Genetron® 407C Refrigerant

Honeywell



The Most Efficient R-22 Retrofit Option in the Marketplace

Best Capacity and Efficiency Match to R-22 in A/C Applications

Genetron® 407C is a non-ozone-depleting HFC-based refrigerant for replacement of HCFC-22 in residential and light commercial air conditioning systems. It has a capacity comparable to HCFC-22, making it easier to use in existing equipment designs. Some equipment modifications will be required when retrofitting to Genetron 407C, such as changing the lubricant.

Features

- A change to POE lubricant is recommended. If existing MO is used, the addition of some POE to the system is required for proper oil return.
- Requires a minimum of 20% POE for close-coupled A/C systems
- No TXV change required, minor adjustments may be needed
- Lowest GWP (1774) among R-22 replacements
- Lower discharge temperatures than R-22
- Non-ozone-depleting HFC refrigerant
- ASHRAE classification A1 (low toxicity, non-flammable per ASTM E-681 method)

Retrofit Considerations

In retrofitting an existing air conditioning system, material compatibility and the condition of the existing seals and gaskets must be taken into account. It is recommended to change any O-rings, seals and other elastomers used in the system (as usually expected in any retrofit to HFC). In most air conditioning and heat pump systems this only applies to the Schrader valve seal and cap seal material.

Polyol ester lubricants are recommended for use with Genetron 407C by the equipment manufacturers.

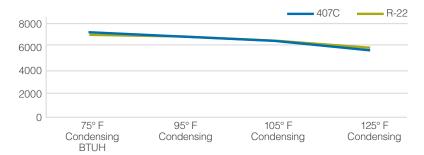
Refer to HCFC Air Conditioning Retrofit Guidelines: HCFC-22 to Genetron 407C for complete instructions.

Capacity

	R-22	407C
75° F Condensing BTUH	6990	7261
COP @ 75	8.39	8.15
95° F Condensing	6476	6557
COP @ 95	5.07	4.87
105° F Condensing	6121	61.98
COP @ 105	4.16	3.97
125° F Condensing	5866	5461
COP @ 125	2.98	2.89
Mass Flowlb/min/cfm Displacement	1.44	1.46
GWP	1810	1774

Conditions: 40° F SST, 10° superheat, 10° subcooling, 60° compressor entering temperature.

Capacity (BTUH vs Ambient @ AC conditions)



Capacity represents BTUH performance per cfm compressor capacity @ 40 sst, 10°F superheat, 10°F subcooling, 60°F entering compressor.

Resources

- To speak to a refrigerant expert, call 1-800-426-8241
- Visit www.honeywell-refrigerants.com and download our: HCFC Air Conditioning Retrofit Guidelines (HCFC-22 to R-407C and R-422D and Genetron 407C Properties, Uses, Storage and Handling Guide)
- Download our R-22 Retrofit app and our Pressure-Temperature Chart for iPad from the App Store

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Honeywell Genetron Refrigerants

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