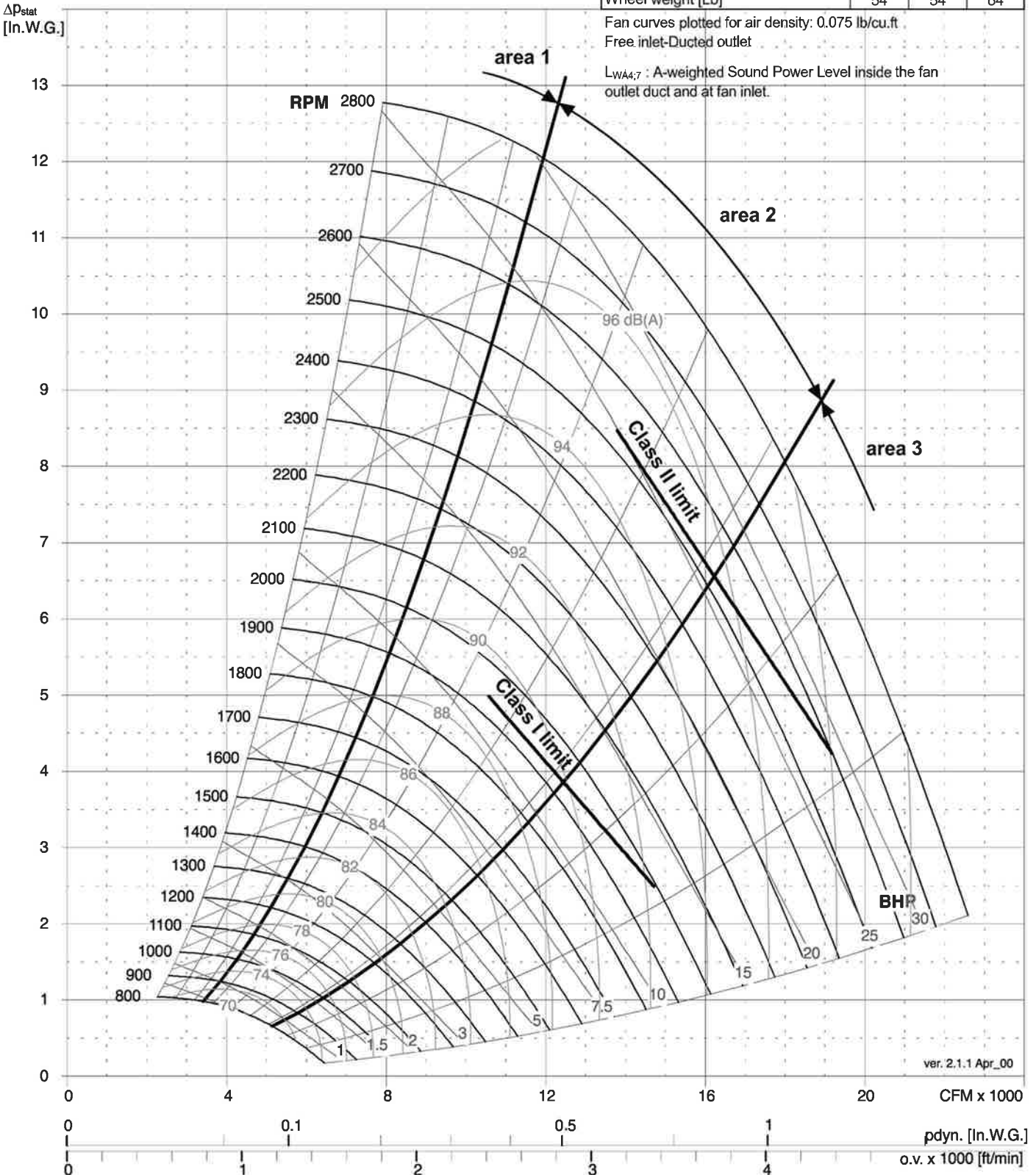




FEG 85
Peak $\eta_t = 79.7$

ATZAF 20-20	R	T1	T2
Fan Max RPM [min ⁻¹]	2100	2300	2750
Fan Max BHP	12.5	17.5	29.5
Fan Outlet Area O.A. [ft ²]	4.38		
Fan weight [Lb]	178	222	257
Nominal wheel diameter [in.]	20.16		
Wheel width [in.]	16.06		
Wheel No. Blades	10		
Wheel Moment of Inertia [Lb ft ²]	28	28	32
Wheel weight [Lb]	54	54	64

