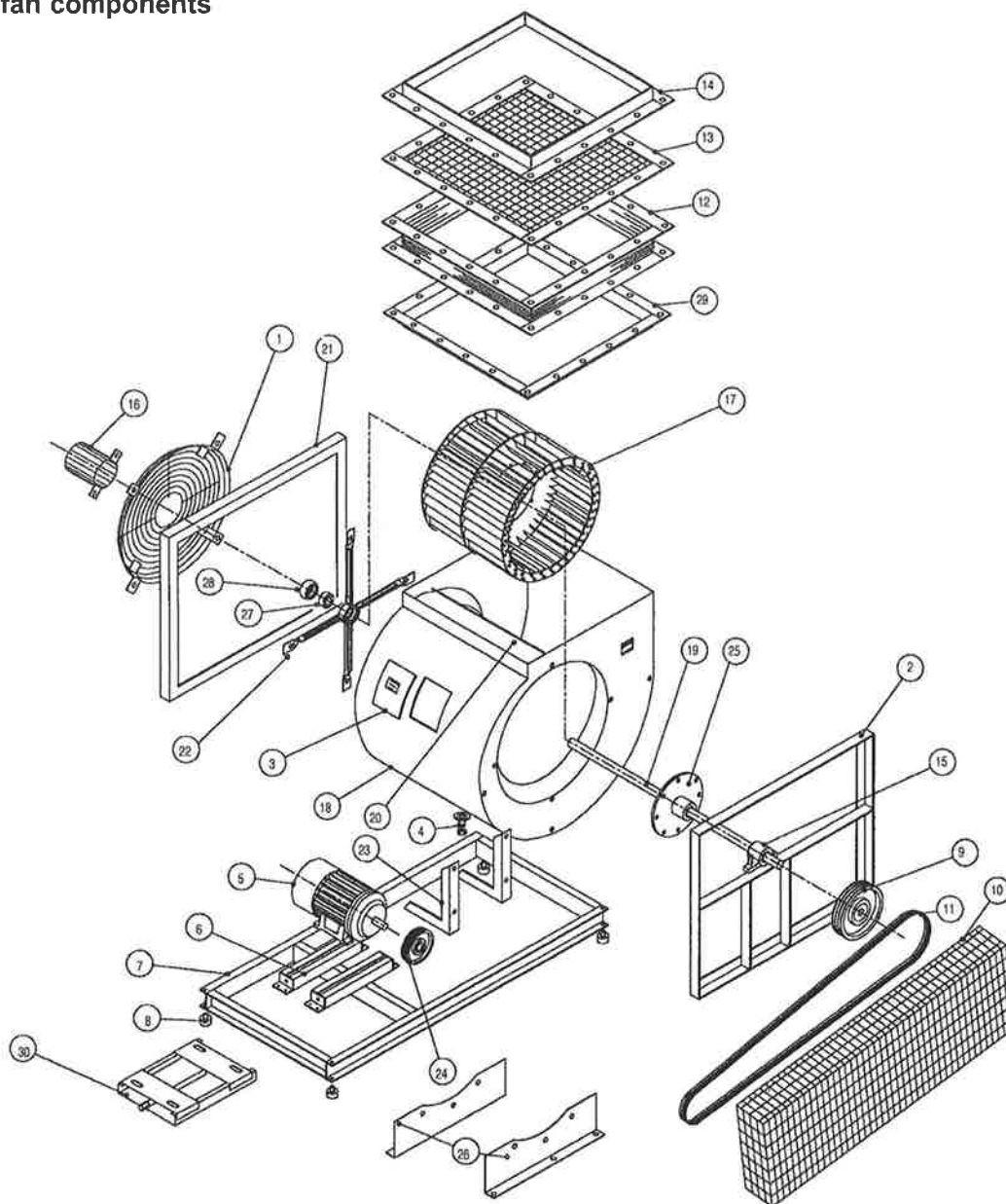




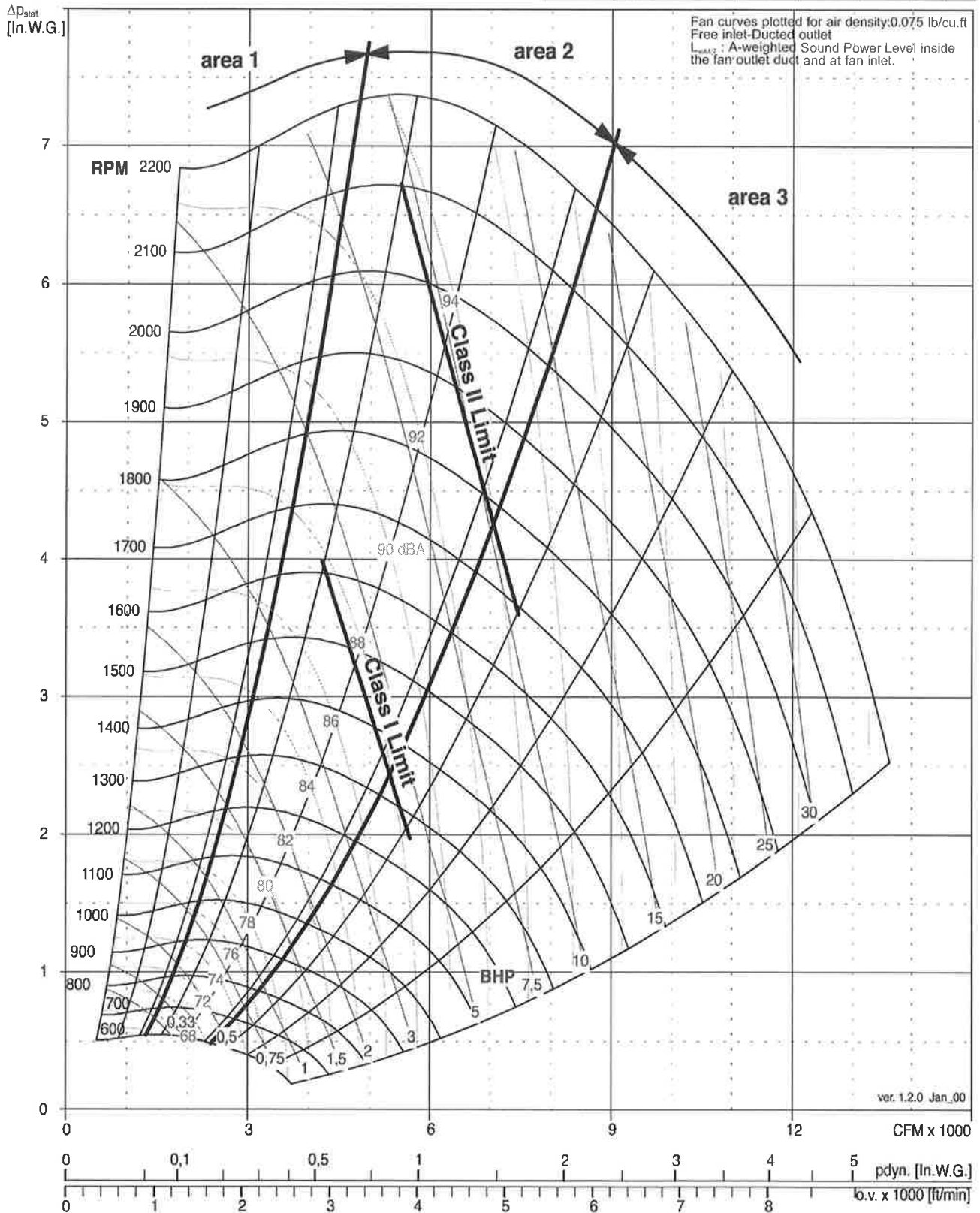
4. Labelling of fan components



1	INLET GUARD	16	SHAFT GUARD
2	FRAME for T EXECUTION	17	WHEEL
3	INSPECTION DOOR	18	HOUSING
4	DRAIN PLUG	19	SHAFT
5	MOTOR	20	CUT OFF
6	MOTOR RAILS SH	21	FRAME for R EXECUTION
7	BASE FRAME	22	BEARING BRACKET for BASE and R EXECUTION
8	ANTIVIBRATION MOUNTING	23	GUARD MOUNT
9	FAN PULLEY	24	MOTOR PULLEY
10	BELT GUARD	25	HUB
11	BELTS	26	FEET
12	OUTLET FLEXIBLE CONNECTION	27	BEARING for BASE and R EXECUTION
13	OUTLET GUARD	28	RUBBER BUSH for BASE and R EXECUTION
14	OUTLET COUNTERFLANGE	29	OUTLET FLANGE
15	BEARINGS for T EXECUTION	30	MOTOR BASE PLATE SY



ATLI 12-12	B	R	T1	T2
Fan Max RPM [min ⁻¹]	1900	1900	-	2115
Fan Max BHP	4	5	-	12
Fan Outlet Area O.A. [ft ²]	1.45			
Fan weight [Lb]	39.7	50.6	-	70.6
Wheel diameter [in.]	12.8			
Wheel width [in.]	11.46			
Wheel No. Blades	48			
Wheel Moment of Inertia [Lb ft ²]	3.37	3.37	-	3.37
Wheel weight [Lb]	13.85	13.85	-	13.85





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DOUBLE INLET FORWARD CURVED FANS - ATLI

ATLI 12-12 B / R / T2

V [CFM]		Δp _{stat} [In.W.G]																													
		0.25		0.5		0.75		1		1.5		2		2.5		3		3.5		4		4.5		5		5.5		6		6.5	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	405	0.06	582	0.14	721	0.23	838	0.33	1031	0.58	1190	0.86	1328	1.19																	
1400	414	0.1	573	0.18	707	0.27	823	0.38	1021	0.64	1186	0.93	1329	1.26	1458	1.63	1574	2.02	1682	2.44	1783	2.88	1877	3.35							
