



Fantech

June 2007

FKD0607

FKD SERIES

INLINE MIXED FLOW DUCT FANS

**100% Speed Controllable
Three Year Warranty**



Fantech, Inc. certifies that the FKD Series shown herein is 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.

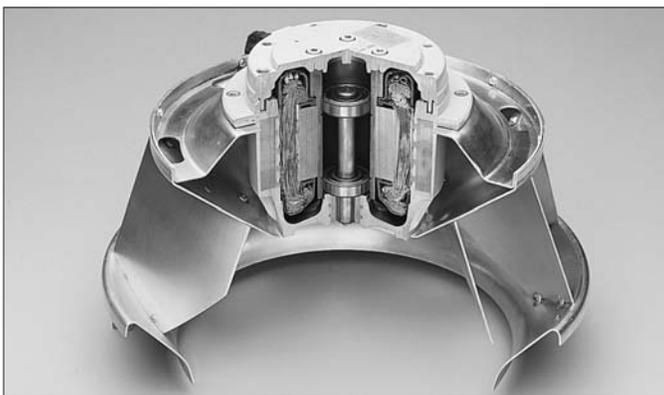
FKD SERIES

INLINE MIXED FLOW DUCT FANS



Description

A mixed flow centrifugal type exhaust/supply fan for moderate size ventilation applications specifically designed to bridge the transition from centrifugal to axial. FKD Series fans offer substantially quieter performance and are easier to install than axial arrangements. Fans can be mounted at any angle at any point along the duct work. Straight-through air flow design allows easy installation. Fans can easily be removed from duct work for service. Fan motors are capable of operating in air stream temperatures of 140°F. Motor bearings are a permanently sealed, self lubricating ball type. All fans are 100% speed controllable through a decrease in the voltage by using a solid state or transformer type control. **All FKD Series fans are backed by Fantech's Three Year Warranty.**



All FKD Series fans are powered by an external rotor motorized impeller. This design provides excellent heat dissipation even at low rpm. All of the FKD Series fans are 100% speed controllable through voltage reduction allowing for precision balancing of systems. FKD8XL through 18 are supplied standard with 115/1/60 motors. FKD18XL and FKD20 have a standard configuration of 230-460/3/60. For additional motor options please contact Fantech Technical Support at 1-800-747-1762.

Features

- 100% Speed Controllable
- Air Flows up to 6300 cfm
- 8" - 20" circular duct connections
- External rotor motor, class F insulation. Sufficient service factor provided to ensure long and maintenance free operation.
- Automatic Reset Thermal Overload Protection
- Self-lubricating/sealed for life precision ball bearings
- Designed for operation in conditioned air streams of up to 140°F
- Galvanized steel housing with baked powder coat finish
- Terminal box with prewired electrical strip
- Mixed Flow impeller
- **Three Year Warranty**

Construction Specifications

Fan housings are constructed of formed galvanized steel casings and pressed inlet and outlet cones. Internal structural members and motor mounting bracket combine to form a rigid framework supporting the motor and impeller. Integral turning vanes for maximized air flow and pressure are included. Units are supplied with a baked powder coating as standard.

Fan impellers are a non-overloading mixed flow axial/ centrifugal type. The FKD14XL through FKD18 impeller is a high density polyamide resin. While the impellers of the FKD8XL through FKD14, FKD18XL, & FKD20 is made of aluminum. Inlet cones are carefully matched to the venturi for maximum efficiency. Each motorized impeller assembly is statically and dynamically balanced for smooth, vibration free operation.

All of the FKD Series fans are 100% speed controllable, direct drive motorized impeller assemblies with sealed, self lubricating bearings. Because of these unique features, the time and costs associated with initial system balancing and constant maintenance schedules are virtually eliminated. Fans are supplied with a factory installed prewired electrical terminal strip for ease of electrical connection. Three phase units are typically supplied prewired for 460 volts but may be supplied as 208-230 when specified or are easily rewired in the field. An optional factory installed disconnect switch can be included when specified.

All FKD Series fans are UL and cUL listed for electrical safety and AMCA Certified for sound and air performance.

Mounting

All FKD Series fans can be mounted either horizontally, vertically or at any angle. Fan mounting options include suspending the unit with neoprene or spring hanging isolators or horizontal surface mounting the unit with neoprene or spring base isolators. The fans may also be secured to a vertical surface using angle brackets and vibration isolators.

Speed Controllability

Due to the excellent heat dissipating characteristic of the external rotor motor, all FKD Series fans are 100% speed controllable through voltage reduction. Fantech offers a variety of fan motor speed controls including single phase solid state and step transformers, three phase step and variable voltage transformers, as well as single and three phase variable frequency drives. Proportional output controls for automatic fan operation and energy management can also be provided.

System Balancing

Rather than adjusting belt tension, system balancing is achieved by measuring the system flow or pressure and adjusting the fan performance by "dialing-in" or setting the fan speed with a variable voltage or step transformer control. This control flexibility allows the system to be adjusted to exacting specifications. Speed Control performance regulation also eliminates the need for correct belt alignment and tensioning as well as maintenance associated with belt drive systems. Speed controls may also be used as secondary steps for multiple speed systems. By using the appropriate contactor, fan speed can be manually or automatically switched from high to low and back again.

Performance Data

Air Performance Data

FKD Series air performance data has been presented at five voltages representing a percentage of full line voltage. Additional performance can be interpolated between the charted test points and achieved using a variable voltage control. For additional assistance determining fan operation at intermediate voltages/rpm, please contact Fantech's engineering department.

Sound Data

Sound data is presented in eight full octave bands as fan inlet sound power - L_{Wj} , dB; total fan inlet sound power L_{Wj} , dB(A); and in fan inlet sound levels. Silencers for additional attenuation of sound transmitted into the duct are available.

Typical Specifications for Model FKD Inline Duct Fans

Supply, exhaust or return air inline fans shall be of the centrifugal, direct driven type.

Construction

Fan housing shall be constructed of heavy gauge galvanized sheet metal with a protective baked enamel finish. Fan shall be supplied with externally mounted electrical terminal box with pre-wired terminal strip connections. Integral disconnect switch shall be provided when specified.

