

Comfort-Cure®

COMBINATION GAS/ELECTRIC UNITS HEATING & COOLING 2 THRU 5 NOMINAL TONS COOLING 90,000 THRU 145,000 BTUH HEATING

INTERMITTENT IGNITION DEVICE

Pilot is spark ignited at the start of each heating cycle and is off at the termination of each heating cycle.

FORCED DRAFT COMBUSTION

A forced draft combustion air blower is used to provide air for combustion. A safety switch is used to prove that air for combustion is being delivered into the vestibule of the unit before main burner ignition takes place.

REDUNDANT GAS VALVE

Provides added safety of operation.

BURNER

The burners have slotted ports for less maintenance.

HEAT EXCHANGER

Standard 18 gauge ceramic coated multisectional heat exchanger. Corrosion resistant for longer life.

SINGLE PACKAGE

Combination gas heating and electric cooling, self contained for year-round comfort. Systems installed on rooftop or ground level.

CONSTRUCTION

20 gauge hot dipped galvanized-painted cabinet. One piece weather resistant top. Access panels for easy service. Side by side supply and return. Heavy gauge base with rails.

DUCT OPENINGS

The duct openings provide two basic sizes to cover all models. Openings provided have supply air on the left and return air on the right when viewed from air handling side of unit.

COMPRESSOR

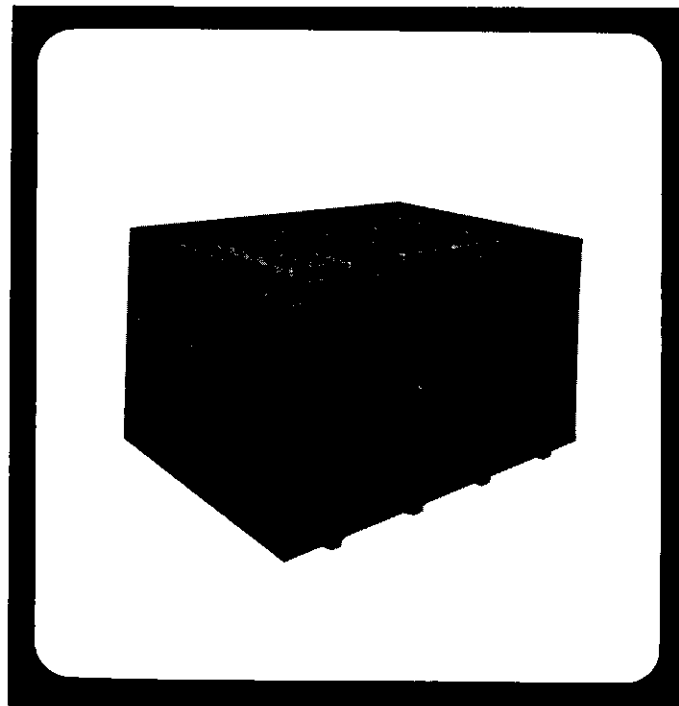
The compressor has internal spring mounting & external rubber mounts to help minimize system noise and features a automatic reset current/temperature sensing overload. All compressors are factory equipped with solid state crankcase heaters.

COILS

Both the condenser and evaporator coils have Aluminum Fins and Copper Tubes to promote efficient heat transfer. The refrigerant flow is controlled with capillary tubes. The refrigerant circuit is sealed, tested and fully charged at the factory.

DIRECT DRIVE BLOWER

All models are equipped with multiple speed direct drive blower motors to provide proper air flow for both heating and cooling requirements.



COMPONENTS

All components are shipped in one carton; however, the vent and rain shield must be mounted at time of installation.

FILTERS

Air filters are not supplied with these units. A filter must be used in the return air and must be provided by the installer.

