

NEW

MSZ-FE18NA

Wall-Mounted Indoor Unit

**MITSUBISHI
ELECTRIC**
Cooling and Heating Solutions



- High efficiency performance
 - 20.2 SEER, 10.3 HSPF and 14.2 EER
- H2i® Hyper-Heating capabilities
- Advanced INVERTER-driven compressor
- Quiet operation
- Improved smooth finish design

The new MSZ-FE18NA is a big addition to the FE Hyper-Heating family of products! With a rated capacity of 27,000 Btu/h at 47° F extending down to 100% at 5° F. The MSZ-FE18NA produces 73% of full heating capacity down to -13° F. This system provides increased heating performance for larger spaces.



Rounding out the FE family of products are the MSZ-FE09NA and the MSZ-FE12NA. Both of these systems are ENERGY STAR certified and qualify for the Federal tax credit with ratings up to 26 SEER.

With Hyper-Heating INVERTER technology, these systems can provide up to 100% heating capacity down to 5° F (on the FE-09 model with the FE-12 providing 92% capacity) with a system cut-off at -13° F.

Integrated advanced technology that is integrated includes a triple filtration system and the i-see™ Sensor, which detects temperature variations within a space and makes real-time adjustments to system operations.

Specifications

Model Name	Indoor Unit		MSZ-FE18NA
	Outdoor Unit		MUZ-FE18NA
Cooling *1	Rated Capacity	Btu/h	18,000
	Capacity Range	Btu/h	8,200-25,200
	Total Input	W	1,270 (570-2,280)
	Energy Efficiency	SEER	20.2
	Moisture Removal	Pints/h	2.7
	Sensible Heat Factor		0.84
Heating at 47° F *2	Rated Capacity	Btu/h	21,600
	Capacity Range	Btu/h	7,500-29,700
	Total Input	W	1,540 (520-2,420)
	HSPF (IV)	Btu/h/W	10.3
	COP		4.11
Heating at 17° F *3	Rated Capacity	Btu/h	11,700
	Rated Total Input	W	2,180
	Maximum Capacity	Btu/h	19,300
	COP		2.77
Heating at 5° F	Maximum Capacity	Btu/h	21,600
Power Supply	Phase, Cycle, Voltage		1-phase, 60Hz, 208 / 230V *4
Voltage	Indoor - Outdoor S1 - S2		AC 208 / 230V
	Indoor - Outdoor S2 - S3		DC12-24V
	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: DC 12V)
Indoor Unit	MCA	A	1.0
	Fan Motor	F.L.A.	0.76
	Airflow at Cooling (Lo-Med-Hi-Powerful) *1	DRY (CFM)	388-469-628-738
		WET (CFM)	347-420-562-661
	Airflow at Heating (Lo-Med-Hi-Powerful) *2	WET (CFM)	388-469-628-738
	Sound Pressure Level at Cooling (Lo-Med-Hi-Powerful) *1	dB(A)	34-41-49-53
	Sound Pressure Level at Heating (Lo-Med-Hi-Powerful) *2	dB(A)	32-41-49-52
	External Finish Color		Munsell No. 1.0Y 9.2 / 0.2
	Dimension Unit	W: In.	43-5/16
D: In.		9-3/8	
H: In.		12-13/16	
Weight Unit	Lbs.	37	
Field Drainpipe Size O.D.	In.	5/8	
Outdoor Unit	MCA	A	17.1
	MOCP	A	20
	Fan Motor	F.L.A.	0.93
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary
		R.L.A.	12.9
		L.R.A.	16.1
	Airflow (Cooling/Heating)	CFM	1,769 / 1,701
	Refrigerant Control		Linear Expansion Valve
	Defrost Method		Reverse Cycle
	Sound Pressure Level at Cooling *1	dB(A)	55
	Sound Pressure Level at Heating *2	dB(A)	55
	External Finish Color		Munsell No. 3Y 7.8 / 1.1
	Dimensions	W: In.	33-1/16
		D: In.	13
H: In.		34-5/8	
Weight	Lbs.	119	
Remote Controller	Type		Wireless Remote (Optional Wired Controller)
Refrigerant	Type		R410A
	Charge	Lbs., Oz.	4, 3
	Oil	Type (fl. oz.)	FV50S (0.40)
Refrigerant Pipe	Gas Side O.D.	In.	5/8
	Liquid Side O.D.	In.	3/8
Refrigerant Pipe Length	Height Difference (Max.)	Ft.	50
	Length (Max.)	Ft.	100
Connection Method	Indoor/Outdoor		Flared/Flared



For more information, visit www.mehvac.com

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Hyper-Heating INVERTER

FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS



New technology for pumped-up heating performance!

UPDATED APRIL 2010





Year-round comfort in a single system.



It's the hot new thing in heating! Mitsubishi Electric has redefined the heat pump, enhancing our INVERTER-driven heat pumps with advanced Hyper-Heating INVERTER (H2i®) technology* for year-round comfort in a single system. These innovative heat pumps can operate effectively to deliver toasty warm comfort at outdoor temperatures well below zero.

It's the ideal comfort control solution for a wide range of applications, residential to commercial, and it's available with select Mitsubishi Electric Mr. Slim® split zoning and CITY MULTI® Variable Refrigerant Flow (VRF) zoning systems.

