



MOOVAIR®

MOOVING FORWARD, TOGETHER.

CENTRAL-MOOV R454B HEAT PUMP SYSTEMS

Now available in multiple inverter-based configurations to suit a range of needs.



CENTRAL-MOOV

NOW FEATURING ENVIRONMENTALLY FRIENDLY R454B REFRIGERANT!

The new Central-Moov system brings the Moovair proven inverter technology into a new generation of efficiency and environmental responsibility. Engineered for the future, 454B refrigerant helps reduce global warming potential while maintaining the performance and flexibility contractors and homeowners expect. With shared outdoor units and flexible indoor matchups, including options optimized for cold climates and those suited for broad regional applications, Central-Moov delivers year-round comfort with confidence.





ADVANCING COMFORT. EVOLVING RESPONSIBLY.

Every Central-Moov 454B system is built on the same reliable foundation - a compact, quiet, inverter-driven platform designed to meet today's performance standards and tomorrow's expectations. With multiple configuration options, each system is engineered for efficiency, flexibility, and lasting comfort in a wide range of applications.



R454B

CENTRALLY DUCTED SYSTEM WITH SIDE DISCHARGE CONDENSER FEATURES FOR ALL MODELS:

HIGH EFFICIENCY

- Up to 19 SEER2 and 10.8 HSPF2 performance ratings
- Inverter compressor adjusts to match demand reducing energy use and wear

DUAL FUEL COMPATIBLE

- Outdoor unit pairs with a 3rd party gas furnace via an AHRI-rated coil
- Supports a variety of hybrid systems

WHISPER QUIET

- Outdoor unit operates as low as 57 dB(A)
- Significantly quieter than many traditional HVAC systems

RETROFIT FLEXIBLE

- Compatible with existing line sets (requires cleaning and verification)
- Braze, flare, or press connections supported



Traditional central system: 73 dB(A)



Central-Moov system: 58 dB(A)

FILTER RACK

- Included rack accepts standard sized filters via tool-less installation
- Strong magnetic closure for easy maintenance

WARRANTY

- 10-year parts, 2-year unit replacement and 90 day labor



BULLETPROOF OPERATION

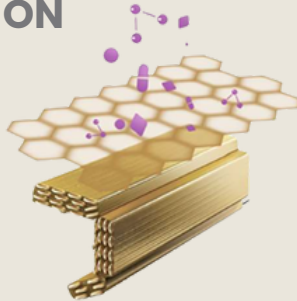
- Maintains consistent airflow performance even in challenging ductwork conditions
- Designed for durability and long-term system protection
- Self-cleaning condenser fan, heated base pan and fault prevention diagnostics

Disclaimer: Warranty coverage requires installation by a licensed HVAC professional. Improper installation may void warranty. See full warranty document for terms and conditions.



✦ ENHANCED CORROSION PROTECTION

- Goldfin hydrophilic coating helps shed water to reduce coil buildup and improve reliability
- 200-hour NSS tested with > RtNo9.5 and no perforation for proven durability in harsh conditions



✦ SMALL FOOTPRINT

- Up to 40% smaller than conventional heat pumps
- Side-discharge design fits tighter spaces and aesthetics
- All heat pump models feature a space-saving single-fan format except for the Heat+ 5 ton which includes a twin fan configuration for maximum output



✦ MULTI-POSITIONAL

- Air handler and add-on coils install in any orientation without additional kits

✦ PRECISION INVERTER PERFORMANCE

- Advanced inverter modulation adjusts in 1% increments for precise temperature control and optimal efficiency
- Reduced compressor cycling lowers energy use and reduces component wear and tear, while maintaining consistent indoor comfort



✦ BACKED BY INDUSTRY CERTIFICATIONS

- Verified by Energy Star®, Energy Star Cold Climate® and AHRI® for trusted performance
- Help qualify for energy and/or tax rebates





CENTRAL-MOOV COLD CLIMATE HEAT⁺

MSHMA MODELS | UP TO 19 SEER2 | 10.8 HSPF | -22°F

Enjoy cold season comfort that gas-fired systems are known for, but with the energy savings of a high-efficiency heat pump. Built to perform in the most challenging environments, Heat+ models feature a new generation compressor that delivers 100% capacity even in sub-freezing temperatures. Regardless of the weather outside, Central-MOOV with Heat+ can handle it.



