FEM4P, FSM4P
Product Specifications

FAN COILS
ALL MODELS

- 1–1/2 thru 4 tons
- Available for environmentally sound R–410A systems
- Factory installed piston metering device with Teflon ring
- Sweat connections
- Primary and secondary drain fittings with brass inserts
- Multiple electrical entry locations
- Time delay relay (TDR)
- Field installed heater packages from 5 kW – 30 kW available separately
- HUD approved for manufactured housing
- 208/230–1–60 supply voltage
- Units tested and certified by manufacturer to achieve a 2% or less leakage rate at 1.0 inch water column
- 1 inch thick insulation with R value of 4.2
- Multiposition installation – upflow or horizontal left standard, horizontal right with minor modification (field convertible to downflow with available accessory kit)
- No Heat (Plug) Kit factory installed
- Filter (washable) available as accessory

FEM4P

- ECM 5–speed motor
- Low voltage circuit protective fuse (3amp) inline on wire harness

FSM4P

- PSC 2–speed motor
- Printed circuit board (PCB) with low voltage circuit protective fuse (5 amp)

Available Styles	FEM4P	FSM4P
Upflow	✓	✓
Horizontal	✓	✓
Downflow	kit	kit
Motor	ECM	PSC

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 .

WARRANTY*

FEM

- 1 year No Hassle Replacement™ limited warranty

FEM, FSM

- 5 year parts limited warranty
  - With timely registration, an additional 5 year parts limited warranty

* For owner occupied, residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Model Number	Tons	Nom. CFM (L/s)	Dimensions H x W x D in. (mm)	Filter Size in. (mm)	Ship Wt lbs. (kg)
FEM4P1800**	1–1/2	600 (283)	42–11/16 x 14–5/16 x 22–1/16 (1084 x 364 x 560)	13 x 21–1/2 (330 x 546)	112 (51)
FEM4P2400**	2	800 (378)	42–11/16 x 14–5/16 x 22–1/16 (1084 x 364 x 560)	13 x 21–1/2 (330 x 546)	112 (51)
FSM4P2400**			49–5/8 x 17–5/8 x 22–1/16 (1261 x 448 x 560)	16–3/8 x 21–1/2 (416 x 546)	128 (58)
FEM4P3000**	2–1/2	1000 (472)	49–5/8 x 17–5/8 x 22–1/16 (1261 x 448 x 560)	16–3/8 x 21–1/2 (416 x 546)	122 (55)
FSM4P3000**			53–7/16 x 21–1/8 x 22–1/16 (1357 x 537 x 560)	19–7/8 x 21–1/2 (505 x 546)	145 (66)
FEM4P3600**	3	1200 (566)	49–5/8 x 17–5/8 x 22–1/16 (1261 x 448 x 560)	16–3/8 x 21–1/2 (416 x 546)	122 (55)
FSM4P3600**			53–7/16 x 21–1/8 x 22–1/16 (1357 x 537 x 560)	19–7/8 x 21–1/2 (505 x 546)	148 (67)
FEM4P4200**	3–1/2	1400 (661)	49–5/8 x 21–1/8 x 22–1/16 (1261 x 537 x 560)	19–7/8 x 21–1/2 (505 x 546)	157 (71)
FSM4P4200**					156 (71)
FEM4P4800**	4	1600 (755)	49–5/8 x 21–1/8 x 22–1/16 (1261 x 537 x 560)	19–7/8 x 21–1/2 (505 x 546)	157 (71)
FSM4P4800**			53–7/16 x 24–11//16 x 22–1/16 (1357 x 627 x 560)	23–5/16 x 21–1/2 (592 x 546)	182 (83)

** A = Copper Tube, Aluminum Fin Evaporator
AL = Aluminum Tube, Aluminum Fin Evaporator
AT = Tin Coated Copper Tube, Aluminum Fin Evaporator

FAN COIL MODEL NUMBER IDENTIFICATION GUIDE

F	E	M	4	P	1800	A	T

F = Fan Coil

S = Standard PSC
E = ECM 5–Speed
MOTOR TYPE

U = Upflow
M = Multiposition
INSTALLATION TYPE

4 = Environmentally Sound R–410A
REFRIGERANT

P = Piston Metering Device
METERING DEVICE

1800 = 18,000 BTUH = 1–1/2 tons
2400 = 24,000 BTUH = 2 tons
3000 = 30,000 BTUH = 2–1/2 tons
3600 = 36,000 BTUH = 3 tons
4200 = 42,000 BTUH = 3–1/2 tons
4800 = 48,000 BTUH = 4 tons
NOMINAL CAPACITY

A = Copper Tubes, Aluminum Fin Evaporator Coil
AL = Aluminum Tubes, Aluminum Fin Evaporator Coil
AT = Tin Coated Copper Tubes, Aluminum Fin Evaporator Coil
SALES CODE / FEATURES

ACCESSORIES PART NUMBER IDENTIFICATION GUIDE

EB	AC	01	NCB	A

EB = Evaporator Blower

AC = Accessory

01 = Product Identifier Number

NCB = Non–Combustible Base Kit
DFK = Down Flow Kit
PLG = Power Plug (no heat kit)
SPK = Single Point Wiring Kit
FKS = Filter Kit Small
FKM = Filter Kit Medium
FKL = Filter Kit Large
FKX = Filter Kit Extra Large
CTK = Condensate Trap Kit (PVC pipe)