Fuel savings, cost savings.

Unequalled comfort is only part of the story. These H2i systems are also one of the most efficient choices in heating and cooling – just check out the ENERGY STAR ratings! Mitsubishi Electric offers the most extensive line of products that qualify for the ENERGY STAR Tier 2 level, helping

* Patent Pending

Tremendous heating performance

homeowners take advantage of available tax credits, efficiency rebate programs with reduced energy use and savings on fuel costs.

Each H2i system features indoor and outdoor units designed to work together to provide the perfect combination of comfort and energy efficiency, whatever the space – whether it's a single room, a multi-story commercial building or anything in-between.

Our P-Series and Y-Series outdoor units use flash injection technology to collect heat energy normally lost in the flash process at the outdoor coil. This patent-pending process cools the compressor, allowing it to operate at higher speeds and lower outdoor temperatures without overheating. Mr. Slim MSZ-FE

Series H2i units feature compressors with a rare earth magnet rotor, which increases the magnetic flux so the compressor can generate higher energy efficiencies with better performance than ever before.

Warm air, quickly.

Occupants will appreciate the warm air difference of the Hyper-Heating INVERTER's Hot Start technology. The unit's larger coils heat faster, so it reaches the desired output temperature quickly. And because the system fan turns on only after the target temperature is reached, it never blows cold air. From that point on, the H2i technology fine-tunes compression speed to precisely match the load requirements in each zone, maintaining uniform comfort and maximizing operating efficiencies.



ce, even in harsh climates

The Mr. Slim® FE-Series

FEATURING OUR NEW RARE EARTH COMPRESSOR MAGNET FOR HIGH HEAT AND ENERGY EFFICIENCY



The latest addition to Mitsubishi Electric's H2i lineup uses a revolutionary new compressor to generate high heat with advanced energy efficiency. FE compressors use a special rare earth magnet rotor to reduce the compressor's energy consumption while producing more heat.

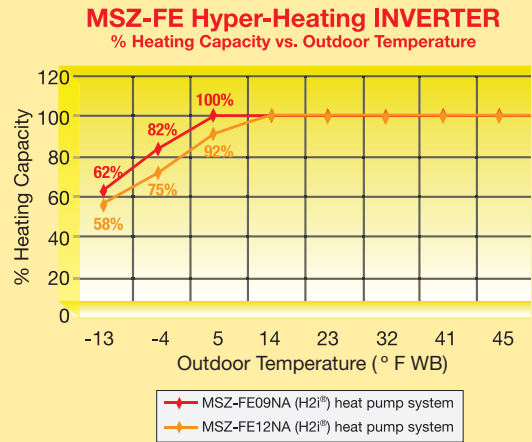
As a result, FE-Series systems provide exceptional heating performance in very cold temperatures – just as our flash technology-based systems do for larger-sized solutions. For example, the 9,000 Btu/h MSZ-FE system can produce up to 100% heating capacity at 5° F; the 12,000 Btu/h system can produce 92% heating capacity at 5° F.

Both FE systems are also ENERGY STAR® certified and federal tax credit qualified, so they have the potential to create additional savings beyond fuel savings, energy savings and ease of installation savings.

The i-see™ Sensor: Airflow where you need it.

The FE-Series also offers advanced features like an enhanced filtration system and the i-see Sensor, which monitors and adjusts airflow to eliminate pockets of too-warm and too-cold air in hard-to-control ceiling and floor areas. It automatically adjusts the unit's operation to regulate temperature differences detected between the floor and the intake air.

The result is superior cooling/heating performance with extremely efficient operation. The sensor adjusts airflow up to a wide 150° lateral angle for ultimate comfort (90° angle in cooling mode).



Features	Benefits
ADVANCED TECHNOLOGY	100% heating capacity at 5° F outdoor temperature (MSZ-FE09NA Model)
EXTENDED CYCLE TIMES	Extended comfort, with consistent heat in one continuous cycle
QUIET OPERATION	Airflow and fan enhancements have reduced operating noise for both cooling and heating
"SMART SET" BUTTON	Powerful programmable operation or setback (down to 50° F in heating)
MORE FAN SPEEDS	For improved air control (compared with previous models)
ENHANCED FILTRATION SYSTEM	Cleaner air through additional level of filtration for the removal of contaminants



(MSZ-FE12NA MODEL SHOWN)