OPTIONAL FIELD INSTALLED ACCESSORIES

- Plenum
- Roof Curb
- Economizer



Rated in accordance
with ARI standard 210



**UNIT SPECIFICATIONS
SINGLE PHASE**

Model No.		NRGF24	NRGF30	NRGF36	NRGF42	NRGF48	NRGF60
Electrical	General Information	230-1-60	230-1-60	230-1-60	230-1-60	230-1-60	230-1-60
Data	Wire Size/Max. Length	#12/52'	#10/66'	#10/55'	#10/50'	#6/90'	#6/85'
	Time Delay Fuse/HACR Breaker	25/30 amps.	30/35 amps.	35/40 amps.	40/50 amps.	50/60 amps.	60/70 amps.
	Max. Fuse Size	30 amps.	35 amps.	40 amps.	50 amps.	60 amps.	70 amps.
	Ampacity	18.0	22.3	24.3	30.0	41.2	43.9
Condenser	Coil: Total Face Area (Sq. Ft.)	7.5	7.5	7.5	7.5	11.25	11.25
Data:	Fins Per In./Rows	18/1	18/1	18/2	18/2	18/2	18/2
	Tube Dia.	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
	Fan H.P./Type	1/3/PSC	1/3/PSC	1/3/PSC	1/3/PSC	1/3/PSC	1/3/PSC
	Motor: Full Load Amps.	1.3	1.3	1.8	1.8	3.0	3.5
	Locked Rotor Amps.	2.2	2.2	5.4	5.4	6.9	7.7
	Fan: Size Dia.	20"	20"	22"	22"	22"	24"
	RPM (Max.)	1100	1100	1100	1100	1100	1100
	CFM (Max.)	2600	2600	3200	3200	3200	3400
Evaporator	Coil: Total Face Area (Sq. Ft.)	4.0	3.25	4.0	4.0	5.4	5.4
Data:	Fins Per In./Rows	14/2	14/3	14/3	14/4	14/3	14/3
	Tube Dia.	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
	Blower H.P./Type/Speeds	1/3/PSC/2	1/3/PSC/2	1/2/PSC/2	1/2/PSC/2	1/2/PSC/2	1/2/PSC/2
	Motor: Full Load Amps.	1.7	1.7	3.2	3.2	4.4	4.4
	Locked Rotor Amps.	4.5	4.5	7.8	7.8	11.0	11.0
	Blower: Type & Size	DD9-6	DD9-6	DD10-7	DD10-7	DD10-10	D10-10
	RPM (Max.)	1100	1100	1100	1100	1100	1100
	CFM (Rated)	800	1000	1200	1400	1600	1800
Compressor	Full Load Amps.	12.0	15.4	15.4	20.0	27.0	28.8
Data:	Locked Rotor Amps.	53	75	81	110	121	139
	Factory Refrigerant Charge (Type R-22)	49 oz.	47 oz.	90 oz.	89 oz.	113 oz.	127 oz.
Weights:	Shipping (Lbs.) (Approx.)	470	482	511	550	670	679

THREE PHASE

Model No.		NRGF36	NRGF48	NRGF60
Electrical	General Information	208-230-3-60	208-230-3-60	208-230-3-60
Data	Wire Size/Max. Length	#10/57'	#10/50'	#8/70'
	Time Delay Fuse/HACR Breaker	20/25 amps.	35/40 amps.	60/70 amps.
	Max. Fuse Size	25 amps.	40 amps.	45 amps.
	Ampacity	18.4	25.9	30.4
Condenser	Coil: Total Face Area (Sq. Ft.)	7.5	11.25	11.25
Data:	Fins Per In./Rows	18/2	18/2	18/2
	Tube Dia.	3/8"	3/8"	3/8"
	Fan H.P./Type	1/3/PSC	1/3/PSC	1/3/PSC
	Motor: Full Load Amps.	1.8	3.0	3.5
	Locked Rotor Amps.	5.4	6.9	7.7
	Fan: Size Dia.	22"	22"	24"
	RPM (Max.)	1100	1100	1100
	CFM (Max.)	3200	3200	3400
Evaporator	Coil: Total Face Area (Sq. Ft.)	4.0	5.4	5.4
Data:	Fins Per In./Rows	14/3	14/3	14/3
	Tube Dia.	3/8"	3/8"	3/8"
	Blower H.P./Type/Speeds	1/2/PSC/2	1/2/PSC/2	1/2/PSC/2
	Motor: Full Load Amps.	3.2	4.4	4.4
	Locked Rotor Amps.	7.8	11.0	11.0
	Blower: Type & Size	DD10-7	DD10-10	D10-10
	RPM (Max.)	1090	1090	1100
	CFM (Rated)	1200	1600	1800
Compressor	Full Load Amps.	9.5	14.8	18.0
Data:	Locked Rotor Amps.	81	90	104
	Factory Refrigerant Charge (Type R-22)	102 oz.	113 oz.	127 oz.
Weights:	Shipping (Lbs.) (Approx.)	505	700	679

