

ComfortStar®

MRR & AHH SERIES

18 SEER

2 - 5 Tons | Condensing Units & Air Handlers



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ComfortStar®

4 COOLING AND HEATING MODELS

MRR24-410-C | MRR36-410-C

MRR48-410-C | MRR60-410-C



FEATURES

- R-410A environmentally friendly refrigerant.
- Painted galvanized steel cabinet.
- Louvered steel coil guard.
- 24V low voltage control
- AHRI Certified & ETL Listed.
- Wide operation temperature range: 5°F -118°F
- Twin-rotary DC compressor
- Condenser coils constructed with copper tubing and enhanced aluminum fins.
- 24K & 36K use AC motor/48K&60K use DC motor.
- Intelligent defrost programs
- Anticorrosion protection
- Use EXV as expansion device for outdoor unit In heating mode
- High and Low pressure protection
- Refrigerant pipeline cooling



Additional Features:

Heating Models:

EXV as expansion device for outdoor unit in heating mode.



Both Heating and Colling models:

Sensor T3 (condenser pipe temperature) When open-circuit or short-circuit, compressor, outdoor fan motor and reverse valve will be OFF.



Protection Functions -

Over High and Over Low pressure protection

MRR SERIES

COOLING AND HEATING

18 SEER



MODEL			MRR24-410-C	MRR36-410-C	MRR48-410-C	MRR60-410-C
Electrical Data		V-Ph-Hz	208/230V-1Ph-60Hz			
	Minimum Circuit Ampacity	A	17.7	24.2	31.9	36.5
	Max. Overcurrent Protection	A	30	40	50	60
	Min / Max Volts	V	187 / 253	187 / 253	187 / 253	187 / 253
Cooling	Capacity	Btu/h	24000	34400	47000	56000
	EER	Btu/h.W	12.00	11.20	11.50	10.70
	SEER	Btu/h.W	17.50	17.50	17.50	17.50
Heating	Capacity		24000	34400	47000	56000
	HSPF		9.50	9.50	9.50	9.50
Outdoor motor	Model		YDK-110-8P2-AL	YDK-110-8P2-AL	DRN-310-200-10	DRN-310-200-10
	Type		AC	AC	DC	DC
	Capacitor	μF	6	6	/	/
	Speed	rpm	825	825	1050	1050
Outdoor Fan	material		Metal			
	Type		Axial flow			
	Diameter	In.	23	23	23-5/8	23-5/8
	Height	In.	4-3/8	4-3/8	4-1/2	4-1/2
	Air flow	CFM	2950	2950	4100	4100
Outdoor noise level		dB(A)	75	77	79	79
Outdoor unit	Dimension (W×H×D)	mm	740×633×740		740×843×740	
		inch	29-1/8×24-15/16×29-1/8		29-1/8×33-3/16×29-1/8	
	Packing (W×H×D)	mm	768×667×768		768×877×768	
		in.	30-1/5×26-1/4×30-1/5		30-1/5×34-1/2×30-1/5	
	Net / Gross weight	kg	64/68	64/68	80/65	80/65
		lbs	141/150	141/150	176/187	176/187
Refrigerant system	Liquid side / Gas side	in.	3/8 / 3/4	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8
	Factory charge R410A	oz	114	114	166	166
	Metering device		TXV & EXV	TXV & EXV	TXV & EXV	TXV & EXV
Operating temperatures		°F	5-118	5-118	5-118	5-118

ComfortStar®

4 COOLING MODELS

MRR24-410-G | MRR36-410-G

MRR48-410-G | MRR60-410-G

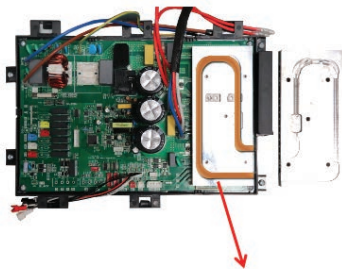


FEATURES

- R-410A environmentally friendly refrigerant.
- Painted galvanized steel cabinet.
- Louvered steel coil guard.
- 24V low voltage control
- AHRI Certified & ETL Listed.
- Wide operation temperature range: 53°F -118°F
- Twin-rotary DC compressor
- Condenser coils constructed with copper tubing and enhanced aluminum fins.
- 24K & 36K use AC motor/48K&60K use DC motor.
- Intelligent defrost programs
- Anticorrosion protection
- Use EXV as expansion device for outdoor unit
In heating mode
- High and Low pressure protection
- Refrigerant pipeline cooling

Additional Features:

The refrigerant pipeline cooling is used to cool the electronic control board. Make the circuit temperature more stable and the operation life longer.



