

# Split-ductless A/C and Heat Pumps





# Mr. Slim® Splitductless Systems Redefining Comfort





M-Series Indoor Unit



Wireless M-Series Remote



M-Series Outdoor Unit

Comfort is a concept many of us notice only when we're either uncomfortable or very comfortable. But at Mitsubishi Electric HVAC Advanced Products Division, comfort is all we think about. Our industryleading Mr. Slim split-ductless cooling and heating systems reflect that thinking. At home or at work, our Mr. Slim systems are designed to make any space inviting. Maybe your home has a room that's always too hot or too cold. Or perhaps you're looking for a way to control the climate effectively in multiple rooms in your office building, such as in conference rooms. No matter what your cooling and heating needs may be, Mr. Slim systems are the perfect way to make rooms in your home or workplace as comfortable as possible.



# What is Mr. Slim® Splitductless Technology?

For decades, split-ductless air-conditioning and heat pump systems have been the quiet solution for cooling and heating problems around the world. Our quiet and powerful Mr. Slim systems have three main components: an indoor unit, outdoor unit, and remote controller. Installation is as simple as mounting the indoor and outdoor units, connecting the refrigerant lines, and making a few electrical connections. An easy installation for your authorized contractor means you will be quickly enjoying the comfort Mr. Slim systems provide.

## Why Mr. Slim Systems?

Mitsubishi Electric is the industry leader in split-ductless air-conditioning technology — period. Our innovations have defined cutting-edge technology for over 28 years. Compare and you'll see that no one surpasses the Mr. Slim brand's performance for quiet, easy-to-use, and energy-efficient operation. And because our split-ductless technology carries the Mitsubishi Electric name, you know every product is built to last. The bottom line is, Mr. Slim systems deliver the ultimate in comfort control for your home or office. It's true today and will be comfortably evident for years to come.



# Where Can Mr. Slim Products Be Used?

If a room is too hot or too cold, Mr. Slim can handle it! Mr. Slim split-ductless systems are specifically designed to improve the comfort level in an uncomfortably hot or cold room of an existing building. Because they don't require ductwork, they're the perfect heating and cooling systems for renovating older buildings that were constructed before air conditioning was available – even those with plaster walls and brick facades. The versatility and variety of applications for Mr. Slim systems are virtually unlimited. They're an excellent choice for almost any spot cooling or heating situation, including enclosed sunrooms, upstairs bedrooms, classrooms, hospitals, nursing homes, restaurants, hotels, workout rooms, computer rooms, offices and churches.

Mr. Slim systems work hard for you even in extreme temperatures, keeping it toasty warm inside even when it's as cold as -13° F outside with the Hyper-heating INVERTER (H2i<sup>™</sup>) P-Series

system. They're also equipped with an antiallergen filter and prevent the cross-flow of air with contaminants. And because they can be controlled by zone, it's easy to set the controls for the exact room temperature you want.

How does it work? Mr. Slim cooling and heating solutions can fit into almost any space because their innovative engineering optimizes the capabilities of the INVERTER technology and R410A refrigerant for more efficient systems with smaller indoor and outdoor units. R410A refrigerant is environmentally friendly, with zero Ozone Depletion Potential (ODP). The units themselves are also made of recycleable materials. To find out more about Mr. Slim split-ductless products or to locate an authorized Diamond Dealer near you, visit www.mrslim.com.

Features	Benefits
Efficient, Quiet Operation	Mr. Slim products are designed to be quieter and more efficient than old window units, so you'll sleep easier with less worry about operating costs.
No Ductwork and Easy to Install	Mr. Slim systems install without ductwork, requiring only a three-inch opening in the wall or ceiling. This design allows you to retain the original aesthetics of a room. Because no ductwork is involved, the installation is quick and simple, which means little or no disruption to your home or business.
Versatile	From living rooms to boardrooms, from classrooms to kitchens to cafeterias, there's a Mr. Slim system to fit any cooling or heating need.
Wireless Remote Controller	Mr. Slim M-Series systems come with a convenient wireless remote controller that puts you in control of your own comfort. (Optional wired remote controller available)
INVERTER Technology	You will enjoy high-speed cooling and heating and consistent delivery of comfort year-round.
Environmentally Friendly	Mr. Slim systems use R410A, an environmentally-friendly refrigerant.



## Sure you can use a window unit,

but it will block your view to the outside from any angle. It's also an open invitation for outsiders to pay you a visit. Oh, and don't forget that old window units are also ugly, drippy, noisy and add no significant value to your home. On the other hand, Mr. Slim® products from Mitsubishi

Electric are easy for your authorized contractor to install. They work quietly and don't leave a large, easily-accessed opening in your otherwise secure home. And split-ductless systems like Mr. Slim



products also add value to your home. All-in-all, window units may be the easy solution, but Mr. Slim systems from Mitsubishi Electric are the smart solution. You get what you pay for when it comes to innovative and reliable air conditioning, and with Mr. Slim products you invest in the comfort for your home or business.

#### **INVERTER TECHNOLOGY**

Pages 06-07

M-SERIES: 9,000-36,000 Btu/h

Residential and Select Commercial Air Conditioners

and Heat Pumps Pages 08-09

Wireless Remote and Benefits

Page 09

MS/MSY/MSZ SINGLE-ZONE, WALL-MOUNTED SERIES:

9,000-22,000 Btu/h

Air Conditioners and Heat Pumps

Pages 10-11

MXZ MULTI-ZONE WALL-MOUNTED SERIES:

20,000-36,000 Btu/h

INVERTER-driven Multi-zone Heat Pump System

Pages 11

**P-SERIES:** 12,000-42,000 Btu/h

Select Residential or Varied Commercial

Pages 16-17

Wired Remote, Benefits, and Outdoor Unit Comparison

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H2i<sup>™</sup> HYPER-HEATING INVERTER

Heat Pump System

Pages 18-20

PKA WALL-MOUNTED SERIES:

12,000-34,200 Btu/h

Air Conditioners and Heat Pumps with Wired and Wireless Hand-held Remote Controllers

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PLA CEILING-RECESSED CASSETTE SERIES:

12,000-42,000 Btu/h

Air Conditioners and Heat Pumps

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PCA CEILING-SUSPENDED SERIES:

24,000-42,000 Btu/h

Air Conditioners and Heat Pumps

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**GENERAL SPECIFICATIONS:** Page 31

REFRIGERANT TUBING

**AND ACCESSORIES:** Page 31

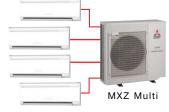
## MR. SLIM PRODUCT FAMILY



MS/MSY/MSZ

M-SERIES

GLOSSARY



MSZ-A09NA (4)



PLA





PCA

**AIR CONDITIONER:** A mechanical device used to control temperature, humidity, cleanliness, and air movement in a confined space.

**Btu/h (British Thermal Units per Hour):** A measure of cooling or heating capacity.

CAPACITY or LOAD: A refrigeration rating system usually measured in Btu/h.

**COMPRESSOR:** A refrigeration or air-conditioning system pump that circulates refrigerant through pipes between an outdoor and an indoor unit using pressure.

**HEAT PUMP:** An air-conditioning system can reverse the direction of refrigerant flow to provide either cooling or heating to the indoor space.

**HSPF** (Heating Season Performance Factor): A rating of the seasonal efficiency of a heat pump unit when operating in the heating mode.

**HVAC:** A term which stands for Heating, Ventilation, and Air-Conditioning.

**INDOOR UNIT:** The air-handler of an air-conditioning system, which contains a heat exchange coil, filters, and fan and provides conditioned air into the space.

**INVERTER TECHNOLOGY:** Mitsubishi Electric's MSY, MSZ and MXZ and all P-Series outdoor units use INVERTER-driven compressor technology (Variable Frequency Drive) to provide exceptional indoor high-speed cooling and heating. By responding to

indoor and outdoor temperature changes, these systems reduce power consumption by varying the compressor speed for extra energy savings. The system operates only at the levels needed to maintain a constant and comfortable indoor environment. Our CITY MULTI® product line also incorporates INVERTER technology. (Visit www.mehvac.com for details.)

MICROPROCESSOR: An electrical component consisting of integrated circuits, which may accept, store, control, and output information.

**OUTDOOR UNIT:** A component of an air-conditioning system which contains compressor, propeller fan, circuit board, and heat exchange coil. It pumps refrigerant to/from indoor unit.

**REFRIGERANT:** A gas/liquid substance used to provide cooling by direct absorption of heat. Mitsubishi Electric products use environmentally-friendly R410A refrigerant.

**REFRIGERANT LINES:** Copper tubing through which refrigerant flows to and from indoor and outdoor units.

**SEER (Seasonal Energy Efficiency Ratio):** A rating of the seasonal efficiency of air-conditioning or heating units in cooling mode.

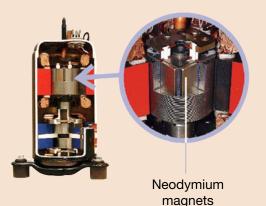
**SPLIT-DUCTLESS SYSTEM:** A system comprised of a remote outdoor condensing unit connected by refrigerant pipes to a matching, non-ducted indoor air-handler and a remote controller. Special cases for introducing ventilated air may call for limited ducting to air-handler from outside.

# INVERTER-DRIVEN COMPRESSOR TECHNOLOGY

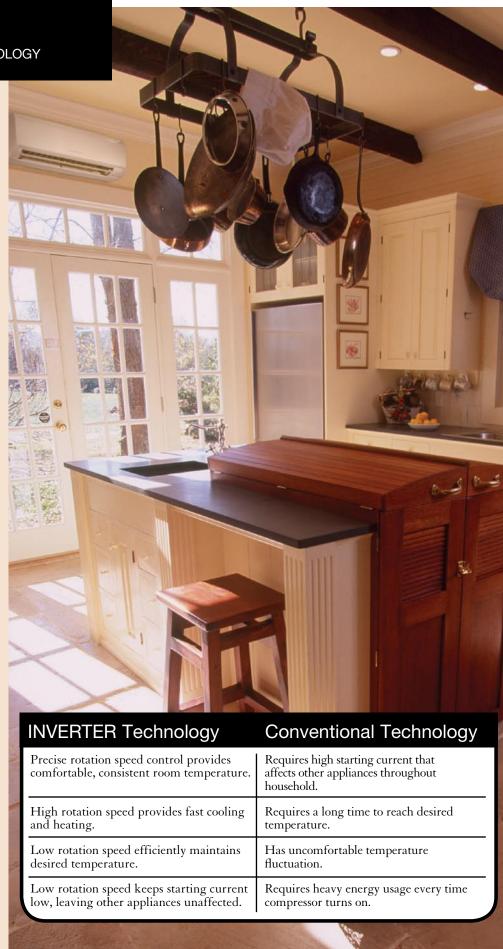
## INVERTER Technology for Superior Year-round Comfort and Performance

Select straight-cool and all heat pump outdoor units use Mitsubishi Electric's INVERTER-driven compressor technology (Variable Frequency Drive) to provide exceptional, high-speed cooling and heating performance. Thanks to high rotation speeds, desired temperatures are reached more quickly than with conventional systems — so you can enjoy your ideal level of comfort without delay.

Like a car's cruise control, the system varies the compressor speed, which reduces power consumption for extra energy savings. This also allows the system to engage without affecting other household appliances. The system adjusts itself precisely to the level needed to maintain a consistently comfortable indoor environment. Precise rotation speed control allows the system to maintain a comfortable, consistent room temperature.

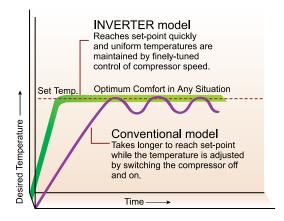


**INVERTER-driven Compressor** 



# High-speed Cooling and Heating

High rotation compressor speeds cool and heat a room quickly, saving both energy and cash. The compressor speed is controlled to maximize efficiency, changing speeds according to the cooling and heating load of a room.



## Optimum Comfort Year-round

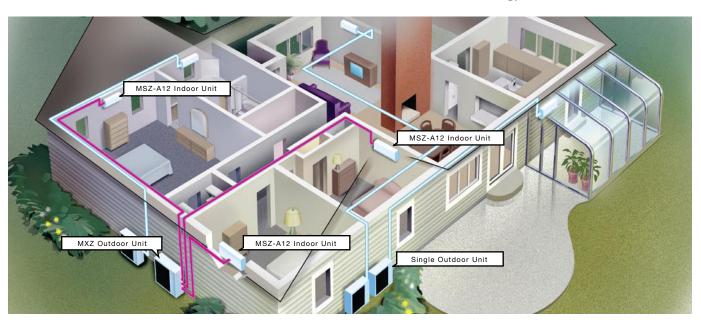
INVERTER units detect subtle changes in temperature and automatically adjust compressor speed – unlike conventional units, which start and stop repetitively. Low rotation speed efficiently maintains desired temperature, reducing temperature swings and provides a more comfortable climate.



## Extra Energy Savings

For optimum performance, INVERTER technology delivers only the energy needed to satisfy the cooling and heating load of a room, reducing energy consumption.

Our CITY MULTI® VRFZ product line also employs INVERTER technology. Like Mr. Slim®products, the CITY MULTI INVERTER systems give you increased performance capabilities and design flexibility, making Mitsubishi Electric products the best choice for any of your cooling and heating applications. Visit www.mehvac.com for more information about CITY MULTI technology.



# M-SERIES SIDENTIAL AND SELECT COMMERCIAL

## Small Size, Big Performance

While all of our Mr. Slim units are compact and lightweight, the M-Series is designed specifically for tight spaces. But don't be fooled: the powerful M-Series delivers plenty of cool or warm air to almost any size room. And unlike window units, the Mr. Slim indoor unit's small size, neutral color, and mounting position mean it blends in well.

## No Ductwork Required

Mr. Slim systems need no ductwork – just a small, three-inch opening for two refrigerant lines and control and power wiring, to connect the indoor and outdoor units. This means quicker installation, less mess, and a better-looking and more comfortable space.

# Efficient. Quiet. Secure. Pick All Three.

That's right. Mr. Slim units deliver all three! They're energy efficient because of their small design, smart functionality, lack of ductwork and INVERTER technology. They're quiet because their fans deliver air quietly and continuously, with only a gentle whoosh for constant circulation and filtration. (That's why Mr. Slim systems were the first choice for thousands of churches, schools, and libraries across the U.S.) And they're secure because each system installs



with just one three-inch opening that connects the indoor and outdoor units, so you don't have to worry about intruders gaining access through easy-to-remove window units.

