

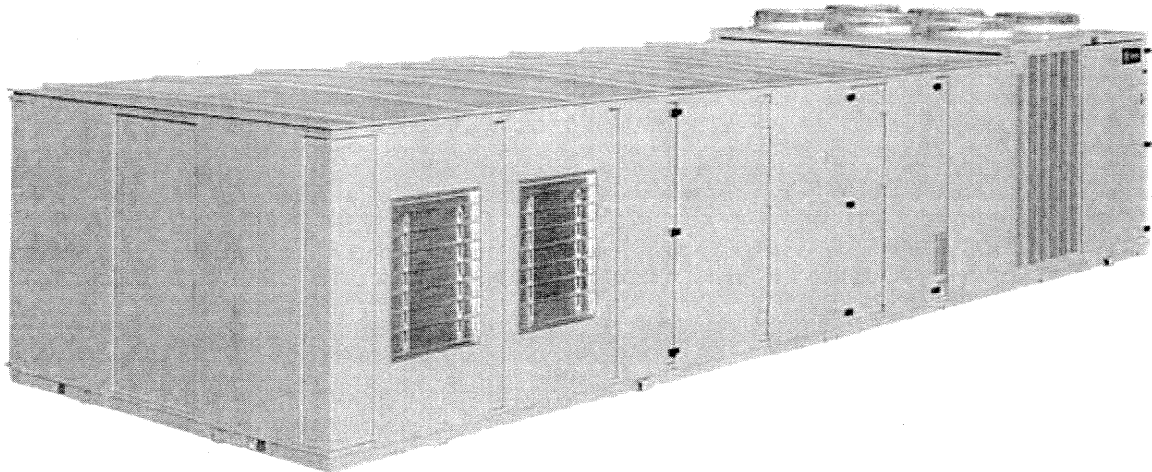


Product Catalog

Packaged Rooftop Air Conditioners

IntelliPak™ — S*HL, S*HK

20 - 130Tons — Air-Cooled Condensers — 60 Hz



Sales Order Inquiry

Sales Order #: J2F188 Seq: 999 Mfg: A Plt Code: C Dt Entered: 11/22/2013 Off. Code: J2
Sales Order Id: Credit Job: 1729455 Prod Code: 0383 Weight: 5700
Sold To Acct: 2707312 Job Name: CBL RANDOLPH MALL
Order Source: Stx-trans Ship To: ASHEBORO NC United States

Product Model #	Serialized	Serial #	Indicator	Claim #	Prod Code	Ship Date	Start Date
SFHFL304LLB6C59D1L11A0W0000B000RT: Y		C13M07254			0383	01/22/2014	02/18/2014

Warranty Description	Start Date	End Date
12/18 STANDARD PARTS WARRANTY	02/18/2014	02/18/2015
1ST YR REFRIGERANT LOSS WAR	02/18/2014	02/18/2015
1ST YR WHOLE UNIT LABOR WAR	02/18/2014	02/18/2015
2ND-5TH YR HEAT EXCH PARTS	02/18/2015	02/18/2019
2ND-5TH YR REPL COM PRTS-SCROL	02/18/2015	02/18/2019



Model Number Descriptions

S A H L * 5 0 4 0 A 6 8 A 6 B D 8 0 0 1 0 0 W 0 0 G 0 B 0 0 0 R 0 0 0 8 0 0
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

DIGIT 1 - UNIT TYPE

S = Self-Contained (Packaged Rooftop)

DIGIT 2 - UNIT FUNCTION

A = DX Cooling, No Heat
 E = DX Cooling, Electric Heat
 F = DX Cooling, Natural Gas Heat
 L = DX Cooling, Hot Water Heat
 S = DX Cooling, Steam Heat
 X = DX Cooling, No Heat, Extended Casing

DIGIT 3 - UNIT AIRFLOW

H = Single Zone

DIGIT 4 - DEVELOPMENT SEQUENCE

L = Sixth

DIGITS 5,6,7 - NOMINAL CAPACITY

*20 = 20 Tons Air-Cooled
 *25 = 25 Tons Air-Cooled
 *30 = 30 Tons Air-Cooled
 *40 = 40 Tons Air-Cooled
 *50 = 50 Tons Air-Cooled
 *55 = 55 Tons Air-Cooled
 *60 = 60 Tons Air-Cooled
 *70 = 70 Tons Air-Cooled
 *75 = 75 Tons Air-Cooled
 *24 = 24 Tons Evap Condenser
 *29 = 29 Tons Evap Condenser
 *36 = 36 Tons Evap Condenser
 *48 = 48 Tons Evap Condenser
 *59 = 59 Tons Evap Condenser
 *73 = 73 Tons Evap Condenser
 *80 = 80 Tons Evap Condenser
 *89 = 89 Tons Evap Condenser