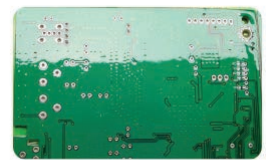
Refrigerant pipeline Cooling

Anti-corrosion choices

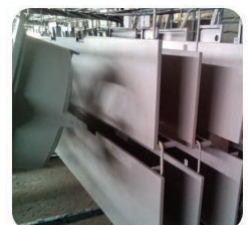
Gold Fin



Moisture
Proof PCB



Thick sprayed
metal plate



MRR SERIES

COOLING ONLY

18 SEER



MODEL			MRR24-410-G	MRR36-410-G	MRR48-410-G	MRR60-410-G
Electrical Data		V-Ph-Hz	208/230V-1Ph-60Hz			
	Minimum Circuit Ampacity	A	17.7	24.2	31.9	36.5
	Max. Overcurrent Protection	A	25	40	50	60
	Min / Max Volts	V	187 / 253	187 / 253	187 / 253	187 / 253
Cooling	Capacity	Btu/h	25000	36000	48000	57000
	EER	Btu/h.W	13.70	11.30	12.10	10.70
	SEER	Btu/h.W	18	18	18	18
Outdoor motor	Model		YDK-110-8P2-AL	YDK-110-8P2-AL	DRN-310-200-10	DRN-310-200-10
	Type		AC	AC	DC	DC
	Capacitor	µF	6	6	/	/
	Speed	rpm	850	850	1050	1050
Outdoor Fan	material		Metal			
	Type		Axial flow			
	Diameter	In.	23	23	23-5/8	23-5/8
	Height	In.	4-3/8	4-3/8	4-1/2	4-1/2
	Air flow	CFM	2950	2950	4100	4100
Outdoor noise level		dB(A)	75	77	79	79
Outdoor unit	Dimension (W×H×D)	mm	740×633×740		740×843×740	
		inch	29-1/8×24-15/16×29-1/8		29-1/8×33-3/16×29-1/8	
	Packing (W×H×D)	mm	760×660×760		760×875×760	
		in.	30-1/5×26-1/4×30-1/5		30-1/5×34-1/2×30-1/5	
	Net / Gross weight	kg	68 / 72	68 / 72	88 / 93	88 / 93
		lbs	150 / 159	150 / 159	194 / 205	194 / 205
Refrigerant system	Liquid side / Gas side	in.	3/8 / 3/4	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8
	Factory charge R410A	oz	114	114	166	166
	Metering device		TXV	TXV	TXV	TXV
Operating temperatures		°F	53-118	53-118	53-118	53-118

ComfortStar®

4 AIR HANDLER MODELS

AHH24-410-C | AHH36-410-C

AHH48-410-C | AHH60-410-C

FEATURES

- Multi-position: upflow and horizontal right.
- Suitable for use with R22 or new R410a
- Direct drive, 3-speed PSC motor
- Transformer, fan relay included
- Fuse protected
- Easy slide out motor housing
- Built-in filter rack for 1" filter (filter not included)
- Pre-installed TXV for 14 SEER series.
- Sweat connection
- ARI certified & ETL listed

Cabinet features:

- Galvanized steel with gray powder paint on all panels
- Fully insulated cabinet
- Primary and secondary drain connections (3/4" NPT)
- Power supply entry at side and top, low-voltage entry at top

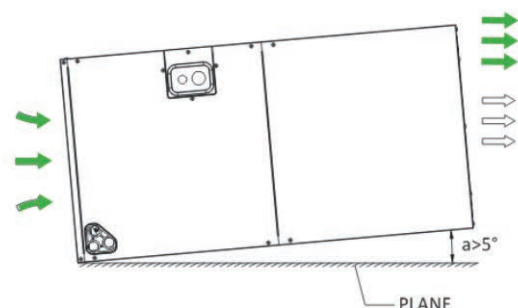
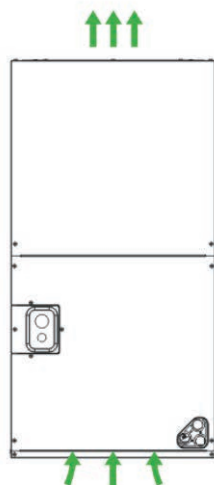
Optional Accessories:

- 5kw to 20kw electric heat kits available for field installation
- Permanent washable air filter



