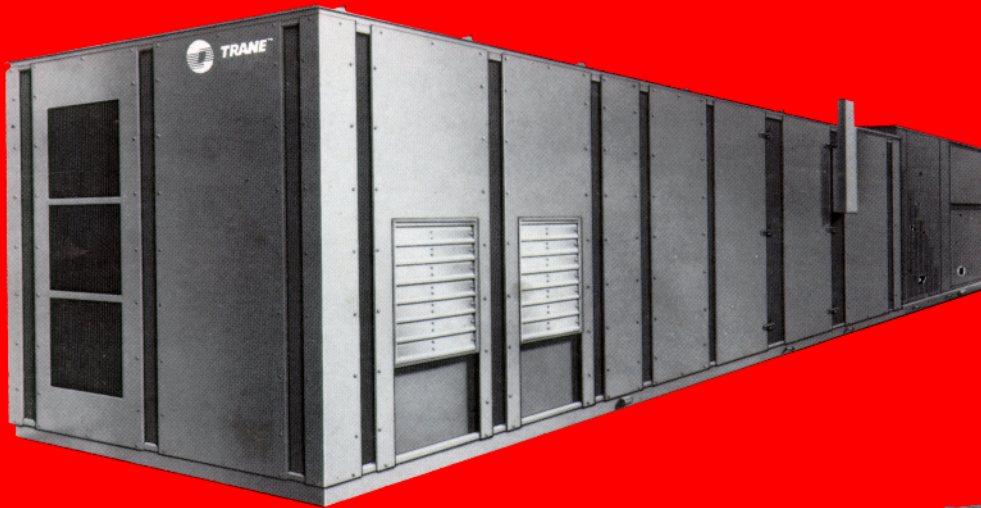




RT-DS-1
November 1992
First Printing

Packaged
Rooftop
Air Conditioners

20 To 130-Tons
C and E Style



20 To 75 Ton
C Style



90 To 130 Ton
E Style

Contents

Standard Features

Ž Trane 3-D™ scroll compressors (20-60 Ton)

- Trane semi-hermetic 'R' compressors (70-130 ton)

Ž FC supply and exhaust fans

- Factory run tested units and components
- Constant volume control
- 14-gauge, single-piece construction base rails

Ž UL and CSA approval

- Two-inch spring isolation (90-130 ton)
- Meets ASTM B117 672 hour salt spray test

Optional Features

- Variable air volume control
- FROSTAT™ coil frost protection (VAV only)
- Hot gas bypass
- Statitrac™ direct building pressurization control

Ž High capacity evaporator coil option

- Double wall access doors
- Double wall construction/perforated double wall
- Two-inch spring isolation (20-75 ton)
- 90-95 percent bag filters

Ž 90-95 percent cartridge filters

- Final filters
- Barometric relief
- 50 percent exhaust fans
- 100 percent modulating exhaust
- Extended casing
- Frequency inverter terminal strip
- Filter rack only (no filters)

- Inlet guide vanes on FC fans (VAV only)
- Heating options: natural gas, electric or hydronic
- Copper evaporator/condenser coils
- Heresite coated coils
- Ž Dual electrical power connection
- Horizontal discharge/return (cooling only)
- High efficiency motors
- Oversized motors
- High duct temperature thermostat
- 0 F ambient
- Economizer with low leak dampers
- Ultra low leak economizer dampers
- Night setback and remote control panel
- Zone reset
- ICS control module Tracer® Integration Module (TIM)
- Non-fused disconnect
- Ž Ventilation override sequences
- Convenience outlet
- Duplex control
- Ž Single zone variable air volume control
- Ž VariTrac interface
- Fast morning warm-up
- Roofcurbs
- Special paint colors
- Power supply monitoring
- Pneumatic interface
- Ž Correction capacitors
- U-frame motors

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Model Number Description

S F H C C25 4 H C 0 0 B 3 9 A 1 A 1 0 L
 1 2 3 4 567 8 9 10 11 12 13 14 15 16 17 18 19 20 21

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
 *(See Note 2)
 **(See Note 3)

DIGIT 3 — UNIT AIRFLOW

H = Single Zone

DIGIT 4 — DEVELOPMENT SEQUENCE

C = Third

DIGITS 5,6,7 — NOMINAL CAPACITY

C20 = 20 Tons C55 = 55 Tons
 C25 = 25 Tons C60 = 60 Tons
 C30 = 30 Tons C70 = 70 Tons
 C40 = 40 Tons C75 = 75 Tons
 C50 = 50 Tons

DIGIT 8 — POWER SUPPLY (See Note 1)

1 = 460/60/3 PWS A = 380/50/3 PWS
 2 = 575/60/3 PWS B = 415/50/3 PWS
 3 = 230/60/3 PWS C = 380/50/3 XL
 4 = 460/60/3 XL D = 415/50/3 XL
 5 = 575/60/3 XL E = 200/60/3 XL
 6 = 200/60/3 PWS F = 230/60/3 XL

DIGIT 9 — HEATING CAPACITY

H = High Heat
 L = Low Heat
 0 = No Heat
 Note: When the second digit is "E" for electric heat, the following values apply in the ninth digit:
 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

DIGIT 10 — DESIGN SEQUENCE

A = First (Factory Assigned)
 B = Second, etc.

NOTE:

- 20 through 60-ton units available in XL only.
- When the second digit calls for "L" or "S", one of the following valve size values must be in digit 21 (Misc.):
 1 = ½" 2 = ¾" 3 = 1" 4 = 1¼" 5 = 1½" 6 = 2"
- SEHC units (units with electric heat) utilizing 208V or 230V require dual power source.

EXAMPLE:

Model numbers: SFHCC254HC00B39A1A10L describes a unit with the following characteristics: DX cooling with natural gas heating, 25 ton nominal cooling capacity, 460/60/3 power supply, high heat model. No exhaust or drive selection, cleanable wire mesh filters, 7½ hp supply fan motor, supply fan drive selection No. 9 — (900 RPM), no fresh air, constant volume control, no accessory panel, 0 F ambient control, no agency approval and high-efficiency motors.

DIGIT 11 — EXHAUST

0 = None 7 = 100%, 15 HP
 1 = Barometric 8 = 100%, 20 HP
 2 = 100%, 1½ HP A = 50%, 1½ HP
 3 = 100%, 3 HP B = 50%, 3 HP
 4 = 100%, 5 HP C = 50%, 5 HP
 5 = 100%, 7½ HP D = 50%, 7½ HP
 6 = 100%, 10 HP

DIGIT 12 — EXHAUST AIR FAN DRIVE SELECTION

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

DIGIT 13 — FILTER

A = Throwaway
 B = Cleanable Wire Mesh
 C = High-Efficiency Throwaway
 D = 90-95% Bag With Prefilters
 E = 90-95% Cartridge With Prefilters
 F = No Filters (T/A Rack)
 G = No Filters (Bag/Cart. Rack)

DIGIT 14 — SUPPLY AIR FAN HP

1 = 3 HP 6 = 20 HP
 2 = 5 HP 7 = 25 HP
 3 = 7½ HP 8 = 30 HP
 4 = 10 HP 9 = 40 HP
 5 = 15 HP

DIGIT 15 — SUPPLY AIR FAN DRIVE SELECTIONS

5 = 500 RPM A = 1000 RPM
 6 = 600 RPM B = 1100 RPM
 7 = 700 RPM C = 1200 RPM
 8 = 800 RPM D = 1300 RPM
 9 = 900 RPM E = 1400 RPM
 F = 1500 RPM

DIGIT 16 — FRESH AIR SELECTION

A = No Fresh Air
 B = 0-25% Manual
 D = 0-100% Economizer

DIGIT 17 — SYSTEM CONTROL

1 = Constant Volume Electronic — Room Thermostat
 3 = Variable Air Volume Electronic Supply Air With FROSTAT™

DIGIT 18 — ACCESSORY PANEL

A = None
 B = Signal Light Connection For Field Supplied Panel
 C = Remote Panel
 D = Remote Panel With Night Setback

DIGIT 19 — AMBIENT CONTROL

0 = Standard 1 = 0 F

DIGIT 20 — AGENCY APPROVAL

0 = None 1 = UL 2 = CSA
 (Only One Agency Approval Can Be Ordered)

DIGIT 21 — MISCELLANEOUS (See Note 2)

A = Unit Disconnect Switch
 B = Hot Gas Bypass
 E = Ultra Low Leak Fresh Air Dampers
 F = High Duct Temperature Thermostat
 G = High Capacity Option (N/A on 70 Ton)
 H = Copper Condenser Fins
 J = Remote Setpoint (VAV only)
 K = Zone Reset (VAV only)
 L = High-Efficiency Motors
 M = Fast Warm-Up Thermostat (VAV Only)
 N = Inlet Vanes — Supply Fan With Controls
 R = Extended Grease Lines
 T = Access Doors
 X = Compressor Lockout Thermostat (Economizer Only)
 Y = ICS Control Option-Tracer Integration Module (TIM)
 8 = Two-Inch Spring Isolators

Model Number Description

S **X** **H** **E** **D11** **4** **0** **A** **H** **7** **C** **E** **8** **D** **3** **D** **0** **1** **N**
 1 2 3 4 567 8 9 10 11 12 13 14 15 16 17 18 19 20 21

DIGIT 1 — UNIT TYPE

S = Self-Contained (Packaged Rooftop)

DIGIT 2 — UNIT FUNCTION

F = DX Cooling, Electric Heat
 F = DX Cooling, Natural Gas Heat
 X = DX Cooling, Extended Casing

DIGIT 3 — UNIT AIRFLOW

H = Single Zone

DIGIT 4 — DEVELOPMENT SEQUENCE

E = Fifth

DIGITS 5,6,7 — NOMINAL CAPACITY

C90 = 90 Tons
 D11 = 105 Tons
 D12 = 115 Tons
 D13 = 130 Tons

DIGIT 8 — POWER SUPPLY

1 = 460/60/3 PWS
 2 = 575/60/3 PWS
 3 = 230/60/3 PWS
 4 = 460/60/3 XL
 5 = 575/60/3 XL
 6 = 200/60/3 PWS

DIGIT 9 — HEATING CAPACITY

0 = No Heat

H = High Heat (1000 MBh)

Note: When the second digit calls for "E" for electric heat, the following values apply in the ninth digit:
 W = 190 KW

DIGIT 10 — DESIGN SEQUENCE

A = First (Factory Assigned)