✦ CONSISTENT COMFORT DELIVERED

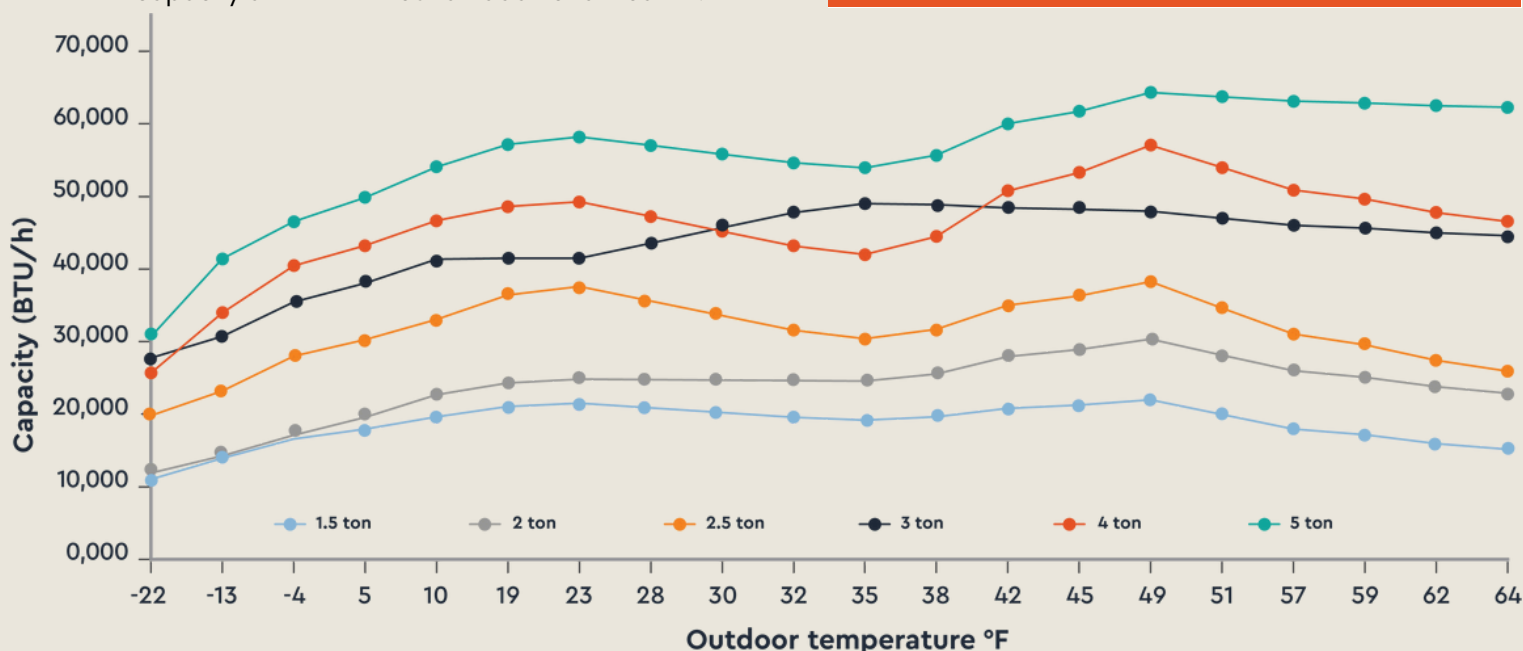
- Both Gen2 and Gen3 air handlers use variable-speed motors to maintain proper airflow across varying duct conditions. Gen3 models support up to 1.0" static pressure (up to 36K), and both are dual-voltage compatible for flexible installs.

