

INTRODUCTION

Krueger's new reverse-flow fan filter unit is the perfect choice for hospital isolation rooms housing patients suffering from highly contagious diseases. It works by creating a negative pressure environment that removes air from an isolation room, cleans it via the unit's built-in HEPA filter, and keeps airborne contaminants from escaping back into the room. The unit can be mounted in the ceiling or provided as a rolling mobile version. The mobile unit includes built-in, heavy-duty swivel casters with brakes, allowing it to be moved easily from location to location as the facility requires.

MODELS

- | | |
|---------------|---------------------------------------------------------------------------------------------|
| RFCRFF | - PSC Reverse flow fan filter unit with HEPA filter |
| RFCRFF-ARS | - PSC Reverse flow fan filter unit with room side access to HEPA filter |
| RFCRFF-E-ARSM | - Reverse flow fan filter unit with HEPA filter and room side access to EC motor and filter |

RFCRFF FEATURES

- Space saving low profile design
- PSC motor with solid state speed control or 3-speed switch
- Backward inclined centrifugal-type fan
- High Efficiency Particulate Air (HEPA) Filter: 99.99% @ 0.3 micron, Type J
- Low power consumption
- Available in 24" x 24" or 24" x 48"
- 1/2 - 20 threaded bushings
- Meets IEST-RP CC001.5 and IEST-RP-CC0034.3 leak testing
- UL listed with Standard UL 900
- Standard Finish: Combinations of Mill and British White available

RFCRFF-E-ARSM FEATURES

- 304 stainless steel construction
- Sizes: 24" x 24" or 24" x 48"
- 51% free area, perforated face
- Adjustable face control
- Roomside accessible pre-filter, filter, motor, and backward curved composite impeller
- High Efficiency Particulate Air (HEPA) filter: 99.99% @ 0.3 micron, type J
- EC brushless DC motor, providing constant airflow over a wide range of external static pressures
- 10ft hospital grade cord with plug
- Push/pull handle *
- 4 swivel casters - (2) with brakes *
- Standard Finish: #90 Satin Polished
- Meets IEST-RP CC001.5 and IEST-RP-CC0034.3 leak testing
- UL listed with Standard UL 900

* Available with mobile unit only.



RFCRFF
Ceiling Mounted Unit
24"x48"



RFCRFF-ARS
Ceiling Mounted Unit
24"x48"



RFCRFF-E-ARSM
Ceiling Mounted Unit
24"x24"



RFCRFF-E-ARSM
Mobile Unit

OPTIONS

- Ultra-Low Penetration Air (ULPA) filter: 99.9995% @ 0.12 micron, Type F
- Round duct collar adapter
- Extruded aluminum plaster frame for hard ceilings (Model 5HCF23, ordered separately.)
- 120, 208/240, 277 V EC motors
- Wall mounted controller *

* Available with mobile unit only.

