



MOOVAIR®

-22°F | **HEAT+**
UP TO 18 SEER2

MOOVING FORWARD, TOGETHER.

CENTRAL- MOOV

Central Heat Pump System with
Side Discharge Condenser



Performance in
heating down to



100 % Capacity to 4°F

BUILT TO PERFORM IN THE MOST CHALLENGING ENVIRONMENTS

Introducing the Central-MOOV with Heat+ technology from MOOVAIR, an HVAC system that harnesses advanced technology to deliver unwavering reliability, ensuring your home or business stays perfectly comfortable across a broad range of climate extremes.

HIGH EFFICIENCY

At full capacity, the rated efficiency of the Central-MOOV system boasts up to 18 SEER2 and 10 HSPF2, which is very efficient. But much of what makes its operating costs so low cannot be measured by a simple standardized test.



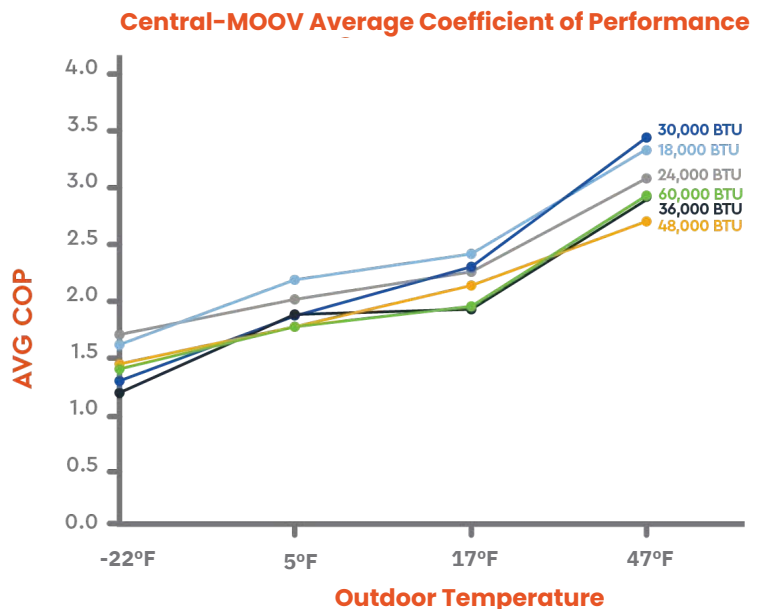
Unlike traditional HVAC equipment that's either ON full power or OFF, the Central-MOOV's fully modulating inverter compressor varies its capacity (and electric power consumption) relative to demand at any given moment. As a result, it runs longer at something far less than full power most of the time. That not only reduces energy bills, it also decreases normal equipment wear and tear through a significant reduction of on/off cycles. This functionality also increases comfort by maintaining even temperatures consistently.

HEAT+® PERFORMANCE

Typical heat pumps, inverter or not, begin to lose heating capacity at just 40°F. The colder it gets outside, the more those systems rely on supplemental electric resistance heat (KW strip) to meet the heating demand. Not the Central-MOOV system though. Thanks to its patented Heat+ design, it will deliver 100% of its rated heat capacity down to 4°F using only the compressor, which is two to three times more efficient on average than using electric backup heat alone. The energy savings this delivers is very significant, but difficult to measure on any standardized test. The system doesn't even use electric strip heat during defrost cycles like traditional heat pumps and will operate at nearly 60% of capacity down to -22°F outside.

HEAT+ 100 % Capacity to 4°F

Coefficient of Performance (COP) of a heat pump is the ratio between the rate at which the heat pump transfers thermal energy (in kW), and the amount of electrical power required to do the work (in kW). For example, if a heat pump used 1kW of electrical energy to transfer 3 kW of heat, the COP would be 3. Between -5°F & 32°F, the Central-MOOV system with High Heat+ achieves an efficiency of 1.5-3.0 times greater than electric resistance heat.



POWER BOOST MODE

The inverter drive in the Central-MOOV system works differently than others. Instead of slowly ramping up when the heating or cooling demand significantly changes, it shifts into overdrive mode to quickly get the temperature back to setpoint before settling into its ideal operating speed. This allows for quick corrections to the temperature in the space. With an overdrive burst that **nearly doubles its capacity***, the power is there when you need it.