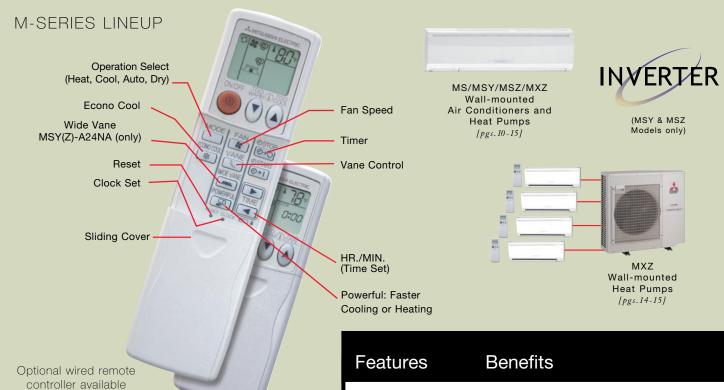
## New Technology

With the new A-Control system, the indoor unit is powered through the outdoor unit. Three polarity sensitive wires plus a ground conductor run from the outdoor to the indoor unit, providing both power and communication. Advanced wireless remote control is standard on all M-Series models. On the INVERTER-driven units, an option for a wired wall controller is available.

## Choose the Mr. Slim® Product Size That's Right for You

Room Size	Performance
100 - 350 Sq. Fт.	<9,500 Вти/н
350 - 440 Sq. Fт.	9,500 - 12,000 Вти/н
440 - 550 Sq. Fт.	12,000 - 15,000 Вти/н
550 - 600 Sq. Fт.	15,000 - 16,200 Вти/н
600 - 800 Sq. Fт.	16,200 - 22,000 Вти/н
800 - 1,100 Sq. Fт.	22,000 - 30,000 BTU/H

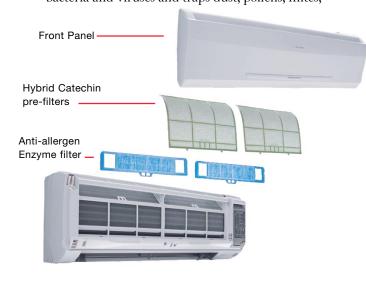
This table is for general guidance only. Additional conditions may factor into your actual cooling or heating needs. Please contact your contractor or Mitsubishi Electric HVAC for a more accurate determination of your specific cooling or heating needs.



## Multiple Filters for Cleaner, Healthier Air

Mr. Slim M-Series units use a sophisticated multi-part filter system to remove contaminants such as allergens, viruses and bacteria from the air as it circulates.

The hybrid catechin filter absorbs odor-causing gases. An anti-allergen filter reduces germs, bacteria and viruses and traps dust, pollens, mites,



Features	Benefits
INVERTER TECHNOLOGY	Maximizes energy savings by making sure only the energy needed to cool or heat an area is used.
No Ductwork	No need for major construction and remodeling hassle because the Mr. Slim system installs quickly and easily.
Zone Control	Maximum control and energy efficiency are realized by cooling and heating only those spaces you want.
Advanced Microprocessor Controls	Advanced self-monitoring controls keep you comfortable no matter what conditions are outside.
CONVENIENT WIRELESS REMOTE CONTROLLER	The remote controller offers comfort control in the palm of your hand. Press a button, and superior air conditioning is yours.
Washable Long-Life Anti-Allergen Filters	Filters help improve air quality and save you money by cleaning them instead of replacing them.
AUTO COOL/ HEAT CHANGEOVER	System switches from cooling to heating, automatically.
Environmentally Friendly	Mr. Slim systems use R410A, an environmentally-friendly refrigerant.

and other particles; it uses an enzyme catalyst to help break down the sulfur atom bonds in allergen proteins, transforming them into non-allergen proteins.

A hybrid-coating process makes the hybrid catechin filter washable and, if properly maintained with monthly cleanings, effective for more than 10 years.

COOLING ONLY WALL-MOUNTED SERIES



What is comfort? Comfort is a home that's cool and dry in the summer and cozy and warm in the winter. This is what you get with the Mr. Slim system: perfect year-round comfort. The M-Series models install easily. Mounted high on the wall, the indoor unit blends into most room environments without taking up any window space. These models also feature automatic cooling/heating changeover, which automatically switches the unit between cooling and heating to compensate for fluctuating temperatures. Our M-Series models are the perfect way to cool or heat any room in your home. M-Series INVERTER systems provide high-speed and efficient cooling and heating performance to keep your home consistently cozy year-round.

## No Ductwork Required

Mr. Slim systems need no ductwork, so if you are adding on a room, you don't have to tie into an existing system to steal

cool or warm air from other areas in the home. This advanced technology means better room control and increased comfort, plus greater efficiency. Our systems are also very flexible and easy to install in almost any space.

# Superior INVERTER Technology

Now you can benefit from technology that outperforms conventional systems with Mitsubishi Electric's INVERTER technology. Precise rotation speed

control helps you keep temperatures consistent. At high rotation speeds, you get faster cooling and heating. At low rotation speeds, the temperature is efficiently maintained and starting currents are kept at low levels so they don't affect

HEAT PUMPS
INVERTER-DRIVEN
WALL-MOUNTED SERIES

Mr.Slim<sup>®</sup>



other appliances. Pulse Amplitude Modulation (PAM) keeps efficiency high by ensuring that the system effectively uses 98 percent of input power supply.

# System Control in the Palm of Your Hand

Mr. Slim's M-Series offers a comprehensive remote controller

Features	Benefits				
PROVEN INVERTER- DRIVEN COMPRESSOR TECHNOLOGY	Your building will be pleasant year-round because our INVERTER technology provides powerful, quiet, and energy-efficient cooling and heating.				
EFFICIENT	Our systems effectively use energy so you'll spend less money for operation and enjoy greater comfort.				
Maintains Constant Temperature Levels	INVERTER technology eliminates annoying swings in temperature, which can cause drafts in any room. You'll stay comfortable year-round.				
Superior Heating Performance	Compressor rotation speed is greatly accelerated to help improve the heat exchange between indoor and outdoor fan coils. Even at 15°F Mr. Slim can provide 50% of the rated heating capacity.				

Mr.Slim®

that controls temperature, fan speed and more. Choose from four modes: COOL, HEAT, AUTO, and DRY. The controller also has a 12-hour ON/OFF timer for one-button control of your personal comfort. Our new MSY(Z)-A24NA models adds the WIDE VANE button to evenly distribute airflow to a wider angle (150 deg.) from right to left, maintaining a comfortable temperature across a wide area. The M-Series INVERTER models can tie into the P-Series wired controller and CITY MULTI® M-NET with adapter to give an 'on-the-wall' controller option.

## Total, Healthy Comfort

The POWERFUL mode is available to cool or heat any desired space quickly by lowering the set temperature in cooling mode or raising the set temperature in heating mode by seven degrees. It increases the fan speed for 15 minutes. Auto changeover maintains consistent temperature in a room by automatically sensing whether the space needs cooling or heating. For challenging cooling environments, low-ambient temperature control means our models perform effectively in cooling mode even when the external temperatures dip to as low as 14 degrees Fahrenheit. Even more important, you can benefit from our antiallergen enzyme filter. Using blue enzymes, this filter helps minimize germs, bacteria, and viruses.

## Warm Air, No Drafts

Our *hot-start technology* provides warmth from the beginning. The fan increases in speed as the coil is warmed, which reduces drafts, so when you want warm air, you'll get it.

# INVERTER-DRIVEN MULTI-ZONE HEAT PUMP SYSTEMS

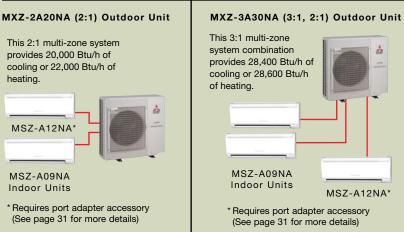
If you're looking for a complete comfort solution for several different rooms, the MXZ multi-zone system is the right choice for you. You can use up to 19 different combinations of indoor and outdoor units, so the system is flexible enough to conform to your particular cooling and heating needs.

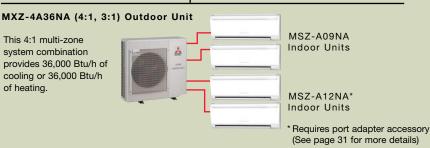
### Powerful, Efficient, and Versatile

Reap the benefits of our latest INVERTER-driven technology. Appreciate high rotation speeds for faster cooling and heating, low rotation speeds to efficiently maintain comfort when a desired temperature is reached. The system ramps up slowly, keeping initial starting currents low so they won't affect your other household appliances. The MXZ series is the perfect solution to cool spaces during the winter because it can maintain cooling when outside ambient temperatures reach as low as 14° F.

## Multi-zone Heat Pump System Attributes

Multi-zone technology means that everyone can enjoy their ideal level of comfort, no matter where they are in the home. Each zone operates independently, so people in the kitchen, master bedroom, or living room can each enjoy the temperatures that makes them feel most comfortable.





# MS/MSY COOLING-ONLY M-SERIES Specifications









Madel News	Indoor U	nit	MS-A09WA	MS-A12WA	MSY-A15NA	MSY-A17NA	MSY-A24NA		
Model Name	Outdoor U	Jnit	MU-A09WA	MU-A12WA	MUY-A15NA	MUY-A17NA	MUY-A24NA		
	Rated Capacity	Btu/h	9,500	12,000	15,000	16,200	22,000		
	Capacity Range	Btu/h	-	-	3,100-15,000	3,100-16,200	4,400-22,000		
	Total Input	W	870	1.070	1,690 (210-1,690)	2,070 (210-2,070)	2,880 (290-2,880)		
Cooling *1	Energy Efficiency	SEER	13		1,090 (210-1,090)	16	2,000 (230-2,000)		
	Moisture Removal	Pints/h	2.7	3.2	4.7	5.1	7.3		
	Sensible Heat Factor	FIIIto/II	0.68	0.70		65	0.63		
Power Supply	Phase, Cycle, Voltage			0Hz, 115V *2		1 Phase, 60Hz, 208/230V			
. one. cappi	Indoor - Outdoor S1-S2			115V		AC 208/230V	_		
Voltage	Indoor - Outdoor S2-S3		DC1	2-24V		DC12-24V			
	Indoor - Remote Controller		Wirele	ss Type	Wireless T	ype (Optional Wired Cont	roller: DC12V)		
	MCA	Α	1	1.2		1.0			
	Fan Motor	F.L.A.	0	.95		0.76			
	Airding (La Mari III)	DRY (CFM)	183-261-335	222-286-406	268-3	28-381	296-431-568		
	Airflow (Lo-Med-Hi)	WET (CFM)	162-233-300	198-254-363	240-2	93-342	265-385-508		
	Sound Pressure Level (Lo-Med-Hi)	dB(A)	26-32-40	33-38-45	34-40-45	34-40-46	34-40-49		
Indoor Unit	External Finish Color		Munsell No.	. 1.0Y 9.2/0.2		Munsell No. 1.0Y 9.2/0.	2		
		W: In.		11/16	30-1	1/16	43-5/16		
	Dimension Unit	D: In.		-1/4		1/4	10-1/4		
	James and a state of the state	H: In.		-3/4	11-	12-13/16			
	Weight Unit	Lbs.		23		37			
	Field Drain Pipe Size O.D.	In.		5/8	23 5/8		<u> </u>		
	MCA	Α	14	16	14		17		
	Max. Fuse Size	(Time Delay) A	15	20	15		20		
	Fan Motor	F.L.A.	0.63	0.93	0.52		0.93		
	I all Wotol	Model (Type)		Rotary		DC Inverter-driven Twin Rotary			
	Compressor	R.L.A.	9.3	10.82	10.1				
	Compressor			<b>-</b>			1		
		L.R.A.	47	56	1	2	16		
O. dala an Unit	Airflow	CFM	1,083	1,327	1,2	249	1,729		
Outdoor Unit	Refrigerant Control		Capilla	ary Tube		Linear Expansion Valve	9		
	Sound Pressure Level (Cooling) *1	dB(A)	47	52	50	52	55		
	External Finish Color		Muneall No	o. 3Y 7.8/1.1	Munsell No. 3Y 7.8/1.1				
	External Fillion Color	W: In.	31-1/2	33-7/16	21	-1/2	33-1/16		
	B'	D: In.	11-1/4	11-7/16		-1/4	13		
	Dimensions	-		ł			<b>.</b>		
		H: In.	21-5/8	23-13/16		-5/8	33-7/16		
	Weight	Lbs.	78	96	88		128		
Remote Controller	Type		Wireles	s Remote	Wireless	Remote (Optional Wired	Controller)		
	Type		R4	10A		R410A			
Refrigerant	Charge	Lbs., Oz.	2, 5	3, 1	2	, 7	4		
	Oil	Type (Fl. Oz.)		2 (10.8)		NE022 (15.2)			
	Gas Side O.D.	ln.	3/8	1/2	1	/2	5/8		
	Liquid Side O.D.	] ""	1	/4		1/4			
Refrigerant Pipe	Height Difference (Max.)	Ft.		35		10	50		
	Length (Max.)		(	65	6	55	100		
Connection Method	Indoor/Outdoor	•	Поне	d/Flared	1	Flared/Flared			

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

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

<sup>\*1</sup> 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).

<sup>\*2</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.

