

Product Comparison Matrix

TdX | 20 R-458A (R-458A)

	TdX 20 (R-458A)	R-407C	MO99 (R-438A)	NU22 (R-422B)	R-427A	R-22
Energy Efficiency vs R-22	✓	✗	✗	✗	✗	-
Cooling Capacity vs R-22	✓	✓	✗	✗	✗	-
Oil Compatibility with MO	✓	✗	✓*	✓*	✓*	-
Mobile App, Tools & Resources	✓	✗	✗	✗	✗	-
Live Veteran Technician Support	✓	✗	✗	✗	✗	-
FAR Compliant	✓	✓	✗	✗	✗	-
Classification	HFC	HFC	HFC	HFC	HFC	HCFC
Molar Mass (lbm/lbmol)	89.9	86.2	99.1	108.5	90.4	86.5
Boiling Point (1atm, °F)	-39.6	-46.5	-44.2	-42.5	-45.3	-41.5
Vapor Pressure (100 °F, PSIG)	164.7	196.1	187.3	182.9	189.9	195.9
Critical Pressure (PSIA)	656.1	672.8	606.1	559.4	638.2	723.7
Critical Temperature (°F)	197.6	187.1	182.9	179.6	185.9	205.1
Critical Density (lb./ft³)	29.8	30.2	36.7	32.9	30.6	32.7
Liquid Density (70°F, lb./ft³)	73.4	72.0	72.7	73.1	71.5	75.3
Vapor Density (bp./lb./ft³)	0.296	0.289	0.332	0.363	0.303	0.294
Heat of Vaporization (- 40°F, kJ/kg)	239.2	242.3	210.5	191.7	230.5	233.2
Ozone Depletion Potential (CFC 11 = 1.0)	0	0	0	0	0	0.05
Global Warming Potential (AR5) (CO2 = 1.0)	1564	1624	2059	2290	2024	1760

✗ Not Compatible ✓ Compatible ✓* Manufacturers state that for most systems an oil change is not required. However, in fine print manufacturers recommend an oil change for some larger systems.

TdX 20 (R-458A) Applications



Small Package Units < 20 Tons	✓
Heat Pumps	✓
Large Package Units > 20 Tons	✓
Split Systems w/ short linesets	✓
Split Systems w/ long linesets	✓
Large RTUs VAV Package Units (Boxcars with Scrolls or Semihermetics)	✓ with Bluon Protocols*
Intellipaks Voyagers 3D scrolls	✓ with Bluon Protocols*
Water cooled DX floor units	✓ with Bluon Protocols*
Screw DX Chillers (RTAA's, York's, etc)	✓ with Bluon Protocols*
Recip Chillers	✓ with Bluon Protocols*
Centrifugals Flooded Evap Chillers	✗

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