

FED Downflow Electric Furnace and NADA Accessory Coil

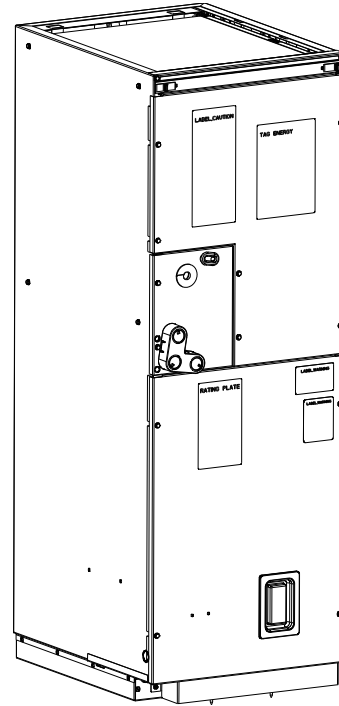
Product Specifications

FEATURES / BENEFITS

- 2 thru 5 tons
- Multiple electrical entry locations
- Factory installed heater packages from 10 kW - 20 kW available separately
- Approved for use in manufactured housing
- 208/230-1-60 supply voltage
- 1 inch thick insulation with R value of 4.2
- Standard filter factory supplied
- ECM 5-speed motor
- Dedicated downflow position
- Low voltage circuit protective fuse (3A) in-line on wire harness

LIMITED WARRANTY

- 1 year limited warranty
For manufactured housing applications only.
See warranty certificate for complete details and restrictions



A200509A



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



A200511

Model Number	Nom. CFM	Operating Dimensions H x W x D (in.)	Shipping Dimensions H x W x D (in.)	Filter Size (in.)	Ship Wt (lb.)
FED002410 FED002410B	800	49-5/8 x 17-5/8 x 22-1/16	53-1/4 x 19-1/4 x 24	16 x 20 x 1	92
FED003610 FED003610B	1200	49-5/8 x 17-5/8 x 22-1/16	53-1/4 x 19-1/4 x 24	16 x 20 x 1	124
FED003612 FED003612B	1200	49-5/8 x 17-5/8 x 22-1/16	53-1/4 x 19-1/4 x 24	16 x 20 x 1	124
FED003615 FED003615B	1200	49-5/8 x 17-5/8 x 22-1/16	53-1/4 x 19-1/4 x 24	16 x 20 x 1	124
FED004815 FED004815B	1600	53-7/16 x 21-1/8 x 22-1/16	57-1/4 x 22-3/4 x 24	20 x 20 x 1	144
FED006020 FED006020B	1750	59-3/16 x 24-11/16 x 22-1/16	62-3/4 x 26-1/2 x 24	20 x 24 x 1	169

FAN COIL MODEL NUMBER IDENTIFICATION GUIDE

Digit Position	1	2	3	4, 5	6,7	8,9	10
F = Fan Coil UNIT	F	E	D	00	24	10	B
E = ECM MOTOR TYPE							
D = Downflow U = Upflow INSTALLATION TYPE							
00 = No Refrigerant Coil REFRIGERANT							
24 = 24,000 BTUH = 2 tons 36 = 36,000 BTUH = 3 tons 48 = 48,000 BTUH = 4 tons 60 = 60,000 BTUH = 5 tons MAX COOLING CAPACITY							
10 = 10 kW 12 = 12 kW 15 = 15 kW 20 = 20 kW ELECTRIC HEAT KW							
B = Enhanced Circuit Breaker Box							

DIMENSIONAL DATA (refer to drawings)

