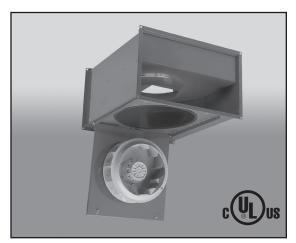


# FRD SERIES

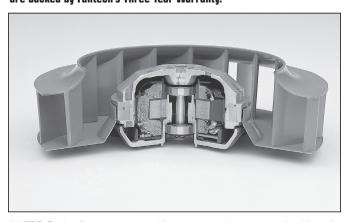
INLINE CENTRIFUGAL DUCT FANS





#### Description

A compact series of centrifugal type exhaust/supply fans specifically designed for installations where space is limited. FRD Series fan housing design allows for installation directly within rectangular duct work without the need for large elbows or transitional sections. The FRD Series fans feature a hinged door to which the motor is mounted. This door simply "swings out" of the housing to provide service access. Fans can be mounted at any angle in any point along the duct work. All fans utilize a non overloading backward inclined wheel. Because the wheels will allow lint to pass through the blades, FRD Series fans are suited for use as duct booster fans in commercial dryer venting applications. Motors are capable of operating in air stream temperatures of up to 140°F. All of the FRD fans are 100% speed controllable through voltage reduction allowing for precision balancing of systems. All FRD Series fans are backed by Fantech's Three Year Warranty.



All FRD Series fans are powered by an external rotor motorized impeller. This design provides excellent heat dissipation even at low rpm. All of the FRD Series fans are 100% speed controllable through voltage reduction allowing for precision balancing of systems. Units can be provided with 115/1/60 or 208-230/1/60.

#### **Features**

- 100% Speed Controllable
- Air Flows up to 2432 cfm
- Rectangular Duct Connections
- External rotor motor. Sufficient service factor provided to ensure long and maintenance free operation over maximum load conditions.
- Automatic Reset Thermal Overload Protection
- Self lubricating/sealed for life precision ball bearings
- Capable of operation in air stream temperatures up to 140°F.
- Galvanized steel housing with electrostatically applied polyester powder coat finish
- Terminal box with prewired electrical strip
- Three Year Warranty

# Typical Specifications for Model FRD 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 steel with powder coat finish. Fan housing design shall allow installation connections directly to or within rectangular duct work. Fan housing shall include a hinged door on which the motor is mounted in order to permit service access to the motor without removing the fan from the duct work. Fans shall be supplied with an electrical terminal box and pre-wired terminal strip connections.

Motorized impeller shall be external rotor type. Motor shall be permanent split capacitor type. Motor shall be a permanently sealed self lubricating ball bearing type. Motor shall be equipped with automatic reset thermal overload protection. Motor 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 backward inclined with a well designed inlet venturi for maximum performance. Impellers shall be constructed of polyamid PA66 or galvanized steel. Motorized impeller shall be both statically and dynamically balanced as one integral unit to provide for vibration free performance.

#### Performance

Fan performance shall be based on tests conducted in accordance with AMCA Standard 210 and AMCA Standard 301 and shall be licensed to bear the AMCA Certified Ratings label.

# Code Approval

Fan shall be tested and approved by UL (or equal) for safety. FRD Series shall be manufactured under the authority of Fantech, Inc., Sarasota, FL.

### Performance Data

#### Air Performance Data

FRD air performance data has been presented at three 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 -  $L_{\rm wi}$ , dB; total fan inlet sound power  $L_{\rm wi}$ , dB(A); and in fan inlet sone levels. Silencers for additional attenuation of sound transmitted into the duct are available.

# FRD12-6

#### View from Discharge

# 11<sup>7</sup>/<sub>8</sub>\* 12<sup>3</sup>/<sub>4</sub>\* All dimensions in inches.

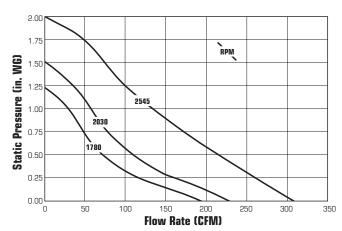
Unit Specifications:

Housing Metal Thickness - 20 Gauge Approximate Weight - 18 lbs. Nominal Hp - 0.10 Hp

