



# Fantech

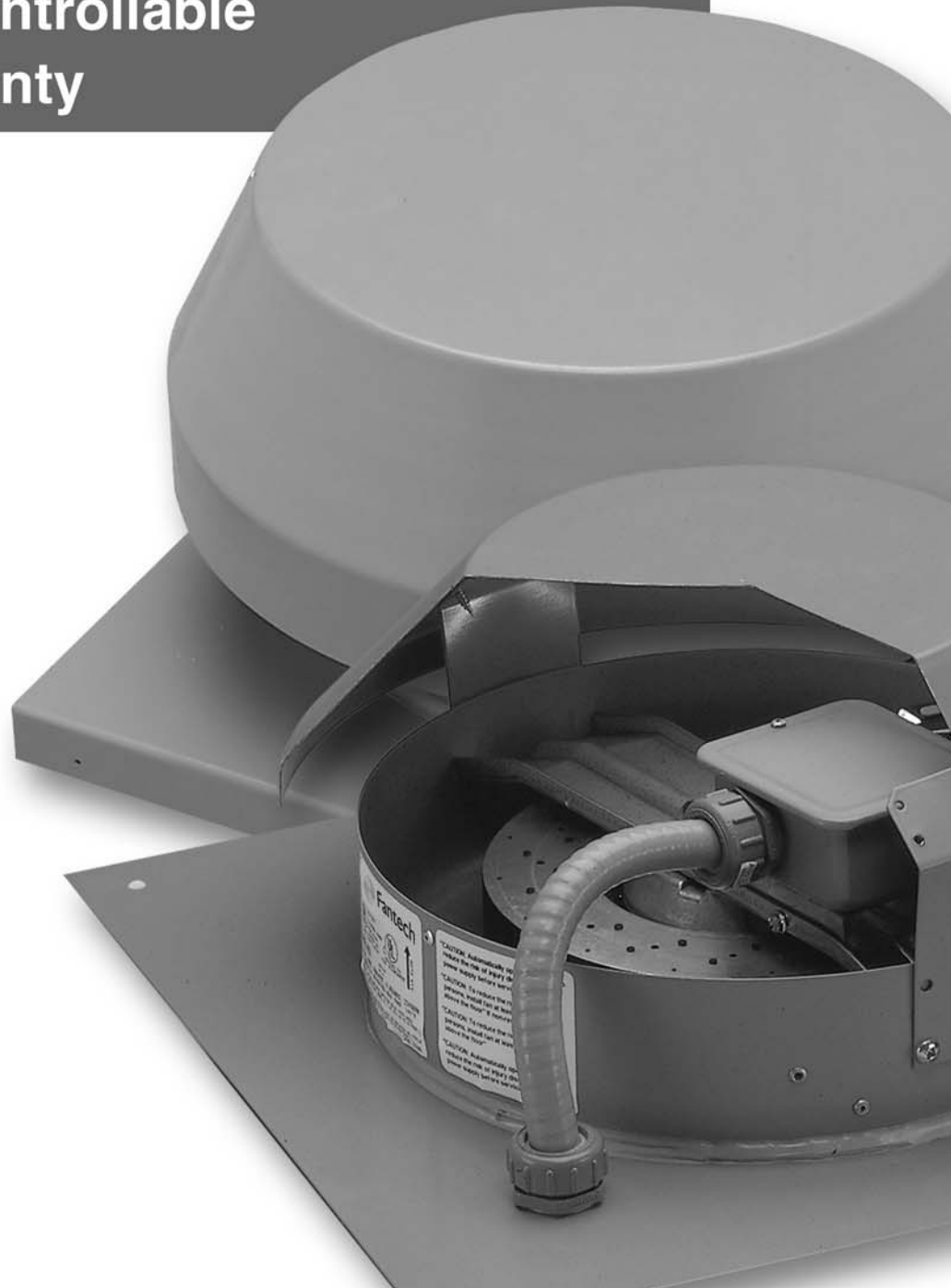
December 2005

RE(C)1205

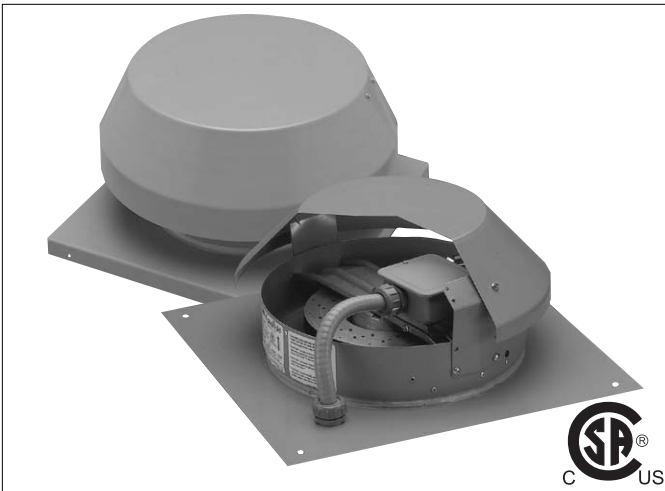
## RE(C) SERIES

### POWER ROOF VENTILATORS

**100% Speed Controllable**  
**Five Year Warranty**

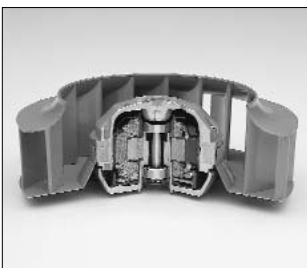


Fantech, Inc. certifies that the RE(C) Series shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



### Description

A low silhouette, direct drive centrifugal type exhaust fan for moderate size ventilation applications. RE(C) Series fans are designed to meet present demands of efficiency and reduced energy consumption. 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. The ability to regulate air flow by means of voltage reduction allows for simple, precision system balancing. Two base styles are available: RE Models have a flat base for direct flashing to roof; REC Models have a flanged base for curb mounting. Either model is acceptable for use on flat or pitched roofs. **All RE(C) Series fans are backed by Fantech's Five Year Warranty.**



All RE(C) Series fans are powered by an external rotor motorized impeller. This design provides excellent heat dissipation even at low rpm. All of the RE(C) Series ventilators are available from stock with 115/1/60 motors; alternative 208-230/1/60 motors are available request for 4" to 8" models.

### Performance Data

#### Air Performance Data

RE(C) Air Performance Data is presented at full line voltage for assistance determining air performance at reduced voltage/rpm please contact Fantech's engineering department.

#### Sound Data

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

### Features

- 100% Speed Controllable
- Air Flows up to 1008 cfm
- Circular duct connections
- External rotor motor, class B insulation.  
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 streams temperatures up to 140°F
- Galvanized steel housing with baked powdercoat finish
- Two base styles: RE Models have a flat base for direct flashing to roof; REC Models have a flanged base for curb mounting
- Terminal box with prewired electrical strip
- Backward curved impeller
- **Five Year Warranty**

### Typical Specifications for Model RE(C) Power Roof Ventilators

#### Construction

Roof exhaust fans shall be of the centrifugal, direct driven type. Fan housing shall be constructed of heavy gauge galvanized sheet metal with a grey baked powder coat finish. Fan base shall be permanently mounted to roof (flat flashing base, Model RE) or to a curb (flanged base, Model REC). Base shall be provided with a gasket seal to prevent leakage. A conduit chase shall be provided for running electrical wiring through the base into the fan terminal box.

Motorized impeller shall be an external rotor type, totally enclosed with permanent split capacitor. 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 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.