Unit Size	Size (ton)	Dimensions (in.)									Coil Type	Ship. Wt (lb.)
		A	B	C	D	E	F	G	Suct.	Liquid		
FED002410*	2	49-5/8	17-5/8	15-3/4	15-5/8	15-3/8	23-1/8	23-5/8	3/4	3/8	Slope	92
FED003610*	3	49-5/8	17-5/8	15-3/4	15-5/8	15-3/8	23-1/8	23-5/8	3/4	3/8	Slope	124
FED003612*	3	49-5/8	17-5/8	15-3/4	15-5/8	15-3/8	23-1/8	23-5/8	3/4	3/8	Slope	124
FED003615*	3	49-5/8	17-5/8	15-3/4	15-5/8	15-3/8	23-1/8	23-5/8	3/4	3/8	Slope	124
FED004815*	4	53-7/16	21-1/8	19-1/4	19-1/8	15-11/16	23-7/16	23-1/8	7/8	3/8	"A"	144
FED006020*	5	59-3/16	24-11/16	22-3/4	22-11/16	25-1/4	32-15/16	32-5/8	7/8	3/8	"A"	169

PHYSICAL DATA - FED

	Size					
	FED002410*	FED003610*	FED003612*	FED003615*	FED004815*	FED006020*
Blower Data						
CFM nominal	800	1200			1600	1750
Motor Type	ECM 5-speed					
HP	1/3	1/2			3/4	3/4
Filter Data (in.)						
	16 x 20 x 1				20 x 20 x 1	20 x 24 x 1

- NOTE:
- SERIES DESIGNATION IS THE 12TH AND 13TH POSITION OF UNIT PRODUCT NUMBER.
 - ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

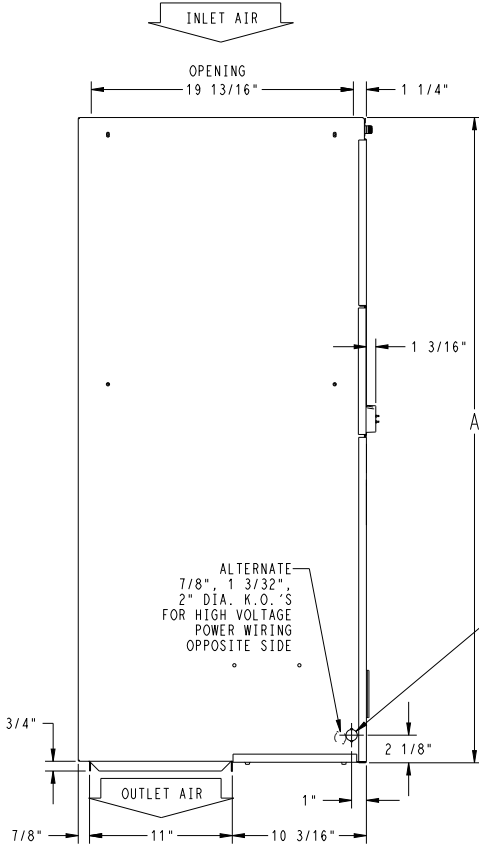
UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G	COIL CONFIGURATION		SHIPPING WT (LBS)
		SLOPE	"A"	"B"	"C"										
FED0024*	1	X	O			49 5/8"	17 5/8"	15 3/4"	15 5/8"	15 3/8"	23 1/8"	23 5/8"	X	-	92
FED0036*	1	X	O			49 5/8"	17 5/8"	15 3/4"	15 5/8"	15 3/8"	23 1/8"	23 5/8"	X	-	124
FED0048*	1	X	O			53 7/16"	21 1/8"	19 1/4"	19 1/8"	15 11/16"	23 7/16"	23 1/8"	-	X	144
FED0060*	1	X	O			59 3/16"	24 11/16"	22 3/4"	22 11/16"	25 1/4"	32 15/16"	32 5/8"	-	X	169

