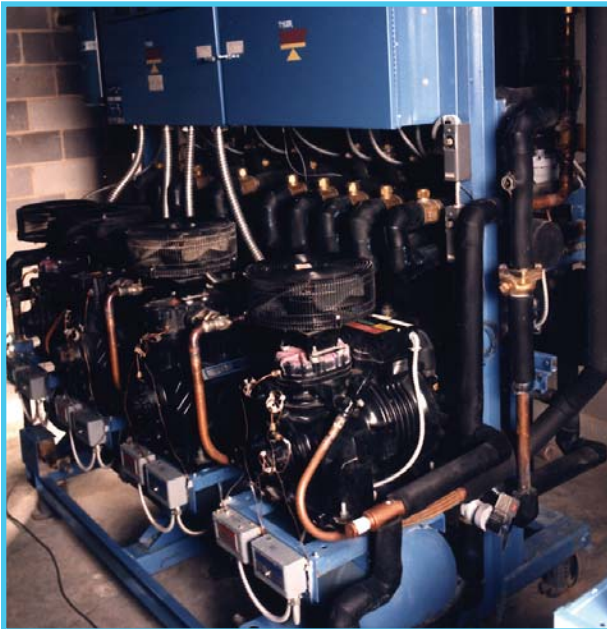


Centrifugal Oil Separators

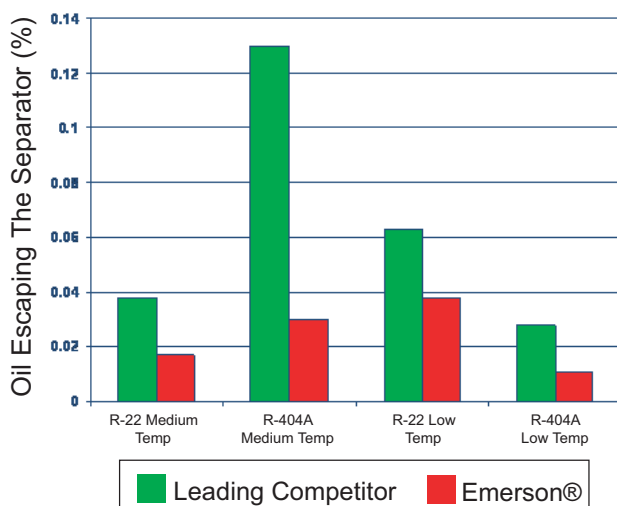
The Challenge



Oil separators serve a critical function in many refrigeration systems. Regardless of the type of compressor, oil will leave with the discharge gas. This oil must be separated from the high pressure gas and returned to the compressor. Minimizing oil circulation improves system operating efficiency by improving the heat transfer characteristics of the evaporator and condenser. It also ensures that adequate oil is available for essential compressor lubrication.

Parallel rack systems benefit from the most efficient oil separators. Emerson Climate Technologies™ has optimized a centrifugal oil separator for just these applications. The oil separator captures more than 99% of oil. This directly results in energy savings due to reduced time between loading of the evaporator and reduced compressor work.

The graph illustrates that the Emerson® oil separators are more than twice as efficient as other leading models in removing oil from circulation. An additional benefit is a lower pressure drop in all tests, which reduces compressor work, thereby extending the life of the compressor. The larger oil separators are also serviceable, helping to facilitate routine maintenance.



Centrifugal Oil Separator Benefits

Features	Advantages	Benefits
Oil separators are serviceable	Float elements can be cleaned or replaced for optimum operation	Less costly (and easier) repair
	Less brazing required to perform Maintenance	Less potential for leaks
Replacement kits	Oil separators can be serviced instead of replaced	Repair cost is much less than replacement cost
	Less brazing is required to service the oil separators	Less chance of leaks because less brazing is involved
	Backwards compatible with the Henry oil separator	One component for all repairs
Two available leg heights	Adjustable positioning to the design of the system	Easy to service because flange is located at the proper height

PCN	Model Number	Solder Connection Size (ODF)	Shell O.D.	Maximum Capacity in Tons of Refrigeration at Evaporator Temperature						Maximum Discharge CFM	Oil Pre-Charge Amount (oz.)
				R-134a		R-22		R-404A			
				-40°F	+40°F	-40°F	+40°F	-40°F	+40°F		
065895	A-WC 41777	7/8	4"	4.6	5.6	7.1	8.0	6.3	8.3	6	17
065896	A-WC 41999	1 1/8	4"	5.4	6.5	8.3	9.4	7.4	9.7	7	17
065930	A-FC 6221111	1 3/8	6"	12	15	19	21	17	22	16	21
065931	A-FC 6221111H	1 3/8	6"	12	15	19	21	17	22	16	21
065362	A-FC 6221313	1 5/8	6"	14	17	21	24	19	25	18	21
065932	A-FC 6221313H	1 5/8	6"	14	17	21	24	19	25	18	21
065933	A-FC 6221717	2 1/8	6"	15	18	23	25	20	26	19	21
065934	A-FC 6221717H	2 1/8	6"	15	18	23	25	20	26	19	21
065276	A-FC 8241717	2 1/8	8"	23	28	36	40	32	42	30	21
065935	A-FC 8241717H	2 1/8	8"	23	28	36	40	32	42	30	21
065936	A-FC 10272121	2 5/8	10"	46	56	71	80	63	83	60	21
065937	A-FC 10272121H	2 5/8	10"	46	56	71	80	63	83	60	21
065938	A-FC 12302525H	3 1/8	12"	73	89	113	127	100	132	95	21

3/8 SAE Flare Oil Return Fitting

W indicates hermetic (sealed) units.

F indicates flanged (serviceable) units. Removable float kit part number is 065847.

Capacities are based on 100 degrees F condensing.

Minimum tonnage is 33% of rated capacity; oversizing leads to poor separation efficiency and is not acceptable.