Sales Code

ELECTRIC HEATER MODEL NUMBER IDENTIFICATION GUIDE

EHK	05	A	K	N	1

EHK = Electric Heater Kit

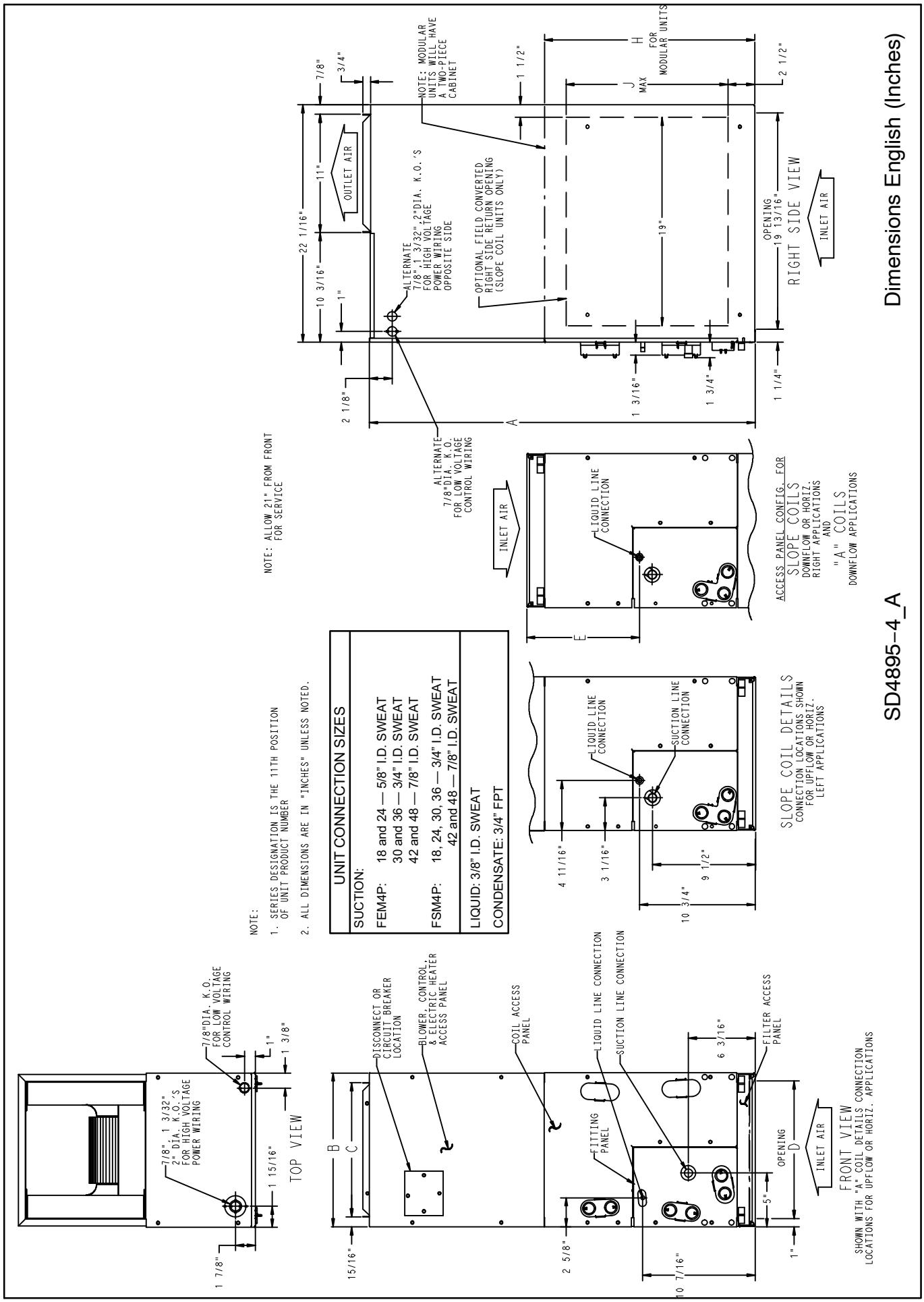
05 = 5 kW
07 = 7 kW
09 = 9 kW
10 = 10 kW
15 = 15 kW
18 = 18 kW
20 = 20 kW
25 = 25 kW
30 = 30 kW
NOMINAL HEAT VALUE

