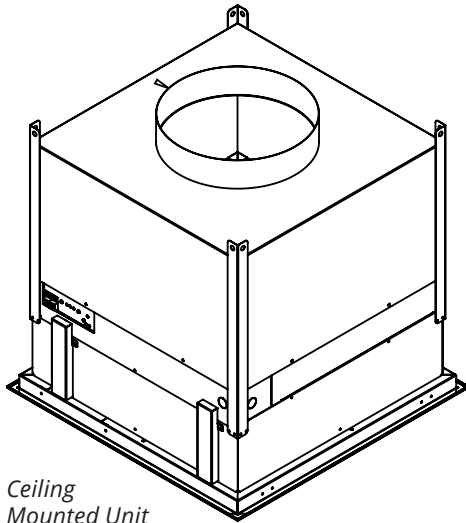
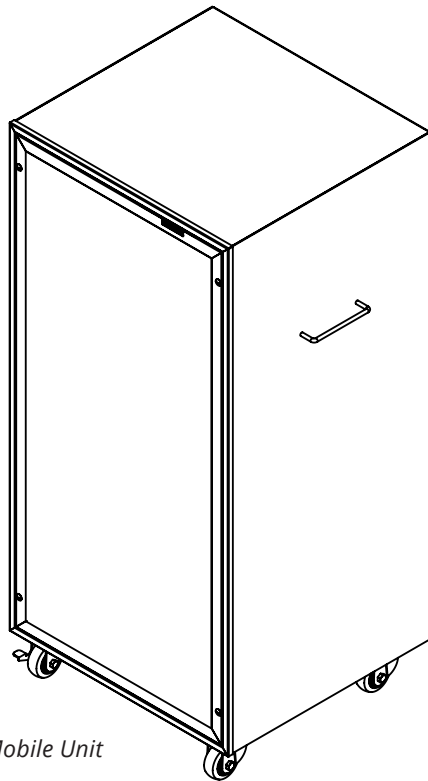


# RFCRFF-E-ARSM

Fan Filter Unit, Reverse Flow



Ceiling Mounted Unit



Mobile Unit

## 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-E-ARSM - Reverse flow fan filter unit with HEPA filter and room side access to EC motor and filter

## FEATURES

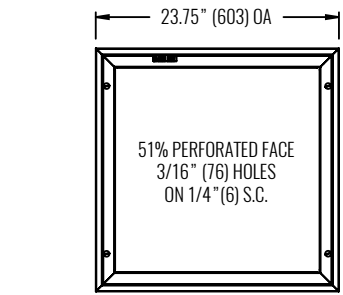
- 304 stainless steel construction
- Sizes: 24" x 24" or 24" x 48"
- 51% free area, perforated face
- Adjustable face control
- Roomside accessible pre-filter, filter, motor, and backward curved composite impeller
- High Efficiency Particulate Air (HEPA) filter: 99.99% @ 0.3 micron, type J
- EC brushless 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.

