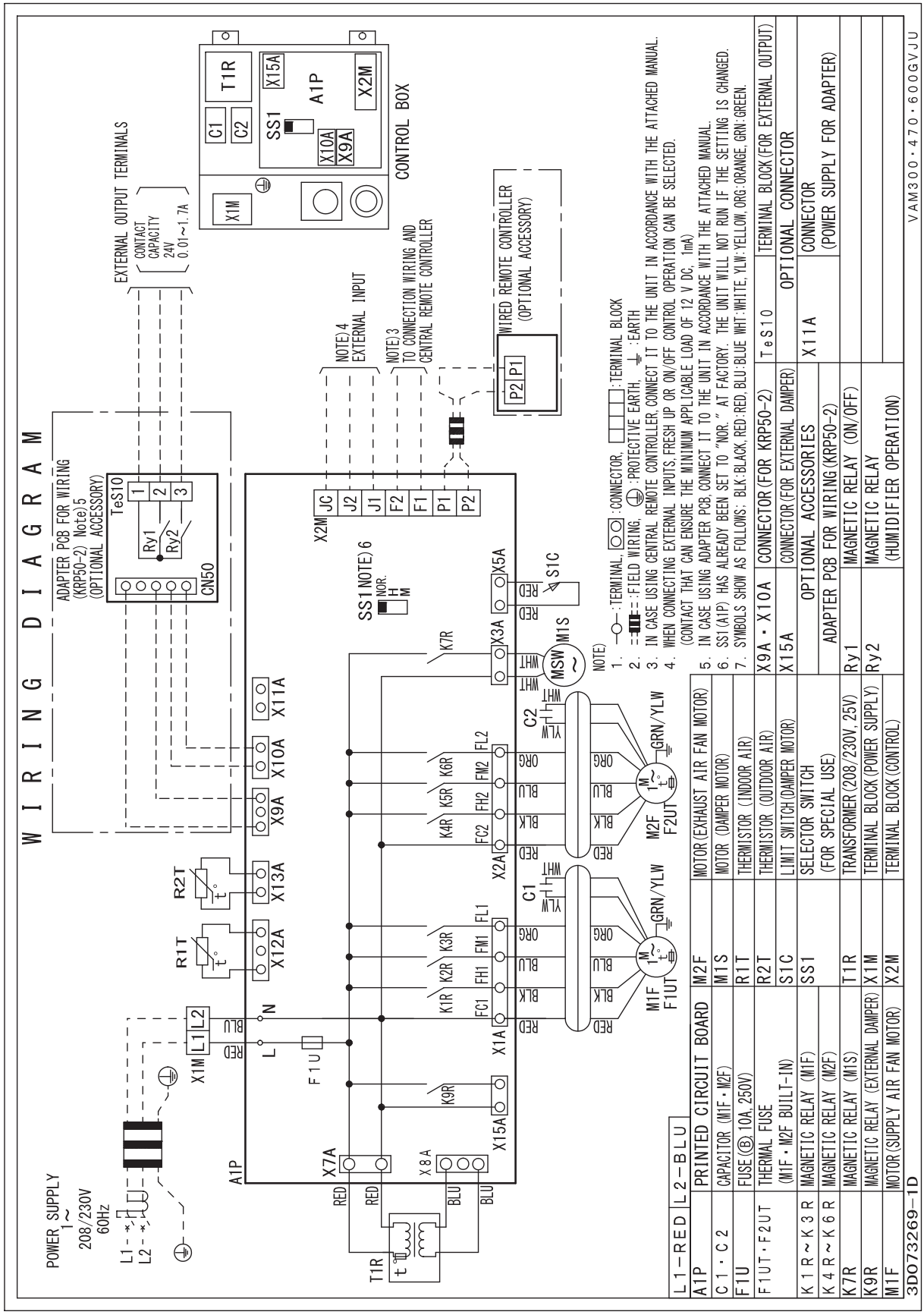
VAM1200GVJU

Unit: in.



5. Wiring Diagrams

VAM300-600GVJU



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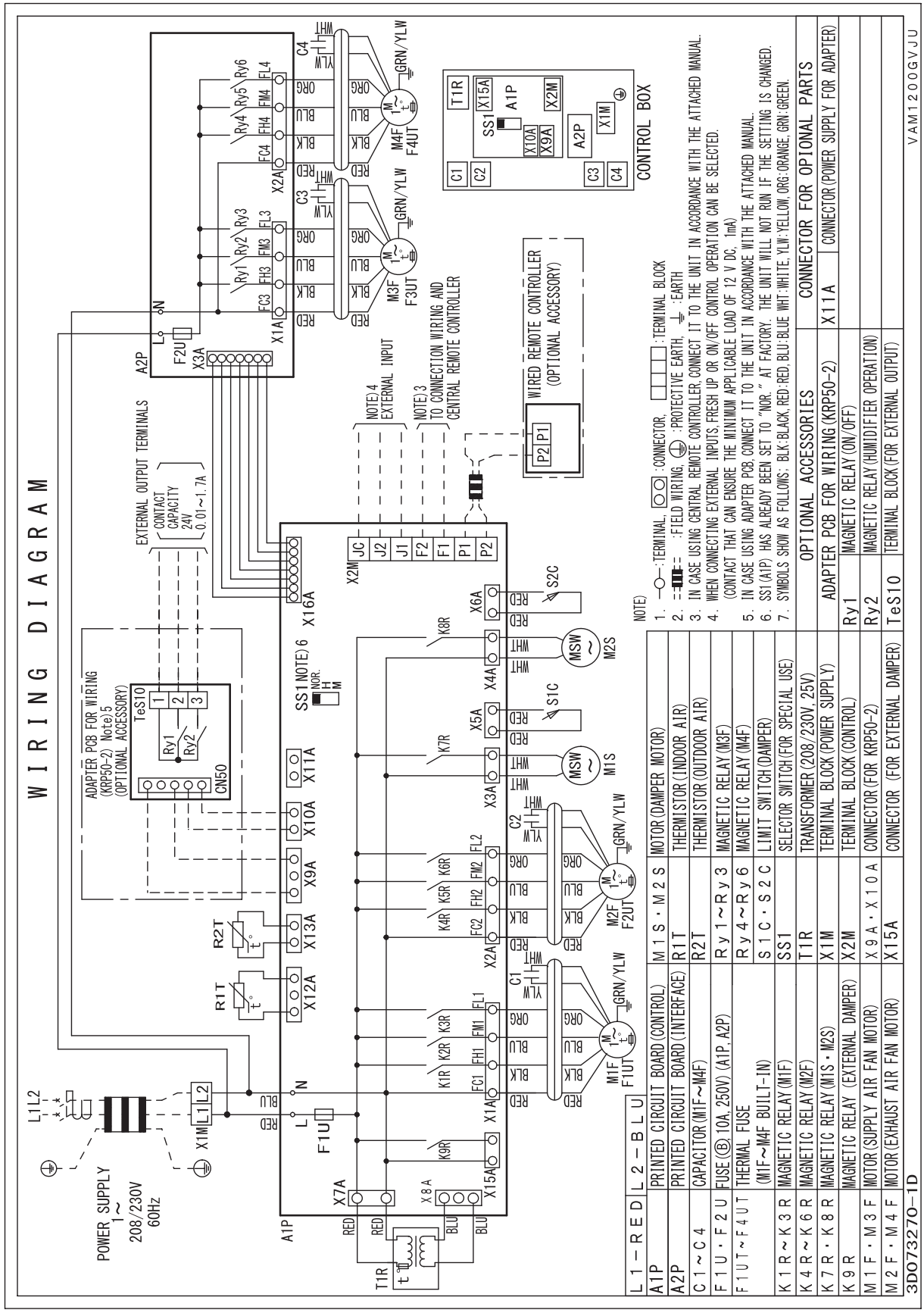
VAM1200GVJU



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6. Electric Characteristics

VAM300-1200GVJU

Model	Power supply					FM	
	Hz	Volts	Voltage range	MCA	MOP	KW	FLA
VAM300GVJU	60	208V/230V	Max. 253V Min. 187V	1.6	15	0.09x2	1.4
VAM470GVJU				3.9	15	0.28x2	3.5
VAM600GVJU				4.2	15	0.28x2	3.7
VAM1200GVJU				8.1	15	0.28x4	7.6