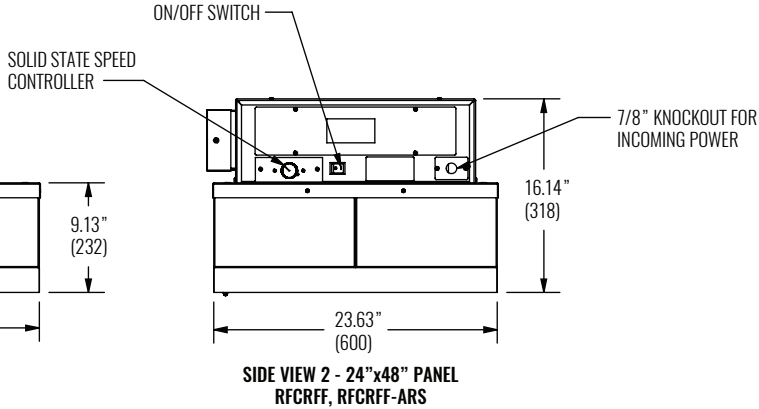
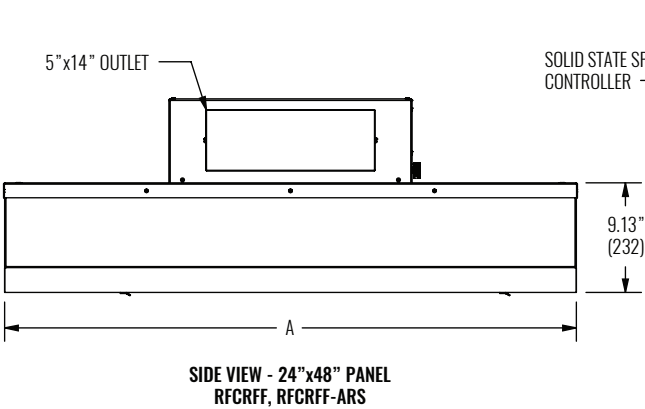
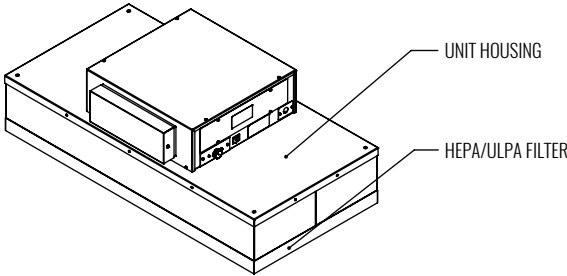
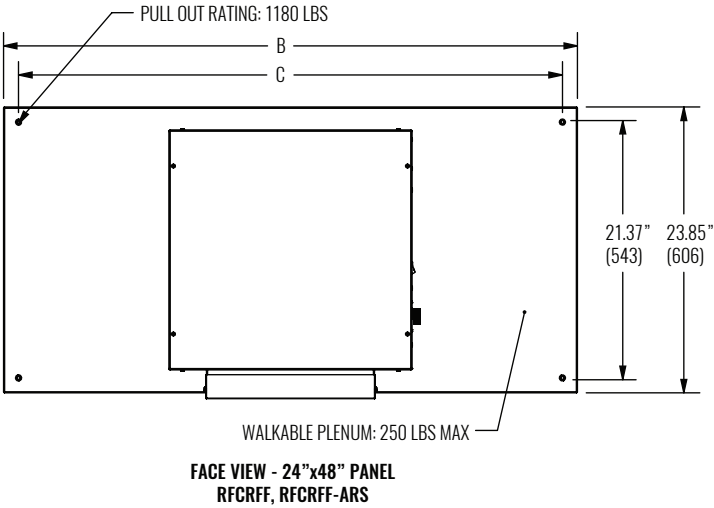
RFCRFF SERIES

