

ADVANCED
DC INVERTER
TECHNOLOGY



UNIVERSAL SERIES

DESIGNED FOR VERSATILITY



With multiple installation options, Universal® products can be tailored to suit your needs, regardless of your application.

www.mrcool.com

Version Date: 10-18-23

UNIVERSAL[®] CONDENSER

Up to 17 SEER2 DC Inverter Unitary



The MRCOOL[®] Universal[®] Condenser is capable of up to a 20 SEER rating. This condenser is designed to handle all of your heating and cooling needs, so the use of a gas furnace is not necessary. It is available in 2-3 ton and 4-5 ton capacities that can easily be field-converted to suit the needs of your application using the dip switch setting.

Benefits & Features

- ✓ 3 Connection Types:
 - Patented* Pre-Charged No-Vac[®] Quick Connect[®] Line Set (15 ft, 25 ft, 35 ft, 50 ft-Couplings also available)
 - Sweat Braze Connection
 - Flare Connection
- ✓ Quiet 55-58 dB(a) operation
- ✓ Slim Design
- ✓ Gas Furnace Not Required
- ✓ Condenser can be field-converted to 2-Ton from 3-Ton or 4-Ton from 5-Ton using a dip switch setting (see manual for details).
- ✓ Sizes: 2-3 Ton or 4-5 Ton
- ✓ 10-Year Limited Warranty*
- ✓ Compatible with any third party air handler and thermostat
- ✓ Uses environmentally-friendly R-410A refrigerant
- ✓ Gold Fin Corrosion Protection
- ✓ Rapid Heating & Cooling



The MRCOOL[®] Universal[®] Series Condenser, with a DC inverter compressor, offers dynamic heating and cooling performance in a slim design. This condenser is capable of delivering 100% heating capacity down to -5°F (-20°C) on 2-ton models and 14°F (-10°C) on 4-ton models. It can also offer 100% cooling capacity up to 115°F (46°C) on 2-ton models and 109.4°F (43°C) on 4-ton models.

The Universal[®] Series Condenser also offers the same versatility and robust construction as with all of the other products in the Universal lineup. It features Gold Fin[®] Technology to offer superior protection of the coils against corrosion. It is also available with our patented pre-charged No-Vac[®] Quick Connect[®] Line Set that can drastically decrease the time and complexity of the installation process.

*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty; 15-year for heat exchanger where specified). Warranty must be registered online within 60 days of installation to qualify for extended coverage. Unregistered equipment defaults to 5-year coverage

SPECIFICATION

UNIVERSAL® CONDENSER

| MODEL NO. | UNITS | MDU018024 | MDU018036 | MDU018048 | MDU018060 |
|-----------|-------|-----------|-----------|-----------|-----------|
|-----------|-------|-----------|-----------|-----------|-----------|

CAPACITY & PERFORMANCE

| | | | | | |
|---------------------------|------------|---------------|-------------------|----------------|-------------------|
| Cooling Capacity | Btu/h (kW) | 24,000 (7 kW) | 34,000 (10.55 kW) | 48,000 (14 kW) | 54,000 (15.83 kW) |
| SEER2 | Btu/w | Up to 17 | Up to 16 | Up to 17 | Up to 15.8 |
| Heating Capacity | Btu/h | 24,000 (7 kW) | 35,000 (10.55 kW) | 48,000 (14 kW) | 54,000 (15.83 kW) |
| EER2 | (Btu/h)/W | 12 | 12 | 11 | 10 |
| HSPF2 | Btu/w | 9 | 9 | 9 | 9 |
| Noise level - Air Handler | dB(A) | 55 | 57 | 58 | 58 |

ELECTRICAL PARTS

| | | | | | |
|------------------------------------|---|-------------------|-------------------|-------------------|-------------------|
| Min/Max Voltage | V | 187/253 | 187/253 | 187/253 | 187/253 |
| Rated Voltage | V | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz |
| Min. Current Ampacity (MCA) | A | 24 | 24 | 35 | 35 |
| Max. Current Over Protection (MOP) | A | 35 | 35 | 45 | 45 |

