



500 and 600 Series Conventional Oil Separators: Tons

	Model	600	501 601	502 602	503 603	504 604	505 605	506 606	507 607
Connection Size		3/8"	1/2"	5/8"	7/8"	1-1/8"	1-3/8"	1-5/8"	2-1/8"
Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-134a R-12 MP-39	+40	1.22	1.83	3.66	5.49	7.32	9.16	13.00	23.00
	+20	1.17	1.75	3.50	5.24	7.00	8.76	12.43	22.00
	+10	1.14	1.71	3.42	5.12	6.84	8.56	12.14	21.50
	0	1.12	1.67	3.34	4.99	6.68	8.35	11.85	21.00
	-10	1.09	1.63	3.26	4.87	6.52	8.15	11.56	20.50
	-20	1.06	1.59	3.18	4.74	6.36	7.95	11.28	20.00
	-30	1.04	1.55	3.10	4.62	6.20	7.75	10.99	19.50
	-40	1.01	1.51	3.02	4.49	6.04	7.55	10.70	19.00
R-22	+40	1.87	2.80	5.60	8.40	11.20	14.00	23.60	40.00
	+20	1.80	2.70	5.39	8.08	10.78	13.47	22.68	38.50
	+10	1.77	2.64	5.29	7.93	10.57	13.22	22.22	37.76
	0	1.73	2.59	5.18	7.77	10.36	12.95	21.75	37.00
	-10	1.69	2.54	5.08	7.61	10.15	12.69	21.29	36.26
	-20	1.66	2.49	4.97	7.46	9.94	12.43	20.82	35.50
	-30	1.62	2.43	4.86	7.30	9.73	12.16	20.37	34.76
	-40	1.59	2.38	4.76	7.14	9.52	11.90	19.90	34.00
R-410A AZ-20	+40	2.60	4.00	7.70	11.60	15.50	19.30	32.60	55.20
	+20	2.50	3.85	7.42	11.18	14.90	18.58	31.32	53.12
	+10	2.45	3.78	7.29	10.96	14.60	18.22	30.69	52.10
	0	2.40	3.70	7.15	10.75	14.30	17.85	30.05	51.05
	-10	2.35	3.63	7.01	10.54	14.00	17.49	29.42	50.02
	-20	2.30	3.55	6.88	10.33	13.70	17.13	28.77	48.98
	-30	2.25	3.48	6.74	10.11	13.40	16.77	28.14	47.95
	-40	2.20	3.40	6.60	9.90	13.10	16.40	27.50	46.90
R-507 AZ-50	+40	1.87	2.80	5.60	8.40	11.20	14.00	23.60	40.00
	+20	1.80	2.70	5.39	8.08	10.78	13.47	22.68	38.50
	+10	1.77	2.64	5.29	7.93	10.57	13.22	22.22	37.76
	0	1.73	2.59	5.18	7.77	10.36	12.95	21.75	37.00
	-10	1.69	2.54	5.08	7.61	10.15	12.69	21.29	36.26
	-20	1.66	2.49	4.97	7.46	9.94	12.43	20.82	35.50
	-30	1.62	2.43	4.86	7.30	9.73	12.16	20.37	34.76
	-40	1.59	2.38	4.76	7.14	9.52	11.90	19.90	34.00
R-404A HP-62 HP-80 R-502	+40	1.87	2.80	5.60	8.40	11.20	14.00	23.60	40.00
	+20	1.80	2.70	5.39	8.08	10.78	13.47	22.68	38.50
	+10	1.77	2.64	5.29	7.93	10.57	13.22	22.22	37.76
	0	1.73	2.59	5.18	7.77	10.36	12.95	21.75	37.00
	-10	1.69	2.54	5.08	7.61	10.15	12.69	21.29	36.26
	-20	1.66	2.49	4.97	7.46	9.94	12.43	20.82	35.50
	-30	1.62	2.43	4.86	7.30	9.73	12.16	20.37	34.76
	-40	1.59	2.38	4.76	7.14	9.52	11.90	19.90	34.00

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Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-717 NH ₃	+40							26.7	45.2
	+30							26.4	44.8
	+20							26.1	44.4
	+10							25.9	44.0
	0							25.6	43.5
	-10							25.4	43.1
	-20							25.1	42.7
	-30							24.8	42.3
	-40							24.6	41.9

SELECT OIL SEPARATOR WITH CONNECTION SIZE NO LESS THAN DISCHARGE LINE SIZE.

500 and 600 Series (Tons) Notes:

1. Tons = Capacity in evaporator (12,000 BTUH/Hr/Ton), based on +100°F Condensing Temperature, 10°F Superheat, 0°F Subcooling.
2. For applications other than reciprocating compressors, (scroll, screw type, 2-stage) please contact Temprite engineering at temprite@temprite.com.