

We Care for Your Needs

SQUARE INLINE FANS

SQ Series



CATALOGUE ID:

ETC-SQ-2023-EDUSV0
NOVEMBER 2023

TCF
TWIN CITY FAN

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SQUARE INLINE FANS

SQxxD / SQxxB

OVERVIEW

Twin City Fan's Model SQ direct drive and belt driven square inline fans are specifically designed for duct applications handling relatively clean air, including supply, exhaust and return air systems. These fans offer high efficiency and quiet operation in a compact design that can be mounted in any position (horizontal, vertical or angular). Square inline centrifugal units feature high efficient, nonoverloading, backward inclined centrifugal impellers precisely matched to a spun venture.

All impellers are statically and dynamically balanced. Units are manufactured under strict assurance standards to insure quality cataloged performance and years of maintenance free operation.

TYPICAL APPLICATIONS INCLUDE

General HVAC, indoor and outdoor application (exhaust, filtration, return and supply air of commercial buildings), Air Pollution Control, Airport Exhaust, Automotive, Fertilizer, Food & Beverage, Laboratory Exhaust, Metal & Mineral Processing, Office Exhaust, Restroom Exhaust, Warehouse Exhaust and Water Treatment

CONFIGURATIONS

Direct Drive and Belt Driven Configurations

➤ SQxxD (Direct Drive)

Available in 4 sizes, 9.0" to 13.0" impellers diameters

➤ SQxxB (Belt Driven)

Available in 10 sizes, 10.0" to 42.0" impellers diameters

OPTIONAL CONSTRUCTION

Spark Resistant Construction (Type B and C, ATEX), Easy Access Construction

IMPELLER TYPES

Backward Inclined/Curved Centrifugal, Spark Resistant Aluminum Impellers

EASY MAINTENANCE ACCESS

The units can be easily serviced through the side access panels without removing duct connections.

MOTOR SELECTION

Both direct drive and belt driven models are available with a wide range of voltages and enclosures. Standard belt drive TEFC selected using a conservative portion of the IEC/NEMA service factor. Standard direct drive TEFC or TEAO motors have Class B/F insulation and internal thermal overload protection. Each size is carefully engineered to match the motor to the impeller capacity.

CERTIFICATIONS

AMCA Sound & Air Performance, ATEX, CE (IEC60335) EMC & RoHS



Twin City Fan & blower certifies that the Models SQ10D, SQ12D, SQ10B, SQ12B, SQ13B, SQ15B, SQ16B, SQ20B, SQ22B & SQ27B shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



ATEX
Expertise and Risk Assessment Directive 2014/34/EC
Equipment and protective systems intended for use in potentially explosive atmospheres.



Low Voltage Directive
IEC 60335-2-80:2015 in conjunction with IEC 60335-1:2010, COR1:2010, COR2:2011, AMD1:2013, AMD2:2016.

EMC Directive

EN 55014-1: 2017+A11: 2020; EN IEC 61000-3-2: 2019; EN 61000-3-3: 2013+A1:2019; EN 55014-2: 2015 (IEC 61000-4-2; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-11).



RoHS Directive
Restriction of Hazardous Substances in Electrical and Electronic Equipment.

CONSTRUCTION FEATURES

SQ- INLINE FAN SERIES

HOUSINGS

Housing assembly features heavy-gauge galvanized steel construction. Removable side panels provide easy access for service and maintenance without the need to remove duct connections. Complete removal of the power assembly is also possible through side access panels. Side panels can provide a 90-degree side discharge.

BELT TUBE

Constructed of heavy gauge galvanized steel, the belt tube and bearing cover enclose the belts, fan sheave and bearings within the airstream.

DRIVE FRAME

Motor and drive frame are constructed of heavy gauge galvanized steel. The pivoting motor base makes for simple belt tensioning.

IMPELLER

Backward inclined non-overloading, aluminum impeller and hub statically and dynamically balanced to assure long life and quiet operation.

MOUNTING BRACKETS

Galvanized steel mounting brackets for easy mounting in horizontal or vertical position.

INLET CONE

Deep spun cone, aerodynamically designed for smooth air entry into the wheel.

DUCT COLLARS

Duct collars provide ready attachment to ductwork and eliminate the need for square to round duct transitions.

DRIVE

Adjustable or fixed pitch, 1.5 service factor V-belt drives with cast iron sheaves, and V-belts designed to be oil and heat resistant, and to dissipate static electricity.

BEARINGS

Heavy duty grease lubricated pillow block bearings selected for minimum average life (AFBMA L-50) of at least 200,000 hours at maximum class speed.

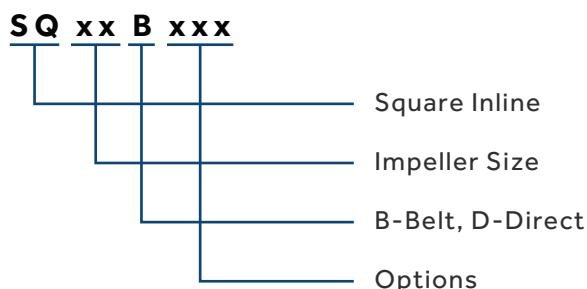
SHAFT

AISI 1045, turned ground and polished for accuracy. Designed to provide first critical speed of at least 1.25 times the maximum class speed.

VIBRATION ISOLATION

EIC offers a complete package of vibration isolators, isolation bases and inertia bases to simplify field assembly and reduce transmitted vibrations.

ORDER CODE



SPARK-RESISTANT CONSTRUCTION

AMCA "C", AMCA "B" and AMCA "A" are available as an option.

Type	Construction
A	All parts in contact with the airstream are constructed of non-ferrous material
B	The fan wheel is constructed of a non-ferrous material. A non-ferrous rub ring surrounds the fan shaft where it passes through the fan housing.
C	The Wheel or the inlet cone is constructed of non-ferrous material. A non-ferrous rub ring surrounds the fan shaft where it passes through the fan housing.

NOTES

A- Bearings shall be placed outside the airstream.

B- The user shall electrically ground all fan parts.

The use of the above standard in no way implies a guarantee of safety for any level of spark resistance. "Spark resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in the system."

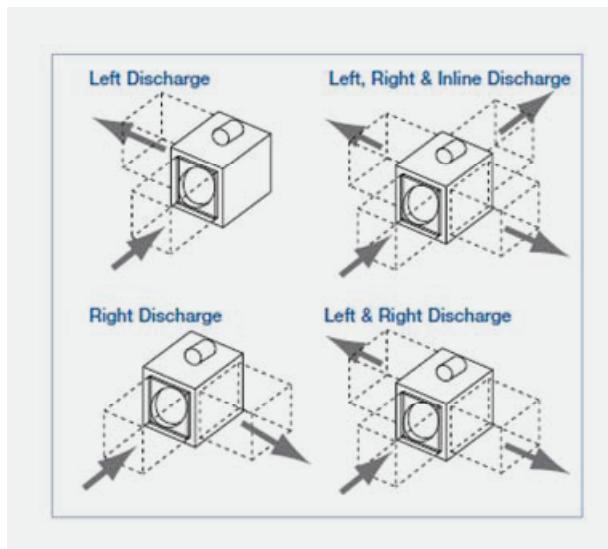
ALUMINUM CONSTRUCTION

Aluminum construction is available for all direct drive sizes and belt drive. Some drive frame components may still be of galvanized construction to maintain structural integrity.



DISCHARGE CONFIGURATION

Fan performance will change with different discharge positions. Catalog data is based on an inline discharge. Right side discharge will give you 105% of cataloged performance and left side will give you 106% of cataloged performance.



FILTER BOX

A filter box containing one or two inch aluminum wire mesh, removable and washable filters is available for attachment to the fan inlet side. The filter box is constructed of galvanized steel, with duct collars for easy mounting and removable side panels for easy filter cleaning or replacement.

Disposable paper filters are also available.



OPTIONS & ACCESSORIES

DOWN BLAST ROOF EXHAUSTERS



Backdraft Damper

Backdraft Damper, with automatic or motorized operation, features a felt seal on the edge of the damper blades for quiet operation. Damper frames are constructed of steel and blades are constructed of aluminum.

Variable Speed Control

Variable Speed Control is an optional accessory; allow the adjustment of airflow for system balancing. Variable speed controllers are solid-state design, Variable speed controls can be shipped separately.



NEMA 1 type disconnect switch

NEMA 1 type disconnect switch mounted in the motor compartment when ODP or TEFC motors used. When explosion proof motors are specified, a NEMA7/9 disconnect switch will be shipped loose for field mounting and wiring.

NEMA 3R rain-tight disconnect switch

NEMA 3R rain-tight disconnect switch, externally mounted when ODP or TEFC motors are used. NEMA 3R, rain proof, disconnects are available shipped loose for field mounting and wiring or factory mounted and wired.



NEMA 4 disconnect switch

NEMA 4 disconnect switch (optional) is mounted externally and is water and dust-tight. Switch is available shipped loose for field mounting and wiring or factory mounted and wired.

NEMA 7/9 disconnect switches

NEMA 7/9 disconnect switches are provided on fan with explosion proof motors. The NEMA7/9 switch is designed for use with fans operating in hazardous environments. NEMA 7/9 disconnects will be shipped loose for field mounting and wiring

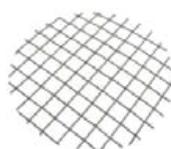


Insulated Housing

Insulated Housing for noise reduction and condensation control, the interior of the fan housing can be lined with a 1-inch fiberglass duct liner.

Inlet & Outlet Screen

Inlet & Outlet Screens are available for mounting in the fan inlet or outlet.



Vibration Isolation Spring

Vibration Isolation Spring - Floor type vibration isolation mounts are available to reduce the transmission of fan vibration in 1" or 2" deflection.

