





www.mrslim.com

# Mr. Slim<sup>®</sup> 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 extremely comfy. At Mitsubishi Electric HVAC Advanced Products Division comfort is all we think about, and our industry-leading 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 the conference room. 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.

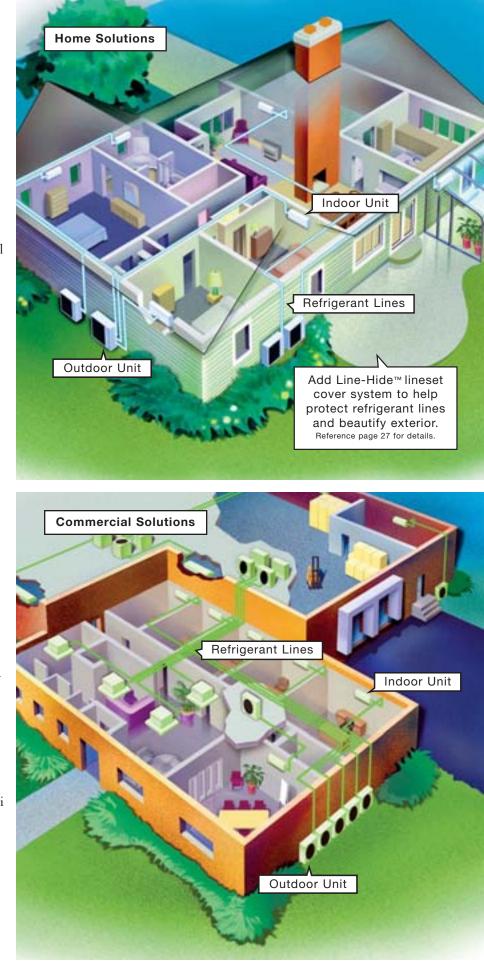


### What is Mr. Slim<sup>®</sup> Splitductless Technology?

For decades split-ductless air-conditioning 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. These units are easily connected by refrigerant lines running through a small three-inch opening in the wall or ceiling. The outdoor unit cycles the refrigerant through the lines to and from the indoor unit, where the air is conditioned and distributed into the indoor space. 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 cuttingedge technology for over 25 years. Compare and you'll see no one surpasses the Mr. Slim brand's performance for quiet, easy-to-use, and energy-efficient operation. And since our split-ductless technology carries the Mitsubishi Electric name, you know every product is built to last. The bottom line is that the Mr. Slim product delivers ultimate comfort control for your home or office. It's true today and will be comfortably evident for years to come.





#### 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 burglars 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.

## Where Can Mr. Slim Products Be Used?

Mitsubishi Electric Mr. Slim systems are the perfect solution for almost any spot cooling or heating situation. Our split-ductless systems can make an uncomfortably hot or cold room in an existing building comfortable again. Perhaps you are remodeling or renovating an **older home** or business built before ducted air conditioning was available. Because there is no ductwork to run, Mr. Slim split-ductless systems are both plaster wall and brick facade friendly so there's no need to compromise the integrity of your home or office just to make each room comfortable. These systems are cooling and heating solutions that can fit into almost any space because smart engineering optimized the capabilities of the new R410A refrigerant and INVERTER technology to develop more efficient systems with smaller indoor and outdoor units. R410A refrigerant is also environmentally friendly with zero Ozone Depletion Potential (ODP). In addition, Mr. Slim systems are perfect for schools, universities, nursing homes, hospitals, restaurants, hotels, equipment rooms, office buildings, and churches. The versatility and variety of applications for Mr. Slim systems are virtually unlimited. If a room is too hot or too cold, a Mr. Slim system can handle it! To find more information about our Mr. Slim split-ductless product line or to find a highly trained Diamond Dealer to service your home, please visit our website at 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)
Environmentally Friendly	Mr. Slim systems use an environmentally-friendly refrigerant.
INVERTER Technology	You will enjoy high-speed cooling and heating, and consistent delivery of comfort year-round.

#### INDEX

#### INVERTER TECHNOLOGY Pages 06-07

#### M-SERIES: 9,000-30,000 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 10-13

#### MXZ MULTI-ZONE WALL-MOUNTED SERIES: 20,000-28,600 Btu/h INVERTER-driven Multi-zone Heat Pump System Pages 14-15

#### **P-SERIES:** 12,000-42,000 Btu/h Select Residential or Varied Commercial Pages 16-17

Wired Remote, Benefits, and Outdoor Unit Comparison Page 17

#### PKA WALL-MOUNTED SERIES:

12,000-34,200 Btu/h Air Conditioners and Heat Pumps with Wired and Wireless Hand-held Remote Controllers Pages 18-20

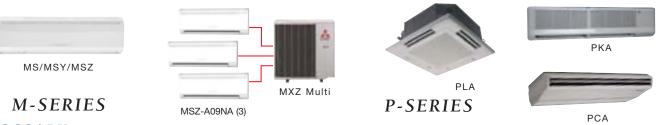
#### PCA CEILING-SUSPENDED SERIES: 24,000-42,000 Btu/h Air Conditioners and Heat Pumps Pages 21-23

PLA CEILING-RECESSED CASSETTE SERIES: 12,000-42,000 Btu/h Air Conditioners and Heat Pumps Pages 24-26

#### **GENERAL SPECIFICATIONS**: Page 27

#### **REFRIGERANT TUBING AND** ACCESSORIES: Page 27

#### MR. SLIM PRODUCT FAMILY



**INVERTER** 

#### GLOSSARY

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

**Btu/h (British Thermal Units per Hour):** A term that is used to measure cooling or heating capacity.

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

**COMPRESSOR:** A pump found in a refrigeration or air-conditioning system, which pumps refrigerant through pipes between an outdoor and an indoor unit using pressure.

**HEAT PUMP:** An air-conditioning system that is capable of reversing 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.

**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.

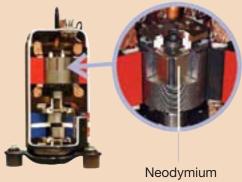
**SPLIT-DUCTLESS SYSTEM:** A system comprised of a remote outdoor condensing unit connected by refrigerant pipes to a matching, non-ducted indoor air-handler, and a remote controller. Special cases for introducing fresh air may call for limited ducting to air-handler from outside.

# INVERTER-DRIVEN COMPRESSOR TECHNOLOGY

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

Select straight-cool and all heat pump outdoor units employ 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, thereby reducing power consumption which results in extra energy savings. This also means the system can 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 provides comfortable, consistent room temperature.



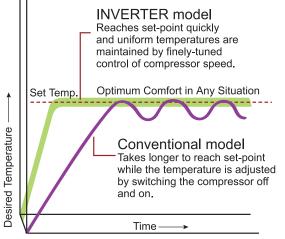
magnets INVERTER-driven Compressor



#### **INVERTER Technology Conventional Technology** High rotation speed provides fast cooling and heating. Requires a long time to reach desired temperature. Has uncomfortable temperature Low rotation speed efficiently maintains fluctuation. desired temperature. Low rotation speed keeps starting current Needs heavy energy usage every time low, leaving other appliances unaffected. compressor turns on. Requires high starting current that Precise rotation speed control provides affects other appliances throughout comfortable, consistent room temperature. household.

## 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

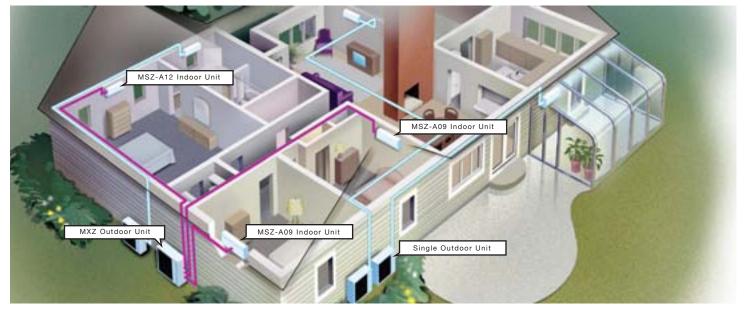
Conventional units start and stop repetitively unlike INVERTER units that detect subtle changes in temperature and adjust compressor speed automatically. Low rotation speed efficiently maintains desired temperature to reduce temperature swings and provide a more comfortable climate.



## Extra Energy Savings

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

Our CITY MULTI® product line also employs INVERTER technology. Ask about how the Mr. Slim® and the CITY MULTI INVERTER systems give you even greater 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.



## M-SERIES RESIDENTIAL 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. There's only a small, three-inch opening connecting the indoor and outdoor units. This means quicker installation, less mess, and a better looking and more comfortable home.

### Efficient. Quiet. Secure. Pick All Three.

That's right. Mr. Slim units deliver all of these. First, its small design, smart functionality, and lack of ductwork plus INVERTER technology make it energy efficient. Second, the unit's fan is designed to 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. *Shhh!*) Third, because each system installs with only a



three-inch opening for connecting the indoor and outdoor units, you don't have to worry about thieves gaining access through an easy-to-remove window unit. With Mr. Slim systems you can sleep in quiet comfort with a sense of security.