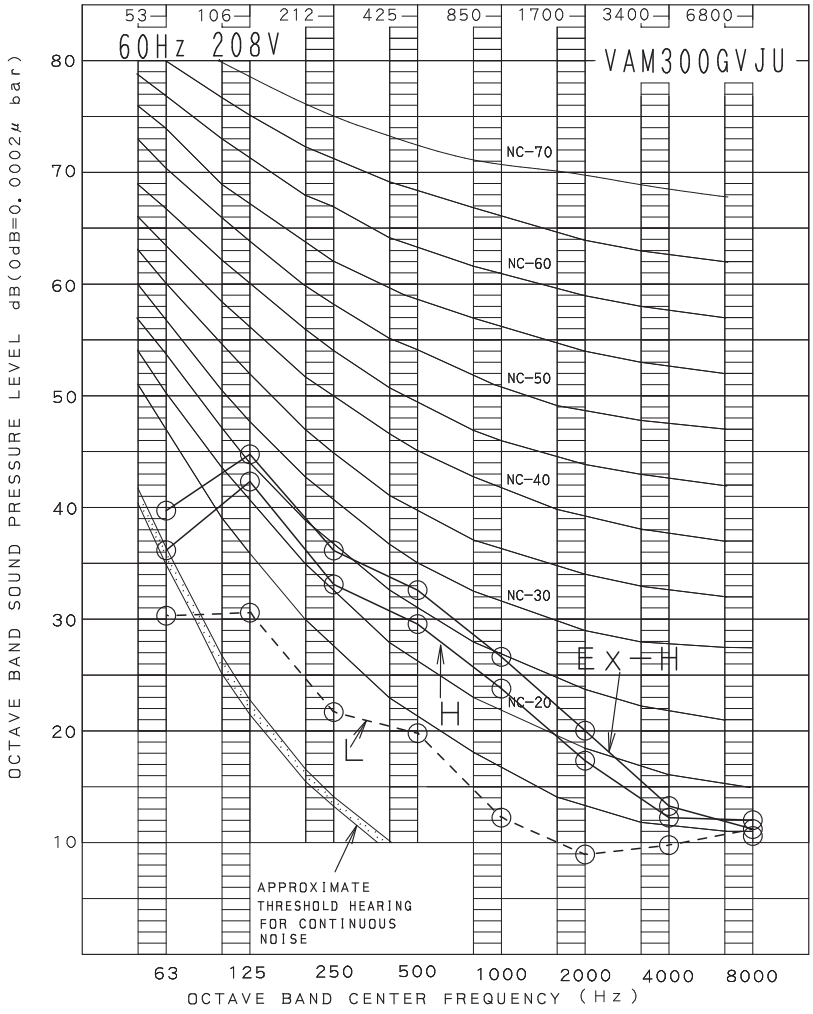
Symbols:
MCA : Min. Circuit Amps (A)
MOP : Max. Overcurrent Protective Device (A)
KW : Fan Motor Rated Output(kW)
FLA : Full Load Amps(A)
FM : Fan Motor

Note:
1. Voltage range
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
2. Maximum allowable voltage unbalance between phases is 2%.
3. MCA/MFA
MCA = 1.25 X FLA(FM1)+FLA(FM2)
MOP ≦ 4 X FLA
(Next lower standard fuse rating. Min.15A)
(VAM1200GVJU consists of two units of VAM600GVJU.)
4. Select wire size based on MCA.

7. Sound Levels (Reference Data)

7.1 208 V

VAM300GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	EX-H	H	L
A	34.5	31.5	21.5

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 208V

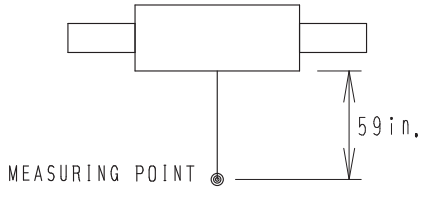
MODEL:VAM300GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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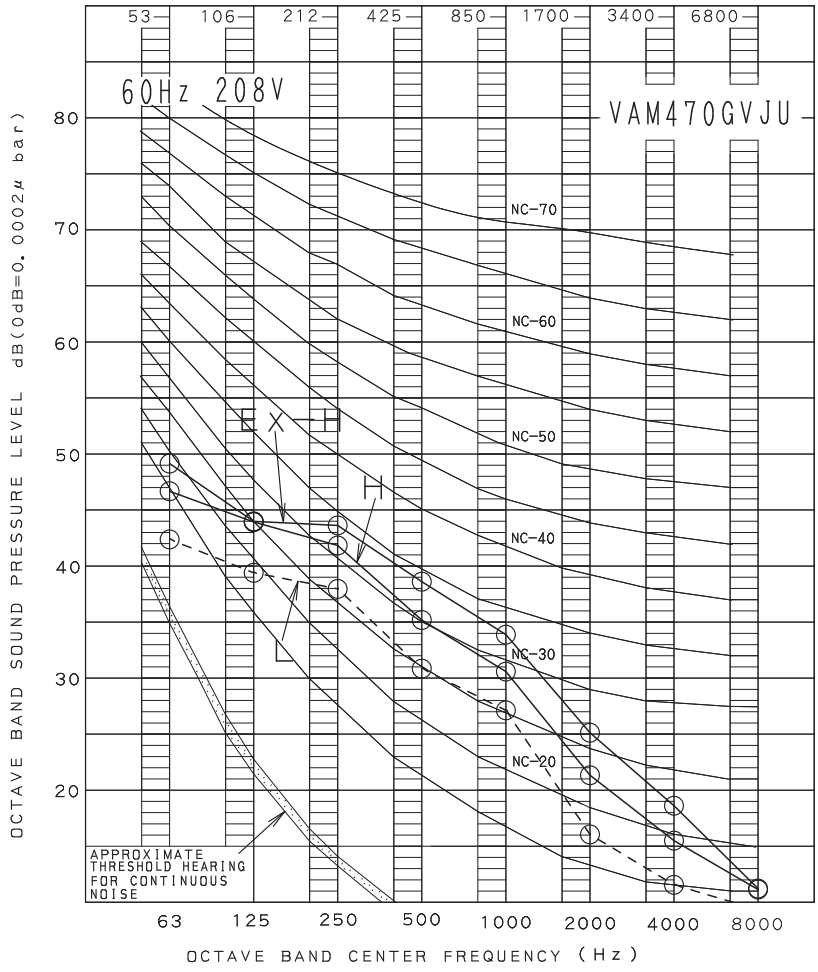
VAM470GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	Ex-H	H	L
A	40.0	37.0	33.0

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 208V

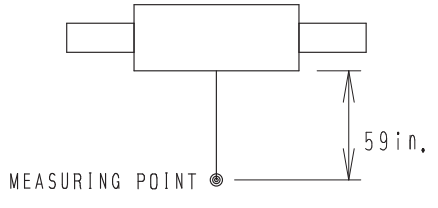
MODEL:VAM470GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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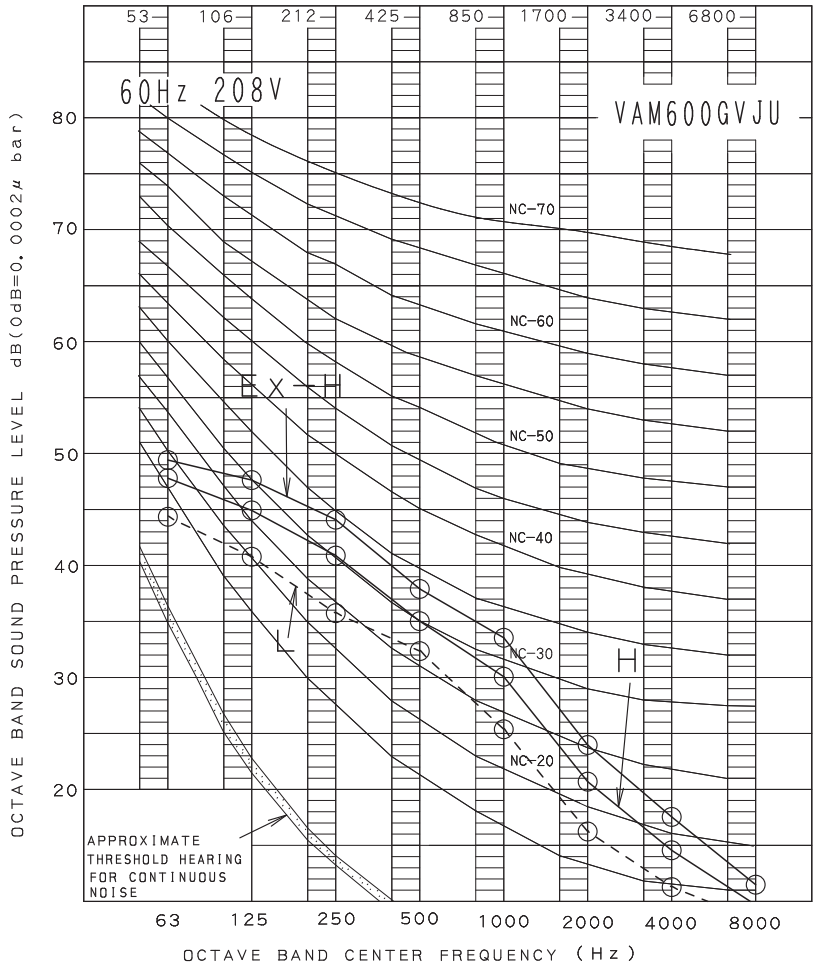
VAM600GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	Ex-H	H	L
A	40.1	37.0	33.1

