



Product Data

FEATURES

The FF1E Series Fan Coil unit is primarily designed for apartment applications as upflow indoor air handlers for split-system heat pumps and air conditioners for use with R-410A refrigerant. These units are available with factory-installed electric heaters, which include the disconnect. A field-installed cooling control with disconnect is also available for unit sizes 18, 24, 30 and 36 only. A Time Delay Relay (TDR) is included with either the electric heat or the cooling control packages.

This fan coil may be installed free-standing, wall hung or flush mounted in the wall. The 22-in (559 mm) wide cabinet size in all models allows units to fit between standard stud spacings. No return-air ductwork is required if the application provides for return air in the front of the cabinet through either a louvered closet door or an optional accessory decorative grille panel.

The cabinet exterior is made of pre-painted, galvanized sheet metal. The cabinet is fully insulated to meet applications in conditioned space. Additional insulation is required if the unit is installed in an unconditioned space. The unit is supplied with a replaceable filter.

Multi-speed, direct-drive, PSC blower motors have been selected to provide the proper air handling for both heating and cooling. Electronic commutating motors (ECM) use X13 high-efficiency motors to increase system performance. Motors are suspended at three points on rubber grommets for quieter operation.

All refrigerant lines, electrical power, and thermostat wiring enter from the top of the cabinet. Sweat-type refrigerant connections on both liquid and suction lines make for swift, low-cost installation. All service access to the unit is conveniently located in the front.

All units come with a factory-supplied, hard-shutoff thermostatic expansion valve (TXV) metering device for performance improvement.

The drain pan is constructed of high-impact, sound-deadening, corrosion-proof polyester resin. Primary and secondary drain connections exit from the bottom or either side of the cabinet.



MODEL NUMBER NOMENCLATURE

1 2 3 4 5 6 7 8 9 10 11 12
 F F 1 E N P 0 1 8 0 0 5

Product

F = Fan Coil

Type

F = Thru- the- Wall

Position

1 = Upflow

Series

E

Electrical

N = 208/230v, 1ph- 60 Hz

Refrigerant

P = R- 410A

Heating Size

005 = 5kW

075 = 7.5 kW

011 = 11 kW

Capacity

018 = 18,000

019 = 19,000

024 = 24,000

025 = 25,000

030 = 30,000

031 = 31,000

036 = 36,000

037 = 37,000



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.



ISO 9001
 OMI-SAI Global



DIMENSIONS (cont.)

JOB NAME	BUYER	DIMENSIONS CERTIFIED BY	DATE	MODEL NO.	SALES DRAWING FF1ENP
JOB LOCATION	BUYER NO.	DATE	TITLE	CMT. D.	R.D.
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT	P.O. BOX 70 INDIANAPOLIS, IN 46266	WITHOUT THE WRITTEN AUTHORIZATION OF CARRIER CORPORATION	THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS PROPERTY OF CARRIER CORPORATION AND SHALL NOT BE REPRODUCED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART.	1006913	R.L.A.
			REV	REV	REV
			SD4781-4	1	A

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UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	SHIPPING WT (LBS) NOM. TIN-COATED	SHIPPING WT (LBS) TIN-COATED
FF1ENP019	A	X 0	15-3/16"	8-1/4"	2-3/4"	38-1/16"	90	-
FF1ENP025	A	X 0	15-3/16"	8-1/4"	2-3/4"	38-1/16"	92	-
FF1ENP031	A	X 0	18-3/8"	9-1/4"	5"	43-3/16"	105	-
FF1ENP037	A	X 0	18-3/8"	9-1/4"	5"	43-3/16"	110	-

UNIT CONNECTION SIZES
 SUCTION: 019, 025, 031, 037 - 3/4" I.D. SWEAT
 LIQUID: 3/8" I.D. SWEAT
 CONDENSATE: 3/4" NPT

NOTE:

- SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT NUMBER.
- ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

DIMENSIONS (cont.)