DIMENSIONS & WEIGHT

| | | | | | |
|-------------------------------|-----------|---|---|--|--|
| Net Dimension (L x W x H) | inch (mm) | 37 x 18.125 x 32.25 (940 x 460 x 820) | 37 x 18.125 x 32.25 (940 x 460 x 820) | 39.375 x 14.5 x 53.75 (1000 x 370 x 1365) | 39.375 x 14.5 x 53.754 (1000 x 370 x 1365) |
| Packing Dimension (L x W x H) | inch (mm) | 42.625 x 22.625 x 38.25 (1083 x 573 x 973) | 42.625 x 22.625 x 38.25 (1083 x 573 x 973) | 45.375 x 19.375 x 59.25 (1153 x 493 x 1505) | 45.375 x 19.375 x 59.25 (1153 x 493 x 1505) |
| Net weight | lbs (kg) | 218.9 (99.3) | 218.9 (99.3) | 313.1 (142) | 313.1 (142) |
| Gross Weight | A | 241 (109.3) | 241 (109.3) | 341.5 (154.9) | 341.5 (154.9) |

REFRIGERANT & PIPING

| | | | | | |
|------------------------|----|---|---|---|---|
| Refrigerant Type | oz | R-410A/148.8 | R-410A/148.8 | R-410A/220.48 | R-410A/220.48 |
| Connection Pipe Method | | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) |



* Data provided by AHRI



Kink Resistant for Easier Bending During Installation.

100% Accurately Precharged R-410A Refrigerant standard sizes: 15 ft, 25 ft, 35 ft, 50 ft.

- Optional MRCOOL® No-Vac® Couplers can be used to combine two standard Quick Connect® Line Sets to extend the length if needed.

Quicker Installation than Conventional Line Sets.

Simple to Use, Leak Proof, and Screw-on Quick Connect Valves do not require vacuuming.

Strong 3/4 inch Gator-Flextra™ UV Protective Insulation provides extra protection against sun damage, weather erosion, or destruction from animals and insects.

NO-VAC®
Quick-Connect®
Pre-Charged
Line Set

UNIVERSAL® COOLING ONLY CONDENSER

Up to 17 SEER2 Cooling System



MRCOOL® would like to announce the addition of a new cooling-only condenser to the Universal® line of products. If you're looking for the cooling efficiency of a Universal® Condenser, but live in a higher climate area where the added cost and complexity of a system with heat is not necessary, the cooling-only condenser is for you. Available in either 2-3 ton or 4-5 ton capacity configuration, this condenser offers exactly what you need and nothing you don't.

Benefits & Features

- ✓ 3 Connection Types:
 - Patented* Pre-Charged No-Vac® Quick Connect® Line Set (15 ft, 25 ft, 35 ft, 50 ft-Couplings also available)
 - Sweat Braze Connection
 - Flare Connection
- ✓ High Efficiency Energy Saving DC Motor
- ✓ 2-Step Condensation Protection
- ✓ Low-Noise Internal Fan Blade
- ✓ Condenser can be field-converted to 2-Ton from 3-Ton or 4-Ton from 5-Ton using a dip switch setting (see manual for details).
- ✓ Sizes: 2-3 Ton or 4-5 Ton
- ✓ 10-Year Limited Warranty*
- ✓ The special fire-proof electrical box design offers anti-electric shock reserved installation space for the circuit breaker
- ✓ Uses environmentally-friendly R-410A refrigerant



Our cooling-only condenser with a DC inverter compressor is the newest addition to the Universal® line of products in 2-3 Ton or 4-5 Ton sizes. Customers who are looking only for the cooling efficiency of a Universal® Condenser can leverage this superior product as their perfect home comfort solution.

