# **Ductless Split Systems**





Our 16 SEER line offers superb performance and excellent value.



# 16 SEER ductless line offers superb performance at mid-tier pricing

# Inverter variable capacity advantages

Inverter technology varies the compressor speed and the indoor fan speed, eliminating constant compressor start-ups/shut-downs that traditional systems require to maintain the temperature set point.

The system can adjust capacity and cooling output to provide only the amount of cooling needed at a given time. The result is optimal comfort with low energy costs.

### 5/5 year warranty

Friedrich Floating Air ductless units feature a 5 year compressor waranty, as well as a 5 year parts warranty.

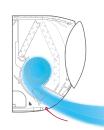
### **Auto restart**

Auto restart function allows system to resume with previous settings in the event of a power shutdown. (Power supply must be restored).

### **Continuous Air Sweep**

The indoor unit's up/down air swing quickly disperses cool air to all four corners of the room to provide comfort throughout the room within a few minutes.

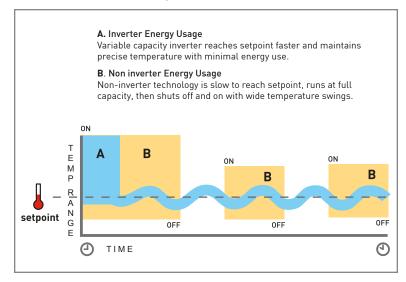




### INVERTER VS. TRADITIONAL HVAC SYSTEMS

TRADITIONAL SYSTEM	INVERTER SYSTEM
At initial start up, fixed capacity system slowly reaches the set temperature.	At initial start up, utilizes variable capacity to quickly reach the set temperature.
Complete shutdown once set temperature is achieved.	Reduces capacity as set temperature is achieved.
Temperature rises until 2nd system start up.	
System works at full capacity to again reach set temperature.	Variable capacity maintains set temperature keeping space comfortable with reduced
System cycles on and off continually to maintain the set temperature.	energy consumption.

### BETTER COMFORT, MORE ENERGY SAVINGS



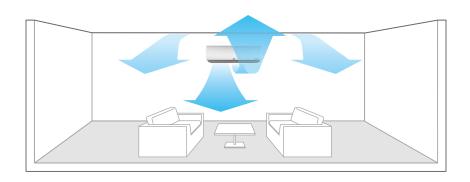
### Optimum air flow

Air is directed downward in heating mode and angled upward during cooling mode so the room feels more comfortable faster.









## 115V and 230/208V Heat Pumps



### 115 volt

### MM09YJ

9000 Btu cooling 9800 Btu heating

### MM12YJ

11800 Btu cooling 13000 Btu heating



### **Comfort & Convenience**

- Inverter technology is more energy efficient and can self-adjust capacity to match cooling needs
- Multiple operating modes including: AUTO, COOL, DRY, FAN ONLY and HEAT
- TURBO mode operates the unit at maximum performance to quickly bring the room to set temperature
- 4 fan speeds heating or cooling: HIGH, MEDIUM, LOW, "QUIET", plus AUTO-FAN
- Continuous 'Air Sweep' UP & DOWN
- LCD remote
- 24-hour timer and sleep timer
- Indoor unit will briefly display set or room temperature
- Auto-restart after power interruptions
- Auto-shut flaps close when unit is off for a sleek appearance
- Washable antimicrobial air filters
- 230 volt models will provide cooling in outdoor temperatures down to 5° F





### 230/208 volt

### MM18YJ

18000 Btu cooling 23000 Btu heating

### MM24YJ

22000 Btu cooling

26600 Btu heating

### Coming in 2016

MM36YJ 33600 Btu cooling 34600 Btu heating



### OPTIONAL ACCESSORY



### DFACC

Optional accessory remote for cooling only operation of all Floating Air heat pump models.

### REFRIGERATION LINE SETS MIN./MAX. LENGTHS

System Model	Outdoor Indoor		Min. (ft.)	Max. (ft.)
MM09YJ	MRM09Y3J	MWM09Y3J	10	66
MM12YJ	MRM12Y3J	MWM12Y3J	10	66
MM18YJ	MRM18Y3J	MWM18Y3J	10	82
MM24YJ	MRM24Y3J	MWM24Y3J	10	82
MM36YJ	MRM36Y3J	MWM36Y3J	10	98

### TORQUE WRENCH SETTINGS

Outside Diameter		Torque		
mm	inch	ft-lbs.	N⋅m	
Ø6.35	1/4	13~18	17.6~24.5	
Ø9.52	3/8	25~30	33.3~41.2	
Ø12.7	1/2	40~47	53.9~64.7	
Ø15.88	5/8	45~59	61.7~80.4	