Motorized impeller shall be a totally enclosed external rotor type, Class F insulation. Single phase motors shall be permanent split capacitor type. Three phase motors shall be dual wound for 230V or 440/460V. All motors shall be a permanently sealed self lubricating ball bearing type. Motors shall be equipped with automatic reset thermal overload protection. Motors shall be acceptable for continuous duty. Sufficient service factor shall be provided to ensure long maintenance free operation over maximum load conditions.

Fan wheel shall be of the mixed flow centrifugal type with a well designed inlet venturi for maximum performance. Motorized impeller shall be both statically and dynamically balanced as one integral unit to provide for vibration free performance. The FKD14XL through FKD18 impeller shall be molded of high density polyamide resin. While the impellers of the FKDBXL through FKD14, FKD18XL, & FKD20 shall be constructed of aluminum.

Performance

Fan air flow and sound performance shall be based on tests conducted in accordance with AMCA Standard 211 and 311 and shall be licensed to bear the AMCA Certified Ratings label.

Code Approval

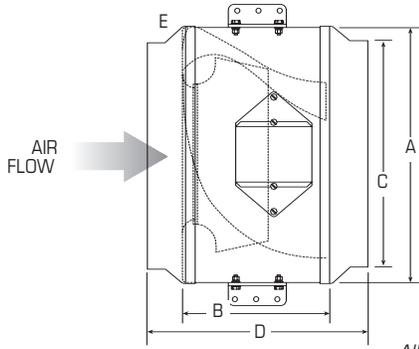
Fan shall be tested and approved by UL and CSA (or equals) for safety.

FKD Series shall be manufactured under the authority of Fantech, Inc., Sarasota, FL.



Fantech, Inc. certifies that the FKD Series shown herein is 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.

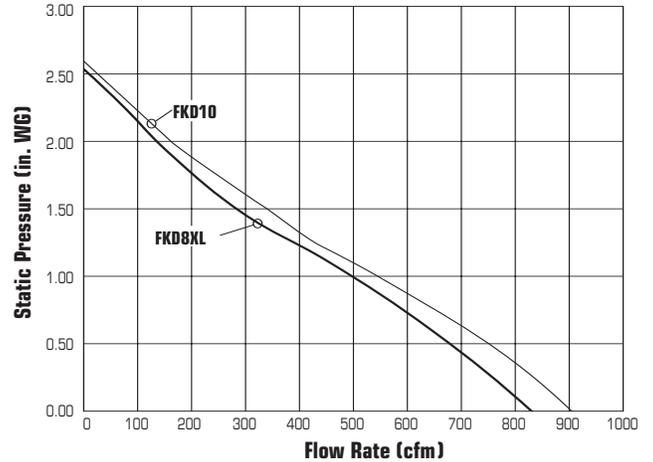
FKD 8XL and 10



All dimensions in inches.

Dimensional Data

Model	A	B	C	D	E
FKD-8XL	12½	7	8	14	¾
FKD-10	12½	7	10	11½	¾



Air Performance Data¹

Model	Nom. RPM	Max. Watts	Static Pressure in Inches W.G.										
			Amps	Volts	0.00"	.125"	.25"	.375"	.50"	.75"	1.00"	1.25"	1.50"
FKD-8XL	2700	327	2.99	115	836	799	761	720	680	595	499	393	286
FKD-10	2700	329	2.99	115	910	873	836	795	752	653	547	432	342



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Sound Data

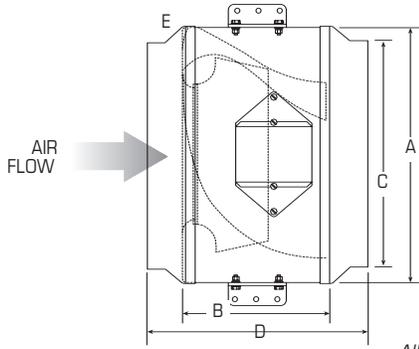
Model	Nom. RPM	SP	Sound Power re 10-12 Watts								dB(A)	L _{wi} †Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
FKD-8XL	2700	0.250	81	79	78	78	71	65	64	62	78	15.2
		0.500	78	79	78	76	70	63	63	60	77	14.1
		0.750	79	81	79	78	70	63	63	59	78	14.8
		1.000	82	84	82	78	70	64	63	59	79	15.9
FKD10	2700	0.250	69	83	80	77	74	68	68	68	80	16.9
		0.500	69	84	78	76	73	66	67	65	78	15.3
		0.750	70	86	79	75	72	65	66	63	78	16.3
		1.000	72	87	81	76	72	64	65	61	79	16.3
		0.250	74	80	75	77	74	69	68	69	79	17.2
		0.500	74	81	75	77	73	67	66	66	78	15.2

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 311. Values shown are for inlet L_{wi} and total inlet L_{wi}A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction.

*Units using speed control are not licensed to bare the AMCA Seal.

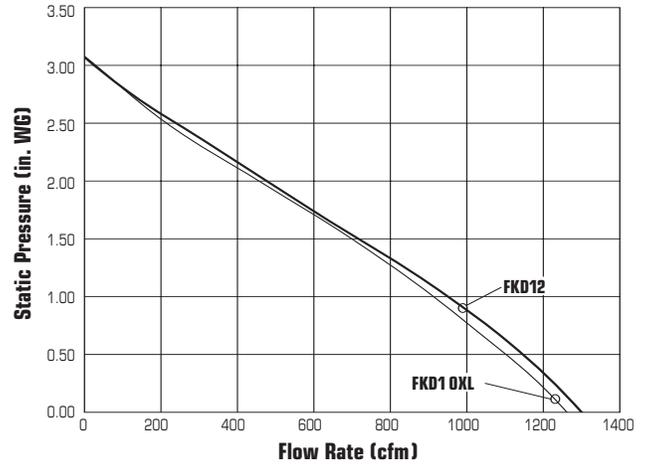
FKD 10XL and 12



All dimensions in inches.