# Air Flow

Side View

Outlet Velocity (fpm) = CFM x 2.086 Tip Speed (fpm) = RPM x 1.958



Air Performance Data

Volts	Nom.	Max.	Max.				Sta	tic Pressur	e in Inches \	W.G.			
VUILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
115	2545	85	0.74	309	287	262	238	214	192	171	133	101	75

#### Sound Data

Juliu Da	<i>5</i> 4				So	und Power	re 10 <sup>-12</sup> Wat	its				
Volts	Nom.	SP					ands, Hz				L <sub>wi</sub> dB(A)**	†Sones
	RPM		63	125	250	500	1000	2000	4000	8000	UD(A)***	
		0.750	75	71	72	65	57	54	49	48	67	8.0
115	2545	1.000	75	72	74	66	57	55	50	48	68	8.5
		1.250	75	74	74	68	60	57	52	50	70	9.2
		1.500	74	75	75	70	62	58	54	52	71	9.9



Fantech, Inc. and Fantech Limited certifies that the FRD 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 211 and comply with the requirements of the AMCA Certified Ratings Program.



#### Air Performance Data with Speed Control\*

Volts	Nom.	Max.	Max.				Sta	tic Pressur	e in Inches	W.G.			
VUILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
75	1780	41	0.52	193	155	116	92	73	60	48	29	_	_
85	2030	52	0.59	230	198	162	129	109	92	77	56	35	_

#### Sound Data with Speed Control\*

					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom.	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPM		63	125	250	500	1000	2000	4000	8000	UD(A)	
75	1780	0.250	66	62	63	56	47	44	40	37	58	4.4
/3	1760	0.375	67	64	64	55	46	42	38	31	57	4.5
		0.250	70	65	67	61	53	50	46	47	63	6.0
85	2030	0.375	70	66	66	59	50	48	43	41	61	5.5
		0.500	71	67	67	59	50	48	42	38	62	5.7

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 alternative motor voltages.

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  $L_{wi}$ A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings do not include the effect of duct end correction.

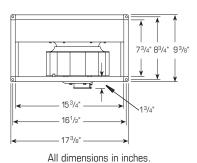
† The sound ratings are loudness values in fan sones at 5ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet hemispherical fan sone levels. Ratings do not include the effect of duct end correction.

<sup>\*</sup> Units using speed control are not licensed to bare the AMCA Seal.

<sup>\*\*</sup>dB(A) levels are not licensed by AMCA International.

# FRD16-8

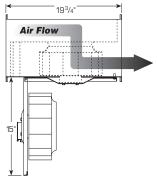
#### View from Discharge



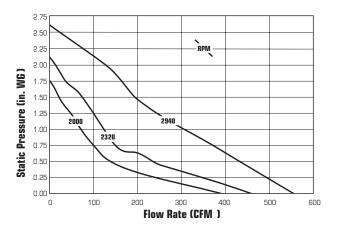
Unit Specifications: Housing Metal Thickness - 20 Gauge Approximate Weight - 23 lbs. Nominal Hp - 0.125 Hp

# 19<sup>3</sup>/<sub>4</sub>"

Side View



Outlet Velocity (fpm) = CFM x 1.180Tip Speed (fpm) = RPM x 2.267



#### Air Performance Data

Valta	Nom.	Max.	Max.					Statio	c Pressure	in Inches	W.G.				
VOITS RPM Watts Amps 0.0" .125" .25" .375" .50" .625" .75"									.75"	1.0"	1.25"	1.50"	1.75"	2.00"	
115	2940	150	1.30	560	530	499	467	434	401	368	300	240	191	159	119

#### Sound Data

					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom.	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPM		63	125	250	500	1000	2000	4000	8000	UDIAJ	
		0.500	79	77	76	73	71	66	63	57	76	13.0
		0.750	77	78	77	71	69	64	61	54	75	12.0
115	2940	1.000	76	78	77	70	68	63	59	52	74	11.7
		1.250	76	79	77	70	67	63	59	53	74	11.7
		1.500	76	79	77	71	67	63	59	54	74	12.0



Fantech, Inc. and Fantech Limited certifies that the FRD Series shown herein is licensed to bear the AMCA Seal The ratings shown are based on tests and procedures performed in ac-cordance 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.	Мах.	Max.					Statio	: Pressure	in Inches	W.G.				
VOILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.00"
75	2000	84	1.11	393	323	241	172	130	109	93	67	43	_	_	_
85	2320	103	1.19	459	402	341	280	232	185	148	120	94	68	35	_