**60Hz is the default electrical frequency of the US power grid. The Central-MOOV's inverter drive converts the power to direct current (DC) and can multiply it to as much as 110 Hz in cooling and 120 Hz in heating.*



BULLETPROOF OPERATION

The Central-MOOV works differently than many other HVAC systems. Onboard sensors interact with an advanced Electronic Expansion Valve (EEV) to monitor internal temperatures and pressures, allowing the system to automatically react and self-adjust for a healthy compressor. It also has many automatic failure prevention sequences. For example, the condenser fan runs backwards for 30 seconds periodically to clear itself of debris. It will also pause to run various self-diagnostic functions if needed to prevent a fault. It even has a heated base pan to prevent ice accumulation from plugging its internal drains. Other benefits come from its robust construction, like a water and fireproof e-box capped with a metal plate, where sensitive electronics are housed. There are many more examples like these that make the Central-MOOV one of the most durable and reliable HVAC systems on the market.

HIGH STATIC FAN

The Central-MOOV air handler has a powerful indoor fan motor rated up to .8 IWC static pressure, which is strong enough to handle the requirements of most manufactured and modular homes.

MULTI-POSITIONAL

The air handler or add-on coil can be installed in an upflow, downflow, or horizontal L/R position to suit your needs, no conversion kit required.

DUAL FUEL COMPATIBLE

The Central-MOOV outdoor unit is compatible with a new or existing gas furnace* when paired with the MOOVAIR CUB series factory matched AHRI rated coil. There are four different cabinet sizes available, designed to fit popular industry-standard furnace dimensions.

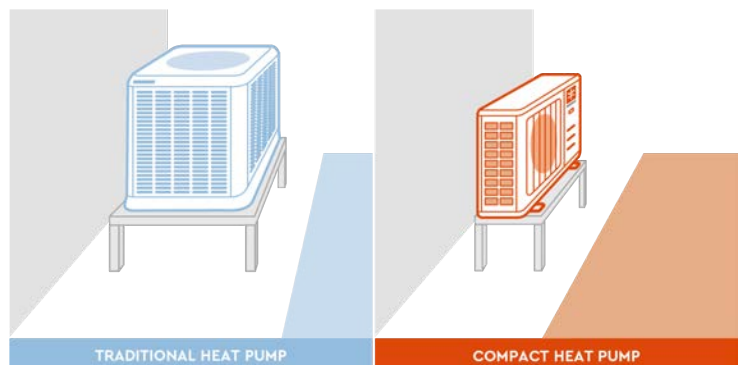
**Not all furnaces should be retrofitted. The furnace age and type of blower must be considered. It is recommended that the blower be equipped with an energy efficient ECM motor.*

RETROFIT FLEXIBLE

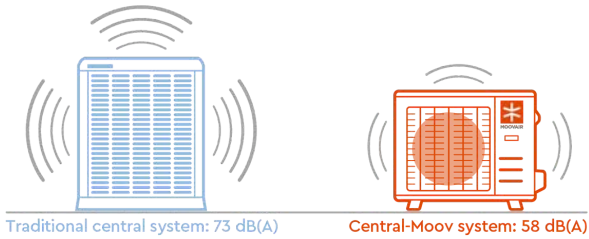
The system comes with accessories to allow for line set connections to be made via braze, flare or mechanical press fittings. Existing line sets may be reused provided they are cleaned and size-verified by a professional (see installation instructions for piping detail.) Terminations on the equipment are in common 3/8-3/4 or 3/8-7/8 sizes, depending on the model.

SMALL FOOTPRINT

Central-MOOV's compact side discharge condenser is up to 40% smaller than traditional heat pumps. The small size and more forgiving installation clearances offer greater flexibility for installation with a more aesthetically pleasing finished look.



WHISPER QUIET OPERATION



Installing on a patio or near a bedroom window? No problem! The Central MOOV heat pump has a decibel rating (db) as low as 57. Compare that to many typical HVAC systems on the market today that operate in the 70-75 db range. It's the difference of hearing the pleasing sound of soft conversation versus the sound of traffic from a sidewalk.

ADVANCED WIFI THERMOSTAT INCLUDED

Take control of the climate in your home with MOOVAIR's smart programmable Wi-Fi thermostat, included in the box. This intuitive communicating thermostat automatically configures required installation settings and only needs two wires to operate.

UNIVERSAL THERMOSTAT COMPATIBLE

Although the Central-MOOV system comes with a smart thermostat included in the box, you are not required to use it. It is compatible with most universal 24-volt thermostats available on the market today! Select universal models feature an advanced dehumidification mode that is compatible with the Central-MOOV system.