DATE	MODEL NO.	BUYER	JOB NAME	DIMENSIONS CERTIFIED BY	SALES DRAWING FF1ENP
.....
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.				THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS FOR THE EXCLUSIVE USE OF THE BUYER AND SHALL NOT BE REPRODUCED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF Carrier Corporation.	
P.O. BOX 70 INDIANAPOLIS, IN 46266				 Carrier Corporation 46266	

UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	SHIPPING WT (KGS) NOM TIN-COATED	SHIPPING WT (KGS) TIN-COATED
FF1ENP019	A	X 0	385.8	209.6	69.8	966.8	40.8	-
FF1ENP025	A	X 0	385.8	209.6	69.8	966.8	41.7	-
FF1ENP031	A	X 0	466.7	235.0	127.0	1097.0	47.6	-
FF1ENP037	A	X 0	466.7	235.0	127.0	1097.0	49.9	-

X=YES
0=NO

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UNIT CONNECTION SIZES
SUCTION: 019, 025, 031, 037 - 19.05 I.D. SWEAT
LIQUID: 9.53 I.D. SWEAT
CONDENSATE: 19.0 NPT

MEASUREMENT- METRIC "SI"

TOP VIEW

FRONT VIEW

SIDE VIEW

BOTTOM VIEW

NOTE:

1. SERIES DESIGNATION IS THE 14TH POSITION OF THE UNIT NUMBER.
2. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

PHYSICAL DATA

CATALOG ORDERING #	FACTORY - INSTALLED HEAT (kW)			FACTORY - SUPPLIED DISCONNECTS	NOMINAL COOLING CAPACITY (BTUH)
	5kW	7.5kW	11kW		
FF1ENP018---	005	075	011	STD	18,000
FF1ENP019---	005	075	NA	STD	
FF1ENP024---	005	075	011	STD	24,000
FF1ENP025---	005	075	011	STD	
FF1ENP030---	005	075	011	STD	30,000
FF1ENP031---	005	075	011	STD	
FF1ENP036---	005	075	011	STD	36,000
FF1ENP037---	005	075	011	STD	

SPECIFICATIONS

FF1ENP	18	19	24	25	30	31	36	37
COIL								
Refrigerant Metering Device	TXV - factory- installed, hard shutoff, bi- flow type for heat pump application							
TXV	2 ton for Puron® refrigerant (R- 410A)					3 ton for Puron® refrigerant (R- 410A)		
Rows/Fins Per In. (mm)	3 / 14.5 (368)							
Face Area Ft ² (m ²)	2.23 (.21)		2.72 (.25)			3.46 (.32)		
Configuration	Slope							
BLOWER & MOTOR								
Air Discharge	Upflow							
Blower Type	Direct Drive							
CFM (Nominal)	600		800		1000		1200	
Motor Type	PSC	X13 (ECM)	PSC	X13 (ECM)	PSC	X13 (ECM)	PSC	X13 (ECM)
Motor HP	1/5	1/3	1/5	1/3	1/3	1/3	1/3	1/2
Motor Speeds	2	5	2	5	2	5	2	5
FILTER								
1" (25mm) Thick	16 x 20 (406 x 508)				20 x 20 (508 x 508)			
CONNECTIONS (Sweat)								
Suction In. (mm)	3/4 (19)							
Liquid In. (mm)	3/8 (9.5)							
Condensate (FPT) In. (mm)	3/4 (19)							

PERFORMANCE DATA

AIRFLOW PERFORMANCE (CFM)

Table 1 – Airflow Performance (Model sizes 18, 24, 30 and 36)

UNIT SIZE	BLOWER SPEED	EXTERNAL STATIC PRESSURE (in. wc)					
		0.10	0.20	0.30	0.40	0.50	0.60
		CFM					
018	High	995	955	910	862	811	-
	Low	738	711	678	641	600	-
024	High	950	908	861	810	754	693
	Low	732	699	662	621	576	527
030	High	1128	1082	1030	973	911	845
	Low	1053	1011	964	911	854	791
036	High	1408	1355	1295	1227	1152	1068
	Low	1191	1157	1113	1061	1000	931

■ - 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 018 through 036). Airflow at 208 volts is approximately 10% lower.
2. Not recommended for use above 0.60 in. wc external static pressure.