1800	435	0.16	579	0.25	702	0.35	812	0.46	1005	0.73	1172	1.03	1318	1.37	1450	1.74	1570	2.14	1681	2.57	1785	3.02	1882	3.5	1974	4	2061	4.51			
2000	448	0.2	587	0.29	704	0.4	810	0.51	999	0.78	1164	1.09	1310	1.44	1443	1.81	1564	2.22	1678	2.65	1781	3.11	1880	3.59	1973	4.09	2061	4.61			
2200	461	0.24	596	0.35	709	0.45	811	0.58	994	0.85	1156	1.16	1302	1.51	1435	1.89	1557	2.3	1670	2.74	1776	3.2	1875	3.68	1970	4.19	2059	4.72			
2400	477	0.29	607	0.41	717	0.52	815	0.65	992	0.92	1151	1.24	1295	1.59	1427	1.98	1549	2.39	1663	2.84	1769	3.3	1869	3.79	1964	4.3	2055	4.84			
2600	493	0.35	619	0.47	726	0.6	821	0.73	993	1.01	1147	1.33	1289	1.69	1420	2.08	1541	2.5	1655	2.95	1761	3.42	1862	3.91	1958	4.43	2049	4.96			
2800	512	0.42	631	0.55	736	0.68	829	0.82	995	1.11	1146	1.44	1284	1.8	1413	2.19	1534	2.62	1647	3.07	1753	3.54	1854	4.04	1950	4.56	2042	5.1			
3000	533	0.49	645	0.63	747	0.77	838	0.92	1000	1.22	1146	1.56	1282	1.92	1408	2.32	1527	2.75	1639	3.2	1745	3.68	1846	4.18	1942	4.71	2034	5.26			
3200	555	0.58	659	0.73	759	0.88	848	1.03	1006	1.34	1149	1.69	1281	2.06	1405	2.46	1522	2.89	1633	3.35	1738	3.84	1838	4.34	1934	4.87	2026	5.42	2114	6	
3400	578	0.68	674	0.83	771	0.99	859	1.15	1014	1.48	1153	1.83	1282	2.21	1403	2.62	1518	3.05	1627	3.52	1732	4	1831	4.52	1926	5.05	2018	5.61	2106	6.18	
3600	603	0.78	691	0.95	785	1.12	871	1.28	1023	1.63	1159	1.99	1285	2.38	1403	2.79	1516	3.23	1624	3.7	1726	4.19	1825	4.71	1919	5.24	2010	5.8	2098	6.39	