Dimensional Data

Model	A	B	C	D	E
FKD-10XL	14	8½	10	15½	¾
FKD-12	14	8½	12	12	¾



Air Performance Data¹

Model	Nom. RPM	Max. Watts	Max. Amps	Volts	Static Pressure in Inches W.G.										
					0.00"	.125"	.25"	.375"	.50"	.75"	1.00"	1.25"	1.50"	1.75"	2.00"
FKD-10XL	2850	529	4.84	115	1266	1226	1187	1147	1100	1006	911	810	696	579	460
FKD-12	2900	531	4.86	115	1305	1266	1228	1189	1145	1054	948	833	712	592	479



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Sound Data

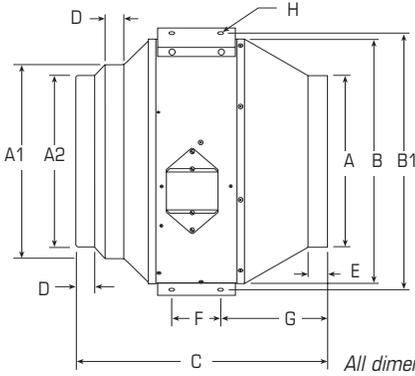
Model	Nom. RPM	SP	Sound Power re 10-12 Watts								dB(A)	L _{wi} tSones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
FKD-10XL	2850	0.250	78	85	82	83	78	75	74	72	85	23
		0.500	78	85	81	82	77	74	73	71	83	21
		0.750	79	85	81	81	76	72	72	70	83	21
		1.000	82	86	82	80	76	71	71	69	82	20
FKD12	2900	0.250	84	86	82	86	80	76	76	73	87	25
		0.500	82	85	81	85	79	75	75	72	86	23
		0.750	82	85	82	83	79	74	74	71	85	22
		1.000	85	85	83	83	78	73	72	70	84	22
		0.250	82	86	82	84	79	76	75	74	86	25
		0.500	80	86	82	83	79	75	74	73	85	23

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wiA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels. Ratings do not include the effect of duct end correction.

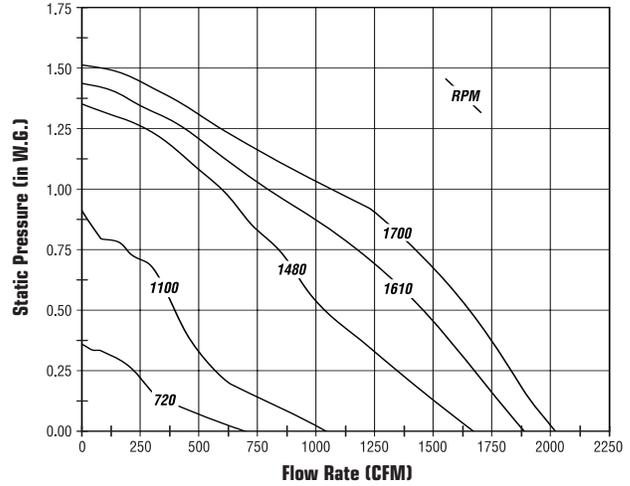
*Units using speed control are not licensed to bare the AMCA Seal.

FKD 12XL



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 45 lbs.
 Nominal Hp - 0.50 Hp
 Outlet Velocity (fpm) = CFM x 1.333
 Tip Speed (fpm) = RPM x 3.717



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
12	—	12	17 ³ / ₈	20 ¹ / ₄	18 ³ / ₈	7 ³ / ₈	1 ⁵ / ₈	4	7 ³ / ₄	3 ³ / ₈

All dimensions in inches.

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"
115	1700	500	4.80	2016	1920	1832	1746	1649	1548	1423	1066	606

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	t [†] Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1700	0.250	81	87	86	79	76	70	63	57	82	19.0
		0.500	82	88	86	79	76	69	63	56	82	18.7
		0.750	84	89	86	79	76	69	63	56	82	19.2
		1.000	86	91	87	80	76	69	64	57	83	21
		1.250	86	90	87	80	76	70	64	58	83	21



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Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"
45	720	163	4.37	678	358	233	—	—	—	—	—	—
60	1100	264	5.42	1041	776	573	467	398	340	—	—	—
75	1480	396	5.97	1666	1504	1343	1188	1044	931	839	600	270
85	1610	426	5.32	1885	1775	1668	1559	1444	1320	1174	802	44

Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	t [†] Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	720	0.125	74	74	58	51	45	37	33	32	60	5.0
		0.250	75	81	65	57	52	44	39	36	66	7.8
		0.125	77	68	73	62	55	47	41	39	66	7.2
60	1100	0.250	77	75	72	62	56	49	42	40	67	7.6
		0.375	79	75	75	66	60	53	46	42	69	8.9
		0.125	79	85	81	73	70	63	59	50	77	14.3
75	1480	0.250	79	84	79	72	69	62	57	48	76	13.3
		0.500	82	84	79	72	68	61	56	48	75	13.4
		0.750	84	87	81	74	70	64	58	51	78	15.8
85	1610	0.250	81	86	83	77	74	67	61	54	80	16.5
		0.500	82	87	83	77	73	66	60	53	79	16.5
		0.750	84	88	83	77	73	66	61	54	80	17.5
		1.000	85	89	85	78	74	67	62	55	81	18.6

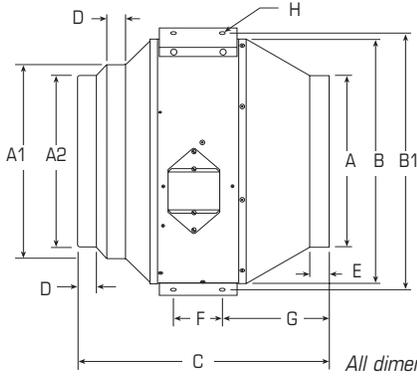


Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wi} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

[†] The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.