AHH SERIES

Multi-position Installation



AHH SERIES

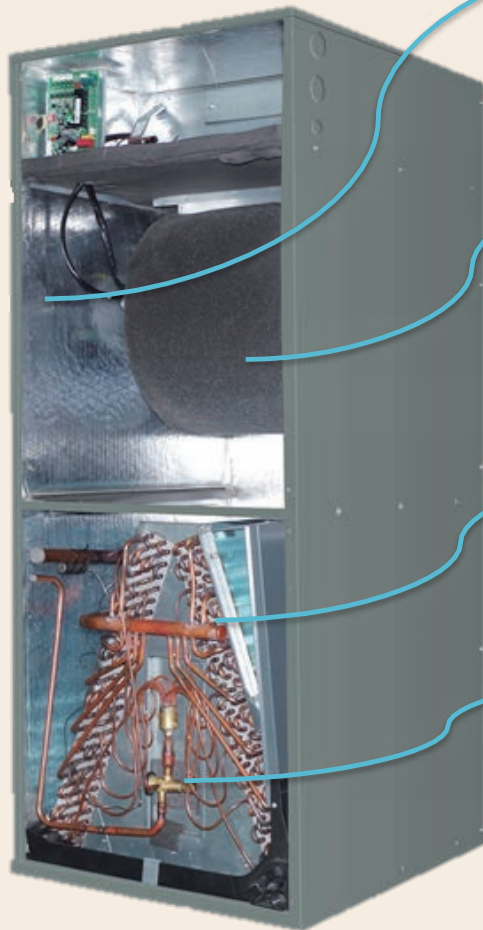
MULTI POSITION

AIR HANDLER



MODEL			AHH24-410-C	AHH36-410-C	AHH48-410-C	AHH60-410-C
Power supply			V/Ph/Hz	208-230V/1PH/60Hz	208-230V/1PH/60Hz	208-230V/1PH/60Hz
Indoor coil	Number of rows		4x2	4x2	5x2	5x2
	Tube outside dia. / Type		7mm / Innergroove tube			
	Fin spacing / Thickness / Type	mm / mm	1.6 / 0.095 / Hydrophilic aluminium			
	Tube pitch(a) × row pitch(b)	mm	13.37 × 21	13.37 × 21	13.37 × 21	13.37 × 21
Indoor motor	type		ECM			
	Rated HP		1/3	1/2	3/4	3/4
	Rated RPM	r/min	1050	1050	1050	1050
	FLA		2.8	4.1	6.0	6.0
Indoor fan	material		Galvanized plate			
	Type		Centrifugal			
	Diameter	inch	11	11	11	11
	Height	inch	10-5/8	10-5/8	10-5/8	10-5/8
Indoor air flow		CFM	780	1300	1500	1750
ESP		Pa	25	37.5	50	50
Indoor noise level		dB(A)	63	66	67	68
Metering device	Throttle type		TXV			
	Model number		3TR	3TR	5TR	5TR
Electrical Data	Voltage-Phase-Hz	V-Ph-Hz	208/230V 1Ph 60Hz			
	Minimum Circuit Ampacity		3.5	5.1	7.5	7.5
	Max. Overcurrent Protection		15	15	15	15
	Min / Max Volts	V	187 / 253	187 / 253	187 / 253	187 / 253
"Indoor unit"	Dimension (W×H×D)	mm	500×1162×560		560×1350×620	
		in.	19-5/8×45-3/4×22		22×53-1/8×24-3/8	
	Packing (W×H×D)	mm	580×1210×650		640×1390×710	
		in.	22-7/8×47-3/5×25-3/5		25-1/8×54-3/4×28	
	Net / Gross weight	kg	57 / 63	57 / 63	77 / 85	77 / 85
		lbs	126 / 139	126 / 139	170 / 188	170 / 188
Refrigerant piping Liquid side / Gas side		in.	3/8 / 3/4	3/8 / 3/4	3/8 / 7/8	3/8 / 7/8
Shipping per STD40HQ			154	154	104	104

AHH SERIES MULTI POSITION AIR HANDLER



AHH Features

Insulated cabinet

Galvanized steel with paint on all panels. Thermal insulator cover all inside panels to reduce heat and cooling losses and prevent condensed water accumulation.

Motor & Blower

Direct drive motors, 3-speed, provide selections of air flow to meet desired applications. $\Phi 10$ " big fan, powerful wind. Motor has thermal protector, which keeps the motor running in safety status.

Coil

"A" shape coils, constructed with copper tubing and enhanced aluminum fins.

Expansion device

Use TXV as expansion device (18 SEER)