# MSZ HEAT PUMP M-SERIES Specifications









Model News	Indoor Uni	t	MSZ-A09NA	MSZ-A12NA	MSZ-A15NA	MSZ-A17NA	MSZ-A24NA				
Model Name	Outdoor Un	it	MUZ-A09NA	MUZ-A12NA	MUZ-A15NA	MUZ-A17NA	MUZ-A24NA				
	Rated Capacity	Btu/h	9,000	12,000	15,000	16,200	22,000				
	Capacity Range	Btu/h	5,500-9,000	5,700-12,000	3,100-15,000	3,100-16,200	4,400-22,000				
	Total Input	W	690 (390-690)	1,170 (395-1,170)	1,690 (210-1,690)	2,070 (210-2,070)	2,880 (290-2,880)				
Cooling *1	Energy Efficiency	SEER		17	, , , ,	16	, , , ,				
	Moisture Removal	Pints/h	2.3	3.2	4.7	5.1	7.3				
	Sensible Heat Factor	1 1110/11	0.71	0.70		65	0.63				
	Rated Capacity	Btu/h	10,900	13,600	18,000	20,100	23,200				
	Capacity Range	Btu/h	5,200-12,600	5,200-13,600		20,900	3,600-24,400				
leating at 47° F *2	Total Input	W	860 (350-1,100)	1,160 (350-1,160)	1,790 (250-2,330)	2,150 (250-2,330)	2,350 (260-2,570)				
	HSPF (Region IV)	Btu/h/W	.,,	., (000 1,100)	8.2		_,				
	Capacity	Btu/h	7,700	8,300		000	15,200				
leating at 17° F *3	Total Input	W	880	930		740	1,960				
ower Supply	Phase, Cycle, Voltage				Phase, 60Hz, 208/230\		.,,,,,,,,				
омет бирріу	Indoor - Outdoor S1-S2				AC 208/230V	4					
oltage	Indoor - Outdoor S1-32				DC12-24V		1				
onago	Indoor - Remote Controller			Wireless Ty	pe (Optional Wired Cont	roller: DC12V)					
	MCA	A			1.0	, , , , , , , , , , , , , , , , , , ,					
	Fan Motor	F.L.A.			0.76						
	Airflow (Cool)	DRY (CFM)	152-229-307	152-240-353	268-3	28-381	296-431-568				
	(Lo-Med-Hi) *1	WET (CFM)	134-205-275	134-215-318	240-2	93-342	265-385-508				
	Airflow (Heat) (Lo-Med-Hi) *2	DRY (CFM)	159-222-307	159-240-353	254-3	14-381	296-486-568				
	Sound Pressure Level		22-33-38	22-34-42	24 40 45	24 40 46	34-40-49				
	(Cooling) (Lo-Med-Hi) *1	4D(A)	22-33-30	22-34-42	34-40-45	34-40-46	34-40-49				
	Sound Level Pressure	dB(A)	20 22 20	22-34-42	24.0	8-44	24 40 40				
ndoor Unit (Heating) (Lo-Med-Hi	(Heating) (Lo-Med-Hi) *2		22-33-38	22-34-42	34-3	00-44	34-40-48				
	External Finish Color			Munsell No. 1.0Y 9.2/0.2							
		W: In.		30-1	1/16		43-5/16				
Dim	Dimension Unit	D: In.		10-1/4							
	Dimension onit										
		H: In.		12-13/16							
	Weight Unit	Lbs.		2	3		37				
	Field Drain Pipe Size O.D.	In.			5/8						
	MCA	Α		4	17						
	Max. Fuse Size	(Time Delay) A		1:	 5		20				
	Fan Motor	F.L.A.		9.0	52		0.93				
	Tan Motor		DC Investor dei		T	C Investor driven Turin F					
		Model (Type)		ven Single Rotary	U	C Inverter-driven Twin F 10.1	lotary				
	Compressor	R.L.A.		7.8							
		L.R.A.	Ç	9.2	1	16					
	Airflow	CFM	1,129	1,094	1,2	249	1,729				
Outdoor Unit	Refrigerant Control				Linear Expansion Valve	)					
	Defrost Method				Reverse Cycle						
	Sound Pressure Level	dB(A) *1		48	50	52	55				
	External Finish Color				Munsell No. 3Y 7.8/1.						
		W: In.			33-1/16						
	Dimensions	D: In.		11-	1/4		13				
	İ	H: In.		21-			33-7/16				
	Woight	Lbs.	75	82		8	128				
Damata Oast III	Weight	LUO.	10				120				
Remote Controller	Туре			wireless	Remote (Optional Wired	Controller)					
) of the second	Type	Libo Oz	0	0.5	R410A	7	1 4				
Refrigerant	Charge	Lbs., Oz.	2	2, 5	2	7 NE022 (15.2)	4				
	Oil	Type (Fl. Oz.)		2 (10.8)		NE022 (15.2)	1				
	Gas Side O.D.	In.	3	3/8		/2	5/8				
Refrigerant Pipe	Liquid Side O.D.				1/4						
nemyerani Pipe	Height Difference (Max.)			4	0		50				
	Length (Max.)	Ft.		6			100				

NOTES: Test conditions are based on ARI 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°), 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 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

## MXZ-MULTI INVERTER HEAT PUMP

MXZ-SERIES Specifications







Model Name		Outdoor Unit		MXZ-2A20NA *5	MXZ-2A20NA *5   MXZ-3A30NA *6   MXZ-4A36N					
		Rated Capacity	Btu/h	20,000	28,400	36,000				
	Cooling *1	Capacity Range	Btu/h	7,800-20,000	12,600-28,400	12,600-36,400				
	1	Total Input	W	2,150 (630-2,150)	3,250 (1,000-3,250)	3,820 (1,000-3,900)				
		Rated Capacity	Btu/h	22,000	28,600	36,000				
Indoor Unit	Heating at 47° F *2	Capacity Range	Btu/h	8,500-22,000	11,400-36,000	11,400-43,000				
		Total Input	W	1,780 (520-1,780)	2,180 (740-2,880)	3,100 (740-4,350)				
	11	Capacity	Btu/h	14,500	18,800	24,600				
	Heating at 17° F *3	Total Input	W	1,500	2,120	3,340				
Power Supply	Phase,Cycle,Voltag	e		1	Phase, 60Hz, 208-230\	/ *8				
/oltage	Indoor - Outdoor S				AC 208-230V					
- Tollago	Indoor - Outdoor S	2-S3	,		DC12-24V					
	MCA		Α		15	19				
	Fan Motor		F.L.A.	0.96		.93				
			Model (Type)	DC	Inverter-driven Twin R	otary				
	Compressor		R.L.A.	10.1 11		14.4				
			L.R.A.							
	Airflow (Cooling/He	ating) *1/*2	CFM	1,485/1,640	1,365/1,605	2,068/2,068				
	Refrigerant Control				Linear Expansion Valv	е				
0. 4.1	Defrost Method				Reverse Cycle					
Outdoor Unit *4	Sound Pressure Le (Cooling/Heating) *1		dB(A)	49/51 49/49		54/57				
	External Finish Cold	or		Munsell No. 5Y 8/1	Munsell No. 5Y 8/1 Munsell No. 3Y 7.8/1.1					
			W: In.	33-1/16 35-7/16						
	Dimensions		D: In.	13 (+1-3/16)	12-5/8	(+1-3/16)				
			H: In.	27-15/16	35-	7/16				
	Weight		Lbs.	130	148	150				
Remote Controller	Туре	•			Wireless Remote					
	Туре				R410A					
Refrigerant	Charge		Lbs., Oz.	5/15	7/11	8/13				
· ·	Oil		Type (Fl. Oz.)	NEO22 (23.7)	NEO2	2 (29.4)				
	Gas Side O.D.		1	A, B: 3/8	A: 1/2; B, C: 3/8	A: 1/2; B, C, D: 3/8				
	Liquid Side O.D.		ln.	, ,	1/4					
Refrigerant Pipe	Height Difference (N	Max.)	i e		49/33 *9					
3	Length (Max.)		1 <sub>Ft.</sub>	164 (A+B)	230 (A+B+C)	230 (A+B+C+D)				
	Length (Each Outdo	oor Unit)			82					
Connection Method	Indoor/Outdoor		•	1	Flared/Flared					

NOTES: Test conditions are based on ARI 210/240. One indoor unit is turned off during low-speed testing under the new test conditions. Systems actually exhibit higher energy efficiencies during normal operation.

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

\*2 Rating conditions (heating)-Indoor: D.B.  $70^{\circ}$  F (21° C), W.B.  $60^{\circ}$  F (16° C); Outdoor: D.B.  $47^{\circ}$  F (8° C), W.B.  $43^{\circ}$  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 12 and 13 for Indoor Unit specifications.

 $^{\star}5$  Data from combination of Indoor Units MSZ-A09NA and MSZ-A12NA.

\*6 Data from combination of Indoor Units MSZ-A09NA, MSZ-A09NA, and MSZ-A12NA.

 $\ensuremath{^{\star}} 7$  Data from combination of four MSZ-A09NA Indoor Units.

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

 $^{\star}9$  49' Applies to installations where the outdoor unit is installed below the indoor unit.

Power factor equals 97%. Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

#### **MXZ-3A30NA Combinations**

	Cooling Capacity (Btu/h)					Enorgy F	Efficiency	Curre	n#	Port Ac	dapter Requirements
Indoor Unit Combinations	Hea	ating Cap	acity (Btı	ı/h)	Power Usage	Ellergy	Iniciency	(A)		Size	Qty. and
(Unit A + Unit B + Unit C)	Unit A	Unit B	Unit C	Total	(W)	SEER	HSPF	208V	230V	0120	Pipe Adapter Part No.
MSZ-A09NA +	9,000	9,000	_	18,000	1,800	16.0	10.0	8.92	8.07		N.A.
MSZ-A09NA	10,900	10,900	_	21,800	1,700	10.0	10.0	8.43	7.62		IN.A.
MSZ-A09NA +	9,000	12,000	-	21,000	2,000	16.0	10.0	9.91	8.96	ļ	N.A
MSZ-A12NA	10,900	13,600	-	24,500	1,980	10.0	10.0	9.81	8.87		N.A
MSZ-A09NA +	9,000	15,000	-	24,000	2,500	16.0	10.0	12.39	11.21		N.A.
MSZ-A15NA	10,100	16,900	_	27,000	2,200	16.0 10.0		10.90	9.86	1	N.A.
MSZ-A09NA +	9,000	16,200	-	25,200	2,700	16.0	10.0	13.38	12.10		N.A.
MSZ-A17NA	9,300	17,700	_	27,000	2,200	16.0	10.0	10.90	9.86	1	N.A.
MOZ AGONA	7,600	20,400	-	28,000	3,200			15.86	14.34	0/0 V 5/0H	(1) PAC-SG76RJ-E
MSZ-A09NA + MSZ-A24NA	7,300	19,700	-	27,000	1,980	16.0	10.0	9.81	8.87	3/8 X 5/8" or 1/2 X 5/8"	or (1) MAC-A456JP-E
MSZ-A12NA +	12,000	12,000	_	24,000	2,500	16.0	10.0	12.39	11.21	N.A.	
MSZ-A12NA	13,500	13,500	_	27,000	2,200	16.0 <b>10.0</b>		10.90	9.86	N.A.	
MSZ-A12NA +	11,500	14,500	-	26,000	2,800	16.0 10.0		13.88	12.55	N.A.	
MSZ-A15NA	12,000	15,000	_	27,000	2,160	10.0	10.0	10.71	9.68		N.A.
MSZ-A12NA +	10,800	15,200	-	26,000	2,800	16.0	10.0	13.88	12.55		N.A.
MSZ-A17NA	11,200	15,800	_	27,000	2,140	10.0	10.0	10.61	9.59		N.A.
MSZ-A15NA +	13,000	13,000	-	26,000	2,800	16.0	10.0	13.88	12.55	3/8 X 1/2"	(1) MAC-A454JP-E
MSZ-A15NA	13,500	13,500	_	27,000	2,120	10.0	10.0	10.51	9.50	3/0 X 1/2	(1) WAC-A4545F-E
MSZ-A15NA +	12,200	13,800	_	26,000	2,800	16.0	10.0	13.88	12.55	3/8 X 1/2"	(1) MAC-A454JP-E
MSZ-A17NA	12,700	14,300	_	27,000	2,110	10.0	10.0	10.46	9.46	3/0 X 1/2	(1) WAO-A43431 -L
MSZ-A17NA +	13,000	13,000		26,000	2,800	16.0	10.0	13.88	12.55	3/8 X 1/2"	(1) MAC-A454JP-E
MSZ-A17NA	13,500	13,500	_	27,000	2,100	10.0	10.0	10.41	9.41	3/0 X 1/2	(1) WAO-A43431 -L
MSZ-A09NA + MSZ-A09NA	9,000	9,000	9,000	27,000	2,860	16.0	10.0	14.18	12.82	1/2 X 3/8"	(1) MAC-A455JP-E
+ MSZ-A09NA	9,500	9,500	9,500	28,500	2,180	10.0	10.0	10.80	9.77	1/2 X 3/0	(1) WAO-A43301 -L
MSZ-A09NA + MSZ-A09NA	8,500	8,500	11,400	28,400	3,250	16.0	10.0	16.11	14.57	1/2 X 3/8"	(1) MAC-A455JP-E
+ MSZ-A12NA	8,600	8,600	11,400	28,600	2,180	10.0	10.0	10.80	9.77	1/2 / 3/0	(1) WING ATOOUT -L
MSZ-A09NA + MSZ-A09NA	7,750	7,750	12,900	28,400	3,250	16.0	10.0	16.11	14.57	1	N.A.
+ MSZ-A15NA	7,800	7,800	13,000	28,600	2,180	10.0	10.0	10.80	9.77		N.A.
MSZ-A09NA + MSZ-A09NA	7,300	7,300	13,800	28,400	3,250	16.0	10.0	16.11	14.57	Ţ	N.A.
+ MSZ-A17NA	7,350	7,350	13,900	28,600	2,180	10.0	10.0	10.80	9.77		IV.A.

Specifications are subject to change without notice.