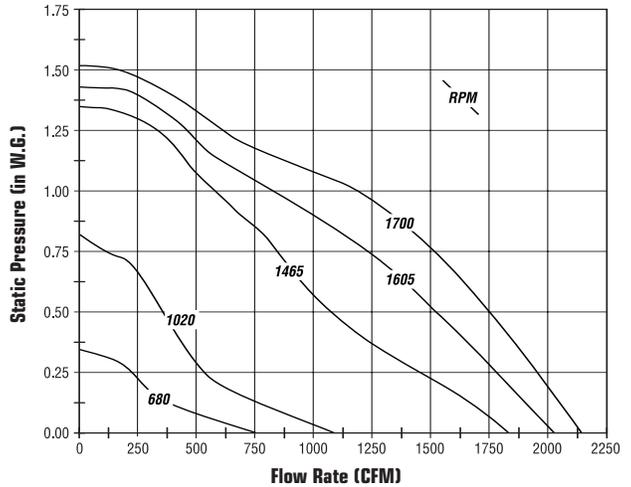
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FKD 14



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 45 lbs.
 Nominal Hp - 0.50 Hp
 Outlet Velocity (fpm) = CFM x 0.937
 Tip Speed (fpm) = RPM x 3.717



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
14	—	14	19¾	22½	20¼	1½	1⅝	4	11⅝	¾

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"
115	1700	495	4.76	2156	2061	1965	1868	1764	1649	1520	1193	623

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1700	0.250	79	89	86	78	72	71	64	61	82	18.9
		0.500	79	88	86	77	73	69	64	58	81	18.4
		0.750	79	89	84	78	73	69	63	56	81	18.3
		1.000	81	92	84	78	73	69	63	56	82	19.8
		1.250	83	91	83	79	73	69	63	57	81	19.6

Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"
45	680	162	4.36	751	374	203	—	—	—	—	—	—
60	1020	259	5.29	1085	770	537	438	359	—	—	—	—
75	1465	396	5.99	1845	1671	1460	1245	1077	958	850	585	322
85	1605	423	5.28	2039	1912	1788	1666	1529	1387	1236	835	463

Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	680	0.125	72	81	61	52	43	36	33	37	66	7.0
		0.250	74	85	65	56	47	41	36	38	70	9.4
		0.125	75	72	75	63	55	48	41	41	68	8.0
60	1020	0.250	76	75	73	62	54	47	41	40	67	7.7
		0.375	78	74	76	65	57	51	45	42	69	8.9
		0.125	78	90	81	74	69	67	62	56	79	17.2
75	1465	0.250	77	90	80	73	68	65	60	51	78	16.5
		0.500	80	89	77	72	66	62	56	49	77	15.3
		0.750	82	91	79	74	68	64	58	51	78	16.8
85	1605	0.250	79	88	83	77	71	69	63	58	80	17.6
		0.500	79	88	82	76	71	67	62	55	79	16.8
		0.750	81	90	81	76	71	67	61	54	79	17.4
		1.000	82	91	82	77	71	67	61	55	80	18.4

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/160 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wiA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.

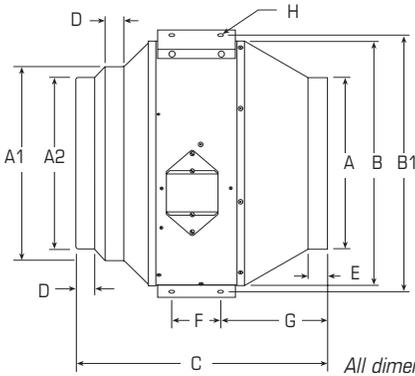
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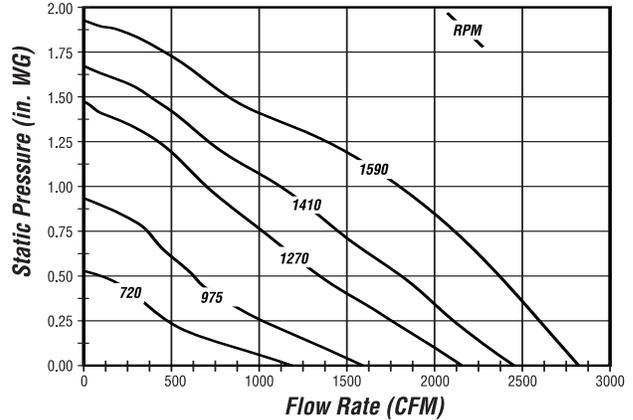


FKD 14XL



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 55 lbs.
 Nominal Hp - 0.75 Hp
 Outlet Velocity (fpm) = CFM x 0.937
 Tip Speed (fpm) = RPM x 4.346



Dimensional Data

A	A1	A2	B ₁	B1	C	D	E	F	G	H
14	—	14	19 ³ / ₄	22 ¹ / ₈	20 ¹ / ₄	1 ¹ / ₂	1 ⁵ / ₈	4	11 ¹ / ₈	³ / ₈

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"
115	1550	738	7.12	2619	2517	2416	2303	2180	1936	1662	1294	843

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1550	0.000	84	89	84	77	71	69	64	56	80	19.0
		0.250	83	90	84	76	71	68	63	56	80	18.9
		0.500	83	90	84	76	71	68	61	56	80	19.0
		1.000	83	92	83	77	72	68	62	57	81	20
		1.250	84	93	83	78	72	68	63	58	81	21



Fantech, Inc. certifies that the FKD Series shown herein is 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.

Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.								
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"
45	650	113	4.76	984	666	427	224	—	—	—	—	—
60	950	323	5.98	1415	1192	980	793	642	361	—	—	—
75	1150	459	6.79	1897	1717	1541	1361	1200	914	658	316	—
85	1300	547	7.14	2172	2030	1880	1723	1575	1295	992	672	253
115	1550	738	7.12	2619	2517	2416	2303	2180	1936	1662	1294	843



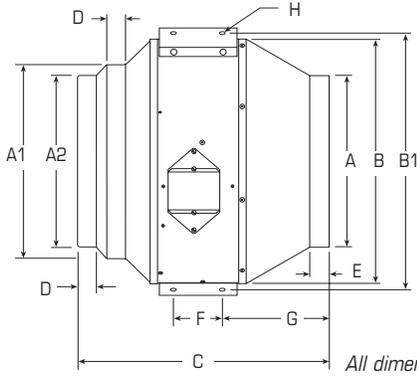
Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	650	0.000	68	63	57	55	50	36	32	38	56	3.8
		0.250	70	75	62	57	50	44	39	39	62	6.0
60	950	0.000	77	78	67	60	58	53	42	39	66	8.1
		0.375	76	79	70	62	57	51	45	41	67	8.6
		0.750	78	83	75	70	63	59	54	49	73	12.3
75	1150	0.000	78	84	73	67	63	61	52	45	72	12.1
		0.250	77	82	73	67	61	58	50	46	71	11.2
		0.500	79	83	73	68	63	58	52	48	72	11.8
		0.750	81	86	75	72	65	61	56	51	75	14.3
85	1300	0.000	80	87	78	71	66	64	57	49	76	15.1
		0.250	80	87	77	71	66	63	56	50	75	14.5
		0.500	81	86	76	71	65	61	55	50	75	14.1
		1.000	81	89	81	74	68	64	59	54	78	16.8
		1.250	82	91	82	77	70	67	61	57	80	19.4