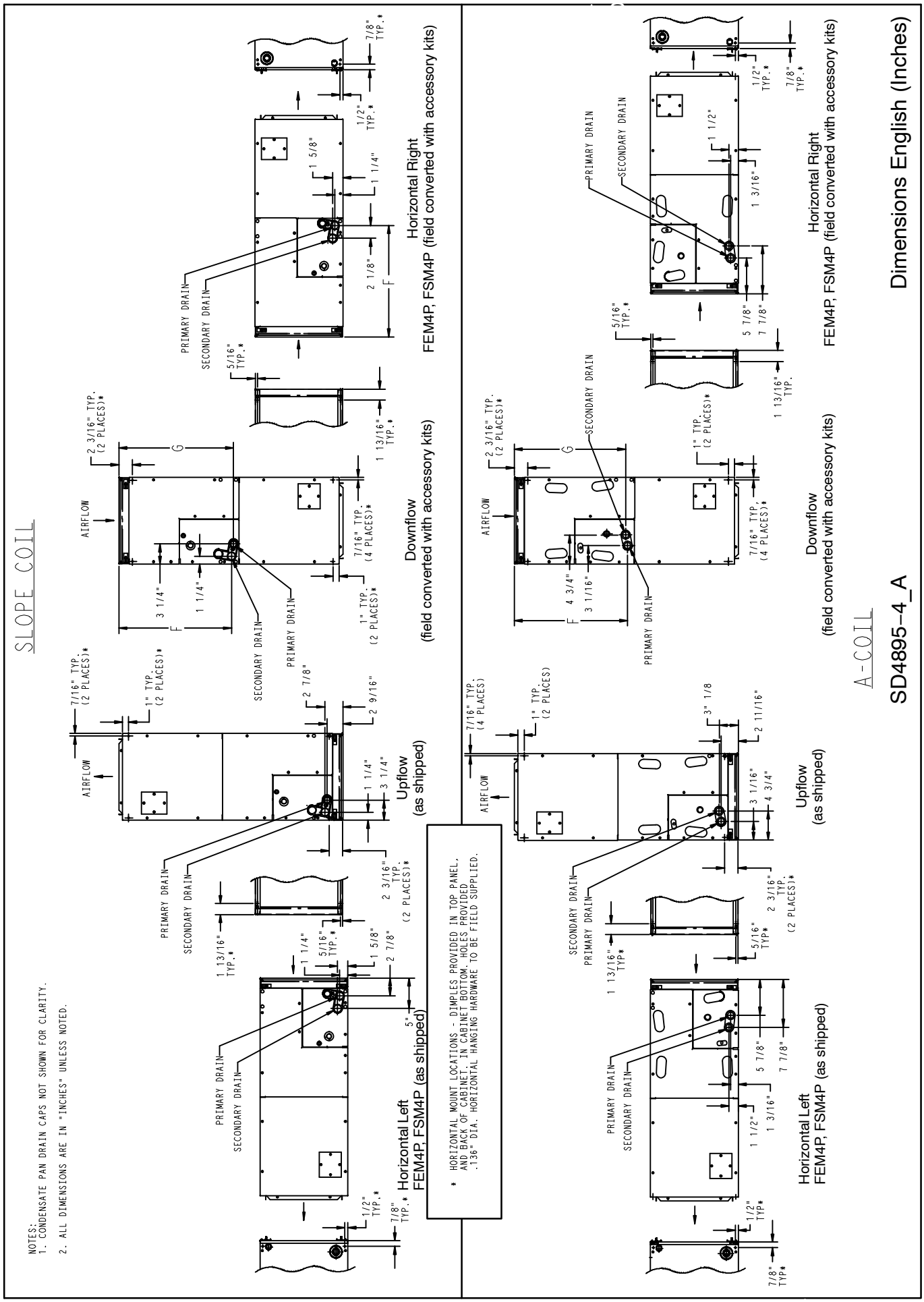
Sales Code

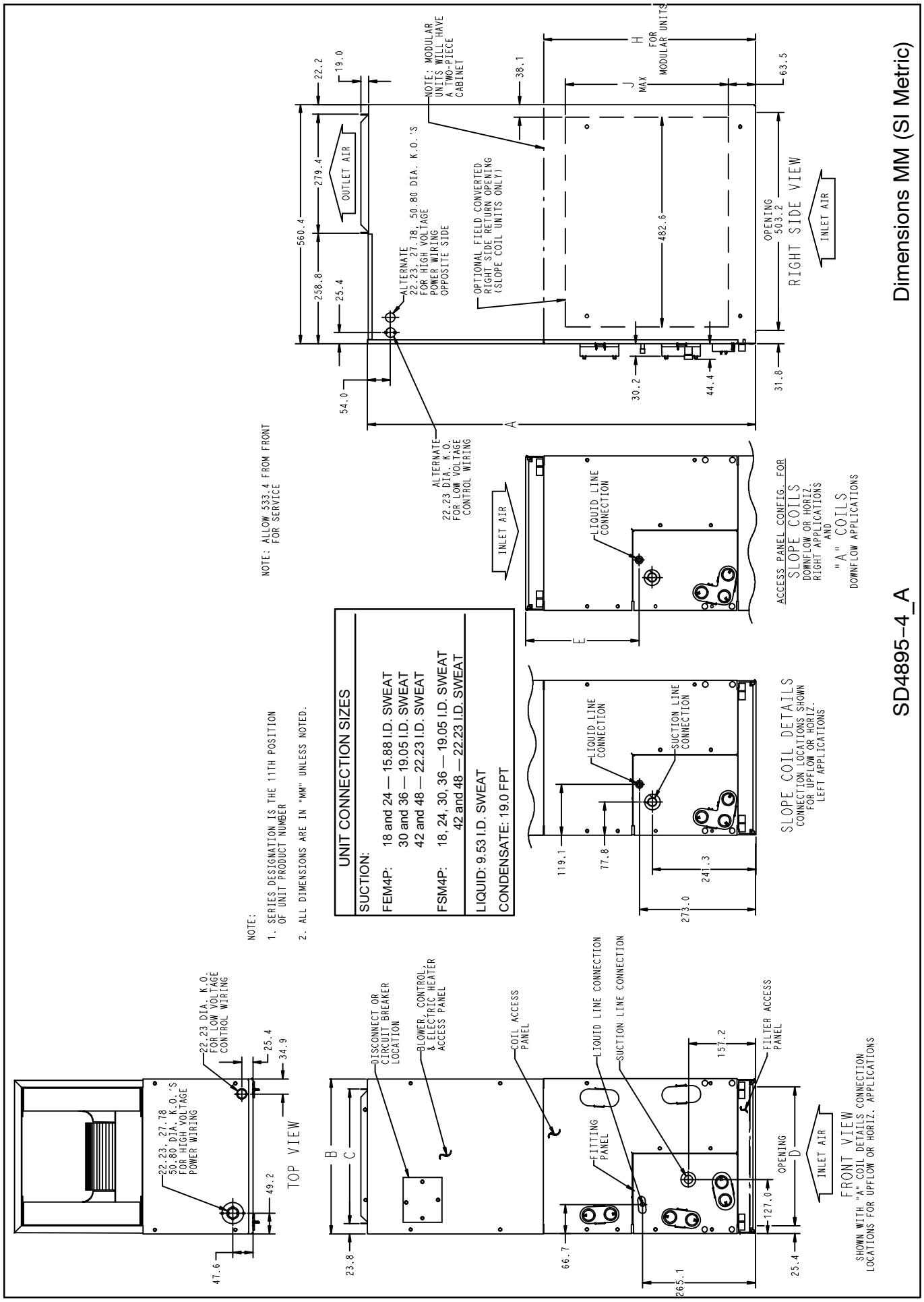
K = 208 / 230 single–phase
H = 208 / 230, 3–phase
KC = 208 / 230, supplied as single phase, field convertible to 3–phase
HC = 208 / 230 supplied as 3–phase, field convertible to single phase
VOLTAGE (60 Hz)