DIGIT 8 - POWER SUPPLY

(See Notes)

4 = 460/60/3 XL E = 200/60/3 XL
 5 = 575/60/3 XL F = 230/60/3 XL

Note: SEHL units (units with electric heat) utilizing 208V or 230V require dual power source.

DIGIT 9 - HEATING CAPACITY

Note: When the second digit calls for "F" (Gas Heat), the following values apply: (please note G and M are available ONLY on 50 ton models and above.

G = Low Heat-Limited Modulation
 H = High Heat-2-Stage
 I = High Heat-Limited
 L = Low Heat-2-Stage
 M = Low Heat- Full Modulation
 0 = No Heat

p = High Heat-Full Modulation

Note: When the second digit calls for "E" (electric heat), the following values apply:

D = 30 kW R = 130 kW
 H = 50 kW U = 150 kW
 L = 70 kW V = 170 kW
 N = 90 kW W = 190 kW
 Q = 110 kW

Note: When the second digit calls for "L" (Hot Water) or "S" (Steam) Heat, one of the following valve size values must be in Digit 9:

High Heat Coil:

1 = .50" 2 = .75" 3 = 1"
 4 = 1.25" 5 = 1.5" 6 = 2"

Low Heat Coil:

A = .50" B = .75" C = 1"
 D = 1.25" E = 1.5" F = 2"

DIGIT 10 - DESIGN SEQUENCE

A = First (Factory Assigned)

Note: Sequence may be any letter A thru Z, or any digit 1 thru 9.

DIGIT 11 - EXHAUST/RETURN OPTION

0 = None
 1 = Barometric
 3 = 100% Exhaust 3 HP w/Statitrac
 4 = 100% Exhaust 5 HP w/Statitrac
 5 = 100% Exhaust 7.5 HP w/Statitrac
 6 = 100% Exhaust 10 HP w/Statitrac
 7 = 100% Exhaust 15 HP w/Statitrac
 8 = 100% Exhaust 20 HP w/Statitrac
 B = 50% Exhaust 3 HP
 C = 50% Exhaust 5 HP
 D = 50% Exhaust 7.5 HP
 F = 100% Exhaust 3 HP w/o Statitrac (CV Only)
 G = 100% Exhaust 5 HP w/o Statitrac (CV Only)
 H = 100% Exhaust 7.5 HP w/o Statitrac (CV Only)
 J = 100% Exhaust 10 HP w/o Statitrac (CV Only)
 K = 100% Exhaust 15 HP w/o Statitrac (CV Only)
 L = 100% Exhaust 20 HP w/o Statitrac (CV Only)
 9 = 100% Return 3 HP w/Statitrac
 M = 100% Return 5 HP w/Statitrac
 N = 100% Return 7.5 HP w/Statitrac
 P = 100% Return 10 HP w/Statitrac
 R = 100% Return 15 HP w/Statitrac

T = 100% Return 20 HP w/Statitrac
 U = 100% Return 3 HP w/o Statitrac (CV Only)
 V = 100% Return 5 HP w/o Statitrac (CV Only)
 W = 100% Return 7.5 HP w/o Statitrac (CV Only)
 X = 100% Return 10 HP w/o Statitrac (CV Only)
 Y = 100% Return 15 HP w/o Statitrac (CV Only)
 Z = 100% Return 20 HP w/o Statitrac (CV Only)

DIGIT 12 - EXHAUST/RETURN AIR FAN DRIVE

(Exhaust/Return Fan)

0 = None 8 = 800 RPM
 4 = 400 RPM 9 = 900 RPM
 5 = 500 RPM A = 1000 RPM
 6 = 600 RPM B = 1100 RPM
 7 = 700 RPM

(Return Fan only)

C = 1200 RPM H = 1700 RPM
 D = 1300 RPM J = 1800 RPM
 E = 1400 RPM K = 1900 RPM
 F = 1500 RPM
 G = 1600 RPM

DIGIT 13 - FILTER (PRE DX/FINAL)