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 208V

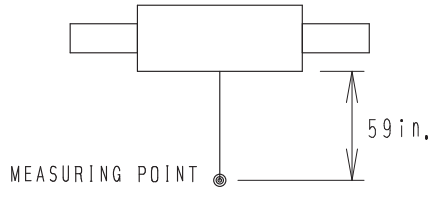
MODEL:VAM600GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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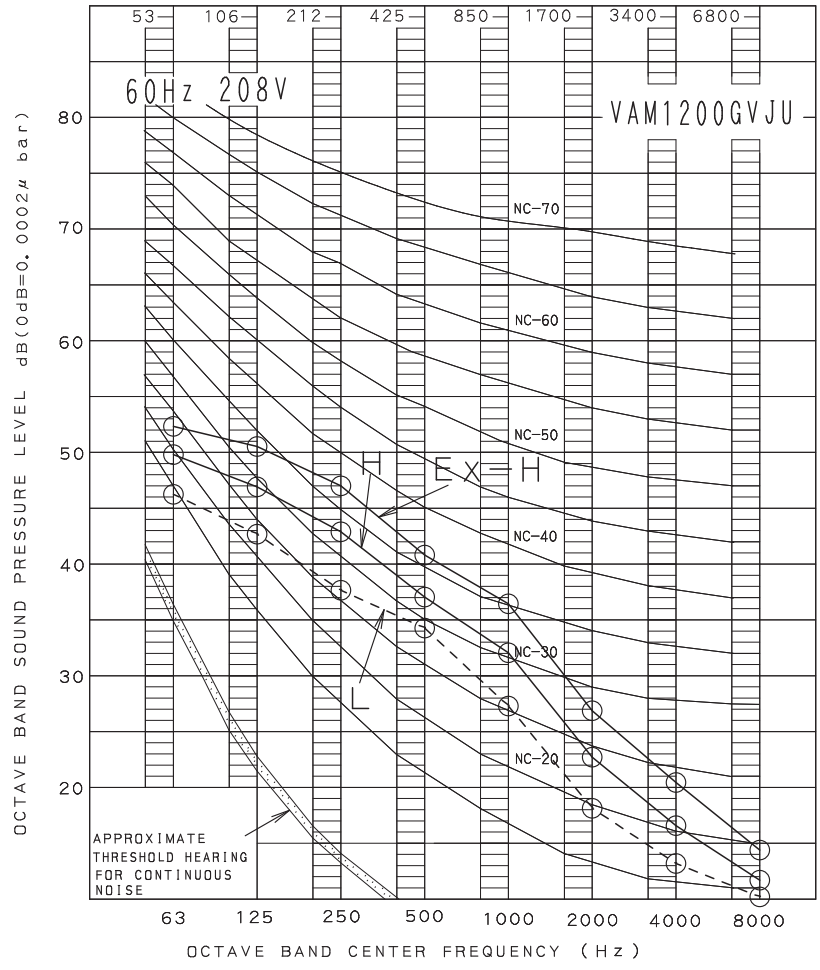
VAM1200GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	Ex-H	H	L
A	43.0	39.0	35.0

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 208V

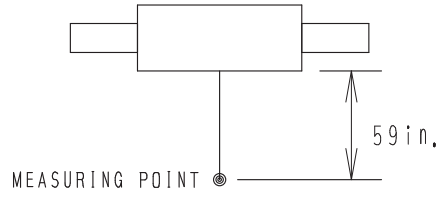
MODEL:VAM1200GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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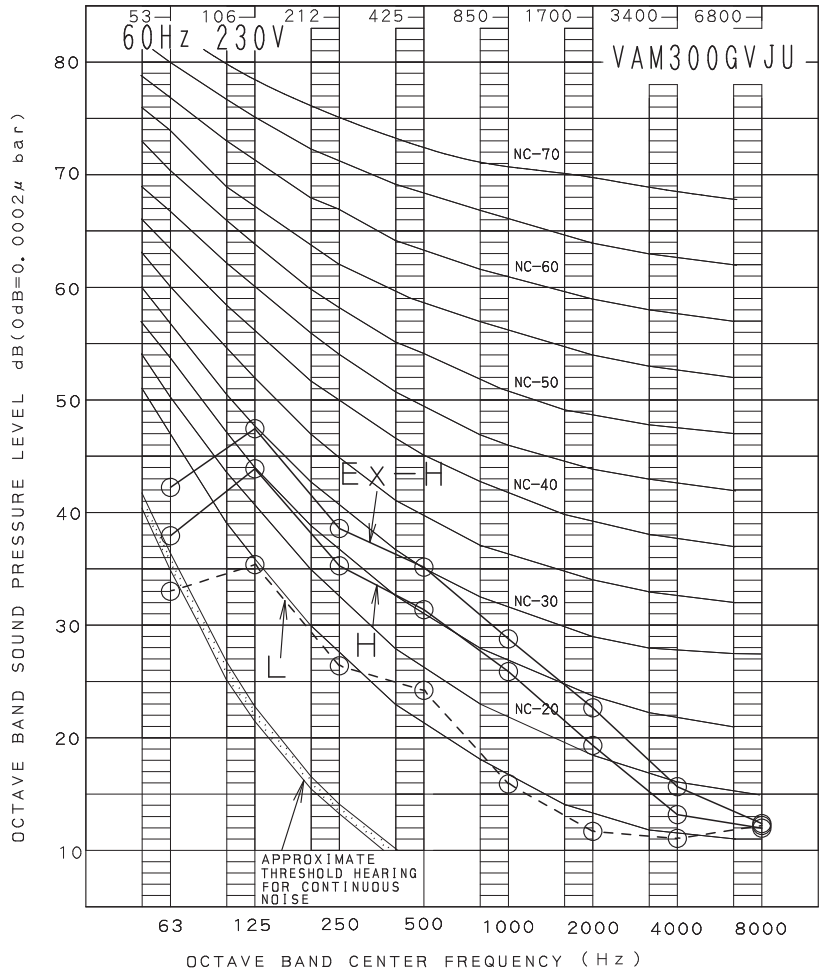
7.2 230 V
VAM300GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	Ex-H	H	L
A	37.0	33.5	25.5