✦ HEAT+ PERFORMANCE

- Delivers 100% heating capacity **down to 4°F** using only the compressor making it much more efficient than traditional heat pumps using electronic supplemental heat (kW strips).
- Operates efficiently in extreme cold at nearly 60% capacity at -22°F without an additional heat kit.

✦ POWER BOOST MODE

- Inverter can double output for rapid heating and cooling
- Quickly returns space to setpoint before stabilizing at optimal efficiency



HEAT PUMP SYSTEM		18,000 BTU*	24,000 BTU*	30,000 BTU*	36,000 BTU*	48,000 BTU*	60,000 BTU*
Outdoor Model		MSHMA18R2ANI*	MSHMA24R2ANI*	MSHMA30R2ANI*	MSHMB36R2ANI*	MSHMA48R2ANI*	MSHMA60R2ANI*
Indoor Model		MAHHA18R4ASI*	MAHHA24R4ASI*	MAHHA30R4ASI*	MAHHA36R4ASI*	MAHHA48R4ASI*	MAHHA60R4ASI*
Heat+ Technology		✓	✓	✓	✓	✓	✓
Power Supply (V/Ph/Hz)		208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz
Cooling	Capacity (BTU/h)	4,600~23,100	6,400~28,700	11,200~40,000	12,100~43,000	18,000~52,000	11,400~60,000
	EER2 (BTU/h)	12.5	12.0	12.0	12.0	12.0	12.0
	SEER2 (BTU/h)	19.0	18.6	17.2	18.0	17.5	17.5
Heating	Capacity (BTU/h)	5,700~23,100	6,700~29,100	9,700~35,800	11,400~47,000	13,500~52,000	8,600~60,000
	COP	3.6	3.49	3.54	3.5	3.28	3.35
	HSPF2 Region IV	10.1	10.0	10.8	10.0	9.5	9.5
Outdoor Unit	Outdoor Compressor Type	Rotary	Rotary	Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
	Fan Motor Quantity	1	1	1	1	1	2
	Outdoor Noise Level (dBA)	56.5	59.0	62.0	63.0	65.0	64.5
	Dimension (WxDxH)	35.04×13.46×26.50	35.04×13.46×26.50	37.24×16.14×31.89	38.58×16.34×38.39	38.58×16.34×38.39	37.48×16.34×52.48
Indoor Unit	Indoor Noise Level (Turbo/Hi/Mi/Lo/Si) (dBA)	N/A/42.5/40.5/37/N/A	N/A/47.5/44/33/N/A	49/47/45.5/31.5/N/A	48/46.5/45.0/33/N/A	N/A/53.0/49.5/33.5/N/A	60.0/57.0/54.5/37.0/
	Dimension (WxDxH) (in)	14.49×21.50×49.72	14.49×21.50×49.72	17.52×21.50×53.98	17.52×21.50×53.98	21.50×21.50×55.94	21.50×21.50×55.94
Outdoor	Outdoor Temp Range of Operation (cooling)	-22~122	-22~122	-22~122	-22~122	-22~122	-22~122
	Outdoor Temp Range of Operation (heating)	-22~75	-22~75	-22~75	-22~75	-22~75	-22~75
	Outdoor Refrigerant Type	R454B	R454B	R454B	R454B	R454B	R454B
Indoor Room	Set Point Range	60~90	60~90	60~90	60~90	60~90	60~90
ENERGY STAR® V6.1		✓	✓	✓	✓	✓	
ENERGY STAR® V6.1 Cold Climate		✓	✓	✓	✓	✓	✓
Tax Credit Eligibility		✓	✓	✓	✓	✓	✓