Extended Lube Line

Extended Lube Lines allow for easy lubrication of bearings on belt driven units without disassembly



Vibration Isolation Spring

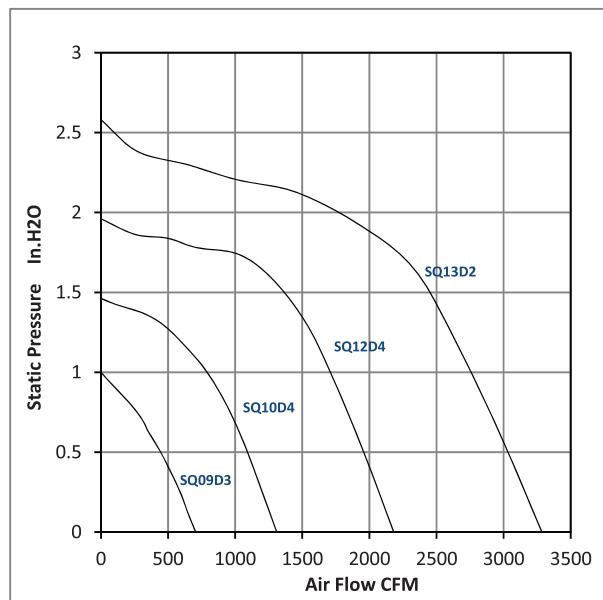
Vibration Isolation Spring - Hunger type vibration isolation mounts

OTHER ACCESSORIES/OPTIONS:

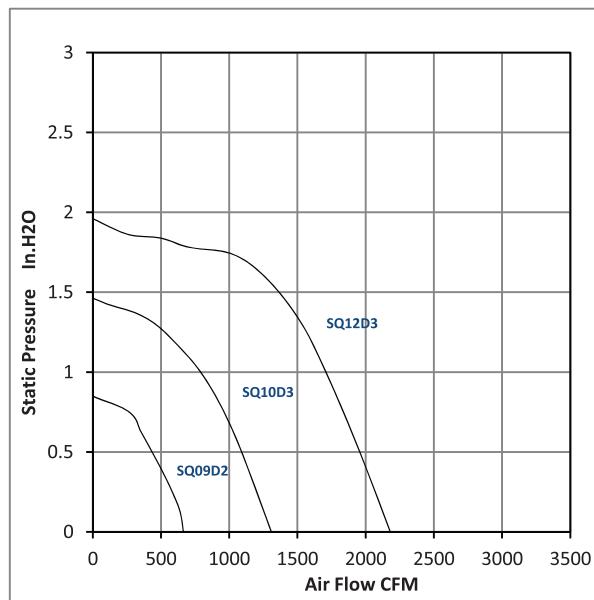
- Special Coatings
- ATEX Certificate
- AMCA Spark B or C
- Aluminum Bird Screen

- Stainless Steel Construction
- Stainless Steel Hardware

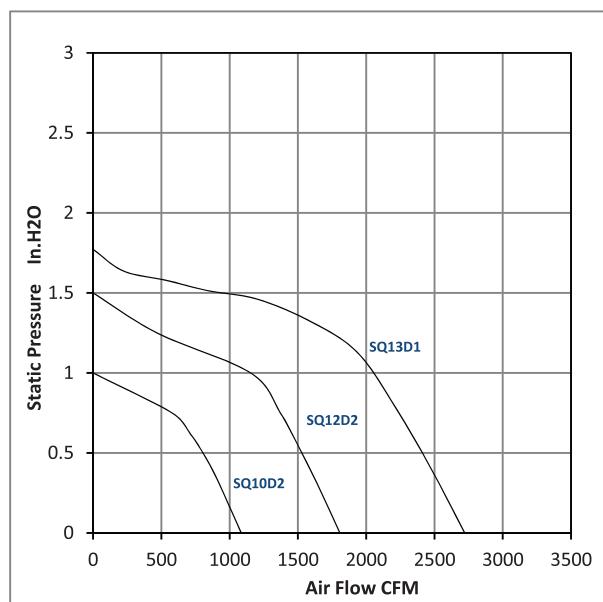
➤ Fan Curve - 1725 RPM (60Hz)



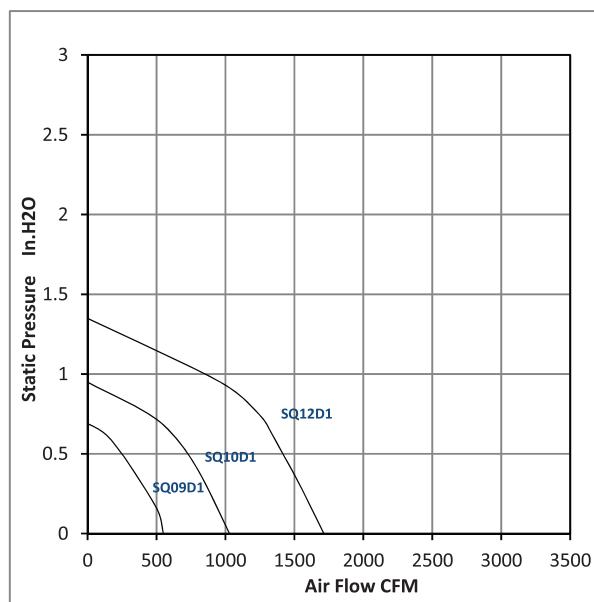
➤ Fan Curve - 1550 RPM (60Hz)



➤ Fan Curve - 1440 RPM (50Hz)



➤ Fan Curve - 1375 RPM (50Hz)

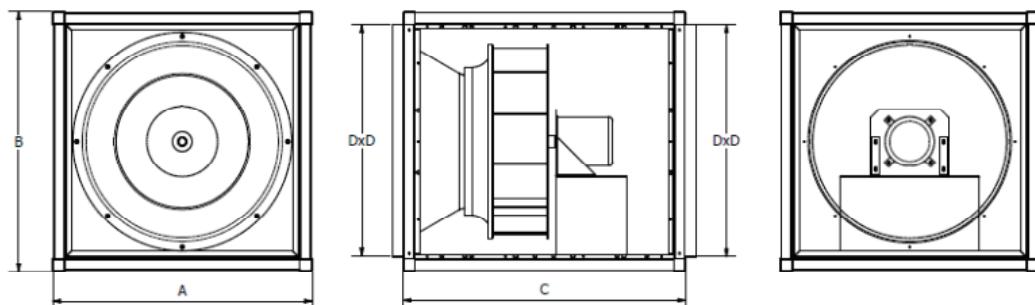


Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

DIRECT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ 09,10,12D – Selection & Dimension Data



MODEL	A	B	C	D	KG	DAMPER SIZE
SQ09D	406	406	410	346	32	350 x 350
SQ10D	406	406	610	346	35	350 x 350
SQ12D	406	406	610	346	37	350 x 350

MODEL	Hz	HP	RPM	0.000" Pst CFM Sones	0.125" Pst CFM Sones	0.250" Pst CFM Sones	0.375" Pst CFM Sones	0.500" Pst CFM Sones	0.625" Pst CFM Sones	0.725 Pst CFM Sones	1.000" Pst CFM Sones
SQ09D1	50	1/6	1375	505	519	439	347	249	128	-	-
				5.5	5.5	5.5	5.5	5.5	5.5	-	-
SQ09D2	60	1/6	1550	655	641	583	513	435	354	269	-
				8	8	8	8	8	8	8	-
SQ09D3	60	1/4	1725	705	645	590	520	445	355	270	-
				9.4	9.4	9.4	9.4	9	9	9	-

MODEL	Hz	HP	RPM	0.000" Pst CFM Sones	0.125" Pst CFM Sones	0.250" Pst CFM Sones	0.375" Pst CFM Sones	0.500" Pst CFM Sones	0.625" Pst CFM Sones	0.725 Pst CFM Sones	1.000" Pst CFM Sones
SQ10D1	50	1/6	1375	1029	960	890	816	728	613	-	-
				11.9	11.9	11.9	11.9	11.9	11.1	-	-
SQ10D2	60	1/6	1550	116	1099	1038	974	905	827	728	-
				14	14	14	14	14	14	12	-
SQ10D3	50	1/4	1440	1085	1020	954	886	805	708	597	-
				12.8	12.8	12.8	12.8	12.8	12.8	12.8	-
SQ10D4	60	1/4	1725	1291	1236	1182	1125	1068	1004	934	728
				16.3	16.3	16.3	16.3	16.3	16.3	15.1	13.2

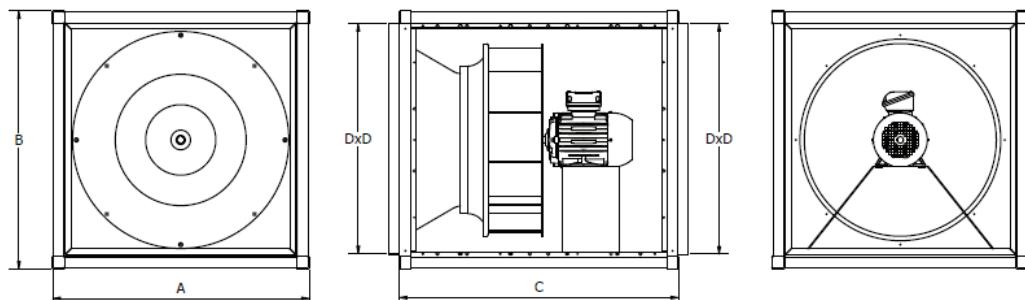
➤ SQ 09,10,12D – Selection & Dimension Data

MODEL	Hz	HP	RPM	0.000" Pst CFM Sones	0.250" Pst CFM Sones	0.375" Pst CFM Sones	0.500" Pst CFM Sones	0.625" Pst CFM Sones	1.000" Pst CFM Sones	1.250" Pst CFM Sones	1.500" Pst CFM Sones
SQ12D1	50	1/2	1375	1714	1572	1497	1417	1337	963	-	-
				20.5	20.5	20.5	20.5	20.5	19.7	-	-
SQ12D2	60	1/2	1550	1932	1806	1743	1674	1603	1369	1120	-
				23.3	23.3	23.3	23.3	23.3	23.3	22.6	20.1
SQ12D3	50	3/4	1440	1807	1672	1603	1528	1453	1374	1154	-
				21.8	21.8	21.8	21.8	21.8	21.8	21.2	-
SQ12D4	60	3/4	1725	2150	2037	1980	1923	1860	1668	1516	1292
				26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.1

➤ 1/6, 1/4, 1/2 & 3/4 HP are TEAO motor.

➤ All dimensions are in mm

➤ SQ 13D – Selection & Dimension Data



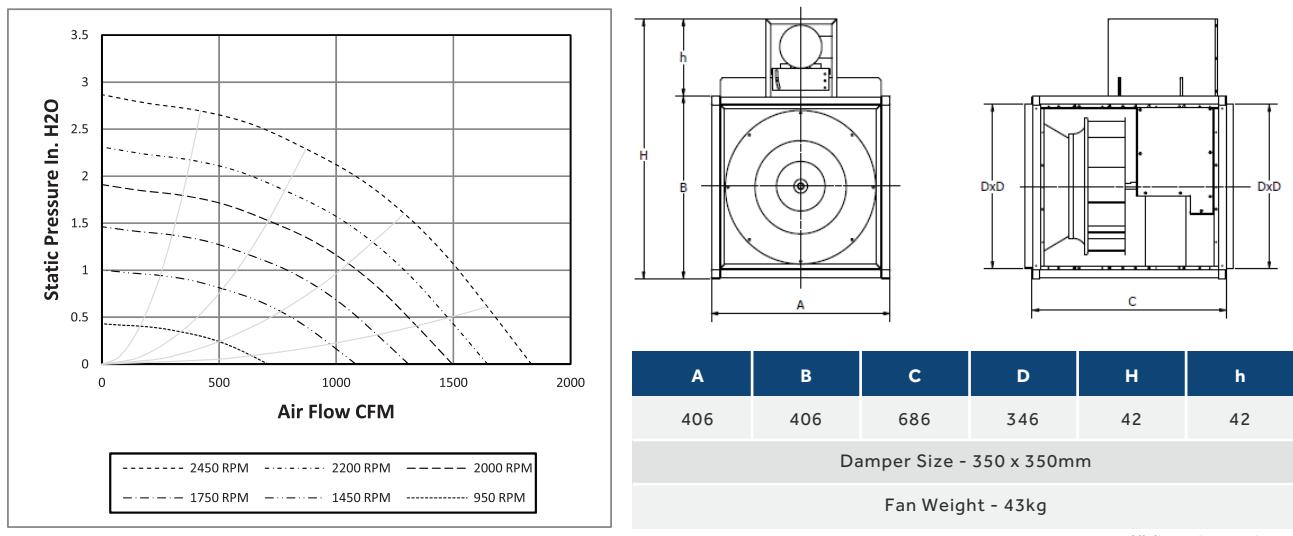
MODEL	A	B	C	D	KG	DAMPER SIZE
SQ13D	406	406	686	346	42	350 x 350