3800	628	0.9	709	1.07	799	1.25	883	1.43	1032	1.75	1166	2.16	1289	2.56	1405	2.98	1516	3.42	1621	3.9	1722	4.39	1820	4.91	1913	5.46	2003	6.02	2090	6.61	
4000	654	1.04	728	1.21	813	1.4	896	1.58	1043	1.98	1174	2.35	1295	2.75	1408	3.18	1517	3.64	1620	4.11	1720	4.62	1816	5.14	1908	5.69	1997	6.25	2084	6.84	
4200	681	1.19	749	1.38	829	1.56	909	1.78	1054	2.15	1183	2.55	1301	2.96	1413	3.4	1519	3.86	1621	4.35	1718	4.85	1813	5.38	1904	5.94	1992	6.51	2078	7.1	
4400	708	1.35	771	1.55	846	1.73	923	1.94	1066	2.35	1193	2.76	1309	3.19	1419	3.64	1523	4.11	1623	4.6	1719	5.11	1812	5.65	1901	6.2	1989	6.78	2073	7.38	
4600	735	1.52	793	1.71	883	1.92	938	2.14	1078	2.57	1203	3	1318	3.44	1426	3.9	1528	4.37	1626	4.87	1720	5.39	1811	5.93	1900	6.49	1986	7.08	2069	7.68	
4800	763	1.72	817	1.9	902	2.12	953	2.35	1090	2.8	1214	3.24	1327	3.7	1433	4.17	1534	4.66	1630	5.16	1723	5.69	1813	6.24	1900	6.8	1984	7.39	2067	8	
5000	791	1.92	841	2.11	902	2.34	970	2.57	1103	3.04	1226	3.51	1338	3.98	1442	4.46	1541	4.96	1636	5.47	1727	6.01	1815	6.56	1901	7.14	1984	7.73	2066	8.34	
5200	819	2.15	866	2.34	923	2.57	987	2.81	1117	3.3	1239	3.79	1348	4.27	1451	4.77	1549	5.28	1642	5.8	1732	6.35	1819	6.91	1903	7.49	1985	8.09	2065	8.71	
5400	848	2.39	892	2.59	945	2.82	1005	3.07	1131	3.58	1250	4.09	1359	4.59	1461	5.1	1558	5.62	1649	6.15	1736	6.71	1823	7.28	1906	7.87	1987	8.47	2066	9.1	
5600	876	2.66	918	2.86	968	3.09	1024	3.34	1146	3.87	1263	4.4	1371	4.92	1472	5.44	1567	5.98	1658	6.53	1745	7.09	1829	7.67	1911	8.27	1991	8.88	2068	9.51	