Of course, those who want cooling-only can still pair this Universal® condenser with an energy-efficient gas furnace option from our Signature Series 95% line to get high-quality heating as well. And since it is non-communicating, this could be an ideal product for homeowners who have a relatively new gas furnace they want to match with variable-speed Universal® technology.*

*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty; 15-year for heat exchanger where specified). Warranty must be registered online within 60 days of installation to qualify for extended coverage. Unregistered equipment defaults to 5-year coverage

SPECIFICATION

UNIVERSAL® COOLING ONLY CONDENSER

| MODEL NO. | UNITS | MDUC018024 | MDUC018036 | MDUC018048 | MDUC018060 |
|-----------|-------|------------|------------|------------|------------|
|-----------|-------|------------|------------|------------|------------|

CAPACITY & PERFORMANCE

| | | | | | |
|---------------------------|------------|---------------|-------------------|----------------|-------------------|
| Cooling Capacity | Btu/h (kW) | 24,000 (7 kW) | 34,000 (10.55 kW) | 48,000 (14 kW) | 54,000 (15.83 kW) |
| SEER2 | Btu/w | Up to 17 | Up to 16 | Up to 17 | Up to 16 |
| Heating Capacity | Btu/h | - | - | - | - |
| EER2 | (Btu/h)/W | 12 | 10 | 11 | 10 |
| HSPF2 | Btu/w | - | - | - | - |
| Noise level - Air Handler | dB(A) | 55 | 57 | 58 | 58 |

ELECTRICAL PARTS

| | | | | | |
|------------------------------------|---|-------------------|-------------------|-------------------|-------------------|
| Min/Max Voltage | V | 187/253 | 187/253 | 187/253 | 187/253 |
| Rated Voltage | V | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz |
| Min. Current Ampacity (MCA) | A | 24 | 24 | 35 | 35 |
| Max. Current Over Protection (MOP) | A | 35 | 35 | 45 | 45 |

DIMENSIONS & WEIGHT

| | | | | | |
|-------------------------------|-----------|---|---|---|---|
| Net Dimension (L x W x H) | inch (mm) | 37 x 18.125 x 32.25 (940 x 460 x 820) | 37 x 18.125 x 32.25 (940 x 460 x 820) | 37 x 12.625 x 56.375 (940 x 321 x 1432) | 37 x 12.625 x 56.375 (940 x 321 x 1432) |
| Packing Dimension (L x W x H) | inch (mm) | 42.625 x 22.625 x 38.25 (1083 x 573 x 973) | 42.625 x 22.625 x 38.25 (1083 x 573 x 973) | 40.875 x 17.25 x 62.25 (1038 x 438 x 1580) | 40.875 x 17.25 x 62.25 (1038 x 438 x 1580) |
| Net weight | lbs (kg) | 185.2 (84) | 185.2 (84) | 262 (119) | 262 (119) |
| Gross Weight | lbs (kg) | 208.3 (94.5) | 208.3 (94.5) | 289 (131) | 289 (131) |

REFRIGERANT & PIPING

| | | | | | |
|-------------------------|----|---|---|---|---|
| Refrigerant Type/Charge | oz | R-410A/118.24 | R-410A/118.24 | R-410A/193.6 | R-410A/193.6 |
| Connection Pipe Method | | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) | Quick Connect®, Flare, Weld (with Stub) |



* Data provided by AHRI

UNIVERSAL® HIGH ESP AIR HANDLER

Up to 17 SEER2 Central Heat & Air Systems



Designed specifically for high static applications, the Universal High ESP Air Handler delivers superior cooling and heating comfort while still providing an industry-leading low decibel level as it maximizes energy savings.

Benefits & Features

- ✓ 3 Connection Types:
 - Pre-charged No-Vac® Quick Connect® Line Set (15 ft, 25 ft, 35 ft, 50 ft Couplings also available)
 - Sweat Braze Fitting
 - Flare Fitting
- ✓ Up to 20 SEER Efficiency Rating
- ✓ Uses Environmentally-Friendly R-410A Refrigerant
- ✓ Easy to Clean Metal Filter Protects Against Fire, Corrosion, and Deterioration
- ✓ Capacities Available: 2-3 Ton or 4-5 Ton
- ✓ Multi-Position Installation (Upflow, Horizontal)
- ✓ 2-Step Condensation Protection
- ✓ Quiet operation: 45-51 dB(a) noise level
- ✓ Air Handler Can Be Field Converted to 2-Ton from 3-Ton or 4-Ton from 5-Ton By Changing Dip Switch Settings (see manual for details)
- ✓ 10-Year Limited Warranty*