MODEL	Hz	HP	RPM	0.000" Pst CFM Sones	0.250" Pst CFM Sones	0.375" Pst CFM Sones	0.500" Pst CFM Sones	0.625" Pst CFM Sones	1.000" Pst CFM Sones	1.500 Pst CFM Sones	2.000" Pst CFM Sones
SQ13D1	50	1 1/2	1440	2722	2568	2492	2409	2324	1720	-	-
				22.8	21.5	20.9	20.4	19.8	18.4	-	-
SQ13D2	60	2	1725	3285	3158	3094	3031	2966	2600	2435	1744
				28.8	27.6	27.1	26.5	26.1	24.7	24.7	23.1

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ10B



All dimensions are in mm

HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/4	900	673		567		427		-		-		-		-		-		-	
		0.05	6.3	0.05	6.3	0.05	6.3	-	-	-	-	-	-	-	-	-	-	-	
	950	711		610		488		-		-		-		-		-		-	
		0.06	6.8	0.06	6.8	0.06	6.8	-	-	-	-	-	-	-	-	-	-	-	
	1000	748		653		543		367		-		-		-		-		-	
		0.07	7.3	0.07	7.3	0.07	7.3	0.06	6.1	-	-	-	-	-	-	-	-	-	
	1100	823		737		644		520		316		-		-		-		-	
		0.09	8.4	0.09	8.4	0.09	8.4	0.09	8.4	0.07	6.6	-	-	-	-	-	-	-	
1/3	1150	861		779		693		582		416		-		-		-		-	
		0.10	9.0	0.11	9.0	0.10	9.0	0.10	9.0	0.09	8.4	-	-	-	-	-	-	-	
	1200	898		819		737		640		500		-		-		-		-	
		0.12	9.5	0.12	9.5	0.12	9.5	0.11	9.5	0.11	8.4	-	-	-	-	-	-	-	
	1300	973		900		825		742		637		489		-		-		-	
		0.15	10.9	0.15	10.9	0.15	10.9	0.15	10.9	0.14	10.9	0.13	9.8	-	-	-	-	-	
1/3	1400	1048		980		912		841		754		645		-		-		-	
		0.18	12.2	0.19	12.2	0.19	12.2	0.18	12.2	0.18	12.2	0.18	11.6	-	-	-	-	-	
	1450	1085		1020		954		886		805		708		-		-		-	
		0.20	12.8	0.21	12.8	0.21	12.8	0.21	12.8	0.20	12.8	0.20	12.8	-	-	-	-	-	

➤ SQ10B

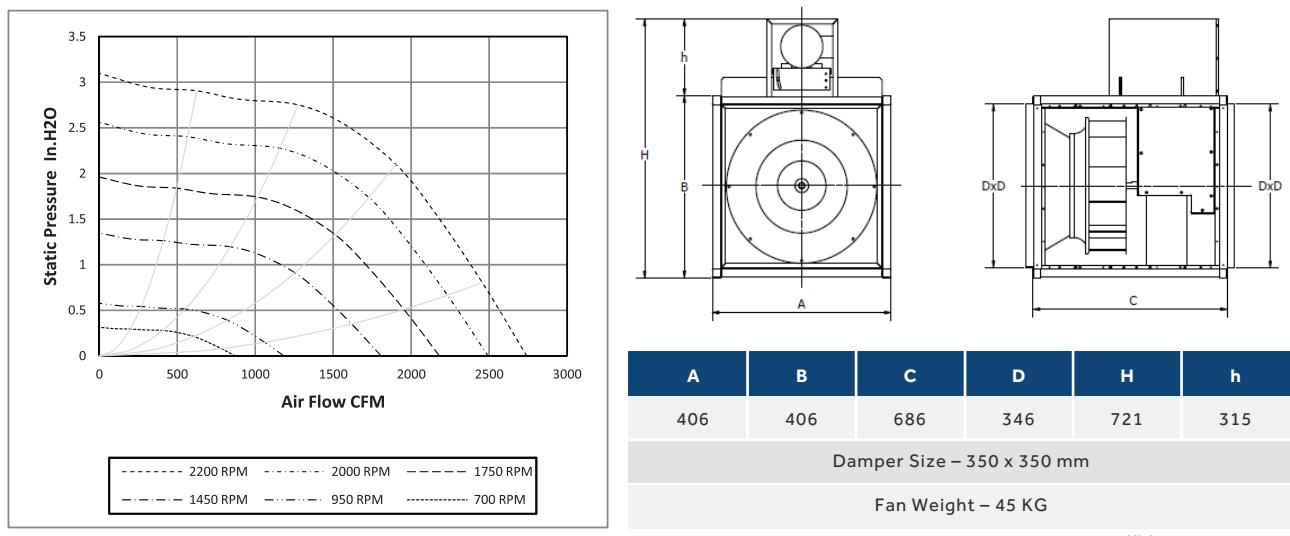
HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/3	1500	1122		1060		996		930		856		770		-		-		-	
		0.23	13.4	0.23	13.4	0.23	13.4	0.23	0.22	0.22	13.4	0.22	13.4	-	-	-	-	-	-
1/2	1600	1197		1138		1079		1018		955		878		537		-		-	
		0.27	14.6	0.28	14.6	0.28	14.6	0.28	14.6	0.27	14.6	0.27	14.6	0.22	12.8	-	-	-	-
3/4	1750	1309		1256		1202		1146		1090		1029		790		-		-	
		0.36	16.6	0.36	16.6	0.37	16.6	0.37	16.6	0.36	16.6	0.36	16.6	0.34	15.6	-	-	-	-
3/4	1900	1422		1372		1323		1273		1221		1168		977		536		-	
		0.46	18.6	0.46	18.6	0.47	18.6	0.48	18.6	0.47	18.6	0.46	18.6	0.45	18.6	0.35	16.1	-	-
2000	2000	1497		1449		1402		1355		1306		1257		1086		734		-	
		0.53	20	0.54	20	0.55	20	0.55	20	0.55	20	0.54	20	0.53	20	0.46	17.9	-	-
1	2100	1571		1526		1482		1437		1391		1344		1188		901		-	
		0.62	21.3	0.63	21.3	0.63	21.3	0.64	21.3	0.64	21.3	0.63	21.3	0.62	21.3	0.58	19.7	-	-
1	2200	1646		1603		1561		1518		1475		1430		1288		1039		-	
		0.71	22.7	0.72	22.7	0.73	22.7	0.73	22.7	0.74	22.7	0.73	22.7	0.71	22.7	0.69	21.7	-	-
1 1/2	2300	1721		1680		1639		1598		1557		1515		1385		1163		-	
		0.81	24.1	0.82	24.1	0.83	24.1	0.83	24.1	0.84	24.1	0.84	24.1	0.82	24.1	0.79	24.1	-	-
1 1/2	2400	1796		1757		1717		1678		1639		1599		1475		1279		-	
		0.92	25.5	0.93	25.5	0.94	25.5	0.95	25.5	0.95	25.5	0.96	25.5	0.93	25.5	0.91	25.5	-	-
1 1/2	2450	1833		1795		1756		1718		1679		1641		1519		1331		686	
		0.98	26.2	0.99	26.2	1.00	26.2	1.01	26.2	1.01	26.2	1.02	26.2	1.00	26.2	0.97	26.2	0.74	24.6

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ12B



All dimensions are in mm

HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/4	700	872		727		517		-		-		-		-		-		-	
		0.043	6.1	0.049	6.1	0.050	6.1	-	-	-	-	-	-	-	-	-	-	-	
	800	997		873		728		-		-		-		-		-		-	
		0.064	7.3	0.071	7.3	0.076	7.1	-	-	-	-	-	-	-	-	-	-	-	
	900	1122		1013		893		735		-		-		-		-		-	
		0.090	8.5	0.100	8.5	0.106	8.5	0.108	8.2	-	-	-	-	-	-	-	-	-	
	950	1184		1081		969		840		593		-		-		-		-	
		0.106	9.2	0.116	9.2	0.123	9.2	0.128	9.2	0.116	9.0	-	-	-	-	-	-	-	
	1000	1246		1149		1043		926		756		-		-		-		-	
		0.124	10	0.134	10	0.142	10	0.148	10	0.145	10	-	-	-	-	-	-	-	
1/3	1100	1371		1282		1189		1090		975		802		-		-		-	
		0.165	11.5	0.176	11.5	0.186	11.5	0.194	11.5	0.198	11.5	0.192	8.8	-	-	-	-	-	
	1150	1433		1348		1261		1166		1061		921		-		-		-	
		0.189	17.1	0.200	17.1	0.211	17.1	0.219	17.1	0.225	17.1	0.224	16.6	-	-	-	-	-	
1/2	1200	1495		1414		1332		1241		1146		1037		-		-		-	
		0.214	17.8	0.227	17.8	0.238	17.8	0.247	17.8	0.254	17.8	0.258	17.6	-	-	-	-	-	
	1300	1620		1545		1470		1388		1304		1211		-		-		-	
		0.273	19.4	0.286	19.4	0.299	19.4	0.309	19.4	0.318	19.4	0.325	19.3	-	-	-	-	-	