Comfort-Cire®

Vinyl Coated Discharge Grille

Cabinet . . .
All panels galvanized steel with weather resistant Epoxy finish

Large finned coil surface (optional inlet Grille Available)

Ventor Motor

Hermetically sealed compressor

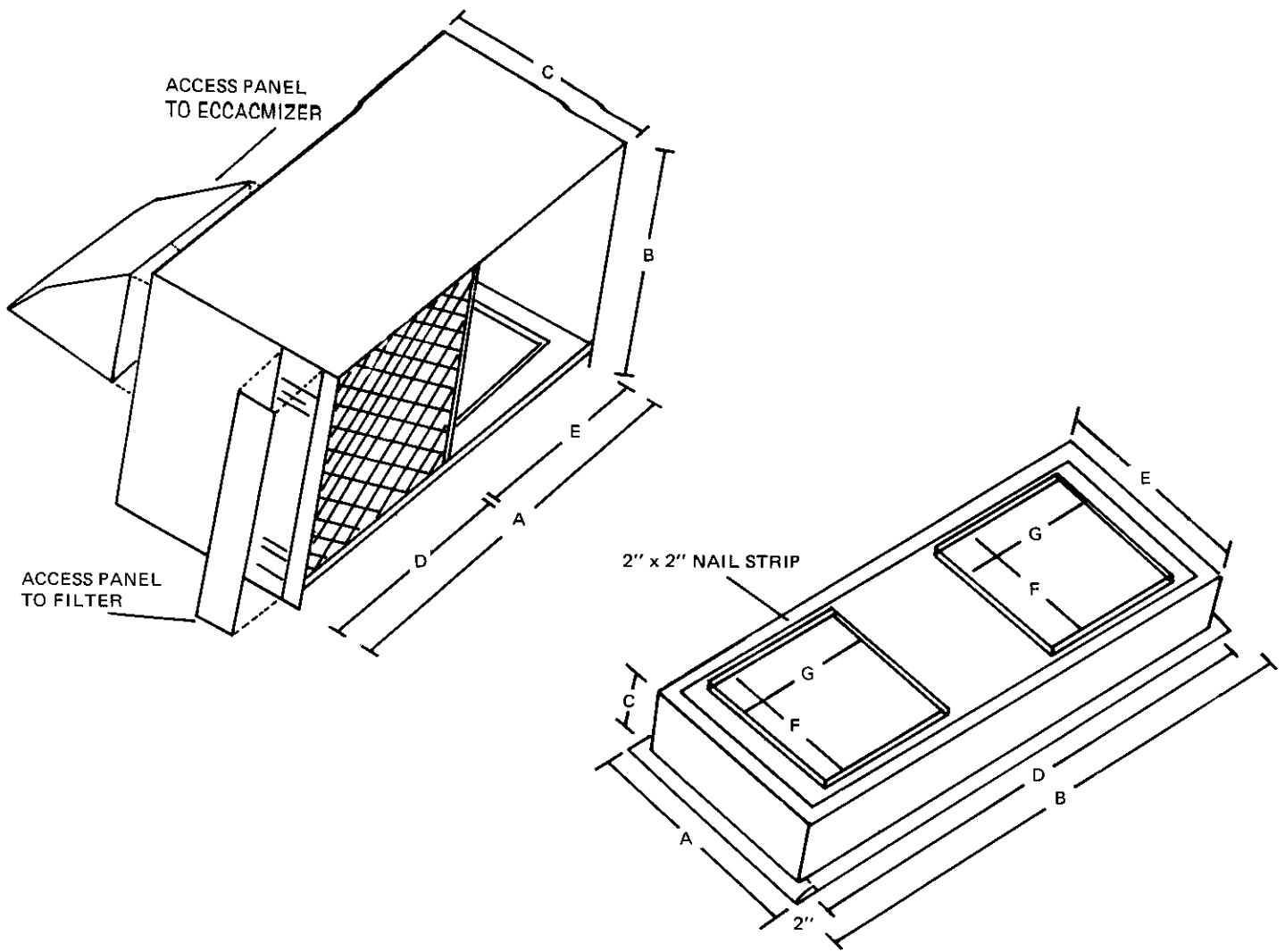
Redundant Gas Valve-Safety Feature

Crankcase heater . . . helps keep refrigerant from accumulating in the compressor

PERFORMANCE DATA: HEATING

Model Number		NRGF24DBB	NRGF30DBB	NRGF36EBB
Capacity	Input (M/BTUH)	90	90	120
	*Heating Capacity (M/BTUH)	68.0	68.0	87.0
	A.F.U.E. %	73.5	73.5	70.1
	Temp. Rise (°)	50	50	65
Gas Piping Size		½"	½"	½"
Burners (Number)		3	3	4
Transformer Size (VA)		40	40	40

Model Number		NRGF42EBB	NRGF48EB/H	NRGF48FBB	NRGF60FBB/H
Capacity	Input (M/BTUH)	120	120	145	145
	*Heating Capacity (M/BTUH)	89.0	90.0	115.0	115.0
	A.F.U.E. %	70.1	72.2	77.8	77.8
	Temp. Rise (°)	65	55	60	60
Gas Piping Size		½"	½"	½"	½"
Burners (Number)		4	4	5	5
Transformer Size (VA)		40	40	40	40



MODEL	A	B	C	D	E	F	G
NRGF CURB 1	31 1/2	51 3/4	8 1/4	47 3/4	27	20 3/4	19 3/4
NRGF CURB 2	31 1/2	69 1/2	8 1/4	65 1/2	27	20 3/4	19 3/4
NRGF PLEN1	48 1/4	30 1/4	27 1/4	23 1/2	24 3/4	—	—
NRGF PLEN 2	65 3/4	30 1/4	27 1/4	31 1/2	34 1/4	—	—