### **SPECIFICATIONS**

PERFORMANCE RATINGS	RMANCE RATINGS 115 volt models		230/208 models			
SYSTEM MODEL NO.		MM09YJ	MM12YJ	MM18YJ	MM24YJ	MM36YJ
INDOOR MODEL		MWM09Y1J	MWM12Y1J	MWM18Y3J	MWM24Y3J	MWM36Y3J
OUTDOOR MODEL		MRM09Y1J	MRM12Y1J	MRM18Y3J	MRM24Y3J	MRM36Y3J
CAPACITY COOLING (RATED)	Btu	9000	11800	18000	22000	33600
CAPACITY COOLING MIN - MAX	Btu	3500~11000	3300~12500	4500~21000	6400~24000	7404~35997
COOLING AMPS		9.00	15.00	7.85/7.10	11.50/10.50	17.0/17.0
HEATING AMPS		9.50	15.5	10.60/11.80	12.80/13.00	16.5/16.5
SENSIBLE HEAT RATIO		0.79	0.73	0.77	0.77	0.75
CAPACITY HEATING (RATED) @ 47°F	Btu	9800	13000	23000	26600	34600
CAPACITY HEATING MIN - MAX	Btu	2500~11000	3400~13500	4000~23000	4100~26600	14979~35997
CAPACITY HEATING (RATED) @ 17°F	Btu	5400	8500	12000	18600	_
HSPF		8.6	8.6	8.5	8.5	9.0
SEER		16.0	16.0	16.0	16.0	18.0
EER		12.00	9.40	11.11	10.00	8.20
ENERGY STAR		Υ	N	N	N	N
MOISTURE REMOVAL	Pts/h	1.69	2.96	3.80	4.50	7.40
AIRFLOW (HIGH/MED/LOW/QUIET)	CFM	330/277/224/188	341/288/235/200	471/400/330/271	588/441/306/206	736/647/530/412
SOUND RATING - INDOOR (HIGH/MED/LOW/QUIET)	dB-A	41/37/35/32	43/39/35/32	48/43/38/34	49/43/39/34	54/49/44/37
SOUND RATING - OUTDOOR	dB-A	53	55	56	53	65
OPERATING RANGE (HEATING)	°F	5-75	5-75	5-75	5-75	-4-75
OPERATING RANGE (COOLING)	°F	32*-113	32*-113	5-118	5-115	0~109
EST. YEARLY OPERATING COST	U.S. \$	67	113	146	198	_
ELECTRICAL DATA		L			<u> </u>	
POWER SOURCE	V/Hz/Phase	115/60/1	115/60/1	208/230/60/1	208/230/60/1	208/230/60/2
MIN. AMPACITY	Α	13	15	15	16	24
COOLING WATTS	W	750	1260	1620	2200	4100
HEATING WATTS	W	830	1320	2400	2800	3800
MAX. TD FUSE/BREAKER	A	20	25	25	25	40
REFRIGERATION SYSTEM					<u> </u>	
REFRIGERANT		R410A	R410A	R410A	R410A	R410A
COMPRESSOR TYPE		Inverter	Inverter	Inverter	Inverter	Inverter
CONNECTIONS		Flare	Flare	Flare	Flare	Flare
LIQUID LINE O.D.	in	1/4"	1/4"	1/4"	1/4"	1/4"
SUCTION LINE O.D.	in	3/8"	3/8"	1/2"	1/2"	5/8"
REFRIGERANT CHARGE	0Z.	35.3	35.3	45.8	54.7	91.7
FACTORY PRECHARGE	ft	24.6	24.6	24.6	24.6	24.6
MIN. / MAX. LINE LENGTH	ft	7 / 65	7 / 65	10 / 82	10 / 82	98
MAX. HEIGHT DIFFERENCE	ft	32	32	32	32	32
DIMENSIONS & WEIGHT						
INDOOR UNIT						
WxHxD	in	30"× 1	1"× 8"	34"× 12"× 8"	39 11/16"× 12 3/8"× 8"	53"x13"x10"
NET WEIGHT	lbs	19	19	26	33	42
SHIPPING WEIGHT	lbs	25	25	35	44	52
OUTDOOR UNIT						
WxHxD	in	in 33 3/8"× 24 1/4"		1/4"× 12 5/8" 37 5/8 x 27 5/		38 1/4"x 31"x 17"
NET WEIGHT	lbs	68	68	106	115	161
SHIPPING WEIGHT	lbs	77	77	117	126	172
TOTAL NET WEIGHT	lbs	87	87	132	148	203
TOTAL SHIPPING WEIGHT	lbs	102	102	152	170	203
TOTAL SHIFFIING WEIGHT	เมร	IUZ	102	132	1/0	<i>LL</i> 4

<sup>\*</sup>Capacity is reduced as 32 degrees Fahrenheit is approached.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.







