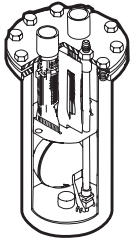


## 500 & 600 Series

Maximum Working Pressure: 44.8 bar (650 PSI)

The Temprite 500 & 600 Series Conventional Oil Separators are impingement screen separators. In these units, the compressed mass flow enters a larger separator chamber, lowering the velocity of the mass. The atomized oil droplets collect on the impingement screen surface, and as the oil drops become larger they fall to the bottom of the separator.

### 500 Series Conventional Oil Separators: Accessible Impingement



- The 500 Series is designed for the OEM who needs oil separation and accessibility to the unit for filter changes.

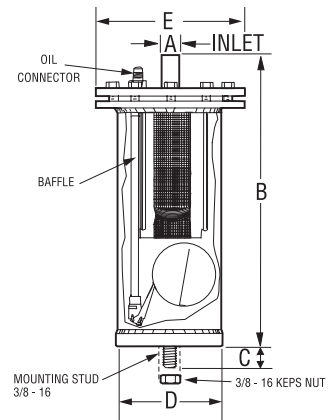


#### Models 501, 502, 503, 504, 505

Compatible with subcritical CO<sub>2</sub>.

Part #	Model #	Oil Conn. Size	A Dim.	B Dim.	C Dim.	D Dim.	E Dim.	Oil Charge Amt.
050100000	501	1/4" SAE*	1/2" ODS* 12.70 mm	10-1/4" 260 mm	3/4" 19 mm	4" 102 mm	5-1/2" 140 mm	16 oz. 475 ml.
050200000	502	1/4" SAE*	5/8" ODS* 15.88 mm	12-7/8" 327 mm	3/4" 19 mm	4" 102 mm	5-1/2" 140 mm	16 oz. 475 ml.
050300000	503	1/4" SAE*	7/8" ODS* 22.23 mm	14-5/8" 371 mm	3/4" 19 mm	4" 102 mm	5-1/2" 140 mm	16 oz. 475 ml.
050400000	504	1/4" SAE*	1-1/8" ODS* 28.58 mm	15-1/2" 394 mm	3/4" 19 mm	4" 102 mm	5-1/2" 140 mm	16 oz. 475 ml.
050500000	505	1/4" SAE*	1-3/8" ODS* 34.93 mm	18-7/8" 479 mm	3/4" 19 mm	4" 102 mm	5-1/2" 140 mm	16 oz. 475 ml.

\* SAE = 45° Flare Connection, ODS = Outside Diameter Solder



500, 501, 502, 503, 504, 505

#### Models 506, 507

Compatible with subcritical CO<sub>2</sub> and ammonia (NH<sub>3</sub>) upon request.

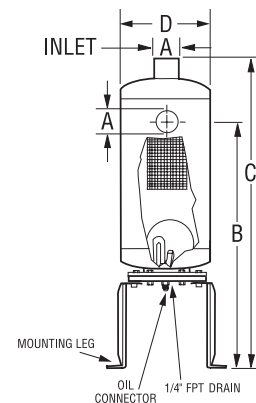
To order ammonia-compatible models, change the last three digits of the part number to "717."  
Example: 092600000 changes to 092600717.

Part #	Model #	Oil Conn. Size	A Dim.	B Dim.	C Dim.	D Dim.	Oil Charge Amt.
050600000	506	3/8" SAE*	1-5/8" ODS* 41.28 mm	15-1/4" 387 mm	20-1/4" 514 mm	6" 152 mm	20 oz. 590 ml.
050700000	507	3/8" SAE*	2-1/8" ODS* 53.98 mm	16-1/4" 413 mm	21-1/4" 540 mm	6" 152 mm	20 oz. 590 ml.

\* SAE = 45° Flare Connection, ODS = Outside Diameter Solder

THE CONNECTIONS ON THE OIL SEPARATOR MUST BE THE SAME SIZE AS (OR LARGER THAN) THE DISCHARGE LINE SIZE.

See page 20 for sizing.



506, 507

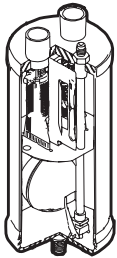
### 500 & 600 Series

The Temprite 500 & 600 Series Conventional Oil Separators are impingement screen separators. In these units, the compressed mass flow enters a larger separator chamber, lowering the velocity of the mass. The atomized oil droplets collect on the impingement screen surface, and as the oil drops become larger they fall to the bottom of the separator.

