

AFTERCOOLERS

WHC WVC

TECHNICAL BULLETIN 9506

CITY OF L.A. E.T.L. APPROVED

APPLICATION:
AIR COMPRESSORS
AFTERCOOLERS, 35 SCFM to
4000 SCFM RANGE

FEATURES

- Use ambient air to cool and dry compressed air to temperature of 5 to 20°F above ambient.
- Precool hot compressed air to required efficient temperature when using an air dryer.
- Heavy duty construction for indoor or outdoor use.
- Core made of seamless copper tubing, mechanically expanded into collared aluminum fins for maximum heat transfer.
- Designed for low pressure drop.
- Remove harmful water, oil and contaminants from compressed air.

LRC

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**PERFORMANCE DATA:
SCFM AT 5, 10, 15 & 20°F APPROACH & 80-125 PSIG**

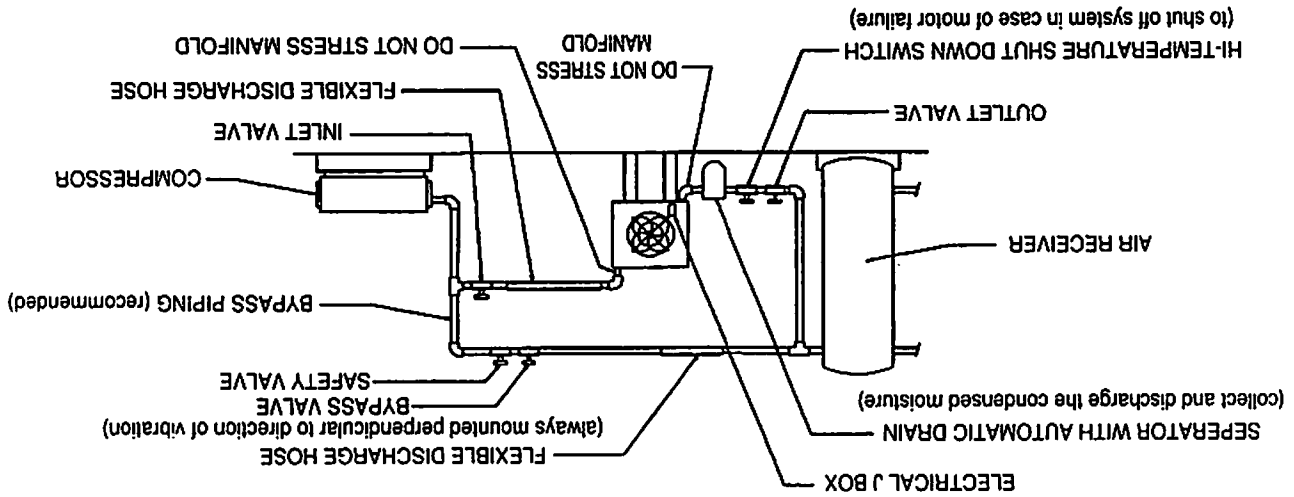
INLET TEMP °F	APPROACH TEMP °F	WVC MODEL #										
		35	50	65	80	100	120	150	240	300	450	640
150	5	28	37	49	58	77	97	109	214	218	244	475
	10	34	48	64	70	97	114	137	238	264	384	600
	15	38	55	73	83	114	133	169	266	345	500	710
	20	43	62	83	90	133	152	190	292	395	590	820
200	5	27	36	47	57	75	93	105	207	212	236	465
	10	33	47	61	69	93	109	131	228	252	368	580
	15	37	53	70	82	109	135	162	257	324	482	685
	20	42	60	80	89	135	148	183	287	380	568	800
250	5	26	35	43	56	70	85	97	191	196	220	445
	10	30	42	57	68	85	100	122	211	232	340	540
	15	35	50	65	80	100	120	150	240	300	450	640
	20	39	56	75	87	120	141	174	272	355	530	750
300	5	23	31	38	54	63	75	86	170	174	202	400
	10	26	37	52	65	75	89	109	188	205	300	475
	15	31	44	59	74	89	105	134	214	266	400	575
	20	34	51	69	84	105	128	157	250	318	470	670
350	5	22	27	34	50	52	63	73	144	152	175	335
	10	23	32	46	61	63	76	92	158	172	252	395
	15	26	36	52	72	76	90	111	180	220	340	475
	20	29	43	62	79	90	109	130	215	260	400	545