Table 2 – Airflow Performance (Model sizes 19, 25, 31 and 37)

SIZE	BLOWER SPEED	0.10	0.20	0.30	0.40	0.50	0.60
019	Tap 5	746	719	668	630	602	564
	Tap 4	611	568	539	496	451	420
	Tap 3	660	618	584	547	505	468
	Tap 2	611	568	539	496	451	420
	Tap 1	554	509	463	418	388	348
025	Tap 5	919	888	866	832	797	764
	Tap 4	736	707	653	611	579	528
	Tap 3	830	804	768	734	699	647
	Tap 2	736	707	653	611	579	528
	Tap 1	616	568	532	484	429	378
031	Tap 5	1110	1085	1049	1022	991	958
	Tap 4	1025	988	960	924	894	850
	Tap 3	1025	988	960	924	894	850
	Tap 2	904	864	839	797	762	716
	Tap 1	724	684	631	581	546	500
037	Tap 5	1353	1321	1282	1245	1195	1135
	Tap 4	1217	1190	1157	1128	1093	1054
	Tap 3	1072	1041	1007	968	920	886
	Tap 2	908	877	828	776	741	694
	Tap 1	731	670	612	576	524	488

■ - 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 18 through 36).
2. Airflow at 208 volts is approximately the same as 230 volts because the X13 motor is a constant torque motor. The torque doesn't drop off at the speeds the motor operates (sizes 19, 25, 31 and 37).
3. Not recommended for use above 0.60 in. external static pressure.

PERFORMANCE DATA (cont.)

GROSS COOLING CAPACITIES (mbh)

UNIT SIZE	INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C)														
			35 (2)			40 (4)			45 (7)			50 (10)			55 (13)		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
018	525	72 (22)	40	20	0.00	36	18	0.00	32	16	0.00	27	14	0.02	21	11	0.02
		67 (19)	33	20	0.02	29	18	0.02	24	16	0.03	20	14	0.03	14	12	0.03
		62 (17)	27	21	0.03	22	18	0.03	18	16	0.03	14	14	0.08	12	12	0.22
	600	72 (22)	44	22	0.00	40	20	0.00	35	17	0.01	30	15	0.02	24	13	0.03
		67 (19)	36	22	0.03	32	20	0.03	27	18	0.03	22	15	0.04	16	13	0.04
		62 (17)	29	23	0.04	25	21	0.04	20	18	0.04	16	16	0.10	13	13	0.24
	675	72 (22)	48	24	0.00	43	21	0.00	38	19	0.02	32	16	0.03	26	14	0.04
		67 (19)	40	25	0.04	35	22	0.04	29	19	0.04	23	17	0.04	17	14	0.05
		62 (17)	32	25	0.05	27	23	0.05	22	20	0.05	17	17	0.11	14	14	0.26
024	700	72 (22)	52	26	0.00	47	23	0.00	41	20	0.01	34	18	0.02	28	15	0.03
		67 (19)	43	26	0.03	37	23	0.03	32	21	0.03	25	18	0.03	18	15	0.04
		62 (17)	34	27	0.03	29	24	0.03	23	21	0.04	18	18	0.09	15	15	0.24
	800	72 (22)	57	28	0.01	52	26	0.00	45	23	0.02	38	20	0.03	30	16	0.03
		67 (19)	47	29	0.04	41	26	0.04	35	23	0.04	28	20	0.04	20	17	0.05
		62 (17)	38	30	0.04	32	27	0.04	26	24	0.05	20	20	0.11	17	17	0.25
	900	72 (22)	63	31	0.00	56	28	0.00	49	25	0.03	41	21	0.04	33	18	0.04
		67 (19)	51	32	0.05	45	29	0.05	38	25	0.05	30	22	0.05	22	19	0.06
		62 (17)	41	33	0.05	35	29	0.05	28	26	0.06	22	22	0.13	19	19	0.27
030	875	72 (22)	60	30	0.00	54	27	0.00	47	24	0.03	40	20	0.04	32	17	0.04
		67 (19)	50	31	0.04	43	27	0.05	37	24	0.05	29	21	0.05	21	18	0.05
		62 (17)	40	31	0.05	34	28	0.05	27	25	0.06	22	22	0.12	18	18	0.27
	1000	72 (22)	66	33	0.00	59	29	0.01	52	26	0.04	44	22	0.05	35	19	0.05
		67 (19)	54	34	0.06	47	30	0.06	40	27	0.06	32	23	0.06	23	20	0.07
		62 (17)	44	35	0.06	37	31	0.07	30	28	0.07	24	24	0.15	20	20	0.29
	1100	72 (22)	71	35	0.00	63	31	0.02	55	28	0.05	46	24	0.06	37	20	0.06
		67 (19)	58	36	0.06	51	33	0.07	43	29	0.07	34	25	0.07	25	21	0.08
		62 (17)	47	37	0.07	39	34	0.07	32	30	0.08	26	26	0.17	22	22	0.30
036	1050	72 (22)	80	39	0.01	71	35	0.00	62	31	0.02	52	27	0.03	42	23	0.04
		67 (19)	65	40	0.04	57	36	0.04	48	32	0.04	38	28	0.05	28	23	0.05
		62 (17)	52	41	0.05	44	37	0.05	35	33	0.05	28	28	0.11	24	24	0.26
	1200	72 (22)	88	43	0.00	78	39	0.00	68	34	0.03	58	30	0.04	46	25	0.05
		67 (19)	72	45	0.05	63	40	0.05	53	35	0.06	42	31	0.06	30	26	0.06
		62 (17)	58	46	0.06	49	41	0.06	39	36	0.07	31	31	0.14	26	26	0.28
1350	72 (22)	95	47	0.00	85	42	0.02	74	37	0.05	62	32	0.06	49	27	0.06	
	67 (19)	78	49	0.06	68	44	0.06	57	39	0.07	45	34	0.07	33	28	0.07	
	62 (17)	63	50	0.07	53	45	0.07	42	40	0.08	34	34	0.16	29	29	0.30	

