



300 and 900 Series Coalescent Oil Separators: Tons

	Model	320	340	900	901	902	903	904	905
Connection Size		3/8"	3/8"	3/8"	1/2"	5/8"	7/8"	1-1/8"	1-3/8"
Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-1234fy	+40	1.50	3.00	2.01	3.75	5.39	7.50	13.49	20.52
	+30	1.21	2.43	1.63	3.03	4.36	6.07	10.92	16.61
	+20	0.97	1.95	1.31	2.44	3.50	4.87	8.77	13.33
	+10	0.77	1.55	1.04	1.94	2.79	3.87	6.97	10.60
	0	0.61	1.22	0.82	1.53	2.19	3.05	5.49	8.35
	-10	0.50	1.00	0.67	1.24	1.79	2.49	4.48	6.81
	-20	0.37	0.73	0.49	0.92	1.32	1.83	3.30	5.01
	-30	0.28	0.56	0.37	0.70	1.00	1.39	2.51	3.81
	-40	0.21	0.42	0.28	0.52	0.75	1.04	1.88	2.86
R-1234ze	+40	1.18	2.37	1.59	2.96	4.26	5.92	10.65	16.19
	+30	0.95	1.90	1.28	2.37	3.41	4.75	8.54	12.99
	+20	0.75	1.51	1.01	1.89	2.71	3.77	6.79	10.32
	+10	0.59	1.19	0.80	1.48	2.13	2.97	5.34	8.12
	0	0.46	0.92	0.62	1.16	1.66	2.31	4.16	6.32
	-10	0.36	0.71	0.48	0.89	1.28	1.78	3.20	4.86
	-20	0.27	0.54	0.36	0.67	0.97	1.35	2.43	3.69
	-30	0.20	0.40	0.27	0.50	0.73	1.01	1.82	2.76
	-40	0.15	0.30	0.20	0.37	0.53	0.74	1.34	2.04
R-134a	+45	1.76	3.51	2.36	4.39	6.31	8.78	15.80	24.02
	+40	1.58	3.16	2.12	3.95	5.69	7.91	14.23	21.64
	+30	1.28	2.56	1.72	3.20	4.60	6.40	11.51	17.50
	+20	1.02	2.05	1.37	2.56	3.68	5.12	9.21	14.00
	+10	0.81	1.62	1.09	2.03	2.92	4.06	7.30	11.10
	0	0.64	1.28	0.86	1.60	2.29	3.19	5.74	8.73
	-10	0.49	0.99	0.66	1.23	1.77	2.47	4.44	6.75
	-20	0.38	0.76	0.51	0.95	1.37	1.91	3.43	5.22
	-30	0.29	0.57	0.39	0.72	1.03	1.43	2.58	3.92
	-40	0.21	0.43	0.29	0.53	0.77	1.07	1.92	2.92
R-22	+40	2.46	4.91	3.30	6.14	8.84	12.29	22.11	33.63
	+30	2.04	4.08	2.74	5.10	7.34	10.21	18.37	27.94
	+20	1.68	3.36	2.26	4.21	6.05	8.41	15.14	23.02
	+10	1.37	2.75	1.85	3.44	4.94	6.87	12.37	18.81
	0	1.11	2.23	1.50	2.79	4.01	5.57	10.03	15.25
	-10	0.89	1.79	1.20	2.24	3.22	4.48	8.06	12.25
	-20	0.71	1.42	0.96	1.78	2.56	3.56	6.41	9.74
	-30	0.56	1.12	0.75	1.40	2.01	2.80	5.03	7.65
		-40	0.44	0.87	0.59	1.09	1.57	2.18	3.92
R-23	See "300 and 900 Series: Ultra Low Temperature (Tons)" Chart								
R-290	See "300 and 900 Series: Natural Refrigerants" Chart								
R-401A MP-39	+50	1.94	3.88	2.60	4.85	6.97	9.69	17.45	26.53
	+40	1.59	3.19	2.14	3.98	5.73	7.97	14.34	21.80
	+30	1.30	2.60	1.75	3.25	4.67	6.50	11.69	17.78
	+20	1.05	2.10	1.41	2.63	3.78	5.25	9.45	14.37
	+10	0.84	1.68	1.13	2.10	3.02	4.21	7.57	11.51
	0	0.67	1.33	0.90	1.67	2.40	3.34	6.00	9.13
	-10	0.52	1.05	0.70	1.31	1.88	2.62	4.71	7.16
	-20	0.40	0.81	0.54	1.01	1.46	2.03	3.65	5.54
	-30	0.31	0.62	0.42	0.77	1.11	1.55	2.79	4.24
	-40	0.23	0.47	0.31	0.58	0.84	1.17	2.10	3.19