### 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<sup>®</sup> Product Size That's Right for You

Room Size	Performance
100 - 350 Sq. Ft.	<9,500 Вти/н
350 - 440 Sq. Fт.	9,500 - 12,000 Btu/h
440 - 550 Sq. Ft.	12,000 - 15,000 BTU/H
550 - 600 Sq. Ft.	15,000 - 16,200 Btu/h
600 - 800 Sq. Fт.	16,200 - 22,000 BTU/H
800 - 1,100 Sq. Ft.	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 for a more accurate determination of your specific cooling or heating needs.

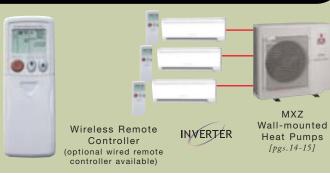


Wireless Remote Controller **Operation Select** (Heat, Cool, Auto, Dry) Econo Cool Fan Speed Reset Timer Vane Control Clock Set Sliding Cover MODE FAN HR./MIN. (Time Set) OSTOP (0+0) Wireless Remote Controller Detail Wide Vane Powerful: Faster MSY(Z)-A24NA (only) Cooling or Heating Optional wired remote controller available

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.
ENVIRONMENTALLY FRIENDLY	Mr. Slim systems use an environmentally-friendly refrigerant.

**Benefits** 

**Features** 





Mr.Slim®\_

**INVERTER** 

(MSY Models Only)



# Air Conditioners

4

MS and MSY Models 9,500 to 22,000 Btu/h Capacity

M-Series Wireless Remote Controller

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

### Superior INVERTER Technology

Benefit from technology that outperforms conventional systems. INVERTER control has many advantages. High rotation speed translates directly into 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 other appliances. Precise rotation speed control helps you keep temperatures consistently where you want them. Pulse Amplitude Modulation (PAM) keeps efficiency high by ensuring the system effectively uses 98 percent of input power supply. Mr.Slim®

HEAT PUMPS INVERTER-DRIVEN WALL-MOUNTED SERIES



M-Series Wireless Remote Controller

### System Control in the Palm of Your Hand

Mr. Slim's M-Series offers a comprehensive remote controller that controls more than temperature and fan speed. It provides four modes: COOL, HEAT, AUTO, and DRY and has a 12-hour ON/OFF timer, giving you one-button control over 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 to ensure a more comfortable temperature is maintained across a wider area. The M-Series INVERTER models can tie into the P-Series wired controller and CITY MULTI<sup>®</sup> M-Net with adapter.

### 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 antiallergy enzyme filter. Using artificial blue enzymes, this filter minimizes germs, bacteria, and viruses.

### Warm Air Without 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.

#### 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 use less energy under milder conditions, 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 $0^{\circ}$ F Mr. Slim can provide 70 percent of the rated heating capacity.



# SPECIFICATIONS FOR MS/MSY COOLING-ONLY M-SERIES (R410A)



\_





**INVERTER** 

INDOOR UNIT		MS-A09WA	MS-A12WA	MSY-A15NA	MSY-A17NA	MSY-A24NA
Color		White	White	White	White	White
Power Supply	V/Phase/Hz	115/1/60	115/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Max. Fuse Size	(Time Delay) A	15	15	15	15	15
Min. Circuit Ampacity	A	1.2	1.2	1.0	1.0	1.0
Airflow Lo-Med-Hi	Dry CFM	183-261-335	222-286-406	268-328-381	268-328-381	296-431-568
Airflow Lo-Med-Hi	Wet CFM	162-233-300	198-254-363	240-293-342	240-293-342	265-385-508
Moisture Removal	Pints/h	2.7	3.2	4.7	5.1	7.3
Sound Level	dB(A) Low-Med-Hi	26-32-42	33-38-46	34-40-45	34-40-46	34-40-49
Cond. Drain Connection	0.D. Inches	5/8	5/8	5/8	5/8	5/8
Indoor Unit Width	Inches	30-11/16	30-11/16	30-11/16	30-11/16	43-5/16
Indoor Unit Depth	Inches	8-1/4	8-1/4	8-1/4	8-1/4	10-1/4
Indoor Unit Height	Inches	11-3/4	11-3/4	11-3/4	11-3/4	12-13/16
Weight	Pounds	23	23	23	23	37
Fan Motor	F.L.A.	0.95	0.95	0.76	0.76	0.76
OUTDOOR UNIT		MU-A09WA	MU-A12WA	MUY-A15NA	MUY-A17NA	MUY-A24NA
Capacities	Cooling MBH (Range)	9.5	12.0	15.0 (3.1~15.0)	16.2 (3.1~16.2)	22.0 (4.4~22.0)
Power Consumption Rated	Cooling W * <sup>1</sup> (Range)	870	1,070	1,690 (210~1,690)	2,070 (210~2,070)	2,850 (290~2,850)
Energy Efficiency	SEER	13	13	16	16	16
External Finish Color				Munsell 3Y 7.8	/1.1	
Sound Level	dB(A)	47	52	50	52	55
Power Supply	V/Phase/Hz	115/1/60	115/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Max. Fuse Size	(Time Delay) A	15	20	15	15	20
Min. Circuit Ampacity	A	14	16	14	14	17
Fan Motor	F.L.A.	0.63	0.93	0.52	0.52	0.93
Compressor	Model (Type)	RN092WHDHT	RN110WHDHT	SNB130FPDH	SNB130FPDH	SNB130FPDH
Compressor	R.L.A.	9.3	10.82	10.1	10.1	10.1
Compressor	L.R.A.	47	56	12	12	16
Refrigerant Control		Capilla	ary Tube	l	inear Expansion Valv	e
Outdoor Unit Width	Inches	31-1/2	33-7/16	31-1/2	31-1/2	33-1/16
Outdoor Unit Depth	Inches	11-1/4	11-7/16	11-1/4	11-1/4	13
Outdoor Unit Height	Inches	21-5/8	23-13/16	21-5/8	21-5/8	33-7/16
Weight	Pounds	78	96	88	88	128
Remote Controller		Wireles	s Remote	Wireless R	emote (optional wired	l controller)
Control Voltage	(By Built-in Transformer)	115VAC	115VAC	12-24V DC		
Refrigerant Piping Size	Liquid - Inches	1/4	1/4	1/4	1/4	1/4
Refrigerant Piping Size	Gas - Inches	3/8	1/2	1/2	1/2	5/8
Connection Method	Indoor			Flared		
Connection Method	Outdoor			Flared		
Refrigerant Piping Size	Max. Piping: (Height) Ft.	35	35	40	40	50
Refrigerant Piping Size	Max. Piping: (Length) Ft.	65	65	65	65	100
Refrigerant Charge (R410A)	lb. oz.	2 lb. 5 oz.	3 lbs. 1 oz.	2 lb.	7 oz.	4 lb.
Refrigerant oil (Model)	CC.		NE022)		450 (NE022)	

NOTES: Test conditions are based on ARI 210/240

\*1 Rating conditions (cooling) - Indoor 80° FDB, 67° FWB, Outdoor: 95° FDB, (75° FWB) Rated frequency: A09:50Hz A12:76Hz

\*1 Rating conditions (cooling) - Indoor 80° FDB, 67° FWB, Outdoor: 95° FDB, (75° FWB) Rated frequency: A15:77Hz A17:89Hz A24:110Hz Specifications are subject to change without notice.