DIGIT 11 — EXHAUST

0 = None
 7 = 100% — 15 HP
 8 = 100% — 20 HP
 9 = 100% — 25 HP
 F = 50% — 15 HP
 H = 100% — 30 HP
 J = 100% — 40 HP

DIGIT 12 — EXHAUST AIR FAN DRIVE SELECTION

0 = None
 5 = 500 RPM
 6 = 600 RPM
 7 = 700 RPM
 8 = 800 RPM

DIGIT 13 — FILTER

A = Throwaway (90 Ton Only)
 C = High-Efficiency Throwaway
 D = 90-95% Bag With Prefilters
 E = 90-95% Cartridge With Prefilters
 F = No Filters (T/A Rack)
 G = No Filters (Bag/Cart. Rack)

DIGIT 14 — SUPPLY AIR FAN HP

C = 30 HP (2-15 HP)
 D = 40 HP (2-20 HP)
 E = 50 HP (2-25 HP)
 F = 60 HP (2-30 HP)
 G = 80 HP (2-40 HP)

DIGIT 15 — SUPPLY AIR FAN DRIVE SELECTIONS

6 = 600 RPM
 7 = 700 RPM
 8 = 800 RPM
 9 = 900 RPM

DIGIT 16 — FRESH AIR SELECTION

D = 0-100% Economizer (Standard)

DIGIT 17 — SYSTEM CONTROL

1 = Constant Volume Electronic — Room Thermostat
 3 = Variable Air Volume Electronic Supply Air With FROSTAT™

DIGIT 18 — ACCESSORY PANEL

A = None
 B = Signal Light Connection For Field Supplied Panel
 C = Remote Panel
 D = Remote Panel With Night Setback

DIGIT 19 — AMBIENT CONTROL

0 = Standard
 1 = 0°F

DIGIT 20 — AGENCY APPROVAL

0 = None
 1 = UL
 2 = CSA
 (Only One Agency Approval Can Be Ordered)

DIGIT 21 — MISCELLANEOUS (See Note 2)

A = Unit Disconnect Switch
 B = Hot Gas Bypass
 E = Low Leak Fresh Air Dampers
 F = High Duct Temperature Thermostat
 G = High Capacity Option
 J = Remote Setpoint (VAV only)
 K = Zone Reset (VAV only)
 L = High-Efficiency Motors
 M = Fast Warm-Up Thermostat (VAV Only)
 N = Inlet Vanes — Supply Fan With Controls
 R = Extended Grease Lines
 T = Access Doors
 X = Compressor Lockout Thermostat (Economizer Only)
 Y = ICS Control Option-Tracer Integration Module (TIM)

EXAMPLE:

Model numbers: SXHED1140AH3CE8D3D01N describes a unit with the following characteristics: DX cooling with extended casing, 105 ton nominal cooling capacity, 460/60/3 power supply, no heat, 30 hp 100% modulating exhaust fan motor with drive selection No. 7 — (700 RPM), high-efficiency throwaway filters, 50 hp supply fan motor with drive selection No. 8 — (800 RPM), economizer, electronic supply air VAV controls, remote panel with night setback, standard ambient, UL agency approval, and inlet vanes with controls.

General Data

AHU-15

Table 9-1 — General Data — 50-75 Ton

	50 Ton		55 Ton		60 Ton		70 Ton		75 Ton	
Compressor Data									Standard High Capacity	
Number/Size (Nominal)	2/10, 2/15 Ton		4/15 Ton		4/15 Ton		2/35 Ton		2/35 Ton 2/40 Ton	
Model	Scroll		Scroll		Scroll		Model R		Model R	
Unit Capacity Steps (%)	100/80/60/30		100/75/50/25		100/75/50/25		100/75/50/25		100/75/50/25	
RPM	3450		3450		3450		1750		1750	
Evaporator Fans										
Number/Size/Type	2/20"/FC		2/20"/FC		2/22"/FC		2/22"/FC		2/22"/FC	
Hp Range	7½-30		7½-30		10-40		10-40		10-40	
Cfm Range ¹	10000-22500		12000-24750		14000-27000		16000-33000		16000-33000	
TSP 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	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%
Number/Size/Type	1/18"/FC	2/18"/FC	1/18"/FC	2/18"/FC	1/20"/FC	2/20"/FC	1/20"/FC	2/20"/FC	1/20"/FC	2/20"/FC
Hp Range	5-7.5	5-15	5-7.5	5-15	5-7.5	5-20	5-7.5	5-20	5-7.5	5-20
Cfm Range	3000-11000	9000-20000	3000-11000	10000-21500	4000-13000	12000-24000	4000-13000	12000-27000	4000-13000	12000-27000
ESP Range — (In. WG)	0.25-1.4	0.2-2.0	0.25-1.4	0.2-2.0	0.25-1.4	0.2-2.0	0.25-1.4	0.2-2.0	0.25-1.4	0.2-2.0
Condenser Fans										
Number/Size/Type	6/26"/Prop		6/26"/Prop		6/26"/Prop		6/26"/Prop		6/26"/Prop	
Hp (Each)	1.0		1.0		1.0		1.0		1.0	
Cfm	36600		36600		40800		40800		40800	
Cycle/Phase	60/3		60/3		60/3		60/3		60/3	
Evaporator Coil — Standard										
Size (Ft. ²)	37.9		37.9		43.1		43.1		43.1	
Rows/Fin Series	2/144		2/144		2/156		2/168		4/144	
Tube Diameter/Surface	½/Enhanced		½/Enhanced		½/Enhanced		½/Enhanced		½/Enhanced	
Evaporator Coil — High Capacity										
Size (Ft. ²)	37.9		37.9		43.1				43.1	
Rows/Fin Series	4/144		4/144		4/144		N.A		4/144	
Tube Diameter/Surface	½/Enhanced		½/Enhanced		½/Enhanced				½/Enhanced	
Condenser Coil (Aluminum Fins)										
Size (Ft. ²)	70.0		70.0		88.0		88.0		88.0	
Rows/Fin Series/Tube Diameter	3/156/ ¾		3/156/ ¾		3/168/ ¾		3/168/ ¾		3/168/ ¾	
Copper Condenser Fins (Optional)	3/144/ ¾		3/144/ ¾		3/156/ ¾		3/156/ ¾		3/156/ ¾	
Electric Heat										
KW Range ²	70-190		70-190		90-190		90-190		90-190	
Capacity Steps: CV/VAV	3/1		3/1		3/1		3/1		3/1	
Natural Gas Heat										
Low Heat Input	500		500		500		500		500	
High Heat Input	850		850		850		850		850	
Capacity Steps: CV/VAV	2/1		2/1		2/1		2/1		2/1	
Hot Water Coil										
Size (Inches)	42 × 66 × 2 Row		42 × 66 × 2 Row		42 × 90 × 2 Row		42 × 90 × 2 Row		42 × 90 × 2 Row	
Type	Type W, Prima Flo		Type W, Prima Flo		Type W, Prima Flo		Type W, Prima Flo		Type W, Prima Flo	
High Heat (Fins/Ft)	110		110		110		110		110	
Low Heat (Fins/Ft)	80		80		80		80		80	
Steam Coil										
Size (Inches)	30 × 66 × 1 Row 12 × 66 × 1 Row		30 × 66 × 1 Row 12 × 66 × 1 Row		30 × 90 × 1 Row 12 × 90 × 1 Row		30 × 90 × 1 Row 12 × 90 × 1 Row		30 × 90 × 1 Row 12 × 90 × 1 Row	
Type	Type NS		Type NS		Type NS		Type NS		Type NS	
High Heat (Fins/Ft)	96		96		72		72		72	
Low Heat (Fins/Ft)	42		42		42		42		42	
Filters										
Panel Filters										
Number/Size (Inches)	20 — 20 × 25 × 2		20 — 20 × 25 × 2		35 — 16 × 20 × 2		35 — 16 × 20 × 2		35 — 16 × 20 × 2	
Face Area (Ft ²)	69.4		69.4		77.8		77.8		77.8	
Bag Filters										
Number/Size (Inches)	3 — 12 × 24 × 19		3 — 12 × 24 × 19		6 — 12 × 24 × 19		6 — 12 × 24 × 19		6 — 12 × 24 × 19	
	9 — 24 × 24 × 19		9 — 24 × 24 × 19		8 — 24 × 24 × 19		8 — 24 × 24 × 19		8 — 24 × 24 × 19	
Cartridge Filters	3 — 12 × 24 × 12		3 — 12 × 24 × 12		6 — 12 × 24 × 12		6 — 12 × 24 × 12		6 — 12 × 24 × 12	
	9 — 24 × 24 × 12		9 — 24 × 24 × 12		8 — 24 × 24 × 12		8 — 24 × 24 × 12		8 — 24 × 24 × 12	
Prefilters (For Bag & Cartridge)	3 — 12 × 24 × 2		3 — 12 × 24 × 2		6 — 12 × 24 × 2		6 — 12 × 24 × 2		6 — 12 × 24 × 2	
	9 — 24 × 24 × 2		9 — 24 × 24 × 2		8 — 24 × 24 × 2		8 — 24 × 24 × 2		8 — 24 × 24 × 2	
Face Area (Ft ²)	42.0		42.0		44.0		44.0		44.0	
Standard Unit Min. Outside Air Temperature For Mechanical Cooling										
Without Hot Gas Option	35 F		40 F		30 F		45 F		45 F	
With Hot Gas Option	35 F		40 F		30 F		45 F		45 F	
Low Ambient Option Min. Outside Air Temp										
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	

Notes:

1. For cfm values outside these ranges, refer to RT-EB-81.
2. Refer to Table 34-3 for availability of electric heat kw ranges by voltage.