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Connection Size		3/8"	3/8"	3/8"	1/2"	5/8"	7/8"	1-1/8"	1-3/8"
Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-402A HP-80	+40	2.70	5.40	3.63	6.75	9.71	13.51	24.31	36.97
	+30	2.22	4.45	2.99	5.56	8.00	11.12	20.02	30.44
	+20	1.82	3.64	2.44	4.55	6.54	9.09	16.36	24.88
	+10	1.47	2.95	1.98	3.69	5.30	7.37	13.27	20.18
	0	1.18	2.37	1.59	2.96	4.26	5.93	10.67	16.22
	-10	0.94	1.89	1.27	2.36	3.39	4.72	8.49	12.92
	-20	0.74	1.49	1.00	1.86	2.67	3.72	6.69	10.17
	-30	0.58	1.16	0.78	1.45	2.08	2.90	5.21	7.92
	-40	0.45	0.89	0.60	1.11	1.60	2.23	4.01	6.10
R-404A	+40	2.51	5.01	3.37	6.27	9.01	12.54	22.56	34.30
	+30	2.09	4.17	2.80	5.22	7.50	10.44	18.78	28.56
	+20	1.67	3.33	2.24	4.17	6.00	8.34	15.01	22.82
	+10	1.34	2.69	1.81	3.36	4.83	6.72	12.10	18.39
	0	1.07	2.15	1.44	2.69	3.86	5.37	9.66	14.69
	-10	0.85	1.70	1.14	2.12	3.05	4.25	7.64	11.62
	-20	0.66	1.33	0.89	1.66	2.39	3.33	5.99	9.10
	-30	0.51	1.03	0.69	1.29	1.85	2.57	4.63	7.04
	-40	0.39	0.79	0.53	0.98	1.41	1.96	3.54	5.38
R-407A	+40	2.35	4.70	3.16	5.88	8.46	11.77	21.17	32.19
	+30	1.92	3.83	2.58	4.79	6.89	9.59	17.25	26.23
	+20	1.55	3.10	2.08	3.87	5.57	7.75	13.94	21.20
	+10	1.24	2.48	1.67	3.10	4.46	6.20	11.16	16.98
	0	0.98	1.97	1.32	2.46	3.54	4.92	8.85	13.46
	-10	0.66	1.32	0.89	1.65	2.38	3.31	5.95	9.05
	-20	0.60	1.20	0.80	1.50	2.15	2.99	5.39	8.19
	-30	0.46	0.92	0.62	1.15	1.65	2.29	4.12	6.27
	-40	0.35	0.69	0.46	0.86	1.24	1.73	3.11	4.73
R-407C	+40	2.25	4.49	3.02	5.62	8.08	11.24	20.23	30.75
	+30	1.83	3.66	2.46	4.58	6.58	9.16	16.48	25.06
	+20	1.48	2.96	1.99	3.70	5.32	7.40	13.32	20.25
	+10	1.18	2.37	1.59	2.96	4.26	5.92	10.66	16.21
	0	0.94	1.87	1.26	2.34	3.37	4.69	8.44	12.83
	-10	0.73	1.47	0.99	1.84	2.64	3.68	6.61	10.06
	-20	0.57	1.14	0.77	1.43	2.06	2.86	5.14	7.82
	-30	0.44	0.87	0.59	1.09	1.57	2.18	3.92	5.96
	-40	0.34	0.67	0.45	0.84	1.21	1.68	3.03	4.61
R-407F	+40	2.49	4.99	3.35	6.24	8.97	12.47	22.44	34.12
	+30	2.04	4.08	2.74	5.10	7.33	10.19	18.34	27.89
	+20	1.65	3.31	2.22	4.14	5.95	8.27	14.89	22.64
	+10	1.33	2.66	1.78	3.32	4.78	6.64	11.95	18.18
	0	1.06	2.11	1.42	2.64	3.80	5.29	9.52	14.47
	-10	0.83	1.67	1.12	2.08	2.99	4.17	7.50	11.40
	-20	0.65	1.30	0.87	1.62	2.33	3.24	5.84	8.88
	-30	0.50	1.00	0.67	1.25	1.79	2.49	4.49	6.82
	-40	0.38	0.76	0.51	0.95	1.36	1.89	3.40	5.17