INVERTER



MSZ HEAT PUMP



TAX CREDIT



TAX CREDIT

Model Name	Indoor Unit		MSZ-FE09NA	MSZ-FE12NA	
	Outdoor Unit		MUZ-FE09NA	MUZ-FE12NA	
Cooling *1	Rated Capacity	Btu/h	9,000	12,000	
	Capacity Range	Btu/h	2,800-9,000	2,800-12,000	
	Total Input	W	580 (160-650)	930 (160-960)	
	Energy Efficiency	SEER	26	23	
	Moisture Removal	Pints/h	2.1	2.9	
	Sensible Heat Factor		0.76	0.73	
Heating at 47° F *2	Rated Capacity	Btu/h	10,900	13,600	
	Capacity Range	Btu/h	3,000-18,000	3,000-21,000	
	Total Input	W	710 (150-2,250)	950 (150-2,250)	
	HSPF (I/V)	Btu/h/W	10	10.6	
Heating at 17° F *3	Rated Capacity	Btu/h	6,700	8,300	
	Rated Total Input	W	650	800	
	Maximum Capacity	Btu/h	12,500 (10,900 @ 5° F)	13,600 (12,507 @ 5° F)	
Power Supply	Phase, Cycle, Voltage		1-phase, 60Hz, 208 / 230V *4		
Voltage	Indoor - Outdoor S1 - S2		AC 208 / 230V		
	Indoor - Outdoor S2 - S3		DC12-24V		
	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: DC 12V)		
Indoor Unit	MCA	A	1.0		
	Fan Motor	F.L.A.	0.76		
	Airflow at Cooling (Lo-Med-Hi-Powerful) *1	DRY (CFM)	162-226-339-381	162-226-381-410	
		WET (CFM)	144-202-307-343	144-202-350-367	
	Airflow at Heating (Lo-Med-Hi-Powerful) *2	WET (CFM)	166-240-367-381	166-240-399-420	
	Sound Pressure Level at Cooling (Lo-Med-Hi-Powerful) *1	dB(A)	22-31-39-42	22-33-43-45	
	Sound Pressure Level at Heating (Lo-Med-Hi-Powerful) *2	dB(A)	22-31-40-42	22-23-43-44	
	External Finish Color	Munsell No. 1.0Y 9.2 / 0.2			
	Dimension Unit	W: In.	31-7/16		
		D: In.	10-1/8	10-1/8	
		H: In.	11-5/8		
	Weight Unit	Lbs.	27	27	
Field Drainpipe Size O.D.	In.	5/8			
Outdoor Unit	MCA	A	12		
	MOCP	A	15		
	Fan Motor	F.L.A.	0.56	0.56	
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary		DC INVERTER-driven Twin Rotary
		R.L.A.	8.6	8.6	
		L.R.A.	10.8	10.8	
	Airflow (Cooling/Heating)	CFM	1,102 / 1,187	1,102 / 1,187	
	Refrigerant Control	Linear Expansion Valve			
	Defrost Method	Reverse Cycle			
	Sound Pressure Level at Cooling *1	dB(A)	48	48	
	Sound Pressure Level at Heating *2	dB(A)	49	49	
	External Finish Color	Munsell No. 3Y 7.8 / 1.1			
	Dimensions	W: In.	31-1/2		
D: In.		11-1/4			
H: In.		21-5/8			
Weight	Lbs.	80	80		
Remote Controller	Type		Wireless Remote (Optional Wired Controller)		
Refrigerant	Type		R410A		
	Charge	Lbs., Oz.	2, 9		
	Oil	Type (fl. oz.)	NEO22 (10.8)		
Refrigerant Pipe	Gas Side O.D.	In.	3/8		
	Liquid Side O.D.	In.	1/4		
Refrigerant Pipe Length	Height Difference (Max.)	Ft.	40		
	Length (Max.)	Ft.	60		
Connection Method	Indoor/Outdoor		Flared/Flared		

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

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

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

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

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

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year warranty on compressor. Five-year warranty on parts.

The Mr. Slim® P-Series

OUR LEADING PRODUCT LINE, NOW ENHANCED:

- Improved energy-efficiency
- Compatible with more indoor units (including ceiling-cassette & horizontal ducted)
- ENERGY STAR® rated with six indoor units
- PLA-36 unit and two PLA-18 units qualify for tax-credits



The Hyper-Heating INVERTER P-Series models add greater performance to our leading product line by providing the extra level of heat needed for comfort in extreme climates. And now, the popular P-Series works with more styles of indoor units than ever before. It also includes enhancements such as the optional i-see™ Sensor on the PCA and PLA indoor unit models.

The wall-mounted, ceiling-recessed, ceiling-suspended or horizontal ducted 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. These systems employ our INVERTER-driven scroll compressor technology so that room temperature is reached more quickly and desired comfort level is maintained consistently, while conserving energy. And with the integration of Mitsubishi Electric's exclusive flash technology, these models exhibit 100% of rated heating capacity at 5° F and 87% at -4° F outdoor ambient.

Air-conditioning down to 0° F outdoor ambient is possible with the addition of a wind baffle, for applications such as computer and mechanical rooms, and kitchens, where cooling can be needed even when outdoor temperatures are below freezing. Whether cooling or heating, the H2i P-Series gives you the flexibility to temper extreme outdoor temperatures.

“Twinning” - Two indoor units working as one

For a large or unusually shaped space – a long room, hallway, etc. – which would be considered one zone, two 18,000 BTU/h indoor units can be connected to one 36,000 Btu/h outdoor unit to cool or heat the space for maximum comfort. This is called “twinning” – when two indoor units join forces to spread the outdoor unit's capacity over a large area.


ENERGY STAR® and Tax Credit Systems

Six (6) H2i P-Series systems are ENERGY STAR rated and two (2) qualify for the Federal Tax Credit.