Fan Filter Unit, Reverse Flow



SPECIALTY PRODUCTS | CRITICAL ENVIRONMENT

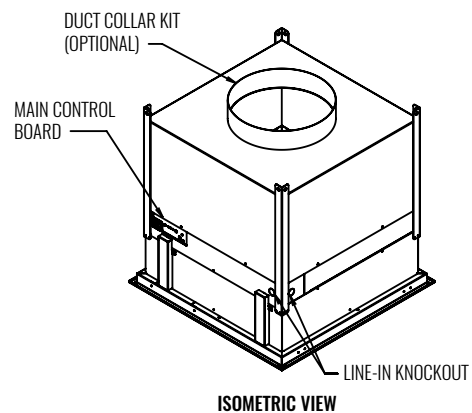
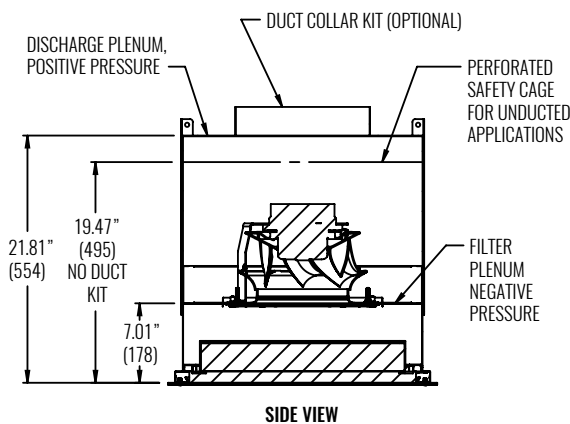
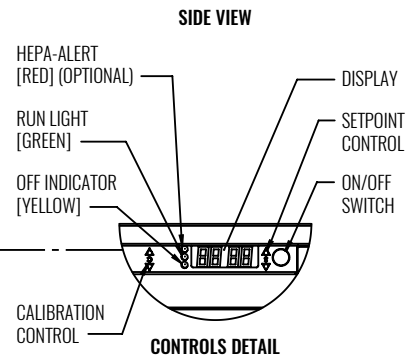
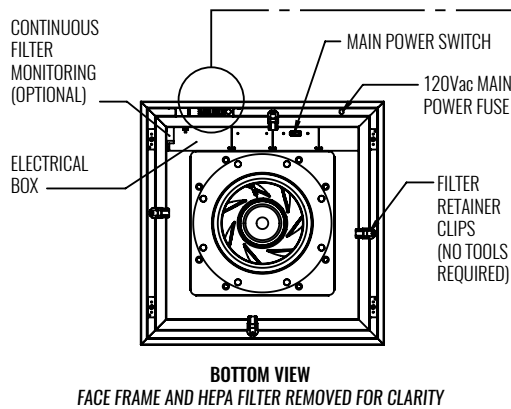
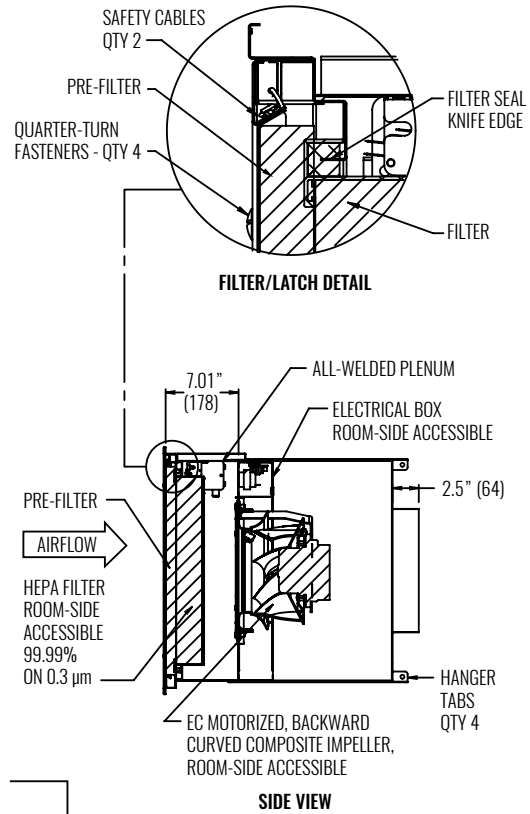
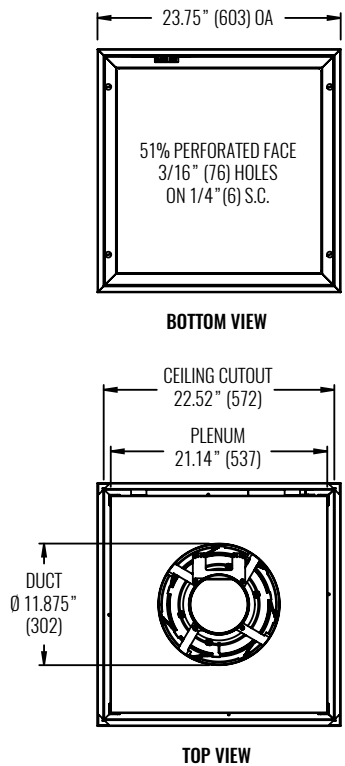
DIMENSIONAL DATA | RFCRFF, RFCRFF-ARS



NOTE: Dimensions in parentheses are millimeters.