**PERFORMANCE DATA:
SCFM AT 5, 10, 15 & 20°F APPROACH & 80-125 PSIG**

INLET TEMP °F	APPROACH TEMP °F	WVC MODEL #							
		770	1010	1300	1800	2200	2600	3500	4000
150	5	585	600	1060	1510	1850	2170	2920	3410
	10	725	900	1240	1720	2150	2680	3350	3830
	15	835	1080	1420	1980	2420	2860	3850	4400
	20	950	1250	1600	2260	2750	3270	4400	4980
200	5	574	585	1040	1460	1770	2100	2810	3300
	10	700	890	1210	1660	2070	2400	3250	3700
	15	815	1070	1380	1910	2350	2760	3710	4250
	20	925	1225	1500	2180	2680	3150	4260	4850
250	5	540	570	970	1370	1670	1970	2650	3100
	10	655	850	1130	1565	1950	2260	3050	3480
	15	770	1010	1300	1800	2200	2600	3500	4000
	20	880	1150	1480	2050	2500	2970	4000	4520
300	5	490	495	870	1260	1530	1810	2430	2850
	10	585	780	1020	1435	1320	2080	2800	3200
	15	685	910	1190	1650	2020	2385	3210	3680
	20	800	1050	1350	1880	2300	2720	3860	4200
350	5	425	435	740	1010	1350	1580	2120	2500
	10	490	680	880	1150	1560	1810	2440	2800
	15	575	800	1030	1320	1760	2080	2800	3200
	20	685	900	1190	1510	2000	2380	3200	3620

Compressor	Rotary Screw	Two Stage	Single Stage
Average Discharge Temperature	150 to 200°F	250°F	300°F

The above table represents average discharge values. For accurate selection, measure the discharge temperature of your compressor as it may vary considerably from the above average.



- How to Select Your Aftercooler**
- Determine the compressed air temperature to enter the aftercooler.
 - Find the desired approach temperature.
 - See performance data chart inlet temperature. (page 2)
 - Next go to approach temperature corresponding to the inlet temperature.
 - Read from left to right until you reach the required capacity.
 - From the above capacity value read upward to find the Model number you need.

- Selection Example:**
- Two stage compressor with 77 SCFM output.
 Discharge temperature of compressed air is 250°F.
 Desired approach temperature is 15°F.
- Solution:**
- See performance data, first column from the left and read down to 250°F.
 - To the right of 250°F read the desired approach temperature, in this case 15°F.
 - From the 15°F proceed reading horizontally to the right until you reach 77 CFM or nearest larger value. In this case we find 80 CFM.
 - Read upward to find WHC-80.

**SPECIFICATIONS:
 WVC-770 THRU WVC-4000 (BELT DRIVE)**

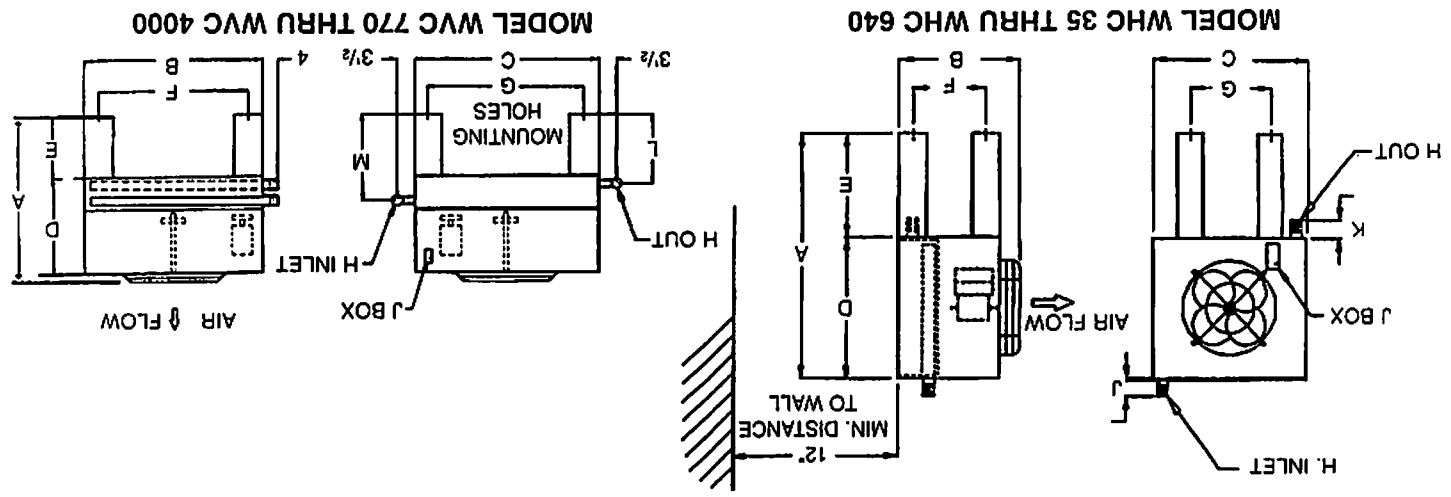
MODEL #	FAN CFM	FAN SIZE	MTR HP
WVC-770	8,600	(1) 36"	(1) 2 HP
WVC-1010	14,600	(1) 42"	(1) 2 HP
WVC-1300	21,000	(1) 48"	(1) 2 HP
WVC-1800	17,950	(2) 36"	(2) 2 HP
WVC-2200	29,800	(2) 42"	(2) 2 HP
WVC-2600	29,660	(2) 48"	(2) 2 HP
WVC-3500	29,200	(2) 48"	(2) 2 HP
WVC-4000	34,670	(2) 48"	(2) 2 HP