Energy Star	Tax Credit
PKA-A30KA	PLA-A36BA
PKA-A36KA	(2) PEA-A18AA
PLA-A30BA	
PLA-A36BA	
PCA-A30KA	
PCA-A36KA	

Twinning Options

Outdoor Unit	Indoor Unit Options
PUZ-HA36NHA	(2) PKA-A18KA OR (2) PLA-A18BA OR (2) PEA-A18AA



Features	Benefits
ADVANCED TECHNOLOGY	Cooling and heating capabilities down to 0° F outdoor temperature
INVERTER TECHNOLOGY	High-speed cooling and heating for consistent comfort year-round
QUIET OPERATION	A workplace free of cooling and heating noise distractions and annoyances
NO DUCTWORK	Easy installation, lower construction costs
ZONE CONTROL	Cool and heat only those spaces desired for maximum control and energy efficiency
ENVIRONMENTALLY FRIENDLY	Cleaner and better operation
AUTO RESTART	Peace-of-mind and ease of use in the event of a power outage
AUTO COOL/HEAT CHANGEOVER	Hands-free comfort control

Low Temperature Heating Performance

PUZ-HA30NHA

COP if	PKA	PLA	PCA	PEAD
47° F	3.20	2.72	3.13	3.41
17° F	1.84	1.63	1.81	1.90
5° F	1.62	1.41	1.60	1.73

PUZ-HA36NHA

COP if	PKA	PLA	PCA	PEAD	PEA18 (x2)
47° F	3.26	3.44	3.40	3.53	3.61
17° F	1.85	2.10	1.94	2.06	2.06
5° F	1.64	1.90	1.70	1.82	1.82

USE WITH THESE INDOOR UNITS:

PKA wall-mounted model



Exceptional Performance, Compact Size

- Hard-wired, wall-mounted, remote controller (-KA model) or wireless (-KAL model)
- Adjustable vane control
- Easy-clean filters
- Auto fan option

PLA ceiling-recessed model



Flexibility & Ease of Installation (Even 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 even heat distribution
- Built-in drain lift mechanism for condensate removal; lifts up to 33-7/16"
- Optional i-see sensor kit

PCA ceiling-suspended model



Control Airflow Angle for Better Coverage

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

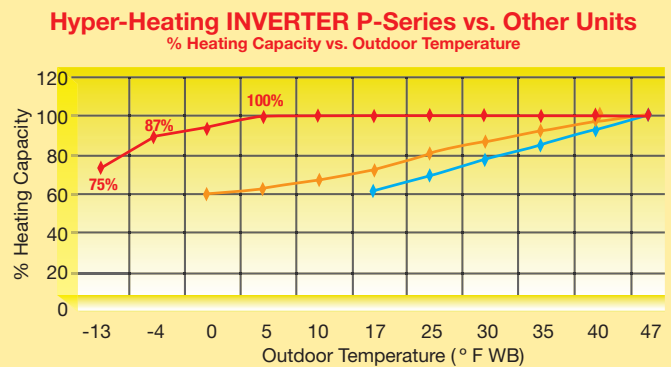
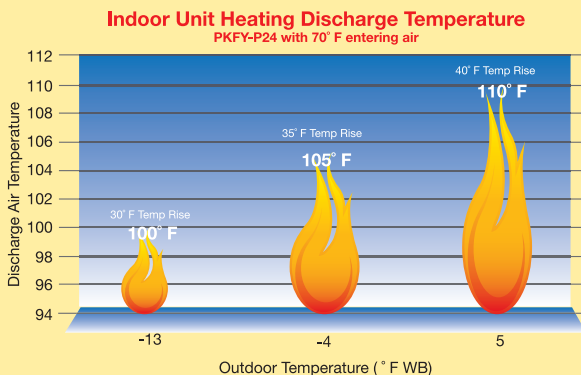
- Auto fan option
- Optional i-see sensor kit

PEA/PEAD horizontal ducted models



Condition Adjacent Spaces or Extend Range

- Low profile cabinet
- Built-in drain lift mechanism for condensate removal. PEA lifts up to 21-11/16"; PEAD lifts up to 27-9/16"
- Adjustable ESP: PEA up to 0.2 and PEAD up to 0.6



◆ Mitsubishi Electric Hyper-Heating INVERTER (H2i) P-Series PUF-HA-NHA2
■ Mitsubishi Electric Standard INVERTER heat pump system
▲ Typical Unitary Equipment Performance

Does not include correction factor for defrost

H2i® P-SERIES HEAT PUMP



Wall-mounted models

Ceiling-cassette models

Ceiling-suspended models



TAX
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KA = Wired Controller; KAL = Wireless Controller