5800	905	2.94	944	3.14	991	3.38	1045	3.64	1161	4.18	1276	4.73	1383	5.27	1483	5.81	1577	6.36	1666	6.92	1752	7.49	1835	8.08	1918	8.69	1995	9.31	2071	9.95	
6000	933	3.24	971	3.45	1015	3.68	1065	3.95	1177	4.51	1290	5.08	1395	5.64	1494	6.2	1587	6.76	1676	7.33	1761	7.92	1843	8.52	1922	9.13	2000	9.76	2075	10.4	
6200	962	3.56	998	3.77	1040	4.01	1087	4.28	1194	4.86	1304	5.45	1408	6.03	1506	6.6	1598	7.18	1686	7.77	1770	8.37	1851	8.98	1929	9.6	2006	10.2	2080	10.9	
6400	991	3.9	1025	4.12	1065	4.36	1110	4.63	1212	5.22	1318	5.83	1421	6.43	1518	7.03	1609	7.62	1696	8.22	1779	8.84	1859	9.46	1937	10.1	2012	10.7	2086	11.4	
6600	1020	4.26	1053	4.49	1090	4.73	1133	5.01	1230	5.61	1333	6.24	1434	6.86	1530	7.47	1621	8.09	1707	8.7	1789	9.33	1868	9.96	1945	10.6	2020	11.3	2092	11.9	
6800	1049	4.65	1081	4.88	1116	5.13	1157	5.41	1249	6.02	1349	6.66	1448	7.31	1543	7.94	1633	8.57	1718	9.21	1799	9.84	1878	10.5	1954	11.2	2028	11.8			
7000	1079	5.06	1109	5.29	1143	5.55	1181	5.83	1269	6.45	1365	7.11	1462	7.77	1556	8.43	1645	9.08	1729	9.73	1810	10.4	1888	11.1	1963	11.7					
7200	1108	5.49	1137	5.73	1169	5.99	1206	6.27	1289	6.9	1382	7.58	1477	8.26	1569	8.94	1657	9.61	1741	10.3	1821	11	1898	11.6							
7400	1137	5.95	1165	6.19	1196	6.45	1231	6.74	1310	7.38	1400	8.07	1492	8.77	1583	9.47	1670	10.2	1753	10.9	1833	11.5									
7600	1166	6.43	1193	6.68	1223	6.95	1256	7.24	1332	7.88	1418	8.58	1508	9.31	1597	10	1683	10.7	1766	11.4											