*bolded letters used to distinguish air handler models

*see controls and accessories page for filter sizes

HEAT PUMP SYSTEM		18,000 BTU*	24,000 BTU*	30,000 BTU*	36,000 BTU*	48,000 BTU*	60,000 BTU*
Outdoor Model		MSHMA18R2ANI*	MSHMA24R2ANI*	MSHMA30R2ANI*	MSHMB36R2ANI*	MSHMA48R2ANI*	MSHMA60R2ANI*
Indoor Model		MAHMA18R4ASI*	MAHMA24R4ASI*	MAHMA30R4ASI*	MAHMA36R4ASI*	MAHMA48R4ASI*	MAHMA60R4ASI*
Heat+ Technology		✓	✓	✓	✓	✓	✓
Power Supply (V/Ph/Hz)		208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz
Cooling	Capacity (BTU/h)	5,600~22,000	7,200~27,000	12,800~39,000	9,700~42,000	15,600~51,000	11,400~56,300
	EER2 (BTU/h)	12.5	11.7	11.7	11.7	10.5	10.0
	SEER2 (BTU/h)	19.0	18.3	16.8	17.3	17.4	16.0
Heating	Capacity (BTU/h)	6,000~22,000	7,100~30,000	10,300~38,500	11,000~48,000	15,500~57,300	8,100~64,500
	COP	3.2	3.33	3.65	3.6	3.4	3.1
	HSPF2 Region IV	9.7	10.0	10.0	10.3	10.2	9.0
Outdoor Unit	Outdoor Compressor Type	Rotary	Rotary	Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
	Fan Motor Quantity	1	1	1	1	1	2
	Outdoor Noise Level (dBA)	59.0	60.0	60.5	62.5	65.0	65.0
	Dimension (WxDxH)	35.04×13.46×26.50	35.04×13.46×26.50	37.24×16.14×31.89	38.58×16.34×38.39	38.58×16.34×38.39	37.48×16.34×52.48
Indoor Unit	Indoor Noise Level (Turbo/Hi/Mi/Lo/Si) (dBA)	N/A/41/39/33/N/A	N/A/44/42/28/N/A	47/46/43/27.5/N/A	49/48/45.5/25.5/N/A	N/A/52/50/34/N/A	54.5/52/49.5/34.5/N/A
	Dimension (WxDxH) (in)	17.52×21.02×45	17.52×21.02×45	21.02×21.02×49.02	21.02×21.02×49.02	24.49×21.02×52.99	24.49×21.02×52.99
Outdoor	Outdoor Temp Range of Operation (cooling)	-22~122	-22~122	-22~122	-22~122	-22~122	-22~122
	Outdoor Temp Range of Operation (heating)	-22~75	-22~75	-22~75	-22~75	-22~75	-22~75
	Outdoor Refrigerant Type	R454B	R454B	R454B	R454B	R454B	R454B
Indoor Room	Set Point Range	60~90	60~90	60~90	60~90	60~90	60~90
ENERGY STAR® V6.1		✓	✓	✓	✓	✓	✓
ENERGY STAR® V6.1 Cold Climate		✓	✓	✓	✓	✓	✓
Tax Credit Eligibility		✓	✓	✓	✓	✓	✓

*bolded letters used to distinguish air handler models

*see controls and accessories page for filter sizes

CENTRAL-MOOV

MSHEA MODELS | UP TO 18.8 SEER2 | 9.7 HSPF



Designed with southern markets in mind, Central-MOOV delivers a new high standard of reliability and efficiency for your home or business. A fully modulating compressor and components automatically self-adjust to match the comfort demand required, saving energy while also improving indoor temperature consistency. This variable operation also allows for a more forgiving installation versus traditional systems.