# SPECIFICATIONS FOR MSZ HEAT PUMP M-SERIES (R410A)





INVERTER



		EPA POLLUTION PREVENTER				
INDOOR UNIT		MSZ-A09NA	MSZ-A12NA	MSZ-A15NA	MSZ-A17NA	MSZ-A24NA
Color		White	White	White	White	White
Power Supply	V/Phase/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Max. Fuse Size	(Time Delay) A	15	15	15	15	15
Min. Circuit Ampacity	A	1.2	1.2	1	1	1
Airflow Lo-Med-Hi (Heat)	Dry CFM	159-222-307	159-240-353	254-314-381	254-314-381	
Airflow Lo-Med-Hi (Cool)	Dry CFM	152-229-307	152-240-353	268-328-381	268-328-381	296-431-568
Airflow Lo-Med-Hi (Cool)	Wet CFM	134-205-275	134-215-318	240-293-342	240-293-342	265-385-508
Moisture Removal	Pints/h	2.3	3.2	4.7	5.1	7.3
Sound Level - Cooling	dB(A) Low-Med-Hi	22-33-38	22-34-48	34-40-45	34-40-46	34-40-49
Sound Level - Heating	dB(A) Low-Med-Hi	22-33-38	22-34-42	34-38-44	34-38-44	34-40-49
Cond. Drain Connection	0.D. Inches	5/8	5/8	5/8	5/8	5/8
Indoor Unit Width	Inches	30-11/16	30-11/16	30-11/16	30-11/16	43-5/16
Indoor Unit Depth	Inches	8-1/4	8-1/4	8-1/4	8-1/4	10-1/4
Indoor Unit Height	Inches	11-3/4	11-3/4	11-3/4	11-3/4	12-13/16
Weight	Pounds	23	23	23	23	37
Fan Motor	F.L.A.	0.76	0.76	0.76	0.76	0.76
OUTDOOR UNIT		MUZ-A09NA	MUZ-A12NA	MUZ-A15NA	MUZ-A17NA	MUZ-A24NA
Capacities	Cooling MBH * <sup>1</sup> (Range)	9.0 (5.5~9.0)	12.0 (5.7~12.0)	15.0 (3.1~15.0)	16.2 (3.1~16.2)	22.0(4.4~22.0)
Capacities	Heating 47° MBH *1 (Range)	10.9 (5.2~12.6)	13.6 (5.2~13.6)	18.0 (3.4~20.9)	20.1 (3.4~20.9)	23.2 (3.6~24.4)
Capacities	Heating at 17° Btu/h * <sup>2</sup>	7.7	8.3	13.0	13.0	15.2
Power Consumption Rated	Cooling W * <sup>1</sup> (Range)	690 (390~690)	1,170 (395~1,170)	1,690 (210~1,690)	2,070 (210~2,070)	2,880 (290~2,880)
Power Consumption Rated	Heating 47° W * <sup>1</sup> (Range)	860 (350~1,100)	1,160 (350~1,160)	1,790 (250~2,330)	2,150 (250~2,330)	2,350 (260~2,570)
Power Consumption Rated	Heating 17° W *2	880	930	1,740	1,740	1,960
Energy Efficiency	SEER	17	17	16	16	16
Energy Efficiency	HSPF	8.2	8.2	8.2	8.2	8.2
External Finish Color				Munsell 3Y 7.8/1.	1	
Sound Level	dB(A) *1	48	48	51	53	55
Power Supply	V/Phase/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Max. Fuse Size	(Time Delay) A	15	15	15	15	20
Min. Circuit Ampacity	A	12	12	14	14	17
Fan Motor	F.L.A.	0.52	0.52	0.52	0.52	0.93
Compressor	Model (Type)	KNB092FPAH	KNB092FPAH	SNB130FPDH	SNB130FPDH	SNB130FPDH
Compressor	R.L.A.	7.8	7.8	10.1	10.1	10.1
Compressor	L.R.A.	9.2	9.2	12	12	16
Refrigerant Control				Linear Expansion Va	lve	
Defrost Method				Reverse Cycle		
Outdoor Unit Width	Inches	31-1/2	31-1/2	31-1/2	31-1/2	33-1/16
Outdoor Unit Depth	Inches	11-1/4	11-1/4	11-1/4	11-1/4	13
Outdoor Unit Height	Inches	21-5/8	21-5/8	21-5/8	21-5/8	33-7/16
Weight	Pounds	82	82	88	88	128
Remote Controller			Wireless	Remote (optional wir	ed controller)	•
Control Voltage	(By Built-in Transformer)			12-24V DC		
Refrigerant Piping Size	Liquid - Inches	1/4	1/4	1/4	1/4	1/4
Refrigerant Piping Size	Gas - Inches	3/8	3/8	1/2	1/2	5/8
Connection Method	Indoor			Flared		
Connection Method	Outdoor			Flared		
Refrigerant Piping Size	Max. Piping: (Height) Ft.	40	40	40	40	50
Refrigerant Piping Size	Max. Piping: (Length) Ft.	65	65	65	65	100
Refrigerant Charge (R410A)	lb. oz.		. 5 oz.	2 lb.		4 lb.
Refrigerant Oil (Model)	CC.	320	(NE022)	450 (NE022)		

NOTES: Test conditions are based on ARI 210/240

\*1 Rating conditions (cooling) - Indoor 80° FDB, 67° FWB, Outdoor: 95° FDB, (75° FWB) Rated frequency: A09:50Hz A12:76Hz A15:77Hz A17:89Hz A24:110Hz

\*1 Rating conditions (heating) - Indoor 70° FDB, 60° FWB, Outdoor: 47° FDB, (43° FWB) Rated frequency: A09:61Hz A12:76Hz A15:78Hz A17:88Hz A24:101Hz

\*2 Rating conditions (heating) - Indoor 70° FDB, 60° FWB, Outdoor: 17° FDB, (15° FWB) Maximum frequency: A09:71Hz A12:76Hz A15:93Hz A17:93Hz A24:108Hz Specifications are subject to change without notice.



#### 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 15 different combinations of indoor and outdoor units so the system is flexible enough to conform to your particular cooling and heating needs.

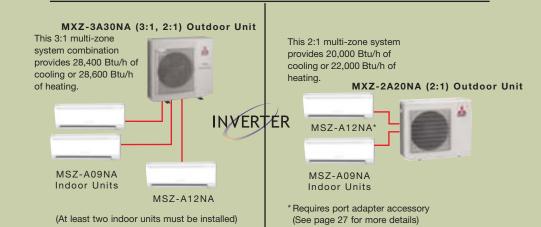
#### Powerful, Efficient, and Versatile

Reap the benefits of our latest INVERTERdriven technology. High rotation speeds will deliver faster cooling and heating while low rotation speeds 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 has the ability to maintain cooling when outside ambient temperatures reach as low as 14 degrees Fahrenheit.

### Multi-zone Heat Pump System Attributes

Multi-zone technology means that everybody 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 will all enjoy the temperature that makes them feel the most comfortable.







# SPECIFICATIONS FOR MXZ HEAT PUMP MXZ SERIES (R410A)





OUTDOOR UNIT		MXZ-2A20NA	MXZ-3A30NA
Capacities	Cooling MBH <sup>*1</sup> (Range)	20 (7.8~20)	28.4 (12.6~28.4)
Capacities	Heating 47° MBH <sup>*1</sup> (Range)	22 (8.5~22)	28.6 (11.4~36)
	Heating 47° IVIBH ' (Range)	14.5	· ,
Capacities	Heating at 17° <sup>*2</sup>		18.8
Power Consumption Rated	Cooling W <sup>*1</sup> (Range)	2,150 (630~2,150)	3,250 (1,000~3,250)
Power Consumption Rated	Heating 47° W *1 (Range)	1,780 (520~1,780)	2,180 (740~2,880)
Power Consumption Rated	Heating 17° W <sup>*2</sup>	1,500	2,120
Energy Efficiency	SEER *3	15	16
Energy Efficiency	HSPF	9	10
External Finish		Munsell 5	/ 8/1
Sound Level	dB(A) *1	49/51	49/49
Power Supply	V/Phase/Hz	208-230/1/60	208-230/1/60
Max. Fuse Size	(Time Delay) A	20	20
Min. Circuit Ampacity		15	15
Fan Motor	F.L.A.	0.96	0.93
Compressor	Model (Type)	SNB130FPDH1	TNB220FMCH
Compressor	R.L.A.	10.1	11
Compressor	L.R.A.	15	15
Refrigerant Control		Liner Expansi	on Valve
Defrost Method		Reverse C	ycle
Outdoor Unit Width	Inches	33-1/16	35-7/16
Outdoor Unit Depth	Inches	13 (+1-3/16)	12-19/32 (+1-3/16)
Outdoor Unit Height	Inches	27-15/16	35-7/16
Weight	Pounds	130	158
Remote Controller		Wireless Re	emote
Control Voltage	(By Built-in Transformer)	12-24V	DC
Refrigerant Piping Size	Liquid - Inches	1/4	1/4
Refrigerant Piping Size	Gas - Inches	A, B:3/8	A: 1/2, B,C:3/8
Connection Method	Indoor	Flared	Flared
Connection Method	Outdoor	Flared	Flared
Between the indoor units	Height Difference Ft.	Max. 33	Max. 33
and outdoor unit	Piping Length (a+b)	Max. 164	Max. 230
Piping length each indoor u	nit	Max. 82	Max. 82
Refrigerant Charge (R410A)		5 lb. 15 oz.	7 lb. 11 oz.
Refrigerant Oil (Model)	(NE022)	1 lb. 4.3 oz.	1 lb. 13.4 oz.

