MITSUBISHI ELECTRIC
COOLING & HEATING

ENERGY STAR

M-S

Ch

RESURGAM CITY OF PORTLAND, MAINE
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

SUBMITTAL DATA: MXZ-3C24NAHZ

MULTI-INDOOR INVERTER HEAT-PUMP SYSTEM

Job Name:

Date: 07/23/15

System Reference:

Date:

GENERAL FEATURES

- Highly energy-efficient system that features 100% heating capacity at 5° F with guaranteed capacity down to -13° F
- Quiet operation
- Built-in base pan heater to prevent ice in drain pan
- Limited warranty: five years parts and seven years compressors

ACCESSORIES

- ☐ 3/8" x 1/2" Port Adapter (MAC-A454JP-E)
- ☐ 1/2" x 3/8" Port Adapter (MAC-A455JP-E)
- ☐ 1/2" x 5/8" Port Adapter (MAC-A456JP-E)
- ☐ M-NET Adapter (PAC-IF01MNT-E)
- ☐ Drain Socket (PAC-SG60DS-E)
- ☐ Airflow Guide (PAC-SH96SG-E)

Outdoor Unit: MXZ-3C24NAHZ

INVERTER

R410A

(For data on specific indoor units, see the MXZ-C Technical and Service Manual.)

Specifications			Model Name
Unit Type			MXZ-3C24NAHZ
Cooling* (Non-ducted / Ducted)	Rated Capacity	Btu/h	22,000 / 23,600
	Capacity Range	Btu/h	6,000 - 23,600
	Rated Total Input	W	1,630 / 2,360
Heating at 47°F* (Non-ducted / Ducted)	Rated Capacity	Btu/h	25,000 / 24,600
	Capacity Range	Btu/h	7,200 - 30,600
	Rated Total Input	W	1,725 / 1,871
Heating at 17°F* (Non-ducted/Ducted)	Rated Capacity	Btu/h	14,000 / 14,000
	Maximum Capacity	Btu/h	25,000 / 24, 600
	Rated Total Input	W	1,622 / 1,635
Heating at 5°F*	Maximum Capacity	Btu/h	25,000
Electrical Requirements	Power Supply	Voltage, Phase, Hertz	208 / 230V, 1-Phase, 60 Hz
	Recommended Fuse/Breaker Size	A	40
	MCA	A	30
Voltage	Indoor - Outdoor S1-S2	V	AC 208 / 230
	Indoor - Outdoor S2-S3	V	DC ±24
Compressor			DC INVERTER-driven Twin Rotary
Fan Motor (ECM)		F.L.A.	1.9
Sound Pressure Level (Non-ducted/Ducted)	Cooling	dB(A)	54
	Heating		58
External Dimensions (H x W x D)		In / mm	41-9/32 x 37-13/32 x 13 1048 x 950 x 330
Net Weight		Lbs / kg	189 / 86
External Finish			Munsell No. 3Y 7.8/11
Refrigerant Pipe Size O.D. — Eight Ports	Liquid (High Pressure)	In / mm	1/4 / 6.35
	Gas (Low Pressure)		A:1/2 / 12.7 ; B,C: 3/8 / 9.52
Max. Refrigerant Line Length		Ft / m	230 / 70
Max. Piping Length for Each Indoor Unit		Ft / m	82 / 25
Max. Refrigerant Pipe Height Difference	If IDU is Above ODU	Ft / m	49 / 15
	If IDU is Below ODU		49 / 15
Connection Method			Flared/Flared
Refrigerant			R410A

*** Rating Conditions per AHRI Standard:**

Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB
Cooling | Outdoor: 95° F (35° C) DB / W.B. 23.9° C (75° F)

Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB
Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

Heating at 17° F | Indoor: 70° F (21° C) DB
Heating at 17° F | Outdoor: 17° F (-8° C) DB / 15° F (-9° C) WB

Specifications are subject to change without notice.

© 2015 Mitsubishi Electric US, Inc.

SPECIFICATIONS: MXZ-3C24NAHZ

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

Operating Range:

	Outdoor
Cooling	D.B. 23 to 115° F [D.B. −5 to 46° C]*1
Heating	D.B. -13 to 70° F [D.B. −25 to 21° C]

*1. D.B. 5 to 115° F [D.B. −15 to 46° C],
when an optional Air Outlet Guide is installed.