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Connection Size		3/8"	3/8"	3/8"	1/2"	5/8"	7/8"	1-1/8"	1-3/8"
Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-408A	+40	2.53	5.07	3.41	6.34	9.11	12.68	22.81	34.69
	+30	2.10	4.19	2.82	5.24	7.54	10.48	18.87	28.69
	+20	1.72	3.44	2.31	4.31	6.19	8.61	15.50	23.56
	+10	1.40	2.81	1.89	3.51	5.05	7.02	12.63	19.20
	0	1.13	2.27	1.52	2.84	4.08	5.67	10.20	15.52
	-10	0.91	1.81	1.22	2.27	3.26	4.54	8.17	12.42
	-20	0.72	1.44	0.97	1.80	2.59	3.60	6.47	9.84
	-30	0.56	1.13	0.76	1.41	2.03	2.82	5.07	7.72
	-40	0.44	0.87	0.59	1.09	1.57	2.18	3.93	5.97
R-410A AZ-20	+45	3.92	7.85	5.27	9.81	14.11	19.62	35.32	53.70
	+40	3.57	7.14	4.80	8.93	12.84	17.85	32.13	48.86
	+30	2.96	5.92	3.98	7.40	10.64	14.80	26.64	40.50
	+20	2.44	4.88	3.28	6.10	8.77	12.20	21.95	33.38
	+10	1.99	3.99	2.68	4.99	7.17	9.97	17.95	27.29
	0	1.62	3.23	2.17	4.04	5.81	8.08	14.54	22.11
	-10	1.30	2.60	1.75	3.25	4.67	6.50	11.69	17.78
	-20	1.03	2.07	1.39	2.58	3.72	5.17	9.30	14.14
	-30	0.81	1.63	1.09	2.03	2.92	4.07	7.32	11.13
	-40	0.63	1.27	0.85	1.58	2.28	3.17	5.70	8.67
R-417A	+40	1.95	3.90	2.62	4.87	7.01	9.74	17.54	26.66
	+30	1.55	3.09	2.08	3.87	5.56	7.73	13.91	21.15
	+20	1.24	2.48	1.66	3.10	4.45	6.19	11.15	16.95
	+10	0.98	1.97	1.32	2.46	3.54	4.92	8.85	13.45
	0	0.77	1.54	1.04	1.93	2.78	3.86	6.95	10.57
	-10	0.60	1.20	0.81	1.50	2.16	3.00	5.40	8.21
	-20	0.46	0.92	0.62	1.15	1.65	2.30	4.14	6.29
	-30	0.35	0.70	0.47	0.87	1.25	1.74	3.13	4.76
	-40	0.26	0.52	0.35	0.65	0.93	1.30	2.33	3.55
R-421A	+40	2.00	3.99	2.68	4.99	7.18	9.98	17.97	27.32
	+30	1.61	3.22	2.17	4.03	5.80	8.06	14.51	22.07
	+20	1.29	2.58	1.74	3.23	4.64	6.46	11.62	17.67
	+10	1.02	2.05	1.38	2.56	3.68	5.12	9.22	14.02
	0	0.80	1.61	1.08	2.01	2.89	4.02	7.24	11.01
	-10	0.62	1.25	0.84	1.56	2.24	3.12	5.62	8.54
	-20	0.48	0.96	0.64	1.20	1.72	2.39	4.31	6.55
	-30	0.36	0.72	0.49	0.90	1.30	1.81	3.26	4.95
	-40	0.27	0.54	0.36	0.67	0.97	1.35	2.43	3.69
R-422A	+40	2.40	4.79	3.22	6.00	8.62	11.99	21.58	32.81
	+30	1.95	3.89	2.62	4.87	7.00	9.73	17.52	26.64
	+20	1.57	3.13	2.11	3.92	5.64	7.84	14.11	21.45
	+10	1.25	2.50	1.68	3.13	4.50	6.26	11.26	17.12
	0	0.99	1.98	1.33	2.47	3.56	4.95	8.90	13.54
	-10	0.77	1.55	1.04	1.93	2.78	3.87	6.96	10.58
	-20	0.60	1.19	0.80	1.49	2.15	2.99	5.38	8.18
	-30	0.46	0.91	0.61	1.14	1.64	2.28	4.10	6.24
	-40	0.34	0.68	0.46	0.86	1.23	1.71	3.08	4.69