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 230V

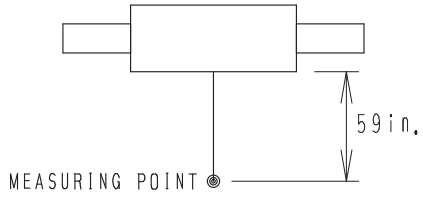
MODEL:VAM300GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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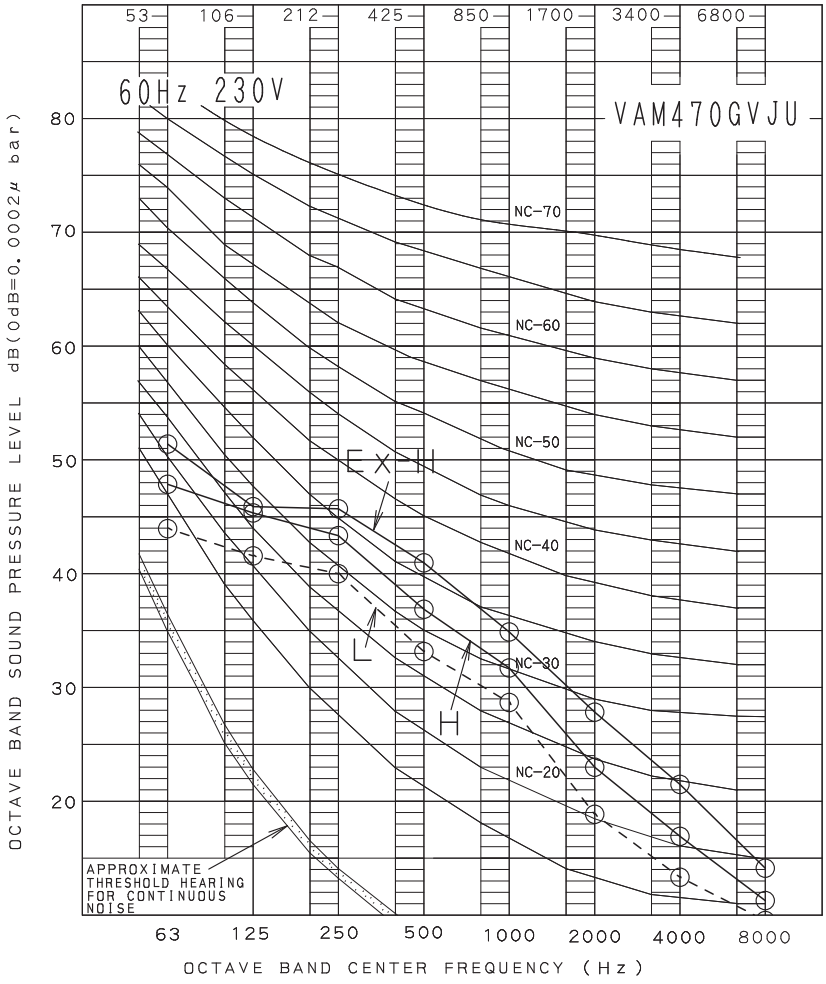
VAM470GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	Ex-H	H	L
A	42.0	38.5	35.0

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 230V

MODEL:VAM470GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
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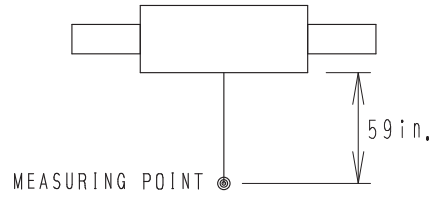
3. OPERATING SOUND VARIES DEPENDING ON OPERATING AND AMBIENT CONDITIONS.
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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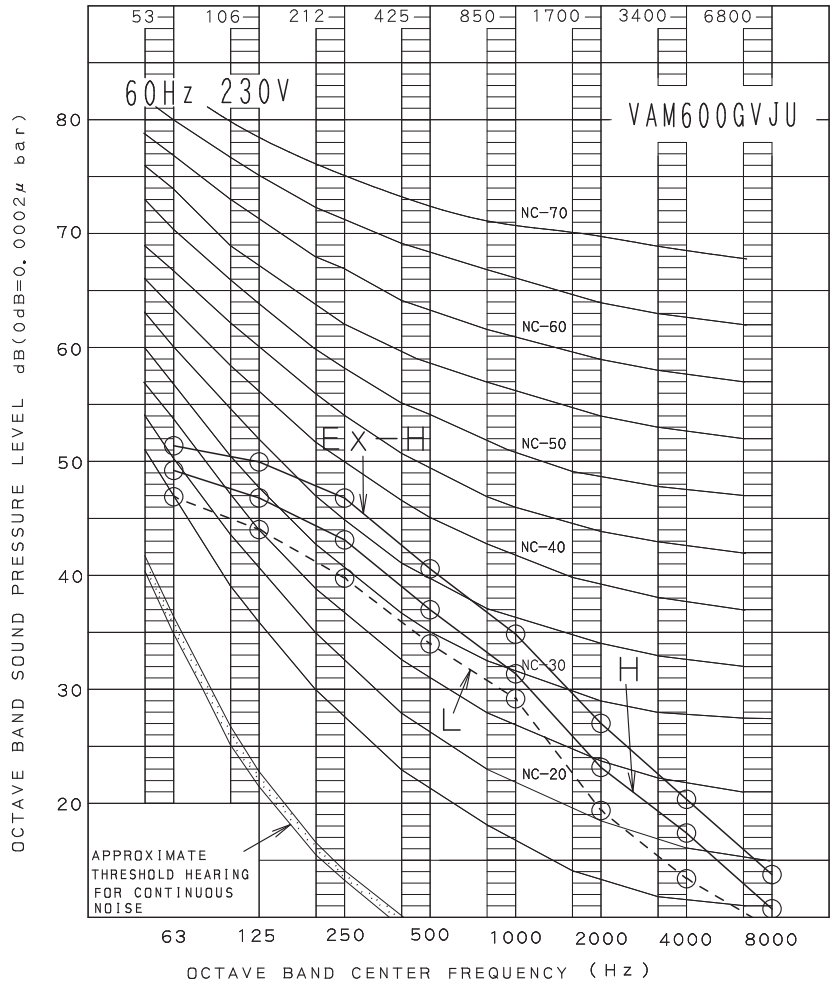
VAM600GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	EX-H	H	L
A	42.5	39.0	36.0

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 230V

MODEL:VAM600GVJU

VENTILATION MODE:ERV

MEASURING PLACE

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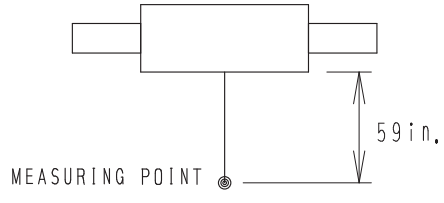
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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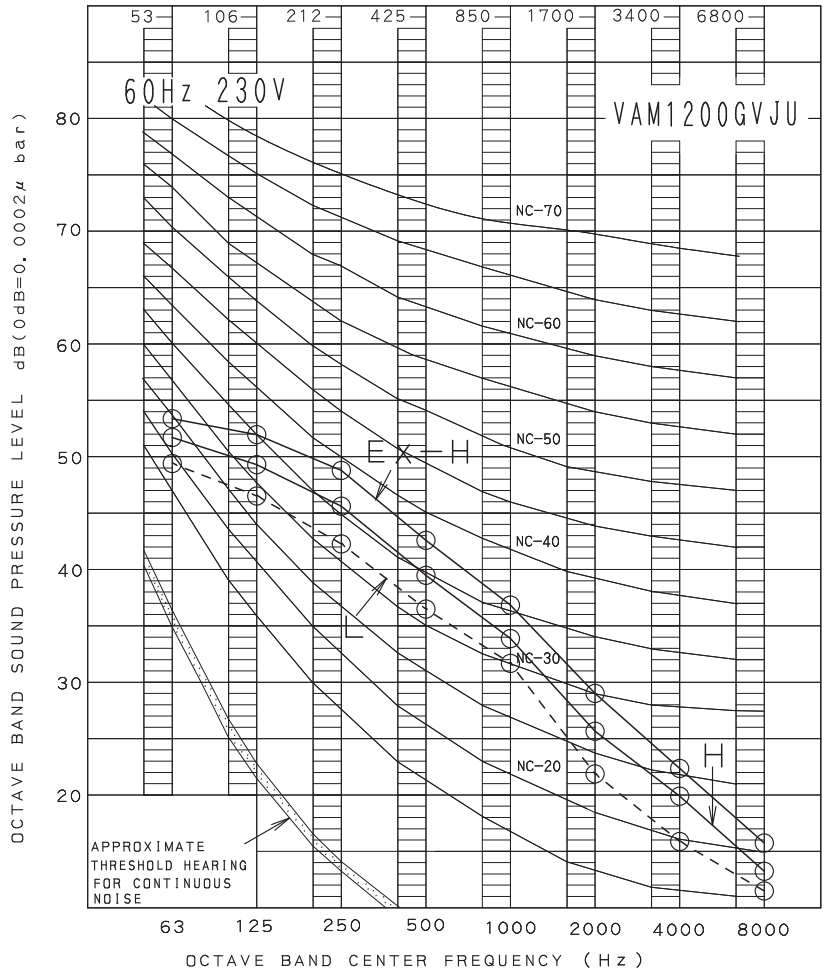
VAM1200GVJU