UNIT CONNECTION SIZES

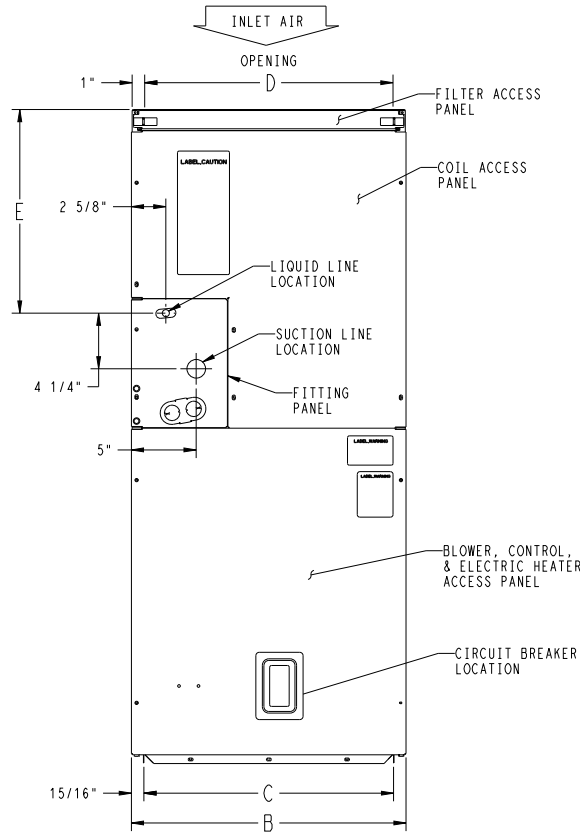
SUCTION: 24 & 36 - 3/4" I.D. SWEAT
 48 & 60 - 7/8" I.D. SWEAT
 LIQUID: 3/8" I.D. SWEAT
 CONDENSATE: 3/4" FPT

