

Multi-split hyper heat systems

Heat pump

- 100% heating capacity down to -15°C
- Hyper Heat to -30°C*
- Variable Compressor Speed Inverter Technology
- Ozone-Friendly R-410A Refrigerant
- Wide Selection of up to 8:1 combinations
- High-Speed Cooling and Heating
- Long Pipe Runs – Up to 492 ft.
- Port Type units Refrigerant Pre-Charged




**HYPER
HEAT AT
-30°C***



Optional accessories available for all models. Visit www.mrslim.ca for more information.

VCS
TECHNOLOGY



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 Total Input	W	1,334 / 1,819	1,630 / 2,360	2,272 / 2,661
	Heating at 8°C *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 Total Input	W	1,612 / 1,748	1,725 / 1,871	2,096 / 2,187	
	Heating at 8°C *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 Total Input	W	1,450 / 1,588	1,622 / 1,635	1,991 / 1,993
	Heating at -15°C	Maximum Capacity	Btu/h	22,000	25,000	28,600
EER		(Non-Ducted/Ducted)		13.5 / 11.0	13.5 / 10.0	12.5 / 10.3
SEER		(Non-Ducted/Ducted)		17.0 / 15.0	19.0 / 15.5	18.0 / 16.0
HSPF (IV)		(Non-Ducted/Ducted)		9.8 / 9.5	10.0 / 9.0	11.0 / 9.8
Power Supply		Phase, Cycle, Voltage		1-phase, 60Hz, 208 / 230V *5		
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.			20	
		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	Width (in.)		37-13/32		
		Depth (in.)		13		
	Height (in.)		41-17/64			
Weight	lbs.		187	189		
Indoor Unit	No. of Units		2	2, 3	2, 3	
Remote Controller	Type		Associated with the Indoor Unit			
	Type		R-410A			
Refrigerant	Charge	lbs., Oz.	8, 13			
	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		Ft.	82			
Outdoor Operating Range	Cooling	Ft.	14 - 115°F (-10 - 46°C)***			
	Heating	Ft.	-12 - 75°F (-25 - 21.1°C)			
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: *Models MXZ-2C20/3C24/3C30NAHZ heat down to -25°C, including tolerance in which typical units can operate in heating mode down to -27°C, depending on conditions. All test conditions are based on ARI 210/240.

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

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

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

*4. Refer to pages 10–13 for Indoor Unit specifications.