OVER ALL (dB)

SCALE	AIRFLOW RATE		
	EX-H	H	L
A	44.5	41.5	38.5

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE

SINGLE PHASE 60Hz 230V

MODEL:VAM1200GVJU

VENTILATION MODE:ERV

MEASURING PLACE

REMARK)
1. OPERATING SOUND IS MEASURED IN AN ANECHOIC CHAMBER.
2. THE OPERATING SOUND LEVEL BECOMES GREATER THAN THIS VALUE DEPENDING ON THE OPERATING CONDITIONS, REFLECTED SOUND AND PERIPHERAL NOISE.
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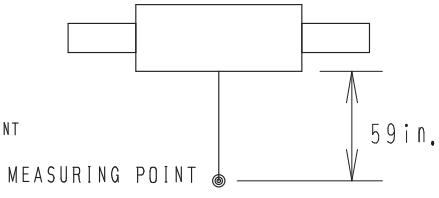
4. Ex-H:EXTRA-HIGH, H:HIGH, L:LOW

LOCATION OF MICROPHONE



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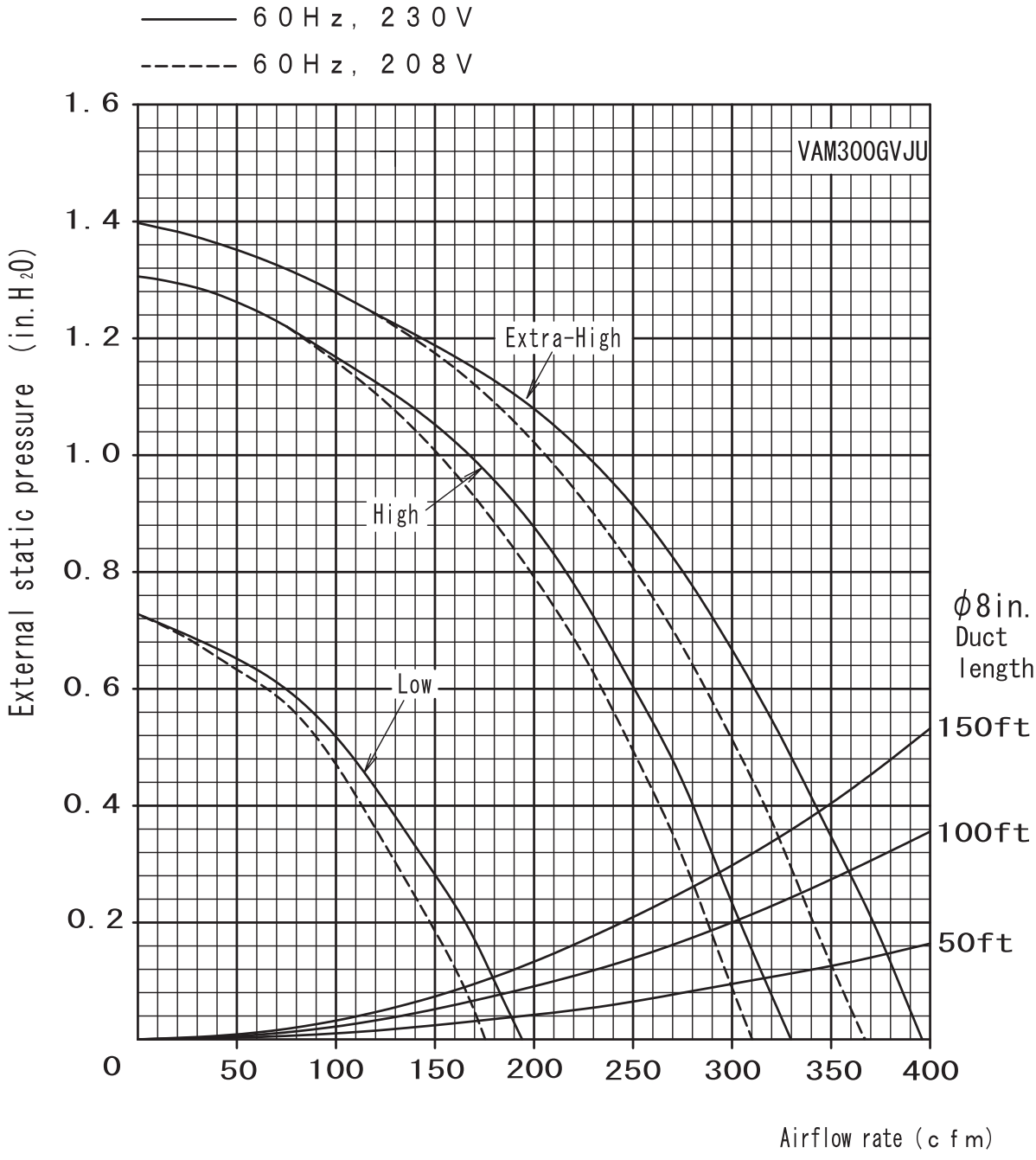
8. Fan Characteristics