A = Throwaway
 B = Cleanable Wire Mesh
 C = High-Efficiency/Throwaway
 D = Bag With Prefilter
 E = Cartridge with Prefilter
 F = Throwaway Filter Rack (Filter Not Included)
 G = Bag Filter Rack (Filter Not Included)
 H = Standard Throwaway Filter/Cartridge Final Filters
 J = High Efficiency Throwaway Filter/Cartridge Final Filters
 K = Bag Filters with 2" Throwaway Prefilters/Cartridge Final Filters
 L = Cartridge Filters with 2" Throwaway Prefilters /Cartridge Final Filters
 M = Standard Throwaway Filter /Cartridge Final Filters with 2" Throwaway Prefilters
 N = High Efficiency Throwaway Filters/Cartridge Final Filters with 2" Throwaway Prefilters
 P = Bag Filters with Prefilters /Cartridge Final Filters with 2" Throwaway Prefilters
 Q = Cartridge Filters with Prefilters/Cartridge Final Filters with 2" Throwaway Prefilters

Model Number Descriptions

DIGIT 14 - SUPPLY AIR FAN HP

- 1 = 3 HP FC
- 2 = 5 HP FC
- 3 = 7.5 HP FC
- 4 = 10 HP FC
- 5 = 15 HP FC
- 6 = 20 HP FC
- 7 = 25 HP FC
- 8 = 30 HP FC
- 9 = 40 HP FC
- A = 50 HP FC
- B = 3 HP DDP 80W
- C = 3 HP DDP 120W
- D = 5 HP DDP 80W
- E = 5 HP DDP 120W
- F = 7.5 HP DDP 80W
- G = 7.5 HP DDP 120W
- H = 10 HP DDP 80W (60-89T = 2 x 5 HP)
- J = 10 HP DDP 120W (60-89T = 2 x 5 HP)
- K = 15 HP DDP 80W (60-89T = 2 x 7.5 HP)
- L = 15 HP DDP 120W (60-89T = 2 x 7.5 HP)
- M = 20 HP DDP 80W (60-89T = 2 x 10 HP)
- N = 20 HP DDP 120W (60-89T = 2 x 10 HP)
- P = 25 HP DDP 80W
- R = 25 HP DDP 120W
- T = 30 HP DDP 80W (60-89T = 2 x 15 HP)
- U = 30 HP DDP 120W (60-89T = 2 x 15 HP)
- V = 40 HP DDP 80W (60-89T = 2 x 20 HP)
- W = 40 HP DDP 120W (60-89T = 2 x 20 HP)
- X = 50 HP DDP 80W (70 & 75-89T = 2 x 25 HP)
- Y = 50 HP DDP 120W (70 & 75-89T = 2 x 25 HP)
- Z = 30 HP DDP 100W^(a)

(a) 50, 55T only

DIGIT 15 - SUPPLY AIR FAN RPM

- 4 = 400 RPM
- 5 = 500 RPM
- 6 = 600 RPM
- 7 = 700 RPM
- 8 = 800 RPM
- 9 = 900 RPM
- A = 1000 RPM
- B = 1100 RPM
- C = 1200 RPM
- D = 1300 RPM
- E = 1400 RPM
- F = 1500 RPM
- G = 1600 RPM
- H = 1700 RPM
- J = 1800 RPM
- K = 1900 RPM
- L = 2000 RPM
- M = 2100 RPM
- N = 2200 RPM
- P = 2300 RPM
- R = 2400 RPM

DIGIT 16 - OUTSIDE AIR

- A = No Fresh Air
- B = 0-25% Manual
- D = 0-100% Economizer
- E = 0-100% Economizer w/ Traq/DCV

Note: Must install CO₂ sensor(s) for DCV to function properly

DIGIT 17 - SYSTEM CONTROL

- 1 = CV - Zone Temp Control
- 2 = CV - Discharge Temp Control
- 4 = CV - Zone Temp Control Space Pressure Control w/ Exhaust/Return VFD w/o Bypass
- 5 = CV - Zone Temp Control Space Pressure Control w/ Exhaust/Return VFD and Bypass
- 6 = VAV Discharge Temp Control w/ VFD