➤ SQ12B

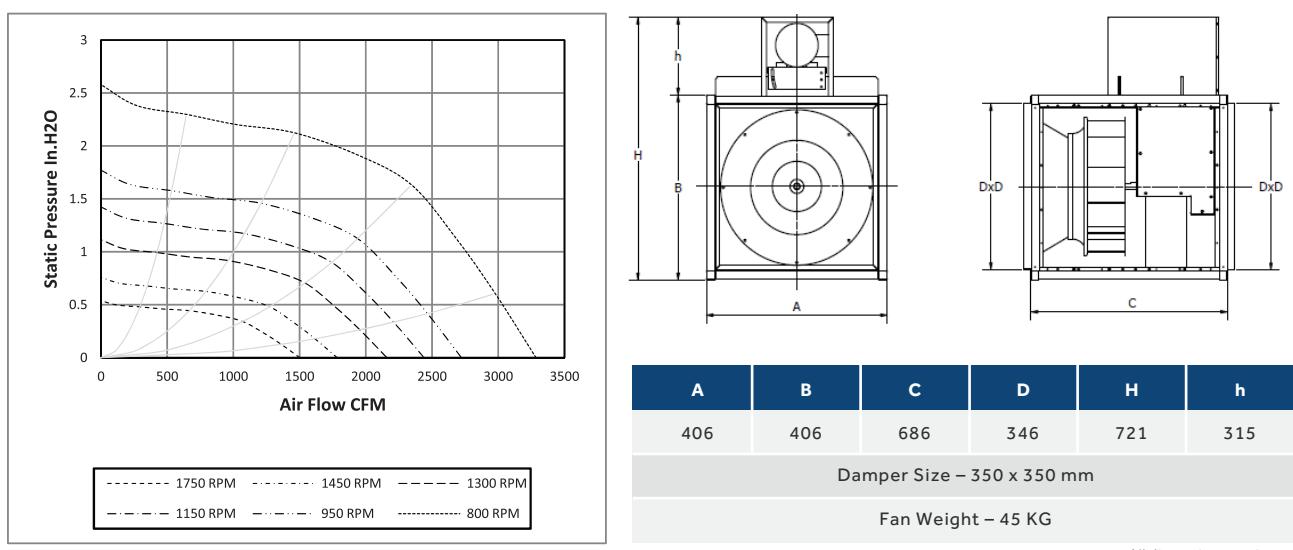
HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/2	1400	1745		1675		1605		1532		1454		1377		1035		-		-	
		0.341	20.9	0.355	20.9	0.369	20.9	0.381	20.9	0.391	20.9	0.401	20.9	0.397	20.2	-	-	-	-
3/4	1450	1807		1740		1672		1603		1528		1453		1154		-		-	
		0.378	21.8	0.393	21.8	0.408	21.8	0.421	21.8	0.431	21.8	0.442	21.8	0.448	21.2	-	-	-	-
	1500	1869		1804		1739		1674		1601		1529		1271		-		-	
		0.419	22.5	0.434	22.5	0.449	22.5	0.464	22.5	0.475	22.5	0.485	22.5	0.502	22.3	-	-	-	-
	1600	1994		1933		1872		1273		1746		1678		1456		-		-	
		0.508	24.2	0.524	24.2	0.541	24.2	0.557	24.2	0.570	24.2	0.581	24.2	0.607	24	-	-	-	-
	1700	2119		2061		2004		1946		1888		1824		1626		1232		-	
		0.610	25.8	0.627	25.8	0.644	25.8	0.661	25.8	0.677	25.8	0.689	25.8	0.723	25.8	0.708	25.1	-	-
1	1750	2181		2125		2069		2014		1958		1896		1709		1352		-	
		0.665	26.6	0.683	26.6	0.700	26.6	0.718	26.6	0.736	26.6	0.748	26.6	0.785	26.6	0.782	26.1	-	-
1 1/2	1900	2368		2316		2265		2214		2162		2110		1938		1679		-	
		0.851	29.3	0.870	29.3	0.890	29.3	0.909	29.3	0.928	29.3	0.946	29.3	0.986	29.3	1.022	29	-	-
1 1/2	2200	2742		2697		2653		2609		2564		2520		2379		2180		1603	
		1.321	34.8	1.344	34.8	1.366	34.8	1.388	34.8	1.410	34.8	1.432	34.8	1.488	34.8	1.550	34.6	1.536	34.2

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ - INLINE FAN SERIES

➤ SQ13B



All dimensions are in mm

HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/4	600	1126		932		497		-		-		-		-		-		-	
		0.05	5.8	0.06	5	0.05	3.8	-	-	-	-	-	-	-	-	-	-	-	
	700	1314		1151		957		178		-		-		-		-		-	
		0.09	7.2	0.09	6.5	0.10	5.8	0.05	4.9	-	-	-	-	-	-	-	-	-	
	800	1502		1363		1205		966		117		-		-		-		-	
		0.13	8.7	0.14	8	0.14	7.4	0.14	6.7	0.07	6.1	-	-	-	-	-	-	-	
	900	1689		1566		1432		1280		1017		184		-		-		-	
		0.18	12.8	0.19	11.9	0.20	11.0	0.21	10.2	0.20	8.8	0.10	7.6	-	-	-	-	-	
1/3	950	1783		1666		1542		1403		1224		798		-		-		-	
		0.22	13.6	0.23	11.9	0.23	11.9	0.24	11.1	0.25	10.3	0.21	8.7	-	-	-	-	-	
	1000	1877		1766		1649		1524		1379		1109		-		-		-	
		0.25	14.5	0.26	13.7	0.27	12.9	0.28	12.1	0.29	11.4	0.28	10.1	-	-	-	-	-	
1/2	1100	2065		1964		1862		1749		1628		1495		-		-		-	
		0.34	16.3	0.35	15.5	0.36	14.8	0.37	14.1	0.37	13.5	0.38	12.8	-	-	-	-	-	
	1150	2159		2062		1965		1859		1749		1622		-		-		-	
		0.39	17.2	0.40	16.5	0.41	15.7	0.42	15.1	0.42	14.5	0.43	13.9	-	-	-	-	-	
3/4	1200	2252		2160		2067		1967		1864		1747		994		-		-	
		0.44	18.1	0.45	17.4	0.46	16.7	0.47	16.1	0.48	15.5	0.49	14.9	0.41	12.3	-	-	-	

➤ SQ13B

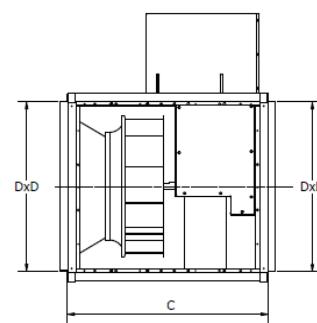
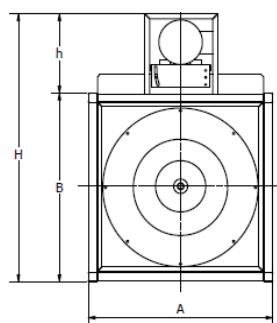
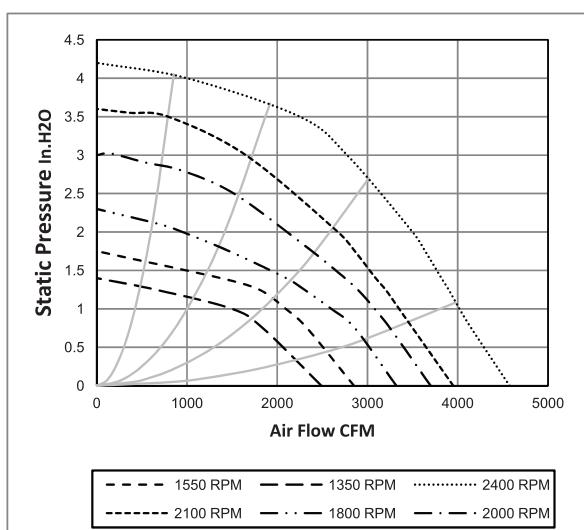
RPM	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
3/4	1300	2440		2355		2269		2180		2085		1989		1552		-		-	
		0.56	20.1	0.57	19.4	0.58	18.7	0.59	18.1	0.60	17.5	0.61	16.9	0.62	15	-	-	-	-
1	1400	2628		2548		2469		2390		2302		2214		1914		-		-	
		0.70	21.9	0.71	21.3	0.72	20.7	0.74	20.1	0.75	19.6	0.76	19	0.79	17.5	-	-	-	-
	1450	2722		2645		2568		2492		2409		2324		2040		-		-	
		0.77	23	0.79	22.4	0.80	21.8	0.81	21.2	0.83	20.6	0.84	20.1	0.87	18.6	-	-	-	-
1 1/2	1500	2816		2741		2667		2593		2515		2433		2165		1414		-	
		0.86	24	0.87	23.4	0.88	22.8	0.90	22.3	0.91	21.7	0.92	21.2	0.96	19.8	0.86	17.4	-	-
	1600	3003		2934		2864		2795		2725		2648		2409		1933		-	
		1.04	26	1.05	25.4	1.07	25.4	1.08	24.3	1.10	23.8	1.11	23.3	1.15	21.9	1.16	20	-	-
2	1700	3191		3126		3060		2995		2929		2861		2643		2306		-	
		1.25	28.2	1.26	27.6	1.28	27.1	1.29	26.5	1.31	26	1.32	25.5	1.36	24.2	1.41	22.5	-	-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ - INLINE FAN SERIES

➤ SQ13BHP



A	B	C	D	H	h
406	406	686	346	721	315

Damper Size - 350 x 350mm

Fan Weight - 48kg

All dimensions are in mm

RPM		0.000" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.500" Pst		3.000" Pst		3.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/3	1050	2000		930		-		-		-		-		-		-		-	
		0.25	12	0.28	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2	1150	2200		1340		-		-		-		-		-		-		-	
		0.37	13	0.38	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1250	3300		1615		1154		-		-		-		-		-		-	
		0.4	15	0.49	12	0.45	12	-	-	-	-	-	-	-	-	-	-	-	-
3/4	1350	2490		1840		1500		-		-		-		-		-		-	
		0.55	16	0.60	12.5	0.6	12.5	-	-	-	-	-	-	-	-	-	-	-	-
1	1450	2750		2140		1875		1525		870		-		-		-		-	
		0.85	18	0.70	15	0.70	15	0.70	15	0.68	15	-	-	-	-	-	-	-	-
	1550	2850		2330		2095		1800		1371		-		-		-		-	
		0.92	19	0.82	16	0.83	16	0.85	16	0.80	16	-	-	-	-	-	-	-	-
1 1/2	1650	3100		2550		2350		2090		1800		1300		-		-		-	
		1.2	19	0.97	17.5	1.00	17.5	17.5	1.10	17.5	1.10	17.4	1.09	-	-	-	-	-	-
	1800	3550		2840		2445		2200		1925		1460		-		-		-	
		1.3	21	1.20	18	1.20	18	18	1.24	18.5	1.26	19	1.2	-	-	-	-	-	-
2	2000	3860		3250		3080		2900		2700		2275		1520		-		-	
		1.8	22	20	1.61	20	1.61	20	1.63	20	1.70	21	1.65	21	1.6	-	-	-	-