ΔP_{stat}
[In.W.G.]





comefri

DOUBLE INLET AIRFOIL FANS - ATZAF

ATZAF 20-20 R / T1 / T2

V [CFM]	Δp_{stat} [In.W.G.]																							
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	12				
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3500	1112	1.71																						
4000	1119	1.84	1244	2.41	1358	3.01																		
4500	1130	1.99	1252	2.57	1364	3.20	1469	3.96	1567	4.55														
5000	1145	2.16	1263	2.75	1372	3.40	1476	4.09	1573	4.80	1665	5.55	1752	6.32										
5500	1165	2.35	1277	2.96	1384	3.62	1484	4.32	1580	5.06	1671	5.84	1757	6.64	1840	7.46	1919	8.30						
6000	1189	2.57	1296	3.19	1399	3.87	1496	4.58	1589	5.34	1679	6.13	1764	6.96	1846	7.80	1925	8.68	2001	9.57	2074	10.47		
6500	1217	2.82	1319	3.46	1417	4.14	1511	4.87	1602	5.64	1689	6.45	1773	7.29	1853	8.16	1931	9.06	2006	9.98	2079	10.91		
7000	1248	3.10	1345	3.76	1439	4.45	1530	5.20	1617	5.98	1702	6.80	1784	7.65	1863	8.54	1940	9.45	2014	10.39	2086	11.35		
7500	1282	3.42	1374	4.09	1464	4.80	1551	5.56	1636	6.35	1718	7.16	1798	8.05	1875	8.95	1950	9.88	2023	10.83	2094	11.81		
8000	1318	3.76	1406	4.45	1492	5.18	1576	5.95	1658	6.76	1737	7.60	1814	8.48	1890	9.39	1963	10.33	2034	11.30	2104	12.30		
8500	1357	4.14	1441	4.85	1523	5.60	1604	6.39	1682	7.21	1759	8.06	1834	8.96	1907	9.88	1978	10.83	2048	11.81	2116	12.82		
9000	1398	4.55	1478	5.29	1557	6.06	1634	6.86	1709	7.70	1783	8.57	1856	9.47	1927	10.41	1996	11.37	2064	12.36	2131	13.38		
9500	1440	5.00	1517	5.76	1592	6.55	1666	7.38	1739	8.23	1810	9.12	1881	10.03	1949	10.98	2017	11.96	2083	12.96	2148	13.98		
10000	1484	5.48	1567	6.27	1630	7.09	1701	7.93	1771	8.81	1840	9.71	1908	10.64	1974	11.60	2040	12.59	2104	13.60	2168	14.64		
10500	1528	6.00	1599	6.82	1669	7.66	1738	8.53	1805	9.43	1871	10.35	1937	11.30	2001	12.27	2065	13.27	2127	14.29	2189	15.34		
11000	1575	6.56	1643	7.41	1710	8.28	1776	9.17	1841	10.09	1905	11.03	1968	11.96	2031	12.98	2092	14.00	2153	15.03	2213	16.09		
11500	1622	7.17	1687	8.04	1752	8.94	1815	9.86	1878	10.79	1940	11.76	2002	12.74	2062	13.75	2122	14.78	2181	15.83	2239	16.90		