RFCRFF, RFCRFF-ARS					
PANEL SIZE	A	B	C	RFCRFF WEIGHT	RFCRFF-ARS WEIGHT
24" x 24"	23.63" (600 mm)	23.85" (606 mm)	21.37" (543 mm)	44 LB (20 kg)	49 LB (22 kg)
24" x 48"	47.63" (1210 mm)	47.85" (1215 mm)	45.37" (1152 mm)	62LB (28 kg)	70LB (32 kg)

DIMENSIONAL DATA | RFCRFF-E-ARSM | CEILING UNIT



NOTE: Dimensions in parentheses are millimeters.

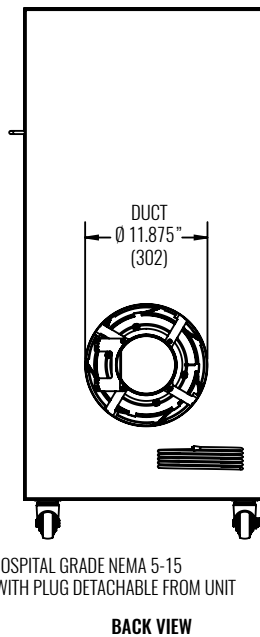
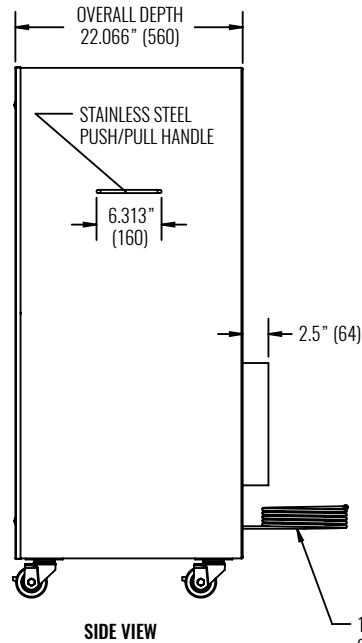
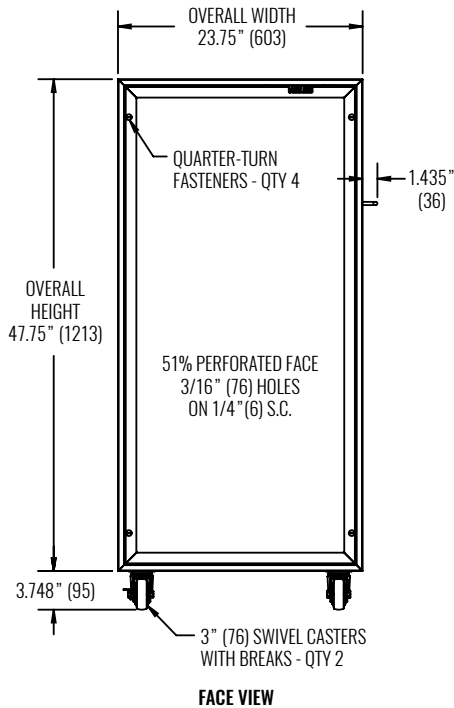
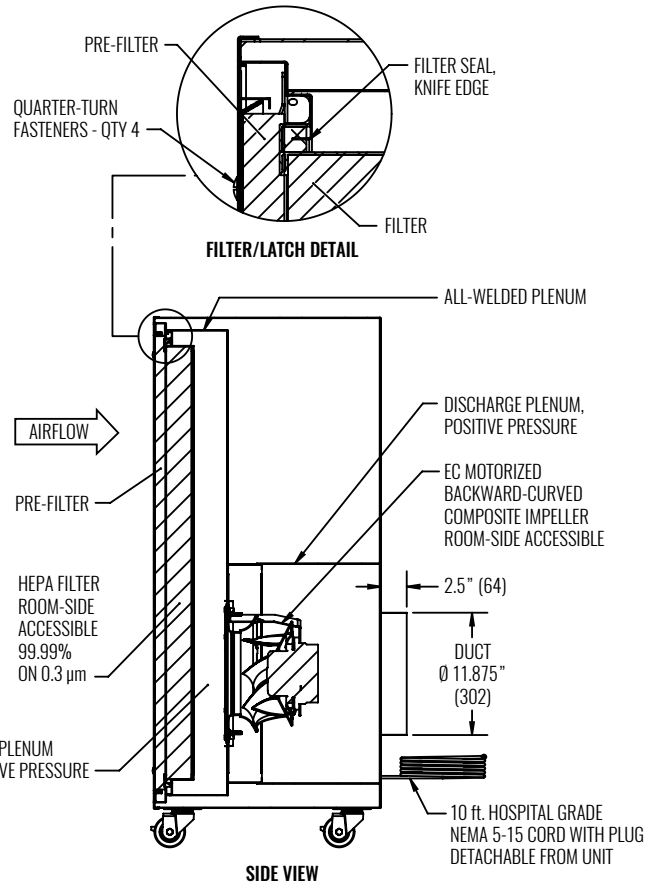
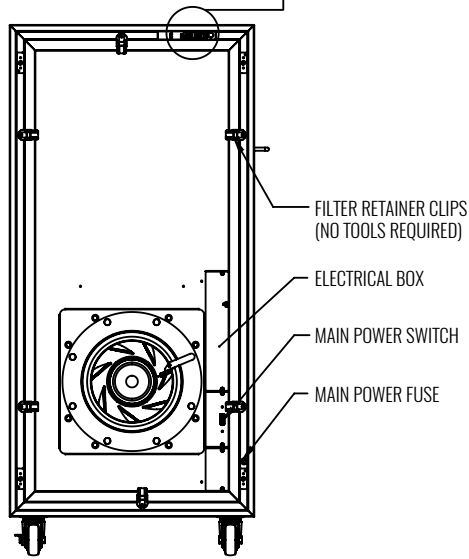
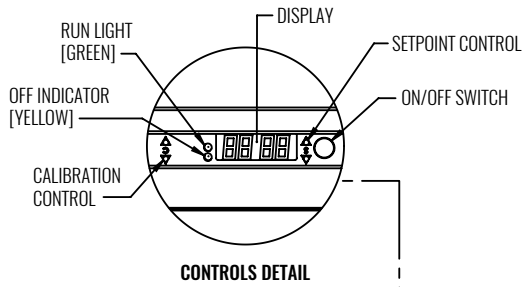
RFCRFF SERIES