REMOTE CONTROL WITH FOLLOW ME® FUNCTION INCLUDED

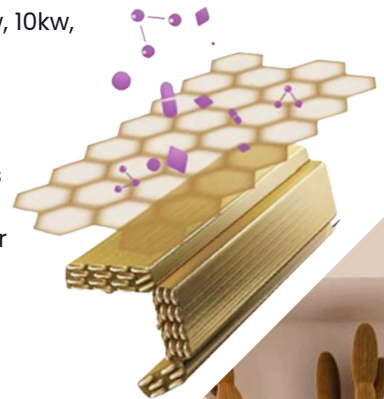
The Central-MOOV system comes with a multi-purpose remote control in the box. The user can assign temperature sensing to the remote instead of the thermostat on the wall. Keep the remote close by to ensure comfort wherever you are. The remote also doubles as a technician's service tool for advanced diagnostics and prompting remote commands. No internet connection required.

OPTIONAL EMERGENCY HEATING KIT

Backup heating kits designed for the Central-MOOV air handler are available in 5kw, 8kw, 10kw, 15kw & 20kw.

ENHANCED CORROSION PROTECTION

Extra protection is standard on the Central-MOOV system. Aluminum heat exchange fins on both the indoor and outdoor unit components have an electrically bonded **Gold Fin™** hydrophilic coating, which is more resistant to degradation from oils, salt, acid, and other environmental contaminants than bare aluminum or ordinary blue-fin coatings. It can also efficiently prevent bacteria from propagating on fin surfaces to help maintain a healthier indoor environment. Fasteners on the MOOVAIR heat pump are made of stainless steel.

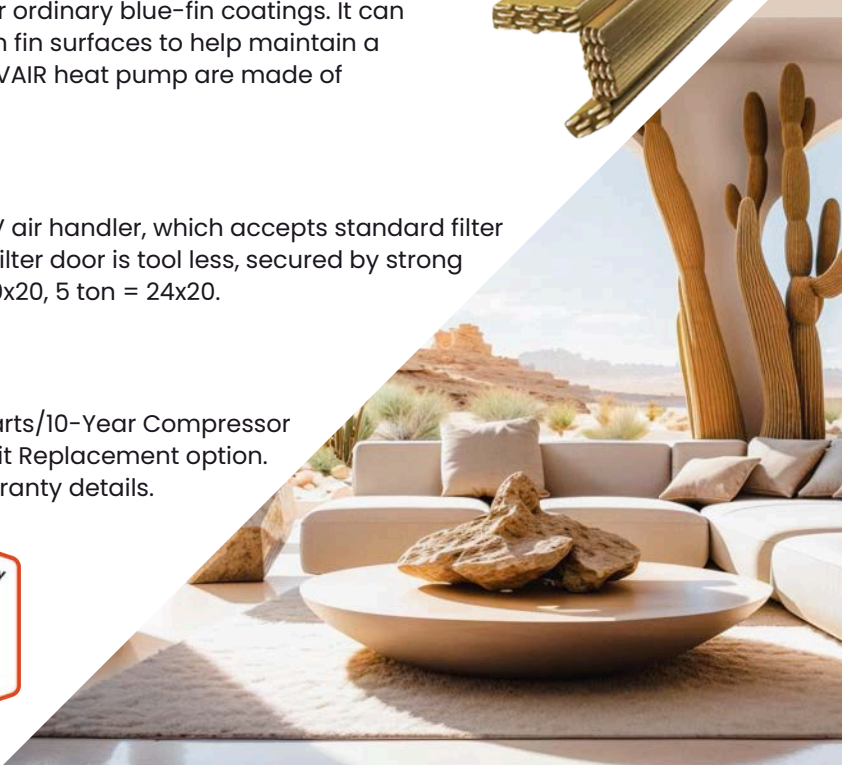


FILTER RACK

A durable filter rack is included on the Central-MOOV air handler, which accepts standard filter sizes available at most retail stores nationwide. The filter door is tool less, secured by strong magnets. Filters: 1.5 & 2 ton = 16x20, 2.5, 3 & 4 ton = 20x20, 5 ton = 24x20.

LEADING WARRANTY

Professional installations receive a limited 10-Year Parts/10-Year Compressor warranty with a 2-Year Major Component Failure/Unit Replacement option. Registration is not required. See Moovair.com for warranty details.





