



Forane[®] Refrigerants R-22 Alternative

FORANE[®] 427A – THE EASY RETROFIT[™]

Forane[®] 427A is an R-22 retrofit for air conditioning, heat pumps, and refrigeration systems. R-427A out performs other common R-22 retrofits in most applications.

Capacity Comparison



Note: Box Temperature 25°F, Ambient 100°F

COP Comparison



Note: Box Temperature 25°F, Ambient 100°F



Minimize the work for R-22 retrofits

- One refrigerant for three applications: air conditioning, heat pumps, and refrigeration
- No TXV replacement required
- Comparable capacity to R-22
- Better efficiency than most R-22 retrofits
- Nearly identical operating pressures to R-22
- Copeland Discus[™] and Bitzer Approved

NO OIL CHANGE NEEDED
in many installations



iPhone[®]



Android[™]

New! Forane[®] P/T App

- Interactive pressure/temperature charts
- Pressure/temperature calculator
- Product finder
- Subcooling and superheat calculator
- Toggle between 8 different languages

Forane® 427A Retrofit Guides

Step 1: Establish baseline performance

Check the system for leaks and identify any needed repairs. Run the system using the correct OEM charge of R-22 and record performance parameters using an Arkema Retrofit Data Sheet.

Step 2: Recover existing R-22

Recover existing R-22 refrigerant (DO NOT vent to the atmosphere) and make sure not to mix with other refrigerant gases. Record the weight of refrigerant removed.

Step 3: Check lubricant

A lubricant change may not be required, but POE is always recommended for optimal performance. Confirming oil quality is important. Check the oil for moisture, acidity, and metal shavings or sediments. If the oil does not meet the desired specification, a complete oil change using POE is recommended.

Systems with complex piping schemes could impede proper oil return. In these cases, adding or changing over to POE is recommended.

Step 4: Replace the filter dryer and seals

Replace the filter dryer and, if necessary, elastomeric seals and gaskets, such as Schrader valve cores.

Step 5: Leak check and evacuate the system

Conduct a pressure test using dry nitrogen to determine if the system has a leak, staying below the system pressure limitations. Repair any leaks as necessary.

Pull a minimum vacuum of 500 microns and ensure that it maintains a vacuum. If the system does not hold vacuum, leaks may still be present.

Step 6: Charge the system with Forane® 427A

Remove refrigerant as a liquid only from the cylinder, being careful not to damage the compressor. The initial weight should be approximately 95% of the original charge for R-22, charging up to 100% if necessary.

Step 7: Start the system and check performance

Start system and record system performance, noting superheat and subcooling. Adjust TXV set-point and/or refrigerant charge to achieve the desired superheat. Low side pressure control settings may also need to be adjusted.

Step 8: Label the system

Properly label the system as being retrofitted with Forane® 427A. For Forane® 427A system labels, call Arkema's customer service at (800) 245-5858.



Customer Service: 800-245-5858
Technical Service: 800-738-7695

www.r22retrofits.com

The chemical, physical, and toxicological properties of these chemicals may not have been fully investigated. You must use due caution in handling of any such material and follow appropriate, good industrial hygiene and safety precautions to prevent human exposure. Carefully read and understand the information on the Material Safety Data Sheet (MSDS) before beginning work with the material described in this brochure.

Please consult Arkema's disclaimer regarding the use of Arkema's products on <http://www.arkema.com/en/products/product-safety/disclaimer/index.html>

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