VAM300GVJU



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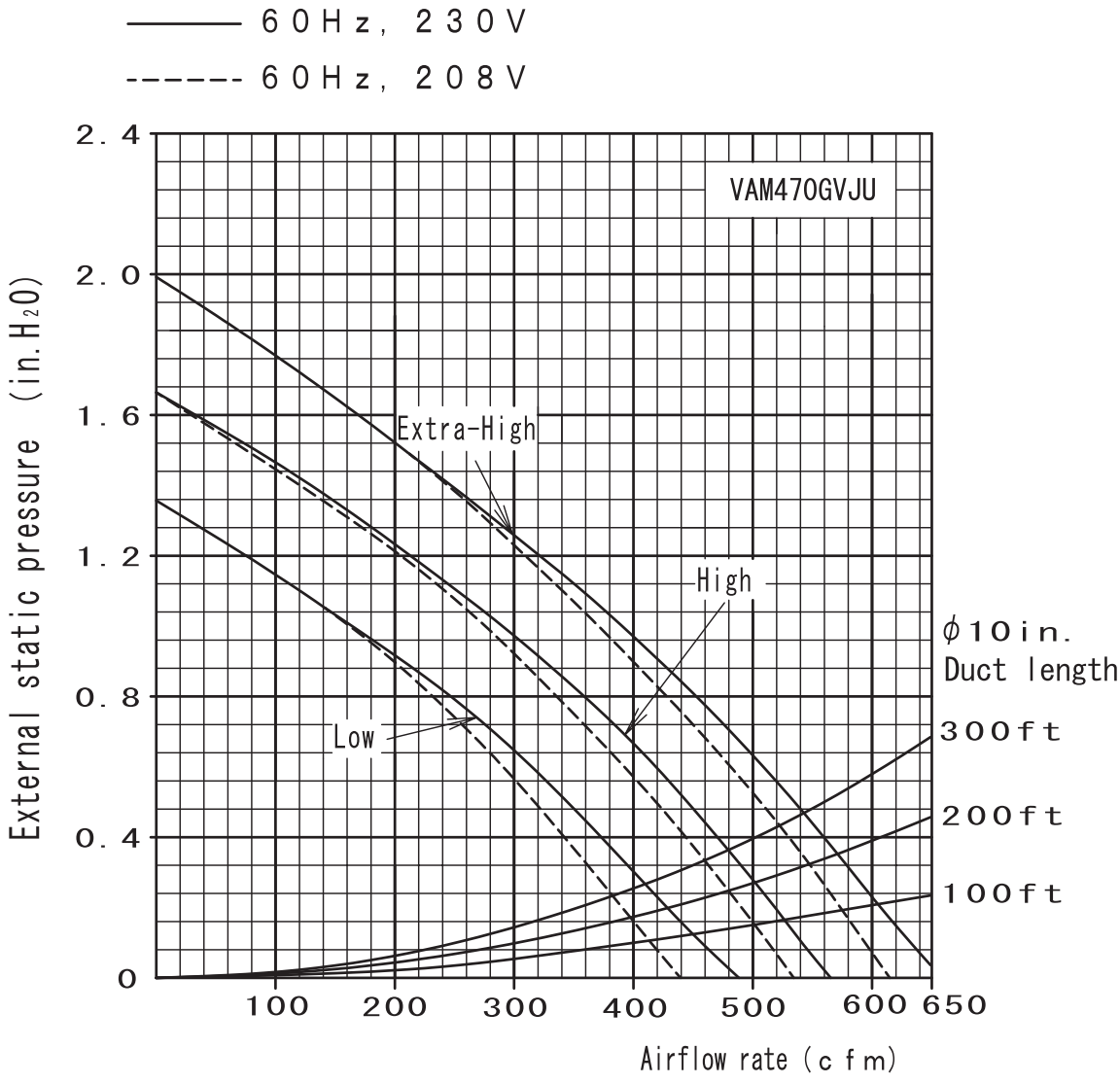
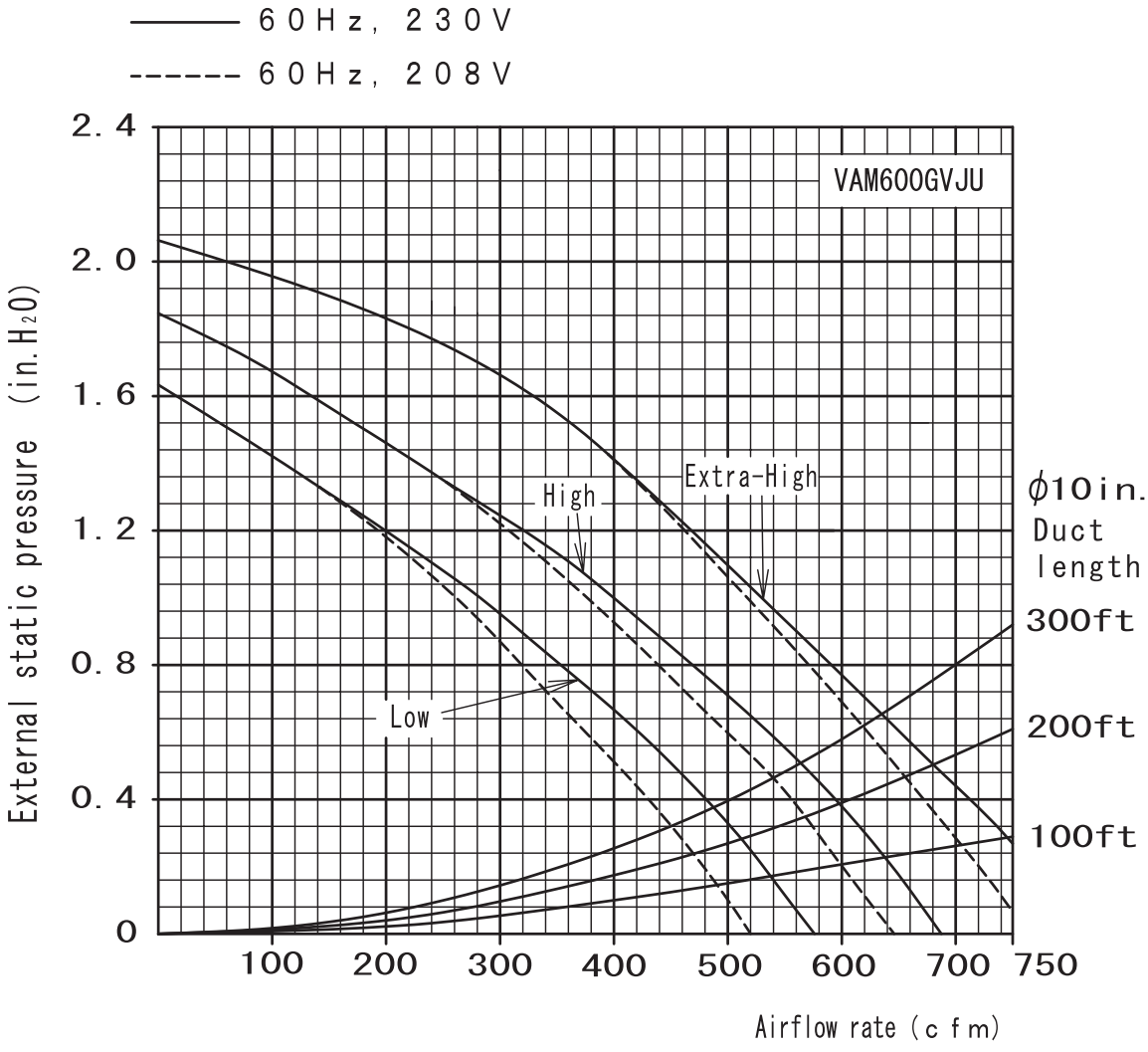
VAM470GVJU