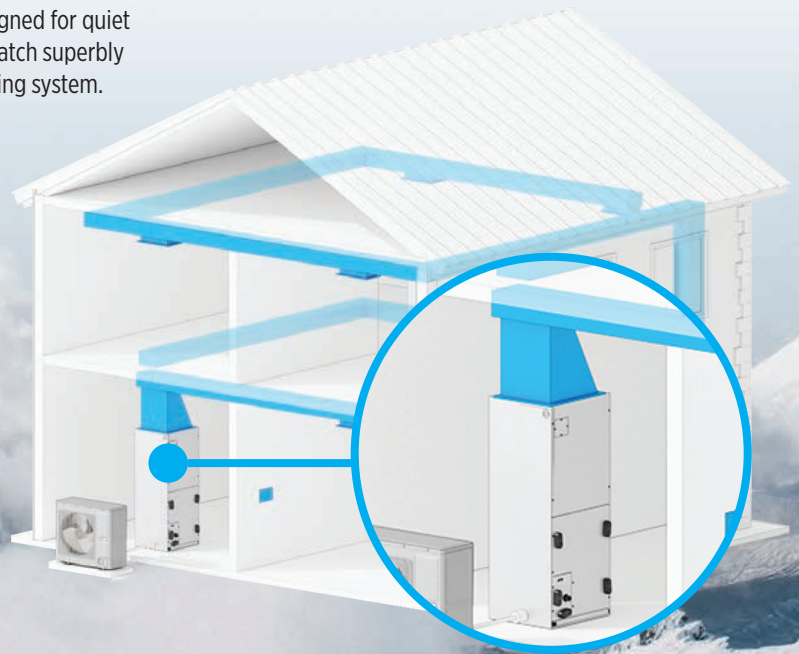


*Registration is required.

The NEW Universal® High-ESP Air Handler has been designed for use in high static pressure applications such as in systems with ductwork restrictions that could place a strain on a conventional air handler not rated for high external static pressure.

This air handler is equipped with a powerful and efficient DC fan motor designed for quiet operation while still providing dynamic performance. Of course, it will still match superbly with a Universal® condenser in a traditional central air conditioning and heating system.

*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty; 15-year for heat exchanger where specified). Warranty must be registered online within 60 days of installation to qualify for extended coverage. Unregistered equipment defaults to 5-year coverage



SPECIFICATION

UNIVERSAL® HIGH ESP AIR HANDLER

| MODEL NO. | UNITS | MDUI18024E | MDUI18036E | MDUI18048E | MDUI18060E |
|-----------|-------|------------|------------|------------|------------|
|-----------|-------|------------|------------|------------|------------|

CAPACITY & PERFORMANCE

| | | | | | |
|---------------------------|------------|---------------|-------------------|----------------|-------------------|
| Cooling Capacity | Btu/h (kW) | 24,000 (7 kW) | 34,000 (10.55 kW) | 48,000 (14 kW) | 54,000 (15.83 kW) |
| SEER2 | Btu/w | Up to 17 | Up to 16 | Up to 17 | Up to 15.8 |
| Heating Capacity | Btu/h | 24,000 (7 kW) | 35,000 (10.55 kW) | 48,000 (14 kW) | 54,000 (15.83 kW) |
| EER2 | (Btu/h)/W | 12 | 12 | 11 | 10 |
| HSPF2 | Btu/w | 9 | 9 | 9 | 9 |
| Noise level - Air Handler | dB(A) | 45 | 47 | 50 | 51 |

ELECTRICAL PARTS

| | | | | | |
|------------------------------------|---|-------------------|-------------------|-------------------|-------------------|
| Min/Max Voltage | V | 187/253 | 187/253 | 187/253 | 187/253 |
| Rated Voltage | V | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz | 208-230V,1Ph,60Hz |
| Min. Current Ampacity (MCA) | A | 4 | 4 | 8 | 8 |
| Max. Current Over Protection (MOP) | A | 15 | 15 | 15 | 15 |