#### Sound Data with Speed Control\*

					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom. RPM	SP				Octave E	Bands, Hz				dB(A)**	†Sones
			63	125	250	500	1000	2000	4000	8000	uD(A)	
75	2000	0.250	69	70	71	61	57	52	47	37	65	6.9
/:0	2000	0.375	73	72	71	56	52	46	40	31	65	6.4
		0.375	72	72	72	66	62	57	52	44	69	8.3
85	2320	0.500	72	73	71	65	60	54	49	41	67	7.8
	85 2320	0.625	72	73	71	64	59	52	47	39	67	7.5



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 alternative motor voltages.

The sound power level ratings shown are in decibels, referred to 10<sup>-12</sup> watts calculated per AMCA Standard 301. Values shown are for inlet L<sub>wi</sub> and L<sub>wi</sub> A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings do not include the effect of duct end correction.

† The sound ratings 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 hemispherical fan sone levels. Ratings do not include the effect of duct end correction.

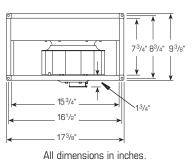
Fantech FRD Series

<sup>\*</sup> Units using speed control are not licensed to bare the AMCA Seal.

<sup>\*\*</sup>dB(A) levels are not licensed by AMCA International.

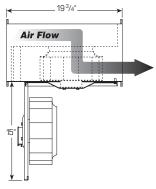
# FRD16-8XL

#### View from Discharge

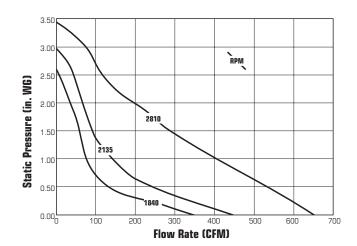


Unit Specifications: Housing Metal Thickness - 20 Gauge Approximate Weight - 29 lbs. Nominal Hp - 0.25 Hp

# Side View



Outlet Velocity (fpm) = CFM x 1.180 Tip Speed (fpm) = RPM x 2.267



#### Air Performance Data

Volts	Nom.	Мах.	Max.					9	Static Pres	sure in In	ches W.G.					
WOILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.00"	2.50"
75	1840	135	1.86	359	299	229	166	135	114	98	78	_	_	_	_	_
85	2135	175	2.09	458	404	343	295	246	208	180	142	113	89	_	_	_

#### Sound Data

					So	und Power	re 10 <sup>-12</sup> Wat	its				
Volts	Nom.	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPM		63	125	250	500	1000	2000	4000	8000	UD(A)	
		0.750	80	80	79	71	68	62	59	59	75	13.1
		1.000	80	80	79	70	66	60	58	57	74	12.4
115	2810	1.250	81	80	79	69	64	58	57	56	73	12.1
110	2010	1.500	83	81	80	69	64	58	57	56	74	12.7
		2.00	83	82	82	72	67	60	59	57	76	14.2
		2.500	85	83	83	74	69	63	61	59	78	15.5

Fantech, Inc. and Fantech Limited certifies that the FRD 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 211 and the requirements of the AMCA Certified Ratings Program.

AMCA CERTIFIED RATINGS

SOUND

Air Pert	formance	Data	with S	Speed	Control*

Volts	Nom.	Max.	Max.					:	Static Pres	sure in In	ches W.G.					
MOILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.00"	2.50"
75	1840	135	1.86	359	299	229	166	135	114	98	78	_	_	_	_	_
85	2135	175	2.09	458	404	343	295	246	208	180	142	113	89	_	_	_



#### Sound Data with Speed Control\*

					So	und Power	re 10 <sup>-12</sup> Wat	its				
Volts	Nom. RPM	SP				Octave B	ands, Hz				dB(A)**	†Sones
	nPIVI		63	125	250	500	1000	2000	4000	8000	UDIN	
		0.250	69	68	69	55	51	46	46	38	62	5.8
75	1840	0.375	69	69	68	53	49	44	43	37	62	5.5
		0.500	71	72	71	54	50	45	44	39	64	6.3
		0.375	70	73	72	57	54	48	47	44	66	7.2
85	2135	0.500	71	73	72	57	53	47	47	43	65	7.1
00	L 100	0.625	72	74	73	58	54	48	47	44	66	7.4
		0.750	73	75	74	59	55	49	48	45	67	7.9

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 alternative motor voltages.