➤ SQ13BHP

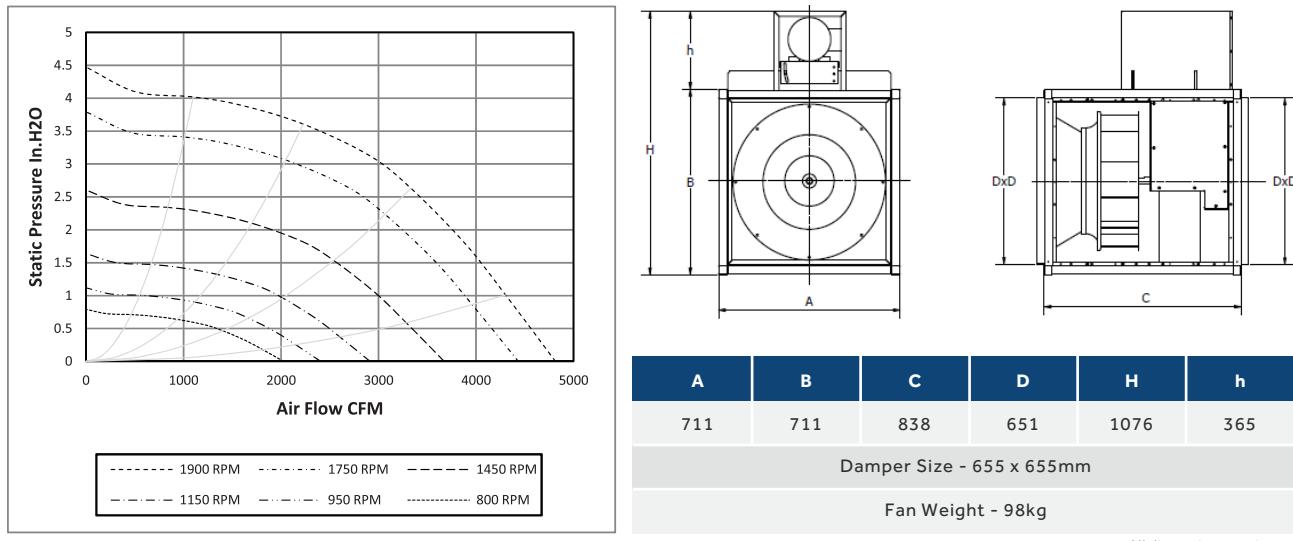
	RPM	0.000" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.500" Pst		3.000" Pst		3.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
3	2100	4000		3500		3350		3200		3010		2660		2172		1252		-	
		1252	22	1.9	21	1.95	21	2.0	21	2.0	22	2.1	22	2.1	22	1.8	22	-	-
	2200	4210		3750		3600		3450		3275		2775		2560		1950		-	
		2.3	25	2.17	23	2.23	23	2.22	23	2.3	24	24	24	2.4	24	2.3	24	-	-
	2300	4390		3950		3825		3685		3530		3375		2875		2420		1630	
		2.55	27	2.45	24	2.55	24	2.6	24	2.6	25	2.65	25	2.7	25	2.7	25	2.5	24
4	2400	4575		4150		4000		390		3775		3400		3150		2775		2250	
		3.3	29	2.9	26	2.9	26	3.0	26	3.1	26	3.1	26	3.1	26	3.2	26	3.1	26

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ15B



All dimensions are in mm

HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		3.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/4	600	1521			1078			596			-	-	-	-	-	-	-	-	-
		0.10	8	0.10	5.3	0.09	4.6	-	-	-	-	-	-	-	-	-	-	-	-
1/4	700	1774			1420			1186			758	-	-	-	-	-	-	-	-
		0.16	14.5	0.16	10.9	0.16	7.9	0.14	6.5	-	-	-	-	-	-	-	-	-	-
1/3	800	2028			1722			1547			1335	987	-	-	-	-	-	-	-
		0.24	16.2	0.24	13.1	0.24	11.3	0.24	9.2	0.22	8.0	-	-	-	-	-	-	-	-
1/2	900	2281			2012			1872			1705	1516	-	-	-	-	-	-	-
		0.34	18.1	0.35	15.3	0.35	14.1	0.35	12.4	0.34	10.8	-	-	-	-	-	-	-	-
1/2	950	2408			2155			2021			1875	1710	-	-	-	-	-	-	-
		0.39	19	0.41	16.4	0.41	15.3	0.41	14	0.41	12.3	-	-	-	-	-	-	-	-
3/4	1000	2534			2294			2169			2042	1885	1169	-	-	-	-	-	-
		0.46	19.9	0.47	17.5	0.48	16.4	0.48	15.4	0.48	13.5	0.43	10.9	-	-	-	-	-	-
3/4	1100	2788			2569			2458			2343	2223	1755	-	-	-	-	-	-
		0.61	21.9	0.63	19.8	0.63	18.8	0.64	17.8	0.64	16.9	0.62	13.3	-	-	-	-	-	-
1	1150	2915			2705			2601			2491	2381	1966	-	-	-	-	-	-
		0.70	23	0.72	20.8	0.72	19.9	0.73	19	0.73	18.1	0.72	14.8	-	-	-	-	-	-
1	1200	3041			2841			2741			2636	2531	2157	1192	-	-	-	-	-
		0.80	24.1	0.81	22	0.82	21.1	0.82	20.2	0.83	19.3	0.82	16.3	0.70	14.3	-	-	-	-

➤ SQ15B

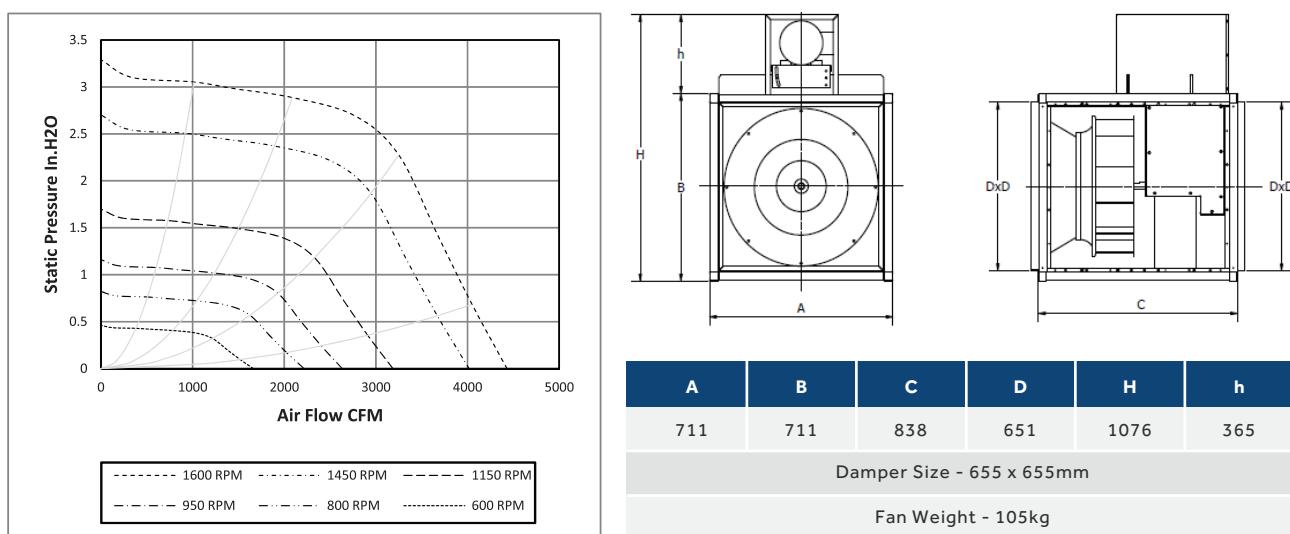
HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		3.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1 1/2	1300	3295		3110		3017		2924		2826		2505		1916		-		-	
		1.01	26.3	1.03	24.3	1.04	23.5	1.04	22.7	1.05	21.9	1.05	19.3	1.01	16.1	-	-	-	-
	1400	3548		3376		3290		3205		3116		2841		2373		1517		-	
		1.26	28.1	1.28	28.1	1.29	28.1	1.30	28.1	1.30	26.5	1.32	26.5	1.30	25	1.15	23	-	-
2	1450	3675		3509		3426		3343		3259		2997		2572		1888		-	
		1.40	29.6	1.42	29.6	1.43	29.6	1.44	28.7	1.45	28.7	1.46	28	1.45	26	1.36	24.5	-	-
3	1600	4055		3905		3830		3754		3679		3445		3094		2671		-	
		1.89	31.4	1.91	31.4	1.92	31.4	1.93	31.4	1.94	29	1.95	29	1.96	27	1.93	25.3	-	-
	1700	4308		4167		4096		4026		3955		3737		3431		3061		1715	
		2.26	33.2	2.28	33.2	2.30	33.2	2.31	33.2	2.32	33.2	2.34	32	2.35	28.8	2.34	27	2.01	25.8

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ16B



All dimensions are in mm

HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones								
1/4	500	1385		913		-		-		-		-		-		-			
		0.07	6.1	0.09	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
1/3	600	1662		1312		1050		-		-		-		-		-		-	
		0.12	8	0.15	6	0.15	6.3	-	-	-	-	-	-	-	-	-	-	-	-
1/3	700	1939		1634		1491		1253		-		-		-		-		-	
		0.19	10	0.22	7.9	0.23	7.6	0.23	7.9	-	-	-	-	-	-	-	-	-	-
1/2	800	2216		1945		1818		1694		1496		-		-		-		-	
		0.29	12.9	0.32	11.5	0.33	10.9	0.35	10.3	0.35	9.7	-	-	-	-	-	-	-	-
3/4	900	2493		2248		2135		2023		1913		-		-		-		-	
		0.41	15.2	0.44	13.8	0.46	13.3	0.48	12.8	0.50	12.2	-	-	-	-	-	-	-	-
3/4	950	2631		2397		2290		2183		2079		-		-		-		-	
		0.49	16.4	0.51	15.1	0.54	14.5	0.56	14	0.58	13.5	-	-	-	-	-	-	-	-
1	1000	2770		2547		2444		2342		2242		1827		-		-		-	
		0.57	17.6	0.60	16.3	0.62	15.8	0.64	15.3	0.66	14.7	0.69	13.6	-	-	-	-	-	-
1 1/2	1100	3047		2844		2746		2654		2562		2290		-		-		-	
		0.76	20.1	0.79	18.9	0.81	18.4	0.83	17.9	0.85	17.4	0.92	16.2	-	-	-	-	-	-
1 1/2	1150	3185		2991		2896		2807		2719		2458		-		-		-	
		0.86	21.3	0.90	20.1	0.91	19.5	0.94	19.1	0.96	18.6	1.04	17.4	-	-	-	-	-	-

