

ENVIRO-TEC® MODEL VF FAN COIL UNIT



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RAISING THE STANDARD IN FI

CONTRACTORS

ENVIRO-TEC® model VFE vertical exposed and VFC vertical concealed fan coil units provide maximum performance while reducing installed cost to the contractor. Ultra narrow profile design (maximum 10" deep and 25" high; up to 1250 CFM) allows installation virtually anywhere. Access to all components through the front panel with only a screw driver makes service easy.

DESIGNERS

The VF's modular construction and number of available sizes renders unparalleled flexibility. Available with chilled water or DX cooling, and hot water, steam or electric heating coils, ENVIRO-TEC® VF fan coils produce the ultimate in comfort and flexibility.

OWNERS

ARI 440 certification ensures exacting performance. Concerned about indoor air quality? Sloped, antimicrobial treated drain pans are standard features on VF Series fan coils. The drain pans and coils are easily removed for cleaning.



STANDARD FEATURES

- Narrow profile, 10" depth and 25" height for all sizes
- Heavy gauge G 60, chromate coated galvanized steel casing construction
- 18 gauge galvannealed steel exterior cabinet construction
- Stamped louver discharge grille
- Durable powder coat paint finish; inside and outside
- 1/2" 4lb. dual-density fiberglass insulation
- Sloped drain pan, internally insulated
- 2 or 4 pipe configuration, heating coil in reheat position
 - 2, 3 or 4 row chilled water, or 3 or 4 row DX
 - 1 and 2 row hot water and steam
- Manual air vents
- Multi-speed motors, 120, 208/230, or 277 volts
- 1" throwaway filters
- ETL safety listed and labeled
- ARI 440 certified

OPTIONAL FEATURES

- Stainless steel drain pan
- Stainless steel coil casings
- Stainless steel auxiliary drain pan
- Factory pre-wired terminal strips for valve and thermostat connections
- 16 gauge front panel construction
- Foil faced insulation
- Auto air vents
- Double deflection discharge grille
- Return air bar grille
- 0 25% manual outside air damper

ELECTRIC HEAT

Electric heat is available in a wide variety of kW and voltage configurations. Options include disconnects, low voltage controls, and quiet operating contactors. All control and electric heat configurations with single point power connection are ETL listed as an assembly.

VF Fan Coils LEXIBILITY AND PERFORMANCE



END POCKETS

The 8" end pockets allow for accessibility and service of optional factory piping packages and controls. End panels are removable to allow for even greater access.



FAN DECK

The fan/drain pan assembly is easily removable for service access to motors and blowers at, or away from, the unit.

DRAIN PAN

The sloped insulated drain pan is available in stainless steel construction. Standard drain pans are internally insulated, single wall galvanized steel. The VF Series fan/drain pan assembly is easily removable for cleaning.



COILS

All fan coils are available in 2 or 4 pipe configurations. The heating coil is standard in the reheat position. Heating and cooling coils are available with the same or opposite end connections. Access for cleaning on the entering air side is available when the drain pan is removed. Coils are removable for service or replacement.



FILTER

The filter is easily replaceable through the return air toe space without requiring removal of the front panel.

POWDER COATED PAINTED SURFACE

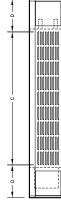
Textured decorator, powder coat finish resists scuffing, scratching, fading, and finger prints.





ENVIRO-TEC® offers a Windows® based Selection Program for VF Model coil selection assistance. See your ENVIRO-TEC® representative for complete catalog and product selection information.