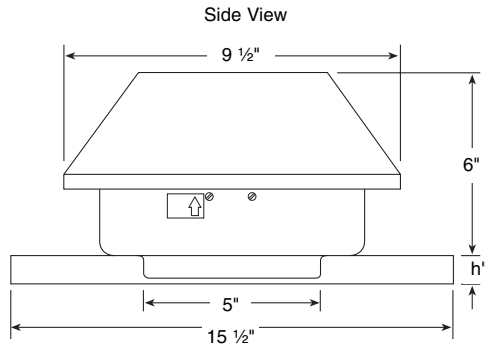
#### Performance

Fan performance shall be based on tests conducted in accordance with AMCA Standard 210 and 300 and shall be licensed to bear the AMCA Certified Ratings labels for both air and sound.

#### Code Approval

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

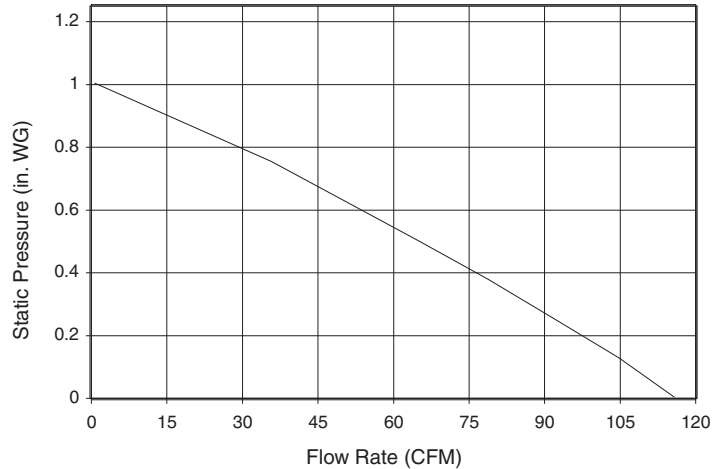
RE(C) Series shall be manufactured under the authority of Fantech, Inc., Sarasota, FL.



All dimensions in inches.  
 "h" dimension is 1 1/2" on model REC only.  
 Ships with 5" to 4" reducer.

### Unit Specifications:

- Housing Metal Thickness - 24 gauge
- Base Metal Thickness - 18 gauge
- Approximate Weight - 8 lbs.
- Nominal Hp - 0.02 Hp
- Tip Speed (fpm) = RPM x 1.37



## 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"	
115	3050	18	0.18	116	105	92	79	65	36	1	

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation Type A: Free inlet, Free outlet.

Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Please consult factory for electrical specifications and delivery on alternative motor voltages - i.e. 208-230/1/60.

## Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 <sup>-12</sup> Watts Octave Bands, Hz								L <sub>wi</sub> dB(A)	†Sones
			63	125	250	500	1000	2000	4000	8000		
115	3050	0.000	58	59	56	56	63	58	43	32	65	5.8
		0.125	57	60	56	55	58	54	42	31	61	4.7
		0.250	57	62	57	54	53	51	41	31	58	4.1
		0.375	56	61	55	52	50	49	38	30	55	3.5
		0.500	56	60	54	51	47	47	37	30	54	3.5
		0.750	56	57	53	49	45	45	40	35	52	3.0

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 total inlet L<sub>wA</sub> sound power levels for installation type A: free inlet, free outlet. Ratings do not 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 A: free inlet fan sone levels.



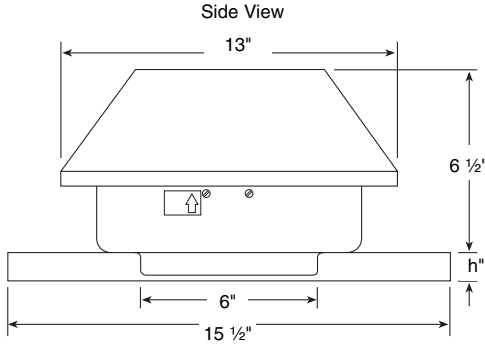
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## Speed Control Options