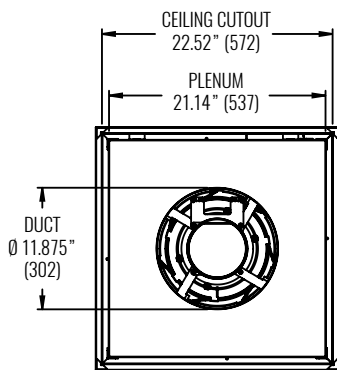
## OPTIONS

- 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

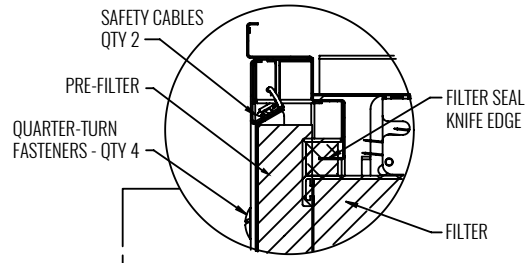
**DIMENSIONAL DATA | CEILING UNIT**



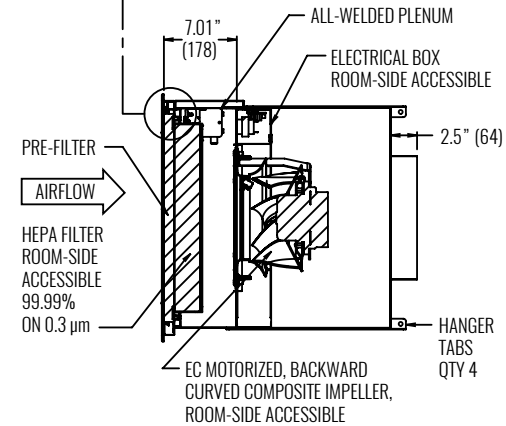
**BOTTOM VIEW**



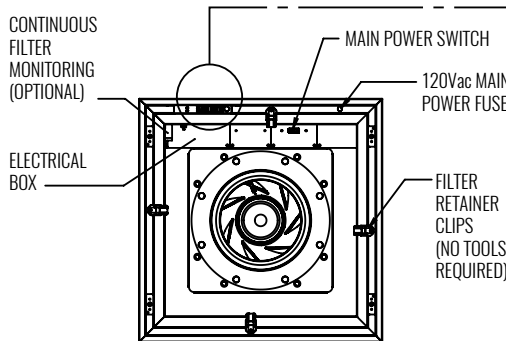
**TOP VIEW**



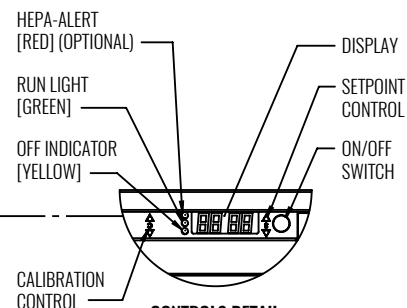
**FILTER/LATCH DETAIL**



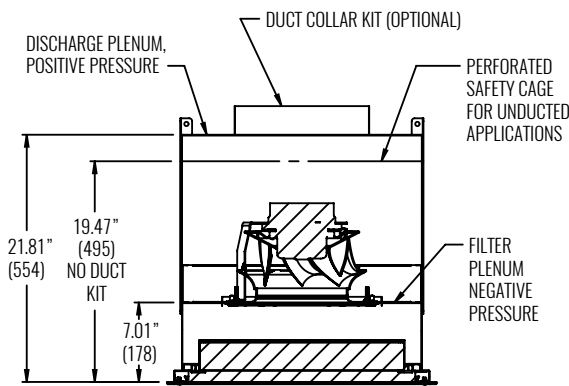
**SIDE VIEW**



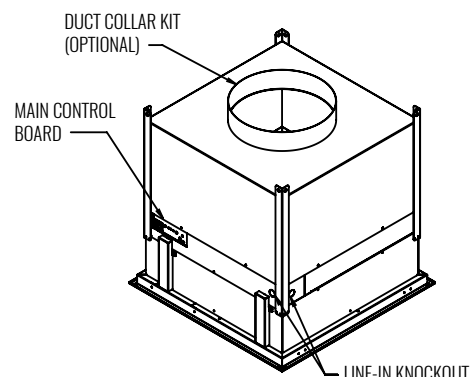
**BOTTOM VIEW**  
FACE FRAME AND HEPA FILTER REMOVED FOR CLARITY



**CONTROLS DETAIL**



**SIDE VIEW**



**ISOMETRIC VIEW**

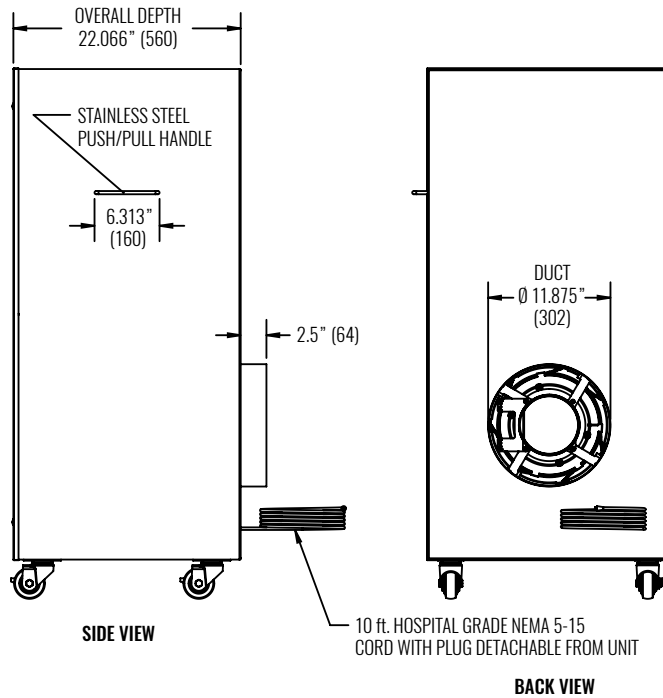
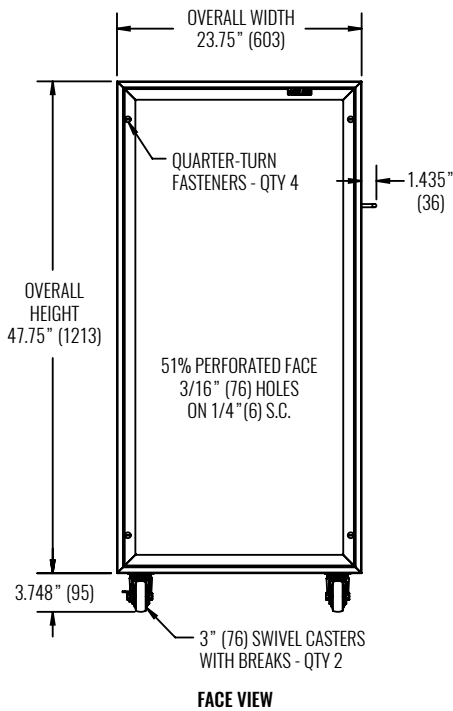
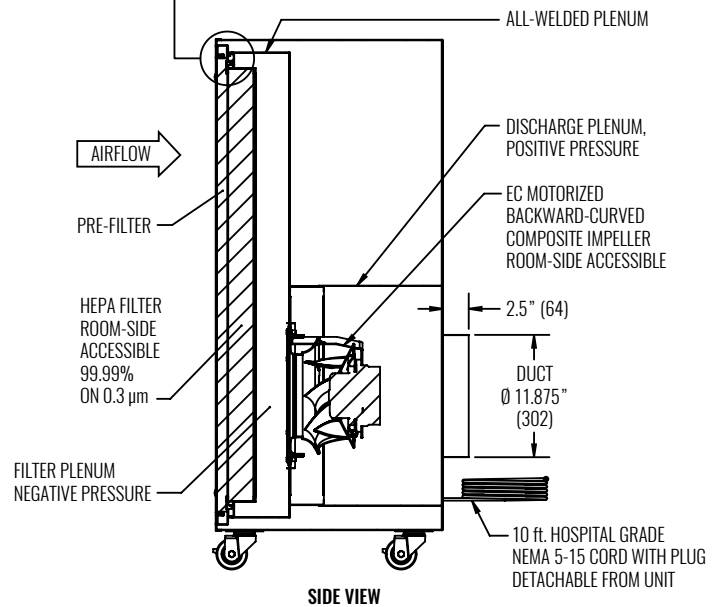
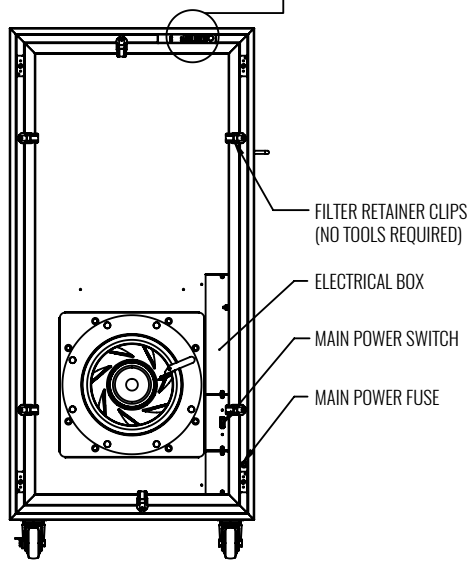
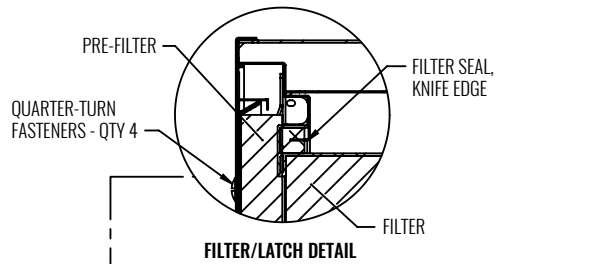
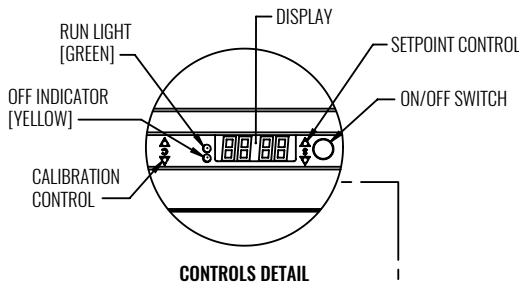
NOTES: Dimensions in parentheses are millimeters.

# RFCRFF-E-ARSM

Fan Filter Unit, Reverse Flow



## DIMENSIONAL DATA | MOBILE UNIT



NOTES: Dimensions in parentheses are millimeters.

**B3-86**

CRITICAL ENVIRONMENT | FAN FILTER UNITS

RFCRFF-E-ARSM

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## PERFORMANCE DATA | CEILING UNIT | 24"x24" UNIT

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

## PERFORMANCE DATA | MOBILE UNIT | 48"x24" UNIT

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

## PERFORMANCE DATA | CEILING UNIT | 48"x24" UNIT

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

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

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

12" ROUND DISCHARGE ADAPTER, HEPA FILTER*, 120VAC			
SETPOINT	CFM	WATTS	RPM
100%	785	218	2090
90%	687	164	1881
80%	563	110	1672
70%	454	76	1463
60%	350	46	1254
50%	272	30	1045
40%	174	17	836
30%	98	12	627
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).

# RFCRFF-E-ARSM

Fan Filter Unit, Reverse Flow



## SOUND DATA | 48"x24" UNIT

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

CRITICAL ENVIRONMENT | FAN FILTER UNITS

RFCRFF-E-ARSM

**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