#### **MXZ-2A20NA Combinations**

Indoor Unit	Cooling	Capacity	(Btu/h)	Power	Ene	ergy	Cur	notice.			
(Unit A + Unit B)	Heating	<b>Capacity</b>	(Btu/h)	Usage	Efficiency		()	4)	without r		
Combinations	Unit A	Unit B	Total	(W)	SEER	HSPF	208V	230V			
MSZ-A09NA +	9,000	9,000	18,000	1,740	16.0	8.5	8.62	7.8	change		
MSZ-A09NA	10,900	10,900	21,800	1,820	10.0	0.0	9.02	8.16	to ch		
MSZ-A09NA +	8,500	11,500	20,000	2,150	16.0	6.0 8.5	10.66	9.64			
MSZ-A12NA	9,500	12,500	22,000	1,780	16.0	0.0	8.82	7.98	subject		
MSZ-A09NA +	7,500	12,500	20,000	2,150	100	10.0	16.0	8.5	10.66	9.64	are
MSZ-A15NA*	8,250	13,750	22,000	1,780	10.0	0.0	8.82	7.98	Specifications		
MSZ-A12NA +	10,000	10,000	20,000	2,150	100	٥.	10.66	9.64	]iji		
MSZ-A12NA	11,000	11,000	22,000	1,780	16.0	8.5	8.82	7.98	Spec		

<sup>\*</sup>Port Adapter size = 3/8" x 1/2", Qty = 1, Part No. = MAC-A454JP-E

# Outdoor Unit MSZ-A12NA\*

MSZ-A09NA Indoor Units

MXZ-2A20NA (2:1)

\* Requires port adapter accessory (See page 31 for more details) (Two indoor units must be installed) MXZ-3A30NA (3:1, 2:1)
Outdoor Unit

MSZ-A09NA
Indoor Units

MSZ-A12NA\*
\* Requires port adapter accessory
(See page 31 for more details)

(See page 31 for more details)
(At least two indoor units must be installed)

#### MXZ-4A36NA (4:1, 3:1) Outdoor Unit



MSZ-A09NA Indoor Units

MSZ-A12NA\* Indoor Units

> \* Requires port adapter accessory (See page 31 for more details) (At least three indoor units must be installed)

#### **MXZ-4A36NA Combinations**

Indoor Unit		Cooling Capacity (Btu/h)						Energy Efficiency		nt (A)		t Adapter uirements
Combinations (Unit A + Unit B +	Heating Capacity (Btu/h)						SEER	HSPF	208V	230V	Size	Qty. and Pipe Adapter
Unit C + Unit D)	Unit A	Unit B	Unit C	Unit D	Total	(W)	JEEH	11011	2004	2500	JIZU	Part No.
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA	9,000 10,800	9,000 10,800	9,000 10,800		27,000 32,400	2,860 2,700	16.0	8.5	14.18 13.38	12.82 12.10		N.A.
MSZ-A09NA + MSZ-A09NA + MSZ-A12NA	9,000	9,000	12,000 12,400		30,000 32,400	3,270 2,700	16.0	8.5	16.21 13.38	14.66 12.10		N.A.
MSZ-A09NA + MSZ-A09NA + MSZ-A15NA	8,800 8,900	8,800 8,900	14,500 14,600		32,100 32,400	3,500 2,700	16.0	8.5	17.35 13.38	15.69 12.10		N.A.
MSZ-A09NA + MSZ-A09NA + MSZ-A17NA	8,200 8,400	8,200 8,400	15,700 15,600		32,100 32,400	3,500 2,700	16.0	8.5	17.35 13.38	15.69 12.10		N.A.
MSZ-A09NA + MSZ-A09NA	6,900	6,900	18,300		32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 5/8" or	(1) PAC-SG76RJ- or
+ MSZ-A24NA MSZ-A09NA + MSZ-A12NA	7,800 8,700	7,800 11,700	16,800 11,700		32,400 32,100	2,700 3,500			13.38 17.35	12.10 15.69	1/2 X 5/8"	(1) MAC-A456JP-
+ MSZ-A12NA MSZ-A09NA + MSZ-A12NA	9,400 8,000	11,500 10,700	11,500 13,400		32,400 32,100	2,700 3,500	16.0	8.5	13.38 17.35	12.10 15.69		N.A.
+ MSZ-A15NA MSZ-A09NA + MSZ-A12NA	8,300 7,600	10,400 10,100	13,700 14,400		32,400 32,100	2,700 3,500	16.0	8.5	13.38 17.35	12.10 15.69		N.A.
+ MSZ-A17NA MSZ-A09NA + MSZ-A15NA	7,900 7,500	9,900 12,300	14,600 12,300		32,400 32,100	2,700 3,500	16.0	8.5	13.38 17.35	12.10 15.69	3/8 X 1/2"	N.A.
+ MSZ-A15NA MSZ-A09NA + MSZ-A15NA	7,600 7,100	12,400 11,700	12,400 13,300		32,400 32,100	2,700 3,500	16.0	8.5 8.5	13.38 17.35	12.10 15.69	3/8 X 1/2"	(1) MAC-A454JP- (1) MAC-A454JP-
+ MSZ-A17NA MSZ-A09NA + MSZ-A17NA	7, <mark>200</mark> 6,700	11,900 12,700	13,300 12,700		32,400 32,100	2,700 3,500		8.5	13.38 17.35	12.10 15.69		``
+ MSZ-A17NA MSZ-A12NA + MSZ-A12NA	7,000 10,700	12,700 10,700	12,700 10,700		32,400 32,100	2,700 3,500	16.0	6.5	13.38 17.35	12.10 15.69	3/8 X 1/2"	(1) MAC-A454JP-
+ MSZ-A12NA	10,800	10,800	10,800		32,400	2,700	16.0	8.5	13.38	12.10		N.A.
MSZ-A12NA + MSZ-A12NA + MSZ-A15NA	9,900 9,700	9,900 9,700	12,300 13,000		32,100 32,400	3,500 2,700	16.0	8.5	17.35 13.38	15.69 12.10		N.A.
MSZ-A12NA + MSZ-A12NA	9,400	9,400	13,300		32,100	3,500	16.0	8.5	17.35	15.69		N.A.
+ MSZ-A17NA MSZ-A12NA + MSZ-A15NA	9,300 9,100	9,300 11,500	13,800 11,500		32,400 32,100	2,700 3,500			13.38 17.35	12.10 15.69		1
+ MSZ-A15NA	9,000	11,700	11,700		32,400	2,700	16.0	8.5	13.38	12.10	3/8 X 1/2"	(1) MAC-A454JP-
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA + MSZ-A09NA	9,000	9,000	9,000	9,000	36,000 36,000	3,820 3,100	16.0	8.5	18.55 15.05	16.78 13.61	1/2 X 3/8"	(1) MAC-A455JP-
MSZ-A09NA + MSZ-A09NA	8,300	8,300	8,300	11,100	36,000	3,820	16.0	8.5	18.55	16.78	1/2 X 3/8"	(1) MAC-A455JP-
+ MSZ-A09NA + MSZ-A12NA	8,300 7,700	8,300 7,700	8,300 7,700	11,100 12,900	36,000 36,000	3,100 3,820	10.0	0.0	15.05 18.55	13.61 16.78		(., 10.10 / 140001 -
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA + MSZ-A15NA	7,700	7,700	7,700	12,900	36,000	3,100	16.0	8.5	15.05	13.61		N.A.
MSZ-A09NA + MSZ-A09NA + MSZ-A12NA + MSZ-A12NA	7,700	7,700	10,300	10,300	36,000	3,820	16.0	8.5	18.55	16.78	1/2 X 3/8"	(1) MAC-A455JP-
T WOL-ATZIVA T WOL-ATZIVA	7,700	7,700	10,300	10,300	36,000	3,100			15.05	13.61		

<sup>\*</sup>Port Adapter size = 3/8" x 1/2", Qty = 1, Part No. = MAC-A454JP-E

# P-SERIES LARGE RESIDENTIAL, VARIED COMMERCIAL, AND INSTITUTIONAL

The Mr. Slim P-Series delivers flexible and convenient cooling and heating solutions to almost any commercial, institutional, or large residential application. Choose from small, quiet indoor and outdoor units that operate with the increased efficiency you need. Whether in a church, office building, school, nursing home, restaurant, retail store, or equipment room, the compact design of the P-Series indoor units makes cooling and heating difficult spaces a breeze. With wall-mounted, ceilingrecessed, and ceiling-suspended options, the P-Series is the perfect solution for almost any building. The P-Series provides up to 42,000 Btu/h of

## **INVERTER Technology**

cooling or heating performance.

INVERTER-driven compressor technology gives Mr. Slim systems a higher degree of cooling and heating abilities that outperform and are more energy efficient than conventional systems. Desired room temperature is reached more quickly and maintained more consistently. This eliminates the peaks and valleys of temperature swings that we're used to with older, conventional units.



The PKA and PLA indoor units can be used with our Hyper-heating INVERTER (H2i<sup>™</sup>) outdoor heat pump units. These innovative H2i outdoor units are designed to deliver consistent, efficient heating and cooling even in extreme low outdoor temperatures from a single system.

#### Flexible Control

Convenient and efficient zone control means you can cool or heat only the spaces in use. You can even have single or dual controllers connected to one system. The controller does not even have to be in the space shared with the indoor unit, which measures the room temperature. Features include a larger mode display, weekly timer, temperature range setting, setting lock, auto-off, expanded fault codes, and service call number display.

## Low Ambient Operation

This feature, along with the addition of a low-ambient wind baffle accessory, allows for a space to be air-conditioned even when it is as low as 0° F outside. This cooling ability is important when dealing with electronic equipment rooms, telecom substations, surveillance mechanical rooms, restaurant kitchens, fitness centers, and more.

## Redi-charged Systems

P-Series outdoor units come with enough refrigerant to be installed up to 100 feet from the indoor units. Linesets can be run up to 100 feet from PUY(Z)12-18 outdoor units and 165 feet from PUY(Z)24-42 outdoor units when additional charge is added. Thanks to unique design profiles and R410A refrigerant, these systems are easier to fit



P-Series Wired Remote Controller



PKA Wall-mounted Air Conditioners and Heat Pumps [pgs. 22-24]



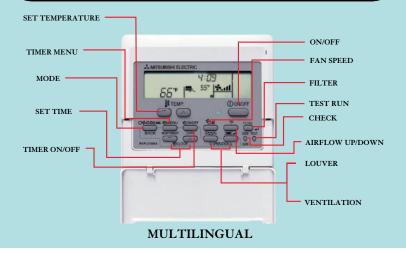
PLA Ceiling-recessed Air Conditioners and Heat Pumps [pgs.25-27]



PCA Ceiling-suspended Air Conditioners and Heat Pumps [pgs.28-30]



Features	Benefits
INVERTER TECHNOLOGY	You can enjoy high-speed cooling and heating and consistent delivery of comfort year-round.
QUIET OPERATION	You can hold a board meeting or teach a class in quiet comfort.
No Ductwork	There's no need to shut down for major construction because installation is quick and easy.
ZONE CONTROL	You can cool and heat only those spaces desired for maximum control and energy efficiency.
DEHUMIDIFICATION	Drier air means healthier air and less damage to books or furniture.
ADVANCED MICROPROCESSOR CONTROLS	Built-in electronics ensure efficient operation and maximum performance for optimum comfort.
Low Ambient Cooling Down to 0° F outdoors (requires a wind baffle)	This feature is perfect for computer network centers and telecom equipment rooms that need help to stay cool even during winter months.
Environmentally Friendly	Mr. Slim systems use R410A, an environmentally-friendly refrigerant.



into any space. R410A is environmentally friendly with zero Ozone Depletion Potential (ODP).

## Hot-start System

Mr. Slim heat pumps use our *hot-start technology* to provide warmth from the beginning by ramping up fan speed as the coil warms. So when you want warm air without annoying drafts, that's what you'll get.

# Installation Service and Maintenance Ease

P-Series outdoor units are designed with easy service and maintenance in mind. Maintenance points are located behind easy-access panels, to make installation and service a breeze for a trained technician. Four-way piping access allows connection in four directions: front, rear, right, and bottom (all PUY/PUZ models). Using the new A-Control system, just three polarity sensitive wires plus a ground conductor run from the outdoor to the indoor unit, providing both power and communication connections. Two non-polar wires connect the indoor unit and wallmounted controller. This wiring design helps avoid installation errors. An optional wireless remote controller kit is available for the P-Series ceilingmounted indoor units.

#### More Compact INVERTER-driven Outdoor Units

#### PUY/PUZ







12,000-18,000 Btu/h

24,000-36,000

42,000 Btu/h

These Mr. Slim units employ advanced Pulse Amplitude Modulation (PAM). PAM adjusts the form of the current wave to emulate the form of the supply voltage wave so that 98 percent of input power is effectively utilized.

# HYPER-HEATING INVERTER P-SERIES HEAT PUMP SYSTEM

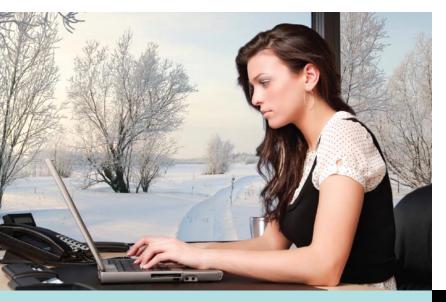
## Unequaled Comfort, Year Round

The heating and cooling success of Mitsubishi Electric's INVERTER heat pump systems is well-documented. Our Hyper-heating INVERTER (H2i) technology takes it a step further with the added benefit of year-round comfort with a single system, even on the coldest days of the year. The 3-ton wall-mounted or ceiling recessed indoor units connected to the H2i P-Series outdoor units are flexible enough to satisfy almost any light commercial or institutional renovation or new construction project.

## The Next Generation in Heat Pump Technology

These H2i outdoor units give a new level of performance to Mr. Slim P-Series models, with the extra heat-generating power it takes to deliver comfort and consistency in extreme climates. H2i units use Mitsubishi Electric's INVERTER-driven scroll compressor technology to achieve the desired room temperature quickly and maintain it consistently – conserving energy. Plus, with the integration of our exclusive H2i flash technology, these units re-collect heat energy that is normally wasted in the flash process at the outdoor coil. This process helps the H2i system overcome issues commonly associated with conventional heat pumps, such as decreases in low-side pressure, refrigerant mass flow rate and operational capacity. As a result, H2i





units exhibit 100% of rated heating capacity at 5° F and 87% at -4° F outdoor ambient temperatures. Plus, they use only environmentally friendly refrigerants.

H2i heat pumps offer a variety of features designed to take the worry out of temperature control, such as automatic restart in the case of power outages and automatic cool/heat changeover.

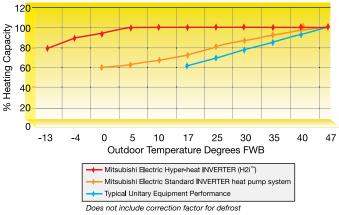
For applications in which you need to cool a space even when it is below freezing outside, such as computer or mechanical rooms and kitchens, air conditioning down to 0° F outdoor ambient temperature is possible with the addition of a wind baffle. Whether cooling or heating, the H2i P-Series gives you the flexibility to temper extreme outdoor temperatures.