Note: Test conditions are based on ARI 210/240

\*1 Rating conditions (cooling) - Indoor: 80° FDB, 67° FWB, Outdoor: 95° FDB, 75° FWB \*1 Rating conditions (heating) - Indoor: 70° FDB, 60° FWB, Outdoor: 47° FDB, 43° FWB

\*2 Rating conditions (heating) - Indoor: 70° FDB, 60° FWB, Outdoor: 17° FDB, 15° FWB \*3 Rating conditions (cooling) - Indoor: 80° FDB, 67° FWB, Outdoor: 82° FDB, 65° FWB

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

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

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

	Cooling	Capacity	(Btu/h)	Power	Current			
Indoor Unit Combinations	Heating	Capacity	(Btu/h)	consumption	(/	(A)		
Compilationo	Unit A	Unit B	Total	(W)	208V	230V		
MSZ-A09NA +	9,000	9,000	18,000	1,740	8.62	7.8		
MSZ-A09NA	10,900	10,900	21,800	1,820	9.02	8.16		
MSZ-A09NA +	8,500	11,500	20,000	2,150	10.66	9.64		
MSZ-A12NA	9,500	12,500	22,000	1,780	8.82	7.98		
MSZ-A09NA +	7,500	12,500	20,000	2,150	10.66	9.64		
MSZ-A15NA	8,250	13,750	22,000	1,780	8.82	7.98		
MSZ-A12NA +	10,000	10,000	20,000	2,150	10.66	9.64		
MSZ-A12NA	11,000	11,000	22,000	1,780	8.82	7.98		

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

	Cooling Capacity (Btu/h)				Power	Current (A)		Port Adapter Requirements		
Indoor Unit Combinations	Heating Capacity (Btu/h)			Consumption	Size			Qty. and		
Combinations	Unit A	Unit B	Unit C	Total	(W)	208V	230V	3126	Joint Pipe Part No.	
MSZ-A09NA +	9,000	9,000	-	18,000	1,800	8.92	8.07		N.A.	
MSZ-A09NA	10,900	10,900	-	21,800	1,700	8.43	7.62	1	N.A.	
MSZ-A09NA +	9,000	12,000	-	21,000	2,000	9.91	8.96		N.A	
MSZ-A12NA	10,900	13,600	-	24,500	1,980	9.81	8.87	1	N.A	
MSZ-A09NA +	9,000	15,000	-	24,000	2,500	12.39	11.21	3/8 X 1/2"	(1) MAC-A454JP-E	
MSZ-A15NA	10,100	16,900	-	27,000	2,200	10.90	9.86	3/0 A 1/2	(T) MAC-A454JF-E	
MSZ-A09NA +	9,000	16,200	-	25,200	2,700	13.38	12.10	3/8 X 1/2"	(1) MAC-A454JP-E	
MSZ-A17NA	9,300	17,700	-	27,000	2,200	10.90	9.86	3/0 X 1/2	(T) MAC-A454JP-E	
MSZ-A09NA +	7,600	20,400	-	28,000	3,200	15.86	14.34	3/8 X 5/8"		
MSZ-A24NA	7,300	19,700	-	27,000	1,980	9.81	8.87	3/0 X 3/0	(1) PAC-SG76RJ-E	
MSZ-A12NA +	12,000	12,000	-	24,000	2,500	12.39	11.21	1 1	N.A.	
MSZ-A12NA	13,500	13,500	-	27,000	2,200	10.90	9.86	1 1	N.A.	
MSZ-A12NA +	11,500	14,500	-	26,000	2,800	13.88	12.55	3/8 X 1/2"	(1) MAC-A454JP-E	
MSZ-A15NA	12,000	15,000	-	27,000	2,160	10.71	9.68	3/8 X 1/2"		
MSZ-A12NA +	10,800	15,200	-	26,000	2,800	13.88	12.55	3/8 X 1/2"		
MSZ-A17NA	11,200	15,800	-	27,000	2,140	10.61	9.59	3/0 X 1/2	(1) MAC-A454JP-E	
MSZ-A15NA +	13,000	13,000	-	26,000	2,800	13.88	12.55	3/8 X 1/2"	(2) MAC-A454JP-E	
MSZ-A15NA	13,500	13,500	-	27,000	2,120	10.51	9.50	3/0 X 1/2	(2) IVIAU-A404JP-E	
MSZ-A15NA +	12,200	13,800	-	26,000	2,800	13.88	12.55	3/8 X 1/2"	(2) MAC-A454JP-E	
MSZ-A17NA	12,700	14,300	-	27,000	2,110	10.46	9.46	3/0 X 1/2	(2) WAG-A434JP-E	
MSZ-A17NA +	13,000	13,000	-	26,000	2,800	13.88	12.55	3/8 X 1/2"	(2) MAC-A454JP-E	
MSZ-A17NA	13,500	13,500	-	27,000	2,100	10.41	9.41	3/0 A 1/2	(2) WAG-A434JF-E	
MSZ-A09NA + MSZ-A09NA	9,000	9,000	9,000	27,000	2,860	14.18	12.82		N.A.	
+ MSZ-A09NA	9,500	9,500	9,500	28,500	2,180	10.80	9.77	1	N.A.	
MSZ-A09NA + MSZ-A09NA	8,500	8,500	11,400	28,400	3,250	16.11	14.57		N.A.	
+ MSZ-A129NA	8,600	8,600	11,400	28,600	2,180	10.80	9.77	1	N.A.	
MSZ-A09NA + MSZ-A09NA	7,750	7,750	12,900	28,400	3,250	16.11	14.57	3/8 X 1/2"	(1) MAC-A454JP-E	
+ MSZ-A15NA	7,800	7,800	13,000	28,600	2,180	10.80	9.77	3/0 / 1/2	(1) WAG-A404JP-E	
MSZ-A09NA + MSZ-A09NA	7,300	7,300	13,800	28,400	3,250	16.11	14.57	3/8 X 1/2"	(1) MAC-A454JP-E	
+ MSZ-A17NA	7,350	7,350	13,900	28,600	2,180	10.80	9.77	J/0 A 1/2	(1) WAU-A404JP-E	
MSZ-A09NA + MSZ-A12NA	7,300	11,400	11,400	30,100	3,400	17.49	16.43	1/2 x 3/8	(1) MAC-A455JP-E	
+ MSZ-A12NA	7,350	11,400	11,400	30,150	3,050	16.41	14.47	1/2 X 3/8	(I) WAU-A455JP-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 cooling or heating performance.

## INVERTER Technology

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.

### Flexible Control Options

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, allows for a space to be air-conditioned even when it is as low as  $0^{\circ}$  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 away from the indoor units. Linesets can be run up to a maximum distance of 100 feet for PUY(Z)12-18 outdoor units and 165 feet for PUY(Z)24-42 outdoor units when additional charge is added. These systems are easier to fit into any space thanks to unique design profiles and R410A refrigerant. R410A is environmentally friendly with zero Ozone Depletion Potential (ODP).



P-Series Wired Remote Controller



PKA Wall-mounted Air Conditioners and Heat Pumps [pgs.18-20]



PCA Ceiling-suspended Air Conditioners and Heat Pumps [pgs.21-23]



PLA Ceiling-recessed Air Conditioners and Heat Pumps [pgs.24-26]



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	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 an environmentally- friendly refrigerant.

SET TEMPERATURE TIMER MENU MODE SET TIME SET TIME SET TIME TEST RUN CHECK AIRFLOW UP/DOWN LOUVER VENTILATION

### 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. Fourway 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 wall-mounted controller. This wiring design helps avoid installation errors. An optional wireless remote controller kit is available for the P-Series ceiling-mounted indoor units.

#### More Compact INVERTER-driven Outdoor Units

#### **PUY/PUZ**







12,000-18,000 Btu/h 24,000-36,000 Btu/h 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, meaning 98 percent of input power is effectively utilized. VKA (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 larger spaces with substantial cooling and heating from a compact, wall-mounted package. Walk into any room where a PKA system is installed and all you'll notice is the perfectly comfortable climate. What you may not notice is the unit itself because it mounts high on the wall and blends into most spaces. The PKA-Series features *Auto Changeover* mode that automatically switches back and forth from cooling to heating operation to compensate for indoor and outdoor temperature fluctuations.

## Auto Flap Shutter

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



PAR-21MAA Controller 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 enable the washable filters to be quickly and easily removed for fast cleaning. You won't need to replace the filters as with other systems, thereby saving money and time.

### Easy to Install the Slim and Lightweight Indoor Unit

The smallest PKA unit measures about 39-inches wide, 13-inches tall, and 9inches deep and weighs 35 pounds and is easily installed high on most walls above windows or doorways. In many cases, just two licensed installers can do the installation in about a half day. And Mr. Slim PKA-Series models don't require ductwork. They don't need a huge hole cut in a wall as with motel-type or window-type units. Because PK systems require only a small three-inch opening in the wall or ceiling, they may be installed into some of the toughest

Controller

spaces, even on brick and masonry type walls.

### Ultimate Comfort Meets Ultimate Convenience

Select from either a wall-mounted, hardwired controller (GA/FA) or a wireless remote controller (GAL/FAL) for ultimate comfort control. The handheld 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 24hour 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.