DIMENSIONS & WEIGHT

| | | | | | |
|-------------------------------|-----------|---|---|---|---|
| Net Dimension (L x W x H) | inch (mm) | 21.25 x 21.25 x 48.25 (540 x 540 x 1224) | 21.25 x 21.25 x 48.25 (540 x 540 x 1224) | 24.75 x 21.25 x 57 (630 x 540 x 1448) | 24.75 x 21.25 x 57 (630 x 540 x 1448) |
| Packing Dimension (L x W x H) | inch (mm) | 26 x 23.75 x 50.375 (660 x 603 x 1280) | 26 x 23.75 x 50.375 (660 x 603 x 1280) | 27.25 x 26 x 59.375 (693 x 660 x 1508) | 27.25 x 26 x 59.375 (693 x 660 x 1508) |
| Net weight | lbs (kg) | 156.5 (71) | 156.5 (71) | 203 (92) | 203 (92) |
| Gross Weight | A | 169.8 (77) | 169.8 (77) | 218 (99) | 218 (99) |

REFRIGERANT & PIPING

| | | | | | |
|------------------------|----|---|--|--|--|
| Refrigerant Type | oz | R-410A/148.8 | R-410A/148.8 | R-410A/211.7 | R-410A/211.7 |
| Connection Pipe Method | | Quick Connect®, Flare, Weld (with Stub) | Quick Connect® Flare, Weld (with Stub) | Quick Connect® Flare, Weld (with Stub) | Quick Connect® Flare, Weld (with Stub) |



* Data provided by AHRI

UNIVERSAL® A-COILS

Up to 16.5 SEER2 Central Heat & Air Systems



The Universal A-Coil is the latest offering in evaporator coil innovation from MRCOOL®. If your existing HVAC system needs a new evaporator coil, or you're looking for one to complement a new system, look no further than the Universal® A-Coils. With the versatility of multiple installation options, efficient operation, and MRCOOL's superior product quality, it can not only be tailored to suit the needs of your application but is also sure to meet the demands of your system.

Benefits & Features

- ✓ Quiet Operation
- ✓ Versatile Installation Options
- ✓ Quick Installation
- ✓ Standard 24V controls
- ✓ Equipped with Multiple Protection Safeguards
- ✓ Special Liquid Pipe Design that Reduces Excessive Condensation



The Universal® A-Coil is a versatile and adaptable option to perfect your home's comfort level. Pre-charged with R-410A refrigerant, this superior component can be installed in upflow, downflow, or horizontal right positions to ensure it can be adapted to your system. Plus, that same installation can be quick and easy when paired with the optional Patented MRCOOL® No-Vac® Quick Connect® line sets (Pat: <https://mrcool.com/mrcool-patents/>).

Designed as a perfect match for the MRCOOL Universal condenser, however, the Universal A-Coil has the versatility of also being able to be paired with an existing furnace or modular blower already in your home. Ready to upgrade? Make it a complete system by pairing a Universal A-Coil with our Signature Series Modular Blower or Signature Series 95% AFUE Gas Furnace for maximized efficiency.