➤ SQ16B

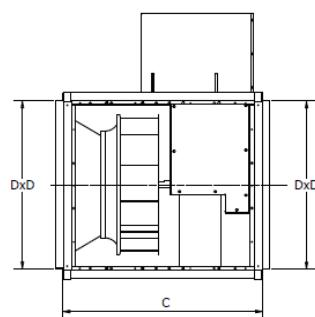
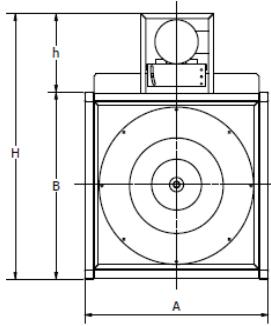
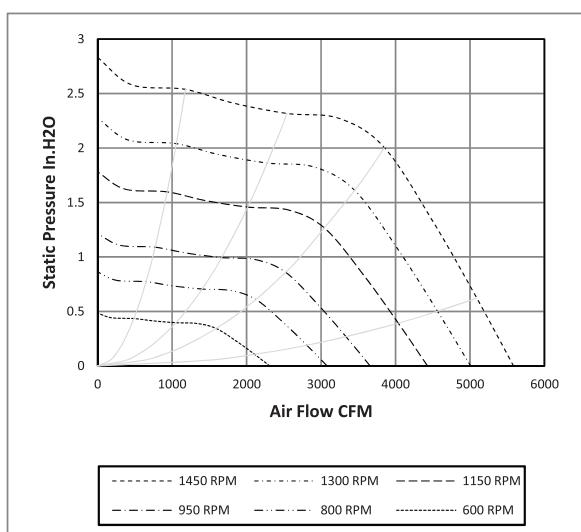
HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1 1/2	1200	3324		3138		3045		2960		2875		2624		2100		-		-	
		0.98	22.6	1.02	21.5	1.03	21	1.06	20.5	1.08	20	1.16	18.8	18.8	17.7	-	-	-	-
2	1300	3601		3429		3343		3261		3182		2949		2643		-		-	
		1.25	25.4	1.28	24.2	1.30	23.7	1.33	23.2	1.35	22.7	1.44	21.5	1.55	20.3	-	-	-	-
	1400	3878		3718		3639		3559		3485		3267		2982		2505		-	
		1.56	28.1	1.60	27	1.62	26.5	1.64	26.0	1.67	25.5	1.76	24.2	1.88	23	1.88	22.1	-	-
3	1450	4016		3862		3786		3709		3635		3425		3148		2779		-	
		1.73	29.5	1.77	28.4	1.79	27.9	1.81	27.4	1.84	27	1.93	25.6	2.06	24.3	2.12	23.5	-	-
	1500	4155		4006		3932		3857		3784		3581		3313		3047		2099	
		1.92	31	1.96	29.9	1.98	29.3	2.00	28.9	2.03	28.4	2.12	27.1	2.25	25.7	2.38	24.9	2.03	24
4	1600	4432		4292		4223		4153		4083		3890		3636		3388		2992	
		2.32	33.5	2.37	32.4	2.39	31.8	2.42	31.3	2.44	30.8	2.54	29.5	2.68	28	2.81	27.1	2.83	26.4

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ20B



A	B	C	D	H	h
711	711	838	651	1076	365
Damper Size - 655 x 655mm					
Fan Weight - 145kg					

All dimensions are in mm

HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones								
1/4	500	1926		1251				-		-		-		-		-		-	
		0.10	6.5	0.12	6			-	-	-	-	-	-	-	-	-	-	-	
1/3	600	2311		1810		1420		-		-		-		-		-		-	
		0.17	8.5	0.20	8.1	0.20	7.8	-	-	-	-	-	-	-	-	-	-	-	
1/2	700	2697		2277		2043		1705		-		-		-		-		-	
		0.27	10.7	0.31	10.4	0.32	10.1	0.32	9.8	-	-	-	-	-	-	-	-	-	
3/4	800	3082		2718		2528		2317		2064		-		-		-		-	
		0.40	14.5	0.44	13.5	0.47	13.6	0.48	13	0.49	12.3	-	-	-	-	-	-	-	
1	900	3467		3147		2979		2810		2618		-		-		-		-	
		0.57	16.8	0.62	16.1	0.64	16	0.67	16.1	0.69	15.5	-	-	-	-	-	-	-	
1	950	3660		3357		3199		3039		2869		1605		-		-		-	
		0.67	18	0.72	17.4	0.75	17.3	0.78	17.2	0.80	17.1	0.65	15.4	-	-	-	-	-	
1 1/2	1000	3852		3565		3416		3265		3113		2503		-		-		-	
		0.79	19.3	0.84	18.6	0.86	18.6	0.89	18.6	0.92	18.6	0.94	17.1	-	-	-	-	-	
1 1/2	1100	4238		3976		3845		3707		3569		3116		-		-		-	
		1.05	21.9	1.10	21.4	1.13	21.3	1.16	21.3	1.19	21.2	1.26	20.4	-	-	-	-	-	
2	1150	4430		4180		4055		3924		3793		3371		-		-		-	
		1.20	23.3	1.25	22.9	1.28	22.8	1.31	22.7	1.35	22.6	1.43	22.0	-	-	-	-	-	

➤ SQ20B

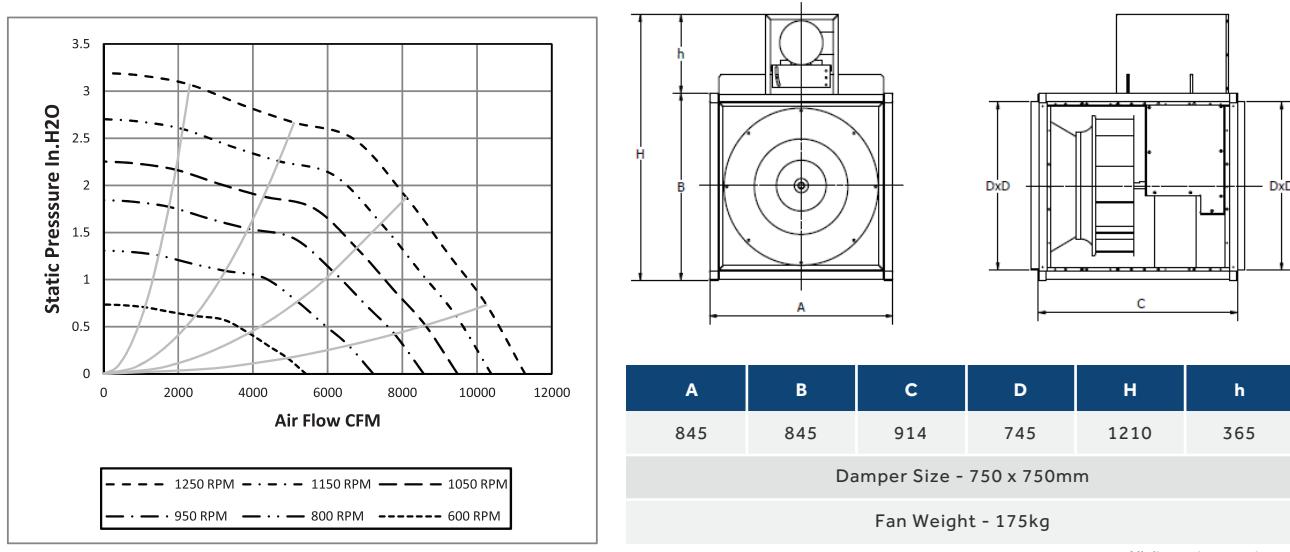
HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
2	1200	4623		4383		4264		4140		4014		3620		2839		-		-	
		1.36	24.8	1.42	24.4	1.45	24.3	1.48	24.2	1.52	24	1.61	23.6	1.59	22.2	-	-	-	-
3	1300	5008		4787		4677		4566		4449		4099		3572		-		-	
		1.73	27.8	1.79	27.5	1.82	27.3	1.86	27.2	1.89	27.1	2.01	26.7	2.10	25.6	-	-	-	-
3	1400	5393		5188		5085		4983		4878		4553		4085		3410		-	
		2.16	31.2	2.23	30.8	2.26	30.6	2.30	30.4	2.33	30.2	2.46	29.8	2.58	28.9	2.56	27.9	-	-
4	1450	5586		5388		5289		5190		5090		4777		4336		3855		1375	
		2.40	32.7	2.47	32.7	2.50	32.7	2.54	31.9	2.58	31.9	2.71	31.2	2.85	30.4	2.94	29.5	1.79	28.6

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ22B



All dimensions are in mm

HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/2	400	1783		1464		-		-		-		-		-		-		-	
		0.08	8.5	0.09	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
	450	2006		1724		1405		-		-		-		-		-		-	
		0.11	9.7	0.12	9.7	0.14	9.7	-	-	-	-	-	-	-	-	-	-	-	
	500	2228		1977		1703		897		-		-		-		-		-	
		0.15	11.5	0.17	11.5	0.18	11.5	9.7	11.5	-	-	-	-	-	-	-	-	-	
	550	2451		2225		1987		1714		-		-		-		-		-	
		0.20	13	0.22	13	0.24	13	0.25	13	-	-	-	-	-	-	-	-	-	
	600	2674		2467		2250		2013		1652		-		-		-		-	
		0.26	14.6	0.28	14.6	0.30	14.6	0.32	14.6	0.31	13.5	-	-	-	-	-	-	-	
3/4	650	2897		2706		2508		2302		2070		1294		-		-		-	
		0.33	15.9	0.35	15.9	0.37	15.9	0.39	15.9	0.41	15.9	0.33	14.3	-	-	-	-	-	
	700	3120		2942		2761		2573		2367		2151		-		-		-	
		0.42	17.5	0.44	17.5	0.46	17.5	0.48	17.5	0.50	17.5	0.51	17.2	-	-	-	-	-	
1	750	3343		3177		3010		2835		2655		2454		-		-		-	
		0.51	19.3	0.54	19.3	0.56	19.3	0.58	19.3	0.61	19.3	0.62	19.3	-	-	-	-	-	

➤ SQ22B

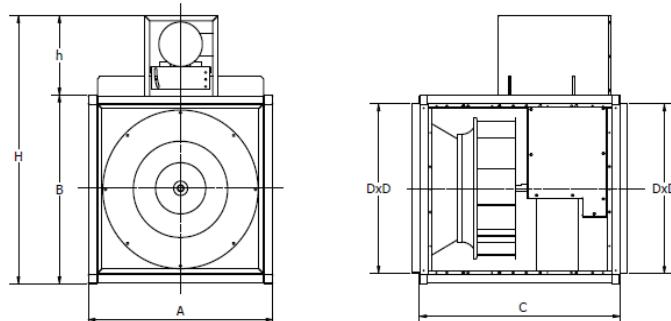
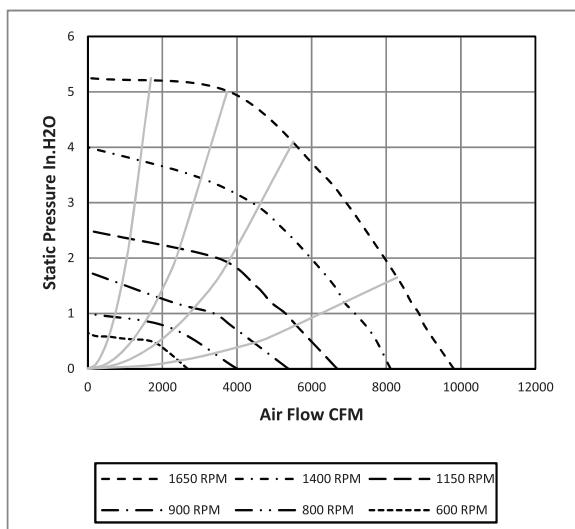
HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1	800	3566		3410		3255		3092		2928		2747		1027		-		-	
		0.62	21	0.65	21	0.67	21	0.70	21	0.72	21	0.74	21	0.49	18.2	-	-	-	-
1 1/2	850	3788		3642		3496		3344		3190		3033		2351		-		-	
		0.75	22.8	0.77	22.8	0.80	22.8	0.82	22.8	0.85	22.8	0.88	22.8	0.88	21.1	-	-	-	-
	900	4011		3873		3735		3594		3448		3303		2810		-		-	
		0.89	24.6	0.91	24.6	0.94	24.6	0.97	24.6	1.00	24.6	1.03	24.6	1.09	24.1	-	-	-	-
2	950	4234		4103		3973		3841		3703		3565		3111		-		-	
		1.04	26.4	1.07	26.4	1.10	26.4	1.13	26.4	1.16	26.4	1.19	26.4	1.26	26.4	-	-	-	-
	1000	4457		4333		4209		4084		3955		3823		3405		1795		-	
		1.22	28.3	1.25	28.3	1.27	28.3	1.30	28.3	1.34	28.3	1.37	28.3	1.45	28.3	1.12	25.1	-	-
3	1050	4680		4562		4443		4325		4203		4079		3693		2975		-	
		1.41	30.3	1.44	30.3	1.47	30.3	1.50	30.3	1.53	30.3	1.57	30.3	1.67	30.3	1.67	28.1	-	-
	1100	4903		4790		4677		4564		4450		4331		3973		3428		-	
		1.62	32.3	1.65	32.3	1.68	32.3	1.72	32.3	1.75	32.3	1.79	32.3	1.90	32.3	1.98	31.3	-	-
3	1150	5126		5018		4910		4802		4694		4581		4239		3730		1930	
		1.85	34.3	1.89	34.3	1.92	34.3	1.95	34.3	1.98	34.3	2.02	34.3	2.14	34.3	2.24	34.3	1.65	30.2
	1200	5348		5245		5141		5038		4934		4828		4501		4026		3303	
		2.10	36.4	2.14	36.4	2.17	36.4	2.21	36.4	2.24	36.4	2.28	36.4	2.40	36.4	2.52	36.4	2.47	33.4