Energy Efficiencies:

Indoor Unit Type	SEER	EER	HSPF		
Non-ducted (06 + 06 + 09)	19.0	13.5	10.0		
Ducted and Non-ducted	17.3	11.75	9.5	[illegible]	[illegible]
Ducted (09 + 09 + 09)	15.5	10.0	9.0	3.80	2.51

Multi-zone Indoor/Outdoor Combination Table

	MSZ-FH*	MSZ-GE*	MFZ*	MVZ*	SEZ-KD*	SLZ*	PCA (A24)*	PLA*	PEAD*
MXZ-3C24NAHZ	OK	6,9,12,15,18 OK 24 NO	OK	12,18 OK 24,30,36 NO	OK	OK	NO	18 OK 12,24 NO	NO

*** Refer to indoor unit submittal.**

Notes:
- Minimum of two Indoor Units must be connected to the MXZ-3C24NAHZ.
- Minimum installed capacity cannot be less than 12,000 Btu/h.
- System can operate with only one Indoor Unit turned on.
- May connect to any style indoor unit or combination.
- Information provided at 208/230V.
  Refer to the MXZ-C Technical & Service Manual for detailed specifications and additional information per Indoor Unit Combination.

MVZ CONNECTION RULES:
- Only 1 MVZ may be used on any system.
- When an MVZ is connected, total connected capacity must be 100% or less.
- When an MVZ is connected, no P-Series indoor units can be used (PCA, PLA, or PEAD).

Notes:

Specifications are subject to change without notice.
© 2015 Mitsubishi Electric US, Inc.

MXZ-3C24NAHZ OPERATIONAL PERFORMANCE

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

DUCTED:

Operational Performance for Indoor Unit Combinations (Unit A + Unit B + Unit C)	Cooling Capacity Range (Btu/h) / Heating Capacity Range (Btu/h)			Power Usage Range (W)
	Unit A	Unit B	Unit C	
9	9000	0	0	TBD
	10900	0	0	
12	12000	0	0	
	13600	0	0	
15	15000	0	0	
	18000	0	0	
18	17200	0	0	
	21600	0	0	
9 + 9	9000	9000	0	
	10900	10900	0	
9 + 12	9000	12000	0	
	9343	12457	0	
9 + 15	8175	13625	0	
	8175	13625	0	
9 + 18	7267	14533	0	
	7267	14533	0	
12 + 12	10900	10900	0	
	10900	10900	0	
12 + 15	9689	12111	0	
	9689	12111	0	
9 + 9 + 9	7867	7867	7867	
	8200	8200	8200	

Speci¿cations are subject to change without notice.
© 2015 Mitsubishi Electric US, Inc.

MXZ-3C24NAHZ OPERATIONAL PERFORMANCE, contd.

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

NON-DUCTED:

Operational Performance for Indoor Unit Combinations (Unit A + Unit B + Unit C)	Cooling Capacity Range (Btu/h) / Heating Capacity Range (Btu/h)			Power Usage Range (W)
	Unit A	Unit B	Unit C	
6	6000	0	0	TBD
	7400	0	0	
9	9000	0	0	
	11000	0	0	
12	12000	0	0	
	14400	0	0	
15	14000	0	0	
	18000	0	0	
18	17200	0	0	
	21600	0	0	
6 + 6	6000	6000	0	
	7400	7400	0	
6 + 9	6000	9000	0	
	7360	11040	0	
6 + 12	6000	12000	0	
	7333	14667	0	
6 + 15	5714	14286	0	
	6286	15714	0	
6 + 18	5450	16350	0	
	5500	16500	0	
9 + 9	9000	9000	0	
	11000	11000	0	
9 + 12	8571	11429	0	
	9429	12571	0	
9 + 15	8175	13625	0	
	8250	13750	0	
9 + 18	7267	14533	0	
	7333	14667	0	
12 + 12	10900	10900	0	
	11000	11000	0	
12 + 15	9689	12111	0	
	9778	12222	0	
6 + 6 + 6	6000	6000	6000	
	7400	7400	7400	
6 + 6 + 9	6000	6000	9000	
	7086	7086	10629	
6 + 6 + 12	5500	5500	11000	
	6250	6250	12500	
6 + 6 + 15	5333	5333	13333	
	5556	5556	13889	
6 + 9 + 9	5500	8250	8250	
	6250	9375	9375	
6 + 9 + 12	5333	8000	10667	
	5556	8333	11111	
9 + 9 + 9	8000	8000	8000	
	8333	8333	8333	

Speci¿cations are subject to change without notice.
© 2015 Mitsubishi Electric US, Inc.

DIMENSIONS: MXZ-3C24NAHZ

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

1.FREE SPACE

2.SERVICE SPACE

AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

Intertek

MITSUBISHI ELECTRIC
COOLING & HEATING

1340 Satellite Boulevard
Suwanee, GA 30024
Toll Free: 800-433-4822
www.mehvac.com

FORM# MXZ-3C24NAHZ for Multiple Indoor Unit Styles - 201505

Speci¿cations are subject to change without notice.
© 2015 Mitsubishi Electric US, Inc.

M-SERIES MVZ-A12AA4

12,000 BTU/H MULTI-POSITION AIR HANDLING UNIT FOR MXZ MULTI-ZONE HEAT-PUMP SYS

Job Name:	
System Reference:	

RESURGAM CITY OF PORTLAND, MAINE

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

SPECIFICATIONS:

Rated Capacity*		
Cooling	Btu/h	12,000
Heating at 47° F	Btu/h	13,500

*Rating Conditions per AHRI Standard:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB
Cooling | Outdoor: 95° F (35° C) DB / 75° F (24° C) WB
Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB
Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

For data on specific indoor units (all ducted, all non-ducted, and both ducted and non-ducted) combinations, see the MXZ Technical and Service Manual

Electrical Power Requirements	208 / 230V, 1-Phase, 60 Hz	
Minimum Circuit Ampacity (MCA)	A	1
Voltage		
Indoor - Outdoor S1-S2	AC 208 / 230V	
Indoor - Outdoor S2-S3	+/- 24VDC	
External Static Pressure	In. WG	0.30 - 0.50 - 0.80
External Finish	High-gloss polyester powder coated	
External Dimensions (H x W x D)	In.(mm)	50-1/4 x 17 x 21-5/8 (1,275 x 432 x 548)
Net Weight	Lbs.(kg)	113 (51)
Sound Pressure Level (Low-Mid-Hi)		
Cooling	dB(A)	27 - 31 - 35
Heating	dB(A)	27 - 31 - 35
Airflow Rate (Low-Mid-Hi)		
Cooling (Dry)	CFM	280 - 340 - 400
Heating	CFM	280 - 340 - 400
Refrigerant Piping		
Liquid (High Pressure)	In.(mm)	1/4 (6.35)
Gas (Low Pressure)	In.(mm)	1/2 (12.70)
Refrigerant	R410A	
Connection Method	Flared	

GENERAL FEATURES:

- Multi-position air handling unit
- Multi-Position installation without any additional kits
- Quiet operation
- Selectable external static pressure settings with capabilities up to 0.80 In. W.G.
- Auto fan speed control: Low, Medium, High
- Indoor unit powered from outdoor unit using A-Control (Optional)
- Auto restart following a power outage
- Limited warranty: five years parts and seven years compressors

ACCESSORIES:

- ☐ Mini-Condensation Pump (SI30-115/230)
- ☐ Maxi Blue Diamond Condensate Pump 230V (X87-721)

Specifications are subject to change without notice.

© 2015 Mitsubishi Electric US, Inc.

DIMENSIONS: MVZ-A12AA4

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/23/15

Model	A	B	C	D	E	F	G	H	J	Gas pipe	Liquid pipe
MVZ-A12AA4	432 (17)	376 (14-13/16)	281 (11-1/8)	224 (8-7/8)	1275 (50-1/4)	680 (26-13/16)	823 (32-7/16)	735.5 (29)	360 (14-3/16)	φ12.7 (1/2)	φ6.35 (1/4)
MVZ-A18AA4											
MVZ-A24AA4											
MVZ-A30AA4	594 (21)	477 (18-13/16)	382.6 (15-1/8)	266.5 (10-1/2)	1378 (54-1/4)	797 (31-3/16)	953.5 (37-9/16)	782 (31-3/8)	461 (18-3/16)	φ15.88 (5/8)	φ9.52 (3/8)
MVZ-A36AA4											

Unit:mm(in.)

Model	Nominal Filter Size	Duct Connection
MVZ-A12AA4	508X406.4X25.4 (20X16X1)	376X402 (14-13/16X15-7/8)
MVZ-A18AA4		
MVZ-A24AA4		
MVZ-A30AA4	508X508X25.4 (20X20X1)	477X402 (18-13/16X15-7/8)
MVZ-A36AA4		

MITSUBISHI ELECTRIC
COOLING & HEATING

1340 Satellite Boulevard. Suwanee, GA 30024
Toll Free: 800-433-4822 www.mehvac.com

AHRI CERTIFIED™ www.ahridirectory.org Unitary Small HP AHRI Standard 210/240

Intertek

Specifications are subject to change without notice.

© 2015 Mitsubishi Electric US, Inc.

MITSUBISHI ELECTRIC
COOLING & HEATING

ENERGY STAR

M-S

SUBMITTAL DATA: MSZ-FH09NA

9,000 BTU/H WALL-MOUNTED INDOOR UNIT FOR MXZ-C MULTI-ZONE HEAT-PUMP SYSTEMS

RESURGAM CITY OF PORTLAND, MAINE
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Job Name:

Date: 07/23/15

System Reference:

Date:

Indoor Unit: MSZ-FH09NA

Wireless Remote Controller

GENERAL FEATURES

- Highly energy-efficient system that features 100% heating capacity at 5°F, 82% at -4°F, and 62% at -13°F
- Updated sleek, compact indoor unit design
- Includes Standard, Platinum Deodorizing, and Anti-allergy Enzyme filters for a complete air purifying system
- "Powerful Mode" function permits system to temporarily run at a lower/higher temperature with an increased fan speed, which quickly brings the room to the optimum comfort level
- Integrated i-see Sensor automatically adjusts the unit's operation according to temperature differences detected between the floor and the intake air, ensuring optimum comfort and energy usage
- Hand-held Wireless Remote Controller
- Base Pan Heater is available as an option
- Limited warranty: five years parts and seven years compressors

ACCESSORIES

Indoor Unit

- □ Condensate Pump (BlueDiamond X87-711/721; 115/230V)
- □ Condensate Pump (Sauermann SI30-115/230; 115/230V)
- □ Replacement Platinum Deodorizing Filter (MAC-3000FT-E)
- □ Replacement Anti-allergy Enzyme Filter (MAC-2330FT-E)

Controller Options

- □ Wireless Wall-mounted Remote Controller Kit (MHK1)*
- □ Portable Central Controller (MCCH1)*
- □ Outdoor Air Sensor (MOS1)*
- □ Wired Wall-mounted Controller (PAR-31MAA requires MAC-333IF)*
- □ Simple MA Remote Controller (PAC-YT53CRAU requires MAC-333IF)*

*See Submittal for information on each option

- □ System Control Interface (MAC-333IF)

SPECIFICATIONS

Cooling Capacity*.....9,000 Btu/h
Heating Capacity*.....10,900 Btu/h

***Rating Conditons:**
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB
Cooling | Outdoor: 95° F (35° C) DB / 75° F (24° C) WB
Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB
Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

(For data on specific indoor units [all ducted, all non-ducted, and both ducted and non-ducted] combinations, see the MXZ Technical and Service Manual.)

Electrical Requirements
Power Supply ..... 208 / 230V, 1-Phase, 60 Hz
Breaker Size ..... 15 A

Voltage
Indoor - Outdoor S1-S2.....AC 208 / 230V
Indoor - Outdoor S2-S3.....DC +/- 24V
Indoor - Remote Controller.....MHK1 DC 3V
PAR-31MAA DC 12V
PAC-YT53CRAU DC 12V

MCA ..... 1.0 A
Blower Motor (ECM) .....0.67 F.L.A.
Airflow (Lo - Med - Hi - Super Hi - Powerful)
Cooling ..... 137-167-221-304-381 Dry CFM
117-143-190-261-328 Wet CFM
Heating..... 140-167-225-325-437 Dry CFM
Sound Pressure Level (Lo - Med - Hi - Super Hi - Powerful)
Cooling ..... 20-23-29-36-40 dB(A)
Heating..... 20-24-29-36-42 dB(A)
External Finish Color ..... Munsell 1.0Y 9.2/0.2
External Dimensions
Inches: .....12 + 11/16 H x 36-7/16 W x 9-3/16 D
mm: .....305 +17 H x 925 W x 234 D
Weight Unit .....29 lbs. / 12 kg
Field Drainpipe Size O.D. ..... 19/32 In. / 15mm
Refrigerant Type R410A
Refrigerant Pipe
Gas Side O.D. ..... 3/8" x 9.52 mm
Liquid Side O.D. ..... 1/4" x 6.35 mm
Connection Method
Indoor/Outdoor .....Flared

R410A INVERTER

Specifications are subject to change without notice.
© 2015 Mitsubishi Electric US, Inc.