SPECIFICATION

UNIVERSAL® A-COILS

| MODEL NO. | UNITS | MDUCC15024 | MDUCC15036 | MDUCC15048 | MDUCC15060 | |
|--------------------|-----------------|-------------------|---------------------|---------------------|-------------------------|-------------------------|
| OUTDOOR UNIT MODEL | - | MDUCO18024 | MDUCO18036 | MDUCO18048 | MDUCO18060 | |
| Blower | Airflow Volume | m ³ /h | 1,360 | 1,700 | 2,090 | 2,570 |
| | | CFM | 800 | 1,000 | 1,230 | 1,510 |
| | Power Input | W | 145 | 185 | 280 | 390 |
| Cooling Capacity | | Btu/h | 23,000 (7 kW) | 34,000 (10.55 kW) | 47,000 (14 kW) | 53,000 (15.83 kW) |
| SEER2 | | (Btu/h)/W | 16.5 | Up to 16 | Up to 16.5 | Up to 15.5 |
| EER2 | | (Btu/h)/W | 12 | 10.2 | 11 | 10.2 |
| Connecting Pipe | Liquid | inch | 3/8 | 3/8 | 3/8 | 3/8 |
| | Gas | inch | 3/4 | 3/4 | 3/4 | 3/4 |
| Dimensions | Net (WxDxH) | inch | 17.5 x 21.25 x 23 | 17.5 x 21.25 x 23 | 24.5 x 21.25 x 28.5 | 24.5 x 21.25 x 28.5 |
| | Packing (WxDxH) | inch | 21 x 27.125 x 25.75 | 21 x 27.125 x 25.75 | 28.125 x 27.125 x 31.25 | 28.125 x 27.125 x 31.25 |
| Net Weight | | lbs | 64 | 64 | 95 | 95 |
| Gross Weight | | lbs | 75 | 75 | 110 | 110 |
| Loading Quantity | 40' GP | Set | 219 | 219 | 102 | 102 |
| | 40' GP | Set | 292 | 292 | 153 | 153 |

*There are only 2 A-Coil units, the 2-3 ton (MDUCC15024036) and the 4-5 Ton (MDUCC15048060). The specs are broken down as usage for 2-ton, 3-ton, 4-ton, and 5-ton based on the size of the condenser it is paired with.