Model Name		Outdoor Unit		MXZ-4C36NAHZ*6	MXZ-5C42NAHZ*6	MXZ-8C48NAHZ*6	
Indoor Unit	Cooling *1 Non-ducted/ Ducted	Rated Capacity	Btu/h	36,000 / 36,000	42,000 / 42,000	48,000 / 48,000	
		Capacity Range	Btu/h	6,000 – 36,000	6,000 – 42,000	6,000 – 48,000	
		Rated Total Input	W	2,570 / 3,180	3,130 / 3,890	4,000 / 5,050	
	Heating at 8°C *2 Non-ducted/Ducted	Rated Capacity	Btu/h	45,000 / 45,000	48,000 / 48,000	54,000 / 54,000	
	Capacity Range	Btu/h	7,200 - 45,000	7,200 - 48,000	7,200 - 54,000		
	Rated Total Input	W	3,340 / 4,250	3,430 / 4,350	4,220 / 4,990		
Heating at 8°C *3 Non-ducted/Ducted	Rated Capacity	Btu/h	34,000 / 36,000	35,800 / 36,600	40,000 / 43,000		
	Maximum Capacity	Btu/h	45,000 / 45,000	48,000 / 48,000	54,000 / 54,000		
	Rated Total Input	W	3,500 / 4,590	3,650 / 4,290	4,340 / 5,250		
	Heating at -15°C	Maximum Capacity	Btu/h	45,000	48,000	54,000	
EER		(Non-Ducted/Ducted)		14.0 / 11.3	13.4 / 10.8	12.0 / 9.5	
SEER		(Non-Ducted/Ducted)		19.1 / 15.8	19.0 / 15.0	18.9 / 14.7	
HSPF (IV)		(Non-Ducted/Ducted)		11.3 / 10.1	11.0 / 10.1	11.0 / 10.0	
Power Supply		Phase, Cycle, Voltage		1 Phase, 60 Hz, 208/230V			
Voltage		Indoor - Outdoor S1 - S2		AC 208/203V			
		Indoor - Outdoor S2 - S3		DC ± 24V			
Outdoor Unit *4	MCA		A	42			
	MOCP		A	52			
	Fan Motor (ECM)		F.L.A.	0.074 + 0.074			
	Compressor		Model (Type)		DC INVERTER-driven Twin Rotary		
			R.L.A.		19		
		L.R.A.		22			
	Airflow (Cooling/Heating)		CFM	3,885 / 3,885			
	Refrigerant Control			Linear Expansion Valve			
	Defrost Method			Reverse Cycle			
	Sound Pressure Level at Cooling *1		dB(A)	49	50	51	
Sound Pressure Level at Heating *2		dB(A)	53	54	54		
External Finish Color			Munsell No. 3.0Y 7.8/1.1				
Dimensions		W: In.	41-11/32				
		D: In.	13+1				
		H: In.	52-11/16				
Weight		Lbs.	276				
Indoor Unit	No. of Units		2,3*,4	2,3,4*,5	2,3,4,5,6*,7,8		
Remote Controller	Type		Associated with the indoor unit				
Refrigerant	Charge	Lbs., Oz.	10, 9				
	Oil	Type (fl. oz.)	FV505 (78)				
Refrigerant Pipe	Gas Side O.D.	In.	5/8				
	Liquid Side O.D.	In.	3/8				
Max Refrigerant Line Length		Ft.	492				
Max. Piping Length for Each Indoor Unit		Ft.	262				
Outdoor Operating Range	Cooling	Ft.	5 - 115°F (-15 - 46°C)***				
	Heating	Ft.	-22 - 70°F (-30 - 21.1°C)				
Connection Method	Indoor/Outdoor		Flared/Flared				

Please see page 27 for MXZ-Hi Connection Rules.

Branch Boxes

Only a single lineset is needed from the outdoor unit to branch box.

Branch box is required on MXZ-4C36NAHZ / 5C42NAHZ / 8C48NAHZ and non-hyper heat model MXZ-8C48NA.

Maximum of two branch boxes can be connected to one outdoor unit. Joint connector MSDD-50AR-E or MSDD-50BR-E is required when connecting two branch boxes.

Model		PAC-MKA31BC	PAC-MKA51BC
Connectable No. of Indoor Units		3	5
Power Supply	Phase, Cycle, Voltage	1 Phase, 60Hz, 208 / 230V	
Power Input	W	3	
Current	A	0.05	
External Finish		Galvanized Steel Sheets	
Dimensions	Width	In.	17-3/4
	Depth	In.	11-1/32
	Height	In.	6-11/16
Net Weight	Lbs.	15	16
Refrigerant Pipe	Outdoor Unit to Branch	Gas (In.)	5/8
	Box	Liquid (In.)	3/8
Dimensions	Branch Box to Indoor	Gas (In.)	A, B, C: 3/8
	Units	Liquid (In.)	A, B, C: 1/4
			A, B, C, D: 3/8; E: 1/2
			A, B, C, D, E: 1/4



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

*6. MXZ-4C36NAHZ, MXZ-5C42NAHZ and MXZ-8C48NAHZ require branch box for operation.

* When the system includes even 1 unit of PLA-A-EA7, the number of the maximum connectable indoor units is decreased as follows: 3 for MXZ-4C36NAHZ-U1, 4 for MXZ-5C42NAHZ-U1, and 6 for MXZ-8C48NA(HZ)-U1

* Models MXZ-2C20/3C24/3C30NAHZ heat down to -25°C, including tolerance in which typical units can operate in heating mode down to -27°C, depending on conditions.

** Branch box should be placed within the level between the outdoor unit and indoor units.

Specifications are subject to change without notice.