12000	1670	7.81	1733	8.72	1795	9.64	1857	10.59	1917	11.55	1977	12.53	2036	13.53	2095	14.56	2153	15.60	2210	16.67	2267	17.87		
12500	1719	8.50	1780	9.44	1840	10.39	1899	11.36	1956	12.35	2016	13.35	2073	14.36	2130	15.42	2186	16.48	2241	17.87	2296	19.00		
13000	1768	9.24	1827	10.21	1885	11.19	1942	12.18	1999	13.19	2055	14.22	2111	15.27	2166	16.33	2220	17.41	2274	18.83	2328	19.96		
13500	1818	10.02	1875	11.02	1931	12.03	1987	13.05	2042	14.09	2096	15.14	2150	16.21	2204	17.29	2257	18.71	2309	19.86	2361	21.02		
14000	1869	10.85	1924	11.88	1978	12.92	2032	13.97	2085	15.03	2138	16.11	2191	17.20	2243	18.62	2294	19.77	2345	20.93	2396	22.12		
14500	1920	11.73	1973	12.75	2026	13.86	2078	14.94	2130	16.02	2181	17.12	2232	18.55	2283	19.71	2333	20.88	2382	22.07	2431	23.27		
15000	1972	12.66	2023	13.75	2075	14.85	2125	15.95	2176	17.07	2225	18.51	2275	19.67	2324	20.85	2372	22.05	2421	23.25	2469	24.47		
15500	2024	13.64	2074	14.76	2124	15.89	2173	17.02	2222	18.48	2270	19.66	2318	20.85	2366	22.05	2413	23.27	2460	24.50	2507	25.74		
16000	2076	14.67	2125	15.83	2173	16.99	2221	18.45	2269	19.66	2316	20.87	2363	22.08	2409	23.31	2455	24.55	2501	25.80	2546	27.05		
16500	2129	15.76	2176	16.96	2223	18.45	2270	19.67	2316	20.90	2362	22.13	2408	23.37	2453	24.62	2498	25.88	2542	27.15	2587	28.42		
17000	2182	16.90	2228	18.43	2274	19.68	2319	20.93	2364	22.19	2409	23.45	2453	24.71	2498	25.99	2541	27.27	2585	28.56				
17500	2236	18.41	2281	19.70	2325	20.97	2369	22.25	2413	23.54	2457	24.82	2500	26.12	2543	27.41	2586	28.71						
18000	2290	19.70	2333	21.02	2377	22.33	2420	23.64	2462	24.94	2505	26.26	2547	27.57	2589	28.88								
18500	2344	21.04	2386	22.40	2428	23.74	2470	25.07	2512	26.41	2553	27.75	2595	29.09										
19000	2398	22.45	2439	23.83	2480	25.21	2521	26.57	2562	27.94	2603	29.30												
19500	2452	23.92	2493	25.33	2533	26.73	2573	28.13																
20000	2507	25.44	2546	26.89	2586	28.32																		
20500	2562	27.03	2600	28.50																				
21000	2617	28.67																						