CFM - Cubic Ft per Minute EWB - Entering Wet Bulb °F (°C) LWB - Leaving Wet Bulb °F (°C) TC - Gross Cooling Capacity 1000 Btuh
 SHC - Gross Sensible Capacity 1000 Btuh BF - Bypass Factor MBH - 1000 Btuh

NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:
 Leaving db = entering db - $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{lwb})
 $h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$
 where h_{ewb} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80°F (27°C) db temperature of air entering coil. Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC. Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

SHC CORRECTION FACTOR

BYPASS FACTOR	ENTERING AIR DRY- BULB TEMPERATURE (°F)					
	79	78	77	76	75	Under 75
	81	82	83	84	85	Over 85
BYPASS FACTOR	ENTERING AIR DRY- BULB TEMPERATURE (°C)					
	26	25	25	24	24	Under 75
	27	28	28	29	29	Over 85
Correction Factor						
0.10	.098	1.96	2.94	3.92	4.91	Use formula shown below
0.20	0.87	1.74	2.62	3.49	4.36	
0.30	0.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.
 Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

PERFORMANCE DATA (cont.)

GROSS COOLING CAPACITIES (mbh)

UNIT SIZE	INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C)														
			35 (2)			40 (4)			45 (7)			50 (10)			55 (13)		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
019	525	72 (22)	40	20	0.00	36	18	0.00	32	16	0.00	27	14	0.02	21	11	0.02
		67 (19)	33	20	0.02	29	18	0.02	24	16	0.03	20	14	0.03	14	12	0.03
		62 (17)	27	21	0.03	22	18	0.03	18	16	0.03	14	14	0.08	12	12	0.22
	600	72 (22)	44	22	0.00	40	20	0.00	35	17	0.01	30	15	0.02	24	13	0.03
		67 (19)	36	22	0.03	32	20	0.03	27	18	0.03	22	15	0.04	16	13	0.04
		62 (17)	29	23	0.04	25	21	0.04	20	18	0.04	16	16	0.10	13	13	0.24
	675	72 (22)	48	24	0.00	43	21	0.00	38	19	0.02	32	16	0.03	26	14	0.04
		67 (19)	40	25	0.04	35	22	0.04	29	19	0.04	23	17	0.04	17	14	0.05
		62 (17)	32	25	0.05	27	23	0.05	22	20	0.05	17	17	0.11	14	14	0.26
025	700	72 (22)	52	26	0.00	47	23	0.00	41	20	0.01	34	18	0.02	28	15	0.03
		67 (19)	43	26	0.03	37	23	0.03	32	21	0.03	25	18	0.03	18	15	0.04
		62 (17)	34	27	0.03	29	24	0.03	23	21	0.04	18	18	0.09	15	15	0.24
	800	72 (22)	57	28	0.01	52	26	0.00	45	23	0.02	38	20	0.03	30	16	0.03
		67 (19)	47	29	0.04	41	26	0.04	35	23	0.04	28	20	0.04	20	17	0.05
		62 (17)	38	30	0.04	32	27	0.04	26	24	0.05	20	20	0.11	17	17	0.25
	900	72 (22)	63	31	0.00	56	28	0.00	49	25	0.03	41	21	0.04	33	18	0.04