- w/o Bypass
- 7 = VAV Discharge Temp Control w/ VFD and Bypass
- 8 = VAV Discharge Temp Control Supply and Exhaust/Return Fan w/ VFD w/o Bypass
- 9 = VAV Discharge Temp Control Supply and Exhaust/Return Fan with VFD and Bypass
- A = VAV - Single Zone VAV - w/ VFD w/o Bypass
- B = VAV - Single Zone VAV - w/ VFD and Bypass
- C = VAV - Single Zone VAV - Supply and Exhaust/Return Fan w/ VFD w/o Bypass
- D = VAV - Single Zone VAV - Supply and Exhaust/Return Fan w/ VFD w/ Bypass

DIGIT 18 - ZONE SENSOR

- 0 = None
- A = Dual Setpoint Manual or Auto Changeover (BAYSENS108*)
- B = Dual Setpoint Manual or Auto Changeover w/ System Function Lights (BAYSENS110*)
- C = Room Sensor w/ Override and Cancel Buttons (BAYSENS073*)
- D = Room Sensor w/ Temperature Adjustment and Override and Cancel Buttons (BAYSENS074*)
- L = Programmable Zone Sensor w/ System Function Lights for CV, SZVAV, and VAV (BAYSENS119*)

Note: *Asterisk indicates current model number digit A, B, C, etc. These sensors can be ordered to ship with the unit.

DIGIT 19 - AMBIENT CONTROL

- 0 = Standard
- 1 = 0° Fahrenheit

DIGIT 20 - AGENCY APPROVAL

- 0 = None (cULus Gas Heater, see note)
- 1 = cULus

Note: Includes cULus classified gas heating section only when second digit of Model No. is a "F"

DIGITS 21 - 38 - MISCELLANEOUS

- 21 A = Unit Disconnect Switch
- 22 B = Hot Gas Bypass
- C = Hot Gas Reheat w/out Hot Gas Bypass
- D = Hot Gas Reheat and Hot Gas Bypass
- 23 0 = Without Economizer
- C = Economizer Control w/ Comparative Enthalpy
- Z = Economizer Control w/ Reference Enthalpy
- W = Economizer Control w/Dry Bulb
- 24 E = Low Leak Fresh Air Dampers
- 25 F = High Duct Temperature Thermostat
- 26 G = High Capacity Unit
- H = High Efficiency Unit

- V = eFlex Variable Speed Compressor
- 27 0 = Air-Cooled Aluminum Condenser Coil
- J = Corrosion Protected Condenser Coil
- A = Evap Condenser
- B = Evap Condenser w/ Sump Heater
- C = Evap Condenser w/ Dolphin WaterCare System
- D = Evap Condenser w/ Sump Heater and Dolphin WaterCare System
- E = Evap Condenser w/ Conductivity Controller
- F = Evap Condenser w/ Conductivity Controller and Sump Heater
- 28 B = GBAS 0-10V
- K = GBAS 0-5V
- R = Rapid Restart
- 29 A = Motors w/ Internal Shaft Grounding
- 30 M = Remote Human Interface
- 31 N = Ventilation Override Module
- 32 0 = None
- R = Extended Grease Lines
- 1 = Differential Pressure Gauge
- Z = Extended Grease Lines and Differential Pressure Gauge
- 33 0 = Standard Panels
- T = Access Doors
- U = IRU - w/ Std Panels
- W = IRU - w/ Access Doors
- Y = IRU w/SST - w/ Std Panels
- Z = IRU w/SST - w/ Access Doors
- 34 V = Inter-Processor Communication Bridge
- 35 M = BACnet Communication Interface (BCI) Module
- Y = Trane Communication Interface (TCI) Module
- 7 = Trane LonTalk Communication Interface (LCI) Module
- 36 8 = Spring Isolators
- 37 6 = Factory-Powered 15A GFI Convenience Outlet/Disconnect Switch
- 38 A = Supply Fan Piezometer
- J = Temperature Sensor

Tip: EXAMPLE

Model numbers:
SAHL*5040A68A6BD800100W00G0
B000R000800 describes a unit with the following characteristics:

DX Cooling Only unit w/ no extended casing, 50 ton nominal cooling capacity, 460/60/3 power supply, 100 percent exhaust with Statitrac, 10 HP exhaust fan motor with drive selection No. 8 (800 RPM), throwaway filters, 20 HP supply fan motor with drive selection No. B (1100 RPM), 0-100% economizer w/ dry bulb control, supply and exhaust VFD w/o bypass, no remote panel, standard ambient control, cULus agency approval. High capacity unit, extended grease lines and spring isolators.