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the accessories. Performance certified for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wiA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

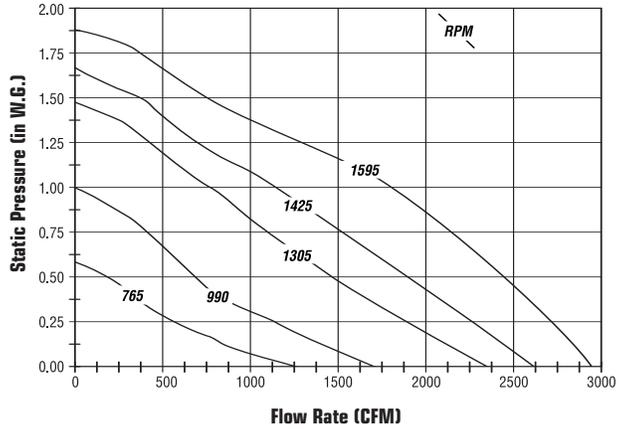
† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.
 *Units using speed control are not licensed to bare the AMCA Seal.

FKD 16



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 55 lbs.
 Nominal Hp - 0.75 Hp
 Outlet Velocity (fpm) = CFM x 0.738
 Tip Speed (fpm) = RPM x 4.436



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
16	16	—	19 ³ / ₄	22 ¹ / ₈	18 ³ / ₄	1 ¹ / ₂	1 ⁵ / ₈	4	9 ¹ / ₂	3 ⁵ / ₈

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.									
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
115	1595	742	6.39	2952	2831	2707	2580	2445	2300	2144	1804	1306	774

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	t _{Sones}
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1595	0.500	82	89	83	77	71	70	65	57	80	18.5
		0.625	82	90	82	77	71	70	64	57	80	18.5
		0.750	82	90	82	77	71	70	64	57	80	18.6
		1.000	82	93	82	78	72	70	63	57	81	20
		1.250	82	92	83	79	73	71	64	58	82	20



Fantech, Inc. certifies that the FKD Series shown herein is 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.

Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.									
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
45	765	225	5.13	1258	847	557	364	—	—	—	—	—	—
60	990	341	6.13	1702	1397	1137	839	687	545	—	—	—	—
75	1305	501	6.84	2348	2117	1899	1682	1470	1287	1107	766	—	—
85	1425	582	6.85	2610	2436	2265	2088	1898	1707	1529	1147	726	—



Sound Data with Speed Control*

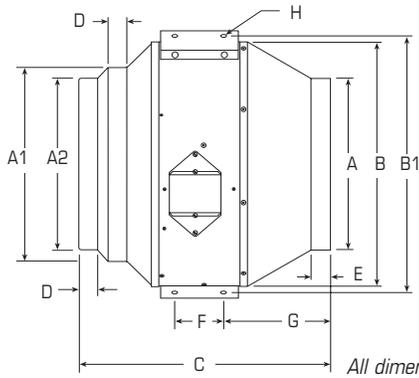
Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	t _{Sones}
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	765	0.250	72	73	64	57	52	47	43	41	62	6.0
		0.375	75	76	69	62	57	52	47	44	66	7.7
60	990	0.250	76	72	70	63	57	54	47	44	66	7.3
		0.375	76	77	72	65	59	57	49	46	68	8.5
		0.500	78	79	74	67	61	62	52	47	70	9.7
75	1305	0.375	78	86	76	70	64	61	55	49	74	13.2
		0.500	78	85	76	70	64	62	55	49	74	13.0
		0.625	79	86	77	71	65	63	56	50	75	13.5
		0.750	79	88	78	72	66	66	57	51	76	14.8
85	1425	0.375	81	86	80	73	68	65	60	53	77	15.2
		0.500	80	86	78	73	67	65	59	52	76	14.7
		0.625	80	87	80	73	68	65	59	52	77	15.2
		0.750	81	88	80	74	68	65	59	53	77	15.7
		1.000	81	89	80	76	70	67	61	55	79	16.9

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wi}A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

*The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.

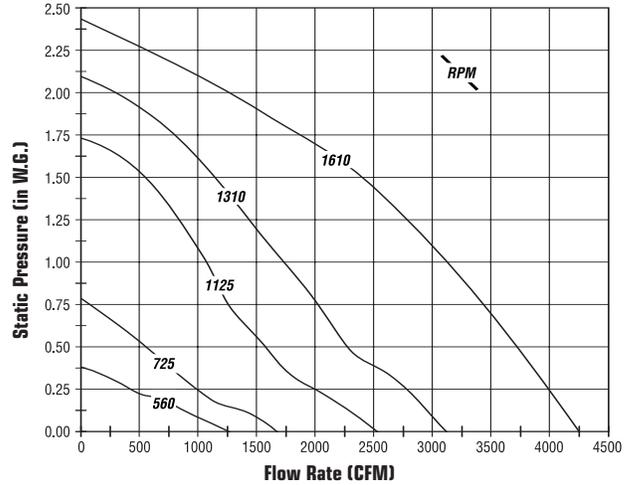
*Units using speed control are not licensed to bare the AMCA Seal.