		67 (19)	51	32	0.05	45	29	0.05	38	25	0.05	30	22	0.05	22	19	0.06
		62 (17)	41	33	0.05	35	29	0.05	28	26	0.06	22	22	0.13	19	19	0.27
031	875	72 (22)	60	30	0.00	54	27	0.00	47	24	0.03	40	20	0.04	32	17	0.04
		67 (19)	50	31	0.04	43	27	0.05	37	24	0.05	29	21	0.05	21	18	0.05
		62 (17)	40	31	0.05	34	28	0.05	27	25	0.06	22	22	0.12	18	18	0.27
	1000	72 (22)	66	33	0.00	59	29	0.01	52	26	0.04	44	22	0.05	35	19	0.05
		67 (19)	54	34	0.06	47	30	0.06	40	27	0.06	32	23	0.06	23	20	0.07
		62 (17)	44	35	0.06	37	31	0.07	30	28	0.07	24	24	0.15	20	20	0.29
	1100	72 (22)	71	35	0.00	63	31	0.02	55	28	0.05	46	24	0.06	37	20	0.06
		67 (19)	58	36	0.06	51	33	0.07	43	29	0.07	34	25	0.07	25	21	0.08
		62 (17)	47	37	0.07	39	34	0.07	32	30	0.08	26	26	0.17	22	22	0.30
037	1050	72 (22)	80	39	0.01	71	35	0.00	62	31	0.02	52	27	0.03	42	23	0.04
		67 (19)	65	40	0.04	57	36	0.04	48	32	0.04	38	28	0.05	28	23	0.05
		62 (17)	52	41	0.05	44	37	0.05	35	33	0.05	28	28	0.11	24	24	0.26
	1200	72 (22)	88	43	0.00	78	39	0.00	68	34	0.03	58	30	0.04	46	25	0.05
		67 (19)	72	45	0.05	63	40	0.05	53	35	0.06	42	31	0.06	30	26	0.06
		62 (17)	58	46	0.06	49	41	0.06	39	36	0.07	31	31	0.14	26	26	0.28
	1350	72 (22)	95	47	0.00	85	42	0.02	74	37	0.05	62	32	0.06	49	27	0.06
		67 (19)	78	49	0.06	68	44	0.06	57	39	0.07	45	34	0.07	33	28	0.07
		62 (17)	63	50	0.07	53	45	0.07	42	40	0.08	34	34	0.16	29	29	0.30

CFM - Cubic Ft per Minute

EWB - Entering Wet Bulb °F (°C)

LWB - Leaving Wet Bulb °F (°C)

TC - Gross Cooling Capacity 1000 Btuh

SHC - Gross Sensible Capacity 1000 Btuh

BF - Bypass Factor

MBH - 1000 Btuh

NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:
 Leaving db = entering db - $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{lwb})
 $h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$
 where h_{ewb} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80°F (27°C) db temperature of air entering coil. Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC. Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

SHC CORRECTION FACTOR

BYPASS FACTOR	ENTERING AIR DRY- BULB TEMPERATURE (°F)					
	79	78	77	76	75	Under 75
	81	82	83	84	85	Over 85
	ENTERING AIR DRY- BULB TEMPERATURE (°C)					
	26	25	25	24	24	Under 75
	27	28	28	29	29	Over 85
	Correction Factor					
	0.10	.098	1.96	2.94	3.92	4.91
	0.20	0.87	1.74	2.62	3.49	4.36
	0.30	0.76	1.53	2.29	3.05	3.82

Interpolation is permissible.

Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

PERFORMANCE DATA (cont.)

AIR DELIVERY PERFORMANCE CORRECTION COMPONENT PRESSURE DROP (IN. WC.) AT INDICATED AIRFLOW (DRY- TO- WET COIL)

UNIT SIZE	CFM								
	500	600	700	800	900	1000	1100	1200	1300
018	0.034	0.049	0.063	--	--	--	--	--	--
019	0.034	0.049	0.063	--	--	--	--	--	--
024	0.021	0.033	0.045	0.056	0.068	--	--	--	--
025	0.021	0.033	0.045	0.056	0.068	--	--	--	--
030	--	--	--	0.056	0.068	0.079	0.090	--	--
031	--	--	--	0.056	0.068	0.079	0.090	--	--
036	--	--	--	--	--	0.055	0.064	0.073	0.081
037	--	--	--	--	--	0.055	0.064	0.073	0.081

ESTIMATED SOUND POWER LEVEL (dBA)

UNIT SIZE	CONDITIONS		OCTAVE BAND CENTER FREQUENCY*						
	CFM	Ext Static Pressure	63	125	250	500	1000	2000	4000
018	600	0.25	64.7	60.7	56.7	53.7	51.7	49.7	45.7
019	600	0.25	64.7	60.7	56.7	53.7	51.7	49.7	45.7
024	800	0.25	66.0	62.0	58.0	55.0	53.0	51.0	47.0
025	800	0.25	66.0	62.0	58.0	55.0	53.0	51.0	47.0
030	1000	0.25	67.0	63.0	59.0	56.0	54.0	52.0	48.0
031	1000	0.25	67.0	63.0	59.0	56.0	54.0	52.0	48.0
036	1200	0.25	67.8	63.8	59.8	56.8	54.8	52.8	48.8
037	1200	0.25	67.8	63.8	59.8	56.8	54.8	52.8	48.8

* Estimated sound power levels have been derived using the method described in the 1987 ASHRAE HVAC Systems & Applications Handbook, Chapter 52, p. 52.7.

AIR DELIVERY PERFORMANCE CORRECTION COMPONENT PRESSURE DROP (IN. WC.) AT INDICATED AIRFLOW

AIR DELIVERY (CFM)		400	500	600	700	800	900	1000	1100
Electric Heaters	1- Element 5 kW	0.007	0.010	0.015	0.025	0.035	0.055	0.070	0.080
	2- Element 7.5 & 11 kW	0.010	0.012	0.018	0.028	0.050	0.075	0.100	0.130

Subtract the above pressure drop corrections from unit airflow data when that component or condition is used. The remaining external static pressure will be available for the duct system.

PERFORMANCE DATA (cont.)