The service digit for each model number contains 38 digits; all 38 digits must be referenced.

General Data

Table 6. General Data - 20-50 Tons

	20(a) Ton	25(a) Ton	30(a) Ton	40(a) Ton	50(a) Ton
Compressor Data - Standard Capacity(b)					
Number/Size (Nominal)	2/10 Scroll	1/10, 1/11.5 Scroll	2/13.5 Scroll	2/7.5, 2/9 Scroll	4/10 Scroll
Unit Capacity Steps (%)	100/50 3450	100/46 3450	100/50 3450	100/72/45/23 3450	100/75/50/25 3450
No. of Circuits	1	1	1	2	2
Compressor Data - High Capacity/High Efficiency(b)					
Number/Size (Nominal)	2/10-5 Scroll	1/10, 1/13.5 Scroll	1/13.5, 1/15 Scroll	4/9 Scroll	2/10, 2/11.5 Scroll
Unit Capacity Steps (%)	100/50 3450	100/43 3450	100/47 3450	100/75/50/25 3450	100/73/46/23 3450
No. of Circuits	1	1	1	2	2
Compressor Data - Variable Speed(b)					
Number/Size (Nominal)	N/A	N/A	N/A	1/4-17 VS, 1/9, 1/7.5 Scroll	1/6-25 VS, 1/10, 1/11.5 Scroll
Unit Capacity Steps (%)	N/A	N/A	N/A	15-100	15-100
No. of Circuits	N/A	N/A	N/A	2	2
Air-Cooled Condenser Fans					
Number/Size/Type	2/26"/Prop	3/26"/Prop	3/26"/Prop	4/26"/Prop	6/26"/Prop
Hp (each)	1	1	1	1	1
Cycle/Phase	60/3	60/3	60/3	60/3	60/3
Evaporator Fans					
Number/Size/Type	2/15"/FC	2/15"/FC	2/18"/FC	2/20"/FC	2/20"/FC
Number of Motors	1	1	1	1	1
Hp Range	3-20	3-20	5-20	7.5-30	7.5-30
Cfm Range(c)	4000-9000	5000-11000	6000-13500	8000-18000	10000-22500
ESP Range - (In. WG)	0.25-4.0	0.25-4.0	0.25-4.0	0.25-4.0	0.25-4.0
Exhaust Fans					
Number/Size/Type	1/15"/FC	1/15"/FC	1/15"/FC	1/18"/FC	1/18"/FC
Hp Range	3	3	3-5	5-7.5	5-15
Cfm Range(c)	2000-6000	4000-10000	2000-7000	3000-11000	9000-20000
ESP Range - (In. WG)	0.25-1.4	0.25-2.0	0.25-1.4	0.25-1.4	0.25-1.4
Return Fans					
Number/Size/Type	1/24.5/AF	1/24.5/AF	1/24.5/AF	1/27.0/AF	1/27.0/AF
Hp Range	3.0	3.0 - 5.0 HP	3.0 - 7.5	5.0 - 10.0	5.0 - 15.0
Cfm Range(c)	4000-9000	4000-11000	4000-12500	7500-18000	9000-20000
ESP Range - (In. WG)	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0
Evaporator Coil					
Size (Ft)	20.3	20.3	25.5	32.5	38
Rows/Fin Series	4/168	4/168	5/168	5/168	4/168
Tube Diameter/Surface	1/2"/Enhanced	1/2"/Enhanced	3/8"/Enhanced	3/8"/Enhanced	1/2"/Enhanced
Air-Cooled Condenser Coil					
Face Area (Ft ²)	58	58	58	116	116
Fin Series	252	252	252	252	252
Type	Microchannel	Microchannel	Microchannel	Microchannel	Microchannel
Electric Heat					
kW Range(d)	30-110	30-130	30-150	50-170	90-190
Capacity Steps:	3	3	3	3	3

Table 6. General Data - 20-50 Tons (continued)