X=YES
 O=NO

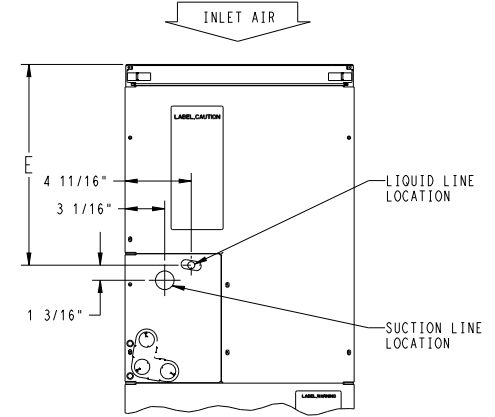
NOTE: ALLOW 21" FROM FRONT FOR SERVICE



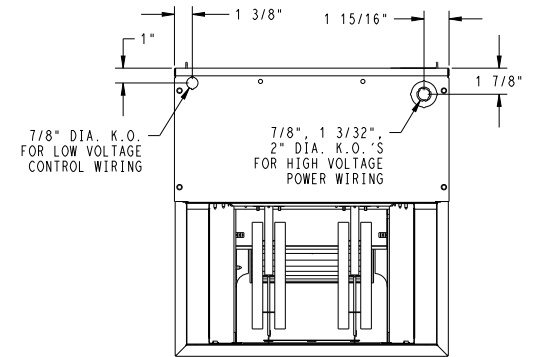
LEFT SIDE VIEW



FRONT VIEW
 SHOWN WITH "A" COIL DETAILS CONNECTION LOCATIONS



SLOPE COIL DETAILS
 CONNECTION LOCATIONS



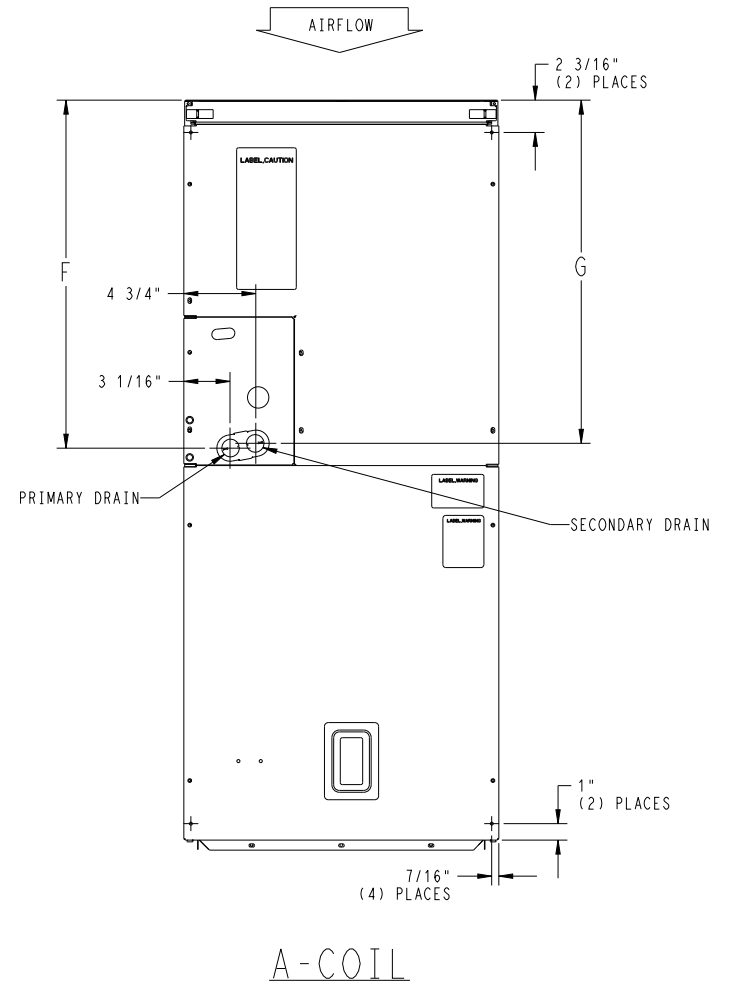
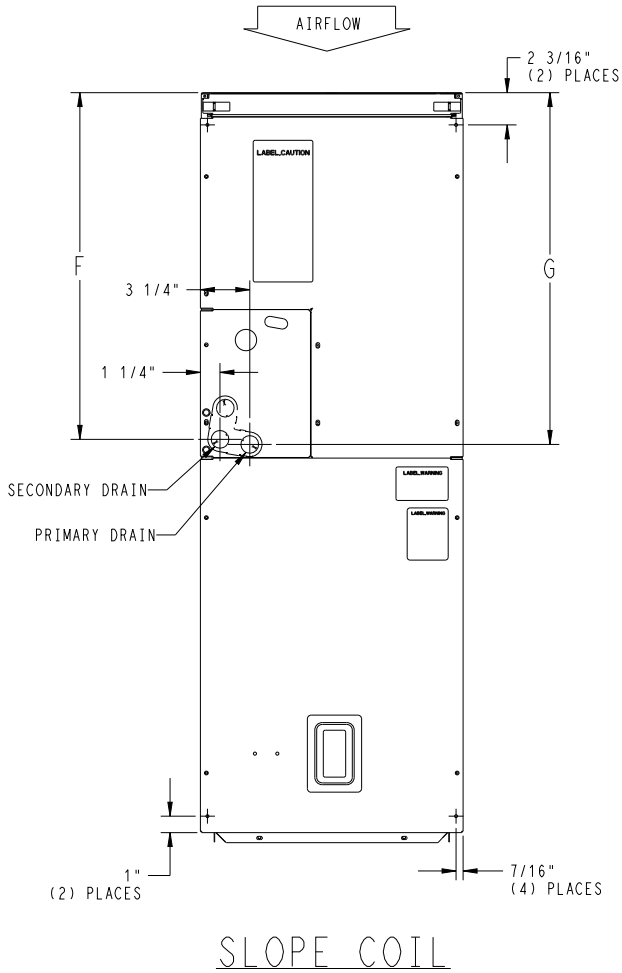
BOTTOM VIEW

U.S. EXPORT CLASSIFICATION: Not Subject to Regulation (N.S.R) MEASUREMENT- ENGLISH

PART NUMBER	SD5521-4	SHT	1	REV	A
NEXT SHEET	2				

NOTES:

1. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

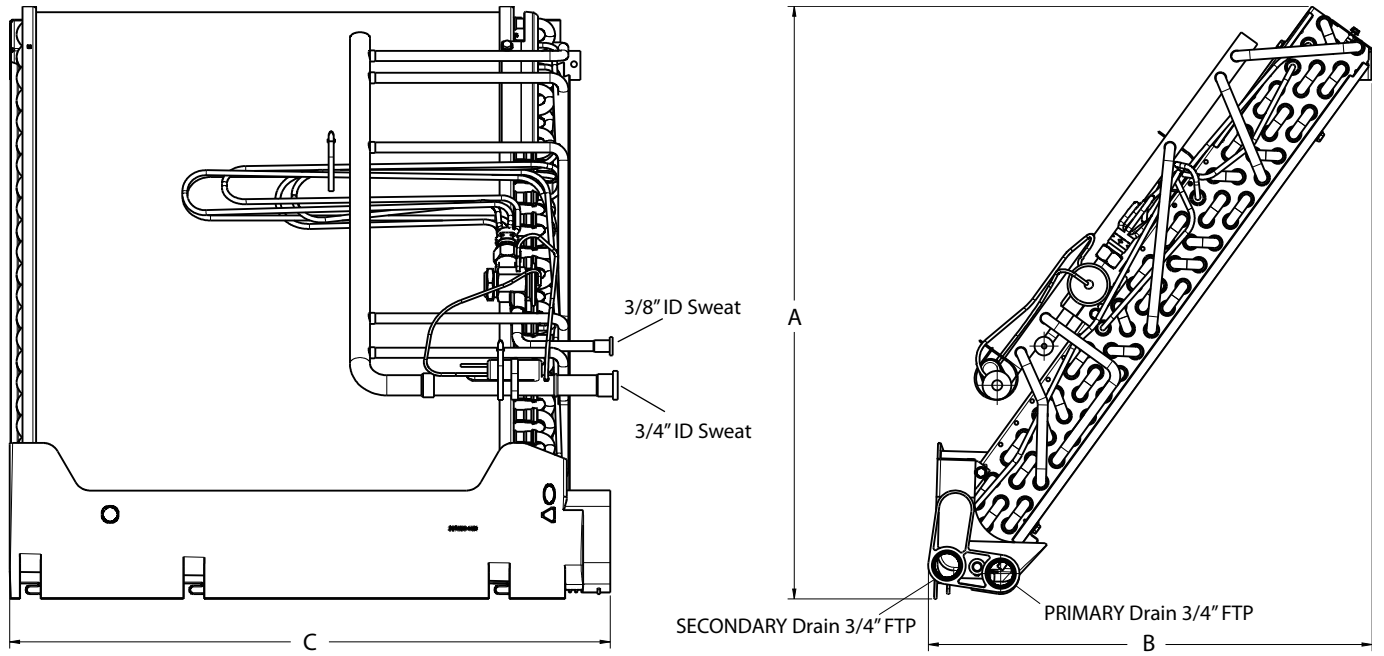


U.S. EXPORT CLASSIFICATION: Not Subject to Regulation (N.S.R) **MEASUREMENT- ENGLISH**