Multi-split system

Heat pump

- Variable Compressor Speed Inverter Technology
- Ozone-Friendly R-410A Refrigerant
- Wide Selection of up to 8:1 combinations
- High-Speed Cooling and Heating
- Long Pipe Runs – Up to 492 ft.
- Port Type units Refrigerant Pre-Charged
- Easy Installation



MXZ-2C20NA2



MXZ-3C24/3C30/4C36NA2



MXZ-5C42NA2



MXZ-8C48NA

Energy Star-Qualified Configurations				
Model	Indoor Unit Combinations	SEER	EER	HSPF (IV)
MXZ-2C20NA2	Non-ducted Units	20.0	12.7	10.0
MXZ-3C24NA2	Non-ducted Units	20.0	13.6	9.8



Optional accessories available. Visit www.mrslim.ca for more information.

Model	Outdoor Unit	MXZ-2C20NA2*4	MXZ-3C24NA2*5	MXZ-3C30NA2*6	MXZ-4C36NA2*7		
Cooling *1	Rated Capacity	Btu/h	18,000 / 20,000	22,000 / 23,600	28,400 / 27,400	35,400 / 34,400	
Combinations:	Capacity Range	Btu/h	7,800 ~ 20,000	12,600 ~ 25,500	12,600 ~ 28,400	12,600 ~ 36,400	
Non-ducted / Ducted	Rated Total Input	W	1,417 / 2,000	1,620 / 2,100	2,680 / 2,840	3,760 / 3,940	
Heating at 8°C *2	Rated Capacity	Btu/h	22,000 / 22,000	25,000 / 24,600	28,600 / 27,600	36,000 / 34,400	
Combinations:	Capacity Range	Btu/h	8,500 ~ 25,500	11,400 ~ 30,600	11,400 ~ 36,000	11,400 ~ 43,000	
Non-ducted / Ducted	Rated Total Input	W	1,641 / 1,771	1,750 / 1,900	2,150 / 2,220	3,020 / 3,100	
Heating at -8°C *3	Maximum Capacity	Btu/h	12,500 / 13,500	19,600 / 19,600	21,000 / 21,000	26,600 / 26,600	
Combinations:	Maximum Total Input	W	1,300 / 1,350	2,580 / 2,400	2,740 / 2,820	3,340 / 3,450	
Non-ducted / Ducted							
EER	Cooling (Non-ducted / Ducted / Mixed)		12.7 / 10.0 / -	13.6 / 11.2 / 12.4	10.6 / 9.6 / 10.1	9.4 / 8.7 / 9.05	
SEER	Cooling (Non-ducted / Ducted / Mixed)		20.0 / 16.0 / -	20.0 / 16.0 / 18.0	19.0 / 16.2 / 17.6	19.2 / 16.0 / 17.6	
HSPF (IV)	Heating (Non-ducted / Ducted / Mixed)		10.0 / 9.3 / -	9.8 / 9.2 / 9.5	10.6 / 9.6 / 10.1	11.0 / 9.8 / 10.4	
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *8				
Voltage	Indoor – Outdoor S1-S2		AC 208 / 230V				
	Indoor – Outdoor S2-S3		DC12-24V				
Outdoor Unit	MCA	A	17.2	22.1	22.1	22.1	
	MOCP	A	20	25	25	25	
	Fan Motor	F.L.A	1.77	2.43	2.43	2.43	
	Compressor	Model (Type)	Variable Speed Compressor (VCSi)				
		R.L.A.	10.7	12	12	12	
		L.R.A.	15.5	13.7	13.7	13.7	
		Refrigerant Control	Linear Expansion Valve				
		Sound – Cooling	dB(A)	50	51	52	54
		Sound – Heating	dB(A)	54	55	56	56
		External Finish Colour		Munsell No. 3.0Y 7.8 / 1.1			
Dimensions	Width (in.)		33-1/16	37-13/32	37-13/32	37-13/32	
	Depth (in.)		13	13	13	13	
	Height (in.)		27-15/16	31-11/32	31-11/32	31-11/32	
Weight	lbs	126	137	137	139		
Connectable No. of Indoor Units		2	2 – 3	2 – 3	2 – 4		
Refrigerant	Type		R-410A	R-410A	R-410A	R-410A	
	Charge	lbs., oz.	5, 15	6, 13	6, 13	6, 13	
Refrigerant Pipe	Gas – O.D.	in.	A, B: 3/8	A: 1/2; B, C: 3/8	A: 1/2; B, C: 3/8	A: 1/2; B, C, D: 3/8	
	Liquid – O.D.	in.	1/4	1/4	1/4	1/4	
Refrigerant Pipe Length	Height Difference (Max.)	ft.	49/33 *9		49/49		
	Length (Max.)	ft.	164 (A+B)		230 (A+B+C)		
Connection Method	Indoor / Outdoor		Flared / Flared				
Outdoor Operating Range	Cooling		-10 – 46°C DB				
	Heating		-14.5 – 24°C DB (-15 – 18°C WB)				