## Warm Air Quickly!

At startup, a special circuit quickly delivers refrigerant to the air-conditioning cycle. This process rapidly increases the mass flow rate in the system. As a result, air at comfortable temperatures begins flowing from indoor units right away. Even at outdoor temperatures of -13° F, the H2i system can discharge 100° F temperature air from the indoor units. At 5° F outdoor temperature and above, the discharge temperature reaches an impressive 110° F with a 40° F temperature rise (see Figure 2). This translates into a comfortable climate in all zones of a home or office, whether heating or cooling, no matter the temperature outside.

#### Hyper-heating INVERTER vs. Other Units

% Heating Capacity vs. Outdoor Temperature



#### **INDOOR UNITS:**

#### **PKA**

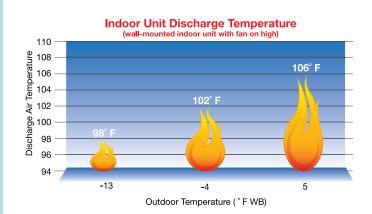
The PK indoor unit is a compact and quiet wall-mounted unit that delivers exceptional cooling and heating performance.

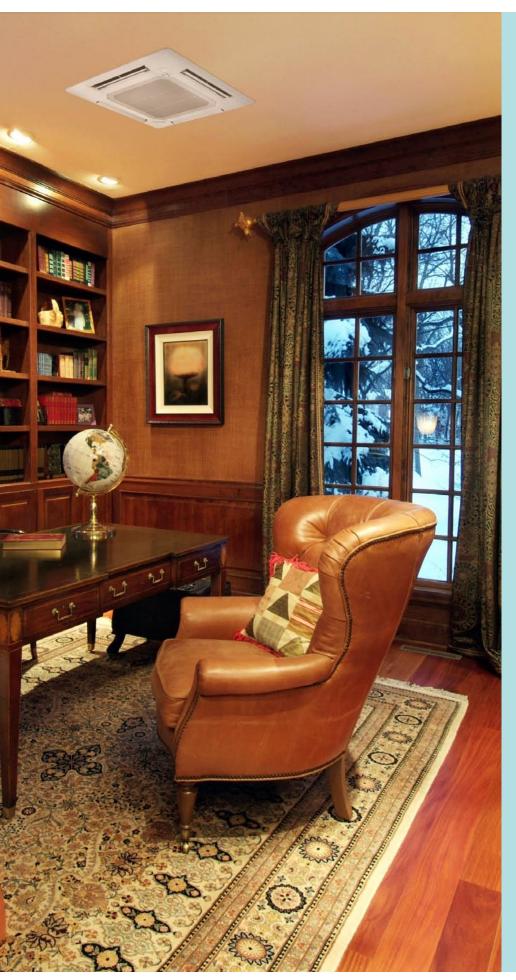
- Hard-wired, wall-mounted, remote controller (-FA model) or wireless (-FAL model)
- Adjustable vane control
- · Easy-clean filters

#### **PLA**

PLA-A\*\*-BA ceiling-recessed indoor units offer increased application flexibility and ease of installation especially in tight spaces.

- Independent vane motor control: five fixed settings plus swing
- Auto wave airflow in heating mode—unit independently cycles through all vertical positions for a more even heat distribution
- Built-in drain lift mechanism for condensate removal; lifts up to 33-7/16 in.
- Optional i-see<sup>™</sup> sensor accessory
- Easy clean filters







#### Two in One

If you have a large space, such as a long room or hallway, which would be considered one zone, two indoor units can be connected to the outdoor unit to cool or heat the space and provide the maximum amount of comfort. This process is called *Twinning*, two indoor units acting as one to spread the outdoor unit capacity over a large area.

#### Continuous Comfort

Unlike typical fixed-speed or staged heat pumps, the INVERTER-driven compressor in the H2i outdoor unit adjusts its speed to precisely match the load requirements within each zone. The use of the INVERTER-driven compressor allows for constant comfort all year long, year after year.

# Heating Performance at Low Temperatures

Our Hyper-heating INVERTER system provides tremendous heating performance at extremely low temperatures while keeping effective energy usage at the forefront. Take a look at these impressive COP (Coefficient of Performance) values. The Mr. Slim H2i P-Series systems are able to maximize efficiency at low temperatures while providing tremendous heating output.

H2i COP	PKA	PLA
47° F	3.59	3.45
17° F	2.10	2.10
5° F	1.90	1.90

# H2i<sup>™</sup> HEAT PUMP P-SERIES Specifications











FA = Wired Controller; FAL = Wireless Controller

Indoor Unit			PKA-A36FA(L) PLA-A36BA			
Model Name	Outdoor Unit		PUZ-HA36NHA	PUZ-HA36NHA		
	Rated Capacity	Btu/h	34,200	36,000		
	Capacity Range	Btu/h	18,000-34,200	18,000-36,000		
	Total Input	W	2,950	3,120		
Cooling *1	Energy Efficiency	SEER	2,555	16.0		
	Moisture Removal	Pints/h	7.1	6.8		
	Sensible Heat Factor	111110/11	0.77	0.79		
	Rated Capacity	Btu/h	0.11	38,000		
	Capacity Range	Btu/h	1:	8,000-40,000		
Heating at 47° F *2	Total Input	W	3,100	3,230		
	HSPF Region (IV)	Btu/h/W	3,100	9.4		
	Capacity	Btu/h	+	38,000		
Heating at 17° F *3	Total Input	W W	+	5,300		
	Capacity	Btu/h	+	38,000		
Heating at 5° F *4	Total Input	W	+	5,860		
	Phase, Cycle, Voltage	Į vv	1 Phos	se, 60Hz, 208/230V		
Power Supply  Breaker Size		A	I-Filas	30		
	Indoor - Outdoor S1 - S2	I <sub>A</sub>	+			
Voltago	Indoor - Outdoor S2 - S3		AC 208/230V DC24V			
Voltage	Indoor - Remote Controller		DC12V: For Wired Controller (FA)  DC12V			
	MCA	Α	1.0	2.0		
	Fan Motor	F.L.A.	0.52	1.00		
	Fan Motor Output	W	70	120		
	Fair Motor Output	DRY (CFM)		710-810-920-1,060 (Lo-M1-M2-Hi)		
	Airflow		780-990 (Lo-Hi)	· ` ` ` · · · · · · · · · · · · · · · ·		
		WET (CFM)	700-890 (Lo-Hi)	670-770-880-1,030 (Lo-M1-M2-Hi)		
	Sound Pressure Level	dB(A)	46-49 (Lo-Hi)	32-34-37-40 (Lo-M1-M2-Hi)		
Indoor Unit	External Finish Color	Munsell No.	3.4Y 7.7/0.8	Grille: 6.4Y 8.9/0.4		
	L	W: In.	66-1/8	33-1/16 (Grille: 37-3/8)		
	Dimension Unit	D: In.	9-1/4	33-1/16 (Grille: 37-3/8)		
		H: In.	13-3/8	11-3/4 (Grille: 1-3/8)		
	Weight Unit	Lbs.	62	55 (Grille: 13)		
	Drain Lift Mechanism (Included)	H: In.	N/A	33-7/16		
	Field Drainpipe Size	ln.	I.D.: 13/16	0.D.: 1-1/4		
	MCA	A	28			
	MOCP	A		40		
	Fan Motor	F.L.A.		0.4 + 0.4		
	Fan Motor Output	W		60 + 60		
		Model	DC In	vert-driven Scroll		
	Compressor	R.L.A.		18		
		L.R.A.		27.5		
	Airflow	CFM		3,530		
Outdoor Unit	Refrigerant Control		Electronic Expansion Valve			
	Defrost Method		Reverse Cycle			
	Sound Pressure Level (Cooling) *1	dB(A)		52		
	Sound Pressure Level (Heating) *2	dB(A)		53		
	External Finish Color	•	Muns	ell No. 3Y 7.8/1.1		
		W: In.		37-3/8		
	Dimensions	D: In.	†	13 + 1-3/16		
	Diffictions		+	53-1/8		
	Woight	H: In.	+			
Domete Controlle	Weight	Lbs.	Located with to do on their	267		
Remote Controller	Type		Located with Indoor Unit	Located with Grille		
Deficement	Type	Libo		R410A		
Refrigerant	Charge	Lbs.	+	12		
	Oil	Type (fl. oz.)	1	FV50S (45)		
Refrigerant Pipe	Gas Side O.D.	ln.	1	5/8		
J	Liquid Side O.D.	ln.	1	3/8		
Refrigerant Pipe Length	Height Difference (Max.)	Ft.		100		
gorant i po Longui	Length (Max.)	Ft.		245		
Connection Method				Flared		
Operating Temperature Range	Cooling			to 115° F D.B. with Wind Baffle Accessory Installed)		
operating remperature harige	Heating		-13° F	W.B. to +59° F W.B.		
Heating						

#### NOTES:

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

<sup>\*1</sup> Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19.4° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

<sup>\*2</sup> Rating conditions (heating)-Indoor: D.B.  $70^{\circ}$  F (21° C), W.B.  $60^{\circ}$  F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

<sup>\*3</sup> Rating conditions (heating)-Indoor: D.B.  $70^{\circ}$  F (21° C), W.B.  $60^{\circ}$  F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

<sup>\*4</sup> Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 5° F (-15° C), W.B. 5° F (-15° C).

# PKA (GA/GAL, FA/FAL) WALL-MOUNTED SERIES



PKA Indoor Unit (Same indoor unit is used for both cooling and heat pump systems)

12,000 to 34,200 Btu/h Capacity

The PKA-Series fills small, critical, and larger spaces with substantial cooling and heating from a compact, wall-mounted package. Walk into any room where a PKA system is is installed and all you'll notice is the perfectly comfortable climate. What you may not notice is the unit itself, which mounts high on the wall and blends into most spaces. The PKA-Series features an *Auto Changeover* mode that automatically switches back and forth between cooling and heating operation to compensate for indoor and outdoor temperature fluctuations.

### Auto Vane Control

With a simple press of the *Off* button, the vane closes to cover the air outlet for a clean presentation when not in use. During operation, the vane can be adjusted with the remote control to the perfect position to direct the airflow horizontally in cooling mode or towards the floor in heating mode, keeping room temperature even and comfortable.



# These Mr. Slim systems come with either a wired (GA/FA) or wireless (GAL/FAL) remote controller that puts you in command of your personal comfort.

## Easy-clean Filters

Convenient tabs let you remove the washable filters quickly and easily for faster cleaning. You'll also save time and money because you won't need to replace the filters.

## Lightweight, Easy-to-Install Indoor Unit

The smallest PKA unit measures about 39" wide, 13" tall, and 9" deep. It weighs just 35 lbs. and is easily installed above windows or doorways. and can typically be installed by just two licensed installers in about a half day. And Mr. Slim PKA-Series models don't require ductwork – just a small three-inch opening in the wall or ceiling – so they can be installed in some of the toughest spaces, even on brick and masonry walls.

# Ultimate Comfort Meets Ultimate Convenience

Select from a wall-mounted, hard-wired controller (GA/FA) or a wireless remote controller (GAL/FAL) for ultimate comfort control. The hand-held Mr. Slim LCD wireless remote controller is easier to use than most TV remotes. The set-temperature display is large and easy to read. Using the 24-hour timer, you can get the unit operation to start and stop at specified times and to repeat daily. And the convenient remote provides easy control of the *Fan Speed* as well as the COOL, HEAT, AUTO, and DRY modes from anywhere in the room.



# P-SERIES Specifications







GA/FA = Wired controller GAL/FAL = Wireless controller BS = Seacoast Protection

Model Neme	Indoor Ur	nit	PKA-A12GA PKA-A12GAL	PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL	
Model Name	Outdoor Unit		PUY-A12NHA PUY-A12NHA-BS	PUY-A18NHA PUY-A18NHA-BS	PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-B	
	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	34,200	
	Capacity Range	Btu/h	6,000-12,000	8,000-18,000	12,000-24,000	12,000-30,000	12,000-34,200	
0	Total Input	w	1,210	2,240	2,650	4,400	5,030	
Cooling *1	Energy Efficiency	SEER	13.8	14.1	13.5	13.0	13.1	
Power Supply	Moisture Removal	Pints/h	1.5	4.8	4.7	8.1	7.1	
	Sensible Heat Factor	•	0.86	0.70	0.78	0.70	0.77	
	Phase, Cycle, Voltage			1 Pr	nase, 60Hz, 208/230	)V *2	•	
Power Supply	Breaker Size A		-	15	25		30	
	Indoor - Outdoor S1-S2	17.			AC 208/230V			
	Indoor - Outdoor S2-S3				DC24V			
Voltage	Indoor - Remote Controlle	ur		DC1	2V : Wired Type (G/	\/FA\		
	Indoor - Remote Controlle				ireless Type (GAL/F			
	MCA	A			1	AL)		
	Fan Motor	F.L.A.	0	.33	0.43		0.52	
	Fan Motor Output	W		30		15	70	
	Airflow (Lo-M1-M2-Hi) or	DRY (CFM)	320-350	0-390-425 530-7		-705	780-990	
	(Lo-Hi)	WET (CFM)				-635	700-890	
Indoor Unit	Sound Pressure Level				100 000			
	(Lo-M1-M2-Hi) or (Lo-Hi)	dB(A)	36-38	-41-43	39-45		46-49	
	External Finish Color		Munaall Na O	.70Y 8.59/0.97	l	uncell No. 2 4V 7 7/	<u> </u>	
	External Finish Color	W: In.		39		unsell No. 3.4Y 7.7/ -1/8	66-1/8	
	Dimension Unit	D: In.	<u> </u>	99	9-1/4	-1/0	00-1/6	
	Dimension Unit	H: In.			13-3/8			
	Weight Unit	Lbs.	<del>                                     </del>	)F		53	62	
		i	35			) <u>s</u>	02	
	Field Drain Pipe Size I.D.	ln.	13/16					
	MCA	Α	-	13	18 25		25	
	MOCP	Α	15	20	30		40	
	Fan Motor	F.L.A.	0.	.35		0.75		
	Fan Motor Output	W		40	75			
		Model (Type)		DC In	verter-driven Twin I	Rotary		
	Compressor	R.L.A		12				
		L.R.A.		14		17	7.5	
	Airflow	CFM	1,	200		1,940		
Outdoor Unit	Refrigerant Control		Linear Expansion Valve			ve		
	Sound Pressure Level (Cooling) *1	dB(A)	4	16	48			
	External Finish Color		Munsell No. 3Y 7.8/1.1					
	External Fillion Color	W: In.	31	-1/2	101100111101 01 7.071	37-3/8		
	Dimensions	D: In.		+ 7/8		13 + 1-3/16		
	Difficiololis	H: In.						
	Weight	Lbs.	90	23-5/8 37-1/8 90 97 163				
Remote Controller	Туре	LUO.	i	GA/FA = Wired; GAL/	FAL = Wireless (Loc		it)	
	Туре				R410A			
Refrigerant	Charge	Lbs., Oz.	2, 14	3, 12		6		
	Oil	Type (Fl. Oz.)		56 (20)		MEL56 (28)		
	Gas Side O.D.	Τ γρο (Γ Ι. ΟΖ.)	-	/2		5/8		
Refrigerant Pipe		⊢ In.			-			
	Liquid Side O.D.	+	1	/4	L	3/8		
Refrigerant Pipe	Height Difference (Max.)	Ft.			100			
Length	Length (Max.)	1	1	00		165		

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

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

<sup>\*1</sup> 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).

<sup>\*2</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.



# P-SERIES Specifications







GA/FA = Wired controller GAL/FAL = Wireless controller BS = Seacoast Protection

	BS = Seacoast Prot	33.1011					
Model Name	Indoo	r Unit	PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL	
Would Name	Outdoor Unit		PUZ-A18NHA PUZ-A18NHA-BS	PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS	
	Rated Capacity	Btu/h	18,000	24,000	30,000	34,200	
	Capacity Range	Btu/h	8,000-18,000	12,000-24,000	12,000-30,000	12,000-34,200	
Oneline #4	Total Input	W	2,240	2,650	4,400	5,030	
Cooling *1	Energy Efficiency	SEER	14.1	13.5	13	13.1	
	Moisture Removal	Pints/h	4.8	4.7	8.1	7.1	
	Sensible Heat Factor		0.70	0.78	0.70	0.77	
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	
Heating at 47° F *2	Capacity Range	Btu/h	8,000-20,000	12,000-28,000	12,000-34,000	12,000-38,000	
	Total Input	W	2,130	2,570	3,660	3,610	
	HSPF (Region IV)	Btu/h/W	8.3	8	.5	8.3	
Heating at 17° F *3	Capacity	Btu/h	13,000	16,000	23,000	25,000	
nealing at 17° F "3	Total Input	W	1.670	2,200	3.050	3,070	
Power Supply	Phase, Cycle, Voltage			1 Phase, 60Hz, 2	208/230V *4		
rowei Supply	Breaker Size	Α	15	25		30	
	Indoor - Outdoor S1-S2			AC 208/2			
Voltago	Indoor - Outdoor S2-S3			DC24			
Voltage	Indoor - Remote Controller			DC12V : Wired T			
	Indoor - Remote Controller			Wireless Type	(GAL/FAL)		
	MCA	A		1			
	Fan Motor	F.L.A.	0.33	0.	43	0.52	
	Fan Motor Output	W	30	4	5	70	
	Airflow (Lo-M1-M2-Hi) or	DRY (CFM)	320-350-390-425	530	-705	780-990	
	(Lo-Hi)	WET (CFM)	290-315-350-380	480	-635	700-890	
	Sound Pressure Level	† ` ´ ´		ì			
Indoor Unit	(Lo-M1-M2-Hi) or (Lo-Hi)	dB(A)	36-38-41-43	39	-45	46-49	
indoor offic	External Finish Color		Munsell No. 0.70Y 8.59/0.97		Munsell No. 3.4Y 7.7/0	8	
	External Fillion Golds	W: In.	39	55.	1/8	66-1/8	
	Dimension Unit	D: In.	39	9-1/4		00-1/0	
	Difficusion offic	H: In.	<u> </u>	13-3/			
	Weight Unit	Lbs.	35		<u>3</u>	62	
	Field Drain Pipe Size I.D.	In.	33	13/10		02	
	MCA	Α	13	18	Ì	25	
	MOCP	A	20	30		40	
	Fan Motor	F.L.A.	0.35	30	0.75	40	
	Fan Motor Output	W F.L.A.		0.75			
	Fair Wotor Output	<del></del>	40	40 75			
		Model (Type)		DC Inverter-driven Twin Rotary			
	Compressor	R.L.A.		12			
		L.R.A.		14		17.5	
	Airflow	CFM	1,200	<u> </u>	1,940		
	Refrigerant Control			Linear Expans			
Outdoor Unit	Defrost Method			Reverse	Cycle		
	Sound Pressure Level (Cooling) *1	JD(A)	46		48		
	Sound Pressure Level (Heating) *2	dB(A)	47	50			
		1	+	Munaali Ni- O	V 7 0/1 1		
	External Finish Color	I W. In	21.1/0	Munsell No. 3			
	Dimensions	W: In.	31-1/2	-	37-3/8		
	Dimensions	D: In.	13 + 7/8	<del>                                     </del>	13 + 1-3/16		
	Weight	H: In.	23-5/8	37-1/8			
Damata Cantinii	Weight	Lbs.	99 CA/FA: Wired Con	Lucillani CAL /EAL NA/	165	h ladaan Ha'll	
Remote Controller	Туре	-	GA/FA: Wired Con	ntroller; GAL/FAL: Wireles		n maoor unit)	
	Туре	T		R410			
Refrigerant	Charge	Lbs., Oz.	3, 12	ļ	6		
	Oil	Type (Fl. Oz.)	MEL56 (20)	ļ	MEL56 (28)		
Refrigerant Pipe	Gas Side O.D.	In.	1/2	ļ	5/8		
nomyorant ripo	Liquid Side O.D.	ļ "".	1/4		3/8		
Refrigerant Pipe Length	Height Difference (Max.)	Ft.		100			
nemgeram ripe Length	Length (Max.)		100		165		
Connection Method	<del>                                     </del>	1		Elored/FI	arod		
Connection Method	Indoor/Outdoor		Flared/Flared				

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

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

<sup>\*1</sup> 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).

<sup>\*2</sup> Rating conditions (heating)-Indoor: D.B.  $70^{\circ}$  F ( $21^{\circ}$  C), W.B.  $60^{\circ}$  F ( $16^{\circ}$  C); Outdoor: D.B.  $47^{\circ}$  F ( $8^{\circ}$  C), W.B.  $43^{\circ}$  F ( $6^{\circ}$  C).

<sup>\*3</sup> Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8.3° C), W.B. 15° F (-9° C).

<sup>\*4</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

# CEILING-RECESSED SERIES

PLA Indoor Unit (Same indoor unit is used for both cooling and heat pump systems)



#### 12,000 to 42,000 Btu/h Capacity

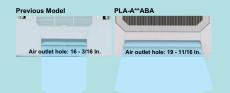
If there's at least a foot of space above your ceiling, the PLA-Series is for you. These models combine powerful cooling and heating in an elegant cassette design that recesses into the ceiling. When installed, the attractive, flush-mounted grille is all you see. With its ventilated air intake capability and four-way discharge airflow, the PLA-Series gives you plenty of comfortable airflow options. There are even branch duct knockouts for either a round or a rectangular duct, allowing for the air conditioning of a smaller adjacent space.

# Auto Cooling/heating Changeover

Heat pump systems will automatically switch back and forth between cooling and heating to compensate for temperature fluctuations in a room.

### Wider Air Stream

Longer air outlets deliver wider air streams for improved air distribution and energy savings. This feature means quieter air delivery with fewer drafts and great overall cooling and heating coverage.



#### Independent Vane Motor Control

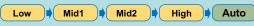
Each of the four vanes can be set by the wired remote controller to operate independently to match the room layout. Specific vane settings include five fixed directions plus swing.





### Auto Fan Speed Feature

Choose from four set fan speeds, or auto fan speed, to ensure faster achievement of room temperature. Auto fan speed mode allows the fan to adjust its speed based on the degree of differential between set point and room temperature.



# Auto Wave Feature (Heating mode)

In the Heating mode, each air outlet vane operates independently, distributing warm air in multiple directions for the best in room heating.



## i-see<sup>™</sup> Sensor Accessory

In addition to the return air temperature, the PLA-A\*\*BA four-way ceiling cassette with the field installed i-see sensor measures the floor temperature in real time, observing the room vertically for better management



of sensible temperature (temperature felt by occupant). The i-see sensor measures the infrared rays generated from the surrounding wall and floor surface at an angle of 360°. The infrared ray energy is converted into a temperature value. The i-see sensor rotates 90° slowly – in five-second intervals – for correct measurement of temperature to cover the full floor space. When combined with the auto

fan speed mode, air can be directed to the farthest corners of the room for enhanced temperature coverage.





i-see sensor detail

#### **UNIT FEATURES:**

- Built-in drain lift mechanism for condensate removal; lifts up to 33-7/16 in. with built-in fail safe sensor
- Easy to install with access to suspension rods through corner pockets
- Easy to maintan, long-life filter which is washable and provides about 2,500 hours of use before cleaning is needed, depending on use







#### BS = Seacoast Protection

	BS = Seacoast Frotection	711								
	Indoor Unit		PLA-A12BA	PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA		
Model Name	Outdoor Unit		PUY-A12NHA PUY-A12NHA-BS	PUY-A18NHA PUY-A18NHA-BS	PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS	PUY-A42NHA PUY-A42NHA-BS		
	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	35,000	42,000		
	Capacity Range	Btu/h	6,000-12,000	8,000-18,000	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000		
Cooling *1	Total Input	W	1,260	1,940	2,500	4,100	4,500	4,600		
Cooling	Energy Efficiency	SEER	13.5	14.2	-	13.6	14.2	14.4		
Power Supply	Moisture Removal	Pints/h	1.7	3.0	5.1	7.2	8.1	10.9		
	Sensible Heat Factor		0.84	0.81	0.76	0.73	0.74	0.71		
Dower Cupply	Phase, Cycle, Voltage				1 Phase, 60l	Hz, 208/230V *2				
Power Supply	Breaker Size	Α	15	5	25		30			
	Indoor - Outdoor S1-S2 Indoor - Outdoor S2-S3			AC 208/230V						
Voltage				DC24V						
	Indoor - Remote Controller		DC12V : Wired Type							
	MCA	Α	1					2		
	Fan Motor	F.L.A.		0.	j1		1.00			
	Fan Motor Output	W	50			120				
		DRY (CFM)	390-420-460-530	420-490-570-640		490-570-640-740	710-810-920-1,060	780-880-990-1,090		
	Airflow (Lo-M1-M2-Hi)	WET (CFM)	350-390-420-490	390-460-530-600		460-530-600-710	670-770-880-1,030	740-850-950-1,060		
	External Pressure	Pa	0							
Indoor Unit	Sound Pressure Level (Lo-M1-M2-Hi)	dB(A)	27-28-29-31 28-29-31-32 28-30-32-34		32-34-37-40	34-36-39-41				
	External Finish Color (Panel)			Munsell No. 6.4Y 8.9/0.4						
		W: In.			33-1/1	6 (37-3/8)				
	Dimension Unit (Panel)	D: In.			33-1/1	6 (37-3/8)				
Ĺ		H: In.		10-3/16	6 (1-3/8)		11-3/4	(1-3/8)		
	Weight Unit (Panel) Lbs.		49 (13)		5 <sup>-</sup>	1 (13)	55	(13)		
	Field Drain Pipe Size O.D.	In.			1	-1/4	,			
	MCA	Α	13 18 25		5	26				
	MOCP	Α	15	15 20 30 40		40				
	Fan Motor	F.L.A.	0.3	35		0.75		0.4 + 0.4		
	Fan Motor Output	W	4(	)		75		86 + 86		
		Model		DC In	verter-driven Twin Rotary			Inverter-driven		
	Compressor	(Type)	DC Inverter-driven Twin Rotary				Scroll			
	Compressor	R.L.A.			12			20		
		L.R.A.		14	17		5	27.5		
Outdoor Unit	Airflow	CFM	1,2	00	L	1,940	3,530			
	Refrigerant Control		Line		Linear Exp	Linear Expansion Valve				
	Sound Pressure Level (Cooling) *1	dB(A)	46			48 5		51		
	External Finish Color				Munsell N	o. 3Y 7.8/1.1				
		W: In.	31-	1/2		37-3/8				
	Dimensions	D: In.	13 +	7/8		13 +	1-3/16			
		H: In.	23-			37-1/8		53-1/8		
	Weight	Lbs.	90	97		163		258		
Remote Controller	Туре			W	ired Remote Contro	oller Packaged with Gr	ille			
	Туре				R	410A				
Refrigerant	Charge	Lbs., Oz.	2, 14	3, 12		6		10		
	Oil	Type (Fl. Oz.)	MEL56	6 (20)		MEL56 (28)		FV50S (45)		
Refrigerant Pipe	Gas Side O.D.	In.	1/				/8			
,	Liquid Side O.D.		1/-	4		3.	/8			
Refrigerant Pipe	Height Difference (Max.)	Ft.				100				
Length	Length (Max.)		10	0		10	65			
Connection Method	Indoor/Outdoor				Flare	ed/Flared				
IOTEO T. I	ADI 040/040									

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

<sup>\*1</sup> 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 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.









#### BS = Seacoast Protection

	BS = Seacoast Protect	tion						
	Indoor Un	it	PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA	
Model Name	Outdoor U	nit	PUZ-A18NHA	PUZ-A24NHA	PUZ-A30NHA	PUZ-A36NHA	PUZ-A42NHA	
	Outuooi o	IIIL	PUZ-A18NHA-BS	PUZ-A24NHA-BS	PUZ-A30NHA-BS	PUZ-A36NHA-BS	PUZ-A42NHA-BS	
	Rated Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000	
	Capacity Range	Btu/h	8,000-18,000	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000	
0	Total Input	W	1,940	2,500	4,100	4,500	4,600	
Cooling *1	Energy Efficiency	SEER	14.2	1;	3.6	14.2	14.4	
	Moisture Removal	Pints/h	3.0	5.1	7.2	8.1	10.9	
	Sensible Heat Factor		0.81	0.76	0.73	0.74	0.71	
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	45,000	
	Capacity Range	Btu/h	8,000-20,000	12,000-28,000	12,000-34,000	12,000-38,000	18.000-48.000	
Heating at 47° F *2	Total Input	W	1,900	2,570	3,370	3,300	4,450	
Heating at 17° F *3 Power Supply	HSPF (Region IV)	Btu/h/W	9.8	8.5	8.7	9.		
	Capacity	Btu/h	13,000	16,000	23,000	25,000	30,000	
Heating at 17° F *3	Total Input	I W	1.590	2.200	3.050	3.070	4,300	
	Phase, Cycle, Voltage	, <sub>'</sub> '	1,550		se, 60Hz, 208/230V *4	0,070	, <del>1</del> ,000	
Power Supply	Breaker Size A 15 25 30				30			
	Indoor - Outdoor S1-S2	<u> </u>	15	23	AC 208/230V			
Voltago	Indoor - Outdoor S2-S3							
Voltage			DC24V					
	Indoor - Remote Controller	ΙΛ		U	C12V : Wired Type	· .		
	MCA	A		2				
	Fan Motor	F.L.A.		0.51			00	
	Fan Motor Output	W		50		12		
	Airflow (Lo M1 M2 Hi)	DRY (CFM)	420-490-5	70-640	490-570-640-740	710-810-920-1,060	780-880-990-1,090	
	Airflow (Lo-M1-M2-Hi)	WET (CFM)	390-460-5	30-600	460-530-600-710	670-770-880-1,030	740-850-950-1,060	
	External Pressure	Pa			0	•		
Indoor Unit	Sound Pressure Level	i			28-30-32-34		34-36-39-41	
	(Lo-M1-M2-Hi)	dB(A)	28-29-3	1-32	20-30-32-34	32-34-37-40	34-30-39-41	
	External Finish Color (Panel)	<u>'</u>		Mun	sell No. 6.4Y 8.9/0.4			
	W: In.				33-1/16 (37-3/8)		-	
	Dimension Heit (Dens)							
	Dimension Unit (Panel)	D: In.	ļ		33-1/16 (37-3/8)	14.0/4	(4. 0.(0)	
		H: In.	10-3/16 (1-3/8)				(1-3/8)	
	Weight Unit (Panel)	Lbs.	49 (13) 51 (13)			55 (13)		
	Field Drain Pipe Size O.D.	ln.			1-1/4			
	MCA	Α	13	18	2	25	26	
	MOCP	Α	15	30		40		
	Fan Motor	F.L.A.	0.35		0.75		0.4 + 0.4	
	Fan Motor Output	l w	40		75		86 + 86	
				DC Inverter-driven		Inverter-dr		
		Model (Type)		Scroll				
	Compressor	R.L.A	12				20	
		L.R.A.	14			7.5	27.5	
	Airflow	CFM	1,200 1,940			1.0		
		CLIM	1,200			3,530		
Outdoor Unit	Refrigerant Control		Linear Expansion Valve					
	Defrost Method	1		1	Reverse Cycle		1	
	Sound Pressure Level	dB(A)	46		48		51	
	(Cooling) *1	( )	·-			40		
	Sound Pressure Level	dB(A)	47		50	55		
	(Heating) *2	ub(ri)	71		30		33	
	External Finish Color			Mu	nsell No. 3Y 7.8/1.1			
		W: In.	31-1/2			-3/8		
	Dimensions	D: In.	13 + 7/8			1-3/16		
		H: In.	23-5/8	1	37-1/8		53-1/8	
	Weight	Lbs.	99	<del>-</del>			260	
D	i	LUO.	33	145 15 1		U. 0.20.	200	
Remote Controller	Туре			Wired Remote	Controller Packaged wi	tn Grille		
	Туре				R410A			
Refrigerant	Charge	Lbs., Oz.	3, 12		6		10	
J	Oil	Type (Fl. Oz.)	MEL56 (20)	İ	MEL56 (28)		FV50S (45)	
	Gas Side O.D.	1 '' '	1/2	i		/8		
Refrigerant Pipe	Liquid Side 0.D.	┥ In.	1/4	<del>1</del>		/8		
		+	1/4			70		
Refrigerant Pipe Length	Height Difference (Max.) Length (Max.)	Ft.	100	1	100	25		
	<del>                                     </del>	I .	100			65		
	Indoor/Outdoor		I		Flared/Flared			
Connection Method	illuool/outuool							

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

<sup>\*1</sup> 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).

<sup>\*2</sup> 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 (6.1° C).

<sup>\*3</sup> 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).

<sup>\*4</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

# PCA CEILING-SUSPENDED SERIES



PCA Indoor Unit (Same indoor unit is used for both cooling and heat pump systems)

#### 24,000 to 42,000 Btu/h Capacity

Powerful cooling and heating performance is what the PCA-Series is all about. This ceiling-suspended unit delivers enough cold or hot air to make any space more comfortable. Manually-adjusted over-sized swing louvers direct the airflow left or right, quietly covering the entire space. Accessory filters are available to increase efficiency and increase the time span between service calls. The PCA-Series is perfect for restaurants, kitchens, and other larger commercial spaces where ovens and other equipment add to an already taxed cooling or heating load.

# Control Airflow Angle for Better Coverage

With the wired remote controller, four different airflow positions can be set.

When using the *Autovane* during cooling, the angle self-adjusts into a horizontal position to circulate cold air more effectively. During heating, the vane forces the hot air downward toward the floor, where it will rise and circulate, keeping your room comfortable from top to bottom.

### Warm Air with No Drafts

Mr. Slim P-Series heat pumps use our *hot-start technology* to provide warmth from the beginning – without drafts.





All Mr. Slim PCA-Series models come with a wired remote controller that puts you in command of your personal comfort. The wireless controller is available in an accessory kit.

## Bring Outside Air In

Ducting can be installed with minimal on-site work to bring in outside air, creating a healthier indoor environment.



# Automatic Cooling/heating Changeover (Heat Pumps)

When set to *Auto* mode, heat pump systems will automatically switch back and forth between cooling and heating operation to compensate for indoor and outdoor temperature fluctuations. This feature means total hands-free comfort and efficient air conditioning of your space.









#### BS = Seacoast Protection

	bo = Seacoast Protection								
	Indoo	r Unit	PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA			
Model Name	Outdo	or Unit	PUY-A24NHA	PUY-A30NHA	PUY-A36NHA	PUY-A42NHA			
	Outuo	or offic	PUY-A24NHA-BS	PUY-A30NHA-BS	PUY-A36NHA-BS	PUY-A42NHA-BS			
	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000			
	Capacity Range	Btu/h	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000			
Cooling *1	Total Input	W	2,500	4,100	4,630	5,070			
Cooling *1	Energy Efficiency	SEER	13.4	13.0	13.1	13.8			
	Moisture Removal Pints/h		5.4	8.3	8.2	11.7			
	Sensible Heat Factor	•	0.75	0.69	0.74	0.69			
D 0 1	Phase, Cycle, Voltage			1 Phase, 60	Hz, 208/230V *2				
Power Supply	Breaker Size	Α	25		30				
	Indoor - Outdoor S1-S2	1		AC 2	208/230V				
Voltage	Indoor - Outdoor S2-S3			DC24V					
•	Indoor - Remote Controller			DC12V	: Wired Type				
	MCA	Α		1					
	Fan Motor	F.L.A.	0	.53	0.69				
	Fan Motor Output	i w		70		90			
	·	DRY (CFM)	495-530	495-530-565-635		40-810-880			
	Airflow (Lo-M1-M2-Hi)	WET (CFM)	445-480-510-570		635-670-730-790				
Indoor Unit	Sound Pressure Level (Lo-M1-M2-Hi)	dB(A)	37-39	37-39-41-43 40-4					
	External Finish Color	•		Munsell No.	0.70Y 8.59/0.97				
		W: In.			1-9/16				
	Dimension Unit	D: In.			26-3/4				
		H: In.	8-:	5/16		10-5/8			
	Weight Unit	Lbs.		75					
	Field Drain Pipe Size O.D.	ln.		75 82					
	MCA	A	18 25			26			
	MOCP	A	30 40		20				
	Fan Motor	F.L.A.	- 55	0.75					
	Fan Motor Output	W		75		0.4 + 0.4 86 + 86			
	·	Model (Type)	D	C Inverter-driven Twin Rota	ary	Inverter-driven Scroll			
	Compressor	R.L.A.		12		20			
		L.R.A.	14	17.5		27.5			
Outdoor Unit	Airflow	CFM		1,940		3,530			
	Refrigerant Control			Linear Ex	pansion Valve				
	Sound Pressure Level (Cooling	ı) *1 dB(A)	48 51						
	External Finish Color	•		Munsell No. 3Y 7.8/1.1					
		W: In.	37-3/8						
	Dimensions	D: In.		13 -	+ 1-3/16				
	- Simonoreno	H: In.		37-1/8		53-1/8			
	Weight	Lbs.		163		258			
Remote Controller	Туре	1200.			er (Located with Indoor Un				
tomote controller	Туре				R410A	.,			
Refrigerant	Charge	Lbs.	1	6		10			
. g-:	Oil	Type (Fl. Oz.)	1	MEL56 (28)		FV50S (45)			
	Gas Side O.D.		1	250 (20)	5/8				
Refrigerant Pipe	Liquid Side O.D.	In.			3/8				
	Height Difference (Max.)		1	1	100				
Refrigerant Pipe Length	Length (Max.)	Ft.			165				
Connection Method	Indoor/Outdoor		1		ed/Flared				
JOHNSONOH WIEUTUU	maoor/ outdoor		I	Fiali	our i lai ou				

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

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

<sup>\*1</sup> 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).

<sup>\*2</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.







#### BS = Seacoast Protection

	Indo	or Unit	PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA		
Model Name	Outdoor Unit		PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS	PUZ-A42NHA PUZ-A42NHA-BS		
	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000		
	Capacity Range	Btu/h	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000		
N P #4	Total Input	W	2,500	4,100	4,630	5,070		
Cooling *1	Energy Efficiency	SEER	13.4	13	13.1	13.8		
	Moisture Removal Pints/h		5.4	8.3	8.2	11.7		
	Sensible Heat Factor		0.75	0.69	0.74	0.69		
	Rated Capacity	Btu/h	26,000	32,000	37,000	45,000		
leating at 47° F *2	Capacity Range	Btu/h	12,000-28,000	12,000-34,000	12,000-38,000	18,000-48,000		
icating at 47 1 2	Total Input	W	2,570	3,390	3,490	4,850		
	HSPF (Region IV)	Btu/h/W	8.5	8.5	8.3	8.5		
Heating at 17° F *3	Capacity	Btu/h	16,000	23,000	25,000	30,000		
realing at 17°F 3	Total Input	W	2,200	3,050	3,070	4,300		
Power Supply	Phase, Cycle, Voltage			1 Phase, 60	Hz, 208/230V *4			
-ower supply	Breaker Size	A	25		30 08/230V			
	Indoor - Outdoor S1-S2							
Voltage	Indoor - Outdoor S2-S3				C24V			
	Indoor - Remote Controller			DC12V :	Wired Type 1			
	MCA Fan Motor	F.L.A.	0	0.53		0.69		
	Fan Motor Output	W		0		90		
	•	DRY (CFM)		-565-635		D-810-880		
	Airflow (Lo-M1-M2-Hi)	WET (CFM)		-510-570		0-730-790		
	Sound Level	dB(A)	37_30.	-41-43	40-4	1-43-45		
ndoor Unit	(Lo-M1-M2-Hi)	UD(A)	37-39			1-43-43		
	External Finish Color	T			0.70Y 8.59/0.97			
	D'	W: In.			-9/16			
	Dimension Unit	D: In. H: In.	0.5		6-3/4	)-5/8		
	Weight Unit	Lbs.		8-5/16 75		82		
	Field Drain Pipe Size O.D.	In.	<u>'</u>	1		02		
	MCA	A	18	· ·		26		
	MOCP	IA	30	-	40	20		
	Fan Motor	F.L.A.		0.75		0.4 + 0.4		
	Fan Motor Output	W		75		86 + 86		
	0	Model (Type)	D	DC Inverter-driven Twin Rotary		Inverter-driven Scroll		
	Compressor	R.L.A.		12		20		
		L.R.A.	14		7.5	27.5		
	Airflow	CFM		1,940		3,530		
Outdoor Unit	Refrigerant Control	•		Linear Ex	pansion Valve			
	Defrost Method			Reverse Cycle				
	Sound Level at Cooling *1	dB(A)		48		51		
	Sound Level at Heating *2	dB(A)		50		55		
	External Finish Color			Munsell N	lo. 3Y 7.8/1.1			
		W: In.		3	7-3/8			
	Dimensions	D: In.			- 1-3/16	53-1/8		
		H: In.		37-1/8				
	Weight	Lbs.		165		260		
lemote Controller	Type				r (Located with Indoor Unit)			
)_f	Type	Tiba			410A	40		
Refrigerant	Charge	Lbs.		6		10		
	Oil	Type (Fl. Oz.)		MEL56 (28)	E/0	FV50S (45)		
Refrigerant Pipe	Gas Side O.D. Liquid Side O.D.	⊢ln.			5/8 3/8			
	Height Difference (Max.)							
		_ Ft.	100					
Refrigerant Pipe Length	Length (Max.) 165							

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

Specifications are subject to change without notice.

 $\label{limited warranty} \ \ | \ \ \text{Six-year warranty on compressor. One-year warranty on parts.}$ 

<sup>\*1</sup> 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).

<sup>\*3</sup> 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).

<sup>\*4</sup> Indoor units receive power from outdoor units through field-supplied interconnected wiring.

#### GENERAL SPECIFICATIONS

#### MS/MU/MSY/MUY/MUZ/MSZ/MXZ RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F D.B. , 71° F W.B. (MS/MSY/MSZ) / 75° F W.B. (MXZ)	115° F D.B.
	MINIMUM	67° F D.B., 57° F W.B.	67° F D.B. (MS) / 14° F D.B. (MSY/MSZ/MXZ)
	MAXIMUM	80° F D.B., 67° F W.B.	75° F D.B., 65° F W.B.
HEATING	MINIMUM	70° F D.B., 60° F W.B.	14º F D.B.; 13º F W.B. (MSY/MSZ) / 12º F W.B. (MXZ)

<sup>\*</sup> MS units operate at intake air temperature down to 10° F with the addition of an ICM-326HM-1 low temperature control.