Comfort-Aire

AITONS' EQUIPMENT INC.
MISSISSAUGA, ONTARIO

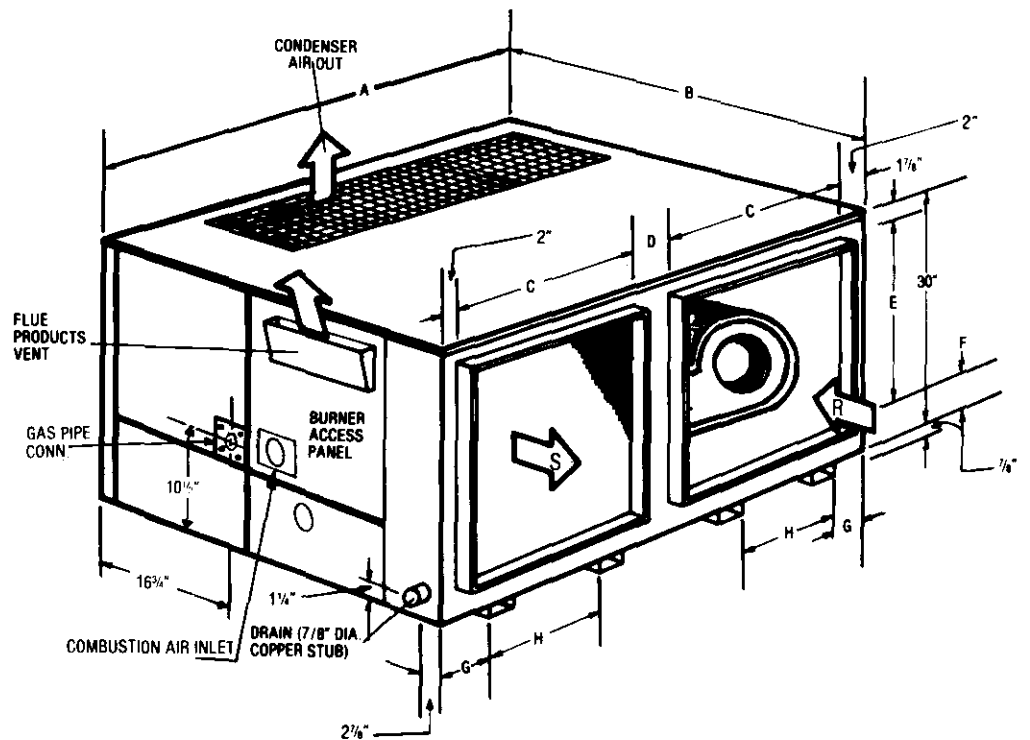
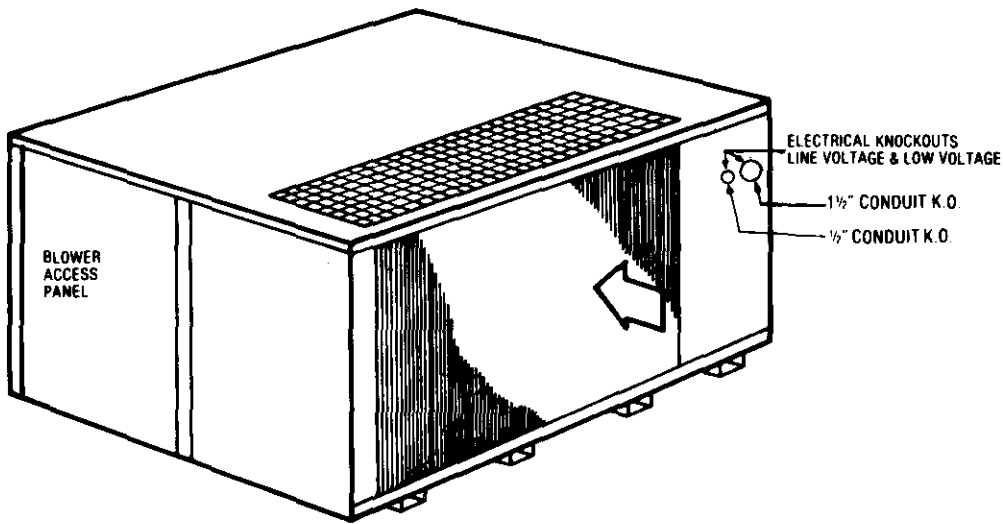
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DIMENSIONS

Model No.	A	B	C	D	E	F	G	H	Gas Pipe Size
NRGF24DBB 30DBB 36DBB 36DBH 42DBB	52	40 ⁵ / ₃₂	22	3 ¹⁵ / ₁₆	26 ¹ / ₁₆	2	6	12 ³ / ₄	1/2
NRGF36EBB 42EBB	52	43 ²¹ / ₃₂	22	3 ¹⁵ / ₁₆	26 ¹ / ₁₆	2	6	12 ³ / ₄	
NRGF48EBB 48EBH 60EBB 60EBH	70	43 ²¹ / ₃₂	30	5 ⁹ / ₃₂	27 ¹ / ₂	1 ¹ / ₄	6	18 ⁷ / ₈	
NRGE48FBB 60FBB 60FBH	70	47 ⁵ / ₃₂	30	5 ⁹ / ₃₂	27 ¹ / ₂	1 ¹ / ₄	6	18 ⁷ / ₈	

ALL DIMENSIONS IN INCHES.