#### SPECIFICATIONS FOR PKA COOLING-ONLY P-SERIES (R410A)

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





	Indoor	Unit	PKA-A12GAL	PKA-A18GAL	PKA-A24FAL	PKA-A30FAL	PKA-A36FAL				
Model Name	Outdoor	Unit	PUY-A12NHA-BS PUY-A12NHA	PUY-A18NHA-BS PUY-A18NHA	PUY-A24NHA-BS PUY-A24NHA	PUY-A36NHA-BS PUY-A36NHA					
	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	34,200				
	Min. Capacity	Btu/h	6,000	8,000	12,000	12,000	12,000				
Cooling *1	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	13.1				
	Moisture Removal			4.8	4.7	8.1	7.1				
	SHF	-	0.86	0.7	0.78	0.7	0.77				
Power supply	Phase,Cycle,Voltage	-		1 Phase, 60Hz, 208/230V							
	Breaker size	A	15 25 30								
	Indoor - Outdoor S1-S2				AC 208 / 230V						
Voltage	Indoor - Outdoor S2-S3				DC24V						
Volugo	Indoor - Remote Contro				DC12V : Wired Type						
	Indoor Remote Controlle			W	ireless Type (GAL/FA	IL)					
	MCA	A			1						
	MOCP	А			15						
	Fan Motor	F.L.A.		.33		43	0.52				
	Fan Motor Output	W		30		5	70				
	Airflow DRY	CFM	320-350	-390-425	530-70	5 (Lo-Hi)	780-990 (Lo-Hi)				
	(Lo-M1-M2-Hi) WET	CFM	290-315	-350-380	480-63	5 (Lo-Hi)	700-890 (Lo-Hi)				
Indoor Unit	Sound Level (Lo-M1-M2-Hi)	dB(A)	36-38	36-38-41-43		39-45 (Lo-Hi)					
	External Finish Color		Munsell 0.7	0Y 8.59/0.97	Munsell 3.4Y 7.7/0.8						
		W: inch	:	39 55-1/8							
	Dimension Unit	D: inch		9-1/4							
		H: inch	13-3/8								
	Weight Unit	lbs.	:	35		3	62				
	Field Drain Pipe Size I.D	). inch			13/16						
Remote Controller			Located with Indoor Unit								
	MCA	A		13	18		25				
	MOCP	A	15	20	30		10				
	Fan Motor	F.L.A.		.35		0.75					
	Fan Motor Output	W		40		75					
			SNB13	OFPBM1		TNB220FLDM					
	Compressor	R.L.A			12						
	A . (1	L.R.A.		14		17.5					
Outdoor Unit	Airflow	CFM	1,	200	1,940						
	Refrigerant Control			Linear Expansion Valve							
	Sound Level at Cooling	dB(A)		46 48							
	External Finish Color				Munsell 3Y 7.8/1.1						
		W: inch	31	-1/2		37-3/8					
	Dimensions	D: inch	13 -	+ 7/8		13 + 1-3/16					
		H: inch	23	-5/8	İ	37-1/8					
	Weight	lbs.	90	97		163					
	Туре			•	R410A						
Refrigerant	Charge	lbs., oz.	2 lbs. 14 oz.	3 lbs. 12 oz.	6 lbs.						
	Oil	0Z.	(MEL	56) 20		(MEL56) 28					
Definement Dir - Oi	Gas Side O.D.	inch	1	/2	İ	5/8					
Refrigerant Pipe Size	Liquid Side O.D.	inch		/4	i	3/8					
Refrigerant Pipe	Height difference				Max.100 ft.						
Length	Length		Max.	100 ft.		Max.165 ft.					
Connection Method	~				Flared						
					1 141 04						

NOTES:

\*1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor: D.B. 35° C (95° F), W.B. 23.9° C (75° F). Specifications are subject to change without notice.



#### SPECIFICATIONS FOR PKA HEAT PUMP P-SERIES (R410A)

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



Model Name	Indoo	r Unit	PKA-A18GAL PKA-A18GA	PKA-A24FAL PKA-A24FA	PKA-A30FAL PKA-A30FA	PKA-A36FAL PKA-A36FA	
Model Name	Outdoor Unit		PUZ-A18NHA-BS PUZ-A18NHA	PUZ-A24NHA-BS PUZ-A24NHA	PUZ-A30NHA-BS PUZ-A30NHA	PUZ-A36NHA-BS PUZ-A36NHA	
	Rated Capacity	Btu/h	18,000	24,000	30,000	34,200	
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	
Cooling *1	Total Input	Î W	2,240	2,650	4,400	5,030	
oooning 1	Energy Efficiency	SEER	14.1	13.5	13	13.1	
	Moisture Removal	Pints/h	4.8	4.7	8.1	7.1	
	SHF		0.7	0.78	0.7	0.77	
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	
Heating *1	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	
nouting 1	Total Input	W	2,130	2,570	3,660	3,610	
	HSPF (IV/V)	Btu/h/W	9.5 / 7.3	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7	
Heating at Low Ambient *2	Capacity	Btu/h	13,000	16,000	23,000	25,000	
ricating at Low Ambient 2	Total Input	W	1,670	2,200	3,050	3,070	
Power supply	Phase,Cycle,Voltage			1 Phase, 60Hz,			
i ower suppry	Breaker size	A	15	25		30	
	Indoor - Outdoor S1-S2			AC 208 / 2			
Voltage	Indoor - Outdoor S2-S3			DC24			
ronago	Indoor - Remote Controller			DC12V : Wire			
	Indoor Remote Controller	T .		Wireless Type	(GAL/FAL)		
	MCA	A		1			
	MOCP	A	0.00	15		0.50	
	Fan Motor	F.L.A.	0.33	0.43		0.52	
	Fan Motor Output	W	30	45 530-705 (Lo-Hi)		70	
	Airflow DRY	CFM	320-350-390-425			780-990 (Lo-Hi)	
	(Lo-M1-M2-Hi) WET	CFM	290-315-350-380	480-635	( )	700-890 (Lo-Hi)	
	Sound Level (Lo-M1-M2-Hi	) dB(A)	36-38-41-43	39-	-	46-49	
	External Finish Color		Munsell 0.70Y 8.59/0.97	Munsell 3.4Y 7.7/0.8			
	Dimension Unit	W: inch	39				
		D: inch	9-1/4				
		H: inch	13-3/8 35 53 62				
	Weight Unit	lbs.	35	35 53			
	Field Drain Pipe Size I.D.	inch		13/16			
Remote Controller				Located with Ir	idoor Unit		
	MCA	A	13	18		25	
	MOCP	Â	20	30		40	
	Fan Motor	F.L.A.	0.35		0.75		
	Fan Motor Output	W	40		75		
			SNB130FPBM1		TNB220FLDM		
	Compressor	R.L.A		12			
		L.R.A.	14			7.5	
	Airflow	CFM	1,200		1,940		
Outdoor Unit	Refrigerant Control			Linear Expans			
	Defrost Method	1		Reverse C			
	Sound Level at Cooling	dB(A)	46		48		
	Sound Level at Heating	dB(A)	47		50		
	External Finish Color		01.1/0	Munsell 3Y			
	Dimensione	W: inch	31-1/2		37-3/8		
	Dimensions	D: inch	11-13/16 + 7/8		13 + 1-3/16		
	Woight	H: inch	23-5/8		37-1/8		
	Weight	lbs.	99	R410/	165		
Refrigerant	Type	lbs., oz.	3 lbs. 12 oz.	K410/	6 lbs.		
nemgerani	Charge Oil	0Z.	(MEL56) 20		(MEL56) 28		
	Gas Side O.D.	inch	1/2		(IVIEL30) 28 5/8		
Refrigerant Pipe Size	Liquid Side 0.D.	inch	1/2		3/8		
	Height difference		1/4	Max.100			
				ivia.100	144		
Refrigerant Pipe Length	Length		Max.100 ft.		Max.165 ft.		

NOTES:

\*1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor: D.B. 35° C (95° F), W.B. 23.9° C (75° F).

(heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor : D.B. 8.3° C (47° F), W.B. 6.1° C (43° F).

\*2 Rating conditions (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor: D.B. -8.3° C (17° F), W.B. -9.4° C (15° F).

IV/V: D.O.E. heat pump heating region.

Specifications are subject to change without notice.





#### 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 oversized 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. So when you want warm air, you'll get it 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*, heat pump systems will automatically switch back and forth from cooling to heating operation to compensate for the indoor and outdoor temperature fluctuations. This feature means total hands-free comfort and efficient air conditioning of your space.





Model Name

#### <u>SPECIFICATIONS FOR PC COOLING-ONLY</u> P-SERIES (R410A)

**INVERTER** 

PCA-A30GA

PUY-A30NHA-BS

PCA-A24GA

PUY-A24NHA-BS

BS = Seacoast Protection

Indoor Unit



Munsell 3Y 7.8/1.1

37-3/8 13 + 1-3/16

R410A

5/8

3/8

Max.100 ft.