FKD 16XL



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 85 lbs.
 Nominal Hp - 1.50 Hp
 Outlet Velocity (fpm) = CFM x 0.738
 Tip Speed (fpm) = RPM x 4.869



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
16	—	16	22 1/8	24 3/8	23 1/4	1 1/4	1 5/8	7 7/8	8 1/2	1/2

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"
115	1610	1421	12.40	4274	4144	4014	3880	3743	3604	3452	3137	2794	2379	1855	1242	541

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1610	0.375	89	87	83	83	79	74	71	64	84	20
		0.500	89	93	89	83	79	74	71	64	86	25
		0.750	89	93	88	83	79	74	69	62	86	24
		1.000	89	93	88	83	79	74	69	62	85	24
		1.250	91	94	87	83	78	74	68	62	86	25
		1.500	93	96	88	84	79	75	69	63	86	27



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Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"
45	560	323	8.23	1259	848	381	—	—	—	—	—	—	—	—	—	—
60	725	529	10.49	1695	1344	983	749	529	315	—	—	—	—	—	—	—
75	1125	880	12.96	2535	2270	1998	1753	1575	1424	1283	1063	833	516	—	—	—
85	1310	1102	13.92	3134	2950	2766	2540	2285	2151	2018	1726	1428	1135	755	213	—

Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	560	0.125	75	70	60	53	47	38	34	34	58	4.5
		0.250	79	73	64	57	51	44	38	36	62	5.8
60	725	0.250	83	77	68	60	54	47	40	39	66	7.6
		0.375	85	79	72	64	58	51	44	41	69	9.2
		0.500	85	80	74	67	60	55	48	44	71	10.2
75	1125	0.375	85	85	74	69	63	58	51	45	73	12.5
		0.500	84	86	75	69	63	59	52	47	74	13.1
		0.750	86	86	78	72	66	62	56	50	76	14.7
		1.000	88	89	82	76	70	65	59	54	79	17.4
85	1310	0.375	89	88	80	75	69	65	59	52	78	16.7
		0.500	89	88	81	75	69	65	57	51	78	16.8
		0.750	88	89	81	76	70	66	59	53	79	17.3
		1.000	89	90	84	77	72	67	61	55	81	19.3
		1.250	90	91	86	79	74	69	63	58	82	21

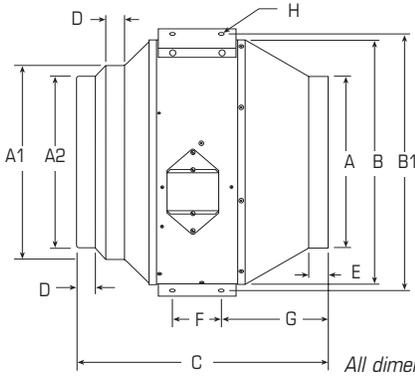


Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wiA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

†The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.

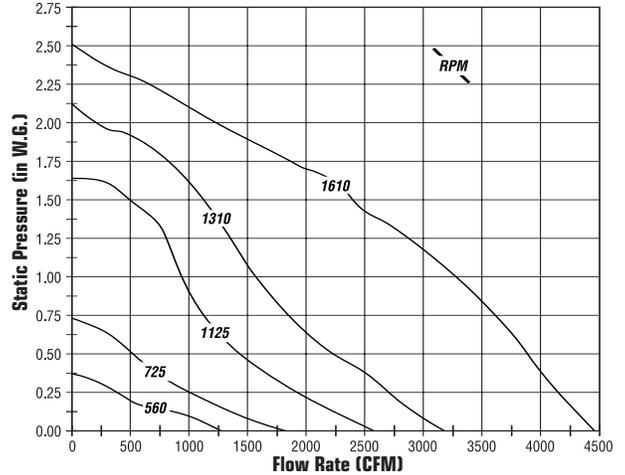
*Units using speed control are not licensed to bare the AMCA Seal.

FKD 18



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 85 lbs.
 Nominal Hp - 1.50 Hp
 Outlet Velocity (fpm) = CFM x 0.583
 Tip Speed (fpm) = RPM x 4.869



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
18	18	—	22½	24¾	21¾	1¼	1⅝	7⅞	7	½

Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"
115	1610	1141	12.30	4448	4992	4130	3991	3871	3743	3583	3239	2843	2380	1849	1231	650

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	1610	0.375	86	93	90	83	76	74	71	66	86	25
		0.500	85	93	89	82	76	74	71	65	85	24
		0.750	85	92	88	81	75	73	70	62	84	23
		1.000	85	92	87	81	75	73	69	60	84	23
		1.250	86	93	87	82	76	73	68	61	84	23
		1.500	87	94	87	85	76	73	68	61	86	25

Air Performance Data with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"
45	550	293	7.51	1286	817	375	—	—	—	—	—	—	—	—	—	—
60	760	500	9.73	1746	1332	990	722	528	308	—	—	—	—	—	—	—
75	1120	798	11.87	2528	2202	1905	1653	1428	1262	1118	936	802	—	—	—	—
85	1300	1022	13.00	3158	2898	2685	2481	2221	2012	1850	1563	1342	1099	818	—	—

Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
45	550	0.125	70	67	57	49	42	34	31	33	55	3.6
		0.250	76	73	62	55	47	41	35	35	60	5.3
60	760	0.250	79	76	64	57	50	43	37	37	63	6.4
		0.375	81	79	70	62	55	48	42	40	67	8.2
75	1120	0.500	82	81	73	65	58	52	46	42	70	10.0
		0.375	80	83	71	65	60	56	48	42	70	10.6
		0.500	81	85	73	67	61	57	50	45	72	11.7
		0.750	84	87	77	71	65	61	54	49	75	14.4
85	1300	1.000	85	89	80	74	68	65	58	52	78	16.7
		0.375	82	86	78	72	66	64	57	48	75	14.0
		0.500	83	86	79	72	66	63	55	48	76	14.0
		0.750	84	87	79	73	67	63	57	51	77	15.3
		1.000	86	89	83	76	70	66	59	54	80	17.7
		1.250	87	90	85	80	72	68	62	56	82	19.8

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wi}A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction.

† The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels.

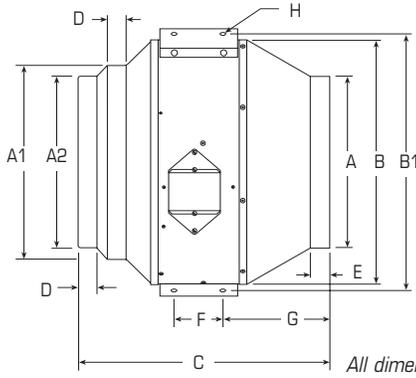
*Units using speed control are not licensed to bare the AMCA Seal.



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FKD 18XL



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 95 lbs.
 Nominal Hp - 3.00 Hp
 Outlet Velocity (fpm) = CFM x 0.583
 Tip Speed (fpm) = RPM x 5,393

All dimensions in inches.

Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
18	—	18	28¼	30¾	29¼	2	1¼	7⅞	12½	½

Air Performance Data¹

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.25"
460	1720	2208	3.75	6236	6115	5995	5874	5754	5500	5199	4909	4602	4241	3703	2794	1886

Sound Data

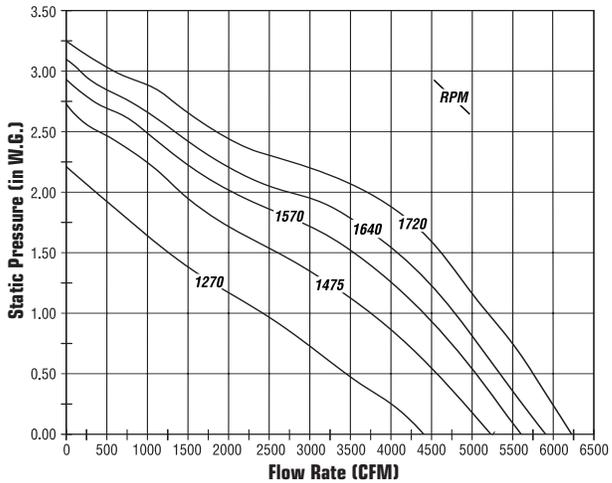
Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
460	1720	0.375	94	98	91	85	81	78	75	70	89	32
		0.500	94	98	91	85	81	78	75	70	89	32
		0.750	94	97	90	84	80	77	74	68	88	31
		1.000	94	97	90	84	80	77	74	67	88	30
		1.500	94	98	89	83	80	77	73	65	87	30
		2.000	96	100	87	82	79	77	72	65	88	32
2.500	100	96	87	83	81	78	72	65	87	29		

Air Performance Data¹ with Speed Control*

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.25"
165	1270	1172	4.74	4407	4209	3972	3718	3454	2932	2385	1815	1296	829	—	—	—
220	1475	1570	4.67	5219	5060	4901	4732	4563	4183	3722	3213	2619	1962	1424	979	—
265	1570	1791	4.38	5606	5463	5323	5191	5060	4754	4400	4002	3538	2862	2075	1455	967
320	1640	1965	4.03	5890	5759	5628	5488	5344	5067	4786	4464	4089	3616	2753	1929	1327

Sound Data with Speed Control*

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
165	1270	0.375	90	91	80	74	71	67	65	52	79	18.9
		0.500	90	89	79	73	70	67	62	51	78	17.5
		0.750	90	86	77	72	69	66	59	52	77	15.7
		1.000	90	86	78	73	70	67	60	53	77	16.2
220	1475	0.375	93	95	85	80	76	73	71	60	84	25
		0.500	93	95	85	79	76	72	70	59	84	24
		0.750	93	94	83	79	75	72	68	58	83	23
		1.000	93	93	82	78	74	71	66	58	82	22
265	1570	0.375	94	97	89	82	78	75	74	64	87	29
		0.500	94	96	88	81	77	74	73	63	86	28
		1.000	94	97	86	80	76	73	70	60	85	27
		1.500	94	97	84	79	76	74	68	60	85	26
320	1640	0.375	94	98	90	83	80	76	75	67	88	31
		0.500	94	97	90	83	79	76	74	66	87	30
		0.750	94	97	89	83	79	76	73	65	87	29
		1.000	94	97	88	82	78	75	72	63	86	28
320	1640	1.500	94	98	86	81	77	75	70	62	86	29
		2.000	97	96	86	81	78	76	70	63	86	28

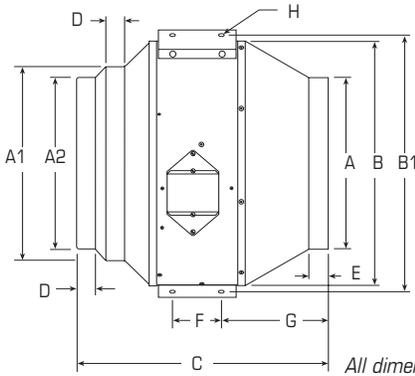


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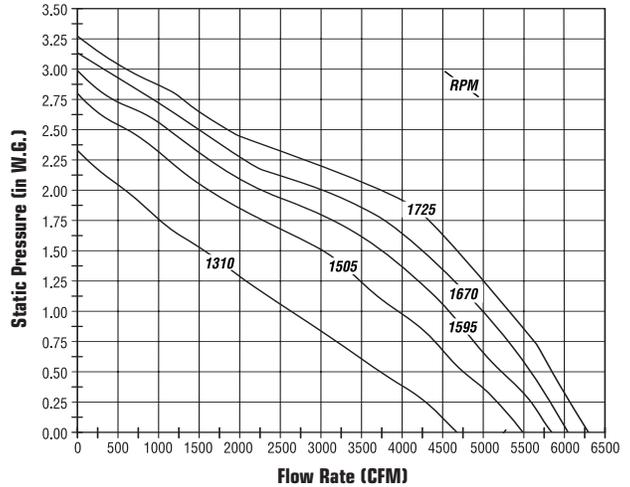
Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of accessories (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/1/60 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction. † The sound ratings shown are business values in fan sones at 0.1 (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan some levels. † Units using speed control are not licensed to bare the AMCA Seal.

FKD 20



Unit Specifications:

Housing Metal Thickness - 18 Gauge
 Approximate Weight - 95 lbs.
 Nominal Hp - 3.00 Hp
 Outlet Velocity (fpm) = CFM x 0.472
 Tip Speed (fpm) = RPM x 5.393



Dimensional Data

A	A1	A2	B	B1	C	D	E	F	G	H
20	20	—	28¼	30½	27¼	2	1¾	7⅞	10½	½

Air Performance Data¹

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.25"
460	1725	2218	3.73	6291	6174	6054	5933	5829	5617	5307	4987	4667	4310	3757	2816	1858

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
460	1720	0.375	94	99	91	84	80	79	77	72	89	34
		0.500	94	99	91	84	80	79	77	71	89	33
		0.750	94	98	90	83	79	78	76	69	88	32
		1.000	94	98	89	83	78	78	76	68	88	31
		1.500	94	96	89	82	78	77	74	65	87	28
		2.000	97	99	87	81	77	77	73	64	87	31
		2.500	98	95	86	81	78	78	72	86	29	