- ✱ SHARED INVERTER TECHNOLOGY
- ✱ GEN2 AIR HANDLER PAIRING
- ✱ SIMPLIFIED HEATING PERFORMANCE
- ✱ STREAMLINED FEATURE SET

- ✱ DESIGNED FOR EVERYDAY RELIABILITY
- ✱ FLEXIBLE APPLICATION OPTIONS

GEN2

HEAT PUMP SYSTEM		18,000 BTU*	24,000 BTU*	30,000 BTU*	36,000 BTU*	48,000 BTU*	60,000 BTU*
Outdoor Model		MSHEA18R2ANI	MSHEA24R2ANI	MSHEA30R2ANI	MSHEA36R2ANI	MSHEA48R2ANI	MSHEA60R2ANI
Indoor Model		MAHMA18R4ASI	MAHMA24R4ASI	MAHMA30R4ASI	MAHMA36R4ASI	MAHMA48R4ASI	MAHMA60R4ASI
Heat+ Technology		N/A	N/A	N/A	N/A	N/A	N/A
Power Supply (V/Ph/Hz)		208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz
Cooling	Capacity (BTU/h)	5,350~20,000	7,200~27,000	10,400~34,000	8,300~38,900	16,600~49,900	21,000~55,000
	EER2 (BTU/h)	11.0	11.0	10.7	10.0	10.0	8.6
	SEER2 (BTU/h)	18.8	18.1	17.0	16.1	16.0	15.2
Heating	Capacity (BTU/h)	5,600~19,000	7,100~30,000	6,400~32,000	6,700~41,300	15,300~49,500	26,000~55,000
	COP	3.15	3.18	3.5	3.4	3.45	3.37
	HSPF2 Region IV	9.1	9.7	8.5	8.7	8.5	8.4
Outdoor Unit	Outdoor Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Fan Motor Quantity	1	1	1	1	1	1
	Outdoor Noise Level (dBA)	55.0	60.0	60.0	63.0	65.0	65.0
	Dimension (WxDxH)	31.69x12.99x21.81	35.04x13.46x26.50	37.24x16.14x31.89	37.24x16.14x31.89	38.58x16.34x38.39	38.58x16.34x38.39
Indoor Unit	Indoor Noise Level (Turbo/Hi/Mi/Lo/Si) (dBA)	44/43/41/33/N/A	N/A/44/42/28/N/A	N/A/46/42/29/N/A	N/A/48/45/28/N/A	N/A/53/50/44/N/A	56/52/49/34.5/N/A
	Dimension (WxDxH) (in)	17.52x21.02x45	17.52x21.02x45	21.02x21.02x49.02	21.02x21.02x49.02	24.49x21.02x52.99	24.49x21.02x52.99
Outdoor	Outdoor Temp Range of Operation (cooling)	-13~122	-13~122	-13~122	-13~122	-13~122	-13~122
	Outdoor Temp Range of Operation (heating)	-13~75	-13~75	-13~75	-13~75	-13~75	-13~75
	Outdoor Refrigerant Type	R454B	R454B	R454B	R454B	R454B	R454B
Indoor Room	Set Point Range	60~90	60~90	60~90	60~90	60~90	60~90
ENERGY STAR® V6.1			✓				
ENERGY STAR® V6.1 Cold Climate			✓		✓	✓	✓
Tax Credit Eligibility		✓	✓	✓	✓	✓	

ADD-ON COIL

Compatible with all heat pump options, the Moovair add-on coil enables AHRI-rated dual fuel matchups built on Moovair's advanced system design.