**SPECIFICATIONS:
 WHC-35 THRU WHC-640 (DIRECT DRIVE)**

MODEL #	FAN CFM	MOTOR HP	VOLTAGE AVAILABLE	OPTIONAL VOLTAGE
WHC-35	1230	(1) 1/6	115/1/60 or 208/230/1/60	230/3/60 or 460/3/60
WHC-50	1180	(1) 1/6	"	"
WHC-65	1150	(1) 1/6	"	"
WHC-80	1360	(1) 1/6	"	"
WHC-100	1700	(1) 1/6	"	"
WHC-120	2320	(1) 1/6	"	"
WHC-150	2550	(1) 1/6	"	"
WHC-240	4020	(2) 1/6	"	"
WHC-300	4700	(2) 1/4	230/3/60 or 460/3/60	115/1/60 or 230/1/60
WHC-450	4800	(2) 1/4	"	"
WHC-640	6930	(3) 1/4	"	"



MAINTENANCE
 Periodic cleaning of the fins with compressed air is necessary to remove dirt and dust accumulation. Check the automatic drain on the separator (not supplied) periodically.
 If the inside of the tubes need to be cleaned of oil and carbon, use a chlorinated solvent. Do not use a strong solvent. Do not use acids or caustic cleaners.



MODEL	A	B	C	D	E	F	G	H	L	M	SHIP WT. LBS.
WVC-770	51 1/2	48 1/2	51	28 1/2	18	41 1/4	43 3/4	3	21	24	560
WVC-1010	51 1/2	59	61	28 1/2	18	51 1/4	53 3/4	3	21	24	875
WVC-1300	51 1/2	66	72	28 1/2	18	58 3/4	64 1/4	3	21	24	990
WVC-1800	51 1/2	59	89	28	18	51 1/4	81 3/4	4	21	24	1000
WVC-2200	53 1/2	59	119	30	18	51 1/4	111 3/4	4	22 1/2	25 1/2	1100
WVC-2600	53 1/2	59	119	30	18	51 1/4	111 3/4	4	22 1/2	25 1/2	1500
WVC-3500	53 1/2	59	119	30	18	51 1/4	111 1/4	4	22 1/2	25 1/2	1700
WVC-4000	53 1/2	59	146 1/2	30	18	51 1/4	139 1/4	4	22 1/2	25 1/2	2000

DIMENSIONAL DATA: WVC-770 THRU WVC-4000

MODEL	A	B	C	D	E	F	G	H	J	K	SHIP WT. LBS.
WVC-35	39 1/2	18	25	22 1/2	17	12 1/4	16 1/4	1	2 1/2	1 1/2	100
WVC-50	39 1/2	18	25	22 1/2	17	12 1/4	16 1/4	1 1/4	2 1/2	1 1/2	105
WVC-65	39 1/2	18	25	22 1/2	17	12 1/4	16 1/4	1 1/2	2 1/2	1 1/2	110
WVC-80	39 1/2	18	28	22 1/2	17	12 1/4	19 1/4	1 1/2	2 1/2	1 1/2	115
WVC-100	39 1/2	18	32	22 1/2	17	12 1/4	23 1/4	1 1/2	2 1/2	1 1/2	133
WVC-120	39 1/2	18	37	22 1/2	17	12 1/4	28 1/4	1 1/2	2 1/2	1 1/2	145
WVC-150	39 1/2	18	44	22 1/2	17	12 1/4	35 1/4	1 1/2	2 1/2	1 1/2	165
WVC-240	45 1/2	19	55	28 1/2	17	12 1/4	44 1/4	2	3	2	225
WVC-300	45 1/2	19	60	28 1/2	17	12 1/4	49 1/4	2	3	2	273
WVC-450	45 1/2	19	65	28 1/2	17	12 1/4	54 1/4	2	3	2	278
WVC-640	45 1/2	19	75	28 1/2	17	12 1/4	64 1/4	2 1/2	3	2	313

DIMENSIONAL DATA: WHC-35 THRU WHC-640

MODEL	A	B	C	D	E	F	G	H	J	K	SHIP WT. LBS.
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