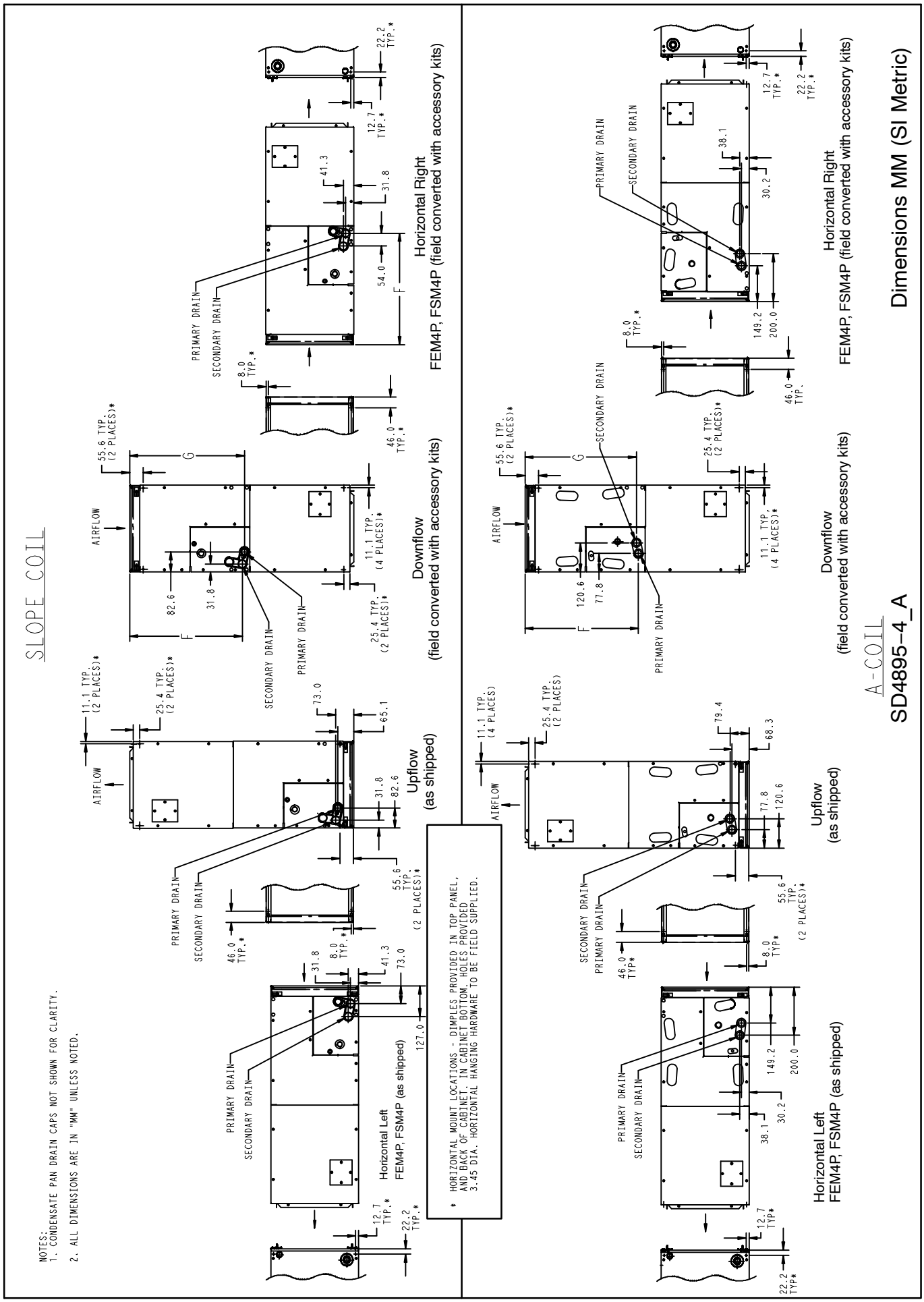
Product Identifier

Engineering Code


Dimensions English (Inches)
SD4895-4_A
RIGHT SIDE VIEW
OUTLET AIR
INLET AIR
NOTE: MODULAR UNITS WILL HAVE A TWO-PIECE CABINET
OPTIONAL FIELD CONVERTED RIGHT SIDE RETURN OPENING (SLOPE COIL UNITS ONLY)
ALTERNATE 7/8" 1 3/32" 2"DIA. K.O.'S FOR HIGH VOLTAGE POWER WIRING OPPOSITE SIDE
ALTERNATE 7/8"DIA. K.O. FOR LOW VOLTAGE CONTROL WIRING
OPENING 19 13/16"
H FOR MODULAR UNITS
J MAX
A
NOTE: ALLOW 21" FROM FRONT FOR SERVICE
LIQUID LINE CONNECTION
ACCESS PANEL CONFIG. FOR SLOPE COILS DOWNFLOW OR HORIZ. RIGHT APPLICATIONS AND "A" COILS DOWNFLOW APPLICATIONS
SUCTION LINE CONNECTION
SLOPE COIL DETAILS CONNECTION LOCATIONS SHOWN FOR UPFLOW OR HORIZ. LEFT APPLICATIONS
NOTE:
1. SERIES DESIGNATION IS THE 11TH POSITION OF UNIT PRODUCT NUMBER
2. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.
UNIT CONNECTION SIZES
SUCTION:
FEM4P: 18 and 24 — 5/8" I.D. SWEAT
30 and 36 — 3/4" I.D. SWEAT
42 and 48 — 7/8" I.D. SWEAT
FSM4P: 18, 24, 30, 36 — 3/4" I.D. SWEAT
42 and 48 — 7/8" I.D. SWEAT
LIQUID: 3/8" I.D. SWEAT
CONDENSATE: 3/4" FPT
TOP VIEW
7/8"DIA. K.O. FOR LOW VOLTAGE CONTROL WIRING
7/8" 1 3/32" 2" DIA. K.O.'S FOR HIGH VOLTAGE POWER WIRING
FRONT VIEW
SHOWN WITH "A" COIL DETAILS CONNECTION LOCATIONS FOR UPFLOW OR HORIZ. APPLICATIONS
DISCONNECT OR CIRCUIT BREAKER LOCATION
BLOWER, CONTROL, & ELECTRIC HEATER ACCESS PANEL
COIL ACCESS PANEL
FITTING PANEL
FILTER ACCESS PANEL
OPENING


SLOPE COIL
A-COIL
Dimensions English (Inches)
SD4895-4_A
Horizontal Right
FEM4P, FSM4P (field converted with accessory kits)
Downflow
(field converted with accessory kits)
Upflow
(as shipped)
Horizontal Left
FEM4P, FSM4P (as shipped)
PRIMARY DRAIN
SECONDARY DRAIN
AIRFLOW
NOTES:
1. CONDENSATE PAN DRAIN CAPS NOT SHOWN FOR CLARITY.
2. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.
* HORIZONTAL MOUNT LOCATIONS - DIMPLES PROVIDED IN TOP PANEL, AND BACK OF CABINET IN CABINET BOTTOM. HOLES PROVIDED .136" DIA. HORIZONTAL HANGING HARDWARE TO BE FIELD SUPPLIED.


Dimensions MM (SI Metric)
SD4895-4_A
RIGHT SIDE VIEW
OUTLET AIR
INLET AIR
NOTE: MODULAR UNITS WILL HAVE A TWO-PIECE CABINET
OPTIONAL FIELD CONVERTED RIGHT SIDE RETURN OPENING (SLOPE COIL UNITS ONLY)
ALTERNATE 22.23, 27.78, 50.80 DIA. K.O.'S FOR HIGH VOLTAGE POWER WIRING OPPOSITE SIDE
ALTERNATE 22.23 DIA. K.O. FOR LOW VOLTAGE CONTROL WIRING
OPENING 503.2
H FOR MODULAR UNITS
J MAX
A
NOTE: ALLOW 533.4 FROM FRONT FOR SERVICE
ACCESS PANEL CONFIG. FOR
SLOPE COILS
DOWNFLOW OR HORIZ. RIGHT APPLICATIONS AND "A" COILS DOWNFLOW APPLICATIONS
LIQUID LINE CONNECTION
SLOPE COIL DETAILS
CONNECTION LOCATIONS SHOWN FOR UPFLOW OR HORIZ. LEFT APPLICATIONS
SUCTION LINE CONNECTION
NOTE:
1. SERIES DESIGNATION IS THE 11TH POSITION OF UNIT PRODUCT NUMBER
2. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.
UNIT CONNECTION SIZES
SUCTION:
FEM4P: 18 and 24 — 15.88 I.D. SWEAT
30 and 36 — 19.05 I.D. SWEAT
42 and 48 — 22.23 I.D. SWEAT
FSM4P: 18, 24, 30, 36 — 19.05 I.D. SWEAT
42 and 48 — 22.23 I.D. SWEAT
LIQUID: 9.53 I.D. SWEAT
CONDENSATE: 19.0 FPT
TOP VIEW
22.23 DIA. K.O. FOR LOW VOLTAGE CONTROL WIRING
22.23, 27.78, 50.80 DIA. K.O.'S FOR HIGH VOLTAGE POWER WIRING
FRONT VIEW
SHOWN WITH "A" COIL DETAILS CONNECTION LOCATIONS FOR UPFLOW OR HORIZ. APPLICATIONS
DISCONNECT OR CIRCUIT BREAKER LOCATION
BLOWER, CONTROL, & ELECTRIC HEATER ACCESS PANEL
COIL ACCESS PANEL
FITTING PANEL
FILTER ACCESS PANEL
OPENING D