Model VFE



TOP MEW

ENGINEERING FOR EXCELLENCE

STANDARD RATING & DIMENSIONAL INFORMATION

Model VFE



| 10 1284] ———————————————————————————————————— | | 3 C FILTER — 9-1/2 — [241] |
|--|--|----------------------------|
| 5/8" x 1" OBROUND HOLE. TYP. (4) PLCS. | 14-8/16 [384] MfC, HOLES | 3/4" MPT |
| 7-1/4 | | [203] |
| MTC. HOLES STANDARD 6 X 6 UNCTION BOX | O SELVEN NACIONAL NAC | 8 4 |
| 7-1/4 | 0 | [203] |
| 1 | | |

| 10 [178] (178] (178] | | | FILTER 9-1/2 [241] |
|--|------|------------|--------------------|
| | | [635] | . [26] |
| 5/8" x 1" 5/8" x 1" OBROUND HOLE, TYP. (4) PLCS. | 1.00 | MrG. HOLES | 3/4" MPT |
| [184] | | - J. S. | [203] |
| MTG. HOLES STANDARD 6 x 6 JUNCTION BOX | o | | RETURN ARR |

| UNIT | A | В | C | D | |
|-------|-----------|-----------|-------------|-------------------|--------------|
| 20 | 43 | 27 | 23½ | 9³/₄ | 7 <u>/</u>] |
| | [1092] | [686] | [597] | [248] | 3 7 |
| 30 | 53 | 37 | 31 ½ | 10³/ ₄ | (6] |
| | [1346] | [940] | [800] | [273] | 38 |
| 40 | 63 | 47 | 43 ½ | 9³/₄ | 48 |
| | [1600] | [1194] | [1105] | [248] | [12 |
| 20 | 73 | 57 | 51 ½ | 10³/ ₄ | 58 |
| | [1854] | [1448] | [1308] | [273] | [14 |
| 09 | 83 | 67 | 63 ½ | 9³/₄ | 68 |
| | [2108] | [1702] | [1613] | [248] | [17 |
| NOTE: | | | | | |

| | | 7 | m | 4 | 2 | 9 | 2 | æ | 4 | 1 |
|------|---------------------------|-------|------------------|-------|--------------------|-------|--------|-------|--------|------|
| TINO | TYPE | į | Vre (Exposed) | . ! | VFC (Concealed) | | | VEE | : | 01/1 |
| ш | 28 ½ [724] | 381/ | [978] | 481/2 | [1232] | 581/2 | [1486] | 681/2 | [1740] | |
| Q | 9³/ ₄ [248] | 103% | [273] | 93/4 | [248] | 103/4 | [273] | 9³/4 | [248] | |
| U | 7. EZ | 311/6 | [800] | 431/2 | [1105] | 511/2 | [1308] | ₹/,£9 | [1613] | |
| В | 22 72 | 37 | [940] | 47 | [1194] | 22 | [1448] | 29 | [1702] | |
| 4 | 43 [1092] | 53 | [1346] | 63 | [1600] | 73 | [1854] | 83 | [2108] | |
| L | | | | | | | | | | |