PART NUMBER	SD5521-4	SHT	REV
NEXT SHEET	3	2	-

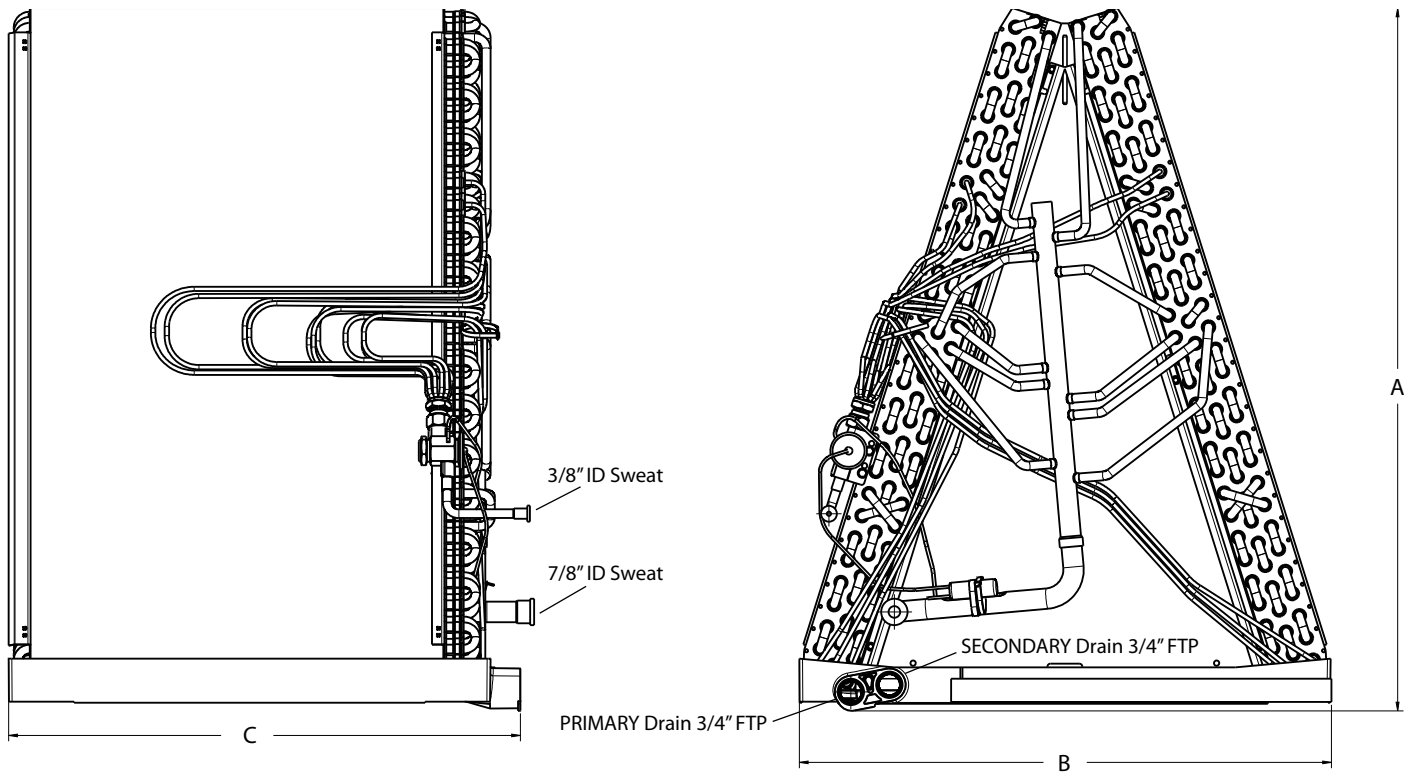
A200513

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.



Slope Coil

A190146



A Coil

A190147

PHYSICAL DATA - NADA ACCESSORY COIL

	Slope Coil	A Coils	
	NADA43601CK	NADA44801CK	NADA46001CK
Dimensions (in.)			
A	22.05	24.57	30.20
B	16.51	19.40	22.86
C	22.34	22.07	22.00

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COIL MATCHUP CHART

Cooling and Heat Pump Coil Kit Part Number	Indoor Unit	Outdoor Unit Tonnage	
		Air Conditioner	Heat Pump
NADA43601CK	FED002410*	1.5 - 2	2
	FED003610* FED003612* FED003615*	2.5 - 3	2.5 - 3
	FED004815*	3 - 4	3.5 - 4
NADA46001CK	FED006020*	4 - 5	4 - 5

NOTE: Reference the AHRI Directory for specific equipment combinations and performance.

ELECTRICAL DATA, FAN COIL ONLY WITHOUT ELECTRIC HEAT

Model	Heater kW	Circuit	Motor Amps	Heater Amps	Min Circuit Amps	Breaker Size Amps
FED002410*	10	SINGLE	2.8	40	53.6	60
FED003610*	10	SINGLE	4.1	40	55.1	60
FED003612*	12	A (L1,L2)	4.1	31.7	44.8	50
		B (L3,L4)		15.8	19.8	20
FED003615*	15	A (L1,L2)	4.1	40	55.1	60
		B (L3,L4)		20	25	25
FED004815*	15	A (L1,L2)	6	40	57.5	60
		B (L3,L4)		20	25	25
FED006020*	20	A (L1,L2)	6	40	57.5	60
		B (L3,L4)		40	50	50

1. All values are calculated at 230 volts.
2. Wire size must be in accordance with the applicable revision of the NEC and all other applicable codes.
3. Amperage ratings may vary. Verify correct Amperage listing to ensure adequate breaker size for over-current protection.
4. Use copper wire only.