Model Name	Indoor Unit		PKA-A30KA(L)	PKA-A36KA(L)	PLA-A30BA	PLA-A36BA	PCA-A30KA	PCA-A36KA
	Outdoor Unit		PUZ-HA30NHA2	PUZ-HA36NHA2	PUZ-HA30NHA2	PUZ-HA36NHA2	PUZ-HA30NHA2	PUZ-HA36NHA2
Cooling *1	Rated Capacity	Btu/h	30,000	33,500	30,000	34,000	30,000	34,000
	Capacity Range	Btu/h	18,000-30,000	18,000-34,200	18,000-30,000	18,000-36,000	18,000-30,000	18,000-36,000
	Total Input	W	2,500	2,790	2,450	2,690	2,480	2,810
	Energy Efficiency	SEER	16.5	16.2	15.6	17	16.1	16.6
	Moisture Removal	Pints/h	8.1	8.7	7.2	7.1	8.3	8.2
	Sensible Heat Factor		0.70	0.71	0.73	0.71	0.69	0.73
Heating at 47° F *2	Rated Capacity	Btu/h	32,000	38,000	32,000	38,000	32,000	38,000
	Capacity Range	Btu/h	18,000-34,000	18,000-40,000	18,000-34,000	18,000-40,000	18,000-34,000	18,000-40,000
	Total Input	W	2,930	3,410	3,440	3,230	2,990	3,270
	HSPF (IV)	Btu/h/W	9.5	10	9.4	10	9.3	10.3
Heating at 17° F *3	Rated Capacity	Btu/h	19,000	25,000	19,000	28,000	19,000	27,000
	Rated Total Input	W	2,570	3,330	2,710	3,590	2,830	3,490
	Maximum Capacity	Btu/h	32,000	38,000	32,000	38,000	32,000	38,000
	Maximum Total Input	W	5,080	6,010	5,720	5,300	5,170	5,720
Heating at 5° F *4	Maximum Capacity	Btu/h	32,000	38,000	32,000	38,000	32,000	38,000
	Maximum Total Input	W	5,770	6,760	6,630	5,860	5,830	6,550
Power Supply	Phase, Cycle, Voltage		1-phase, 60Hz, 208/230V *5					
Voltage	Indoor - Outdoor S1 - S2		AC208 / 230V					
	Indoor - Outdoor S2 - S3		DC24V					
	Indoor - Remote Controller		DC12V: For Wired Controller (KA)			DC12V: For Wired Controller		
	Indoor - Remote Controller		Wireless Type (KAL)			N/A		
Indoor Unit	MCA	A	1		2		1	2
	Fan Motor	F.L.A.	0.36	0.57	0.51	1.00	0.54	0.97
	Fan Motor Output	W	56		50	120	95	160
	Airflow (Lo-Mid-Hi or Lo-Mid1-Mid2-Hi)	DRY (CFM)	635-705-775	705-810-920	490-570-640-740	710-810-920-1,060	565-600-635-705	775-850-920-990
		WET (CFM)	570-635-700	635-730-830	460-530-600-710	670-770-880-1,030	530-565-600-670	705-775-850-920
	Sound Pressure Level (Lo-Mid-Hi or Lo-Mid1-Mid2-Hi)	dB(A)	39-42-45	43-46-49	28-30-32-34	32-34-37-40	35-37-39-41	37-39-41-43
	External Finish Color		Munsell No. 1.0Y 9.2 / 0.2		Munsell No. 6.4Y 8.9 / 0.4 (Grille)		Munsell No. 6.4Y 8.9 / 0.4	
	Dimension Unit	W: In.	46-1/16		33-1/16 (Grille: 37-3/8)		50-3/8	63
		D: In.	11-5/8		33-1/16 (Grille: 37-3/8)		26-3/4	
		H: In.	14-3/8	10-3/16 (Grille: 1-3/8)	11-3/4 (Grille 1-3/8)	9-1/16		
	Weight Unit	Lbs.	46	51 (Grille: 13)	55 (Grille: 13)	71	79	
	Drain Lift Mechanism (Included)	H: In.	N/A		33-7/16		N/A	
	Field Drainpipe Size	In.	5/8 I.D.		1-1/4 O.D.		1-1/16 O.D.	
Outdoor Unit	MCA	A	28					
	MOCP	A	40					
	Fan Motor	F.L.A.	0.4 + 0.4					
	Fan Motor Output	W	60 + 60					
	Compressor	Model (Type)	INVERTER-driven Scroll					
		R.L.A.	18					
		L.R.A.	27.5					
	Airflow	CFM	3,530					
	Refrigerant Control	Electronic Expansion Valve						
	Defrost Method	Reverse Cycle						
	Sound Pressure Level at Cooling *1	dB(A)	52					
	Sound Pressure Level at Heating *2	dB(A)	53					
	External Finish Color		Munsell No. 3Y 7.8 / 1.1					
Dimensions	W: In.	37-3/8						
	D: In.	13 + 1-3/16						
	H: In.	53-1/8						
Weight	Lbs.	265						
Remote Controller	Type	KA = Wired, KAL = Wireless (Located with Indoor Unit)			Wired Remote Controller (Packaged with Grille)		Wired Remote Controller (Located with Indoor Unit)	
	Type	R410A						
Refrigerant	Charge	Lbs.						
	Oil	Type (fl. oz.)						
Refrigerant Pipe	Gas Side O.D.	In.						
	Liquid Side O.D.	In.						
Refrigerant Pipe Length	Height Difference (Max.)	Ft.						
	Length (Max.)	Ft.						
Connection Method	Indoor/Outdoor	Flared/Flared						
Operating Temperature Range	Cooling	0° F D.B. to 115° F D.B. with Wind Baffle Accessory Installed						
	Heating	-13° F W.B. to +59° F W.B.						

Specifications are subject to change without notice.

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).
*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 (47° F), W.B. 6.1° C (43° F).
*3 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).
*4 Rating conditions (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F); Outdoor: D.B. -15° C (5° F), W.B. -15° C (5° F).