Fan Filter Unit, Reverse Flow



DIMENSIONAL DATA | RFCRFF-E-ARSM | MOBILE UNIT

SPECIALTY PRODUCTS | CRITICAL ENVIRONMENT



NOTE: Dimensions in parentheses are millimeters.

B3-94

PERFORMANCE DATA | RFCRFF, RFCRFF-ARS

RFCRFF, RFCRFF-ARS										
NOMINAL UNIT SIZE	ACTIVE FILTER FACE AREA (Sq. Ft.)	MIN CFM	MAX CFM	WATTS @ Max CFM	dBA @ Max CFM	CFM @ 90 FPM	WATTS @ 90 FPM	SOUND dBA @ 90 FPM	UNIT WEIGHT	DIMENSIONS AxBxCxDxE (mm)
48" x 24" RFCRFF	7.2	250	760	209	71	650	212	68	62	23.63" x 47.63" x 16.14" x 20" x 20" (600 x 1210 x 318 x 508 x 508)
24" x 24" RFCRFF	3.5	165	620	205	69	315	187	60	44	23.63" x 23.63" x 16.14" x 20" x 20" (600 x 600 x 318 x 508 x 508)
48" x 24" RFCRFF-ARS	5.3	135	720	193	67	470	188	60	70	23.63" x 47.63" x 16.14" x 20" x 20" (600 x 1210 x 371 x 508 x 508)
24" x 24" RFCRFF-ARS	2.3	135	495	199	67	210	160	56	49	23.63" x 23.63" x 16.14" x 20" x 20" (600 x 600 x 371 x 508 x 508)