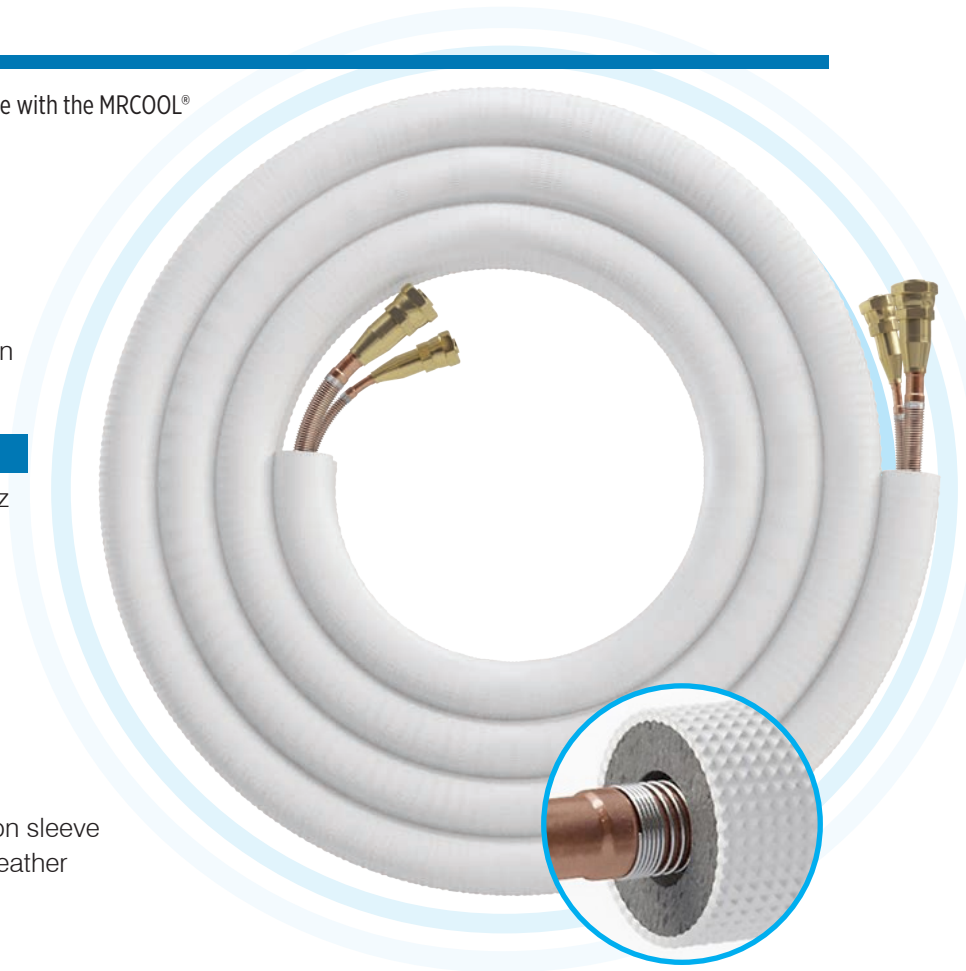
NO-VAC® QUICK CONNECT®

Factory Charged Line Set

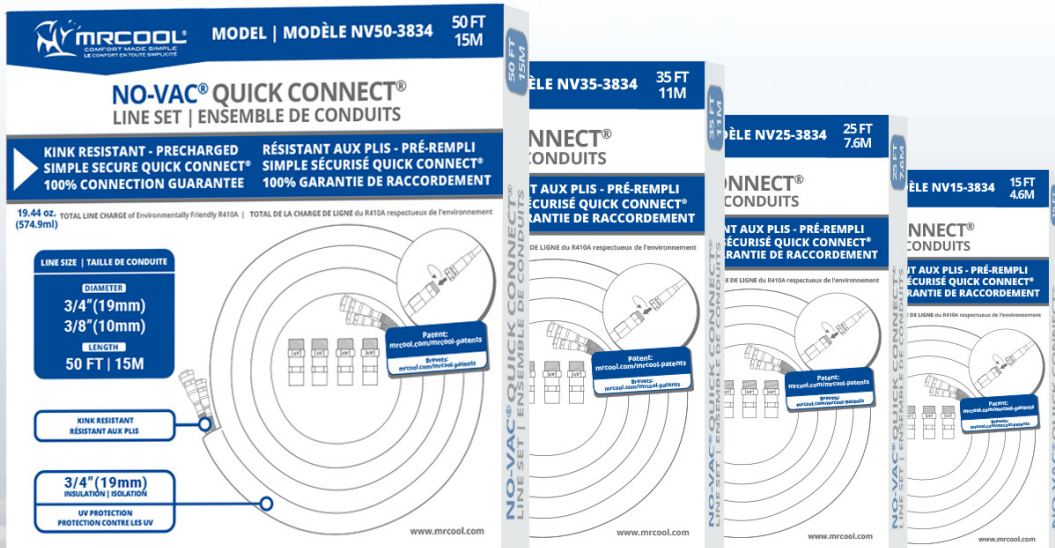
The MRCOOL® No-Vac® Quick Connect® Line Set is intended for use with the MRCOOL® Universal Condensers and MRCOOL® Universal Air Handlers.

Benefits & Features

- ✓ Kink resistant for easier bending during installation
 - ✓ 100% accurately precharged R410A refrigerant
- | 15FT | 25FT | 35FT | 50FT |
|--------|--------|--------|--------|
| 2.43oz | 4.02oz | 5.64oz | 7.94oz |
- ✓ Simple to use screw-on Quick Connect® valves
 - ✓ Line sizes 3/4" and 3/8"
 - ✓ Leak proof
 - ✓ No vacuum needed
 - ✓ Quicker installation than conventional line sets
 - ✓ Strong 3/4" Gator-Flextra™ UV protective insulation sleeve provides extra protection against sun damage, weather erosion, or destruction from animals/rodents