*5 Indoor units receive power from outdoor units through field-supplied interconnected wiring.
LIMITED WARRANTY | Seven-year warranty on compressor. Five-year warranty on parts.

H2i® P-SERIES HEAT PUMP



Horizontal ducted models

KA = Wired Controller; KAL = Wireless Controller

Model Name	Indoor Unit		Twin PEA-18	PEAD-A30AA	PEAD-A36AA	
	Outdoor Unit		PUZ-HA36NA2	PUZ-HA30NHA2	PUZ-HA36NHA2	
Cooling *1	Rated Capacity	Btu/h	34,000	30,000	34,000	
	Capacity Range	Btu/h	18,000	18,000-30,000	18,000-36,000	
	Total Input	W	2,700	2,500	2,800	
	Energy Efficiency	SEER	16.8	16.5	16.8	
	Moisture Removal	Pints/h	6.7	8.9	7.3	
	Sensible Heat Factor		0.78	0.67	0.76	
Heating at 47° F *2	Rated Capacity	Btu/h	38,000	32,000	38,000	
	Capacity Range	Btu/h	40,000	18,000-34,000	18,000-40,000	
	Total Input	W	2,150	2,750	3,150	
	HSPF (I/V)	Btu/h/W	10.4	9.5	10.4	
Heating at 17° F *3	Rated Capacity	Btu/h	27	19,000	27,000	
	Rated Total Input	W	5,400	2,590	3,250	
	Maximum Capacity	Btu/h	38,000	32,000	38,000	
	Maximum Total Input	W	5,400	4,930	5,400	
Heating at 5° F *4	Maximum Capacity	Btu/h	38,000	32,000	38,000	
	Maximum Total Input	W	6,100	5,420	6,100	
Power Supply	Phase, Cycle, Voltage		208/230V, 1-Phase, 60HZ	1 Phase, 60Hz, 208/230V *5		
Voltage	Indoor - Outdoor S1 - S2		AC 20/230V	AC 208 - 230V		
	Indoor - Outdoor S2 - S3		DC24V	DC24V		
	Indoor - Remote Controller		DC12V	DC12V: For Wired Controller		
Indoor Unit	MCA	A	2	2.73	3.30	
	Fan Motor	F.L.A.	0.74	2.18	2.64	
	Fan Motor Output	W	96	0.121	0.244	
	Airflow (Lo-Mid-Hi)	DRY (CFM)		4230-529-635	618-742-883	847-1,024-1,201
		WET (CFM)		381-476-572	565-671-812	777-953-1,130
	External Static Pressure *6	In. WG	0.02-0.06-0.14-0.20	0.14 - 0.20 - 0.28 - 0.40 - 0.60		
	Sound Pressure Level (Lo-Mid-Hi)	dB(A)	30-24-38	30-34-39	33-38-42	
	External Finish Color		Galvanized-steel Sheet	Galvanized-steel Sheets		
	Dimension Unit	W: In.		46-7/8	43-5/16	55-1/8
		D: In.		27-9/16	28-7/8	
		H: In.		7-1/8	9-7/8	
	Weight Unit	Lbs.	60	73	91	
	Drain Lift Mechanism (Included)	H: In.	21-11/16	27-9/16		
Field Drainpipe Size	In.	1-1/4	1-1/4			
Outdoor Unit	MCA	A	28	28		
	MOCP	A	40	40		
	Fan Motor	F.L.A.	0.4 + 0.4	0.4 + 0.4		
	Fan Motor Output	W	60 + 60	60 + 60		
	Compressor	Model (Type)		DC INVERTER-driven Scroll	Inverter-driven Scroll	
		R.L.A.		18	18	
		L.R.A.		27.5	27.5	
	Airflow	CFM	3,530	3,530		
	Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve		
	Defrost Method		Reverse Cycle	Reverse Cycle		
	Sound Pressure Level at Cooling *1	dB(A)	52	52		
	Sound Pressure Level at Heating *2	dB(A)	53	53		
	External Finish Color		Munsell No. 3Y 7.8 / 1.1	Munsell No. 3Y 7.8 / 1.1		
Dimensions	W: In.		37-3/8	37-3/8		
	D: In.		13 + 1-3/16	13 + 1-3/16		
	H: In.		53-1/8	53-1/8		
Weight	Lbs.	265	265			
Remote Controller	Type		PAR-21MAA (wired)	Wired		
Refrigerant	Type		R410A	R410A		
	Charge	Lbs.	12	12		
	Oil	Type (fl. oz.)	45	FV50S (45)		
Refrigerant Pipe	Gas Side O.D.	In.	5/8 - 1/2	5/8		
	Liquid Side O.D.	In.	3/8 - 1/4	3/8		
Refrigerant Pipe Length	Height Difference (Max.)	Ft.	100	100		
	Length (Max.)	Ft.	245	245		
Connection Method	Indoor/Outdoor		Flared	Flared/Flared		
Operating Temperature Range	Cooling		115 - 0 F	0° F D.B. to 115° F with Wind Baffle Accessory Installed		
	Heating		70 - -13 F	-13° F W.B. to +59° F W.B.		

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).

*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 (47° F), W.B. 6.1° C (43° F).

*3 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).