TECHNICAL SPECIFICATIONS

| HEAT PUMP SYSTEM | | 18,000 BTU* | 24,000 BTU* | 30,000 BTU* | 36,000 BTU* | 48,000 BTU* | 60,000 BTU* |
|---------------------------------------|-------------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Indoor Model | | FMA18HIAHUU230X7 | FMA24HIAHUU230X7 | FMA30HIAHUU230X7 | FMA36HIAHUU230X7 | FMA48HIAHUU230X7 | FMA60HIAHUU230X7 |
| Outdoor Model | | DMA18HOS20230E7 | DMA24HOS20230E7 | DMA30HOS20230E7 | DMC36HOS20230E7 | DMA48HOS20230E7 | DMA60HOS20230E7 |
| HEAT+ Technology | | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Supply (V/Ph/Hz) | | 208-230/1/60 | 208-230/1/60 | 208-230/1/60 | 208-230/1/60 | 208-230/1/60 | 208-230/1/60 |
| Cooling | Capacity (BTU/h) | 18,000 (6,880~21,000) | 24,000 (6,400~27,000) | 30,000 (10,000~33,600) | 35,000 (14,000~38,000) | 47,000 (15,000~48,000) | 55,000 (14,000~56,000) |
| | EER2 (BTU/Wh) | 12.4 | 11.7 | 10.0 | 11.7 | 8.2 | 8.8 |
| | SEER2 (BTU/Wh) | 18.0 | 17.4 | 16.2 | 16.3 | 15.6 | 15.3 |
| Heating | Capacity (BTU/h) | 19,000 (2,800~21,000) | 24,000 (10,100~31,000) | 33,000 (11,500~37,000) | 39,000 (11,000~48,000) | 50,000 (11,000~55,000) | 59,000 (13,400~69,000) |
| | COP2 (W/W) | 3.64 | 3.35 | 3.30 | 3.40 | 3.15 | 3.42 |
| | HSPF2 Region 4 (BTU/Wh) | 9.3 | 10.0 | 8.9 | 9.5 | 9.4 | 9.4 |
| Max. fuse (outdoor) (A) | | 20 | 35 | 35 | 35 | 50 | 50 |
| Compressor type | | Twin Rotary | Twin Rotary | Rotary | Rotary | Rotary | Rotary |
| Indoor air flow (Hi/Mi/Lo) (CFM) | | 576.47/529.41/488.24 | 758.82/694.12/629.41 | 894.12/805.88/711.76 | 1082.35/970.59/864.71 | 1282.35/1094.12/905.88 | 1582.35/1358.82/1135.29 |
| Indoor noise level (Hi/Mi/Lo) (dB(A)) | | 34/31/30 | 39/36/33 | 42/40.5/36.5 | 49/44/42 | 50/47/43.5 | 51/45.5/41.5 |
| Indoor Unit | Width x Depth x Height (in) | 21.02x17.52x45.00 | 21.02x17.52x45.00 | 21.02x21.02x49.02 | 21.02x21.02x49.02 | 21.02x21.02x49.02 | 21.02x24.49x52.99 |
| | Net/Gross weight (lbs) | 105.82/129.41 | 105.60/127.43 | 129.19/155.64 | 129.19/155.64 | 130.51/156.31 | 162.70/192.90 |
| Outdoor fan motor | Number of fans | 1 | 1 | 1 | 1 | 2 | 2 |
| | Speed (min/mid/max r/min) | 800/700/580 | 950/700/500/400 | 950/900/500 | 850/800/750/650/550 | 850/750/650 | 850/750/650 |
| Outdoor noise level (dB(A)) | | 57.0 | 62.0 | 60.5 | 65.0 | 64.0 | 63.5 |
| Outdoor Unit | Width x Depth x Height (in) | 35.04x13.46x26.50 | 37.24x16.14x31.89 | 37.24x16.14x31.89 | 38.58x14.76x38.39 | 37.48x16.34x52.48 | 37.48x16.34x52.48 |
| | Net/Gross weight (lbs) | 102.95/109.79 | 136.69/145.50 | 159.83/169.75 | 203.71/234.57 | 220.24/248.90 | 239.86/271.61 |
| Refrigerant precharge (ft) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Refrigerant piping | Liquid side/Gas side (in) | 3/8 / 3/4 | 3/8 / 3/4 | 3/8 / 3/4 | 3/8 / 3/4 | 3/8 / 3/4 | 3/8 / 3/4 |
| | Max. refr. pipe length (ft) | 98.42 | 164.04 | 164.04 | 213.25 | 213.25 | 213.25 |
| | Max. difference in level (ft) | 65.62 | 82.02 | 82.02 | 98.42 | 98.42 | 98.42 |
| Moisture removal (L/h) | | 1.67 | 1.98 | 3.41 | 3.65 | 4.96 | 5.55 |
| Thermostat type | | Wired Control | Wired Control | Wired Control | Wired Control | Wired Control | Wired Control |
| Room temp. | Indoor (cooling) (°F) | 60~90 | 60~90 | 60~90 | 60~90 | 60~90 | 60~90 |
| | Indoor (heating) (°F) | 32~86 | 32~86 | 32~86 | 32~86 | 32~86 | 32~86 |
| | Outdoor (cooling) (°F) | 5~122 | 5~122 | 5~122 | 5~122 | 5~122 | 5~122 |
| | Outdoor (heating) (°F) | -22~75 | -22~75 | -22~75 | -22~75 | -22~75 | -22~75 |