General Data

AHU-14

Table 10-1 — General Data — 90-130 Ton

	90 Ton		105 Ton		115 Ton		130 Ton	
Compressor Data								
Number/Size (Nominal)	2/40 Ton		1/40 Ton, 1/50 Ton		2/50 Ton		2/60 Ton	
Model	Model R		Model R		Model R		Model R	
Unit Capacity Steps (%)	100/75/50/25		100/78/44/22		100/75/50/25		100/75/50/25	
RPM	1750		1750		1750		1750	
Evaporator Fans								
Number/Size/Type	2/27"/FC		2/27"/FC		2/27"/FC		2/27"/FC	
Hp Range	30-80		30-80		30-80		30-80	
Cfm Range ¹	27,000-45,000		31,000-46,000		31,000-46,000		31,000-46,000	
TSP Range — (In. WG)	1.0-4.75		1.0-4.70		1.0-4.70		1.0-4.70	
Exhaust Fans								
	50%	100%	50%	100%	50%	100%	50%	100%
Number/Size/Type	1/22"/FC	2/22"/FC	1/22"/FC	2/22"/FC	1/22"/FC	2/22"/FC	1/22"/FC	2/22"/FC
Hp Range	15	15-40	15	15-40	15	15-40	15	15-40
Cfm Range	10,000-25,000	24,000-40,000	10,000-25,000	24,000-40,000	10,000-25,000	24,000-40,000	10,000-25,000	24,000-40,000
ESP Range — (In. WG)	.25-2.5	.25-2.5	.25-2.5	.25-2.5	.25-2.5	.25-2.5	.25-2.5	.25-2.5
Condenser Fans								
Number/Size/Type	8/26"/Prop.		9/26"/Prop.		10/26"/Prop.		12/26"/Prop.	
Hp (Each)	1.0		1.0		1.0		1.0	
Cfm	59,200		63,200		70,222		84,267	
Cycle/Phase	60/3		60/3		60/3		60/3	
Evaporator Coil — Standard								
Dimensions	122.0 x 70.0		122.0 x 71.25		122.0 x 71.25		122.0 x 71.25	
Size (Ft ²)	59.3		60.4		60.4		60.4	
Rows/Fin Series	3/120		4/120		5/144		5/144	
Tube Diameter/Surface	½/Enhanced		½/Enhanced		½/Enhanced		½/Enhanced	
Evaporator Coil — High Capacity								
Dimensions	122.0 x 70.0		122.0 x 71.25		NA		NA	
Size (Ft ²)	59.3		60.4		NA		NA	
Hi-Capacity Rows/Fin Series	5/144		5/144		NA		NA	
Tube Diameter/Surface	½/Enhanced		½/Enhanced		N/A		N/A	
Condenser Coil								
Size (Ft ²)	152		152		152		152	
Rows/Fin Series/Tube Diameter	3/156/ ¾		4/156/ ¾		4/156/ ¾		4/156/ ¾	
Electric Heat								
KW	190		190		190		190	
Capacity Steps: CV/VAV	3/1		3/1		3/1		3/1	
Natural Gas Heat								
MBh Input	1000		1000		1000		1000	
Capacity Steps: CV/VAV	2/1		2/1		2/1		2/1	
Filters								
Panel Filters								
Number/Size (Inches)	25-24x24x2		25-24x24x2		25-24x24x2		25-24x24x2	
Face Area (Ft ²)	100.0		100.0		100.0		100.0	
Bag Filters								
Number/Size (Inches)	3-12x24x19		3-12x24x19		3-12x24x19		3-12x24x19	
Cartridge Filters	3-12x24x12		3-12x24x12		3-12x24x12		3-12x24x12	
Prefilters (For Bag & Cartridge)	3-20x24x2		3-20x24x2		3-20x24x2		3-20x24x2	
Face Area (Ft ²)	66.0		66.0		66.0		66.0	

Notes:

1. For cfm values outside these ranges, refer to RT-EB-81.
2. Refer to Table 34-3 for availability of electric heat kw ranges by voltage.
3. Single step of heating capacity provided on units with VAV option.

Table 10-2 — ARI Performance Data¹

ARI Performance Data ¹				
Tons	Model ²	Capacity (MBh)	EER	IPLV ²
20	SAHCC2040Y***A*****	218	9.0	11.8
	SXHCC2040Y***A*****	218	9.0	11.8
	SFHCC204LY***A*****	218	8.9	11.7
	SEHCC204*Y***A*****	218	8.9	11.7
	SLHCC204LY***A*****	216	8.9	11.6
	SSHCC204LY***A*****	218	8.9	11.7

Notes:

1. This information is rated in accordance to the ARI Standard 360-86 for large unitary equipment up to 20 tons. These Trane products can be found in the current ARI Directory.
2. IPLV — Integrated Part Load Value
3. This information applies to units whose design sequence (Digit 10) is "Y" or later.

Table 10-3 — ARI Correction Multipliers

Option Description	Model Digit	Designator	Multipliers (%)		
			Capacity	EER	IPLV ²
200/60/3 Voltage	8	E	100	100	100
230/60/3 Voltage	8	F	101	99	99
High Heat — Gas	9	H	100	100	100
High Heat — Steam	9	H	100	99	98
High Heat — Hot Water	9	H	100	99	99
Wire Mesh Filter	13	B	100	101	101
95% Bag filter	13	D	99	95	91
95% Cartridge Filter	13	E	99	95	92
100% Economizer	16	D	100	99	98
High Capacity Coil	21	G	113	109	107
High Efficiency Motor	21	L	100	101	101
Inlet Guide Vanes	21	N	100	99	99

Table 10-4 — Economizer Outdoor Air Damper Leakage (Of Rated Airflow)

	ΔP Across Dampers (In. WC)	
	0.5 (In.)	1.0 (In.)
Standard "Low Leak"	1.5 %	2.5 %
Optional "Ultra Low Leak"	0.5 %	1.0 %

Note:

Above data based on tests completed in accordance with AMCA Standard 575 at AMCA Laboratories.

Performance Data

60 Ton
AHU-15

Table 27-1 — 60 Ton Gross Cooling Capacity — STANDARD CAPACITY Evaporator Coil With Scroll Compressor

		Ambient Temperature																							
		85						95						105						115					
CFM	ENT DB (F)	Entering Wet Bulb																							
		61		67		73		61		67		73		61		67		73		61		67		73	
		CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC
14000	75	605	448	674	363	749	277	583	437	649	352	722	266	560	425	623	340	693	254	535	412	596	328	663	242
	80	604	515	673	430	748	344	583	504	649	419	721	332	559	492	623	407	692	321	535	480	595	395	662	309
	85	609	581	673	497	748	410	588	569	648	486	720	399	566	555	622	474	692	388	543	539	595	462	661	376
	90	628	628	672	564	747	477	610	610	648	552	720	465	590	590	622	540	691	454	570	570	595	528	661	442
18000	75	637	497	708	393	785	286	613	485	681	381	755	275	587	473	653	369	724	263	560	460	623	356	691	251
	80	638	579	708	475	785	369	614	567	681	463	755	357	589	554	652	451	723	345	563	539	622	438	691	333
	85	651	649	707	557	784	450	630	630	680	545	754	439	609	609	652	533	723	427	586	586	622	520	690	415
	90	683	683	709	638	783	532	663	663	683	626	753	520	641	641	655	612	722	508	617	617	627	598	689	496
21000	75	654	531	727	412	805	292	629	518	699	400	773	281	602	506	669	388	741	269	573	493	638	375	707	257
	80	658	621	727	505	804	385	633	608	698	493	773	374	608	593	668	481	740	362	582	575	637	468	706	349
	85	681	681	726	598	803	478	660	660	698	586	772	466	637	637	668	573	739	454	613	613	637	560	705	442
	90	716	716	730	687	803	570	694	694	704	673	772	558	671	671	676	658	739	546	646	646	648	640	705	533
24000	75	668	562	742	431	820	298	642	549	712	419	788	286	614	536	682	406	754	274	585	523	649	393	719	262
	80	675	658	741	534	819	401	651	642	712	522	787	389	626	624	681	509	753	377	600	600	649	496	718	365
	85	707	707	741	637	819	503	684	684	712	624	786	492	660	660	682	611	753	480	635	635	650	597	717	467
	90	744	744	750	730	818	605	720	720	723	713	786	594	695	695	696	694	752	581	669	669	669	669	717	569
27000	75	680	591	754	448	832	303	653	578	723	436	799	291	624	565	691	423	764	279	594	550	658	410	728	267
	80	692	688	753	561	832	416	668	668	723	548	798	404	644	644	691	536	764	392	618	618	658	523	728	379
	85	729	729	754	672	831	528	705	705	724	659	798	516	680	680	694	645	763	504	653	653	662	629	727	491
	90	768	768	768	764	830	639	743	743	742	742	797	627	717	717	716	716	762	615	689	689	689	689	726	603

Table 27-2 — 60 Ton Gross Cooling Capacity — HIGH CAPACITY Evaporator Coil With Scroll Compressor

		Ambient Temperature																							
		85						95						105						115					
CFM	ENT DB (F)	Entering Wet Bulb																							
		61		67		73		61		67		73		61		67		73		61		67		73	
		CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC	CAP	SHC
14000	75	669	498	745	402	826	303	642	484	715	389	793	290	614	470	684	375	759	277	585	456	651	360	723	264
	80	671	575	744	478	825	379	644	573	714	464	792	366	617	558	683	450	758	353	588	543	651	435	722	339
	85	678	664	744	553	825	455	653	648	714	540	792	441	629	629	683	525	758	427	604	604	651	511	722	413
	90	707	707	746	629	824	529	684	684	717	630	791	516	661	661	686	615	757	502	636	636	654	600	721	488
18000	75	705	570	781	443	865	314	675	556	749	429	829	301	645	541	715	415	792	288	613	526	680	400	753	274
	80	710	668	781	542	864	414	682	653	748	529	828	400	652	636	714	514	791	387	622	618	679	500	752	373
	85	735	735	782	642	863	513	710	710	750	628	828	499	684	684	716	613	790	485	656	656	682	598	752	471
	90	772	772	788	739	863	611	747	747	757	723	827	598	720	720	725	706	790	584	691	691	693	687	752	570
21000	75	724	614	801	468	885	322	694	600	767	455	847	308	662	584	731	440	809	295	629	569	694	426	769	281
	80	734	721	800	583	884	436	706	703	766	569	847	422	678	678	731	555	808	408	649	649	694	540	768	394
	85	771	771	803	696	884	549	744	744	770	682	846	536	716	716	735	666	807	522	686	686	700	650	767	508
	90	811	811	815	801	883	662	783	783	784	781	846	649	754	754	754	754	808	634	724	724	724	724	769	620
24000	75	740	656	816	493	901	328	709	641	781	479	862	315	676	625	744	465	822	301	642	608	706	450	781	287
	80	759	759	816	622	900	457	731	731	781	608	861	443	703	703	744	593	821	429	672	672	707	578	780	415
	85	801	801	821	747	899	584	772	772	787	731	861	571	743	743	752	715	821	557	711	711	716	696	779	543
	90	843	843	843	843	900	711	814	814	814	814	862	697	783	783	783	783	823	683	751	751	751	751	782	668
27000	75	754	695	828	517	913	335	722	678	792	502	873	321	688	661	754	488	832	307	655	642	715	473	790	293
	80	782	782	828	659	912	477	754	754	792	645	873	463	723	723	755	630	832	449	692	692	717	614	790	435
	85	826	826	837	794	912	618	796	796	802	776	872	605	765	765	767	756	831	591	732	732	732	732	789	576
	90	871	871	870	870	914	758	840	840	840	840	875	744	807	807	807	807	835	729	774	774	774	774	794	713

Notes:
 1. All capacities shown are gross and have not considered indoor fan heat.
 2. CAP = Total gross cooling capacity.
 3. SHC = Sensible heat capacity.