3/4" Gator-Flextra™
Insulation



Lengths Available:
15FT, 25FT, 35FT, 50FT

*Only for use with MRCOOL®
Universal Series

*Pat: <https://www.mrcool.com/mrcool-patents>

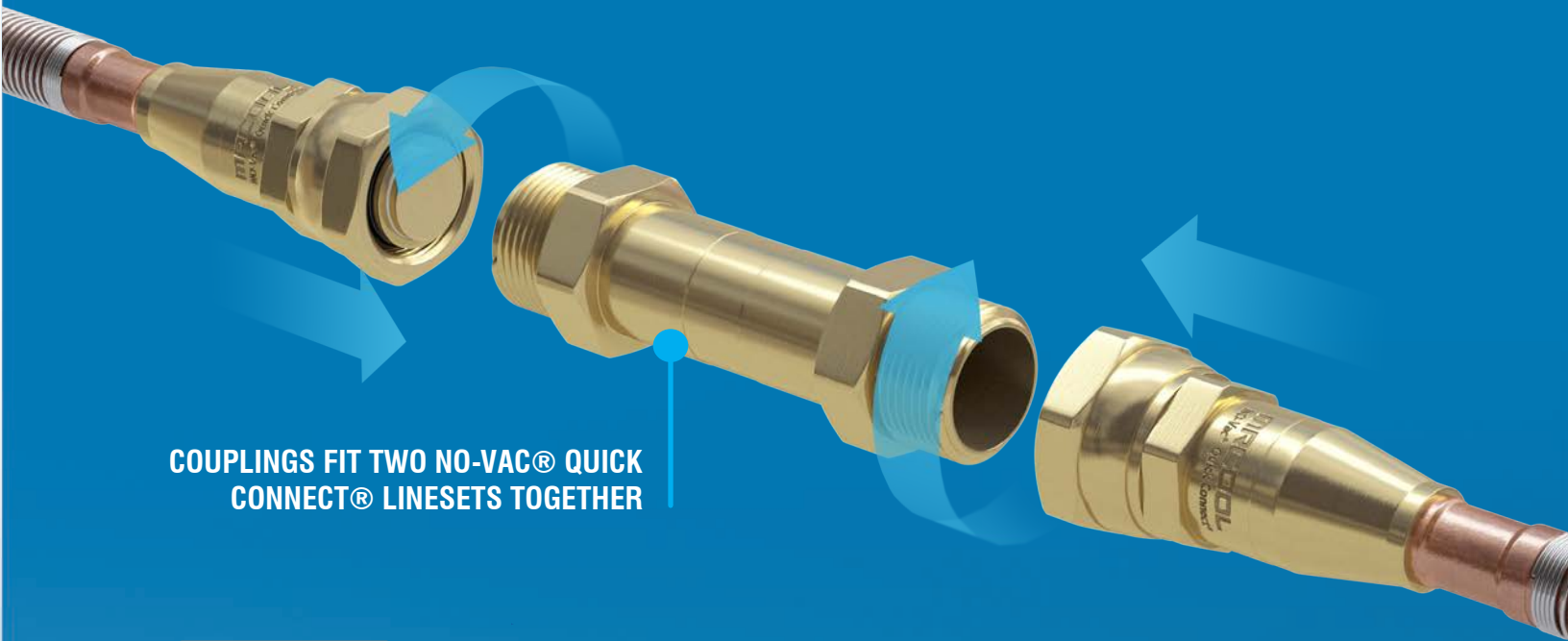
NO-VAC® COUPLER

Line Set Extension Accessory

When one standard size NO-VAC® QUICK CONNECT® LINE SET is not long enough, two standard QUICK CONNECT® LINE SETS can be combined using our NO-VAC® COUPLER to increase the desired length of the QUICK CONNECT® LINE SETS.



- 1 Choose the MRCEOL® No-Vac® Coupler size that matches the size of your Standard Line Sets.
- 2 Use a wrench to assemble the line sets on each side of the coupler making sure the thread is screwed tightly at the bottom until it stops.
- 3 After all pieces are securely connected, cover the connections with the provided grey sleeve to prevent condensation.
- 4 Slide all insulation sleeves together ensuring no copper wiring is exposed and secure in place with tape.



COUPLINGS FIT TWO NO-VAC® QUICK CONNECT® LINESETS TOGETHER

AHRI CERTIFIED®
www.ahridirectory.org

* Data provided by AHRI



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***Display Images for demonstrative purposes only. Actual images during product use may vary.**

NOTICE: MRCOOL® products must be installed in accordance with all applicable local, state and federal codes and regulations. Unless explicitly stated otherwise, installation must be completed by a licensed / certified HVAC technician. ALL electrical connections to a power source must be performed by a licensed electrician and comply with local, state and federal electrical codes and regulations.

www.mrcool.com