ELECTRICAL DATA

MODEL SIZE	MTR. HP	MTR. FLA	PH/ HZ	COOLING CONTROL*/HEAT PACK INSTALLED	MIN. WIRE SIZE (208/230)†	MAX. FT. WIRE (208/230)‡	HEATER AMPS (208/230)	MIN. CIRCUIT AMPS (MCA) (208/230)	MAX. FUSE OR CKT. BRK. AMPS (208/230)
018	1/5	1.5	1/60	KFDCC0101DCC	14	394 (120)	—	1.9	15
				KFDEH0801D05	10/10	70/70 (21)	18.1/20.0	24.5/26.9	25/30
				KFDEH0901D75	8/8	75/75 (23)	27.1/30.0	35.8/39.4	40/40
				KFDEH1001D11	6/6	82/82 (25)	39.8/44.0	51.6/56.9	60/60
019	1/3	2.8	1/60	KFEEH0101D05	10/10	70/70 (21)	18.1/19.8	26.1/28.3	30/30
				KFEEH0201D75	8/8	75/75 (23)	27.1/30.0	37.4/41.0	40/50
024	1/5	1.5	1/60	KFDCC0101DCC	14	394 (120)	—	1.9	15
				KFDEH0801D05	10/10	70/70 (21)	18.1/20.0	24.5/26.9	25/30
				KFDEH0901D75	8/8	75/75 (23)	27.1/30.0	35.8/39.4	40/40
				KFDEH1001D11	6/6	82/82 (25)	39.8/44.0	51.6/56.9	60/60
025	1/3	2.8	1/60	KFEEH0101D05	10/10	70/70 (21)	18.1/19.8	26.1/28.3	30/30
				KFEEH0201D75	8/8	75/75 (23)	27.1/30.0	37.4/41.0	40/50
030	1/3	1.9	1/60	KFDCC0101DCC	14	312 (95)	—	2.4	15
				KFDEH0801D05	10/10	69/69 (21)	18.1/20.0	25.0/27.4	30/30
				KFDEH0901D75	8/8	74/74 (23)	27.1/30.0	36.3/39.9	40/40
				KFDEH1001D11	6/6	81/82 (25)	39.8/44.0	52.1/57.4	60/60
031	1/3	2.8	1/60	KFEEH0101D05	10/10	69/69 (21)	18.1/19.8	26.1/28.3	30/30
				KFEEH0201D75	8/8	74/74 (23)	27.1/30.0	37.4/41.0	40/50
036	1/3	2.0	1/60	KFEEH0301D11	6/6	81/82 (25)	39.8/43.8	53.3/58.3	60/60
				KFDCC0101DCC	14	300 (91)	—	2.5	15
				KFDEH0801D05	10/10	68/69 (21)	18.1/20.0	25.1/27.5	30/30
				KFDEH0901D75	8/8	73/74 (23)	27.1/30.0	36.4/40.0	40/40
037	1/2	4.1	1/60	KFDEH1001D11	6/6	81/81 (25)	39.8/44.0	52.3/57.5	60/60
				KFEEH0101D05	10/10	68/69 (21)	18.1/19.8	27.8/29.9	30/30
				KFEEH0201D75	8/8	73/74 (23)	27.1/30.0	39.0/42.6	40/50
				KFEEH0301D11	6/6	81/81 (25)	39.8/43.8	54.9/59.9	60/60

* Field- installed Cooling Control Package required.

† Use copper wire only. 75°C wire must be used in this application. When using non- metallic (NM) sheathed cable, wire size required should be based on that of 60°C conductors, instead of wire sizes shown in table above per NEC 1996 Article 336- 30.

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

FLA — Full Load Amps

OPTIONAL FIELD-INSTALLED ELECTRIC HEAT PACKAGES

HEATER PART NUMBER WITH TDR	SIZE(S) USED WITH	NOMINAL kW @ 240v	HEATER VOLTS- PHASE (60 Hz)	HEATER CAPACITY (MBH)*		APPROX. SHIP WGT. LBS. (KG)
KFDEH0801D05	018/024/030/036	5	208/230- 1	14.3	17.2	7 (3)
KFDEH0901D75	018/024/030/036	7.5	208/230- 1	20.7	25.0	7 (3)
KFDEH1001D11	018/024/030/036	11	208/230- 1	29.7	36.0	7 (3)
KFEEH0101D05	019/025/031/037	5	208/230- 1	14.3	17.2	7 (3)
KFEEH0201D75	019/025/031/037	7.5	208/230- 1	20.7	25.0	7 (3)
KFEEH0301D11	019/025/031/037	11	208/230- 1	29.7	36.0	7 (3)

*Heater capacities shown here are for the largest size fan coil unit and they do include blower motor heat.

KIT NUMBER	DESCRIPTION	USED ON SIZES
KFDCC0101DCC	Cooling Control Package	18, 24, 30 & 36 only
KFBLG0106LGL*	Louvered Wall Panel with Frame	018 - 030
KFBLG0206LGL*	Louvered Wall Panel with Frame	031 - 037

* 6 pack