1 Variable SCR Controls		
Demand Adjusted		Field Balanced
115V	208-230V	115/208-230V
WC 15	WC 25	706-123S



# RE(C) 6



### Unit Specifications:

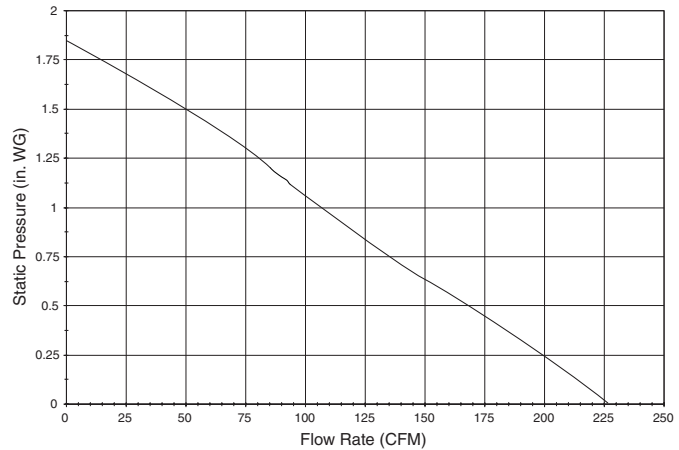
Housing Metal Thickness - 24 gauge

Base Metal Thickness - 18 gauge

Approximate Weight - 15 lbs.

Nominal Hp - 0.06 Hp

Tip Speed (fpm) = RPM x 1.958



All dimensions in inches.

"h" dimension is 1 1/2" on model REC only

## 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	2695	87	0.76	227	213	199	184	169	152	134	106	80	51

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation Type A: Free inlet, Free outlet.

Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Please consult factory for electrical specifications and delivery on alternative motor voltages - i.e. 208-230/1/60.

## Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 <sup>-12</sup> Watts Octave Bands, Hz								L <sub>WA</sub> dB(A)	†Sones
			63	125	250	500	1000	2000	4000	8000		
115	2695	0.125	63	62	70	68	59	58	56	47	68	7.7
		0.250	62	61	70	67	58	57	55	47	68	7.4
		0.375	61	61	69	67	58	57	54	46	67	7.1
		0.500	61	61	71	67	58	57	55	47	68	7.5
		0.625	61	62	74	68	59	58	56	49	70	8.5
		0.750	61	63	77	69	61	59	57	50	72	9.5
		1.000	61	64	81	72	64	60	58	53	75	11.5
		1.250	62	65	79	73	65	61	59	54	74	11.1
1.500	63	66	78	75	66	62	60	56	75	11.2		

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>WA</sub> and total inlet L<sub>WA</sub> sound power levels for installation type A: free inlet, free outlet.

Ratings do not 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 A: free inlet fan sone levels.



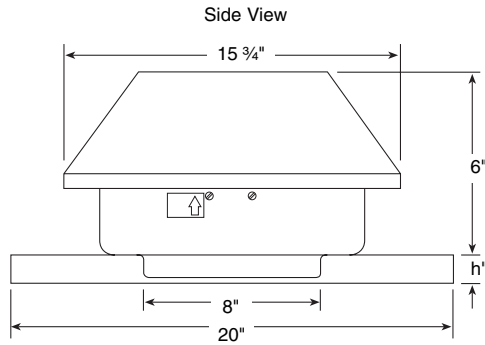
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## Speed Control Options

1 <sup>1</sup> / <sub>2</sub> Variable SCR Controls		
Demand Adjusted	Field Balanced	
115V	208-230V	115/208-230V
WC 15	WC 25	706-123S