| HEAT PUMP + ADD ON COIL | | 18,000 BTU* | 24,000 BTU* | 30,000 BTU* | 30,000 BTU* | 36,000 BTU* | 36,000 BTU* | 48,000 BTU | 60,000 BTU |
|-------------------------|-----------------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Indoor Model | | CUB24HAC20BWT7A | CUB24HAC20BWT7A | CUB36HAC20BWT7A | CUB36HAC20CWT7A | CUB36HAC20BWT7A | CUB36HAC20CWT7A | CUB48HAC20CWT7A | CUB60HAC20DWT7A |
| Outdoor Model | | DMA18HOS20230E7 | DMA24HOS20230E7 | DMA36HOS20230E7 | DMA30HOS20230E7 | DMC36HOS20230E7 | DMC36HOS20230E7 | DMA48HOS20230E7 | DMA60HOS20230E7 |
| HEAT+ Technology | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cooling | Capacity (BTU/h) | 18,000 (6,880~21,000) | 24,000 (6,400~27,000) | 29,000 (13,000~33,600) | 30,000 (9,900~35,000) | 36,000 (11,700~40,000) | 35,000 (11,700~40,000) | 46,000 (16,500~47,000) | 53,000 (13,400~54,000) |
| | EER2 (BTU) | 11.7 | 10.7 | 10.0 | 10.5 | 10.0 | 10.0 | 8.6 | 8.6 |
| | SEER2 (BTU) | 16.1 | 16.5 | 15.2 | 15.5 | 15.5 | 15.2 | 14.3 | 14.5 |
| Heating | Capacity (BTU/h) | 19,000 (5,900~23,600) | 25,000 (8,500~28,000) | 31,000 (8,000~34,000) | 33,000 (9,000~37,000) | 38,000 (9,200~45,000) | 39,000 (9,200~45,000) | 51,000 (25,000~59,000) | 55,000 (10,800~60,000) |
| | COP2 (W/W) | 3.35 | 3.32 | 3.18 | 3.5 | 3.18 | 3.18 | 3.04 | 3.08 |
| | HSPF2 Region 4 (BTU/Wh) | 9.5 | 9.5 | 8.5 | 9.7 | 8.6 | 10.0 | 9.0 | 8.6 |
| Indoor Unit | Width x Depth x Height (in) | 17.52x20.98x17.99 | 17.52x20.98x17.99 | 17.52x20.98x23.58 | 20.98x20.98x23.98 | 17.52x20.98x23.58 | 20.98x20.98x23.98 | 20.98x20.98x23.98 | 24.49x20.98x27.99 |
| | Net/Gross Weight (lbs) | 42.77/52.03 | 42.77/52.03 | 60.19/69.00 | 66.58/77.16 | 60.19/69.00 | 66.58/77.16 | 66.58/77.16 | 86.64/98.33 |



Performance in heating down to



100 % Capacity to 4°F

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MOOVING FORWARD, TOGETHER.

SERIAL NOMENCLATURE



SN: 2400898120232190130118

3219

Equipment Production Date

3: 2023

2: February, A: October, B: November, C: December

19: 19th



Performance in heating down to



100 % Capacity to 4°F

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