Note: Performance may vary based on specific indoor combination. Please consult with your local dealer for a complete listing from the service manual. All non-ducted indoor unit combinations for MXZ-2C20NA2 and MXZ-3C24NA2 are Energy Star certified.

All test conditions are based on ARI 210/240. Rating conditions:

*1. Cooling - Indoor: 27°C DB, 19°C WB; Outdoor: 35°C DB, 24°C WB; Rated frequency

*2. Heating - Indoor: 21°C DB, 15.5°C WB; Outdoor: 8°C DB, 6°C WB; Rated frequency

*3. Heating - Indoor: 21°C DB, 15.5°C WB; Outdoor: -8°C DB, -9°C WB; Rated frequency

*4. Data from combination of two Indoor Units 9,000 Btu/h (non-ducted) or one 9,000 Btu/h and one 12,000 Btu/h (ducted).

Model	Outdoor Unit		MXZ-5C42NA2 ¹⁰	MXZ-8C48NA
Cooling *1	Rated Capacity	Btu/h	40,500 / 37,500	48,000 / 48,000
Combinations:	Capacity Range	Btu/h	6,000 ~ 43,000	6,000 ~ 48,000
Non-ducted / Ducted	Rated Total Input	W	4,403 / 4,112	4,000 / 5,050
Heating at 8°C *2	Rated Capacity	Btu/h	45,000 / 41,000	54,000 / 54,000
Combinations:	Capacity Range	Btu/h	7,200 ~ 53,600	7,200 ~ 54,000
Non-ducted / Ducted	Rated Total Input	W	3,575 / 3,463	4,220 / 4,990
Heating at -8°C *3	Maximum Capacity	Btu/h	30,500 / 29,100	36,600 / 36,600
Combinations:	Maximum Total Input	W	4,800 / 5,500	3,720 / 4,420
Non-ducted / Ducted				
EER	Cooling (Non-ducted / Ducted / Mixed)		9.2 / 9.0 / 9.1	12.0 / 9.5 / 10.75
SEER	Cooling (Non-ducted / Ducted / Mixed)		19.7 / 15.2 / 17.5	18.9 / 14.7 / 16.8
HSPF (IV)	Heating (Non-ducted / Ducted / Mixed)		10.3 / 9.1 / 9.7	11.4 / 10.1 / 10.8
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V	
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V	
	Indoor - Outdoor S2-S3		DC12-24V	
Outdoor Unit	MCA	A	32.5	37
	Recommended Breaker Size	A	40	40
	Compressor	Model (Type)	Variable Speed Compressor (VCSi)	
	Refrigerant Control		Linear Expansion Valve	
	Sound - Cooling	dB(A)	56	51
	Sound - Heating	dB(A)	58	54
	External Finish Colour		Munsell No. 3Y 7.8 / 1.1	
	Dimensions	Width (in.)	37-13/32	41-11/32
		Depth (in.)	13	13
		Height (in.)	41-17/64	52-11/16
	Weight	lbs	189	269
Connectable Indoor Units (Size/Quantity)			6,000 – 24,000 / 2 ~ 5	6,000 – 36,000 / 2 ~ 8
Refrigerant	Type		R-410A	R-410A
	Charge	lbs., oz.	8, 13	10, 9
Refrigerant Pipe	Gas – O.D.	in.	A: 1/2; B, C, D, E: 3/8	5/8
	Liquid – O.D.	in.	1/4	3/8
Refrigerant Pipe Length	Height Difference (Max.)	ft.	49/49	131/164 *12
	Max. Distance Between Outdoor Unit and Farthest Indoor Unit	ft.	–	262
	Max. Distance from Outdoor Unit to Branch Box	ft.	–	180
	Max. Pipe Length – Branch Box to Indoor Unit	ft.	–	82
	Total Max. Pipe Length Between Branch Box and All Connected Indoor Units	ft.	–	311
	Max. Total Length	ft.	262 (A+B+C+D+E)	492
Connection Method	Indoor / Outdoor		Flared / Flared	
Outdoor Operating Range	Cooling		-10 – 46°C DB	
	Heating		-14.5 – 24°C DB (-15 – 18°C WB)	