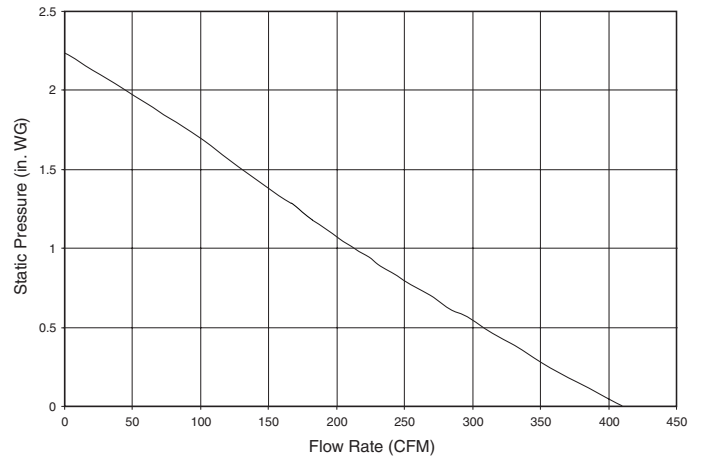


# RE(C) 8XL



### Unit Specifications:

- Housing Metal Thickness - 24 gauge
- Base Metal Thickness - 18 gauge
- Approximate Weight - 20 lbs.
- Nominal Hp - 0.10 Hp
- Tip Speed (fpm) = RPM x 2.268



All dimensions in inches.

"h" dimension is 1½" on model REC only

## 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"	1.75"	2.0"
115	2800	153	1.48	409	382	356	331	307	259	212	170	130	90	43

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation Type A: Free inlet, Free outlet.

Note: Electrical specifications reflect voltage/phase/cycles for stock delivery motor/fans sets. Please consult factory for electrical specifications and delivery on alternative motor voltages - i.e. 208-230/1/60.

## Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 <sup>-12</sup> Watts								L <sub>WA</sub> dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	2800	0.375	65	69	67	63	60	65	58	48	69	9.0
		0.500	65	69	67	65	60	65	58	47	69	8.9
		0.750	64	69	67	61	60	64	57	46	68	8.3
		1.000	64	72	69	62	60	63	57	46	68	8.4
		1.250	65	74	71	64	60	62	57	46	69	8.6
		1.500	65	76	74	65	61	62	58	47	70	9.6
		1.750	66	78	76	67	63	63	59	49	72	10.7
2.000	68	79	76	67	64	63	59	49	72	11.0		

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>WA</sub> and total inlet L<sub>WA</sub> sound power levels for installation type A: free inlet, free outlet. Ratings do not 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 A: free inlet fan sone levels.



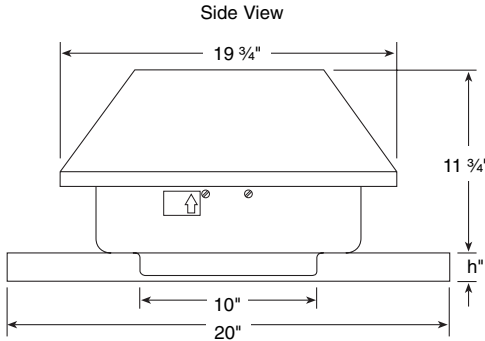
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## Speed Control Options

1\Variable SCR Controls			1\Proportional Output Control	1\Transformers			
Demand Adjusted	Field Balanced			6 Step		Variable	
115V	208-230V	115/208-230V	115/208-230V	115V	208-230V	115V	208-230V
WC 15	WC 25	706-123S	707DBVmA	STW 7	STW 7	1520CT	1520CT



# RE(C) 10XL



All dimensions in inches.

"h" dimension is 1 1/2" on model REC only

### Unit Specifications:

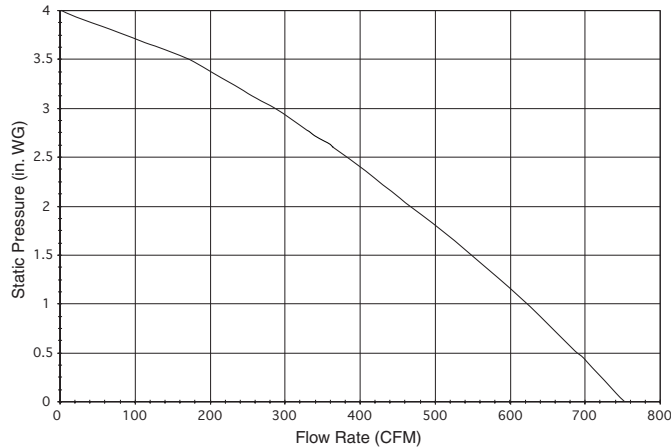
Housing Metal Thickness - 24 gauge

Base Metal Thickness - 18 gauge

Approximate Weight - 30 lbs.