Max.165 ft. Flared

37-1/8

163

6

(MEL56) 28

PCA-A36GA

PUY-A36NHA-BS



PCA-A42GA

PUY-A42NHA-BS

PUY-A42NHA

42,000

18.000

5,070

13.8

11.7

0.69

0.69

90

10-5/8

82

26

0.4 + 0.4

86 + 86

ANV33FDDMT

20

27.5

3,530

51

53-1/8

265

10

(MEL56) 45

#### **Outdoor Unit** PUY-A24NHA **PUY-A30NHA** PUY-A36NHA **Rated Capacity** Btu/h 24,000 30,000 35,000 Btu/h 12.000 12,000 12.000 Min. Capacity Total Input W 2,500 4,100 4,630 Cooling \*1 Energy Efficiency SEER 13.4 13 13.1 Moisture Removal 8.3 8.2 Pints/h 5.4 SHF 0.75 0.69 0.74 Phase, Cycle, Voltage 1 Phase, 60Hz, 208/230V Power supply Breaker size 25 30 Α Indoor - Outdoor S1-S2 AC 208 / 230V Voltage Indoor - Outdoor S2-S3 DC24V Indoor - Remote Controller DC12V : Wired Type MCA А MOCP A 15 F.L.A. Fan Motor 0.53 Fan Motor Output W 70 CFM 495-530-565-635 705-740-810-880 Airflow DRY (Lo-M1-M2-Hi) WET CFM 445-480-510-570 635-670-730-790 Sound Level (Lo-M1-M2-Hi) dB(A) 37-39-41-43 40-41-43-45 Indoor Unit **External Finish Color** Munsell 0.70Y 8.59/0.97 W: inch 51-9/16 26-3/4 **Dimension Unit** D: inch H: inch 8-9/32 Weight Unit lbs. 75 Field Drain Pipe Size O.D. inch 1-1/32 Located with Indoor Unit **Remote Controller** MCA 18 А 25 MOCP А 30 40 Fan Motor F.L.A 0.75 Fan Motor Output W 75 TNB220FLDM R.L.A 12 Compressor L.R.A 14 17.5 Airflow CFM 1,940 Outdoor Unit Linear Expansion Valve Refrigerant Control Sound Level at Cooling dB(A) 48

NOTES:

Length

Refrigerant

**Refrigerant Pipe Size** 

Connection Method

Refrigerant Pipe

\*1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor: D.B. 35° C (95° F), W.B. 23.9° C (75° F). Specifications are subject to change without notice.

W: inch

D: inch

H: inch

lbs.

lbs.

0Z.

inch

inch

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

External Finish Color

Dimensions

Weight

Charge

Length

Gas Side 0.D.

Liquid Side 0.D.

Height difference

Туре

0il

# SPECIFICATIONS FOR PC HEAT PUMP P-SERIES (R410A)





#### **BS = Seacoast Protection**

		couon						
	Indo	or Unit	PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA		
Model Name	Outdoor Unit		PUZ-A24NHA-BS Puz-A24NHA	PUZ-A30NHA-BS PUZ-A30NHA	PUZ-A36NHA-BS Puz-A36NHA			
	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000		
	Min. Capacity	Btu/h	12,000	12,000	12,000	18,000		
Ocaliaa *1	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		
	SHF		0.75	0.69	0.74	0.69		
	Max. Capacity	Btu/h	28,000	34,000	38,000	48,000		
	Rated Capacity	Btu/h	26,000	32,000	37,000	45,000		
Heating *1	Min. Capacity	Btu/h	12,000	12,000	12,000	18,000		
	Total Input	W	2,570	3,390	3,490	4,850		
	HSPF (IV/V)	Btu/h/W	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7	9.3 / 7.3		
Heating at Low Ambient *2	Capacity	Btu/h	16,000	23,000	25,000	30,000		
Theating at LOW Amblent 2	Total Input	W	2,200	3,050	3,070	4,300		
Power supply	Phase,Cycle,Voltage			1 Phase, 6	0Hz, 208/230V			
	Breaker size	A	25		30			
	Indoor - Outdoor S1-S2				08 / 230V			
Voltage	Indoor - Outdoor S2-S3				0C24V			
	Indoor - Remote Controller			DC12V:	Wired Type			
	MCA	A			1			
	MOCP	A		50	15	0.00		
	Fan Motor	F.L.A.		.53		0.69		
	Fan Motor Output	W		70	90			
	Airflow DRY	CFM		)-565-635	705-740-810-880 635-670-730-790			
	(Lo-M1-M2-Hi) WET	CFM	445-480					
Indoor Unit	Sound Level (Lo-M1-M2-Hi dB(A)		37-39-41-43 40-41-43-45					
	External Finish Color		Munsell 0.70Y 8.59/0.97					
	Dimension Unit	W: inch	51-9/16					
	Dimension Unit	D: inch	<u>26-3/4</u> 8-9/32 10-5/8					
	H: inch		75					
	Weight Unit	lbs.	· ·	82				
	Field Drain Pipe Size O.D.	inch	1-1/32					
Remote Controller					vith Indoor Unit			
	MCA	A		18 25		26		
	MOCP	A	30		40			
	Fan Motor	F.L.A.		0.75		0.4 + 0.4		
	Fan Motor Output	W	75		86 + 86			
			TNB220FLDM		ANV33FDDMT			
	Compressor	R.L.A		12		20		
		L.R.A.	14	1	7.5	27.5		
	Airflow	CFM		3,530				
Outdoor Unit	Refrigerant Control	•		Linear Ex	pansion Valve			
	Defrost Method			Reve	rse Cycle			
	Sound Level at Cooling	dB(A)		48				
	Sound Level at Heating	dB(A)	1	50		51 55		
	External Finish Color		50 Munsell 3Y 7.8/1.1					
	External Fillibil GUIU	W: inch						
	Dimensions	D: inch	<u> </u>					
		H: inch	37-1/8 53-1/					
	Weight	lbs.		165		267		
	Туре	1.~~.			410A	201		
Refrigerant	Charge	lbs.	1	6		10		
	Oil	0Z.	-	(MEL56) 28		(MEL56) 45		
Defficiency Dia Ci	Gas Side O.D.	inch			5/8			
Refrigerant Pipe Size	Liquid Side 0.D.	inch			3/8			
Defilement Division and the	Height difference			Ma	x.100 ft.			
Refrigerant Pipe Length	Length		Max.165 ft.					
Connection Method	i č		-i		lared			

NOTES:

\*1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor : D.B. 35° C (95° F), W.B. 23.9° C (75° F). (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor : D.B. 8.3° C (47° F), W.B. 6.1° C (43° F).

\*2 Rating conditions (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor : D.B. -8.3° C (17° F), W.B. -9.4° C (15° F). IV/V: D.O.E. heat pump heating region.

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 fresh air intake capability and four-way discharge airflow, the PLA-Series gives you plenty of fresh, 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. All these features are found in a versatile, attractive design made to disappear discreetly into the ceiling.

### Easy-to-maintain, Long-life Filter

The washable filter provides about 2,500 hours of use in a normal office environment before cleaning is needed.

#### Auto Cooling/heating Changeover

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

### Customize the Airflow Pattern to Meet Your Needs

The PLA-Series offers two-, three-, or four-way airflow selection, enabling effective air conditioning in places such as halls, showrooms, and shopping malls.\*

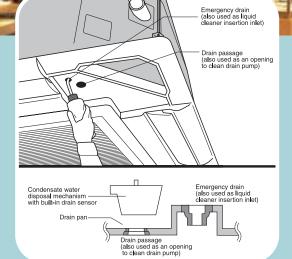
\* Optional air outlet shutter plate is necessary for two- or three-way airflow setting.

### Easy to Install

PLA-Series units are about 40 percent lighter than previous models, making suspension work easier. The unit level can be adjusted through the corner pockets without removing the grille.

### Drain Lift for Condensate Water Removal

A built-in, high-performance drain pump means improved condensate water removal. The pump lifts the water up to 33 inches above the unit to help simplify drain piping. A built-in drain sensor shuts off the indoor unit if a drain is clogged or in the unlikely event the pump malfunctions. This fail-proof system is the perfect solution for computer rooms or high-end conference rooms.