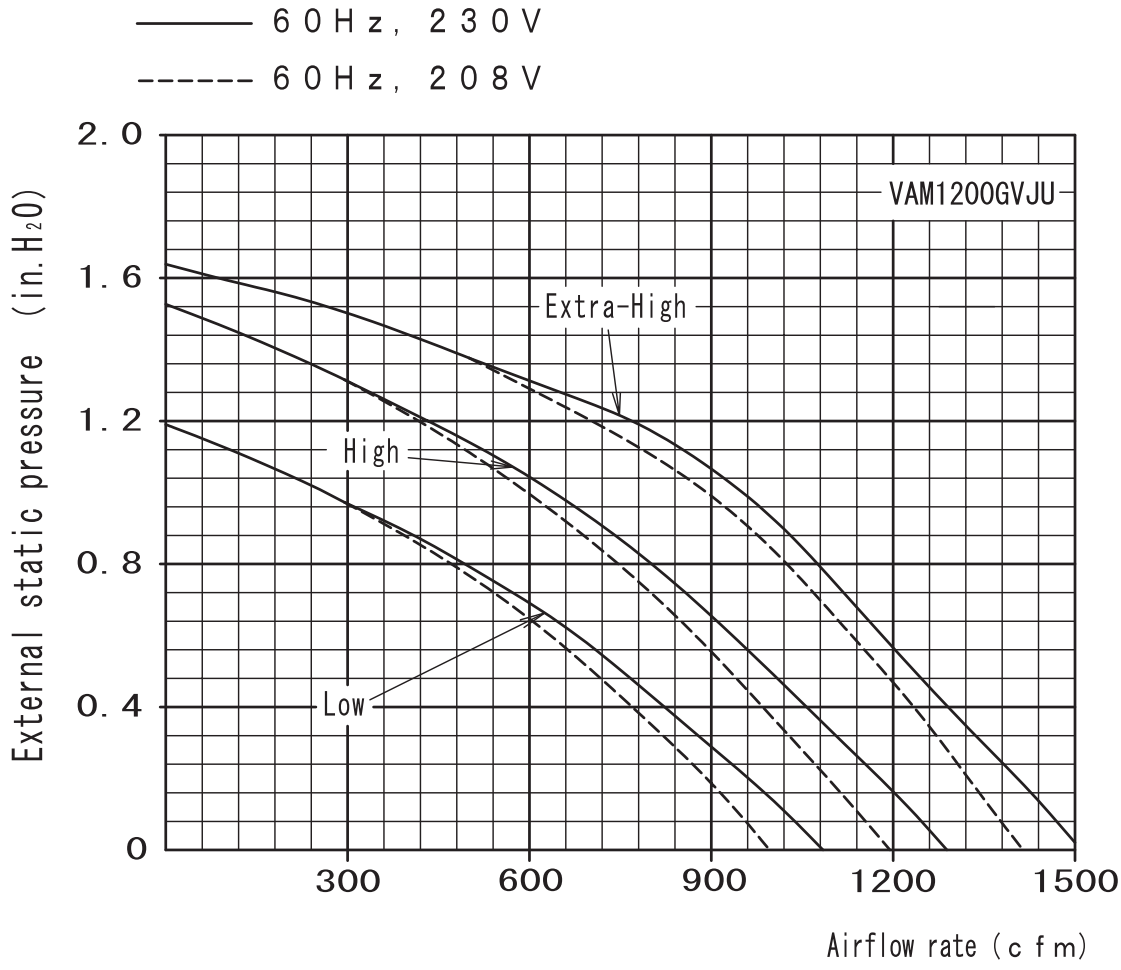
4D073498C

VAM600GVJU



4D073499C

VAM1200GVJU



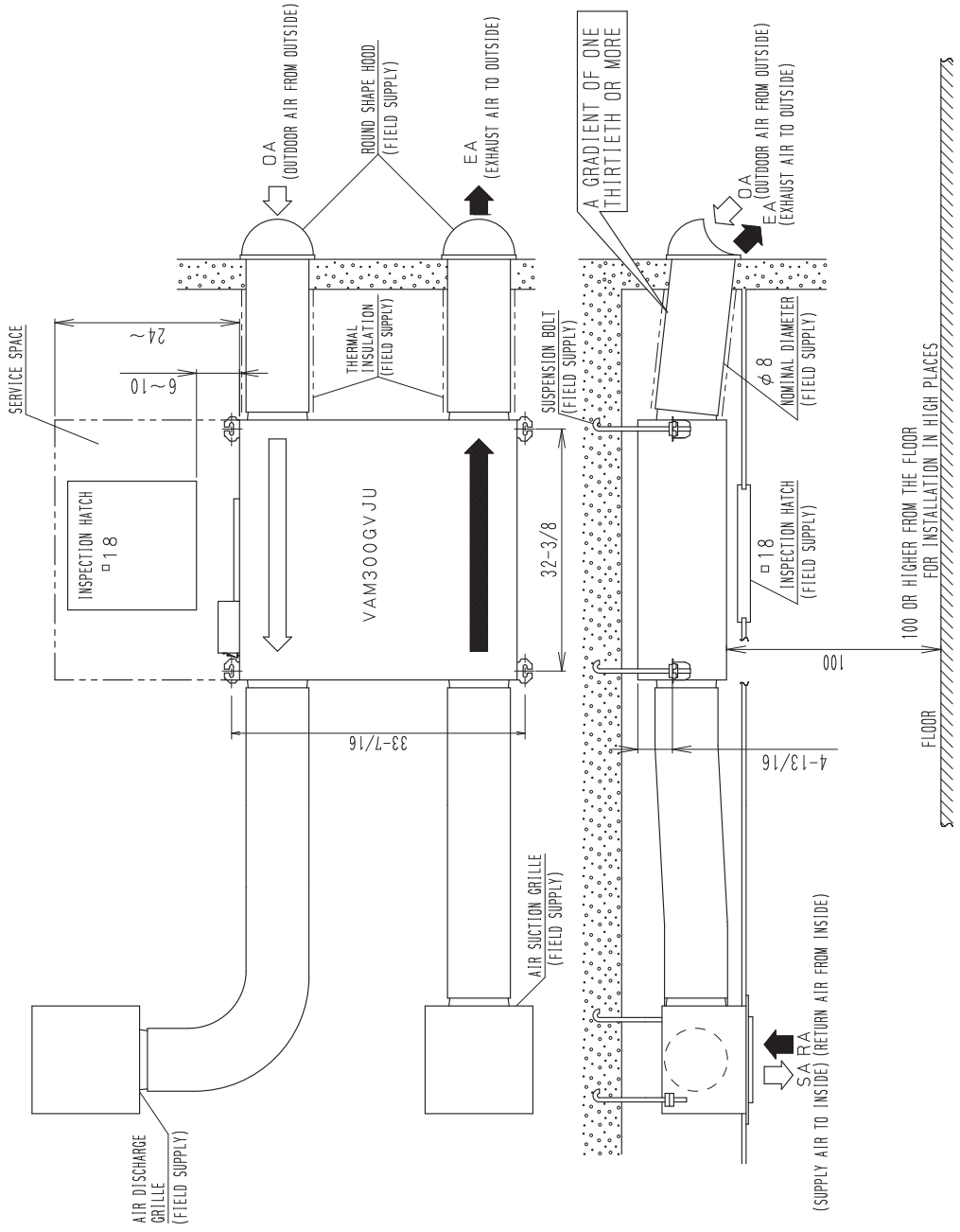
4D073500C

9. Installation Drawing

VAM300GVJU

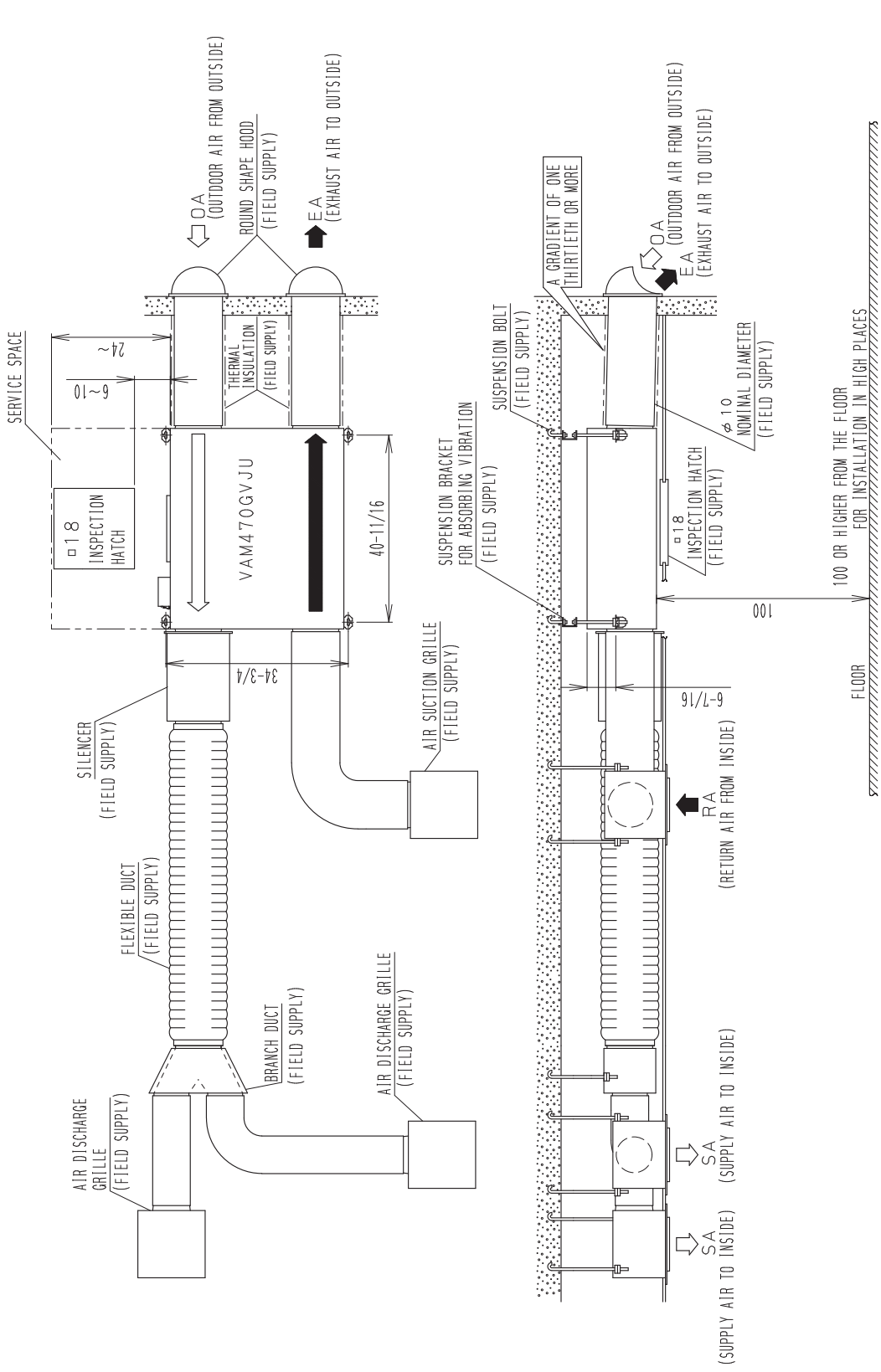
Unit: in.