MINIMUM CFM WHEN USING ELECTRIC HEAT

Unit Size	HEATER kW			
	10	12	15	20
FED002410*	625	—	—	—
FED003610*	625	—	—	—
FED003612*	—	850	—	—
FED003615*	—	—	850	—
FED004815*	—	—	850	—
FED006020*	—	—	—	1050

Note: Speed Tap 4 (white wire) is used for electric heat only. White wire must remain on tap 4.

REQUIRED CLEARANCES - ALL MODELS

Back and Sides	0"
Front	In Closet - 6" to closet door In Alcove - 24" for access
Ducts	0"

AIRFLOW PERFORMANCE - WITHOUT COOLING COIL (CFM)

Size	Blower Speed	Total Static (inches water column)					
		0.10	0.20	0.30	0.40	0.50	0.60

AIRFLOW PERFORMANCE - WITHOUT COOLING COIL (CFM)

FED002410*	Tap 5	1123	1081	1032	993	967	914
	Tap 4	1015	934	892	857	800	737
	Tap 3	1015	942	892	856	804	738
	Tap 2	1012	833	761	705	643	585
	Tap 1	1014	829	627	560	496	441
FED003610* FED003612* FED003615*	Tap 5	1492	1453	1425	1398	1364	1335
	Tap 4	1382	1348	1314	1286	1255	1219
	Tap 3	1383	1347	1313	1285	1254	1218
	Tap 2	1223	1182	1151	1122	1079	1039
	Tap 1	1165	1123	1092	1060	1012	973
FED004815*	Tap 5	1991	1954	1919	1888	1850	1811
	Tap 4	1885	1849	1811	1776	1737	1692
	Tap 3	1889	1846	1812	1778	1739	1690
	Tap 2	1630	1584	1547	1499	1449	1403
	Tap 1	1480	1431	1385	1332	1280	1237
FED006020*	Tap 5	2069	2031	2005	1977	1945	1912
	Tap 4	1857	1824	1795	1760	1727	1689
	Tap 3	1859	1822	1794	1760	1725	1688
	Tap 2	1699	1664	1635	1595	1553	1509
	Tap 1	1569	1482	1403	1355	1308	1263

- Notes:
1. Airflow based upon dry coil at 230V with factory-approved filter and electric heater; airflow at 208V is approximately the same as 230V because the ECM motor is a constant torque motor. The torque doesn't drop off at the speeds the motor operates.
 2. To avoid potential for condensate blowing out of drain pan prior to making drain trap, return static pressure must be less than 0.40 in. wc.
 3. Airflow above 400 cfm/ton on 4800 - 6000 size could result in condensate blowing off coil or splashing out of drain pan.

AIRFLOW PERFORMANCE - WITH ACCESSORY COOLING COIL (CFM)

Size	Blower Speed	Total Static (inches water column)					
		0.10	0.20	0.30	0.40	0.50	0.60
FED002410*	Tap 5	976	924	859	790	736	690
	Tap 4	810	774	710	661	605	568
	Tap 3	850	786	721	672	625	585
	Tap 2	735	661	601	549	504	449
	Tap 1	590	541	489	440	383	333
FED003610* FED003612* FED003615*	Tap 5	1266	1234	1208	1174	1138	1106
	Tap 4	1239	1210	1177	1145	1107	1072
	Tap 3	1229	1201	1170	1141	1110	1076
	Tap 2	1107	1074	1039	1007	973	937
	Tap 1	1048	1016	979	941	906	867
FED004815*	Tap 5	1615	1598	1566	1534	1504	1464
	Tap 4	1533	1504	1471	1439	1400	1359
	Tap 3	1549	1517	1474	1438	1404	1360
	Tap 2	1330	1299	1258	1218	1181	1140
	Tap 1	1218	1185	1148	1102	1056	978
FED006020*	Tap 5	1879	1849	1820	1789	1758	1724
	Tap 4	1686	1656	1622	1588	1557	1522
	Tap 3	1696	1662	1631	1599	1567	1532
	Tap 2	1559	1520	1486	1451	1414	1376
	Tap 1	1356	1323	1290	1247	1198	1156