Air Performance Data¹ with Speed Control^{*}

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.125"	.25"	.375"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.25"
165	1310	1234	5.00	4663	4455	4248	3980	3705	3176	2606	2057	1531	1026	583	—	—
220	1505	1620	4.79	5478	5311	5145	4940	4725	4378	3930	3473	2987	2282	1638	1108	608
265	1595	1820	4.41	5831	5697	5563	5401	5213	4881	4559	4190	3729	3101	2289	1652	1121
320	1670	1965	4.01	6056	5933	5810	5684	5556	5294	4980	4625	4230	3755	2992	2069	1491

Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 ⁻¹² Watts								L _{wi} dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
165	1270	0.375	91	92	82	76	71	70	69	55	81	21
		0.500	91	92	81	75	71	69	67	54	80	20
		0.750	91	89	79	73	70	68	61	53	78	17.7
		1.000	91	89	78	73	70	68	61	53	78	17.3
220	1475	0.375	93	97	88	81	77	76	74	65	86	29
		0.500	93	96	87	81	77	75	73	64	86	27
		0.750	93	95	87	80	76	75	72	62	85	26
		1.000	93	95	85	80	75	74	71	61	84	25
		1.500	94	95	85	79	75	74	69	61	84	25
265	1570	0.375	93	98	89	82	77	76	76	66	87	30
		0.500	93	98	88	81	77	76	75	65	87	30
		1.000	93	96	87	80	75	75	73	62	85	27
		1.500	94	98	85	79	75	74	70	61	85	27
		2.000	96	96	84	79	76	76	69	62	85	26
320	1640	0.375	94	98	90	83	79	78	76	69	88	32
		0.500	94	98	89	83	79	77	76	68	88	31
		0.750	94	97	89	82	78	77	75	67	87	30
		1.000	94	96	88	82	77	76	74	65	86	28
		1.500	94	97	87	81	76	75	72	63	86	28
		2.000	96	96	85	80	77	76	71	63	85	27



Fantech, Inc. certifies that the FKD Series shown herein is 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.



Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of apertures (accessories). Performance certified is for installation Type D: ducted inlet, ducted outlet. Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Alternative motors are available. Please consult factory for electrical specifications and delivery on 208-230/160 motors. The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} and total inlet L_{wA} sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effect of duct end correction. † The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet fan sone levels. *Units using speed control are not licensed to bare the AMCA Seal.

Three (3) Year Warranty

This warranty supersedes all prior warranties

DURING ENTIRE WARRANTY PERIOD:

FANTECH will repair or replace any part which has a factory defect in workmanship or material. Product may need to be returned to the Fantech factory, together with a copy of the bill of sale and identified with RMA number:

FOR FACTORY RETURN YOU MUST:

- Have a Return Materials Authorization (RMA) number: This may be obtained by calling FANTECH either in the USA at 1.800.747.1762 or in CANADA at 1.800.565.3548. Please have bill of sale available.
- The RMA number must be clearly written on the outside of the carton, or the carton will be refused.
- All parts and/or product will be repaired/replaced and shipped back to buyer; no credit will be issued.

OR

The Distributor may place an order for the warranty part and/or product and is invoiced. The Distributor will receive a credit equal to the invoice only after product is returned prepaid and verified to be defective.

FANTECH WARRANTY TERMS DO NOT PROVIDE FOR REPLACEMENT WITHOUT CHARGE PRIOR TO INSPECTION FOR A DEFECT. REPLACEMENTS ISSUED IN ADVANCE OF DEFECT INSPECTION ARE INVOICED, AND CREDIT IS PENDING INSPECTION OF RETURNED MATERIAL. DEFECTIVE MATERIAL RETURNED BY END USERS SHOULD NOT BE REPLACED BY THE DISTRIBUTOR WITHOUT CHARGE TO THE END USER, AS

CREDIT TO DISTRIBUTOR'S ACCOUNT WILL BE PENDING INSPECTION AND VERIFICATION OF ACTUAL DEFECT BY FANTECH.

THE FOLLOWING WARRANTIES DO NOT APPLY:

- Damages from shipping, either concealed or visible. Claim must be filed with freight company.
- Damages resulting from improper wiring or installation.
- Damages or failure caused by acts of God, or resulting from improper consumer procedures, such as:
 1. Improper maintenance
 2. Misuse, abuse, abnormal use, or accident, and
 3. Incorrect electrical voltage or current.
- Removal or any alteration made on the FANTECH label control number or date of manufacture.
- Any other warranty, expressed, implied or written, and to any consequential or incidental damages, loss or property, revenues, or profit, or costs of removal, installation or reinstallation, for any breach of warranty.

WARRANTY VALIDATION

- The user must keep a copy of the bill of sale to verify purchase date.
- These warranties give you specific legal rights, and are subject to an applicable consumer protection legislation. You may have additional rights which vary from state to state.

Limitation of Warranty and Liability

This warranty does not apply to any FANTECH INC. product or part which has failed as a result of faulty installation or abuse, incorrect electrical connections or alterations made by others, or use under abnormal operating conditions or misapplication of the product or parts. We will not approve for payment any repair not made by us or our authorized agent without prior written consent. The foregoing shall constitute our sole and exclusive warranty and our sole exclusive liability, and is in lieu of any other warranties, whether written, oral, implied or statutory. There are no warranties which extend beyond the description on the page hereof. In no event, whether as a result of breach of contract, or warranty or alleged negligence, defect incorrect advice or other causes, shall FANTECH be liable for special or consequential damages, including, but not limited to, loss of profits or revenue, loss of use of equipment or any other associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, or claims of customers of purchase for such damages. FANTECH neither assumes or authorizes any person to assume for it any other liability in connection with the sale of product(s) or part(s). Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages so the above limitations and exclusions may not apply to you.

Warning

FANTECH, INC. products are designed and manufactured to provide reliable performance, but they are not guaranteed to be 100% free from defects. Even reliable products will experience occasional failures and this possibility should be recognized by the user. If these products are used in a life support ventilation system where failure could result in loss or injury, the user should provide adequate backup ventilation, supplementary natural ventilation, failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

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