3D073389



VAM470GVJU

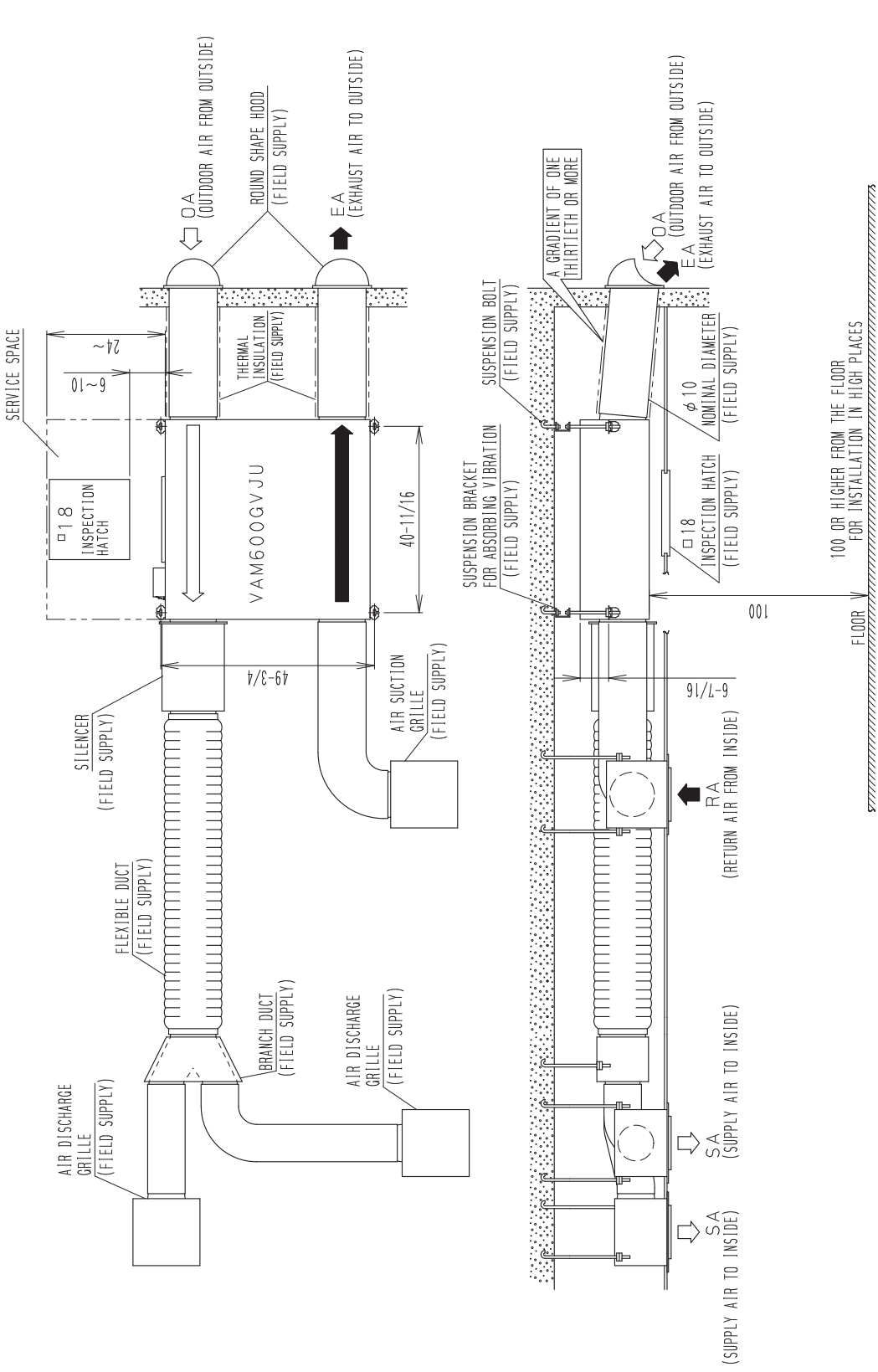
Unit: in.



3D073390

VAM600GVJU

Unit: in.

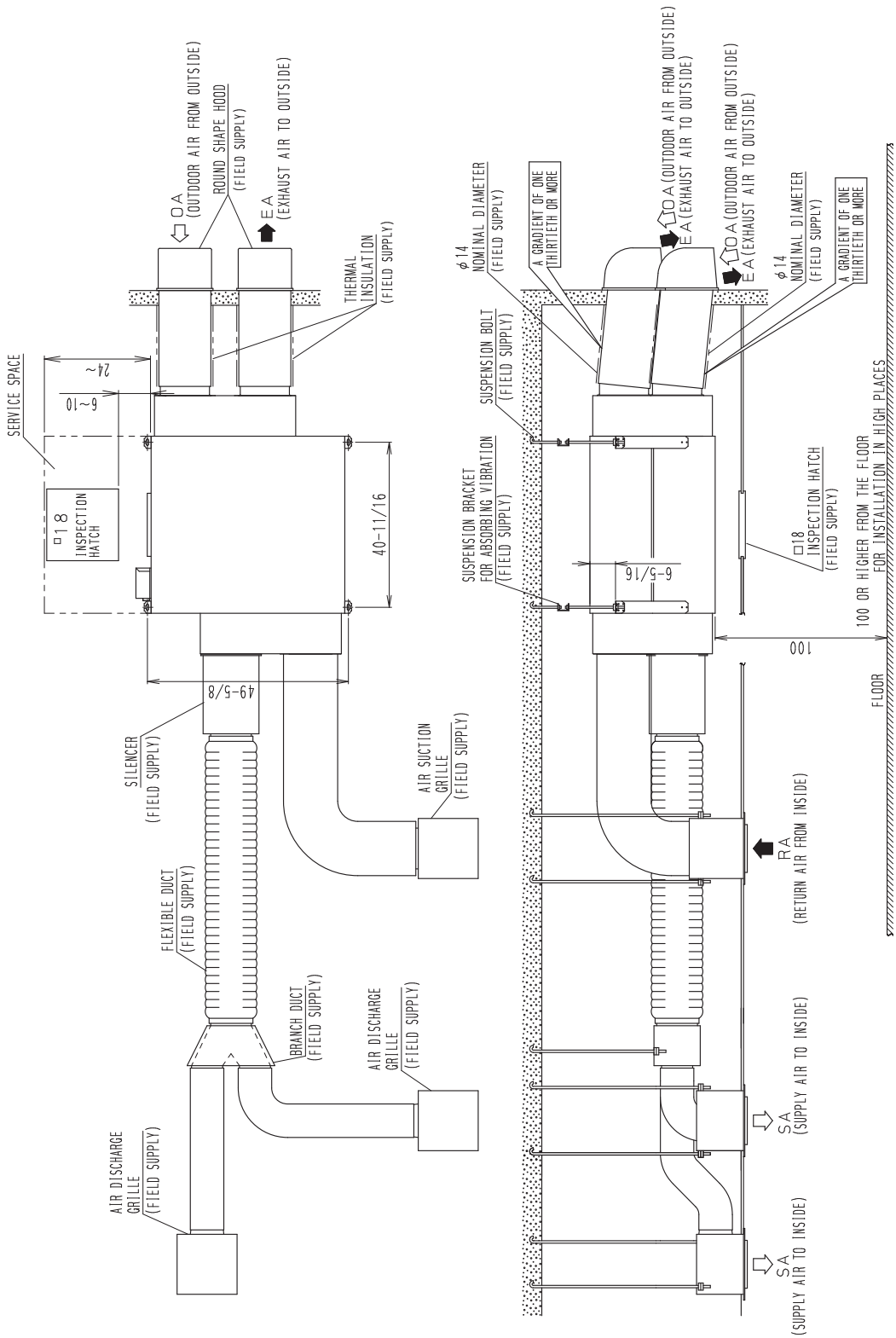


3D073391

VAM1200GVJU

Unit: in.

3D073392



10.Accessories

10.1 Optional Accessories (for Unit)

Item		Model			
		VAM300GVJU	VAM470GVJU	VAM600GVJU	VAM1200GVJU
Auxiliary component	Air filter for replacement	KAF241J50M	KAF241J80M	KAF241J100M	KAF241J100M × 2

C: 3D073395A

Warning

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

●Specifications, designs and other content appearing in this brochure are current as of December 2020 but subject to change without notice.