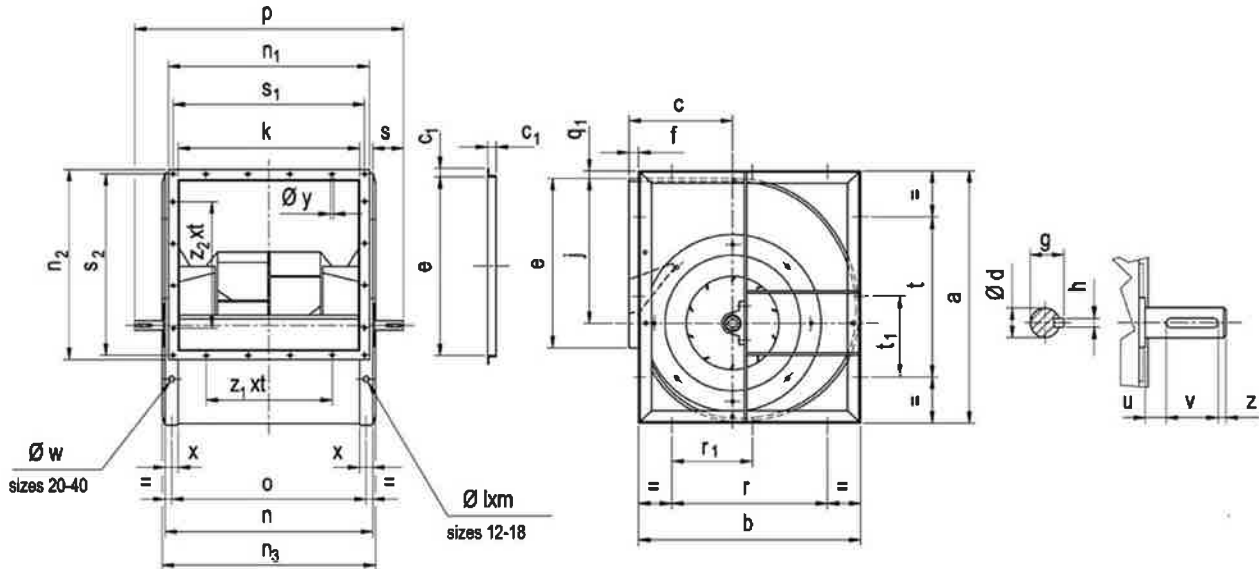
SOUND DATA TABLE

Fan Model and Size	Fan Performance Area	Range of fan speed	ΔL_{W4}	ΔL_{Woct4} 63	ΔL_{Woct4} 125	ΔL_{Woct4} 250	ΔL_{Woct4} 500	ΔL_{Woct4} 1000	ΔL_{Woct4} 2000	ΔL_{Woct4} 4000	ΔL_{Woct4} 8000
ATZAF 20-20	Area 1	RPM < 1080	15.0	13	10	1	-5	-7	-11	-17	-25
		1081 <RPM< 2130	13.6	9	11	2	-5	-7	-13	-18	-23
		RPM > 2131	10.1	5	7	0	-2	-5	-12	-18	-23
	Area 2	RPM < 1080	14.3	13	7	1	-5	-6	-9	-16	-24
		1081 <RPM< 2130	11.7	9	6	3	-4	-5	-11	-16	-22
		RPM > 2131	8.2	5	2	-3	-1	-4	-10	-18	-24
	Area 3	RPM < 1080	10.8	7	7	1	-3	-6	-10	-17	-25
		1081 <RPM< 2130	10.3	8	2	3	-3	-6	-11	-16	-23
		RPM > 2131	8.0	5	1	-3	-1	-4	-10	-15	-23

Performance certified is for installation type B - Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. The AMCA Certified Ratings Seal applies to air performance ratings only.



7.2. ATZAF 12-12 T1 / T2 to 40-40 T1 / T2



	a	b	c	c ₁	Ø d		e	f	g		h		j	k
					T1	T2			T1	T2	T1	T2		
ATZAF 12-12 T	21.61	18.62	9.09	0.98	1"	1-3/16"	13.45	0.98	1.11	1.30	1/4"	1/4"	11.65	15.55
ATZAF 15-15 T	25.51	21.93	10.39	0.98	1-3/16"	1-7/16"	15.87	0.98	1.30	1.60	1/4"	3/8"	13.46	18.54
ATZAF 18-18 T	30.43	26.26	12.36	0.98	1-3/16"	1-1/2"	18.78	0.98	1.30	1.66	1/4"	3/8"	16.34	21.93
ATZAF 20-20 T	36.14	29.29	13.86	0.98	1-1/2"	1-11/16"	25.12	2.21	1.66	1.85	3/8"	3/8"	21.26	25.12
ATZAF 22-22 T	40.55	32.99	15.35	0.98	1-1/2"	2"	28.15	2.13	1.66	2.22	3/8"	1/2"	23.84	28.15
ATZAF 25-25 T	45.59	36.85	17.09	0.98	1-11/16"	2"	31.54	2.44	1.85	2.22	3/8"	1/2"	26.79	31.54
ATZAF 28-28 T	51.34	41.26	19.09	0.98	1-15/16"	2-3/16"	35.35	2.81	2.17	2.41	1/2"	1/2"	30.19	35.35
ATZAF 32-32 T	57.80	46.22	21.26	0.98	2-3/16"	2-3/16"	39.65	3.19	2.41	2.41	1/2"	1/2"	34.03	39.65
ATZAF 36-36 T	64.88	51.65	23.78	1.18	2-7/16"	2-7/16"	44.49	3.82	2.71	2.71	5/8"	5/8"	38.26	44.49
ATZAF 40-40 T	71.26	56.85	25.87	1.18	2-3/16"	2-7/16"	49.88	3.82	2.41	2.71	1/2"	5/8"	42.06	49.88