1. All Dimensions are in inches [millimeters].

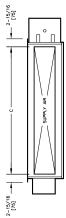
SIDE VIEW

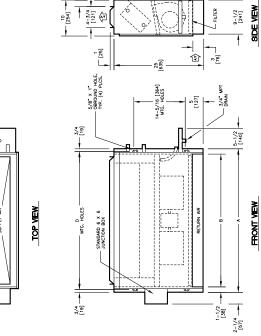
FRONT WEW

| | | ARI | Sta | ARI Standard Ratings | Ratir | sbu | |
|-----------------|----------------|---------|------|----------------------|------------------|---------------------|------------------|
| HNO | UNIT SIZE | NOMINAL | | COOLING CAPACITY | APACITY | PWR. INPUT WATTS | WATE PRESS. D |
| TYPE | COIL ROWS | CFM | GPIM | ТОТАL ВТОН | SENSIBLE BTUH | PSC | FEET OF WAT |
| | 20, 3 Row (3C) | 250 | 1.5 | 7,500 | 5,400 | 75 | 1.3 |
| VFE (Exposed) | 30, 3 Row (3C) | 200 | 2.4 | 10,900 | 8,300 | 135 | 2.4 |
| | 40, 3 Row (3C) | 750 | 3.2 | 14,700 | 11,300 | 200 | 3.2 |
| VFC (Concealed) | 50, 3 Row (3C) | 1000 | 4.9 | 22,700 | 15,700 | 395 | 5.5 |
| (Ballacallon) | 60, 3 Row (3C) | 1250 | 5.9 | 26,900 | 20,800 | 355 | 7.5 |
| | 20, 4 Row (4C) | 250 | 1.9 | 9,100 | 6,100 | 59 | 2.4 |
| VFE | 30, 4 Row (4C) | 200 | 2.8 | 13,200 | 008'6 | 125 | 4.1 |
| | 40, 4 Row (4C) | 750 | 3.9 | 18,200 | 13,400 | 185 | 4.4 |
| VFC | 50, 4 Row (4C) | 1000 | 5.8 | 27,400 | 20,500 | 365 | 8.3 |
| | 60, 4 Row (4C) | 1250 | 6.7 | 32,400 | 24,000 | 350 | 13.6 |
| | | | | | | | |

Based on 80°F DB and 67°F WB EAT, 45°F EWT, 10°F temperature rise, high fan speed. Motor voltage 115/1/60. Airflow under dry coil conditions.

Model VFC





Model VFC

| SIZE | A | В | C | D |
|------|-----------|-----------|--------------|-------------|
| 20 | 30 | 27 | 24 1% | 28 ½ |
| | [762] | [686] | [613] | [724] |
| 30 | 40 | 37 | 34 % | 38 ½ |
| | [1016] | [940] | [876] | [978] |
| 40 | 50 | 47 | 44 % | 48 ½ |
| | [1270] | [1194] | [1121] | [1232] |
| 50 | 60 | 57 | 54 % | 58 ½ |
| | [1524] | [1448] | [1375] | [1486] |
| 60 | 70 | 67 | 64 1% | 68 ½ |
| | [1778] | [1702] | [1629] | [1740] |
| 110 | | | | |

1. All Dimensions are in inches [millimeters].

Heating Capacity

| FIND | | NOMINAL | | 1 ROW | | N | 2 ROW | | m | 3 ROW | | 4 | 4 ROW | |
|------|----|---------|------|--------------|-----|--------------|-------|-----|---|-------|-----|--------------|-------|-----|
| TYPE | | CFM | SMBH | GPM | WPD | SMBH | GPM | WPD | SMBH GPM WPD SMBH GPW WPD SMBH GPM WPD SMBH GPM | GPM | WPD | SMBH | GPM | WPD |
| | 20 | 250 | 9.8 | 0.4 | 0.2 | 0.2 15.7 0.8 | 0.8 | 6.0 | 0.9 19.7 1.0 0.3 22.9 | 1.0 | 0.3 | 22.9 | 1.2 | 0.5 |
| | 30 | 200 | 15.1 | 15.1 0.8 | 9.0 | 27.5 | 1.5 | 3.2 | 0.6 27.5 1.5 3.2 36.0 2.0 | 2.0 | 1.2 | 1.2 42.0 | 2.3 | 2.0 |
| A 7 | 40 | 750 | 21.0 | 21.0 1.2 | 1.5 | 36.0 | 2.1 | 1.6 | 1.6 49.1 | 2.8 | 1.1 | 57.7 | 3.3 | 1.8 |
| | 20 | 1000 | 27.3 | 27.3 1.5 0.7 | 0.7 | 51.0 | 2.7 | 2.9 | 51.0 2.7 2.9 70.0 3.8 | 3.8 | 2.0 | 2.0 82.2 4.4 | 4.4 | 3.4 |
| | 9 | 1250 | 35.4 | 35.4 2.0 4.7 | 4.7 | 6.09 | 3.4 | 4.7 | 4.7 84.1 4.7 | 4.7 | 3.4 | 98.5 | 5.5 | 5.6 |

NOTE:

1. Based on 70°F DB EAT, 180°F EWT, 40°F temperature drop, high fan speed.

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