SLOPE COIL
A-COIL
SD4895-4_A
Dimensions MM (SI Metric)
Horizontal Right
FEM4P, FSM4P (field converted with accessory kits)
Downflow
(field converted with accessory kits)
Upflow
(as shipped)
Horizontal Left
FEM4P, FSM4P (as shipped)
AIRFLOW
PRIMARY DRAIN
SECONDARY DRAIN
55.6 TYP. (2 PLACES)*
11.1 TYP. (4 PLACES)*
25.4 TYP. (2 PLACES)*
8.0 TYP.*
46.0 TYP.*
12.7 TYP.*
22.2 TYP.*
* HORIZONTAL MOUNT LOCATIONS - DIMPLES PROVIDED IN TOP PANEL, AND BACK OF CABINET IN CABINET BOTTOM. HOLES PROVIDED 3.45 DIA. HORIZONTAL HANGING HARDWARE TO BE FIELD SUPPLIED.
NOTES:
1. CONDENSATE PAN DRAIN CAPS NOT SHOWN FOR CLARITY.
2. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

DIMENSIONAL DATA (refer to drawings)

Model	Size (tons)	Dimensions inches (English) A	B	C	D	E	F	G	H	J	Suct.	Liquid	Coil Type	Ship. WT lbs.
FEM4P1800	1–1/2	42–11/16	14–5/16	12–7/16	12–5/16	10–7/16	18–1/8	18–5/8	—	12	5/8	3/8	Slope	112
FSM4P1800		47–5/8	17–5/8	15–3/4	15–5/8	15–3/8	23–1/8	23–5/8		—	3/4			117
FEM4P2400	2	42–11/16	14–5/16	12–7/16	12–5/16	10–7/16	18–1/8	18–5/8	—	12	5/8	3/8	Slope	112
FSM4P2400		49–5/8	17–5/8	15–3/4	15–5/8	15–3/8	23–1/8	23–5/8		—	3/4			128
FEM4P3000	2–1/2	49–5/8	17–5/8	15–3/4	15–5/8	15–3/8	23–1/8	23–5/8	—	17	3/4	3/8	Slope	122
FSM4P3000		53–7/16	21–1/8	19–1/4	19–1/8	19–3/16	26–15/16	27–1/2		—				145
FEM4P3600	3	49–5/8	17–5/8	15–3/4	15–5/8	15–3/8	23–1/8	23–5/8	—	17	3/4	3/8	Slope	122
FSM4P3600		53–7/16	21–1/8	19–1/4	19–1/8	19–3/16	26–15/16	27–1/2		—				148
FEM4P4200	3–1/2	49–5/8	21–1/8	19–1/4	19–1/8	15–11/16	23–7/16	23–1/8	—	—	7/8	3/8	"A"	157
FSM4P4200		49–5/8	21–1/8	19–1/4	19–1/8	15–11/16	23–7/16	23–1/8						156
FEM4P4800	4	49–5/8	21–1/8	19–1/4	19–1/8	15–11/16	23–7/16	23–1/8	—	—	7/8	3/8	"A"	157
FSM4P4800		53–7/16	24–11/16	22–3/4	22–11/16	19–1/2	27–1/4	26–15/16						182

Model	Size (tons)	Dimensions mm (SI Metric) A	B	C	D	E	F	G	H	J	Suct.	Liquid	Coil Type	Ship. WT kg
FEM4P1800	1–1/2	1084	364	316	313	265	460	473	—	305	16	10	Slope	51
FSM4P1800		1210	448	400	397	391	587	600		—	19			53
FEM4P2400	2	1084	364	316	313	265	460	473	—	305	16	10	Slope	51
FSM4P2400		1261	448	400	397	391	587	600		—	19			58
FEM4P3000	2–1/2	1261	448	400	397	391	587	600	—	305	19	10	Slope	55
FSM4P3000		1357	537	489	486	487	684	699		—				66
FEM4P3600	3	1261	448	400	397	391	587	600	—	305	19	10	Slope	55
FSM4P3600		1357	537	489	486	487	684	699		—				67
FEM4P4200	3–1/2	1261	537	489	486	399	595	587	—	—	22	10	"A"	71
FSM4P4200		1261	537	489	486	399	595	587						71
FEM4P4800	4	1261	537	489	486	399	595	587	—	—	22	10	"A"	71
FSM4P4800		1357	627	578	576	495	692	684						83

PHYSICAL DATA

Model		Size 1800	2400	3000	3600	4200	4800
Metering Device – Factory Installed Piston Size (R–410A)**							
FEM4P		52	57	67	70	76	80
FSM4P		52	57	67	70	76	80
Blower Data							
CFM (nominal)	FEM4P	600	800	1000	1200	1400	1600
	FSM4P	600	800	1000	1200	1400	1600
Motor Type	FEM4P	ECM 5–speed					
	FSM4P	PSC (Permanent Split Capacitor) 2–speed					
HP	FEM4P	1/3	1/3	1/3	1/2	1/2	3/4
	FSM4P	1/6	1/4	1/3	1/3	1/2	1/2
Filter Data (washable, available as accessory)							
FEM4P		13 x 21–1/2		16–3/8 x 21–1/2		19–7/8 x 21–1/2	
FSM4P		16–3/8 x 21–1/2		19–7/8 x 21–1/2			23–5/16 x 21–1/2
Coil Data – Face Area ft^2 (m^2)							
FEM4P		2.23 (0.21)	2.23 (0.21)	2.97 (0.28)	2.97 (0.28)	4.45 (0.41)	4.45 (0.41)
FSM4P		2.97 (0.28)	2.97 (0.28)	3.46 (0.32)	3.46 (0.32)	4.45 (0.41)	5.93 (0.55)
Refrigerant Line Connections (sweat)							
FEM4P	Liquid inch (mm)	3/8 (10)					
	Suction inch (mm)	5/8 (16)	5/8 (16)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)
FSM4P	Liquid inch (mm)	3/8 (10)					
	Suction inch (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)