	Ø l x m	n	n ₁	n ₂	n ₃		o	p		r	r ₂	s		s ₁
					T1	T2		T1	T2			T1	T2	
ATZAF 12-12 T	0.44x0.88	18.55	17.52	15.16	18.94	18.94	17.38	24.76	24.76	16.62	-	3.11	3.11	16.73
ATZAF 15-15 T	0.44x0.88	21.54	20.51	17.60	22.01	22.40	20.33	27.87	28.54	19.93	-	3.17	3.50	19.72
ATZAF 18-18 T	0.44x0.88	24.93	23.90	20.51	25.79	26.18	23.66	32.52	33.27	24.26	-	3.80	4.17	23.11
ATZAF 20-20 T	-	28.26	27.09	27.09	29.37	30.16	26.69	35.67	38.70	17.71	8.86	3.70	5.22	26.30
ATZAF 22-22 T	-	32.09	30.12	30.12	32.48	33.27	30.12	40.47	43.94	19.69	9.84	4.19	5.93	29.33
ATZAF 25-25 T	-	35.48	33.50	33.50	36.65	36.65	33.50	43.90	48.03	22.05	11.02	4.21	6.28	32.72
ATZAF 28-28 T	-	39.29	37.32	37.32	40.47	40.47	37.72	49.61	52.60	24.80	12.40	5.16	6.66	36.53
ATZAF 32-32 T	-	43.58	41.61	41.61	44.76	44.78	42.01	53.82	56.89	27.95	13.98	5.12	6.65	40.83
ATZAF 36-36 T	-	48.43	46.85	46.85	49.61	49.61	46.85	60.20	61.97	31.50	15.75	5.88	6.77	45.83
ATZAF 40-40 T	-	53.82	52.24	52.24	55.00	55.00	52.24	67.40	67.40	35.43	17.72	6.79	6.79	51.22

	s ₂	t	t ₂	u		v		z	x	Ø y	q ₁	Ø w	z ₁ xt	z ₂ xt
				T1	T2	T1	T2							
ATZAF 12-12 T	14.37	19.61	-	0.81	0.68	1.77	1.77	0.20	1.50	0.35	0.88	-	2x8.37	2x7.18
ATZAF 15-15 T	16.81	23.51	-	0.70	0.63	1.77	1.97	0.20	1.50	0.35	1.00	-	2x9.86	2x8.40
ATZAF 18-18 T	19.72	28.43	-	0.64	0.68	2.36	2.36	0.20	1.50	0.35	0.98	-	2x11.55	2x9.86
ATZAF 20-20 T	26.30	17.71	8.86	0.68	0.73	1.97	2.76	0.20	1.57	0.29	0.16	0.47	6x3.54	6x3.54
ATZAF 22-22 T	29.33	19.69	9.84	0.74	1.30	2.76	3.15	0.20	1.97	0.29	0.22	0.59	7x3.54	7x3.54
ATZAF 25-25 T	32.72	22.05	11.02	0.56	1.65	2.76	3.15	0.20	1.97	0.29	0.26	0.59	8x3.54	8x3.54
ATZAF 28-28 T	36.53	24.80	12.40	1.12	1.34	3.15	3.54	0.20	1.97	0.29	0.24	0.71	9x3.54	9x3.54
ATZAF 32-32 T	40.83	27.95	13.98	0.93	1.34	3.15	3.54	0.20	1.97	0.29	0.26	0.71	11x3.54	11x3.54
ATZAF 36-36 T	45.83	31.50	15.75	1.18	1.36	3.54	3.54	0.20	1.97	0.39	0.24	0.71	11x3.94	11x3.94
ATZAF 40-40 T	51.22	35.43	17.72	1.48	1.38	3.54	3.54	0.20	1.97	0.39	0.26	0.71	12x3.94	12x3.94