SPECIFICATIONS FOR PL COOLING-ONLY P-SERIES (R410A)







#### BS = Seacoast Protection PLA-A12AA PLA-A18AA PLA-A24AA PLA-A36AA PLA-A42AA **Indoor Unit** PLA-A30AA Model Name PUY-A12NHA-BS PUY-A18NHA-BS PUY-A24NHA-BS PUY-A30NHA-BS PUY-A36NHA-BS PUY-A42NHA-BS **Outdoor Unit** PUY-A12NHA PUY-A18NHA PUY-A24NHA PUY-A30NHA PUY-A36NHA PUY-A42NHA Rated Capacity Btu/h 12,000 18,000 24,000 30,000 35,000 42,000 12,000 18,000 Min. Capacity Btu/h 6,000 8,000 12.000 12,000 Total Input W 1,260 1,870 2,500 4,100 4,510 4,820 Cooling \*1 Energy Efficiency SEER 13 13.2 13.4 13 13.1 13.1 Moisture Removal Pints/h 1.8 1.5 5 8.1 7.2 10.9 SHF 0.83 0.91 0.77 0.7 0.77 0.71 Phase, Cycle, Voltage 1 Phase, 60Hz, 208/230V Power supply 30 Breaker size A 15 25 AC 208/230V Indoor - Outdoor S1-S2 Voltage Indoor - Outdoor S2-S3 DC24V Indoor - Remote Controller DC12V: Wired Type 2 MCA Α 1 MOCP Α 15 Fan Motor F.L.A. 0.79 1.25 Fan Motor Output W 70 110 CFM 710-810-920-990 390-420-460-490 530-570-640-710 Airflow DRY (Lo-M1-M2-Hi) WET CFM 350-380-420-450 490-530-600-670 670-770-880-950 Sound Level dB(A) 27-28-29-31 28-30-32-34 33-36-39-41 Indoor Unit (Lo-M1-M2-Hi) External Finish Color (Panel) Munsell 0.70Y 8.59/0.97 33-1/16 (37-3/8) W: inch **Dimension Unit (Panel)** D: inch 33-1/16 (37-3/8) H: inch 10-3/16 (1-3/16) 11-3/4(1-3/16) Weight Unit (Panel) lbs. 49 (11) 53 (11) 66 (11) 66 (11) Field Drain Pipe Size 0.D. inch 1-1/4 Remote Controller Packaged with Grille MCA Α 13 18 25 26 MOCE 15 20 30 40 Α Fan Motor F.L.A. 0.75 0.4 + 0.40.35 Fan Motor Output W 86 + 86 40 75 SNB130FPBM1 TNB220FLDM ANV33FDDMT Compressor R.L.A 12 20 L.R.A. 17.5 27.5 14 Airflow CF 1,200 1,940 3,530 Outdoor Unit Refrigerant Control Linear Expansion Valve Sound Level at Cooling dB(A) 46 48 51 Sound Level at Heating dB(A) --**External Finish Color** Munsell 3Y 7.8/1.1 W: inch 37-3/8 31-1/2 Dimensions D: inch 11-13/16 13 + 1-3/16 37-1/8 23-5/8 53-1/8 H: inch Weight 90 97 163 265 lbs. Туре R410A Refrigerant Charge lbs., oz. 2 lbs. 14 oz. 3 lbs. 12 oz. 6 lbs. 10 lbs. Oil 0Z. (MEL56) 20 (MEL56) 28 (MEL56) 45 **Refrigerant Pipe** Gas Side 0.D. inch 1/25/8 Liquid Side 0.D. inch 1/4 3/8 Size Height difference Max.100 ft. Refrigerant Pipe Length Length Max.100 ft. Max.165 ft. **Connection Method** Flared

NOTES:

1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor: D.B. 35° C (95° F), W.B. 23.9° C (75° F). Specifications are subject to change without notice.

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

Available Options Wireless Remote Controller Kit



BS = Seacoast Protection

## SPECIFICATIONS FOR PL HEAT PUMP P-SERIES (R410A)



INVERTER

	BS = Seacoast Protecti	on						
	Indoor Unit		PLA-A18AA	PLA-A24AA	PLA-A30AA	PLA-A36AA	PLA-A42AA	
Model Name	Outdoor U	nit	PUZ-A18NHA-BS PUZ-A18NHA	PUZ-A24NHA-BS PUZ-A24NHA	PUZ-A30NHA-BS PUZ-A30NHA	PUZ-A36NHA-BS PUZ-A36NHA	PUZ-A42NHA-BS PUZ-A42NHA	
	Rated. Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000	
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000	
Cooling *1	Total Input	W	1,870	2,500	4,100	4,510	4,820	
oboling	Energy Efficiency	SEER	13.2	13.4	13	13.1	13.1	
	Moisture Removal	Pints/h	1.5	5	8.1	7.2	10.9	
	SHF	ī	0.91	0.77	0.7	0.77	0.71	
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	45,000	
Heating *1	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000	
0	Total Input	W	1,620	2,570	3,370	3,490	5,070	
	HSPF(IV/V)	Btu/h/W	10 / 7.8	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7	8.0 / 7.0	
leating at Low Ambient *2	Capacity	Btu/h	13,000	16,000	23,000	25,000	30,000	
-	Total Input	W	1,400	2,200	3,050 ase, 60Hz, 208/230V	3,070	4,300	
Power supply	Phase, Cycle, Voltage Breaker size	A	15	25	ase, 60HZ, 206/230V	30		
	Indoor - Outdoor S1-S2	A	15	23	AC 208 / 230V	30		
Voltage	Indoor - Outdoor S1-S2				DC24V			
Voltago	Indoor - Remote Controlle	r		D	C12V: Wired Type			
	MCA	A		1			2	
	MOCP	A			15		-	
	Fan Motor	F.L.A.	0.79 1.25				25	
	Fan Motor Output	W	70 110				10	
Ì	Airflow DRY	CFM	530-570-640-710 710-810-920-				-920-990	
	(Lo-M1-M2-Hi) WET	CFM	490-530-600-670 670-770-880-950				-880-950	
	External Pressure	Pa	0					
Indoor Unit	Sound Level (Lo-M1-M2-Hi)	dB(A)	28-30-32-34 33-36-39-41				-39-41	
	External Finish Color (Pane	el)	Munsell 0.70Y 8.59/0.97					
	W: inch		33-1/16 (37-3/8)					
	Dimension Unit (Panel)	D: inch	33-1/16 (37-3/8)					
		H: inch	10-3/16 (1-3/16) 11-3/4(1-3/16)					
	Weight Unit (Panel)	lbs.	11			11	11	
	Field Drain Pipe Size O.D.	inch			1-1/4		•	
Remote (	Controller			Pa	ckaged with Grille			
	MCA	A	13	18	2	5	26	
	MOCP	А	20	30		40		
	Fan Motor	F.L.A.	0.35		0.75		0.4 + 0.4	
	Fan Motor Output	W	40 75		86 + 86			
			SNB130FPBM1	TNB220FLDM			ANV33FDDMT	
	Compressor	R.L.A		12	i		20	
		L.R.A.	14			27.5		
Outdoor Unit	Airflow Refrigerant Control	CFM	1,200	Lin	1,940 3,530 Linear Expansion Valve			
Outdoor Unit	Defrost Method			LIII				
	Sound Level at Cooling	dB(A)	Reverse Cycle					
	Sound Level at Heating	dB(A)			-		51 55	
	External Finish Color	UD(A)	47 50 Muncall 2V 7 8/1 1			55		
		W: inch	31-1/2	Munsell 3Y 7.8/1.1 37-3/8				
	Dimensions	D: inch	11-13/16	1	13 + 1			
		H: inch	23-5/8			53-1/8		
	Weight	lbs.	99	1	165		267	
	Туре				R410A			
Refrigerant	Charge	lbs., oz.	3 lbs. 12 oz.	1	6 lbs.		10 lbs.	
÷	Oil	OZ.	(MEL56) 20	1	(MEL56) 28		(MEL56) 45	
Refrigerant Pipe Size	Gas Side O.D.	inch	1/2		5/	/8		
nemyerani Pipe Size	Liquid Side O.D.	inch	1/4		3/	/8		
Refrigerant Pipe Length	Height difference				Max.100 ft.			
	Length		Max.100 ft.		Max.1	65 ft.		
Connection Method					Flared			

NOTES: \*1 Rating conditions (cooling)-Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F) Outdoor: D.B. 35° C (95° F), W.B. 23.9° C (75° F). (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor: D.B. 8.3° C (47° F), W.B. 6.1° C (43° F).

**Available Options** Wireless Remote Controller Kit

\*2 Rating conditions (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F) Outdoor: D.B. -8.3° C (17° F), W.B. -9.4° C (15° F). IV/V: D.O.E. heat pump heating region.

Specifications are subject to change without notice.

#### GENERAL SPECIFICATIONS

MS/MSY/MSZ/MXZ RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F DB, 71° F WB	115° F DB
	MINIMUM	67° F DB, 57° F WB	67° F (MS) / 14° F (MSY/MSZ/MXZ)
HEATING	MAXIMUM	80° F DB, 67° F WB	75° F DB, 65° F WB
	MINIMUM	70° F DB, 60° F WB	12º F DB, 15º F WB

#### GENERAL SPECIFICATIONS

#### PKA/PCA/PLA RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F DB, 71° F WB	115º F DB
	MINIMUM	67° F DB, 57° F WB	0° F DB*
HEATING	MAXIMUM	80° F DB, 67° F WB	70° F DB, 59° F WB
	MINIMUM	70° F DB, 60° F WB	12° F DB, 10° F WB

\* With wind baffle installed. Without wind baffle installed, the minimum temperature will be 23° F DB.