CENTRAL-MOOV COLD CLIMATE HEAT+

HEAT PUMP SYSTEM		18,000 BTU*	24,000 BTU*	30,000 BTU*	30,000 BTU*	36,000 BTU*	36,000 BTU*	48,000 BTU*	60,000 BTU*
Outdoor Model		MSHMA18R2ANI	MSHMA24R2ANI	MSHMA30R2ANI	MSHMA30R2ANI	MSHMB36R2ANI	MSHMB36R2ANI	MSHMA48R2ANI	MSHMA60R2ANI
Indoor Model		MCHMA24RBASI	MCHMA24RBASI	MCHMA30RBASI	MCHMA30RCASI	MCHMA36RBASI	MCHMA36RCASI	MCHMA48RCASI	MCHMA60RDASI
Heat+		✓	✓	✓	✓	✓	✓	✓	✓
Power Supply		208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz
Cooling	Capacity	5,600~22,800	7,900~27,600	13,900~37,000	13,900~37,000	12,100~41,000	12,100~41,000	16,000~48,000	17,600~53,400
	EER2	11.7	10.0	10.0	10.0	10.7	10.7	10.0	8.8
	SEER2	16.1	16.0	16.0	16.0	15.8	15.8	15.2	14.5
Heating	Capacity	5,600~22,800	6,500~30,000	13,000~40,000	13,000~40,000	11,500~46,000	11,500~46,000	16,000~50,000	21,200~59,000
	COP	3.3	3.2	3.37	3.37	3.3	3.3	3.12	2.76
	HSPF2 Region IV	9.5	9.5	10.0	10.0	9.4	9.4	8.8	8.1
Outdoor Unit	Outdoor Compressor Type	Rotary	Rotary	Rotary	Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary	Twin-Rotary
	Fan Motor Qty	1	1	1	1	1	1	1	2
	Speed (Hi/Mi/Lo)	780/700/550	810/700/450	850/800/750	850/800/750	800/750/650	800/750/650	850/800/750	850/800/750
	Outdoor Noise Level	58	60	64	64	64	64	65	64
	Dimension (WxDxH)	35.04x13.46x26.5	35.04x13.46x26.5	37.24x16.14x31.89	37.24x16.14x31.89	38.58x16.34x38.39	38.58x16.34x38.39	38.58x16.34x38.39	37.48x16.34x52.48
Indoor Unit	Dimension (WxDxH)	17.52x21x17.99	17.52x21x17.99	17.52x21x23.58	21.02x21x24.06	17.52x21x23.58	21.02x21x24.06	21.61x21.5x27.8	24.49x21x27.99
Outdoor	Outdoor Temp Range (cooling)	-22~122	-22~122	-22~122	-22~122	-22~122	-22~122	-22~122	-22~122
	Outdoor Temp Range (heating)	-22~75	-22~75	-22~75	-22~75	-22~75	-22~75	-22~75	-22~75
	Outdoor Refrigerant Type	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B
Indoor Room	Set Point Range	60~90	60~90	60~90	60~90	60~90	60~90	60~90	60~90
ENERGY STAR® V6.1		✓	✓	✓	✓	✓	✓	✓	✓
ENERGY STAR® V6.1 Cold Climate		✓	✓	✓	✓	✓	✓	✓	✓
Potential IRA Tax Credit Eligibility		✓	✓	✓	✓				