Performance Data

90 Ton

AHU-14

Table 30-1 — 90 Ton Gross Cooling Capacity — STANDARD CAPACITY Evaporator Coil

ENT		Ambient Temperature																							
		85						95						105						115					
		DB		Entering Wet Bulb				DB		Entering Wet Bulb				DB		Entering Wet Bulb				DB		Entering Wet Bulb			
CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC		
CFM	(F)																								
27000	75	932	711	1040	569	1155	423	889	690	993	548	1103	403	840	666	939	525	1045	381	788	641	882	500	983	357
	80	931	825	1039	682	1154	536	888	803	992	661	1102	516	841	779	938	638	1044	493	790	753	881	613	982	470
	85	941	931	1038	795	1153	649	903	902	991	774	1101	628	864	864	937	750	1043	606	822	822	880	726	981	582
	90	986	986	1037	907	1152	761	950	950	990	886	1100	740	910	910	938	862	1042	718	866	866	882	836	980	694
32000	75	962	761	1072	599	1188	433	916	739	1022	577	1134	412	865	715	966	554	1073	390	810	689	905	529	1008	366
	80	962	890	1071	728	1187	561	918	867	1021	706	1133	541	869	840	965	682	1072	518	818	809	904	657	1007	495
	85	988	988	1070	856	1186	689	951	951	1020	834	1132	669	909	909	964	810	1071	646	863	863	903	785	1006	622
	90	1039	1039	1070	983	1185	817	1001	1001	1022	960	1131	796	958	958	969	933	1070	773	910	910	913	901	1005	749
37000	75	986	807	1097	626	1214	441	938	785	1045	604	1157	420	885	760	986	580	1094	398	827	734	924	555	1028	374
	80	989	948	1096	769	1213	584	944	922	1044	747	1156	564	896	890	985	723	1093	541	847	847	923	698	1027	517
	85	1030	1030	1095	912	1212	727	990	990	1043	890	1155	706	945	945	984	866	1092	683	897	897	923	840	1026	659
	90	1084	1084	1099	1050	1211	868	1043	1043	1050	1024	1154	847	997	997	998	991	1091	824	947	947	946	946	1025	801
42000	75	1005	850	1117	651	1234	449	955	827	1063	629	1176	428	900	802	1002	605	1111	405	841	775	938	579	1043	382
	80	1013	997	1115	808	1233	606	969	966	1062	786	1175	585	923	923	1001	762	1110	562	874	874	937	736	1042	538
	85	1065	1065	1114	964	1232	762	1023	1023	1061	942	1174	741	976	976	1002	917	1109	718	925	925	940	889	1041	694
	90	1121	1121	1125	1107	1231	917	1078	1078	1078	1075	1173	896	1030	1030	1029	1029	1108	873	978	978	977	977	1040	849
45000	75	1014	874	1127	665	1245	453	964	851	1072	643	1186	432	908	826	1011	618	1120	409	849	798	946	593	1051	386
	80	1028	1022	1126	830	1244	618	985	985	1071	808	1185	597	938	938	1010	783	1119	574	887	887	945	758	1050	550
	85	1083	1083	1125	994	1243	782	1041	1041	1071	972	1184	761	992	992	1011	945	1118	738	940	940	949	915	1049	714
	90	1141	1141	1141	1136	1241	945	1097	1097	1096	1096	1182	924	1047	1047	1046	1046	1117	901	994	994	994	994	1048	877

Table 30-2 — 90 Ton Gross Cooling Capacity — HIGH CAPACITY Evaporator Coil

ENT		Ambient Temperature																							
		85						95						105						115					
		DB		Entering Wet Bulb				DB		Entering Wet Bulb				DB		Entering Wet Bulb				DB		Entering Wet Bulb			
CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC	CAP	SHC			CAP	SHC		
CFM	(F)																								
27000	75	1048	847	1166	659	1291	469	995	822	1108	635	1229	446	937	794	1044	609	1160	422	875	764	976	581	1089	396
	80	1054	993	1165	807	1290	617	1004	965	1107	783	1228	594	949	933	1043	756	1159	568	893	893	975	728	1088	543
	85	1091	1091	1165	955	1289	763	1047	1047	1108	930	1227	740	998	998	1045	903	1158	715	945	945	979	874	1087	689
	90	1148	1148	1172	1098	1288	909	1103	1103	1117	1071	1226	886	1052	1052	1058	1039	1157	860	999	999	998	998	1086	834
32000	75	1080	918	1198	701	1324	481	1025	892	1138	676	1259	458	964	863	1071	650	1188	433	900	832	1000	622	1114	408
	80	1094	1078	1197	872	1323	652	1044	1043	1137	848	1258	629	992	992	1070	821	1187	604	937	937	1000	793	1114	578
	85	1150	1150	1199	1042	1322	822	1103	1103	1140	1016	1257	799	1050	1050	1075	988	1186	773	994	994	1008	956	1113	747
	90	1211	1211	1216	1197	1321	991	1162	1162	1162	1161	1257	968	1108	1108	1108	1108	1186	942	1051	1051	1051	1051	1114	916
37000	75	1105	985	1222	740	1349	492	1049	958	1160	715	1283	469	987	927	1091	688	1209	444	922	892	1018	660	1134	419
	80	1135	1135	1221	934	1348	685	1086	1086	1159	909	1282	662	1031	1031	1090	882	1208	637	973	973	1019	853	1133	612
	85	1198	1198	1228	1123	1347	878	1148	1148	1168	1096	1281	855	1092	1092	1102	1063	1207	829	1033	1033	1035	1025	1132	803
	90	1262	1262	1262	1262	1347	1069	1211	1211	1211	1211	1281	1046	1154	1154	1154	1209	1019	1094	1094	1094	1094	1136	992	
42000	75	1127	1046	1241	777	1369	502	1070	1017	1177	753	1301	479	1007	982	1106	725	1226	454	943	940	1032	697	1149	429
	80	1172	1172	1241	993	1367	717	1121	1121	1177	968	1300	694	1064	1064	1108	940	1225	669	1004	1004	1035	910	1148	643
	85	1238	1238	1252	1196	1366	931	1186	1186	1192	1165	1299	908	1128	1128	1128	1124	1224	883	1066	1066	1066	1066	1147	857
	90	1305	1305	1305	1305	1368	1143	1252	1252	1251	1251	1301	1119	1192	1192	1192	1192	1229	1091	1131	1131	1131	1131	1155	1062
45000	75	1138	1080	1251	799	1378	508	1081	1049	1186	774	1310	485	1019	1010	1114	747	1234	460	957	957	1040	719	1157	435
	80	1192	1192	1251	1027	1377	736	1139	1139	1187	1002	1309	713	1081	1081	1117	973	1233	687	1019	1019	1044	943	1156	662
	85	1259	1259	1266	1235	1376	963	1206	1206	1207	1199	1308	939	1146	1146	1146	1146	1232	914	1084	1084	1084	1084	1155	888
	90	1328	1328	1327	1327	1379	1186	1273	1273	1273	1273	1312	1160	1212	1212	1212	1212	1240	1132	1150	1150	1150	1150	1166	1101

- Notes:
 1. All capacities shown are gross and have not considered indoor fan heat.
 2. CAP = Total gross cooling capacity.
 3. SHC = Sensible heat capacity.

Performance Data

Table 33-1 — Natural Gas Heating Capacities

Nom. Tons	Heat Module	Gas Heat Input (MBh)	Heat Output (MBh)	Air Temperature Rise Vs Unit Cfm																										
				CFM																										
				4000	5000	5760	6000	6284	7000	8000	9000	9792	10000	10682	10830	11200	11750	12000	13500	15000	16129	18000	20000	22500	23040	25000	27000	29377	30000	
20	Low	235	192.7	44	36	31	30	28	25	22	20																			
	High	500	410.0			66	63	60	54	47	42																			
25	Low	235	192.7		36	31	30	28	25	22	20	18	18	17	16															
	High	500	410.0			66	63	60	54	47	42	39	38	35	35	34														
30	Low	350	287.0				44	42	38	33	29	27	26	25	24	24	23	22	20											
	High	500	410.0					60	54	47	42	39	38	35	35	34	32	31	28											
40	Low	350	287.0							33	29	27	26	25	24	24	23	22	20	18	16									
	High	850	697.0								66	64	60	59	57	55	54	48	43	40	36									
50	Low	500	410.0										38	35	35	34	32	31	28	25	23	21	19	17						
	High	850	697.0											60	59	57	55	54	48	43	40	36	32	29						
55	Low	500	410.0											38	35	35	34	32	31	28	25	23	21	19	17	16				
	High	850	697.0													55	54	48	43	40	36	32	29	28	26					
60	Low	500	410.0														31	28	25	23	21	19	17	16	15	14				
	High	850	697.0														54	48	43	40	36	32	29	28	26	24				
70	Low	500	410.0														31	28	25	23	21	19	17	16	15	14	13	13		
	High	850	697.0														54	48	43	40	36	32	29	28	26	24	22			
75	Low	500	410.0														31	28	25	23	21	19	17	16	15	14	13	13		
	High	850	697.0														54	48	43	40	36	32	29	28	26	24	22			

Note:
 1. All heaters are 82% efficient.
 2. Cfm values below the minimums and above the maximums shown in this table are not UL/CSA approved.
 3. Air Temperature Rise = Heat Output (Btu) ÷ (Cfm x 1.085).

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Table 33-2 — Natural Gas Heating Capacities

Nominal Tons	Gas Heat Module	Heat Input (MBh)	Heat Output (MBh)	Air Temperature Rise Vs Unit Cfm								
				CFM								
				28,350	30,250	32,550	34,750	37,000	39,250	41,500	43,000	46,000
90	High	1000	820	27	25	23	22	20	19	18	18	16
105	High	1000	820			23	22	20	19	18	18	16
115	High	1000	820			23	22	20	19	18	18	16
130	High	1000	820			23	22	20	19	18	18	16

Notes:
 1. All heaters are 82% efficient.
 2. Cfm values below the minimums and above the maximums shown in this table are not UL/CSA approved.
 3. Air Temperature Rise = Heat Output (Btu) ÷ (Cfm x 1.085).