ELECTRICAL DATA, FAN COIL ONLY WITHOUT ELECTRIC HEAT			
	208/230V, single phase, 60 Hz		
Model	Motor Full Load Amps (**FLA**)	Minimum Circuit Ampacity (**MCA**)	Maximum Fuse/Ckt Bkr Amps (Max OverCurrent Protection – **MOCP**)
FEM4P1800	2.8	3.5	15
FEM4P2400	4.1	5.1	15
FEM4P3000	2.8	3.5	15
FEM4P3600	4.1	5.1	15
FEM4P4200	4.1	5.1	15
FEM4P4800	6.0	7.5	15
FSM4P1800	0.9	1.2	15
FSM4P2400	1.4	1.8	15
FSM4P3000	1.4	1.8	15
FSM4P3600	1.7	2.2	15
FSM4P4200	2.8	3.5	15
FSM4P4800	2.7	3.4	15

NOTE: Always check piston size on indoor unit to see if it matches required piston on outdoor unit nameplate. If it does not match, replace indoor piston with piston size marked on outdoor unit nameplate.

AIRFLOW PERFORMANCE – CFM at a given Speed and Static reading							
Model	**Blower Speed**	**Total Static (inches water column)**					
		0.10	**0.20**	**0.30**	**0.40**	**0.50**	**0.60**
FEM4P1800	Tap 5	767	739	702	669	620	565
	Tap 4	614	569	534	486	436	398
	Tap 3	701	660	616	581	537	499
	Tap 2	614	569	534	486	436	398
	Tap 1	614	569	534	486	436	398
FEM4P2400	Tap 5	969	936	892	835	763	676
	Tap 4	826	795	766	743	706	660
	Tap 3	826	795	766	743	706	660
	Tap 2	701	660	616	581	537	499
	Tap 1	617	592	552	507	472	420
FEM4P3000	Tap 5	1108	1090	1065	1034	1009	974
	Tap 4	1026	1000	969	938	899	865
	Tap 3	1026	1000	969	938	899	865
	Tap 2	909	873	842	799	762	724
	Tap 1	825	795	757	722	674	634
FEM4P3600	Tap 5	1301	1276	1245	1218	1176	1121
	Tap 4	1227	1191	1169	1143	1105	1074
	Tap 3	1227	1191	1169	1143	1105	1074
	Tap 2	1087	1062	1030	1001	966	930
	Tap 1	1026	1000	969	938	899	865
FEM4P4200	Tap 5	1560	1544	1507	1464	1424	1358
	Tap 4	1419	1397	1358	1320	1279	1239
	Tap 3	1419	1397	1358	1320	1279	1239
	Tap 2	1249	1220	1184	1142	1093	1052
	Tap 1	1242	1205	1158	1110	1069	1026
FEM4P4800	Tap 5	1743	1712	1679	1642	1610	1574
	Tap 4	1669	1634	1599	1564	1531	1499
	Tap 3	1669	1634	1599	1564	1531	1499
	Tap 2	1452	1413	1377	1339	1308	1271
	Tap 1	1300	1256	1221	1182	1142	1101

AIRFLOW PERFORMANCE – CFM at a given Speed and Static reading													
Model	Blower Speed	Total Static (inches water column)											
		0.10		0.20		0.30		0.40		0.50		0.60	
		208V	230V	208V	230V	208V	230V	208V	230V	208V	230V	208V	230V
FSM4P1800	High	742	825	707	768	642	714	568	648	466	526	403	434
	Low	541	608	480	564	417	511	357	431	299	363	n/a	304
FSM4P2400	High	1041	1112	969	1030	888	936	774	791	573	654	341	438
	Low	874	1014	838	953	781	868	684	740	506	573	341	418
FSM4P3000	High	1256	1327	1186	1242	1071	1132	952	1005	704	791	459	482
	Low	965	1117	949	1074	916	1019	805	902	575	637	396	447
FSM4P3600	High	1306	1490	1264	1418	1207	1338	1135	1241	1043	1127	842	937
	Low	1164	1335	1144	1290	1108	1226	1052	1148	970	1048	697	855
FSM4P4200	High	1723	1768	1639	1681	1544	1576	1435	1465	1309	1340	1144	1182
	Low	1387	1543	1358	1488	1311	1410	1237	1315	1137	1200	997	1047
FSM4P4800	High	1902	1941	1803	1867	1706	1767	1593	1648	1472	1512	1303	1371
	Low	1671	1777	1630	1711	1563	1630	1479	1528	1370	1412	1218	1266

– Airflow outside 450 cfm/ton.

NOTES:

1. Airflow based upon dry coil at 230v with factory–approved filter and electric heater (2 element heater sizes 1800 through 3600, 3 element heater sizes 4200 through 4800). For FEM4P models, airflow at 208 volts is approximately the same as 230 volts 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.
   Horizontal applications of 4200 – 4800 sizes must have supply static greater than 0.20 in. wc.
3. Airflow above 400 cfm/ton on 4800–4800 size could result in condensate blowing off coil or splashing out of drain pan.

PRESSURE DROP ACROSS FILTER (inches of water column)									
Model FEM4P	CFM								
	400	600	800	1000	1200	1400	1600	1800	2000
1800	0.02	0.044	0.075	—	—	—	—	—	—
2400, 3000	—	0.022	0.048	0.072	0.100	—	—	—	—
3600 4200, 4800	—	—	—	0.051	0.070	0.092	0.120	0.152	—
Models FSM4P	CFM								
	400	600	800	1000	1200	1400	1600	1800	2000
1800, 2400	0.012	0.022	0.048	0.072	—	—	—	—	—
3000, 3600, 4200	—	—	0.036	0.051	0.07	0.092	0.12	—	—
4800	—	—	—	—	—	0.073	0.086	0.105	0.13