*see controls and accessories page for filter sizes

CENTRAL-MOOV

HEAT PUMP SYSTEM		18,000 BTU*	24,000 BTU*	30,000 BTU*	30,000 BTU*	36,000 BTU*	36,000 BTU*	48,000 BTU*	60,000 BTU*
Outdoor Model		MSHEA18R2ANI	MSHEA24R2ANI	MSHEA30R2ANI	MSHEA30R2ANI	MSHEA36R2ANI	MSHEA36R2ANI	MSHEA48R2ANI	MSHEA60R2ANI
Indoor Model		MCHMA24RBASI	MCHMA24RBASI	MCHMA36RBASI	MCHMA36RCASI	MCHMA36RBASI	MCHMA36RCASI	MCHMA48RCASI	MCHMA60RDASI
Heat+		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Power Supply		208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz	208-230V/1Ph/60Hz
Cooling	Capacity	6,500~21,600	7,900~27,600	12,800~33,700	12,800~33,700	10,400~38,800	10,400~38,800	15,500~47,000	15,500~50,000
	EER2	10.2	10.0	10.0	10.0	10.2	10.2	9.5	8.1
	SEER2	16.0	16.0	15.4	15.4	14.8	14.8	14.7	14.3
Heating	Capacity	6,800~22,000	6,500~30,000	8,600~32,000	8,600~32,000	11,200~41,000	11,200~41,000	10,600~47,000	10,600~50,000
	COP	3.15	3.2	2.78	2.78	3.4	3.4	2.75	2.7
	HSPF2 Region IV	8.6	9.5	8.5	8.5	8.7	8.7	8.0	7.3
Outdoor Unit	Outdoor Compressor Type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Fan Motor Qty	1	1	1	1	1	1	1	1
	Speed (Hi/Mi/Lo)	840/700/650	810/700/450	850/700/500	850/700/500	800/750/500	800/750/500	850/800/750/650	850/800/750/650
	Outdoor Noise Level	56	60	60	60	63	63	65	65
	Dimension (WxDxH)	31.69x12.99x21.81	35.04x13.46x26.50	37.24x16.14x31.89	37.24x16.14x31.89	37.24x16.14x31.89	37.24x16.14x31.89	38.58x16.34x38.39	38.58x16.34x38.39
Indoor Unit	Dimension (WxDxH)	17.52x21x17.99	17.52x21x17.99	17.52x21x23.58	21.02x21x24.06	17.52x21x23.58	21.02x21x24.06	21.61x21.5x27.8	24.49x21x27.99
Outdoor	Outdoor Temp Range (cooling)	-13~122	-13~122	-13~122	-13~122	-13~122	-13~122	-13~122	-13~122
	Outdoor Temp Range (heating)	-13~75	-13~75	-13~75	-13~75	-13~75	-13~75	-13~75	-13~75
	Outdoor Refrigerant Type	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B
Indoor Room	Set Point Range	60~90	60~90	60~90	60~90	60~90	60~90	60~90	60~90
ENERGY STAR® V6.1									
ENERGY STAR® V6.1 Cold Climate									
Potential IRA Tax Credit Eligibility									

Efficiency Note - Published efficiency ratings reflect certification using the most basic compatible air movement system. Many homeowners may experience even better performance when the heat pump is paired with a high-efficiency air handler or furnace.

CONTROLS AND ACCESSORIES

UNIVERSAL THERMOSTAT COMPATIBILITY

- Works with most 24V thermostats on the market
- Supports advanced dehumidification with select models



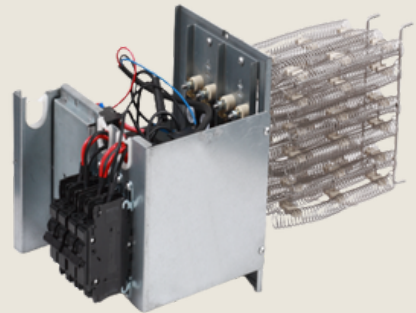
DIAGNOSTIC REMOTE

- Included with the air handler to act as a service tool for technician access and commands



HEAT KITS

- Electric backup kits available from 5kW to 20kW for the air handler
- Adds peace of mind during extreme winter conditions



FILTER SIZING

- Air handlers use standard 1" filters
 - For 14.5" cabinets – Use 14x20x1
 - For 17.5" cabinets – Use 16x20x1
 - For 21" cabinets – Use 20x20x1
 - For 24.5" cabinets – Use 24x20x1



**All controls and accessories sold separately unless otherwise specified.*

SUPPORT FROM THE SOURCE



AVAILABLE EXCLUSIVELY FROM VAD HVAC DISTRIBUTORS, A DIVISION OF THE MASTER GROUP

As the exclusive brand owner of Moovair in North America, VAD provides more than just access to premium equipment. We offer the complete install-ready solutions backed by factory-level training and technical support. From surge protectors to indoor air quality products and contractor trusted install essentials, VAD ensures every Central-Moov system is fully supported from initial planning to system startup.

Legal Notices

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- ENERGY STAR® and AHR1® are registered trademarks of their respective owners.
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Disclaimer

- All product specifications, features, and availability as subject to change without notice.
- Performance ratings are based on standard testing condition. Actual performance may vary depending on installation, maintenance, operating conditions.
- Images shown are for illustration purposes only and may not represent actual product or configuration.



MOOVAIR®



HEAT+



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