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Table 33-3 — Steam Heating Capacities (Q/ITD)¹

20 Nominal Ton Unit					25 Nominal Ton Unit				30 Nominal Ton Unit											
Steam Module	Unit	Standard Air Volume (Cfm)			Steam Module	Unit	Standard Air Volume (Cfm)			Steam Module	Unit	Standard Air Volume (Cfm)								
			4000	6000	8000	10000				5000	7500	10000	12500				6000	9000	12000	15000
Low Heat	0.95	1.18	1.37	1.52	1.06	1.33	1.52	1.74	1.06	1.33	1.52	1.74	1.06	1.33	1.52	1.74	1.18	1.64	1.69	2.00
High Heat	1.94	2.47	2.95	3.31	2.20	2.85	3.31	3.65	2.20	2.85	3.31	3.65	2.20	2.85	3.31	3.65	2.47	3.12	3.59	3.95

40 Nominal Ton Unit					50 Nominal Ton Unit				55 Nominal Ton Unit											
Steam Module	Unit	Standard Air Volume (Cfm)			Steam Module	Unit	Standard Air Volume (Cfm)			Steam Module	Unit	Standard Air Volume (Cfm)								
			8000	12000	16000	20000				10000	15000	20000	25000				11000	16500	22000	27500
Low Heat	1.61	2.01	2.29	2.60	1.82	2.21	2.60	2.85	1.82	2.21	2.60	2.85	1.82	2.21	2.60	2.85	1.91	2.38	2.72	2.92
High Heat	3.36	4.28	4.93	5.43	3.86	4.79	5.43	5.97	3.86	4.79	5.43	5.97	3.86	4.79	5.43	5.97	4.09	5.01	5.64	6.41

60 Nominal Ton Unit					70 & 75 Nominal Ton Unit								
Steam Module	Unit	Standard Air Volume (Cfm)			Steam Module	Unit	Standard Air Volume (Cfm)						
			12000	18000	24000	30000				16000	20000	24000	30000
Low Heat	2.32	2.81	3.33	3.71	2.65	2.98	3.33	3.71	2.65	2.98	3.33	3.71	
High Heat	3.85	4.84	5.62	6.18	4.50	5.10	5.62	6.18	4.50	5.10	5.62	6.18	

Note:
 1. Capacities expressed as MBH (Q) per initial temperature difference (ITD) between the entering air temperature to the steam module and the entering steam temperature. Maximum recommended operating pressure is 35 PSIG.

Table 33-4 — Properties of Steam

Steam Pressure (Psig)	2	5	10	15	20	25	30	40	50
Temperature Of Steam (F)	219	227	239	250	259	267	274	287	298

Performance Data

60, 70, 75 Tons

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Table 44-1 — Supply Fan Performance WITHOUT INLET VANES — 60, 70 and 75 Ton “C” Style

Cfm Std	Total Static Pressure															
	.250		.500		.750		1.000		1.250		1.500		1.750		2.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	295	1.55	366	2.32	441	3.34	505	4.44	559	5.65	606	6.89	648	8.15	687	9.41
15000	305	1.80	373	2.59	442	3.60	508	4.74	563	5.98	611	7.29	654	8.63	693	9.97
16000	316	2.08	380	2.90	444	3.88	509	5.08	566	6.33	615	7.69	659	9.10	699	10.52
17000	327	2.38	389	3.24	448	4.20	510	5.43	568	6.72	619	8.09	663	9.55	704	11.06
18000	338	2.72	399	3.62	454	4.60	512	5.78	569	7.15	621	8.53	667	10.02	708	11.58
19000	349	3.09	408	4.03	461	5.04	515	6.18	570	7.59	623	9.02	670	10.51	712	12.11
20000	361	3.48	419	4.48	469	5.52	519	6.65	572	8.03	624	9.55	672	11.06	715	12.66
21000	372	3.91	429	4.97	478	6.04	525	7.19	575	8.51	625	10.07	673	11.66	718	13.27
22000	384	4.37	440	5.51	488	6.61	533	7.79	579	9.07	627	10.60	674	12.27	719	13.93
23000	395	4.87	450	6.08	497	7.22	541	8.43	584	9.72	629	11.18	675	12.88	720	14.63
24000	407	5.41	461	6.70	508	7.88	550	9.12	591	10.43	633	11.85	677	13.51	721	15.33
25000	419	5.98	473	7.37	518	8.59	559	9.86	599	11.20	639	12.61	680	14.20	723	16.03
26000	431	6.60	484	8.08	528	9.35	569	10.66	607	12.03	645	13.45	685	14.99	725	16.76
27000	443	7.26	495	8.83	539	10.16	579	11.50	616	12.90	653	14.36	690	15.89	728	17.58
28000	455	7.97	507	9.62	550	11.02	589	12.40	626	13.83	661	15.32	696	16.87	733	18.52
29000	468	8.72	518	10.45	561	11.94	599	13.36	635	14.82	670	16.34	704	17.92	738	19.56
30000	480	9.52	530	11.32	572	12.91	610	14.37	645	15.87	679	17.42	712	19.03	745	20.69
31000	492	10.37	541	12.25	583	13.93	620	15.44	655	16.98	689	18.56	721	20.20	752	21.89
32000	505	11.27	553	13.23	595	15.02	631	16.58	666	18.15	698	19.76	730	21.43	760	23.16
33000	517	12.22	565	14.26	606	16.14	642	17.77	676	19.39	708	21.03	739	22.73	769	24.49

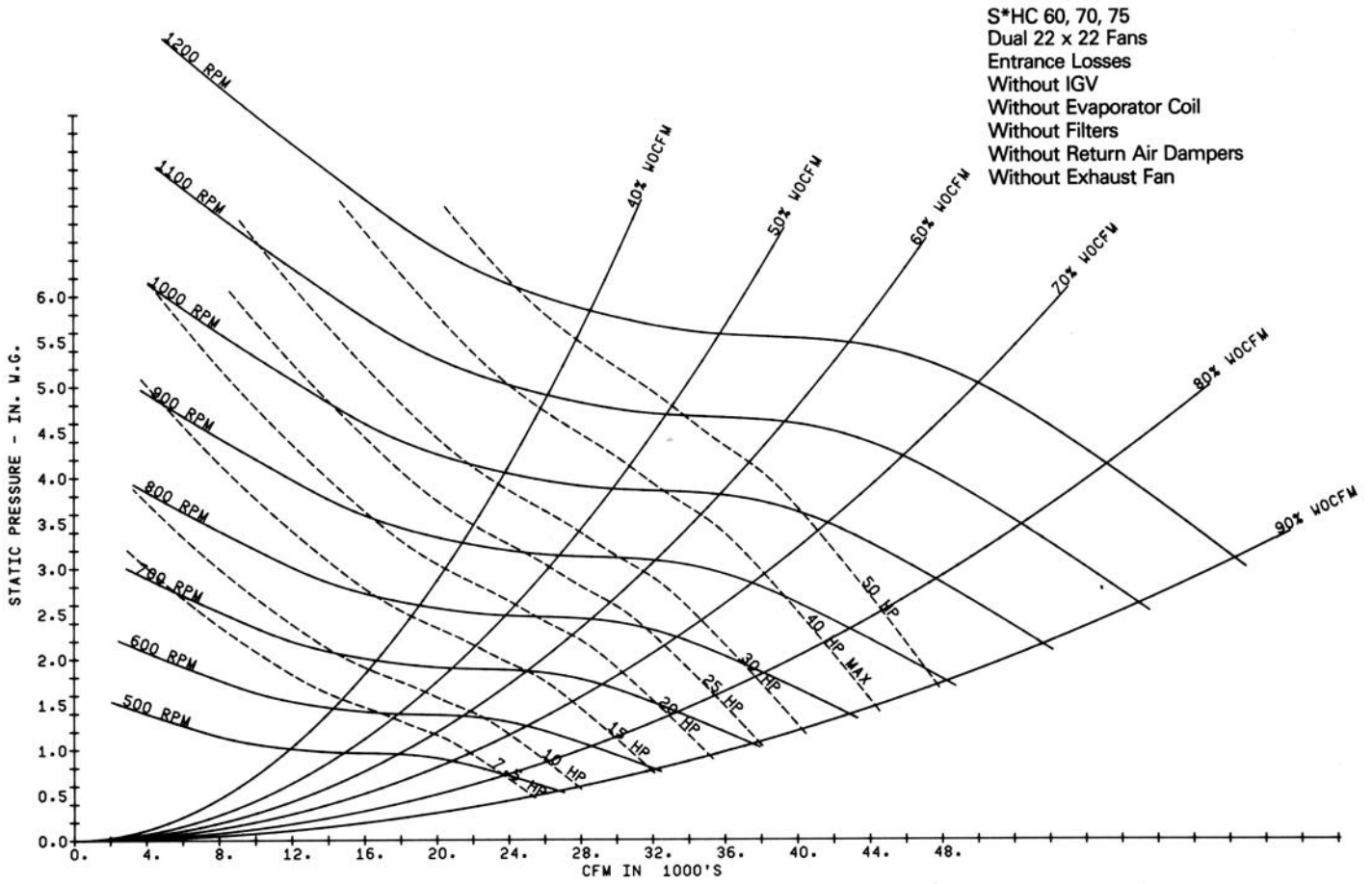
Cfm Std	Total Static Pressure															
	2.250		2.500		2.750		3.000		3.250		3.500		3.750		4.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	723	10.67	757	11.95	788	13.24	818	14.55	846	15.89	873	17.25	898	18.63	923	20.04
15000	730	11.32	764	12.68	796	14.04	826	15.41	855	16.81	882	18.22	908	19.65	933	21.11
16000	736	11.96	771	13.39	803	14.84	834	16.28	863	17.74	891	19.22	917	20.71	943	22.22
17000	741	12.57	777	14.10	810	15.62	841	17.15	870	18.69	899	20.23	926	21.79	951	23.36
18000	746	13.17	782	14.78	815	16.39	847	18.01	877	19.63	906	21.25	933	22.88	959	24.52
19000	751	13.76	787	15.44	821	17.14	853	18.84	883	20.54	912	22.25	940	23.96	967	25.68
20000	755	14.36	791	16.10	826	17.87	858	19.65	889	21.44	918	23.23	946	25.03	973	26.83
21000	758	14.97	795	16.76	830	18.59	863	20.45	894	22.32	924	24.19	952	26.08	979	27.96
22000	761	15.64	799	17.44	834	19.32	867	21.23	899	23.18	929	25.13	958	27.10	985	29.07
23000	762	16.37	801	18.17	838	20.06	871	22.03	903	24.03	933	26.06	962	28.10	990	30.15
24000	764	17.14	803	18.96	840	20.86	875	22.84	907	24.89	938	26.98	967	29.09	995	31.22
25000	765	17.94	805	19.82	842	21.72	878	23.70	910	25.77	942	27.90	971	30.07	1000	32.27
26000	766	18.72	806	20.70	844	22.65	880	24.64	913	26.71	945	28.86	975	31.07	1004	33.32
27000	768	19.51	807	21.57	845	23.62	881	25.65	915	27.72	948	29.87	978	32.09	1008	34.38
28000	770	20.37	808	22.44	846	24.58	882	26.69	917	28.80	950	30.96	981	33.18	1011	35.48
29000	774	21.34	810	23.35	847	25.53	883	27.75	918	29.94	951	32.12	983	34.35	1014	36.65
30000	779	22.43	814	24.36	849	26.51	884	28.79	919	31.08	952	33.34	985	35.60	1016	37.91
31000	785	23.63	818	25.50	852	27.58	886	29.84	920	32.21	953	34.57	986	36.90	1017	39.24
32000	791	24.92	823	26.76	855	28.76	888	30.97	922	33.34	954	35.79	987	38.22	1018	40.63
33000	799	26.28	829	28.13	860	30.08	892	32.20	924	34.53	956	37.01	988	39.53	1019	42.04