### 600 Series Conventional Oil Separators: Hermetic Impingement

Compatible with HCs and subcritical CO<sub>2</sub>.

Maximum Working Pressure: 44.8 bar (650 PSI)

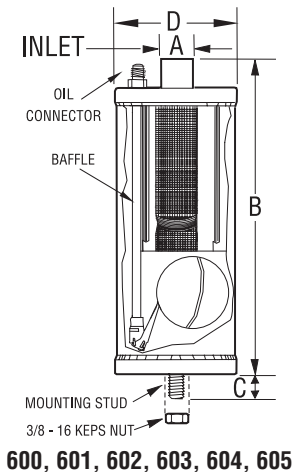


- The 600 Series is designed for the OEM who needs oil separation but does not require the accessibility of the 500 Series.



#### Models 600, 601, 602, 603, 604, 605

Part #	Model #	Oil Conn. Size	A Dim.	B Dim.	C Dim.	D Dim.	Oil Charge Amt.
060000000	600	1/4" SAE*	3/8" ODS* 9.53 mm	8-1/8" 206 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.
060100000	601	1/4" SAE*	1/2" ODS* 12.70 mm	10-1/4" 260 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.
060200000	602	1/4" SAE*	5/8" ODS* 15.88 mm	12-7/8" 327 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.
060300000	603	1/4" SAE*	7/8" ODS* 22.23 mm	14-5/8" 371 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.
060400000	604	1/4" SAE*	1-1/8" ODS* 28.58 mm	15-1/2" 394 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.
060500000	605	1/4" SAE*	1-3/8" ODS* 34.93 mm	18-7/8" 479 mm	3/4" 19 mm	4" 102 mm	12 oz. 355 ml.



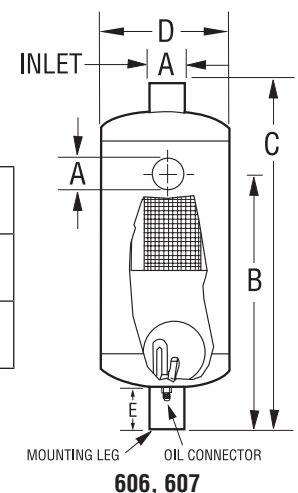
\* SAE = 45° Flare Connection, ODS = Outside Diameter Solder

#### Models 606, 607

Compatible with HCs, subcritical CO<sub>2</sub> and ammonia (NH<sub>3</sub>) upon request.

To order ammonia-compatible models, change the last three digits of the part number to "717." Example: 092600000 changes to 092600717.

Part #	Model #	Oil Conn. Size	A Dim.	B Dim.	C Dim.	D Dim.	E Dim.	Oil Charge Amt.
060600000	606	1/4" SAE*	1-5/8" ODS* 41.28 mm	13-1/2" 343 mm	18-3/8" 467 mm	6" 152 mm	3" 76 mm	29 oz. 850 ml.
060700000	607	1/4" SAE*	2-1/8" ODS* 53.98 mm	14-1/2" 368 mm	19-3/8" 492 mm	6" 152 mm	3" 76 mm	29 oz. 850 ml.



\* SAE = 45° Flare Connection, ODS = Outside Diameter Solder

THE CONNECTIONS ON THE OIL SEPARATOR MUST BE THE SAME SIZE AS (OR LARGER THAN) THE DISCHARGE LINE SIZE.

600 through 607 Series separators are all welded construction with no access to internal components.

See page 20 for sizing.

## Temprite 500 and 600 Series: Conventional Oil Separators

	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-1234yf* R-1234ze* R-401A* R-422B* R-422D* R-438A*	+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* R-427A*	+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* R-407F* R-421A* R-422A* R-422C* R-427A*	+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* R-402A* R-407A* R-407C*	+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

\* Approximate tonnage, see Sizing Charts on [www.temprite.com](http://www.temprite.com) for actual tonnage.

See [www.temprite.com](http://www.temprite.com) for a full list of refrigerants.

THE CONNECTIONS ON THE OIL SEPARATOR MUST BE THE SAME SIZE AS (OR LARGER THAN) THE DISCHARGE LINE SIZE.

### 500 and 600 Series 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, screws or 2-stage compressors, please contact Temprite engineering at [temprite@temprite.com](mailto:temprite@temprite.com).