STATIC PRESSURE CORRECTION FROM DRY TO WET COIL (inches of water column)																
Model FEM4P	CFM															
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
1800	0.034	0.049	0.063	—	—	—	—	—	—	—	—	—	—	—	—	—
2400	0.034	0.049	0.063	0.076	0.089	—	—	—	—	—	—	—	—	—	—	—
3000	—	—	—	0.049	0.059	0.070	0.080	—	—	—	—	—	—	—	—	—
3600	—	—	—	—	—	0.070	0.080	0.090	0.099	—	—	—	—	—	—	—
4200	—	—	—	—	—	—	—	0.049	0.056	0.063	0.070	—	—	—	—	—
4800	—	—	—	—	—	—	—	—	—	0.063	0.070	0.076	0.083	0.090	—	—
Models FSM4P	CFM															
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
1800	0.016	0.027	0.038	—	—	—	—	—	—	—	—	—	—	—	—	—
2400	0.016	0.027	0.038	0.049	0.059	—	—	—	—	—	—	—	—	—	—	—
3000	—	—	—	0.036	0.046	0.055	0.064	—	—	—	—	—	—	—	—	—
3600	—	—	—	—	—	0.055	0.064	0.073	0.081	—	—	—	—	—	—	—
4200	—	—	—	—	—	—	—	0.049	0.056	0.063	0.07	—	—	—	—	—
4800	—	—	—	—	—	—	—	—	—	0.038	0.043	0.049	0.054	0.059	—	—

MINIMUM CFM WHEN USING ELECTRIC HEAT

Model FEM4P	HEATER kW									
	3	5	8	9	10	15	18	20	24	30
1800	525	525	525	—	600	—	—	—	—	—
2400	700	700	700	—	700	775	—	—	—	—
3000	—	875	875	—	875	875	—	1060	—	—
3600	—	1050	970	970	970	920	—	1040	—	—
4200	—	—	1225	1225	1225	1225	1225	1225	—	—
4800	—	—	1400	1400	1400	1400	1400	1400	1400	1400

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

Models FSM4P	HEATER kW									
	3	5	8	9	10	15	18	20	24	30
1800	525	525	525	—	600	—	—	—	—	—
2400	700	700	700	—	700	775	—	—	—	—
3000	—	875	875	—	875	875	—	1060	—	—
3600	—	1050	970	970	970	920	—	1040	—	—
4200	—	—	1225	1225	1225	1225	1225	1225	—	—
4800	—	—	1400	1400	1400	1400	1400	1400	1400	1400

Note: Values indicate low or medium speed.

STATIC PRESSURE CORRECTION FOR ELECTRIC HEATERS (inches of water column)

Airflow performance chart was developed using fan coils with 10 kW electric heater (2 elements) in the 1800 – 3600 model sizes, and 15 kW electric heaters (3 elements) in the 4200 – 4800 model sizes.
When using a different number of heater elements, adjust the static pressure numbers by adding or subtracting the values in this table (for a given CFM, more electric heater elements create higher static pressure drop).

Model Size	Heater kW					
	No Heater	3 or 5	8 or 10	9 or 15	20	18, 24, or 30
	Number of Heat Elements					
	0	1	2	3	4	6
1800	+0.02	+0.01	0	–0.02	–0.04	–
2400	+0.02	+0.01	0	–0.02	–0.04	–
3000	+0.02	+0.01	0	–0.02	–0.04	–
3600	+0.02	+0.01	0	–0.02	–0.04	–
4200	+0.04	–	+0.02	0	–0.02	–0.10
4800	+0.04	–	+0.02	0	–0.02	–0.10

ELECTRIC HEATER ELECTRICAL DATA

Heater Model	Heater kW		PHASE	INTERNAL CIRCUIT PROTECTION	HEATER AMPS 208/230V			BRANCH CIRCUIT: Min Ampacity ☆ 208/230V			Min Wire Size (AWG) 208/230V [1]			Min Gnd Wire Size 208/230V			Max Fuse/Ckt Bkr Amps 208/230V			Max Wire Length 208/230V (Ft)‡‡		
					Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit	
	230v	208v				L1,l2	L3,L4		L1,L2	L3,L4		L1, L2	L3, L4		L1, L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4
EHK05AKN*	5	3.8	1	None	18.1/20.0	—	—	26.0/28.4	—	—	10/10	—	—	10/10	—	—	30/30	—	—	66/66	—	—
EHK05AKN**	5	3.8	1	None	18.1/20.0	—	—	31.2/33.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	85/88	—	—
EHK05AKB*	5	3.8	1	Ckt Bkr	18.1/20.0	—	—	26.0/28.4	—	—	10/10	—	—	10/10	—	—	30/30	—	—	66/66	—	—
EHK05AKB**	5	3.8	1	Ckt Bkr	18.1/20.0	—	—	31.2/33.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	85/88	—	—
EHK07AKN	8	6.0	1	None	28.9/32.0	—	—	44.7/48.5	—	—	8/8	—	—	10/10	—	—	45/50	—	—	59/60	—	—
EHK07AKB	8	6.0	1	Ckt Bkr	28.9/32.0	—	—	44.7/48.5	—	—	8/8	—	—	10/10	—	—	45/50	—	—	59/60	—	—
EHK09AKCN†	9	6.8	1	None	32.8/36.0	—	—	49.5/53.5	—	—	8/6	—	—	10/10	—	—	50/60	—	—	54/87	—	—
	9	6.8	3	None	18.8/20.8	—	—	32.0/34.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	83/85	—	—
EHK10AKN	10	7.5	1	None	36.2/40.0	—	—	53.8/58.5	—	—	6/6	—	—	10/10	—	—	60/60	—	—	78/80	—	—
EHK10AKB	10	7.5	1	Ckt Bkr	36.2/40.0	—	—	53.8/58.5	—	—	6/6	—	—	10/10	—	—	60/60	—	—	78/80	—	—
EHK15AKF	15	11.3	1	Fuse	54.2/59.9	36.2/40.0	18.1/20.0	76.3/83.4	53.8/58.5	22.7/25.0	4/4	6/6	10/10	8/8	10/10	10/10	80/90	60/60	25/25	88/89	78/80	75/76
EHK15AKB	15	11.3	1	Ckt Bkr	—	36.2/40.0	18.1/20.0	—	53.8/58.5	22.7/25.0	—	6/6	10/10	—	10/10	10/10	—	60/60	25/25	—	78/80	75/76
EHK15AHN	15	11.3	3	None	31.3/34.6	—	—	47.7/51.8	—	—	8/6	—	—	10/10	—	—	50/60	—	—	56/90	—	—
EHK18AHN	18	13.5	3	None	37.6/41.5	—	—	55.5/60.4	—	—	6/6	—	—	10/8	—	—	60/70	—	—	76/77	—	—
EHK20AKF	20	15.0	1	Fuse	72.3/79.9	36.2/40.0	36.2/40.0	98.9/108.4	53.8/58.5	45.3/50.0	3/2	6/6	8/8	8/6	10/10	10/10	100/110	60/60	50/50	85/109	78/80	59/59
EHK20AKB	20	15.0	1	Ckt Bkr	—	36.2/40.0	36.2/40.0	—	53.8/58.5	45.3/50.0	—	6/6	8/8	—	10/10	10/10	—	60/60	50/50	—	78/80	59/59
EHK25AHCF‡	24	18.0	3	Fuse	50.1/55.4	—	—	71.2/77.8	—	—	4/4	—	—	8/8	—	—	80/80	—	—	94/95	—	—
	24	18.0	1	Fuse	86.7/95.5	—	—	116.9/127.9	—	—	1/1	—	—	6/6	—	—	125/150	—	—	115/116	—	—
EHK30AHCF‡	30	22.5	3	Fuse	62.6/69.2	—	—	86.8/95.0	—	—	3/3	—	—	8/8	—	—	90/100	—	—	97/98	—	—
	30	22.5	1	Fuse	109.0/120.0	—	—	144.8/158.5	—	—	0/00	—	—	6/6	—	—	150/175	—	—	117/150	—	—