Cfm Std	Total Static Pressure															
	4.250		4.500		4.750		5.000		5.250		5.500		5.750		6.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	947	21.47	970	22.92	993	24.39	1015	25.89	1036	27.40	1057	28.93	1077	30.49	1097	32.06
15000	957	22.59	981	24.09	1003	25.61	1025	27.16	1047	28.72	1068	30.30	1088	31.91	1108	33.53
16000	967	23.75	991	25.30	1014	26.87	1036	28.46	1057	30.08	1078	31.71	1099	33.36	1119	35.03
17000	976	24.94	1000	26.55	1023	28.17	1046	29.81	1067	31.48	1089	33.16	1109	34.86	1129	36.58
18000	985	26.17	1009	27.83	1032	29.51	1055	31.20	1077	32.92	1098	34.65	1119	36.40		
19000	992	27.40	1017	29.13	1041	30.87	1064	32.63	1086	34.40	1108	36.19	1129	37.99		
20000	999	28.63	1024	30.44	1048	32.25	1072	34.08	1094	35.91	1116	37.76				
21000	1006	29.85	1031	31.74	1055	33.63	1079	35.53	1102	37.44	1124	39.35				
22000	1012	31.04	1037	33.02	1062	35.00	1086	36.98	1109	38.96						
23000	1017	32.21	1043	34.27	1068	36.34	1092	38.41	1116	40.47						
24000	1022	33.35	1048	35.50	1074	37.65	1098	39.80	1122	41.96						
25000	1027	34.48	1053	36.70	1079	38.93	1104	41.17	1127	43.41						
26000	1031	35.60	1058	37.89	1084	40.20	1109	42.52								
27000	1036	36.71	1062	39.07	1088	41.45	1113	43.85								
28000	1039	37.85	1066	40.26	1093	42.70	1118	45.16								
29000	1042	39.03	1070	41.47	1096	43.95	1122	46.47								
30000	1045	40.28	1073	42.73	1100	45.24	1126	47.80								
31000	1047	41.62	1076	44.06	1103	46.58	1129	49.16								
32000	1048	43.04	1078	45.49	1105	48.01										
33000	1049	44.52	1079	47.01	1107	49.53										

- Notes:
- Fan performance for 60, 70 and 75 ton “C” style rooftops are identical. However, note maximum motor hp size for each size. Contact your local Trane representative for information on oversized motors.
 - Shaded areas at table extremes note non-standard Bhp or Rpm selection. Contact your local Trane representative for more information.
 - Supply fan performance table includes internal resistance of rooftop. For total static pressure determination, system external static must be added to appropriate component static pressure drops (evaporator coil, filters, optional economizer, optional exhaust fan, optional heating system, optional cooling only extended casing, optional roof curb).
 - Maximum Cfm (for UL approval) as follows: 60 Ton — 27,000 Cfm
70 & 75 Ton — 30,000 Cfm
 - Minimum motor horsepower is 10 hp.
 - Maximum motor horsepower is 40 hp.
 - See RT-EB-81 for further details. Shading indicates non-standard horsepower.

Performance Data

60, 70, 75 Tons



Important: Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from the supply fan to the space cannot exceed 4.0" H₂O.

Performance Data

60, 70, 75 Tons

Table 46-1 — Supply Fan Performance WITH INLET VANES — 60, 70 and 75 Ton “C” Style

Cfm Std	Total Static Pressure															
	.250		.500		.750		1.000		1.250		1.500		1.750		2.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	316	1.77	382	2.48	454	3.51	514	4.62	567	5.84	613	7.03	655	8.22	693	9.47
15000	330	2.07	390	2.79	458	3.83	518	4.95	572	6.22	619	7.52	661	8.78	700	10.07
16000	344	2.41	401	3.17	462	4.15	523	5.34	576	6.60	624	7.98	667	9.36	707	10.71
17000	359	2.80	413	3.59	466	4.50	528	5.76	580	7.02	629	8.43	673	9.91	713	11.36
18000	374	3.24	425	4.05	474	4.94	532	6.18	585	7.51	633	8.90	677	10.43	718	12.00
19000	390	3.72	437	4.55	485	5.47	535	6.61	590	8.04	638	9.44	682	10.96	723	12.59
20000	405	4.24	450	5.10	496	6.06	541	7.12	594	8.57	643	10.05	686	11.55	727	13.19
21000	420	4.81	464	5.70	508	6.71	550	7.74	597	9.10	647	10.69	691	12.23	732	13.84
22000	436	5.44	478	6.37	520	7.40	560	8.46	602	9.70	651	11.32	696	12.96	737	14.58
23000	452	6.11	492	7.10	532	8.14	572	9.25	610	10.43	654	11.96	700	13.71	742	15.39
24000	468	6.85	507	7.89	545	8.94	583	10.10	620	11.27	659	12.67	704	14.44	746	16.25
25000	484	7.64	522	8.74	558	9.81	595	11.01	631	12.21	667	13.53	707	15.19	750	17.10
26000	500	8.49	538	9.66	572	10.74	608	11.97	642	13.22	676	14.51	713	16.04	754	17.93
27000	516	9.41	553	10.64	586	11.75	620	12.99	654	14.30	687	15.60	720	17.04	758	18.81
28000	532	10.39	568	11.68	600	12.84	633	14.09	666	15.44	698	16.78	729	18.18	763	19.82
29000	548	11.44	584	12.78	615	14.00	646	15.26	678	16.64	710	18.04	740	19.45	771	20.99
30000	565	12.57	599	13.96	630	15.24	660	16.51	691	17.91	722	19.37	751	20.80	780	22.31
31000	581	13.76	615	15.22	645	16.56	674	17.85	703	19.26	734	20.76	763	22.25	791	23.75
32000	597	15.04	631	16.55	661	17.97	688	19.27	717	20.69	746	22.22	775	23.77	802	25.30
33000	614	16.39	646	17.95	676	19.43	703	20.79	730	22.21	758	23.76	787	25.36	814	26.94

Cfm Std	Total Static Pressure															
	2.250		2.500		2.750		3.000		3.250		3.500		3.750		4.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	729	10.76	762	12.09	794	13.45	824	14.83	853	16.22	880	17.62	906	19.03	932	20.46
15000	736	11.39	770	12.77	802	14.18	832	15.62	861	17.09	889	18.57	915	20.06	941	21.56
16000	743	12.07	777	13.48	809	14.93	840	16.43	869	17.95	897	19.50	924	21.07	950	22.65
17000	750	12.80	784	14.25	817	15.73	848	17.26	877	18.83	905	20.43	932	22.06	958	23.71
18000	756	13.53	791	15.05	824	16.58	855	18.14	884	19.75	913	21.39	940	23.07	966	24.78
19000	761	14.25	797	15.87	830	17.48	862	19.09	891	20.72	920	22.40	948	24.11	974	25.86
20000	766	14.93	802	16.67	836	18.37	868	20.06	898	21.76	927	23.47	955	25.21	981	27.00
21000	771	15.60	807	17.42	842	19.25	874	21.04	905	22.82	934	24.59	962	26.38	988	28.20
22000	775	16.31	812	18.16	847	20.08	880	21.99	911	23.88	940	25.74	968	27.60	995	29.46
23000	780	17.11	816	18.94	851	20.89	884	22.89	916	24.90	946	26.87	974	28.82	1002	30.77
24000	785	18.00	821	19.81	855	21.74	889	23.78	921	25.87	951	27.96	980	30.03	1008	32.07
25000	789	18.94	826	20.77	860	22.68	893	24.71	925	26.84	956	29.01	985	31.19	1013	33.35
26000	794	19.91	830	21.81	865	23.72	898	25.72	930	27.84	960	30.05	990	32.31	1019	34.58
27000	797	20.85	835	22.88	870	24.85	902	26.85	934	28.93	965	31.13	994	33.43	1023	35.77
28000	801	21.80	839	23.94	874	26.02	907	28.06	939	30.14	969	32.31	999	34.59	1028	36.96
29000	805	22.83	842	24.98	879	27.20	912	29.33	944	31.45	974	33.60	1003	35.85	1032	38.21
30000	812	24.02	846	26.07	882	28.34	917	30.62	949	32.82	979	35.01	1008	37.24	1036	39.56
31000	820	25.38	851	27.29	886	29.50	920	31.88	953	34.21	984	36.48	1013	38.74	1041	41.05
32000	830	26.90	858	28.68	890	30.77	924	33.13	957	35.58	988	37.98	1018	40.32	1046	42.65
33000	840	28.55	867	30.26	896	32.20	927	34.46	960	36.93	992	39.47	1022	41.92	1051	44.33

Cfm Std	Total Static Pressure															
	4.250		4.500		4.750		5.000		5.250		5.500		5.750		6.000	
Air	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
14000	956	21.90	980	23.36	1003	24.83	1025	26.32	1047	27.83	1068	29.35	1088	30.90	1108	32.46
15000	966	23.07	989	24.60	1013	26.14	1035	27.69	1057	29.26	1078	30.84	1099	32.44	1119	34.05
16000	975	24.24	999	25.84	1022	27.45	1045	29.07	1067	30.70	1088	32.35	1109	34.01	1130	35.68
17000	983	25.38	1008	27.06	1031	28.75	1054	30.44	1076	32.15	1098	33.87	1119	35.60		
18000	992	26.51	1016	28.26	1040	30.02	1063	31.80	1085	33.58	1107	35.38	1128	37.18		
19000	1000	27.64	1024	29.45	1048	31.28	1071	33.13	1094	34.99	1116	36.86				
20000	1007	28.82	1032	30.67	1056	32.55	1079	34.46	1102	36.38	1124	38.32				
21000	1014	30.05	1039	31.93	1064	33.86	1087	35.81	1110	37.79						
22000	1021	31.35	1046	33.27	1071	35.22	1095	37.21	1118	39.23						
23000	1028	32.71	1053	34.67	1078	36.66	1102	38.67	1125	40.72						
24000	1034	34.10	1060	36.13	1085	38.17	1109	40.22								
25000	1040	35.49	1066	37.60	1091	39.71	1115	41.83								
26000	1046	36.83	1072	39.06	1097	41.27	1122	43.46								
27000	1051	38.12	1077	40.47	1103	42.80	1128	45.09								
28000	1055	39.38	1082	41.83	1108	44.27										
29000	1060	40.66	1087	43.16	1113	45.69										
30000	1064	42.00	1091	44.52	1118	47.10										
31000	1069	43.45	1096	45.95	1122	48.54										
32000	1073	45.04	1100	47.50	1126	50.07										
33000	1078	46.74	1105	49.19												