*4 Rating conditions (heating)-Indoor: D.B. 21.1° C (70° F), W.B. 15.6° C (60° F); Outdoor: D.B. -15° C (5° F), W.B. -15° C (5° F).

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

*6 External static pressure is factory set to 0.20" WG.

LIMITED WARRANTY | Seven-year warranty on compressor. Five-year warranty on parts.

CITY MULTI® H2i® Y-SERIES

MULTI-ZONE, MULTI-STORY, HIGH-PERFORMANCE



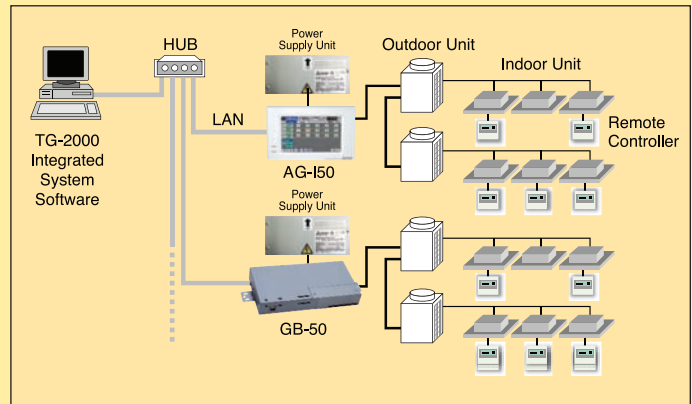
The Hyper-Heating INVERTER Y-Series combines the ultimate in application flexibility and powerful cooling and heating capabilities to deliver precise comfort control to multiple zones of a commercial or institutional building. The outdoor units deliver full-sized performance from a compact, space-saving design. This also makes for easier transportation and installation. The INVERTER-driven scroll compressor delivers the precise amount of comfort to the zones as required by the application. Now with its expanded heating capabilities, the CITY MULTI H2i Y-Series provides year-round comfort – even in harsh climates.

High capacity, high connectivity










The H2i Y-Series is available in four capacities, six, eight, 12, and 16 tons. Each provides distributed capacity to multiple indoor units. The six-ton model (P72) connects to up to 13 indoor units and the eight-ton (P96) connects to up to 16. When you simply manifold two outdoor units, you expand not only the capacity but also the connectable indoor units. The 12-ton H2i system consists of two manifolded P72's connected to up to 22 indoor units. The 16-ton system consists of two manifolded P96's connected to up to 24 indoor units.

CITY MULTI Controls Network (CMCN)

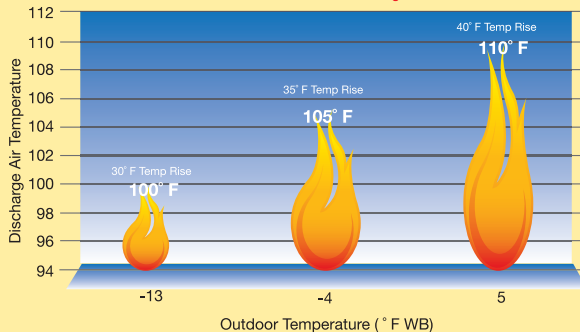
The CMCN acts as stand-alone building management system, placing control of personalized comfort in the hands of the tenant and the building manager. Up to 2,000 indoor units can be managed from a single networked PC – including operation, monitoring, scheduling (daily, weekly and yearly), error code email, personal web browser, tenant billing and maintenance diagnostic information. Several styles of remote, system and central controllers are available for a wide range of control options. The CMCN can also integrate with existing Building Management Systems (BMS) via LonWorks® or BACnet® interfaces.



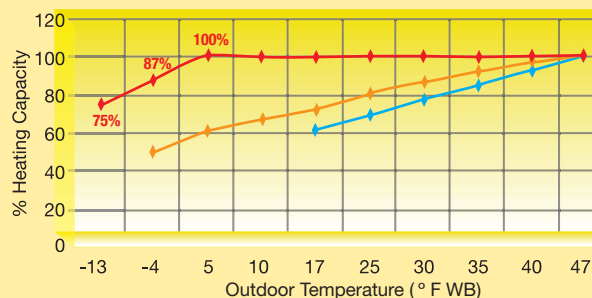
USE WITH THESE INDOOR UNITS:

Indoor Unit	Wall-mounted PKFY-P-N * MU-E	Ceiling-recessed Cassette PLFY-P-N * MU-E	Ceiling-recessed Cassette PMFY-P-NBMU-E	Ceiling-suspended PCFY-P-NKMU-E	Ceiling-concealed (ducted) PEFY-P-NMAU-E	Ceiling-concealed (ducted low-profile) PEFY-P-NMLU-E	Ceiling-concealed (ducted alternate high-static) PEFY-P-NMSU-E	Floor-standing (exposed/concealed) PFY-P-NEMU/NRMU-E	Vertical-concealed (ducted) PVFY-P-E00A
Nominal Btu/h	 6,000-30,000	 8,000-36,000	 6,000-15,000	 15,000-36,000	 6,000-54,000	 6,000-12,000	 15,000-96,000	 6,000-24,000	 12,000-54,000

Indoor Unit Heating Discharge Temperature
PKFY-P24 with 70° F entering air



Hyper-Heating INVERTER vs. Other Units
% Heating Capacity vs. Outdoor Temperature