NOTES: Performance tested in accordance with the (ANSI/AMCA 210-07), (ANSI/ASHRAE 51-07) test standards for Certified Aerodynamic Performance Rating. Max CFM rating based on free air volumes at high speed motor setting. 90 fpm values based on active filter face area. BTU = Watts x 3.413.
 * Do not operate 24"x24" units above 400 SCFM. Damage to the filter and/or particle bleed-through can occur.

Electrical Data:

115V 60HZ 1 Phase = 1.8 F.L.A., 277V 60 HZ 1 Phase = 0.80 F.L.A.

PERFORMANCE DATA | RFCRFF-E-ARSM

MOBILE UNIT, 48"x24" HEPA FILTER*, 120VAC			
SETPOINT	CFM	WATTS	RPM
100%	930	237	2090
90%	806	174	1881
80%	672	120	1672
70%	545	81	1463
60%	415	50	1254
50%	292	32	1045
40%	183	17	836
30%	104	12	627
20%	34	8	418

CEILING UNIT, 24"x24" HEPA FILTER*, 120VAC			
SETPOINT	CFM	WATTS	RPM
100%	505	192	2090
90%	428	148	1881
80%	355	101	1672
70%	278	69	1463
60%	205	50	1254
50%	138	33	1045
40%	85	22	836
30%	40	15	627
20%	15	11	418

CEILING UNIT, 48"x24" HEPA FILTER*, 208-277VAC			
SETPOINT	CFM	WATTS	RPM
100%	1125	365	2450
90%	1004	274	2205
80%	848	195	1960
70%	708	127	1715
60%	545	81	1470
50%	395	48	1225
40%	260	26	980
30%	141	14	735
20%	56	8	490

CEILING UNIT, 48"x24" 12" ROUND DISCHARGE ADAPTER, HEPA FILTER*, 208-277VAC			
SETPOINT	CFM	WATTS	RPM
100%	950	345	2450
90%	850	262	2205
80%	729	184	1960
70%	590	122	1715
60%	454	76	1470
50%	334	43	1225
40%	237	25	980
30%	134	14	735
20%	55	8	490

NOTES: Data was derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.

* Data is for diffusers with clean filters. Filters may be operated up to a final resistance of 2" w.g. (500 Pa).

RFCRFF SERIES

Fan Filter Unit, Reverse Flow



PERFORMANCE DATA | RFCRFF-E-ARSM (CONTINUED)

CEILING UNIT, 48"x24" HEPA FILTER*, 120VAC				CEILING UNIT, 48"x24" 12" ROUND DISCHARGE ADAPTER, HEPA FILTER*, 120VAC			
SETPOINT	CFM	WATTS	RPM	SETPOINT	CFM	WATTS	RPM
100%	930	237	2090	100%	785	218	2090
90%	806	174	1881	90%	687	164	1881
80%	672	120	1672	80%	563	110	1672
70%	545	81	1463	70%	454	76	1463
60%	415	50	1254	60%	350	46	1254
50%	292	32	1045	50%	272	30	1045
40%	183	17	836	40%	174	17	836
30%	104	12	627	30%	98	12	627
20%	34	8	418	20%	34	8	418

NOTES: Data was derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
* Data is for diffusers with clean filters. Filters may be operated up to a final resistance of 2" w.g. (500 Pa).