**APPLICATION DATA:
SINGLE PHASE**

Model No.	OUTDOOR AMBIENT TEMPERATURE — DEGREES F. DRY BULB															
	65°			75°			85°			95°						
	*ENTERING INDOOR TEMPERATURE - DEGREES F. WET BULB															
	63	65	67	69	63	65	67	69	63	65	67	69	63	65	67	69
NRGF24	22.8	23.5	24.2	25.0	23.0	23.7	24.4	25.2	22.9	23.6	24.3	25.1	22.3	23.0	24.0	24.4
NRGF30	27.9	28.7	29.6	30.5	28.2	29.0	29.9	30.8	28.0	28.8	29.7	30.7	27.3	28.1	29.0	29.9
NRGF36	33.3	34.2	35.3	31.4	33.6	34.6	35.7	36.8	33.2	34.4	35.4	36.6	32.6	33.5	34.6	35.7
NRGF42	40.9	42.1	43.4	44.7	41.3	42.5	43.8	45.2	41.1	42.2	43.5	45.0	40.0	41.2	42.5	43.8
NRGF48	46.2	47.5	49.0	50.5	46.7	48.0	49.5	51.1	46.4	47.7	49.2	50.6	45.2	46.5	48.0	49.5
NRGF60	56.8	58.4	60.2	62.1	57.3	59.0	60.8	62.8	57.0	58.6	60.4	62.4	55.6	57.1	59.0	60.8

THREE PHASE

NRGF36	36.0	37.0	38.2	39.4	36.3	37.4	38.5	39.8	36.1	37.2	38.3	39.5	35.2	36.2	37.4	38.5
NRGF48	48.1	49.5	51.0	52.6	48.6	50.0	51.5	53.2	48.3	49.7	51.2	52.9	47.1	48.5	50.0	51.5
NRGF60	55.3	56.9	58.7	60.5	55.9	57.5	59.3	61.2	55.6	57.1	58.9	60.8	54.1	55.7	57.5	59.3

BLOWER PERFORMANCE DATA:

Model Number	Motor Speed	Air Delivery in CFM Ext. Static Pressure (In. W.C.)				
		.10	.20	.30	.40	.50
NRGF24DBB 30DBB (Cooling) 1 Phase 230V	Lo.	900	890	865	825	780
	Md.	—	—	—	—	—
NRGF24DBB 30DBB (Heating) 1 Phase 230V	Lo.	890	865	825	780	705
	Md.	—	—	—	—	—
NRGF36EBB 42EBB (Cooling) 1 Phase 230V	Lo.	1090	1080	1070	1040	1010
	Md.	—	—	—	—	—
NRGF36EBB 42EBB (Heating) 1 Phase 230V	Lo.	1140	1110	1105	1085	1080
	Md.	—	—	—	—	—
NRGF48FBB 60FB(B.H) (Cooling) 1 & 3 Phase 230V	Lo.	1555	1520	1480	1445	1385
	Md.	—	—	—	—	—
NRGF60FBH (Cooling) 3 Phase 208V	Lo.	1540	1500	1460	1425	1370
	Md.	—	—	—	—	—
NRGF48FBB 60FB(B.H) (Heating) 1 & 3 Phase 230V	Lo.	1705	1680	1660	1600	1550
	Md.	—	—	—	—	—
NRGF60FBH (Heating) 3 Phase 208V	Lo.	1610	1580	1530	1480	1435
	Md.	—	—	—	—	—
NRGF60FBH (Heating) 3 Phase 208V	Lo.	1610	1580	1530	1480	1435
	Md.	—	—	—	—	—

NOTE:
Heating air delivery shown as dry coil operation.
Cooling air delivery shown as wet coil operation.

**PERFORMANCE DATA: COOLING
(SINGLE PHASE)**

Model No.	Rated Capacity BTUH	S/T Ratio	S. E. R.	Power Input Watts	Evaporator Rated Air Flow C.F.M.	Ext. Static Pressure Drop Wet
NRGF24	24,000	.68	8.50	2827	800	.30
NRGF30	29,000	.67	8.60	3740	1000	.30
NRGF36	34,600	.69	8.70	4238	1200	.30
NRGF42	42,500	.70	8.70	5282	1400	.30
NRGF48	48,000	.68	8.05	5733	1600	.30
NRGF60	59,000	.71	8.10	7131	1800	.33

(THREE PHASE)

NRGF36	37,400*	.71	9.0†	4150	1200	.30
NRGF48	50,000*	.68	8.1†	5770	1600	.30
NRGF60	57,500*	.67	8.5†	6749	1800	.33

*Rated Capacity @ 230 Volts. †E.E.R.
For applications at 208 volts deduct 1000 BTU.

MODEL NUMBER IDENTIFICATION GUIDE:

