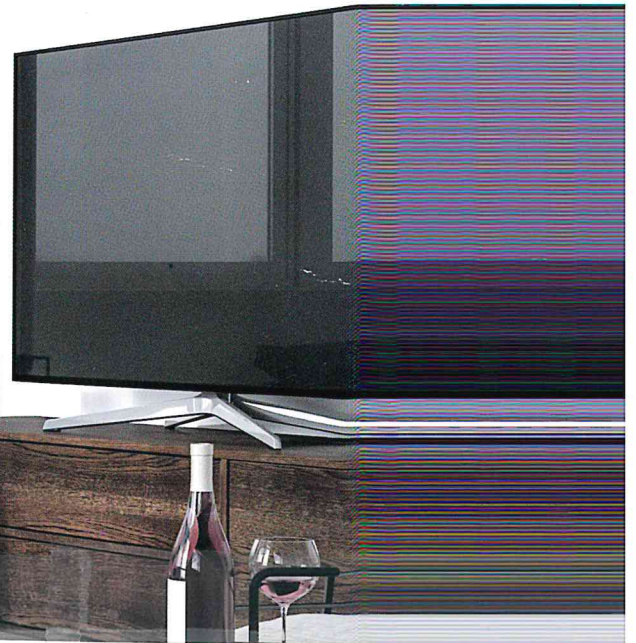
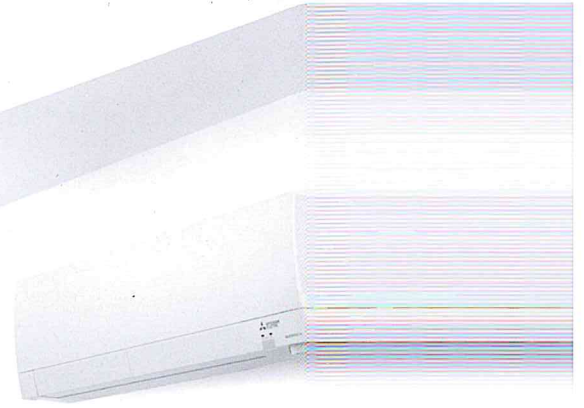
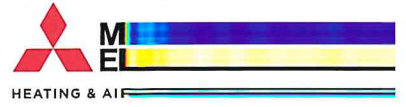


M-Series and P-Series Catalog

Winter 2021



Joe Cobb
Service Manager

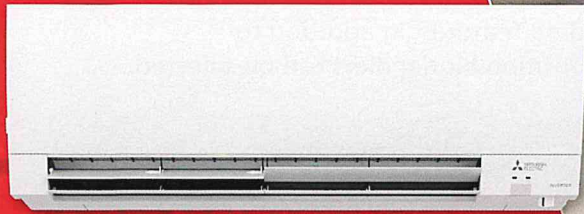
73 Prim Road, Suite 1
Colchester, Vermont 05446

Tel: (802) 860-4090 • Fax: (802) 951-9157
joe@ecvt.net • www.ecvt.net

KNEEN

John B. Kneen

VT Lic # M 3680
jbkneen@msn.com



MSZ-FS Model

Deluxe Wall Mount

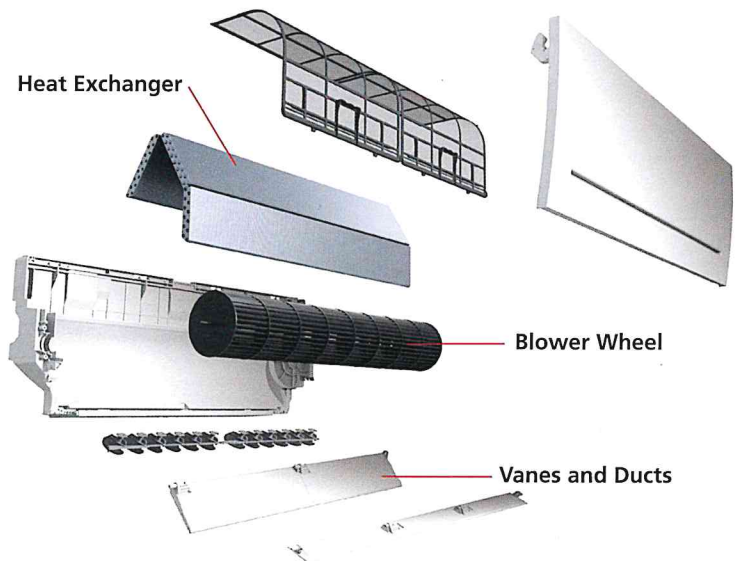


Dual Barrier Coating

The patented Mitsubishi Electric Dual Barrier Coating prevents dust and dirt from accumulating on the inner surface of the heat pump, keeping your heat pump clean year-round.

Blended fluorine particles prevent hydrophilic dirt penetration, and hydrophobic particles prevent hydrophobic dirt from getting into the heat pump. As a result, the patented Dual Barrier Coating keeps the heat exchanger, vanes/air ducts and blower wheel clean.

A clean heat exchanger preserves high-efficiency operation and optimal heat transfer. Also eliminated is additional motor power input required to deliver the proper airflow through a dirty blower wheel and heat exchanger contributing to operational efficiency. Over time, the end result is 30% better airflow and 18% less energy consumption than a system without Dual Barrier Coating.



Comparison of Dirt on Heat Exchanger, Blower Wheel and Air Duct

Actual images of accelerated 10 year test

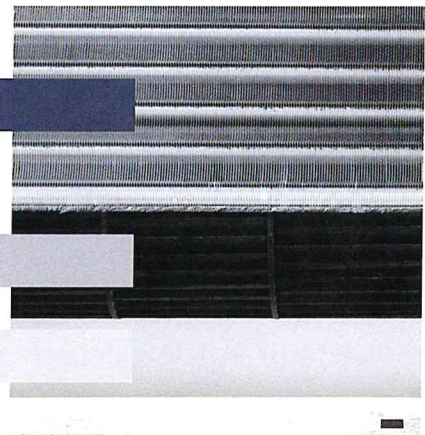


No Dual Barrier Coating

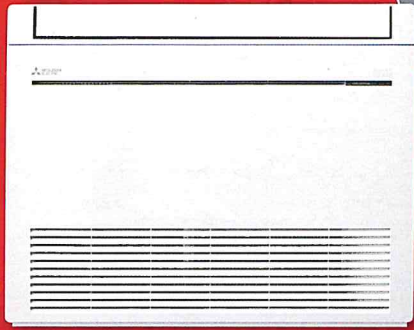
Heat Exchanger

Blower Wheel

Air Duct



Dual Barrier Coating Used

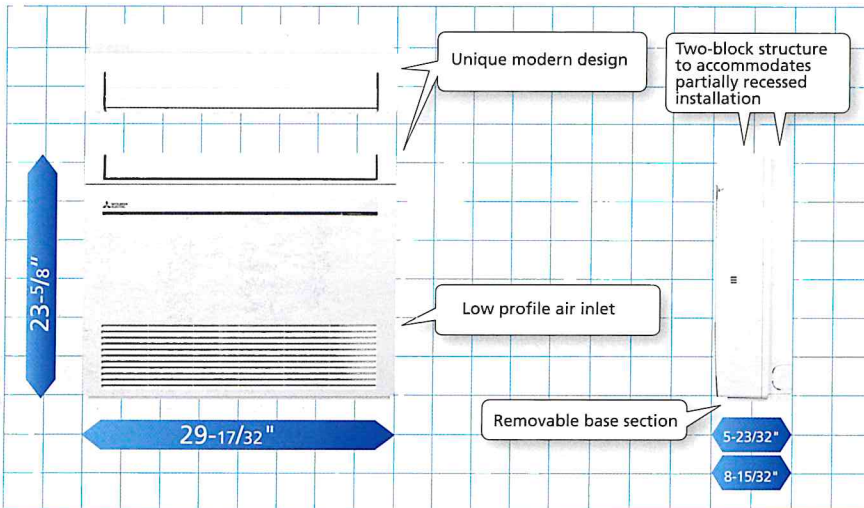


MFZ-KJ Model

Floor Mount



Simple Flat Design

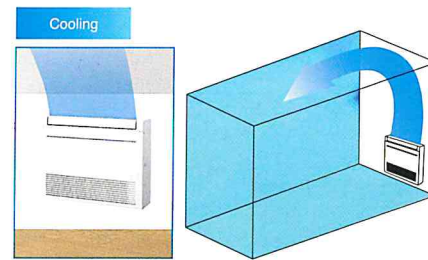
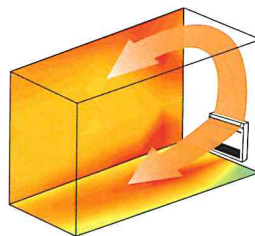
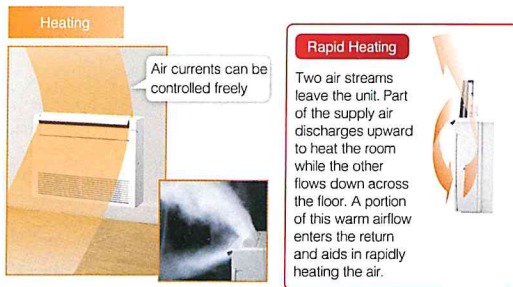


Images Of Installed Unit

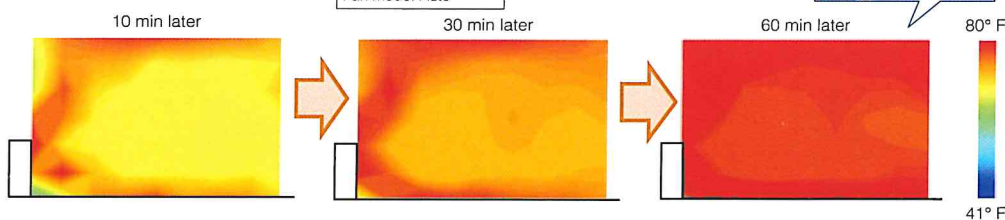


Base can be removed to accentuate the stylish main body

Multi-Flow Vane



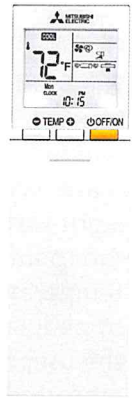
Air Distribution (MFZ-KJ15NA) (sectional view)



All MFZ-KJ single-zone systems are ENERGY STAR® certified.

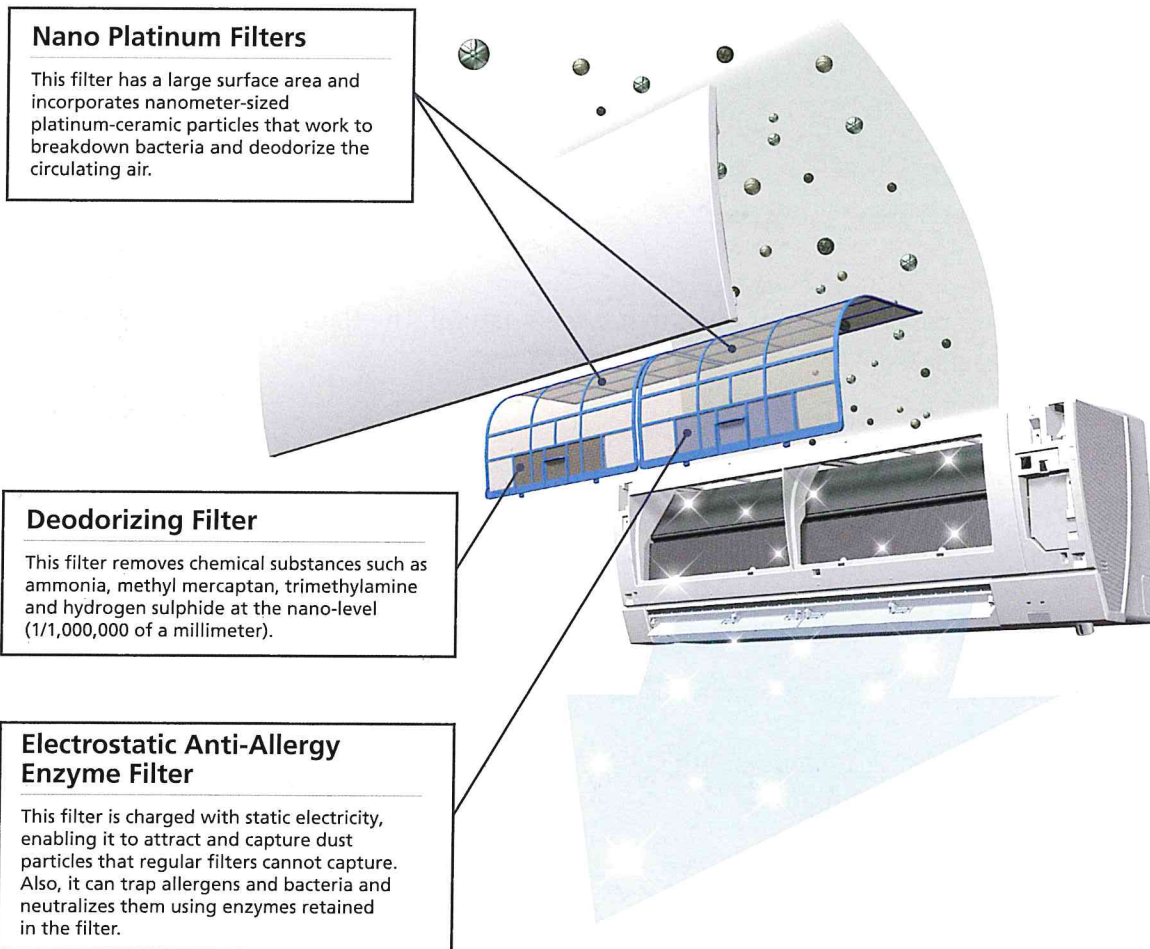
Deluxe Hand-Held Wireless Controller with Advanced Features

- Backlit display for night time visibility
- Modes identified by text: AUTO, HEAT, COOL, DRY, FAN
- Powerful Mode function allows the system to temporarily run at a lower or higher temperature with an increased fan speed to quickly bring the room to your optimal comfort level
- Wide Vane setting provides a wider horizontal air distribution on select models
- 3D i-see Sensor® control for absence detection and direct/indirect modes for personalized comfort
- Adjustable fan speeds and individual vane control for personalized airflow preference
- Indirect/Direct
- Natural Flow
- Weekly scheduling timer



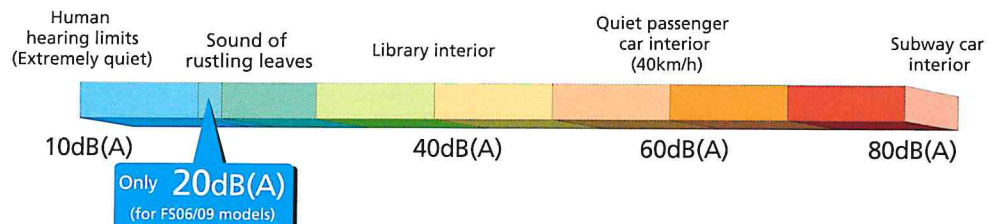
Triple-action Filtration

Air, like water, is something we use every day unconsciously. Yet, clean, fresh air is a vital part of creating a healthy space for humans. Healthy air is achieved with three filters: the Nano Platinum filter, the Deodorizing filter, and the Electrostatic anti-allergy enzyme filter.



Quiet Operation

The indoor unit noise level is as low as 20dB(A) for FS06/09 models, offering a peaceful inside environment.

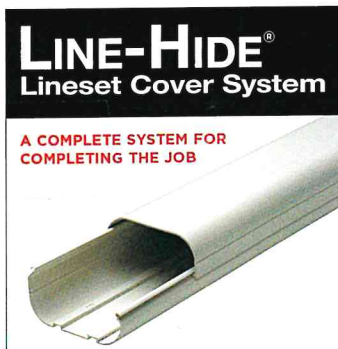
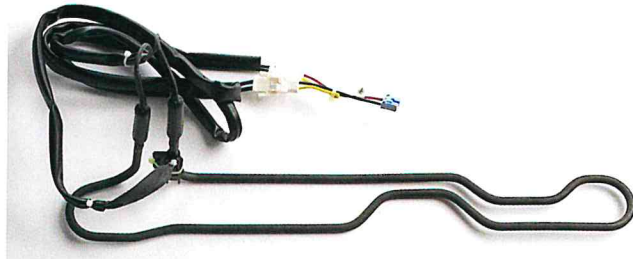


M-SERIES ACCESSORIES

BASE PAN HEATERS

In colder climates where outdoor temperatures can drop to below freezing for longer than 72 hours straight, a base pan heater is a great way to limit ice buildup. Base pan heaters prevent freezing before water drains from the base pan.

- ▶ Heater is energized below 36° F
- ▶ Prevents ice from building up on the outdoor unit base when operating in heating mode for an extended period of time in a very low temperature, high humidity condition
- ▶ Controlled by outdoor unit



- Meets UL94v-0 for interior applications
- Has snap-on covers and a full selection of couplings, elbows, T-joints, caps, and more for any application: complex or simple
- Offers high-quality PVC with UV inhibitors for outdoor service in all weather conditions
- Can be painted with most house paints to match exterior decors
- Is not just for HVAC—Hides any exterior cabling, piping, or wiring
- Is available in four sizes: 3", 4", and 6" tubes
- One-year warranty

Download a brochure at www.line-hide.com to find out more information.

QUICKSLING STANDS AND BRACKETS

Strong and reliable mini-split stands are the mount of choice for M-Series outdoor units.

- ▶ Quick and easy to assemble
- ▶ Manufactured with heavy gauge steel
- ▶ Color-matched with thermally fused powder coat finish



H2i plus™ Hyper-Heating Performance

H2i plus™ hyper-heating heat pump technology is leading technology in the industry. The H2i plus outdoor units produce up to 100% heating capacity down to -5° F.



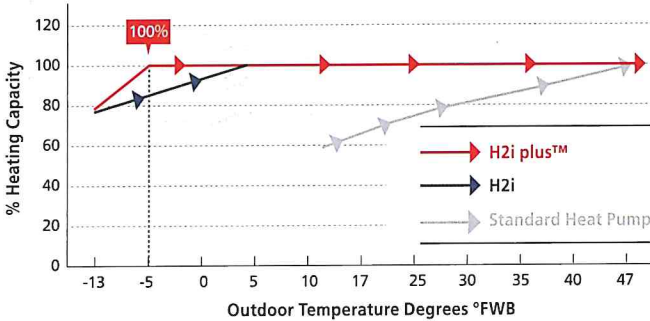
Heating Capacity

	FS06	FS09	FS12	FS15	FS18
Maximum Heating Capacity at 5°F (-15°C)	10,500BTU/H	11,590BTU/H	14,690BTU/H	19,360BTU/H	23,000BTU/H
COP at 5°F (-15°C)	2.46	2.41	2.42	2.17	2.15
Maximum Heating Capacity at -5°F (-20.5°C)	8,700BTU/H	9,600BTU/H	12,300BTU/H	16,000BTU/H	19,000BTU/H
COP at 5°F (-20.5°C)	2.26	2.20	2.24	2.01	2.00

Industry Leading Performance

Operation guaranteed at minus -13° F,
100% heating capacity at -5° F

Heating Capacity At Low Temperatures

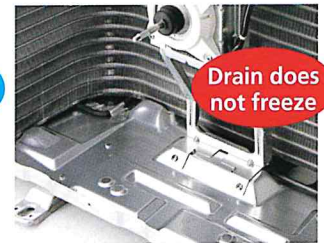


Base Heater equipped as standard*

The base heater restricts lowered capacity and operation shutdowns caused by the drain water freezing. This feature supports stable operation in low-temperature environments.



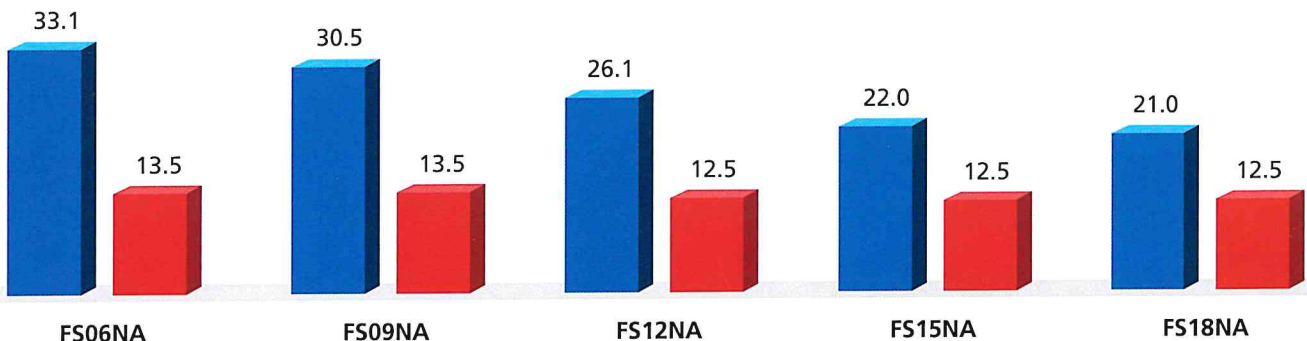
Without Base Heater



With Base Heater

*Standard for MUZ-FSxxNAH models
Optional for MUZ-FSxxNA models

SEER HSPF



All MSZ-FS single-zone systems are ENERGY STAR® certified.

MSZ-FS Model



* To confirm compatibility with the MXZ Model multi-zone system, refer to MXZ Model page.

Indoor Unit				MSZ-FS06NA	MSZ-FS09NA	MSZ-FS12NA	MSZ-FS15NA	MSZ-FS18NA
Outdoor Unit				MUZ-FS06NA	MUZ-FS09NA	MUZ-FS12NA	MUZ-FS15NA	MUZ-FS18NA
Cooling	Capacity	Rated ¹	BTU/H	6,000	9,000	12,000	14,000	17,200
	Capacity Range	Min-Max	BTU/H	1,700-9,000	1,700-12,000	2,500-13,600	6,450-19,000	6,450-21,000
	Power Input	Rated ¹	W	315	560	870	1,000	1,375
	Moisture Removal	Pints/h		0.2	0.6	1.9	4.0	4.8
	Sensible Heat Factor			0.960	0.920	0.830	0.700	0.690
Heating	Capacity at 47°F	Rated ²	BTU/H	8,700	9,600	12,300	16,000	19,000
	Capacity Range	Min-Max	BTU/H	1,600-14,000	1,600-18,000	3,700-21,000	5,150-24,000	5,150-30,000
	Power Input at 47°F	Rated ²	W	545	620	850	1,155	1,610
	Capacity at 17°F	Rated ³	BTU/H	5,900	5,900	8,400	10,000	12,800
	Capacity at 5°F	Max ⁴	BTU/H	12,840	14,170	17,410	22,730	27,000
	Capacity at -5°F	Max ⁵	BTU/H	10,500	11,590	14,690	19,360	23,000
Efficiency	SEER			33.1	30.5	26.1	22.2	21.0
	EER			19.05	16.05	13.8	14.0	12.5
	HSPF			13.5	13.5	12.5	12.5	12.5
	COP			4.68	4.54	4.24	4.06	3.46
	ENERGY STAR® Certified			Yes	Yes	Yes	Yes	Yes
Indoor Unit	Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	137-167-221-304-381	137-167-221-304-381	137-167-221-304-424	225-262-304-355-437	225-262-304-355-437
	Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Wet	CFM	117-143-190-261-328	117-143-190-261-328	117-143-190-261-364	194-225-261-305-376	194-225-261-305-376
	Air Flow Rate - Heating (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	140-167-225-325-437	140-167-225-325-437	155-226-282-367-454	201-272-350-410-514	201-272-350-410-514
	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Cooling	dB(A)	20-23-29-36-40	20-23-29-36-40	21-24-29-36-44	27-31-35-39-44	27-31-35-39-44
	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Heating	dB(A)	20-24-29-39-42	20-24-29-39-42	21-28-32-38-43	25-31-37-40-46	25-31-37-40-46
	External Static Pressure		In. W.G.	—	—	—	—	—
	Condensate Lift Mechanism	Max Distance	In. [mm]	—	—	—	—	—
	Dimensions	H	In. [mm]	12 (+11/16) [305 (+17)]	12 (+11/16) [305 (+17)]	12 (+11/16) [305 (+17)]	12 (+11/16) [305 (+17)]	12 (+11/16) [305 (+17)]
		W	In. [mm]	36-7/16 [925]	36-7/16 [925]	36-7/16 [925]	36-7/16 [925]	36-7/16 [925]
		D	In. [mm]	9-3/16 [234]	9-3/16 [234]	9-3/16 [234]	9-3/16 [234]	9-3/16 [234]
Weight	lbs [kg]		29 [13.5]	29 [13.5]	29 [13.5]	29 [13.5]	29 [13.5]	
Outdoor Unit	MCA	A		10.0	10.0	10.0	18.0	18.0
	MOCP	A		15	15	15	20	20
	Dimensions	H	In. [mm]	21-5/8 [550]	21-5/8 [550]	21-5/8 [550]	34-5/8 [880]	34-5/8 [880]
		W	In. [mm]	31-1/2 [800]	31-1/2 [800]	31-1/2 [800]	33-1/16 [840]	33-1/16 [840]
		D	In. [mm]	11-1/4 [285]	11-1/4 [285]	11-1/4 [285]	13 [330]	13 [330]
	Weight	lbs [kg]		82 [37]	82 [37]	83 [37.5]	117 [53]	118 [53.5]
	Air Flow Rate (Cooling/Heating)	CFM		1141/1183	1141/1183	1215/1201	1801/1949	1801/1949
Piping	Diameter	Gas (O.D.)	In. [mm]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]	1/2 [12.7]	1/2 [12.7]
		Liquid (O.D.)	In. [mm]	1/4 [6.35]	1/4 [6.35]	1/4 [6.35]	1/4 [6.35]	1/4 [6.35]
		Indoor Drain	In. [mm]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]	5/8 [15.88]
	Max. Length	ft [m]		65 [20]	65 [20]	100 [30]	100 [30]	
Max. Height	ft [m]		40 [12]	40 [12]	40 [12]	50 [15]	50 [15]	
Electrical	Outdoor-Indoor ⁶	V, ph, Hz		208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
	Recommended Breaker Size	A		15	15	15	20	20
Refrigerant Type				R410A	R410A	R410A	R410A	R410A
Guaranteed Temperature Operation Range	Cooling ⁷	°F DB [°C DB]		14 to 115	14 to 115	14 to 115	14 to 115	14 to 115
	Heating	°F DB [°C DB]		-13 to 75	-13 to 75	-13 to 75	-13 to 75	-13 to 75

Notes:

AHRI Rated Conditions
(Rated data is determined at a fixed compressor speed)

¹Cooling (Indoor // Outdoor)

²Heating at 47°F (Indoor // Outdoor)

³Heating at 17°F (Indoor // Outdoor)

⁴Heating at 5°F (Indoor // Outdoor)

⁵Heating at -5°F (Indoor // Outdoor)

⁶F 80 DB, 67 WB // 95 DB, 75 WB

⁷F 70 DB, 60 WB // 47 DB, 43 WB

⁸F 70 DB, 60 WB // 17 DB, 15 WB

⁹F 70 DB, 60 WB // 5 DB, 4 WB

¹⁰F 70 DB, 60 WB // -5 DB, -6 WB

Conditions

¹¹Indoor units receive power from outdoor units through field-supplied interconnected wiring.

¹²Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

MFZ-KJ Model



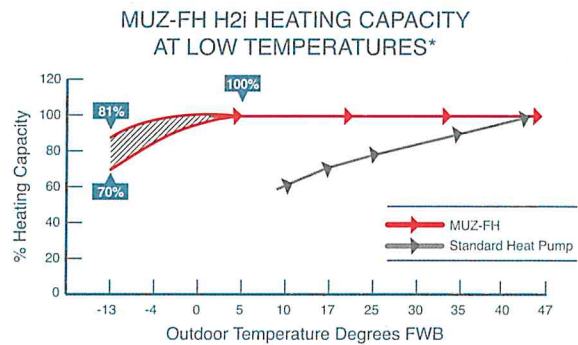
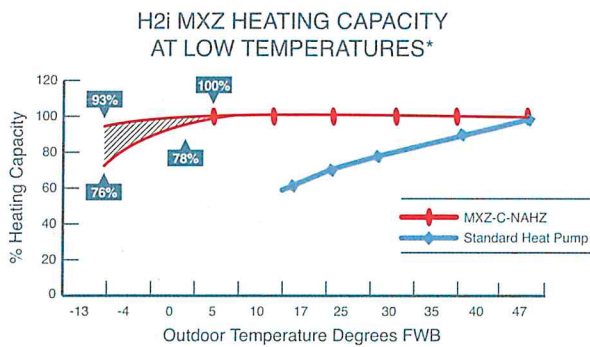
Indoor Unit				MFZ-KJ09NA	MFZ-KJ12NA	MFZ-KJ15NA	MFZ-KJ18NA
Outdoor Unit				MUFG-KJ09NAHZ	MUFG-KJ12NAHZ	MUFG-KJ15NAHZ	MUFG-KJ18NAHZ
Cooling	Capacity	Rated ¹	BTU/H	9,000	12,000	15,000	17,000
	Capacity Range	Min-Max	BTU/H	2,300-14,000	2,300-15,000	5,300-19,000	5,300-22,500
	Power Input	Rated ¹	W	570	890	1,120	1,350
	Moisture Removal	Pints/h		1.4	2.7	3.9	4.4
	Sensible Heat Factor			0.790	0.700	0.660	0.650
Heating	Capacity at 47°F	Rated ²	BTU/H	11,000	13,000	18,000	21,000
	Capacity Range	Min-Max	BTU/H	2,900-19,000	2,900-22,800	5,700-25,000	5,700-29,000
	Power Input at 47°F	Rated ²	W	750	900	1,410	1,730
	Capacity at 17°F	Rated ³	BTU/H	7,500	8,800	12,000	12,800
		Max	BTU/H	13,400	14,800	20,500	23,000
	Capacity at 5°F	Max ⁴	BTU/H	11,000	13,000	18,000	21,000
	Capacity at -5°F	Max ⁵	BTU/H	—	—	—	—
Efficiency	SEER			28.2	25.5	21.8	21.0
	EER			15.8	13.6	13.5	12.6
	HSPF			13.0	12.0	11.6	11.3
	COP			4.3	4.2	3.7	3.5
	ENERGY STAR® Certified			Yes	Yes	Yes	Yes
Indoor Unit	Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	138-198-272-360-417	138-198-272-360-417	198-254-311-392-431	198-254-328-420-491
	Air Flow Rate - Cooling (Quiet-Lo-Med-Hi-SHi)	Wet	CFM	117-168-231-306-354	117-168-231-306-354	168-216-264-333-366	168-216-279-357-417
	Air Flow Rate - Heating (Quiet-Lo-Med-Hi-SHi)	Dry	CFM	138-191-254-328-417	138-191-254-328-417	212-268-328-399-470	212-268-328-399-470
	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Cooling	dB(A)	21-27-34-41-46	21-27-34-41-46	28-33-38-43-47	28-33-39-45-50
	Sound Pressure Level (Quiet-Lo-Med-Hi-SHi)	Heating	dB(A)	21-27-34-40-46	21-27-34-40-46	29-35-40-45-49	29-35-40-45-49
	External Static Pressure		In. W.G.	—	—	—	—
	Condensate Lift Mechanism	Max Distance	In. [mm]	—	—	—	—
	Dimensions	H	In. [mm]	23-5/8 [600]	23-5/8 [600]	23-5/8 [600]	23-5/8 [600]
		W	In. [mm]	29-17/32 [750]	29-17/32 [750]	29-17/32 [750]	29-17/32 [750]
		D	In. [mm]	8-15/32 [215]	8-15/32 [215]	8-15/32 [215]	8-15/32 [215]
Weight		lbs [kg]		33 [15.0]	33 [15.0]	33 [15.0]	33 [15.0]
Outdoor Unit	MCA	A		11.0	11.0	16.0	16.0
	MOC	A		15	15	20	20
	Dimensions	H	In. [mm]	21-5/8 [550]	21-5/8 [550]	34-5/8 [880]	34-5/8 [880]
		W	In. [mm]	31-1/2 [800]	31-1/2 [800]	33-1/16 [840]	33-1/16 [840]
		D	In. [mm]	11-1/4 [285]	11-1/4 [285]	13 [330]	13 [330]
	Weight	lbs [kg]		83 [38]	83 [38]	124 [56]	124 [56]
	Air Flow Rate (Cooling/Heating)	CFM		1074/1202	1074/1202	1653/1730	1653/1730
	Sound Pressure Level	Cooling	dB(A)	48	48	51	51
Heating		dB(A)	50	50	55	55	
Piping	Diameter	Gas (O.D.)	In. [mm]	3/8 [9.52]	3/8 [9.52]	1/2 [12.7]	1/2 [12.7]
		Liquid (O.D)	In. [mm]	1/4 [6.35]	1/4 [6.35]	1/4 [6.35]	1/4 [6.35]
		Indoor Drain	In. [mm]	5/8 O.D [15]	5/8 O.D [15]	5/8 O.D [15]	5/8 O.D [15]
	Max. Length	ft [m]		65 [20]	65 [20]	100 [30]	100 [30]
Max. Height	ft [m]		40 [12]	40 [12]	50 [15]	50 [15]	
Electrical	Outdoor-Indoor ⁶	V, ph, Hz		208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
	Recommended Breaker Size	A		15	15	20	20
Refrigerant Type				R410A	R410A	R410A	R410A
Guaranteed Temperature Operation Range	Cooling ⁷	°F DB [°C DB]		14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]	14 to 115 [-10 to 46]
	Heating	°F DB [°C DB]		-13 to 75 [-25 to 24]	-13 to 75 [-25 to 24]	-13 to 75 [-25 to 24]	-13 to 75 [-25 to 24]

Notes:
 AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)
¹Cooling (Indoor // Outdoor) °F 80 DB, 67 WB // 95 DB, 75 WB
²Heating at 47°F (Indoor // Outdoor) °F 70 DB, 60 WB // 47 DB, 43 WB
³Heating at 17°F (Indoor // Outdoor) °F 70 DB, 60 WB // 17 DB, 15 WB
⁴Heating at 5°F (Indoor // Outdoor) °F 70 DB, 60 WB // 5 DB, 4 WB
⁵Heating at -5°F (Indoor // Outdoor) °F 70 DB, 60 WB // -5 DB, -6 WB
 Conditions
⁶Indoor units receive power from outdoor units through field-supplied interconnected wiring.
⁷Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

HYPER-HEATING INVERTER[®] TECHNOLOGY

HEAT...AND LOTS OF IT

Mitsubishi Electric Hyper-Heating INVERTER[®] systems feature the most advanced heat pump technology for delivering exceptional heating performance. Single-zone and multi-zone systems give you year-round comfort control of one room to every room of the home.



* Includes correction for defrost.
NOTE: Low ambient temperature conditions may require base pan heater (MSZ-GL and MSZ-FH 1:1 systems)

POWERFUL HEAT PUMP

Stay warm even when it's -13° F outdoors. Our units produce up to 100% heating capacity down to 5° F.

YEAR-ROUND COMFORT

When the weather breaks, you'll rest easy knowing that your heating technology is also the most efficient A/C on the market.

HOT-START TECHNOLOGY

Warm your desired comfort zone more quickly, fighting drafts and cold winters.

MINIMAL MAINTENANCE

Thanks to easily accessible filters, little or no ductwork to clean, and simple wiring between the indoor and outdoor units, you'll spend more time enjoying the technology, not fixing it.

QUIETER THAN A HUMAN WHISPER

Do you hear that? No? Mitsubishi Electric Zoned Comfort Solutions[®] operate at low sound levels. Our indoor units produce decibels barely at the level of a whisper. Compare to other common sounds:



SOURCE: NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
*SMALLEST TO LARGEST CAPACITY INDOOR UNIT AT LOW SPEED

MULTI-ZONE | MXZ-C | H2i HEAT PUMP



Model Name		Outdoor Unit		MXZ-2C20NAHZ2	MXZ-3C24NAHZ2	MXZ-3C30NAHZ2	
Indoor Units	Cooling *1 Non-ducted/Ducted	Rated Capacity	Btu/h	18,000 / 20,000	22,000 / 23,600	28,400 / 27,400	
		Capacity Range	Btu/h	6,000 – 20,000	6,000 – 23,600	6,000 – 28,400	
		Rated Power Input	W	1,334 / 1,819	1,630 / 2,360	2,272 / 2,661	
	Heating at 47° F *2 Non-ducted/Ducted	Rated Capacity	Btu/h	22,000 / 22,000	25,000 / 24,600	28,600 / 27,600	
		Capacity Range	Btu/h	7,400 - 25,500	7,200 - 30,600	7,200 - 36,000	
		Rated Power Input	W	1,612 / 1,748	1,725 / 1,871	2,096 / 2,187	
	Heating at 17° F *3 Non-ducted/Ducted	Rated Capacity	Btu/h	13,700 / 13,700	14,000 / 14,000	18,000 / 16,500	
		Maximum Capacity	Btu/h	22,000 / 22,000	25,000 / 24, 600	28,600 / 27, 600	
		Rated Power Input	W	1,450 / 1,588	1,622 / 1,635	1,991 / 1,993	
	Heating at 5° F	Maximum Capacity	Btu/h	22,000	25,000	28,600	
Power Supply *5	Phase, Cycle, Voltage		1-phase, 60Hz, 208 / 230V				
Voltage	Indoor - Outdoor S1 - S2		AC 208 / 230V				
	Indoor - Outdoor S2 - S3		DC ±24V				
Outdoor Unit *4	MCA	A	29.5	30.5			
	MOCP	A	40				
	Fan Motor (ECM)	F.L.A.	2.43				
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary				
		R.L.A.	12				
		L.R.A.	28.8				
	Airflow (Cooling/Heating)	CFM	2,118 / 2,542	2,118 / 2,542	2,224 / 2,542		
	Refrigerant Control	Linear Expansion Valve					
	Defrost Method	Reverse Cycle					
	Sound Pressure Level at Cooling *1	dB(A)	54				
	Sound Pressure Level at Heating *2	dB(A)	58				
	External Finish Color	Munsell No. 3.0Y 7.8 / 1.1					
	Dimensions	W: In.	37-13/32				
		D: In.	13				
		H: In.	41-9/32				
Weight	Lbs.	187	189				
Indoor Unit	No. of Units	2		2, 3	2, 3		
Remote Controller	Type	Associated with the Indoor Unit					
Refrigerant	Type	R410A					
	Charge	Lbs., Oz.	6, 13				
	Oil	Type (fl. oz.)	FV50S (24.7)				
Refrigerant Pipe	Gas Side O.D.	In.	A,B: 3/8	A: 1/2; B,C: 3/8	A: 1/2; B,C: 3/8		
	Liquid Side O.D.	In.	1/4				
Max Refrigerant Line Length		Ft.	164	230			
Max. Piping Length for Each Indoor Unit			82				
Max. Refrigerant Pipe Height Difference	If IDU is Above ODU	Ft.	49				
	If IDU is Below ODU	Ft.	49				
Connection Method	Indoor/Outdoor		Flared/Flared				

NOTES: Test conditions are based on AHRI 210/240.

*1. Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2. Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3. Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4. Refer to pages 47–55 for Indoor Unit specifications.

*5. Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Five years parts and seven years compressor.