7800	1196	6.94	1222	7.19	1251	7.46	1282	7.76	1355	8.41	1437	9.12	1524	9.86	1612	10.6	1697	11.3													
8000	1225	7.48	1250	7.73	1278	8.01	1309	8.3	1378	8.96	1457	9.69	1541	10.4	1627	11.2	1710	12													
8200	1255	8.04	1279	8.3	1306	8.58	1335	8.88	1401	9.54	1477	10.3	1558	11.1	1642	11.8															
8400	1284	8.63	1308	8.89	1334	9.18	1362	9.48	1425	10.2	1498	10.9	1577	11.7																	
8600	1314	9.25	1337	9.52	1362	9.81	1389	10.1	1450	10.8	1519	11.5																			
8800	1343	9.9	1366	10.2	1390	10.5	1416	10.8	1474	11.5																					
9000	1373	10.6	1395	10.9	1418	11.2	1443	11.5																							
9200	1402	11.3	1424	11.6	1446	11.9																									

SOUND DATA TABLE

Fan Model and Size	Fan Performance Area	Range of fan speed	ΔL_{wA}	$\Delta L_{wA} 63$	$\Delta L_{wA} 125$	$\Delta L_{wA} 250$	$\Delta L_{wA} 500$	$\Delta L_{wA} 1000$	$\Delta L_{wA} 2000$	$\Delta L_{wA} 4000$	$\Delta L_{wA} 8000$
ATLI 12-12	Area 1	RPM < 444	15.7	15	5	1	-4	-6	-12	-20	-29
		445 <RPM< 888	15.6	15	5	-2	-2	-5	-12	-20	-29
		889 <RPM< 1750	14.1	13	6	0	-5	-5	-10	-15	-24
		RPM > 1751	14.3	13	7	1	-6	-5	-8	-12	-21
	Area 2	RPM < 444	11.7	10	3	3	-3	-5	-10	-16	-26
		445 <RPM< 888	11.5	10	4	-2	-2	-5	-10	-15	-26
		889 <RPM< 1750	7.3	5	-1	-3	-5	-4	-9	-12	-19
		RPM > 1751	7.1	5	-2	-3	-6	-7	-6	-9	-16
	Area 3	RPM < 444	8.9	7	0	-1	-4	-5	-8	-10	-19
		445 <RPM< 888	8.7	7	0	-5	-4	-5	-8	-9	-18
		889 <RPM< 1750	7.9	6	-1	-4	-6	-5	-7	-9	-13
		RPM > 1751	6.0	3	-1	-5	-8	-7	-6	-8	-12