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  $L_{wi}$ A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings do not include the effect of duct end correction.

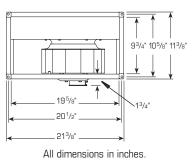
<sup>†</sup> The sound ratings are loudness values in fan sones at 5ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet hemispherical fan sone levels. Ratings do not include the effect of duct end correction.

<sup>\*</sup> Units using speed control are not licensed to bare the AMCA Seal.

<sup>\*\*</sup>dB(A) levels are not licensed by AMCA International.

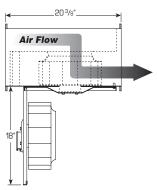
## FRD20-10

#### View from Discharge

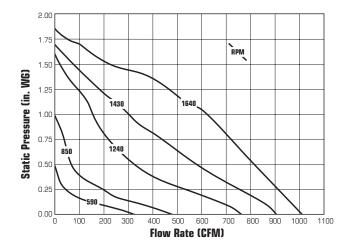


Unit Specifications: Housing Metal Thickness - 20 Gauge Approximate Weight - 41 lbs. Nominal Hp - 0.15 Hp

# Side View



Outlet Velocity (fpm) = CFM x 0.752Tip Speed (fpm) = RPM x 3.199



Air Performance Data

	THUILIDG L	rava											
Volts	Nom.	Max.	Max.				Sta	tic Pressure	e in Inches \	N.G.			
Anita	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
115	1640	193	1.68	1013	963	915	868	814	770	724	617	462	225

Sound Data

Souriu Da					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom. RPM	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPIVI		63	125	250	500	1000	2000	4000	8000	UDIA	
		0.500	85	91	82	70	66	60	55	52	78	16.7
		0.625	84	90	81	69	65	59	54	51	77	15.9
115	1640	0.750	84	89	80	69	65	59	54	51	76	15.1
110	1040	1.000	83	88	78	66	63	56	51	48	75	13.8
		1.250	83	86	77	66	63	56	52	48	74	13.2
		1.500	84	86	78	67	63	57	53	49	74	13.2

Air Performance Data with Speed Control\*

Volts	Nom.	Max.	Max.				Sta	tic Pressur	e in Inches V	N.G.			
VUILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"
45	590	52	1.26	322	136	48	_	_	_	_	_	_	_
60	850	84	1.58	482	310	194	109	69	_	_	_	_	_
75	1240	135	1.91	767	668	533	407	327	283	253	174	_	_
85	1430	162	1.95	907	844	755	660	576	504	433	300	176	

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Sound Data with Speed Control\*

·												
Volts	Nom.	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPM		63	125	250	500	1000	2000	4000	8000	UDIAJ	
45	590	0.250	76	73	58	47	40	31	22	20	59	4.3
60	850	0.250	76	72	56	45	38	31	24	19	58	4.0
00	630	0.375	78	76	61	49	42	35	28	23	62	5.3
		0.250	80	83	71	59	56	48	43	41	69	9.9
75	1240	0.375	79	80	66	56	51	44	39	35	66	7.7
		0.500	79	80	65	55	49	42	37	32	65	7.4
		0.375	82	88	77	64	62	56	50	47	74	13.3
85	1430	0.500	82	88	75	62	60	53	47	44	74	12.7
		0.625	81	88	73	60	58	51	45	42	73	12.2

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.

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 alternative motor voltages.

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  $L_{w}$ A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings do not include the effect of duct end correction.

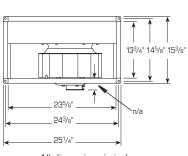
† The sound ratings are loudness values in fan sones at 5ft. (1.5m) from the test inlet duct in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet hemispherical fan sone levels. Ratings do not include the effect of duct end correction.

<sup>\*</sup> Units using speed control are not licensed to bare the AMCA Seal.

<sup>\*\*</sup>dB(A) levels are not licensed by AMCA International.

# FRD24-14

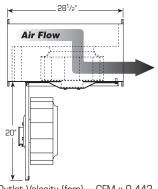
#### View from Discharge



All dimensions in inches.