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ22BHP



A	B	C	D	H	h
845	845	914	745	1210	365
Damper Size - 750 x 750mm					
Fan Weight - 175kg					

All dimensions are in mm

HP	RPM	0.000" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.500" Pst		3.000" Pst		3.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
3/4	700	4000		2180		-		-		-		-		-		-		-	
		0.65	12	0.55	9	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	800	4950		3150		2400		-		-		-		-		-		-	
		0.9	15	0.85	11	0.80	11	-	-	-	-	-	-	-	-	-	-	-	
1 1/2	900	5375		3900		3380		2275		-		-		-		-		-	
		1.3	17	1.2	13	1.19	13	1.1	12.5	-	-	-	-	-	-	-	-	-	
2	1000	5950		4650		4220		3725		2420		-		-		-		-	
		1.75	18	1.6	15	1.6	15	1.45	15	1.3	15	-	-	-	-	-	-	-	
3	1150	6685		5635		5300		4910		4500		3475		-		-		-	
		2.65	21	2.4	18	2.38	18	2.41	18	2.38	18	2.3	19	-	-	-	-	-	
4	1250	7325		6400		6100		5775		5450		4650		3625		-		-	
		3.55	24	3.1	20	3.2	20	3.15	20	3.3	20	3.4	21	3.12	21	-	-	-	
5	1400	8115		7750		7160		6875		6605		5975		5275		4400		2790	
		4.95	26	4.8	23	4.85	25	5.0	25	5.03	25	5.1	25	5.1	25	5.1	26	5.1	
7 1/2	1550	8465		8235		8000		7750		7500		6950		6380		5710		4960	
		6.6	28	26	5.3	5.3	26	5.7	27	5.78	247	5.9	27	5.95	28	6.0	28	5.9	

➤ SQ22BHP

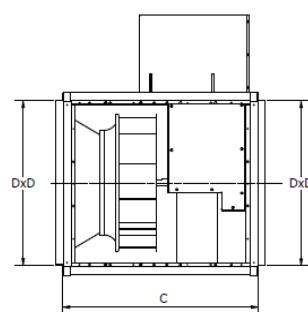
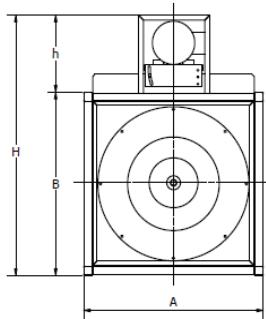
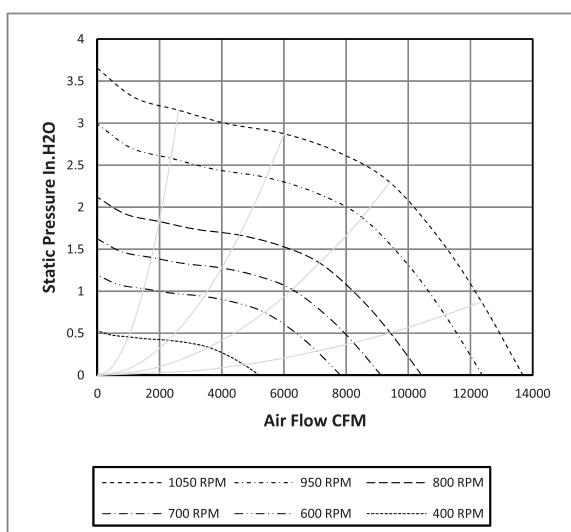
HP	RPM	0.000" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.500" Pst		3.000" Pst		3.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
7 1/2	1600	9350		8750		8500		8325		8050		7605		7050		6500		5855	
		7.3	32	6.5	29	6.6	29	6.7	29	6.8	29	6.9	29	7.1	30	7.0	30	7.1	30
10	1650	9810		9050		8875		8670		8430		7950		7450		6925		6310	
		8.2	33	7.0	30	7.2	30	7.3	30	7.4	30	7.6	30	7.5	31	7.4	31	7.2	31

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ27B



A	B	C	D	H	h
1029	1029	1120	929	1549	520

Damper Size - 935 x 935mm

Fan Weight - 190kg

All dimensions are in mm

HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1/2	400	5216		4101		3077		-		-		-		-		-		-	
		0.34	7	0.39	6.4	0.38	6.3	-	-	-	-	-	-	-	-	-	-	-	
3/4	450	5868		4922		4290		3088		-		-		-		-		-	
		0.48	9	0.55	7.9	0.56	7.4	0.51	7.7	-	-	-	-	-	-	-	-	-	
1	500	6520		5690		5204		4582		3303		-		-		-		-	
		0.65	10.5	0.74	9.5	0.77	9.0	0.77	8.5	0.69	8.5	-	-	-	-	-	-	-	
1 1/2	550	7171		6439		6010		5516		4950		-		-		-		-	
		0.87	12.4	0.97	11.4	1.00	11	1.02	10.5	1.03	10.1	-	-	-	-	-	-	-	
2	600	7823		7157		6781		6388		5893		-		-		-		-	
		1.13	14.2	1.24	13.2	1.28	12.8	1.32	12.4	1.33	11.9	-	-	-	-	-	-	-	
3	650	8475		7860		7535		7172		6799		4927		-		-		-	
		1.44	15.9	1.55	15	1.61	14.7	1.65	14.3	1.68	13.9	1.61	13.9	-	-	-	-	-	
4	700	9127		8556		8271		7939		7602		6344		-		-		-	
		1.80	17.9	1.92	17	1.98	16.6	2.03	16.2	2.07	15.8	2.12	14.7	-	-	-	-	-	
4	750	9779		9246		8980		8692		8378		7288		-		-		-	
		2.21	19.8	2.34	19.1	2.41	18.7	2.47	18.3	2.51	17.9	2.60	16.8	-	-	-	-	-	

➤ SQ27B

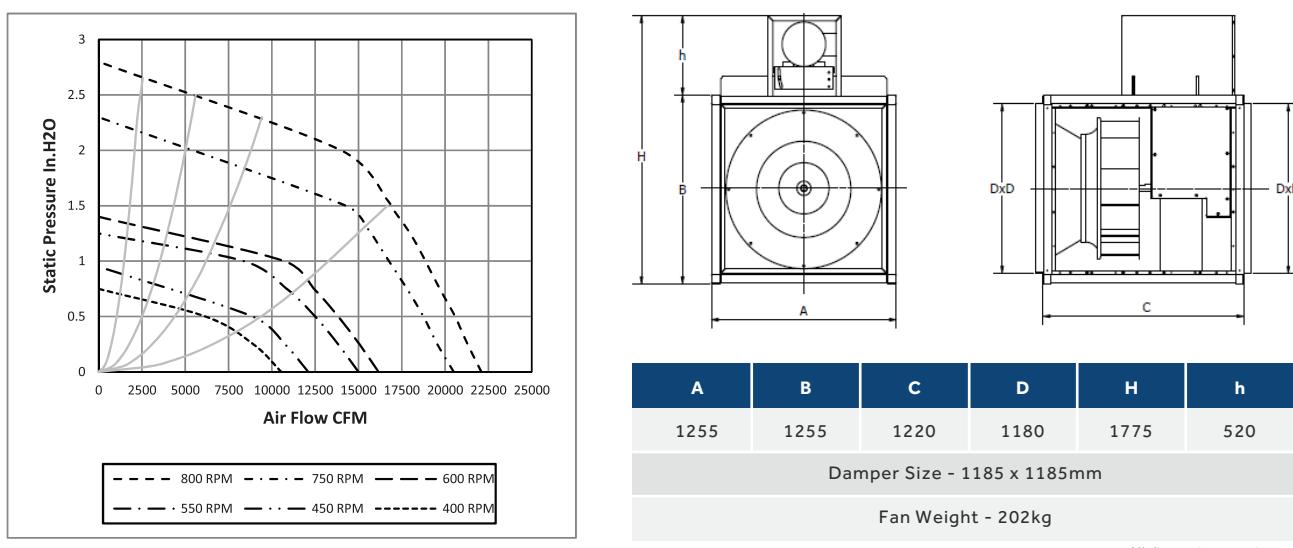
HP	RPM	0.000" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.625" Pst		1.000" Pst		1.500" Pst		2.000" Pst		2.500" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
4	800	10431		9932		9682		9432		9139		8203		6154		-		-	
		2.68	21.8	2.82	21.1	2.89	20.7	2.96	20.4	3.02	20.1	3.14	18.9	3.02	18.9	-	-	-	-
5	850	11083		10613		10378		10143		9890		9057		7629		-		-	
		3.22	23.9	3.37	23.2	3.44	22.9	3.52	22.5	3.58	22.2	3.74	21.1	3.79	19.8	-	-	-	-
7 1/2	900	11735		11291		11069		10847		10625		9844		8580		6176		-	
		3.82	26	3.98	25.3	4.06	25	4.14	24.7	4.22	24.4	4.39	23.3	4.49	22	4.11	22	-	-
7 1/2	950	12387		11966		11756		11546		11335		10617		9505		7896		-	
		4.49	28.3	4.66	28.3	4.74	27.3	4.83	27.3	4.91	26.6	5.11	25.5	5.27	24.2	5.17	23.8	-	-
	1000	13039		12639		12440		12240		12040		11380		10409		9164		6605	
7 1/2	1050	5.24	30.5	5.41	29.9	5.50	29.5	5.59	29.2	5.68	28.9	5.90	27.9	6.14	26.5	6.17	25.3	5.55	25.3
		13691		13310		13120		12930		12739		12133		11234		10109		8465	
		6.06	32.9	6.25	32.2	6.34	31.9	6.43	31.9	6.53	31.2	6.78	31.2	7.04	28.9	7.13	27.7	6.92	28