FIELD MULTIPOINT WIRING OR 24 AND 30 KW SINGLE PHASE

Heater Model	Heater kW		PHASE	Heater Amps 208/230V			Minimum Circuit Ampacity 208/230V ☆			Minimum Wire Size (AWG) 208/230V‡			Min Gnd Wire Size 208/230 V	Max Fuse/Ckt Bkr Amps 208/230V			Max Wire Length 208/230V (FT)‡‡		
	230V	208V		L1, L2	L3, L4	L5, L6	L1, L2	L3, L4	L5, L6	L1, L2	L3, L4	L5, L6		L1, L2	L3, L4	L5, L6	L1, L2	L3, L4	L5, L6
EHK25AHCF‡	24	18.0	1	28.9/32.0	28.9/32.0	28.9/32.0	44.7/48.5	36.2/40.0	36.2/40.0	8/8	8/8	8/8	10/10	45/50	40/40	40/40	59/60	73/73	73/73
EHK30AHCF‡	30	22.5	1	36.2/40.0	36.2/40.0	36.2/40.0	53.8/58.5	45.3/50.0	45.3/50.0	6/6	8/8	8/8	10/10	60/60	50/50	50/50	78/80	59/59	59/59

Notes:

1 Copper wire must be used. If other than uncoated (non-plated), 75° C ambient, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the National Electric Code (ANSI/NFPA 70).

* When used with Fan Coil model sizes 2400, 3600.

** When used with Fan Coil model sizes 4200, 4800.

☆ Includes blower motor amps of largest Fan Coil used with heater.

† Supplied as single phase, field convertible to 3-phase.

‡ Supplied as 3-phase, field convertible to single phase, single or multiple supply circuits.

‡‡ Length shown is as measured one way along wire path between unit and service panel for a voltage drop not to exceed 2%.

ACCESSORIES			
		Use with models	
Part Number	Description	FSM4P models	FEM4P models
EBAC01DSC	Disconnect Kit	use with All Heaters 3 kW thru 10 kW	
EBAC01NCB	Downflow Base Kit	–	1800, 2400
EBAC02NCB		1800, 2400	3000, 3600
EBAC03NCB		3000, 3600, 4200, 4800	4200, 4800
EBAC01DFS	Downflow Conversion Kit – Slope Coil	1800, 2400, 3000, 3600	1800, 2400, 3000, 3600
EBAC02DFA	Downflow Conversion Kit – “A” Coil	4200, 4800	4200, 4800
EBAC01SPK	Single Point Wiring Kit	only for use with 15 kW & 20 kW fused heaters	
AMFK20SPA or Square D® part # QOU14100JBAF	Single Point Wiring Kit – Square D® Jumper Bar Assembly	Only for use with EHK15AKB and EHK20AKB breaker heaters	
EBAC01FKS	Filter Kit (washable, box of 12)	–	1800, 2400
EBAC01FKM		1800, 2400	3000, 3600
EBAC01FKL		3000, 3600, 4200	4200, 4800
EBAC01FKX		4800	–
NASA00101FR	Standard Filter Rack (12 x 20 x 1 filter required)	–	1800, 2400
NASA00201FR	Standard Filter Rack (16 x 20 x 1 filter required)	2400	3000, 3600
NASA00301FR	Standard Filter Rack (20 x 20 x 1 filter required)	3000, 3600, 4200	4200, 4800
NASA00401FR	Standard Filter Rack [quantity 2] (12 x 20 x 1 filter required)	4800	–
EBAC01PLG	No Heat (Plug) Kit (box of 6)	Factory Installed	
EBAC01CTK	PVC Condensate Trap Kit (box of 50)	ALL	ALL
EBAC01GSK	Downflow Gasket Kit	ALL	ALL (required for horizontal right and downflow)
NAEA40501TX	TXV Kit, R–410A	1800, 2400, 3000	1800, 2400, 3000
NAEA40601TX		3600, 4200	3600, 4200
NAEA40701TX		4800	4800
NAEA20101TX	TXV Kit, R–22	1800, 2400, 3000, 3600, 4200	1800, 2400, 3000, 3600, 4200
NAEA20201TX		4800	4800

ELECTRIC HEATERS

Part Number	Description	Use with Model Sizes
EHK05AKN	5 kW, single phase, no internal circuit protection	ALL
EHK05AKB	5 kW, single phase, with circuit breakers	ALL
EHK07AKN	8 kW, single phase, no internal circuit protection	ALL
EHK07AKB	8 kW, single phase, with circuit breakers	ALL
EHK09AKCN	9 kW, supplied as single phase, field convertible to 3–phase, no internal circuit protection	3600, 4200, 4800
EHK10AKN	10 kW, single phase, no internal circuit protection	ALL
EHK10AKB	10 kW, single phase, with circuit breakers	ALL
EHK15AKF	15 kW, single phase, with fuses	2400, 3000, 3600, 4200, 4800
EHK15AKB	15 kW, single phase, with circuit breakers	2400, 3000, 3600, 4200, 4800
EHK15AHN	15 kW, 3–phase, no internal circuit protection	3600, 4200, 4800
EHK18AHN	18 kW, 3–phase, no internal circuit protection	4200, 4800
EHK20AKF	20 kW, single phase, with fuses	3000, 3600, 4200, 4800
EHK20AKB	20 kW, single phase, with circuit breakers	3000, 3600, 4200, 4800
EHK25AHCF	24 kW, supplied as 3–phase, field convertible to single phase, with fuses	4800
EHK30AHCF	30 kW, supplied as 3–phase, field convertible to single phase, with fuses	4800

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