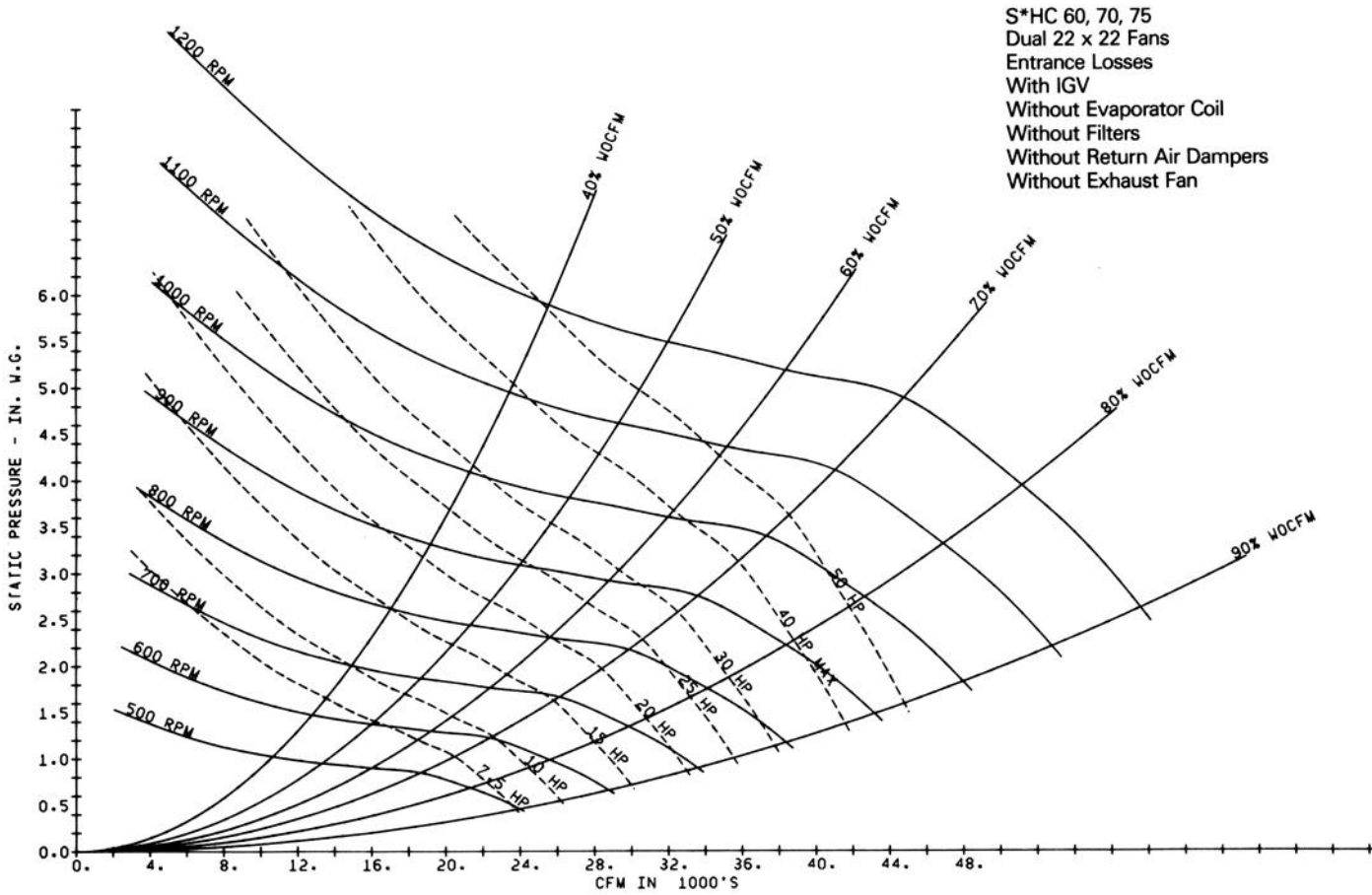
Notes:

1. Fan performance for 60, 70 and 75 ton “C” style rooftops are identical. Contact your local Trane representative for information on oversized motors.
2. Shaded areas at table extremes note non-standard Bhp or Rpm selection. Contact your local Trane representative for more information.
3. Supply fan performance table includes internal resistance of rooftop. For total static pressure determination, system external static must be added to appropriate component static pressure drops (evaporator coil, filters, optional economizer, optional exhaust fan, optional heating system, optional cooling only extended casing, optional roof curb).
4. Maximum Cfm (for UL approval) as follows: 60 Ton — 27,000 Cfm
70 & 75 Ton — 30,000 Cfm
5. Minimum motor horsepower is 10 hp.
6. Maximum motor horsepower is 40 hp.
7. See RT-EB-81 for further details.

Shading indicates non-standard horsepower.

Performance Data

60, 70, 75 Tons



S*HC 60, 70, 75
 Dual 22 x 22 Fans
 Entrance Losses
 With IGV
 Without Evaporator Coil
 Without Filters
 Without Return Air Dampers
 Without Exhaust Fan

Important: Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from the supply fan to the space cannot exceed 4.0" H₂O.

Performance Data

90 Tons

AHU-14

Table 48-1 — Supply Fan Performance WITHOUT INLET VANES — 90 Ton “E” Style

Cfm Std. Air	Total Static Pressure															
	.250		.500		.750		1.000		1.250		1.500		1.750		2.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	307	5.00	353	6.57	391	8.02	423	9.33	452	10.54	481	12.07	507	13.46	534	14.87
28000	315	5.45	360	7.09	398	8.61	431	10.06	458	11.22	486	12.76	512	14.26	537	15.69
29000	322	5.92	367	7.63	404	9.23	438	10.79	465	12.00	492	13.44	518	15.08	542	16.56
30000	330	6.43	374	8.21	411	9.88	444	11.50	472	12.86	497	14.18	524	15.88	548	17.48
31000	338	6.96	381	8.82	418	10.55	450	12.21	479	13.77	504	15.03	529	16.67	554	18.42
32000	346	7.52	388	9.46	425	11.26	457	12.99	486	14.69	511	16.00	535	17.51	560	19.34
33000	353	8.11	396	10.13	432	12.01	464	13.80	493	15.59	518	17.06	541	18.44	565	20.24
34000	361	8.74	403	10.83	439	12.78	470	14.64	500	16.48	525	18.15	548	19.51	571	21.18
35000	369	9.40	410	11.56	446	13.59	477	15.52	506	17.39	533	19.25	555	20.69	577	22.22
36000	377	10.09	418	12.33	453	14.43	484	16.44	512	18.37	539	20.33	562	21.94	583	23.39
37000	385	10.82	425	13.14	460	15.31	491	17.39	519	19.39	546	21.40	570	23.22	590	24.70
38000	393	11.59	433	13.98	467	16.23	498	18.37	526	20.45	552	22.46	577	24.50	597	26.10
39000	401	12.39	440	14.86	474	17.18	505	19.40	533	21.54	558	23.63	583	25.77	605	27.56
40000	410	13.23	448	15.78	482	18.17	512	20.47	539	22.68	565	24.83	590	27.02	612	29.03
41000	418	14.11	456	16.73	489	19.20	519	21.57	546	23.85	572	26.08	596	28.25	619	30.48
42000	426	15.03	463	17.73	496	20.28	526	22.71	553	25.07	579	27.36	602	29.60	625	31.92
43000	434	15.99	471	18.77	504	21.39	533	23.90	560	26.33	585	28.69	609	31.00	632	33.34
44000	443	16.99	479	19.85	511	22.54	540	25.13	567	27.63	592	30.06	616	32.44	638	34.76
45000	451	18.04	487	20.97	519	23.74	548	26.40	574	28.98	599	31.48	622	33.92	645	36.32
46000	459	19.13	495	22.14	526	24.99	555	27.72	581	30.37	606	32.94	629	35.46	651	37.92

Cfm Std. Air	Total Static Pressure															
	2.250		2.500		2.750		3.000		3.250		3.500		3.750		4.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	561	16.30	588	17.68	613	19.02	638	20.42	661	21.97	684	23.71	706	25.66	728	27.75
28000	564	17.18	591	18.65	616	20.06	640	21.45	664	22.92	686	24.53	708	26.34	730	28.34
29000	567	18.07	593	19.62	618	21.12	643	22.57	666	24.02	689	25.55	710	27.22	732	29.08
30000	571	19.01	596	20.59	621	22.19	645	23.73	669	25.22	691	26.73	713	28.32	734	30.04
31000	577	20.01	600	21.61	624	23.25	648	24.89	671	26.47	693	28.01	715	29.57	736	31.21
32000	582	21.05	604	22.68	627	24.35	650	26.05	673	27.74	696	29.35	718	30.94	738	32.55
33000	588	22.10	610	23.80	631	25.49	653	27.23	676	28.99	698	30.71	720	32.37	741	34.01
34000	594	23.13	616	24.96	636	26.70	657	28.45	679	30.26	701	32.07	723	33.83	743	35.53
35000	599	24.15	621	26.13	642	27.96	662	29.73	682	31.56	704	33.42	725	35.28	746	37.09
36000	605	25.21	627	27.27	648	29.24	667	31.08	687	32.92	707	34.81	728	36.73	748	38.64
37000	611	26.36	632	28.41	653	30.52	673	32.47	692	34.35	711	36.26	731	38.21	751	40.19
38000	617	27.66	638	29.59	659	31.77	679	33.87	697	35.84	716	37.77	734	39.74	754	41.75
39000	624	29.11	644	30.87	664	33.02	684	35.26	703	37.36	721	39.35	739	41.34	758	43.37
40000	631	30.66	650	32.31	670	34.33	690	36.62	709	38.87	727	40.98	744	43.01	762	45.05
41000	639	32.28	657	33.91	676	35.76	695	37.99	715	40.36	733	42.61	750	44.74	767	46.82
42000	646	33.93	664	35.62	682	37.35	701	39.45	720	41.83	739	44.23	756	46.49	773	48.65
43000	653	35.58	672	37.41	689	39.11	707	41.04	726	43.34	744	45.82	762	48.23	779	50.51
44000	660	37.20	679	39.24	696	41.00	713	42.81	731	44.95	750	47.41	767	49.95	784	52.38
45000	666	38.81	686	41.07	704	42.96	720	44.74	737	46.72	755	49.07	773	51.64	790	54.22
46000	673	40.41	693	42.89	711	44.97	728	46.80	744	48.68	761	50.86	778	53.38	796	56.03