◆ Mitsubishi Electric Hyper-Heating Inverter (H2i™)
◆ Mitsubishi Electric Y-Series
◆ Typical Unitary Equipment Performance

Does not include correction factor for defrost



CITY MULTI H2i® Y-Series

Model Name			PUHY-HP72THMU-A (-BS)	PUHY-HP96THMU-A (-BS)	PUHY-HP144TSHMU-A (-BS) *2	PUHY-HP192TSHMU-A (-BS) *2	
					With 2 PUHY-HP72THMU-A (-BS)	With 2 PUHY-HP96THMU-A (-BS)	
Power Source			208/230V, 3-phase, 60Hz				
Capacity *1	Cooling	Btu/h	72,000	96,000	144,000	192,000	
	Heating	Btu/h	80,000	108,000	160,000	216,000	
Power Input	Cooling	kW	5.90	8.73	12.15 *3	17.98 *3	
	Heating	kW	6.28	9.13	12.94 *3	18.81 *3	
Current (208/230)	Cooling	A	18.2-16.5	27.0-24.4	37.5-33.9 *3	55.5-50.2 *3	
	Heating	A	19.4-17.6	28.2-25.5	40.0-36.1 *3	58.1-52.5 *3	
Electrical Supply	MCA	A	53	71	53 + 53 *3	71 + 71 *3	
	MOCP	A	60	75	60 + 60 *3	75 + 75 *3	
Fan	Type x Quantity		Propeller Fan x 1			Refer to PUHY-HP72THMU-A (-BS) Specifications	Refer to PUHY-HP96THMU-A (-BS) Specifications
	Airflow Rate	CFM	7,950				
	Direct-drive INVERTER Motor Output	kW	0.92				
	External Static Pressure		Selectable: 0, 0.12 or 0.24" W.G.; factory set to 0" W.G.				
Compressor	Operating Range		16% - 100%	13% - 100%	8% - 100%	6% - 100%	
	Type		INVERTER-driven Scroll Hermetic x1				
	Motor Output	kW	5.3	6.7			
	Crankcase Heater	W	57				
	Lubricant		MEL32				
Refrigerant	Type	R410A				Refer to PUHY-HP72THMU-A (-BS) Specifications	Refer to PUHY-HP96THMU-A (-BS) Specifications
External Finish Color			Pre-coated Galvanized Sheets (Plus Powder-coating for -BS types) <Munsell No. 5Y 8/1 or Similar>				
Dimensions	Height	Inches	65				
	Width	Inches	36-1/4				
	Depth	Inches	29-15/16				
Net Weight		Pounds	486				
Sound Pressure Level (As Measured in an Anechoic Room)		dB(A)	56 (61 in Heating at -5° F Outdoor Temperature)	57 (62 in Heating at -5° F Outdoor Temperature)	59 (64 in Heating at -5° F Outdoor Temperature)	60 (65 in Heating at -5° F Outdoor Temperature)	
Protection Devices	High Pressure Protection		High-pressure Sensor, High-pressure Switch				
	Compressor/Fan		Discharge Thermo, Over-current Protection				
	Inverter		Overheat and Over-current Protection, Thermal Switch				
Refrigerant Pipe Dimensions (Outdoor Units to Indoor Units)	Low Pressure	Inches	3/4 (Brazed + Flare)	7/8 (Brazed)	N/A		
	High Pressure	Inches	1/2 (Brazed + Flare)				
Refrigerant Pipe Dimensions (Outdoor Units to Twinning Kit) *2	Low Pressure	Inches	N/A			Both ODUs: 3/4 (Brazed + Flare) *2	Both ODUs: 7/8 (Brazed) *2
	High Pressure	Inches				Both ODUs: 3/8 (Brazed + Flare) *2	Both ODUs: 3/8 (Brazed + Flare) *2
Refrigerant Pipe Dimensions (Twinning Kit to Indoor Units) *2	Low Pressure	Inches	1-1/8 (Brazed)				
	High Pressure	Inches	5/8 (Brazed)				
Required Twinning Kit *2	Model		CMY-Y100VBK2				
Indoor Unit	Total Capacity		50 to 130% of Outdoor Unit Capacity				
	Quantity		P06-P72/1-13	P06-P96/1-16	P06-P96/1-22	P06-P96/1-24	
Operating Temperature Range	Cooling		Outdoor: 23° F D.B. to 109° F D.B.				
	Heating		Outdoor: -13° F W.B. to +60° F W.B.				

*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).

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

*2 Twinning Kit CMY-Y100VBK2 is required for combining two individual outdoor units in the field for PUHY-HP-TSHMU combined systems. Piping dimensions from the Twinning Kit to the Indoor Units are High Pressure: 5/8 In. Brazed; Low Pressure: 1-1/8 In. Brazed.

*3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

-BS indicates Seacoast Protection option.

LIMITED WARRANTY | Five-year warranty on compressor. One-year warranty on parts. Specifications are subject to change without notice.



CITY MULTI[®]
VRF TECHNOLOGY

Mr. SLIM[®]



Cooling and Heating Solutions

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Suwanee, GA 30024

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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.

Form No. H2iBROM-4-10-10M SP

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* Hyper-Heating technology Patent Pending