	20(a) Ton	25(a) Ton	30(a) Ton	40(a) Ton	50(a) Ton
Natural Gas Heat					
Standard Gas Heat ^(e)					
Low Heat Input	235	235	350	350	500
High Heat Input	500	500	500	850	850
Std. Heating Capacity Steps:	2	2	2	2	2
Modulating Gas Heat (Not Available on 20-40 Ton Models with Low Heat)					
High Heat - Limited Modulation ^(f)	See Table 10	See Table 10	See Table 10	See Table 10	See Table 10
Heat Exchanger Type	Standard	Standard	Standard	Standard	Standard
High Heat - Full Modulation ^(g)	See Table 10	See Table 10	See Table 10	See Table 10	See Table 10
Heat Exchanger Type	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Hot Water Coil					
Size (Inches)	30x66x2 Row	30x66x2 Row	30x66x2 Row	42x66x2 Row	42x66x2 Row
Type	5W Prima-Flo E w/ turbulators	5W Prima-Flo E w/ turbulators	5W Prima-Flo E w/ turbulators	5W Prima-Flo E w/ turbulators	5W Prima-Flo E w/ turbulators
High Heat (Fins/Ft)	110	110	110	110	110
Low Heat (Fins/Ft)	80	80	80	80	80
Steam Coil					
Size (Inches)	30x66x1 Row	30x66x1 Row	30x66x1 Row	30x66x1 Row	30x66x1 Row
Type	Type NS	Type NS	Type NS	Type NS	Type NS
High Heat (Fins/Ft)	96	96	96	96	72
Low Heat (Fins/Ft)	42	42	42	42	42
Pre-Evap Filters					
Panel Filters					
Number/Size (Inches)	12 - 20x20x2	12 - 20x20x2	16 - 20x20x2	16 - 20x25x2	20 - 20x25x2
Face Area (Ft ²)	33.3	33.3	44.4	55.5	69.4
Bag Filters					
Number/Size (Inches)	4 - 12x24x19	4 - 12x24x19	2 - 12x24x19	5 - 12x24x19	3 - 12x24x19
	3 - 24x24x19	3 - 24x24x19	6 - 24x24x19	6 - 24x24x19	9 - 24x24x19
Cartridge Filters	4 - 12x24x12	4 - 12x24x12	2 - 12x24x12	5 - 12x24x12	3 - 12x24x12
	3 - 24x24x12	3 - 24x24x12	6 - 24x24x12	6 - 24x24x12	9 - 24x24x12
Prefilters (For Bag & Cartridge)	4 - 12x24x2	4 - 12x24x2	2 - 12x24x2	5 - 12x24x2	3 - 12x24x2
	3 - 24x24x2	3 - 24x24x2	6 - 24x24x2	6 - 24x24x2	9 - 24x24x2
Face Area (Ft ²)	20	20	28	34	42
Final Filters (SX Units only)					
Cartridge Filters	4 - 12x24x12	4 - 12x24x12	1 - 12x24x12	5 - 12x24x12	2 - 12x24x12
Number/Size (Inches)	3 - 24x24x12	3 - 24x24x12	6 - 24x24x12	6 - 24x24x12	9 - 24x24x12
Prefilters	4 - 12x24x2	4 - 12x24x2	1 - 12x24x2	5 - 12x24x2	2 - 12x24x2
(For Cartridge Filters)	3 - 24x24x2	3 - 24x24x2	6 - 24x24x2	6 - 24x24x2	9 - 24x24x2
Face Area (Ft ²)	20	20	26	34	40
Standard Unit Minimum Outside Air Temperature for Mechanical Cooling					
Without Hot Gas Option	55°F	50°F	50°F	55°F	45°F
With Hot Gas Option	55°F	50°F	50°F	55°F	45°F
Low Ambient Option Minimum Outside Air Temperature					
Without Hot Gas Option	0°F	0°F	0°F	0°F	0°F
With Hot Gas Option	10°F	10°F	10°F	10°F	10°F

(a) Model sizes are listed are for air-cooled/evaporative condensers. Not all data applies to both condenser configurations.

(b) 20/24-30/36 ton models are single circuit, 40/48 ton models are dual circuit.

(c) For CFM values outside these ranges, contact your local Trane sales office.

(d) Refer to Table 52, p. 82 for availability of electric heat kW ranges by voltage.

(e) Two-stage gas heat: 1st stage 50% on gas heat exchangers up to 500 Mbt/h; 60% on 800-1000 Mbt/h gas heat exchangers.

(f) The firing rate of the unit can vary from 33% of the heater Mbt/h up to the nameplate rating of the unit.

(g) The firing rate of the unit can vary from pilot rate of 125,000 Btu/h up to the nameplate rating of the unit.