SOUND DATA | RFCRFF-E-ARSM 48"x24"

DATA COLLECTED AT 277VAC														
BACKWARD INCLINED FAN UNIT							OCTAVE BAND FREQUENCY							
VELOCITY	DISTANCE FROM FACE	Hz	dBA	COMMAND VDC	LAEQ	NC	1	2	3	4	5	6	7	8
70	30"	500	57.48	5.7	57.48	55	58	61	54	58	52	47	37	23
80	30"	500	58.81	5.8	58.81	57	62	63	55	59	53	49	39	24
90	30"	500	60.73	6.1	60.73	59	58	62	58	61	55	51	41	27
100	30"	500	61.8	6.3	61.8	60	65	62	58	62	56	52	43	31
110	30"	500	62.98	6.5	62.98	60	60	66	60	63	58	53	45	31

SUGGESTED SPECIFICATION & CONFIGURATION

1. SERIES: (XXXXXX-X-XXXX)

RFCRFF-E-ARSM - Reverse Flow Fan Filter Unit with HEPA Filter (Ceiling Mounted Unit)

2. MOTOR: (X)

4 - 120V EC Motor
5 - 208/240V EC Motor
6 - 277V EC Motor

3. CONTROL TYPE: (X)

1 - Adjustable Face Control

4. FRAME: (XXX)

F23 - Lay-in T-Bar

5. PANEL: (XX)x(XX)

24"x24"
24"x48"

6. FILTER: (XXXX)

HEPA - 99.99% @ 0.3 Micron
ULPA - 99.9995% @ 0.12 Micron

7. INSULATION: (X)

I - External 1.5" Foil Backed

8. ACCESSORIES: (XX) (XX) (XX)

00 - None
PM - Constant Filter Monitoring
PL - Filter Pressure Light
03 - Challenge / Pressure Ports

9. FINISH: (XX)

90 - 304 SS Casing with 304 SS Diffuser Screen, Polished Satin
4A - Antimicrobial White

1. SERIES: (XXXXXX-X-XXXX)

RFCRFF-E-ARSM - Reverse Flow Fan Filter Unit with HEPA Filter (Mobile Unit)

2. MOTOR: (X)

4 - 120V EC Motor

3. CONTROL TYPE: (X)

1 - Adjustable Face Control

4. FRAME: (XXX)

MBU - 3" Swivel Casters w/ (2) Brakes

5. PANEL: (XX)x(XX)

24"x48"

6. FILTER: (XXXX)

HEPA - 99.99% @ 0.3 Micron
ULPA - 99.9995% @ 0.12 Micron

7. ACCESSORIES: (XX) (XX) (XX)

00 - None
PM - Constant Filter Monitoring
PL - Filter Pressure Light
03 - Challenge / Pressure Ports

8. FINISH: (XX)

90 - 304 SS Casing with 304 SS Diffuser Screen, Polished Satin
4A - Antimicrobial White

1. SERIES: (XXXXXX-X-XXXX)

RFCRFF - PSC Reverse Flow Fan Filter Unit
RFCRFF-ARS - PSC Reverse FFU with replaceable HEPA

2. MOTOR: (X)

1 - 120V 1-Phase
3 - 277 1-Phase

3. CONTROL TYPE: (X)

PSC - Solid State Speed Controller

4. FRAME: (XXX)

F23 - Lay-in T-Bar

5. PANEL: (XX)x(XX)

24"x24"
24"x48"

6. FILTER: (XXXX)

HEPA - 99.99% @ 0.3 Micron
ULPA - 99.9995% @ 0.12 Micron

7. ACCESSORIES: (XX) (XX) (XX)

00 - None
CFM - Constant Filter Monitoring
INS - Insulation
SMA - Surface Mount Adaptor

8. FINISH: (XX)

01 - Mill with White Diffuser Screen
44 - British White Casing and Diffuser Screen

SAMPLE CONFIGURATION: RFCRFF-E-ARSM - 4 - 1 - MBU - 24x48 - HEPA - PM - 90