Nominal Hp - 0.30 Hp

Tip Speed (fpm) = RPM x 2.577



## Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.25"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.50"	3.00"	3.50"
115	3250	394	3.43	753	721	690	656	622	586	548	508	467	425	383	287	170

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation Type A: Free inlet, Free outlet.

## Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 <sup>-12</sup> Watts								L <sub>wi</sub> dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	3250	0.750	70	73	77	76	76	70	68	68	80	16.4
		1.000	69	72	76	75	75	69	67	67	79	15.6
		1.250	69	72	76	74	74	69	66	66	78	14.5
		1.500	69	71	76	74	73	68	65	64	77	13.6
		1.750	69	71	76	73	72	67	63	62	76	12.9
		2.000	68	70	76	73	72	67	63	61	76	12.5
		2.250	68	70	76	73	72	66	63	61	76	12.4
		2.500	68	70	76	73	72	66	63	61	76	12.5
		2.750	68	70	77	74	72	67	63	61	76	12.7
3.000	68	70	77	74	72	67	63	61	77	12.8		

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 total inlet L<sub>wA</sub> sound power levels for installation type A: free inlet, free outlet. Ratings do not 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 A: free inlet fan sone levels.

## Speed Control Options

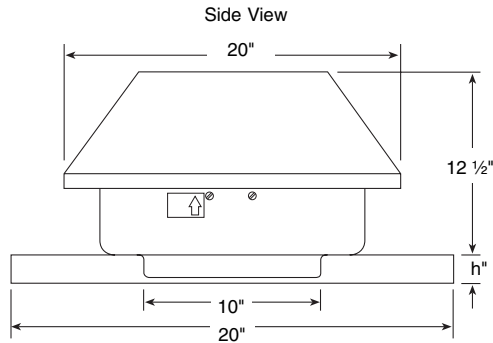
1 Variable SCR Controls		1 Proportional Output Control	1 Transformers	
Demand Adjusted	Field Balanced		6 Step	Variable
115V	115/208-230V	115/208-230V	115V	115V
RPE10	706-123S	709DBVmA	STW 7	1520CT



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# RE(C) 10XLT



All dimensions in inches.

"h" dimension is 1½" on model REC only

### Unit Specifications:

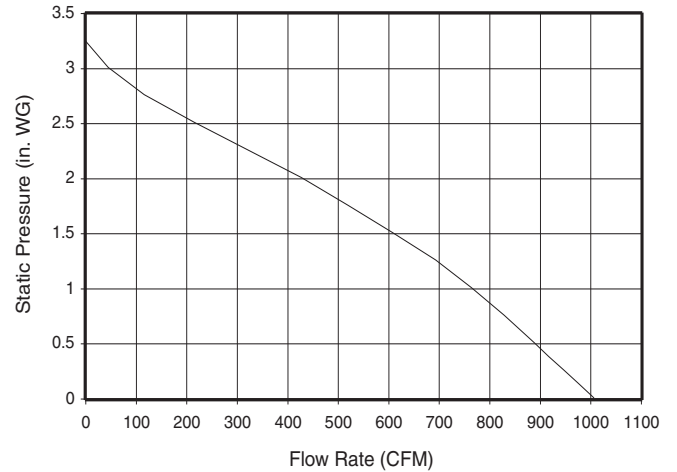
Housing Metal Thickness - 24 gauge

Base Metal Thickness - 18 gauge

Approximate Weight - 30 lbs.