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Connection Size		3/8"	3/8"	3/8"	1/2"	5/8"	7/8"	1-1/8"	1-3/8"
Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-422B	+40	1.98	3.96	2.66	4.95	7.12	9.90	17.81	27.08
	+30	1.62	3.24	2.18	4.05	5.82	8.10	14.57	22.16
	+20	1.30	2.60	1.74	3.24	4.67	6.49	11.68	17.76
	+10	1.03	2.06	1.38	2.57	3.70	5.15	9.27	14.09
	0	0.82	1.65	1.10	2.06	2.96	4.11	7.40	11.25
	-10	0.61	1.22	0.82	1.53	2.20	3.06	5.51	8.37
	-20	0.47	0.94	0.63	1.17	1.69	2.35	4.22	6.42
	-30	0.36	0.73	0.49	0.91	1.31	1.82	3.28	4.99
	-40	0.27	0.54	0.36	0.68	0.98	1.36	2.44	3.72
R-422C	+40	2.34	4.69	3.15	5.86	8.43	11.73	21.11	32.09
	+30	1.90	3.80	2.56	4.76	6.84	9.51	17.12	26.03
	+20	1.53	3.06	2.06	3.83	5.50	7.65	13.78	20.95
	+10	1.22	2.44	1.64	3.05	4.39	6.10	10.98	16.70
	0	0.96	1.93	1.29	2.41	3.46	4.82	8.67	13.18
	-10	0.75	1.50	1.01	1.88	2.70	3.76	6.77	10.29
	-20	0.58	1.16	0.78	1.45	2.09	2.90	5.22	7.94
	-30	0.44	0.88	0.59	1.10	1.59	2.21	3.98	6.04
	-40	0.33	0.66	0.45	0.83	1.19	1.66	2.98	4.53
R-422D	+40	2.12	4.24	2.85	5.30	7.63	10.61	19.09	29.03
	+30	1.72	3.43	2.31	4.29	6.17	8.58	15.45	23.49
	+20	1.38	2.75	1.85	3.44	4.95	6.89	12.39	18.84
	+10	1.09	2.19	1.47	2.74	3.93	5.47	9.85	14.97
	0	0.86	1.72	1.16	2.15	3.09	4.30	7.75	11.78
	-10	0.67	1.34	0.90	1.67	2.41	3.35	6.02	9.16
	-20	0.51	1.03	0.69	1.29	1.85	2.57	4.63	7.04
	-30	0.39	0.78	0.52	0.97	1.40	1.95	3.51	5.33
	-40	0.29	0.58	0.39	0.73	1.05	1.45	2.62	3.98
R-427A	+40	2.16	4.32	2.90	5.40	7.76	10.80	19.43	29.55
	+30	1.76	3.51	2.36	4.39	6.32	8.78	15.81	24.03
	+20	1.42	2.83	1.90	3.54	5.09	7.09	12.75	19.39
	+10	1.13	2.26	1.52	2.83	4.07	5.66	10.19	15.50
	0	0.90	1.79	1.20	2.24	3.22	4.48	8.07	12.27
	-10	0.70	1.40	0.94	1.76	2.52	3.51	6.32	9.61
	-20	0.54	1.09	0.73	1.36	1.95	2.72	4.89	7.43
	-30	0.41	0.83	0.56	1.04	1.49	2.07	3.73	5.68
	-40	0.31	0.62	0.42	0.78	1.12	1.56	2.81	4.27
R-438A	+40	2.09	4.18	2.81	5.23	7.52	10.46	18.82	28.61
	+30	1.70	3.39	2.28	4.24	6.10	8.48	15.26	23.21
	+20	1.36	2.73	1.83	3.41	4.91	6.82	12.28	18.67
	+10	1.05	2.09	1.40	2.61	3.76	5.23	9.41	14.30
	0	0.86	1.72	1.15	2.15	3.08	4.29	7.72	11.74
	-10	0.67	1.34	0.90	1.67	2.41	3.35	6.02	9.16
	-20	0.52	1.03	0.69	1.29	1.86	2.58	4.64	7.06
	-30	0.38	0.75	0.51	0.94	1.36	1.89	3.39	5.16
	-40	0.29	0.59	0.40	0.74	1.06	1.47	2.65	4.03

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Refrigerant	Temp °F	Tons @ 100°F Condensing 10°F Superheat 0°F Subcooling							
R-507 AZ-50	+40	2.57	5.14	3.45	6.42	9.24	12.85	23.12	35.16
	+30	2.10	4.21	2.83	5.26	7.57	10.53	18.94	28.81
	+20	1.71	3.42	2.30	4.28	6.15	8.56	15.40	23.42
	+10	1.38	2.76	1.86	3.46	4.97	6.91	12.44	18.92
	0	1.10	2.21	1.49	2.76	3.97	5.53	9.95	15.12
	-10	0.88	1.75	1.18	2.19	3.15	4.38	7.88	11.98
	-20	0.69	1.37	0.92	1.72	2.47	3.43	6.18	9.40
	-30	0.53	1.07	0.72	1.33	1.92	2.67	4.80	7.29
	-40	0.41	0.81	0.55	1.02	1.46	2.03	3.66	5.57
R-508A	See "300 and 900 Series: Ultra Low Temperature (Tons)" Chart								
R-508B	See "300 and 900 Series: Ultra Low Temperature (Tons)" Chart								
R-600a	See "300 and 900 Series: Natural Refrigerants" Chart								

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

300 and 900 Series Notes:

1. Tons = Capacity in evaporator (12,000 BTUH/Hr/Ton), based on Condensing Temperature stated in the chart, 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.