#### OPTIONAL ACCESSORIES

PART NUMBER	USE WITH	DESCRIPTION
		Control Options
MAC-397IF-E	MSZ Series Inverter	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-397IF-E: 1 per unit)
PAC-725AD	P-Series	Connector for CN51/ multiple remote controller adapter and duct fan controller
PAC-715AD	P-Series	Connector for CN32 (For remote on/off)
PAC-SE41TS-E	P-Series A-Control Systems	Remote temperature sensor for indoor units
PAC-SF40RM-E	P-Series A-Control Systems	Remote operation adapter: display and on/off
PAC-SF80MA-E	P-Series	M-NET control adapter for Mr. Slim PUY and PUZ Models
PAC-SK52ST	P-Series	Control / service tool
PAR-21MAA-G	Use for wired M-Series Controller	Deluxe MA remote controller (Requires MAC-397IF-E)
PAR-SL99B-E	P-Series	Wireless remote controller kit for PCA suspended units
PAR-SW96U-E	P-Series	Wireless remote controller kit for PLA cassette units
PZ-41SLB-E	P-Series Remote Controller	Lossnay ERV remote controller For LGH ERV control
		Low Ambient
WB-PA1	P-Series	Wind baffle (1 piece) PUY/Z A12/A18
WB-PA2	P-Series	Wind baffle (1 piece) PUY/Z A24/A30/A36/A42 (42 installation requires 2 pieces)
		Filters
MAC-2300FT	M-Series Indoor Unit - A24	Anti-allergy enzyme filter
MAC-415FT-E	M-Series Indoor Unit - A09/A12/A15/A17	Anti-allergy enzyme filter
PAC-SE81KF-E	PCA Indoor Units	High-efficiency filter element
PAC-SG01KF-E	All PLA Models	High-efficiency filter element
	l	Pumps
SI1730-230	P-Series	Mini-condensation pump: 230V
SI3100-115	MS-Series	Mini-condensation pump: 115V
SI3100-230	MSY/Z-Series	Mini-condensation pump: 230V
		Miscellaneous
CWMB1	MU and PU outdoor units	Condensing unit wall mounting brackets: painted steel
CWMBSS	MU and PU outdoor units	Condensing unit wall mounting brackets: 304 stainless steel
PAC-SG03TM-E	All PLA Models	Multi-function casement (filter not included)
PAC-SG06SP-E	All PLA Models	Air outlet shutter plates (1 set = 2 pieces)
PAC-SG58SG-E	P-Series	Air outlet guide (1 piece) PUY/Z A12/A18
PAC-SG59SG-E	P-Series	Air outlet guide (1 piece) PUY/Z A24/A30/A36/A42 (42 installation requires 2 pieces)
PAC-SG61DS-E	P-Series	Drain socket
PAC-SG63DP-E	PUZ(Y)-A12/18	Drain pan
PAC-SG64DP-E	PUZ(Y)-A24/30/36/42	Drain pan
RCMKP1CB	M-Series Wireless	Lockdown bracket for remote controller
ULTRILITE1	All M-Series and PUZ(Y)-A12/18	Condensing unit mounting pad (in.): 16" x 36" x 3"
ULTRILITE2	PUZ(Y)-A24/30/36/42	Condensing unit mounting pad (in.): 24" x 42" x 3"
		Port Adapters
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"
MSDD-50SR-E	P-Series	Distribution pipe
PAC-493PI	MXZ-Series	Adapter: 1/4" x 5/8"
PAC-SC84PI-E	PKA-Series	L connector pipe (for left side piping)
PAC-SG76RJ-E	MXZ-Series	Adapter: 3/8" x 5/8"

#### GENERAL SPECIFICATIONS REFRIGERANT LINE LENGTH FLARE/FLARE

Indoor Unit	Outdoor Unit	Length in feet	Height in feet
MSA09WA	MUA09WA	65	35
MSA12WA	MUA12WA	65	35
MSYA15NA	MUYA15NA	65	40
MSYA17NA	MUYA17NA	65	40
MSYA24NA	MUYA24NA	100	40
MSZA09NA	MUZA09NA	65	40
MSZA12NA	MUZA12NA	65	40
MSZA15NA	MUZA15NA	65	40
MSZA17NA	MUZA17NA	65	40
MSZA24NA	MUZA24NA	100	40
MSZA09NA, MSZA12NA, MSZA15NA	MXZ2A20NA	164	49*/33
MSZA09NA, MSZA12NA, MSZA15NA, MSZA17NA, MSZA24NA	MXZ3A30NA	230	33
PKAA12GA (L)	PUYA12NHA	100	100
PKAA18GA (L)	PUYA18NHA, PUZA18NHA	100	100
PKAA24GA (L)	PUYA24NHA, PUZA24NHA	165	100
PKAA30GA (L)	PUYA30NHA, PUZA30NHA	165	100
PKAA36GA (L)	PUYA36NHA, PUZA36NHA	165	100
PLAA12AA (L)	PUYA12NHA	100	100
PLAA18AA (L)	PUYA18NHA, PUZA18NHA	100	100
PLAA24AA (L)	PUYA24NHA, PUZA24NHA	165	100
PLAA30AA (L)	PUYA30NHA, PUZA30NHA	165	100
PLAA36AA (L)	PUYA36NHA, PUZA36NHA	165	100
Plaa42aa (L)	PUYA42NHA, PUZA42NHA	165	100
PCAA24GA (L)	PUYA24NHA, PUZA24NHA	165	100
PCAA30GA (L)	PUYA30NHA, PUZA30NHA	165	100
PCAA36GA (L)	PUYA36NHA, PUZA36NHA	165	100
PCAA42GA (L)	PUYA42NHA, PUZA42NHA	165	100

\*49' applies to installations with outdoor unit installed above 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"	
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"	Mr. Slim MS-A09WA, MSZ-A09NA, MSZ-A12NA
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
MLS141238-30	1/4 x 1/2	30	3/8"	MS-A12WA, MSY-A15NA, MSY-A17NA,
MLS141238-50	1/4 x 1/2	50	3/8"	MSZ-A15NA, MSZ-A17NA,
MLS141238-65	1/4 x 1/2	65	3/8"	PKA-A12GA(L), PKA-A18GA(L), PLA-A12AA, PLA-A18AA
MLS141238-100	1/4 x 1/2	100	3/8"	TEN ATZAN, TEN ATOAN
MLS145838-15	1/4 x 5/8	15	3/8"	
MLS145838-30	1/4 x 5/8	30	3/8"	Mr. Slim
MLS145838-50	1/4 x 5/8	50	3/8"	MSY-A24NA, MSZ-A24NA
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"	
MPLS385838-15	3/8 x 5/8	15	3/8"	Mr. Slim
MPLS385838-30	3/8 x 5/8	30	3/8"	PKA-A24GA(L), PKA-A30GA(L), PKA-A36GA(L), PLA-A24AA, PLA-A30AA, PLA-A36AA,
MPLS385838-50	3/8 x 5/8	50	3/8"	PLA-A42AA, PCA-A24GA,
MPLS385838-65	3/8 x 5/8	65	3/8"	PCA-A30GA, PCA-A36GA, PCA-A42GA
MPLS385838-100	3/8 x 5/8	100	3/8"	

Specifications are subject to change without notice.

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

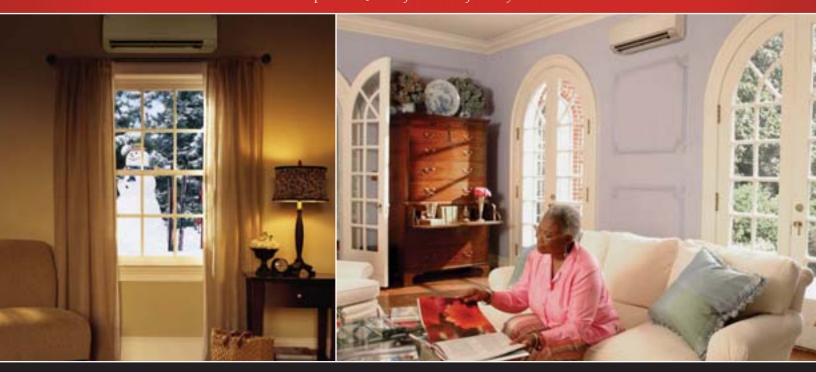
#### LINE-HIDE™ LINESET COVER SYSTEM

- Available in four sizes 2-1/4-inch, 3-inch, 4-inch and 6inch 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

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.



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.







Mitsubishi Electric Advanced Products Division 3400 Lawrenceville Suwanee Road Suwanee, GA 30024

MITSUBISHI ELECTRIC

Phone: 888-467-7546 Fax: 800-658-1458

©2006 Mitsubishi Electric & Electronics USA, Inc. Mr Slim<sup>®</sup> is a registered trademark of Mitsubishi Electric. The three-diamond logo is a registered logo of Mitsubishi Electric Corporation.

See complete warranty for terms, conditions, and limitations. A copy is available from Mitsubishi Electric. Form No. MBROGEN-09-06-45M

For more information visit WWW.mrslim.com

B Printed on recycled paper.