Nominal Hp - 0.40 Hp

Tip Speed (fpm) = RPM x 2.783



## Air Performance Data

Volts	Nom. RPM	Max. Watts	Max. Amps	Static Pressure in Inches W.G.												
				0.0"	.25"	.50"	.75"	1.0"	1.25"	1.50"	1.75"	2.0"	2.25"	2.50"	2.75"	3.00"
115	2900	531	5.12	1008	949	890	831	766	695	609	521	429	323	217	118	47

Speed (RPM) shown in nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances in the airstream. Performance shown is for installation Type A: Free inlet, Free outlet.

## Sound Data

Volts	Nom. RPM	SP	Sound Power re 10 <sup>-12</sup> Watts								L <sub>wi</sub> dB(A)	†Sones
			Octave Bands, Hz									
			63	125	250	500	1000	2000	4000	8000		
115	2900	0.00	80	77	80	78	76	74	72	73	82	22
		0.13	78	77	80	78	76	73	72	73	82	21
		0.25	78	79	81	80	77	74	73	74	83	22
		0.38	75	82	83	79	77	72	70	70	82	20
		0.50	77	89	89	82	79	75	72	71	86	25
		0.75	76	83	84	80	78	74	71	69	83	21
		1.00	75	78	79	78	77	74	71	69	82	18.4

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 total inlet L<sub>wA</sub> sound power levels for installation type A: free inlet, free outlet. Ratings do not 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 A: free inlet fan sone levels.

## Speed Control Options

1 Variable SCR Controls		1 Proportional Output Control		1 Transformers	
Demand Adjusted	Field Balanced			6 Step	Variable
115V	115/208-230V	115/208-230V		115V	115V
RPE 10	706-123S	709DBVmA		STW 7	1520CT



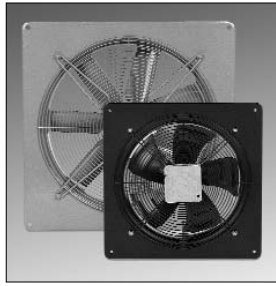
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# Product Range



**FX Series**  
 INLINE  
 BACKWARD  
 CURVED  
 CENTRIFUGAL  
 FANS FOR  
 ROUND DUCT



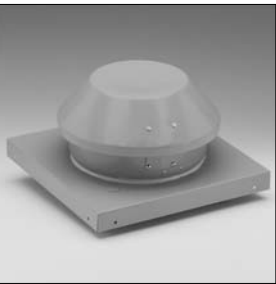
**FADE Series**  
 SIDEWALL  
 PROPELLER  
 FANS



**FSD Series**  
 INLINE  
 BACKWARD  
 CURVED  
 MIXED FLOW  
 FANS FOR  
 SQUARE  
 DUCT



**FKD Series**  
 INLINE  
 BACKWARD  
 CURVED  
 MIXED FLOW  
 FANS FOR  
 ROUND DUCT



**RE(C) Series**  
 BACKWARD  
 CURVED  
 POWER  
 ROOF / WALL  
 VENTILATORS



**FRD Series**  
 INLINE  
 BACKWARD  
 CURVED  
 CENTRIFUGAL  
 FANS FOR  
 RECTANGULAR  
 DUCT

**Three areas of applications**  
**Residential • Commercial • Industrial**  
**One Company... Fantech**

# Controls & Accessories



Solid State Single Phase Voltage Control



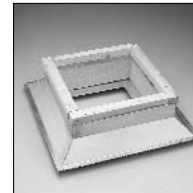
Vibration Isolating Clamps



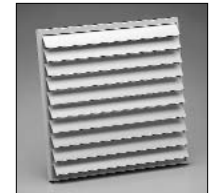
Solid State Three Phase Proportional Control



Single Phase Step Transformers



Prefabricated Roof Curbs



Gravity Operated Louvered Shutter



Three Phase Step Transformers



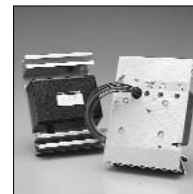
Single Phase Variable Transformers



CG Supply/Exhaust Grilles



Backdraft Dampers



Variable Output Energy Management Control



Sound Attenuators

Represented By:



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