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ34B



All dimensions are in mm

HP	RPM	0.000" Pst		0.250" Pst		0.500" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.250" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1	300	4825		5910		-		-		-		-		-		-		-	
		0.45	7	0.55	6	-	-	-	-	-	-	-	-	-	-	-	-	-	
1 1/2	400	11550		8930		6170		-		-		-		-		-		-	
		1.3	11	1.0	9	1.1	9	-	-	-	-	-	-	-	-	-	-	-	
2	450	12100		10750		8875		-		-		-		-		-		-	
		1.75	16	1.5	12	1.6	12	-	-	-	-	-	-	-	-	-	-	-	
3	500	13100		12450		10910		8420		-		-		-		-		-	
		2.3	17	1.9	16	2.1	16	2.2	15	-	-	-	-	-	-	-	-	-	
3	550	15200		13825		12500		10860		8375		-		-		-		-	
		2.68	21	2.6	20	2.75	18	2.9	16	2.51	16	-	-	-	-	-	-	-	
4	600	17455		15050		13825		12430		10710		-		-		-		-	
		3.69	22	3.2	21	3.4	20	3.6	18	3.7	18	-	-	-	-	-	-	-	
5	650	18253		16500		15450		12465		12810		11050		-		-		-	
		4.58	28	4.0	26	4.2	24	4.5	22	4.7	22	4.6	20	-	-	-	-	-	
7 1/2	700	21325		18400		17510		16450		15300		13995		12425		-		-	
		6.1	30	5.3	28	5.6	26	5.9	26	6.0	26	6.2	23	6.3	22	-	-	-	

➤ **SQ34B**

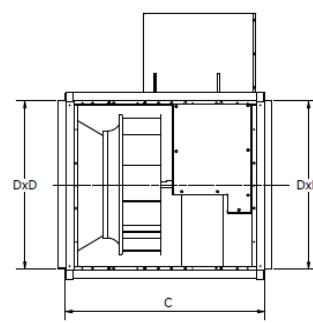
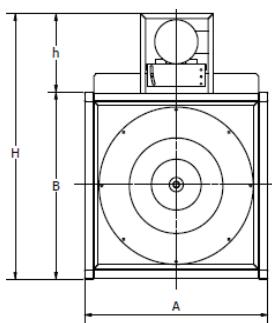
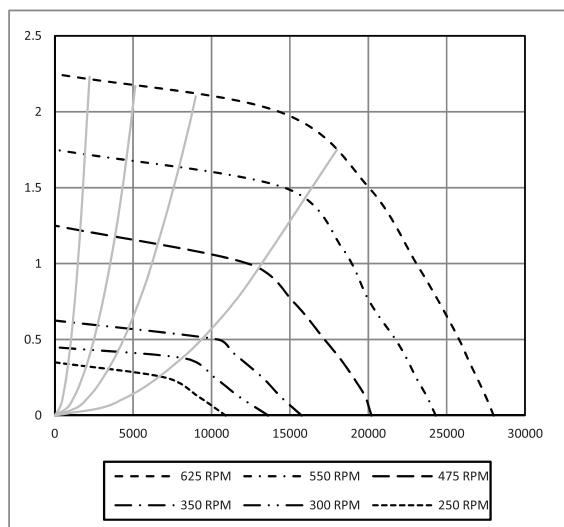
HP	RPM	0.000" Pst		0.250" Pst		0.500" Pst		0.750" Pst		1.000" Pst		1.250" Pst		1.500" Pst		2.000" Pst		2.250" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
10	750	21212		19550		18750		17800		16760		15500		14285		-		-	
		8.5	33	6.2	30	6.5	30	6.8	29	7.0	28	7.25	25	7.5	24	-	-	-	-
	800	23463		21300		20580		19700		18180		170850		16675		14000		-	
		9.5	38	7.8	36	8.1	36	8.4	34	8.7	33	9.3	33	9.5	31	9.4	27	-	-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

BELT DRIVE FAN DATA

SQ- INLINE FAN SERIES

➤ SQ42B



A	B	C	D	H	h
1525	1525	1120	1450	2045	520
Damper Size - 1455 x 1455mm					
Fan Weight - 275kg					

All dimensions are in mm

HP	RPM	0.000" Pst		0.125" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.750" Pst		1.000" Pst		1.500" Pst		2.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
1	250	11600		9150		7090		-		-		-		-		-		-	
		0.8	6.5	0.5	5	0.6	5	-	-	-	-	-	-	-	-	-	-	-	
	275	13000		10630		8900		5625		-		-		-		-		-	
		0.9	7	0.71	6	0.8	6	0.75	6	-	-	-	-	-	-	-	-	-	
1 1/2	300	14125		11750		10200		8340		-		-		-		-		-	
		1.3	9.5	0.9	7	1.0	7	1.1	7	-	-	-	-	-	-	-	-	-	
2	350	16050		14400		13250		11900		10410		-		-		-		-	
		1.65	11	1.5	10	1.5	9	1.51	8	1.6	8	-	-	-	-	-	-	-	
3	375	17350		15400		14350		13100		11800		-		-		-		-	
		2.4	12.5	1.6	10	1.7	10	1.8	10	1.9	10	-	-	-	-	-	-	-	
4	450	20750		18890		18050		17150		16125		13975		9600		-		-	
		3.55	16	3.0	15	3.0	16	3.2	16	3.4	16	3.7	15	3.5	15	-	-	-	
5	475	21624		19800		19050		18200		17210		15200		12325		-		-	
		4.2	20.5	3.6	18	3.9	18	4.1	18	4.2	18	4.6	17	4.8	16	-	-	-	
7 1/2	500	22375		21510		20820		20100		19200		17380		15400		-		-	
		5.5	23	4.0	20	4.2	20	4.4	19	4.6	19	5	18	5.3	17	-	-	-	

➤ SQ42B

HP	RPM	0.000" Pst		0.150" Pst		0.250" Pst		0.375" Pst		0.500" Pst		0.750" Pst		1.000" Pst		1.500" Pst		2.000" Pst	
		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM		CFM	
		BHP	Sones																
7 1/2	550	25175		23740		23050		22450		21740		20075		18350		12700		-	
		5.4	25	5.2	22	5.5	22	6.1	23	5.9	22	6.3	22	6.7	20	6.8	18	-	-
10	600	27325		26025		25425		24850		22800		21275		17890		14640		-	
		8.8	31	6.7	28	7.0	27	7.3	27	7.5	26	8.0	26	9.2	20	8.8	20	-	-
	625	28000		27500		26925		26350		25800		24500		23075		20050		14325	
		9.2	32.5	8.0	30	8.1	29	8.4	29	8.7	29	9.2	28	9.7	28	10.5	23	10	23

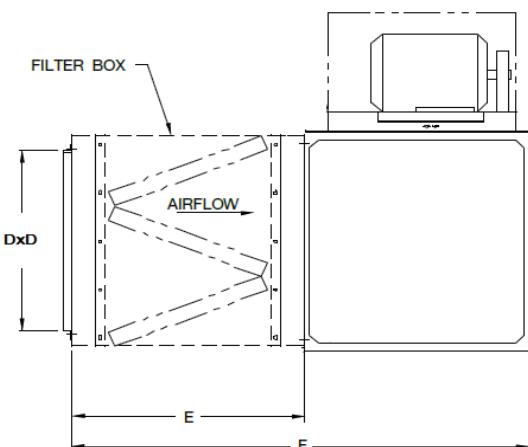
Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sones levels. Performance ratings do not include the effects of appurtenances in the airstream.

FILTER BOX DIMENSIONAL DATA

SQ- INLINE FAN SERIES

FILTER BOX DIMENSIONS

MODEL	E	F	D	Weight KG
FB-SQ10B	675	1285	346	67
FB-SQ12B	800	1410	346	67
FB-SQ13B	800	1410	346	67
FB-SQ15B	815	1653	651	82
FB-SQ16B	815	1653	651	82
FB- SQ20B	815	1653	651	82
FB- SQ22B	840	1754	745	180
FB- SQ27B	840	1958	929	199
FB- SQ34B	840	1958	929	199
FB- SQ42B	840	1958	929	199



➤ **Notes:** All dimensions are in mm unless otherwise noted.

FILTER PRESSURE DROP

Type	Aluminum Washable Filter		Disposable Filter	
Thickness Inches	1"	2"	1"	2"
Pressure Drop In. WG	0.015	0.025	0.2	0.3

MOTOR WEIGHT

HP	1/4	1/3	1/2	3/4	1	1 1/2	2	3	4	5	7 1/2	10
KG	9.5	9.5	12.5	12.5	19	25	27	38	43	45	57	68

TYPICAL SPECIFICATION

Fans shall be Model SQ Backward Inclined, as manufactured by Twin City.

PERFORMANCE

Fans shall be tested in accordance with AMCA 211 and AMCA 311 test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels. SQ fans shall be licensed to bear the AMCA certified ratings seal for both sound and air.

HOUSING

Unit exterior shall be constructed of heavy gauge galvanized steel. The fan housing shall be square in shape and readily attachable to building ductwork. Unit side panels shall be removable for easy access for maintenance and service. The power assembly shall be removable as a complete module through the side access panel. Fan housings shall have universal mounting brackets to accommodate horizontal or vertical installations

IMPELLERS

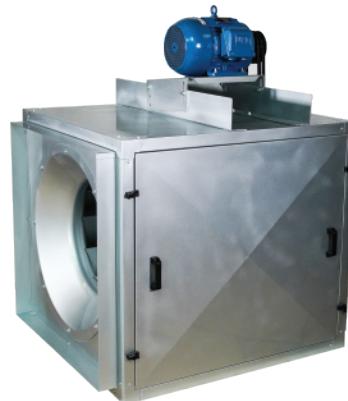
SQ backward inclined impellers shall be single thickness plate type designed for maximum efficiency and quiet operation and shall be of the non-overloading type. Sizes 09 through 42 shall be constructed of aluminum, with blades welded to the spun impeller front plate and back plate.

SHAFT

Shafts shall be AISI 1045 hot rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.25 times the maximum speed.

BEARINGS

Bearings shall be heavy - duty, grease lubricated, anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.



DRIVE

Motor sheaves shall be cast iron, and supplied as either variable pitch or fixed pitch. Drives and belts shall be rated for a minimum of 150% of the required motor HP.

ACCESSORIES

When specified, accessories such as access doors, variable inlet vanes, outlet shutters, inlet screens, etc., shall be provided by Energy Twin City maintain one source responsibility.

FACTORY RUN TEST

All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each wheel shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 / ISO1940 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

WARRANTEE

The manufacturer shall guarantee the workmanship and materials for its SQ Series models for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS
MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | PROPELLER WALL FANS | PROPELLER ROOF VENTILATORS
CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS
RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS
LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCOOLERS | FIBERGLASS FANS | CUSTOM FANS