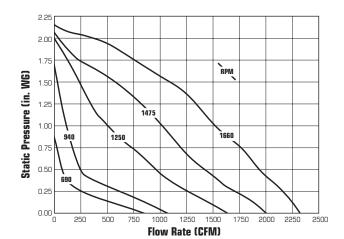
Unit Specifications: Housing Metal Thickness - 20 Gauge

Approximate Weight - 62 lbs. Nominal Hp - 0.75 Hp



Side View

Outlet Velocity (fpm) = CFM x 0.443Tip Speed (fpm) = RPM x 3.663



Air Performance Data

Volts	Nom.	// Watts	Max.		Static Pressure in Inches W.G.											
VOITS	RPM		Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.00"	
115	1660	607	5.18	2318	2237	2149	2039	1939	1850	1752	1527	1332	1090	754	377	

#### Sound Data

					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom.	SP				Octave B	ands, Hz				dB(A)**	†Sones
	RPM		63	125	255	500	1000	2000	4000	8000	UD(A)	
		0.750	89	85	81	79	74	71	68	62	81	18.2
		1.000	89	85	81	78	72	69	66	60	80	17.6
115	1660	1.250	90	86	81	76	71	68	65	59	79	17.2
		1.500	89	86	81	75	70	67	64	58	78	16.7
		1.750	87	85	80	74	70	67	64	59	78	16.3
		2.000	87	85	81	74	70	68	65	59	78	16.6

Air Performance Data with Speed Control\*

All FELLO	IIIIaiiuu L	Jaua VVII	iii opeci	u Guiiii	UI										
Volts	Nom.	Max.	Max.					Stati	c Pressure	in Inches	W.G.				
VOILS	RPM	Watts	Amps	0.0"	.125"	.25"	.375"	.50"	.625"	.75"	1.0"	1.25"	1.50"	1.75"	2.00"
45	690	141	3.47	810	494	242	137	_	_	_	_	_	_	_	_
60	940	226	4.34	1047	836	591	357	249	210	181	123	_	_	_	_
75	1250	375	5.27	1607	1437	1253	1099	967	845	723	504	349	241	_	_
85	1475	468	5.52	1994	1870	1686	1547	1420	1303	1198	1014	818	572	243	_
115	1660	607	5.18	2318	2237	2149	2039	1939	1850	1752	1527	1332	1090	754	377

Sound Data with Speed Control\*

					So	und Power	re 10 <sup>-12</sup> Wat	tts				
Volts	Nom. RPM	SP				Octave B	ands, Hz				dB(A)**	†Sones
	KPIVI		63	125	255	500	1000	2000	4000	8000	UDIAJ	
45	690	0.125	72	79	57	51	47	43	32	26	64	6.1
40	090	0.250	75	80	57	50	46	41	32	26	65	6.5
60	940	0.250	79	79	61	55	50	46	39	31	64	7.0
00	940	0.375	80	79	62	55	51	47	40	32	65	7.4
		0.375	82	80	76	67	62	59	55	47	71	10.8
75	1250	0.500	82	81	75	66	61	58	53	46	71	10.6
		0.625	83	81	74	65	61	58	53	46	71	10.7
		0.500	85	74	78	73	68	65	61	54	75	12.7
85	1475	0.625	85	76	78	72	67	64	60	53	74	12.6
93	14/0	0.750	85	79	77	71	66	64	60	53	74	12.6
		1.000	86	83	77	71	66	63	59	52	74	13.3

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 alternative motor voltages.

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<sub>m</sub> and L<sub>m</sub> A sound power levels for installation type D: ducted inlet, ducted outlet. Ratings do not include the effect of duct end correction.

<sup>\*\*</sup>dB(A) levels are not licensed by AMCA International.





Fantech, Inc. and Fantech, Inc. and Fantech Limited certifies that the FRD Series shown herein is licensed to bear the AMCA Seal The ratings shown are based on tests and procedures performed in ac-cordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified



<sup>†</sup> The sound ratings 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 hemispherical fan sone levels. Ratings do not include the effect of duct end correction.

<sup>\*</sup> 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.

#### NR

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 IN-SPECTION 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

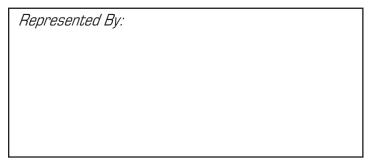
- The user must keep a copy of the bill of sale to verify purchase date.
- These warranties give you specific legal rights, and are subject to an applicable consumer protection legislation. You may have additional rights which vary from state to state.

## **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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