#### GENERAL SPECIFICATIONS

#### PKA/PCA/PLA/PUY-PUZ-A RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F D.B., 71° F W.B.	115° F D.B.
COOLING	MINIMUM	67° F D.B., 57° F W.B.	0° F D.B.*
HEATING	MAXIMUM	80° F D.B., 67° F W.B.	70° F D.B., 59° F W.B.
TIEATING	MINIMUM	70° F D.B., 60° F W.B.	12º F D.B., 10º F W.B.

<sup>\*</sup> With wind baffle installed. Without wind baffle installed, the minimum temperature will be 23° F D.B.

#### OPTIONAL ACCESSORIES

MAC-397IF-E M-Series Inverter Units MA and contact terminal interface MAC-399IF-E M-Series Inverter Units M-NET control adapter for Mr. Slim MSY and MSZ models MAC-821SC-E M-Series Inverter Units Centralized on/off remote controller or up to 8 units (Requires MAC-397II PAC-725AD P-Series Connector for CNS1/multiple remote controller adapter and duct far PAC-715AD P-Series Connector for CNS2 (For remote on/off) PAC-SE41TS-E P-Series Remote temperature sensor for indoor units PAC-SA1ME-E PIA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA More	
MAC-397IF-E M-Series Inverter Units MA and contact terminal interface  MAC-399IF-E M-Series Inverter Units M-NET control adapter for Mr. Slim MSY and MSZ models  MAC-821SC-E M-Series Inverter Units Centralized on/off remote controller for up to 8 units (Requires MAC-397II  PAC-725AD P-Series Connector for CN51/multiple remote controller adapter and duct far  PAC-715AD P-Series Connector for CN32 (For remote on/off)  PAC-SE41TS-E P-Series Remote temperature sensor for indoor units  PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units  PAC-SF40RM-E P-Series Remote operation adapter: display and on/off  PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA More	
MAC-399IF-E M-Series Inverter Units M-NET control adapter for Mr. Slim MSY and MSZ models  MAC-821SC-E M-Series Inverter Units Centralized on/off remote controller for up to 8 units (Requires MAC-397II  PAC-725AD P-Series Connector for CN51/multiple remote controller adapter and duct far  PAC-715AD P-Series Connector for CN32 (For remote on/off)  PAC-SE41TS-E P-Series Remote temperature sensor for indoor units  PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units  PAC-SF40RM-E P-Series Remote operation adapter: display and on/off  PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA More	
MAC-821SC-E M-Series Inverter Units Centralized on/off remote controller for up to 8 units (Requires MAC-397II PAC-725AD P-Series Connector for CN51/multiple remote controller adapter and duct far PAC-715AD P-Series Connector for CN32 (For remote on/off) PAC-SE41TS-E P-Series Remote temperature sensor for indoor units PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA More	
PAC-725AD P-Series Connector for CN51/multiple remote controller adapter and duct far PAC-715AD P-Series Connector for CN32 (For remote on/off) PAC-SE41TS-E P-Series Remote temperature sensor for indoor units PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	
PAC-715AD P-Series Connector for CN32 (For remote on/off) PAC-SE41TS-E P-Series Remote temperature sensor for indoor units PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	Controller
PAC-SE41TS-E P-Series Remote temperature sensor for indoor units PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	
PAC-SA1ME-E PLA-A**ABA i-see Sensor corner panel for PLA-ABA indoor units PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	
PAC-SF40RM-E P-Series Remote operation adapter: display and on/off PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	
PAC-SF80MA-E P-Series M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Mor	
	dels
PAC-SK52ST P-Series Control / service tool	40.0
PAR-21MAA-G Use for wired M-Series Controller Deluxe MA remote controller (Requires MAC-397IF-E)	
PAR-SL99B-E PCA Wireless remote controller kit for PCA suspended units	
PAR-FL32MA PLA-ABA Wireless remote controller for PLA-ABA units (Requires signal receives the controller for PLA-ABA units (Requires th	ver PAR-SA9FA-F
PAR-SA9FA-E PLA-ABA Wireless signal receiver for PLA-ABA units (For PAR-FL32MA control	
PZ-41SLB-E Lossnay Lossnay ERV remote controller for LGH ERV control	,
Low Ambient	
WB-PA1 P-Series Wind baffle (1 piece) PUY/Z-A12/A18	
Wind haffle (1 piace) PLV/7-A24/A20/A26/A42 (42 installation requi	ires 2 pieces):
WB-PA2 P-Series PUZ-HA36NA (Requires 2 pieces)	,
ICM-326HM-1 M-Series Non-Inverter units Low ambient head pressure controller	
Filters	
MAC-2300FT M-Series Indoor Unit - A24 Anti-allergen enzyme filter	
MAC-415FT-E M-Series Indoor Unit - A09/A12/A15/A17 Anti-allergen enzyme filter	
PAC-SE81KF-E PCA Indoor Units High-efficiency filter element	
PAC-SH59KF-E All PLA-ABA Models High-efficiency (MERV 10) filter element (Requires PAC-SH53TM-E	multi-function
casement)	
Pumps  Ott 700,000  Discrete Pumps	
S11730-230 P-Series Mini-condensation pump: 230V	
SI3100-115 MS-Series Mini-condensation pump: 115V	
Sl3100-230 MSY/Z-Series Mini-condensation pump: 230V	
Miscellaneous	
TAZ-MS303 M-Series and P-Series 3-pole disconnect switch; 30A, 600V; turns off power between indoor	r and outdoor units
CWMB1 MU and PU outdoor units Condensing unit wall mounting brackets: painted steel	n
PAC-SH53TM-E All PLA-ABA Models Multi-function casement (High-efficiency filter element not included	1)
PAC-SH51SP-E         All PLA-ABA Models         Air outlet shutter plates (1 set = 2 pieces)           PAC-SG58SG-E         P-Series         Air outlet quide (1 piece) PUY/Z-A12/A18	
Air outlet quide (1 piece) PLIV/7 A24/A20/A26/A42 (A2 installation requ	uires 2 nieces):
PAC-SG59SG-E P-Series PUZ-HA36NA (Requires 2 pieces)	211 00 Z p10000),
PAC-SG61DS-E P-Series Drain socket	
PAC-SG61DS-E         P-Series         Drain socket           PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan	
PAC-SG63DP-E PUZ(Y)-A12/18 Drain pan	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"           ULTRILITE2         PUZ(Y)-A24/30/36/42         Condensing unit mounting pad: 24" x 42" x 3"	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"           ULTRILITE2         PUZ(Y)-A24/30/36/42         Condensing unit mounting pad: 24" x 42" x 3"           Port Adapters & Piping Accessories	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"           ULTRILITE2         PUZ(Y)-A24/30/36/42         Condensing unit mounting pad: 24" x 42" x 3"           Port Adapters & Piping Accessories           MAC-A454JP-E         MXZ-Series         Adapter: 3/8" x 1/2"	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"           ULTRILITE2         PUZ(Y)-A24/30/36/42         Condensing unit mounting pad: 24" x 42" x 3"           Port Adapters & Piping Accessories           MAC-A454JP-E         MXZ-Series         Adapter: 3/8" x 1/2"           MAC-A455JP-E         MXZ-Series         Adapter: 1/2" x 3/8"	
PAC-SG63DP-E         PUZ(Y)-A12/18         Drain pan           PAC-SG64DP-E         PUZ(Y)-A24/30/36/42 and PUZ-HA36         Drain pan           RCMKP1CB         M and P Series Wireless         Lockdown bracket for remote controller           ULTRILITE1         All M-Series and PUZ(Y)-A12/18         Condensing unit mounting pad: 16" x 36" x 3"           ULTRILITE2         PUZ(Y)-A24/30/36/42         Condensing unit mounting pad: 24" x 42" x 3"           PORT Adapters & Piping Accessories           MAC-A454JP-E         MXZ-Series         Adapter: 3/8" x 1/2"           MAC-A455JP-E         MXZ-Series         Adapter: 1/2" x 3/8"           MAC-A456JP-E         MXZ-Series         Adapter: 1/2" x 5/8"	

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

Pricing and specifications are subject to change without notice. Please consult your area sales manager or Mitsubishi Electric at 678-376-2900 for pricing and availability.

#### PKA/PLA/PUZ-HA RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	90° F D.B., 73° F W.B.	115° F D.B.
COOLING	MINIMUM	66° F D.B., 59° F W.B.	0° F D.B.*
HEATING	MAXIMUM	83° F D.B.	70° F D.B., 59° F W.B.
TEATING	MINIMUM	63° F D B	-13° F D B -13° F W B

<sup>\*</sup> With wind baffle installed. Without wind baffle installed, the minimum temperature will be 23° F D.B.

#### GENERAL SPECIFICATIONS

#### REFRIGERANT LINE LENGTH FLARE/FLARE

		Length	Height
Indoor Unit	Outdoor Unit	in feet	in feet
MS-A09WA	MU-A09WA	65	35
MS-A12WA	MU-A12WA	65	35
MSY-A15NA	MUY-A15NA	65	40
MSY-A17NA	MUY-A17NA	65	40
MSY-A24NA	MUY-A24NA	100	50
MSZ-A09NA	MUZ-A09NA	65	40
MSZ-A12NA	MUZ-A12NA	65	40
MSZ-A15NA	MUZ-A15NA	65	40
MSZ-A17NA	MUZ-A17NA	65	40
MSZ-A24NA	MUZ-A24NA	100	50
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA	MXZ-2A20NA	164	49*/33
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA, MSZ-A17NA, MSZ-A24NA	MXZ-3A30NA	230	49*/33
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA, MSZ-A17NA, MSZ-A24NA	MXZ-4A36NA	230	49*/33
PKA-A12GA (L)	PUY-A12NHA	100	100
PKA-A18GA (L)	Puy-a18nha, Puz-a18nha	100	100
PKA-A24FA (L)	Puy-a24nha, Puz-a24nha	165	100
PKA-A30FA (L)	Puy-a30nha, Puz-a30nha	165	100
PKA-A36FA (L)	Puy-a36nha, Puz-a36nha	165	100
PKA-A36FA (L)	PUZ-HA36NHA	265	100
PLA-A12BA	PUY-A12NHA	100	100
PLA-A18BA	Puy-a18nha, Puz-a18nha	100	100
PLA-A24BA	Puy-A24nha, Puz-A24nha	165	100
PLA-A30BA	Puy-a30nha, Puz-a30nha	165	100
PLA-A36BA	Puy-a36nha, Puz-a36nha	165	100
PLA-A36BA	PUZ-HA36NHA	265	100
PLA-A42BA	Puy-A42nha, Puz-A42nha	165	100
PCA-A24GA	Puy-a24nha, Puz-a24nha	165	100
PCA-A30GA	PUY-A30NHA, PUZ-A30NHA	165	100
PCA-A36GA	PUY-A36NHA, PUZ-A36NHA	165	100
PCA-A42GA	PUY-A42NHA, PUZ-A42NHA	165	100

<sup>\*49&#</sup>x27; applies to installations where the outdoor unit is installed below indoor unit.

#### REFRIGERANT TUBING SETS

Lineset Model Number	Tube Size (In.)	Length Ft.	Insul.	Use With Mitsubishi Electric Models
MLS143838-5	1/4 x 3/8	5	3/8"	Mr. Slim Ms-A09wa, Msz-A09na, Msz-A12na
MLS143838-6	1/4 x 3/8	6	3/8"	
MLS143838-10	1/4 x 3/8	10	3/8"	
MLS143838-15	1/4 x 3/8	15	3/8"	
MLS143838-30	1/4 x 3/8	30	3/8"	
MLS143838-50	1/4 x 3/8	50	3/8"	
MLS143838-65	1/4 x 3/8	65	3/8"	
MLS141238-15	1/4 x 1/2	15	3/8"	Mr. Slim MS-A12WA, MSY-A15NA, MSY-A17NA, MSZ-A15NA, MSZ-A17NA, PKA-A12GA(L), PKA-A18GA(L), PLA-A12BA, PLA-A18BA
MLS141238-30	1/4 x 1/2	30	3/8"	
MLS141238-50	1/4 x 1/2	50	3/8"	
MLS141238-65	1/4 x 1/2	65	3/8"	
MLS141238-100	1/4 x 1/2	100	3/8"	
MLS145838-15	1/4 x 5/8	15	3/8"	Mr. Slim MSY-A24NA, MSZ-A24NA
MLS145838-30	1/4 x 5/8	30	3/8"	
MLS145838-50	1/4 x 5/8	50	3/8"	
MLS145838-65	1/4 x 5/8	65	3/8"	
MLS145838-100	1/4 x 5/8	100	3/8"	
MPLS385838-10	3/8 x 5/8	10	3/8"	Mr. Slim PKA-A24FA(L), PKA-A30FA(L), PKA-A36FA(L), PLA-A24BA, PLA-A30BA, PLA-A36BA, PLA-A42BA, PCA-A24GA, PCA-A30GA, PCA-A43GA, PCA-A42GA
MPLS385838-15	3/8 x 5/8	15	3/8"	
MPLS385838-30	3/8 x 5/8	30	3/8"	
MPLS385838-50	3/8 x 5/8	50	3/8"	
MPLS385838-65	3/8 x 5/8	65	3/8"	
MPLS385838-100	3/8 x 5/8	100	3/8"	

#### LINE-HIDE™ LINESET COVER SYSTEM

- Available in four sizes 2-1/4", 3", 4" and 6" tubes
  Snap-on covers and a full selection of couplings, elbows,
  T-joints, caps, and more for any application, complex or simple
  High-quality PVC with UV inhibitors for outdoor service in all weather conditions



# Mr.SLIM.

Split-ductless A/C and Heat Pumps

Provides personalized comfort control for every room.









Mitsubishi Electric Shizuoka Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO), based on a review of quality warranties for the production of air-conditioning equipment. The plant also acquired environmental management system standard ISO 14001 certification.









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**HVAC Advanced Products Division** 

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\*Hyper-heating technology Patent Pending.

See complete warranty for terms, conditions, and limitations. A copy is available from Mitsubishi Electric.

Form No. MBROGEN-04-08-20M PD

For more information visit WWW.mrslim.com