Please see page 25 for Branch Box information.

MXZ Connection Rules

Port Type

MXZ-3C24/3C30/4C36/5C42NA MXZ-2C20/3C24/3C30NAHZ

- Standard Wiring Applies
- 14/4, 600V rated wire from Condenser to each IDU
- A minimum of (2) indoor units must be connected.
- A minimum of 12,000 Btu/h must be connected.
- Refer to connectivity charts on pages 30 and 31 for indoor unit capacities.

Systems NOT USING an MVZ Multi Position AHU.

- May connect to any style indoor unit or combination.
- May connect up to 130% nominal capacity or less.

Systems USING an MVZ Multi Position AHU.

- Only 1 MVZ may be used
- Total connected capacity must be 100% nominal or less.
- No P-Series indoor units can be used (PCA, PLA, PEAD).
- MVZ Units are only MXZ compatible - They CANNOT be installed in a 1:1 application.

Branch Box Type

MXZ-8C48NA MXZ-4C36/5C42/8C48NAHZ

- 16/2 Shielded M-Net wire runs from Condenser to Branch Box for Communication
- Power wire will be based on code requirements. You have the capability to run a separate power supply to the branch box if you would like. Same code rules apply.
- Communication from the Branch Box to the indoor units is 16/4, 600V rated wire; not 14/4
- A minimum of (2) indoor units must be connected.
- A minimum of 12,000 Btu/h must be connected.
- Refer to connectivity charts on pages 30 and 31 for indoor unit capacities.

Systems USING an MVZ Multi Position AHU:

- Up to (2) MVZ's may be connected, more when using SPTB1 (see below).
- When (2) MVZ's are connected, no additional indoor units can be used, 130% rule still applies.
- When (1) MVZ is connected, additional indoor units can be connected.
- When (1) MVZ is connected, total connected capacity must be 130% or less.

*Maximum installed capacity is the maximum total of all connected indoor units, NOT the maximum capacity produced.

Separate Power Terminal Block (SPTB1)

RULES FOR USE OF OPTIONAL KIT - SPTB1

Using no Optional Kit - SPTB1

- MXZ Port Type can use only 1 MVZ
- MXZ Branch Box Type can use only 2 MVZ

Using the Optional Kit - SPTB1

- MXZ Port Type can use only 1 MVZ
- MXZ Branch Box Type can use any number of MVZ's as long as other connection rules are followed

*5. Data from combination of one Indoor Unit 6,000 Btu/h and two 9,000 Btu/h (non-ducted) or three 9,000 Btu/h (ducted).

*6. Data from combination of two Indoor Units 9,000 Btu/h and one 12,000 Btu/h (non-ducted and ducted).

*7. Data from combination of four Indoor Units 9,000 Btu/h (non-ducted and ducted).

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

*9. 49 feet applies to installations where the outdoor unit is installed below the indoor unit.

*10. Data from combination of one Indoor Unit 6,000 Btu/h and four 9,000 Btu/h (non-ducted) or five 9,000 Btu/h (ducted).

*11. 131 feet applies to installations where the outdoor unit is installed below the indoor unit.