MITSUBISHI ELECTRIC

COOLING & HEATING

ENERGY STAR

M-S

SUBMITTAL DATA: MSZ-FH15NA

15,000 BTU/H WALL-MOUNTED INDOOR UNIT FOR MXZ-C MULTI-ZONE HEAT-PUMP SYSTEMS

RESURGAM CITY OF PORTLAND, MAINE

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Job Name:

Date: 07/23/15

System Reference:

Date:

GENERAL FEATURES

- Highly energy-efficient system that features 100% heating capacity at 5°F, 82% at -4°F, and 62% at -13°F
- Updated sleek, compact indoor unit design
- Includes Standard, Platinum Deodorizing, and Anti-allergy Enzyme filters for a complete air purifying system
- "Powerful Mode" function permits system to temporarily run at a lower/higher temperature with an increased fan speed, which quickly brings the room to the optimum comfort level
- Integrated i-see Sensor automatically adjusts the unit's operation according to temperature differences detected between the floor and the intake air, ensuring optimum comfort and energy usage
- Hand-held Wireless Remote Controller
- Base Pan Heater is available as an option
- Limited warranty: five years parts and seven years compressors

ACCESSORIES

Indoor Unit

- ☐ Condensate Pump (BlueDiamond X87-711/721; 115/230V)
- ☐ Condensate Pump (Sauermann SI30-115/230; 115/230V)
- ☐ Replacement Platinum Deodorizing Filter (MAC-3000FT-E)
- ☐ Replacement Anti-allergy Enzyme Filter (MAC-2330FT-E)

Controller Options

- ☐ Wireless Wall-mounted Remote Controller Kit (MHK1)*
- ☐ Portable Central Controller (MCCH1)*
- ☐ Outdoor Air Sensor (MOS1)*
- ☐ Wired Wall-mounted Controller (PAR-31MAA requires MAC-333IF)*
- ☐ Simple MA Remote Controller (PAC-YT53CRAU requires MAC-333IF)*

*See Submittal for information on each option

- ☐ System Control Interface (MAC-333IF)
- ☐ Remote Temperature Sensor (M21-JKO-307)
- ☐ Lockdown Bracket for Hand-held Controller (RCMKP1CB)

SPECIFICATIONS

Cooling Capacity* ..... 15,000 Btu/h
Heating Capacity* ..... 18,000 Btu/h

***Rating Conditons:**
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB
Cooling | Outdoor: 95° F (35° C) DB / 75° F (24° C) WB
Heating at 47°F | Indoor: 70° F (21° C) DB / 60° F (16° C) WB
Heating at 47°F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

(For data on specific indoor units [all ducted, all non-ducted, and both ducted and non-ducted] combinations, see the MXZ Technical and Service Manual.)

Electrical Requirements
Power Supply ..... 208 / 230V, 1-Phase, 60 Hz
Breaker Size ..... 20 A

Voltage
Indoor - Outdoor S1-S2 ..... AC 208 / 230V
Indoor - Outdoor S2-S3 ..... DC +/- 24V
Indoor - Remote Controller ..... MHK1 DC 3V
PAR-31MAA DC 12V
PAC-YT53CRAU DC 12V

MCA ..... 1.0 A
Blower Motor (ECM) ..... 0.67 F.L.A.
Airflow (Lo - Med - Hi - Super Hi - Powerful)
Cooling ..... 225-262-304-355-411 Dry CFM
194-225-261-305-354 Wet CFM
Heating ..... 201-254-317-394-497 Dry CFM
Sound Pressure Level (Lo - Med - Hi - Super Hi - Powerful)
Cooling ..... 27-31-35-39-44 dB(A)
Heating ..... 25-29-34-39-46 dB(A)
External Finish Color ..... Munsell 1.0Y 9.2/0.2
External Dimensions
Inches: ..... 12 + 11/16 H x 36-7/16 W x 9-3/16 D
mm: ..... 305 +17 H x 925 W x 234 D
Weight Unit ..... 29 lbs. / 12 kg
Field Drainpipe Size O.D. ..... 19/32 In. / 15mm
Refrigerant Type R410A
Refrigerant Pipe
Gas Side O.D. ..... 1/2" x 12.7 mm
Liquid Side O.D. ..... 1/4" x 6.35 mm
Connection Method
Indoor/Outdoor ..... Flared

R410A INVERTER

Specifications are subject to change without notice.
© 2014 Mitsubishi Electric US, Inc.