Cfm Std. Air	Total Static Pressure															
	4.250		4.500		4.750		5.000		5.250		5.500		5.750		6.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	749	29.93	769	32.15	790	34.38	809	36.59	828	38.75	847	40.89	866	43.00	884	45.09
28000	751	30.49	771	32.73	791	35.03	811	37.34	830	39.65	848	41.91	867	44.14	885	46.35
29000	752	31.13	773	33.33	792	35.64	812	38.00	831	40.40	850	42.79	868	45.16	886	47.49
30000	754	31.95	774	34.04	794	36.29	813	38.65	832	41.08	851	43.55	869	46.03	887	48.50
31000	756	32.99	776	34.94	796	37.07	815	39.36	834	41.77	852	44.25	871	46.79	888	49.36
32000	759	34.25	779	36.07	798	38.05	817	40.22	836	42.54	854	44.99	872	47.53	890	50.13
33000	761	35.67	781	37.42	800	39.28	819	41.29	838	43.48	856	45.84	874	48.33	891	50.91
34000	764	37.22	783	38.93	803	40.72	821	42.62	840	44.67	858	46.88	876	49.26	893	51.78
35000	766	38.84	786	40.57	805	42.34	824	44.17	842	46.11	860	48.17	878	50.40	895	52.80
36000	769	40.50	788	42.29	808	44.07	826	45.88	844	47.76	862	49.73	880	51.82	897	54.06
37000	771	42.14	791	44.04	810	45.89	829	47.72	847	49.58	865	51.49	882	53.49	899	55.61
38000	774	43.78	793	45.79	813	47.74	831	49.63	849	51.51	867	53.41	884	55.37	902	57.40
39000	777	45.44	796	47.52	815	49.58	834	51.58	852	53.53	870	55.46	887	57.40	904	59.39
40000	780	47.15	799	49.28	817	51.41	836	53.52	854	55.57	872	57.57	889	59.55	906	61.54
41000	784	48.92	802	51.08	820	53.26	839	55.45	857	57.61	875	59.71	892	61.77	909	63.80
42000	789	50.78	806	52.94	824	55.15	841	57.39	859	59.63	877	61.84	894	64.01	911	66.11
43000	795	52.70	811	54.89	828	57.11	845	59.38	862	61.67	880	63.97	897	66.23	914	68.45
44000	801	54.67	816	56.91	832	59.15	849	61.43	865	63.76	882	66.11	899	68.45	916	70.77
45000	806	56.66	822	58.99	838	61.28	853	63.57	869	65.91	886	68.29	902	70.69	919	73.09
46000	812	58.63	828	61.09	843	63.46	858	65.79	874	68.14	889	70.53	905	72.97	922	75.42

Performance Data

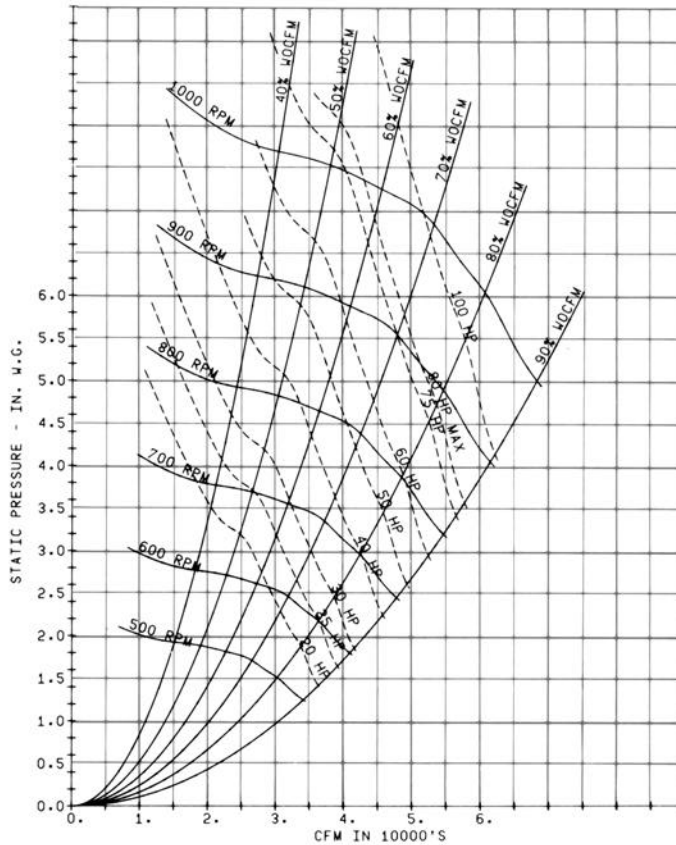
90 Tons

Table 49-1 — Supply Fan Performance WITHOUT INLET VANES — 90 Ton “E” Style (Cont.)

Cfm Std.	6.250		6.500		6.750		7.000		7.250	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	901	47.16	918	49.23	935	51.30	952	53.36	968	55.42
28000	902	48.53	920	50.69	937	52.85	953	54.99	969	57.13
29000	903	49.79	921	52.07	938	54.33	954	56.57		
30000	905	50.93	922	53.33	939	55.71	955	58.06		
31000	906	51.92	923	54.46	940	56.96	956	59.43		
32000	907	52.77	924	55.42	941	58.05	958	60.66		
33000	909	53.57	926	56.27	942	59.00	959	61.73		
34000	910	54.40	927	57.11	944	59.87	960	62.67		
35000	912	55.34	929	58.00	945	60.75	962	63.56		
36000	914	56.47	931	59.03	947	61.72	963	64.50		
37000	916	57.87	933	60.28	949	62.85	965	65.55		
38000	918	59.54	935	61.81	951	64.23	967	66.80		
39000	921	61.46	937	63.62	953	65.90	969	68.32		
40000	923	63.57	939	65.67	955	67.85				
41000	926	65.83	942	67.90	958	70.03				
42000	928	68.19	944	70.27	960	72.38				
43000	931	70.61	947	72.75	963	74.87				
44000	933	73.05	949	75.27	965	77.45				
45000	935	75.46	952	77.80						
46000	938	77.88								

NOTES:

1. Shaded areas indicate non-standard BHP or RPM selection. Contact your local Trane representative for more information.
2. Supply fan performance table includes internal resistance of rooftop. For total static pressure determination, system external static must be added to appropriate component static pressure drops (evaporator coil, filters, optional economizer, optional heating system, optional roof curb).
3. Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from the supply fan to the space cannot exceed 4.0" H₂O.
4. Maximum Cfm as follows: 90 Ton - 45,000 Cfm
5. Minimum motor horsepower is 30 hp.
6. See RT-EB-81 for further details.



S*HE 90
 Dual 27 x 25 Fans
 Entrance Losses
 Without IGV
 Without Evaporator Coil
 Without Filters
 Without Return Air Dampers
 Without Exhaust Fan

Important: Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from fan to the space cannot exceed 4.0" H₂O.

Performance Data

90 Tons

Table 50-1 — Supply Fan Performance WITH INLET VANES — 90 Ton “E” Style

Cfm Std. Air	Total Static Pressure															
	.250		.500		.750		1.000		1.250		1.500		1.750		2.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	335	5.90	373	7.27	406	8.56	435	9.67	464	10.86	493	12.25	521	13.62	550	15.24
28000	344	6.47	382	7.90	414	9.23	443	10.48	470	11.58	499	13.03	526	14.41	554	15.96
29000	354	7.07	391	8.57	423	9.96	451	11.31	477	12.41	505	13.81	532	15.28	558	16.76
30000	363	7.72	400	9.27	431	10.73	460	12.16	485	13.34	510	14.63	538	16.20	563	17.67
31000	373	8.40	408	10.02	440	11.54	468	13.02	493	14.33	517	15.53	543	17.11	569	18.67
32000	382	9.12	417	10.81	448	12.39	476	13.90	501	15.36	524	16.56	549	18.04	574	19.72
33000	392	9.89	426	11.64	457	13.29	484	14.85	509	16.41	532	17.69	555	19.04	580	20.76
34000	401	10.70	435	12.52	465	14.22	492	15.85	518	17.48	540	18.89	562	20.17	586	21.81
35000	411	11.56	444	13.44	474	15.21	501	16.90	526	18.57	549	20.13	570	21.42	592	22.94
36000	421	12.46	454	14.40	483	16.24	509	17.99	534	19.68	557	21.38	578	22.78	598	24.18
37000	431	13.41	463	15.42	492	17.32	518	19.13	542	20.89	565	22.66	586	24.20	606	25.56
38000	440	14.41	472	16.48	500	18.45	526	20.32	550	22.14	573	23.96	594	25.65	614	27.07
39000	450	15.46	481	17.60	509	19.62	535	21.57	559	23.44	581	25.28	602	27.12	622	28.65
40000	460	16.56	491	18.76	518	20.86	544	22.86	567	24.80	589	26.68	611	28.61	630	30.29
41000	470	17.72	500	19.98	527	22.14	552	24.21	576	26.21	598	28.15	619	30.12	638	31.96
42000	480	18.93	510	21.26	536	23.48	561	25.61	584	27.67	606	29.68	627	31.66	646	33.65
43000	490	20.19	519	22.59	546	24.87	570	27.07	593	29.19	615	31.26	635	33.27	655	35.36
44000	500	21.52	529	23.98	555	26.32	579	28.58	602	30.77	623	32.90	643	34.97	663	37.09
45000	510	22.90	538	25.42	564	27.83	588	30.16	610	32.41	632	34.60	652	36.74	671	38.86
46000	520	24.34	548	26.93	573	29.40	597	31.79	619	34.11	640	36.36	660	38.56	679	40.71

Cfm Std. Air	Total Static Pressure															
	2.250		2.500		2.750		3.000		3.250		3.500		3.750		4.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	577	16.94	602	18.56	625	20.13	647	21.72	669	23.38	691	25.15	713	27.05	735	29.04
28000	581	17.70	606	19.44	630	21.10	651	22.73	673	24.38	694	26.11	715	27.95	736	29.90
29000	585	18.47	610	20.29	634	22.07	656	23.78	677	25.46	698	27.18	718	28.97	739	30.87
30000	588	19.30	614	21.14	638	23.02	661	24.84	682	26.60	703	28.34	722	30.13	742	31.98
31000	593	20.23	618	22.02	642	23.95	666	25.89	687	27.75	707	29.56	727	31.37	746	33.21
32000	598	21.28	622	22.98	646	24.90	669	26.91	692	28.89	712	30.80	732	32.67	751	34.53
33000	604	22.42	627	24.05	650	25.90	673	27.93	696	30.00	717	32.04	737	33.99	755	35.92
34000	609	23.59	632	25.25	654	27.01	677	28.99	699	31.10	721	33.24	741	35.32	760	37.33
35000	615	24.77	638	26.53	659	28.24	681	30.14	703	32.23	725	34.42	745	36.62	765	38.75
36000	621	25.95	643	27.84	665	29.60	686	31.41	707	33.43	728	35.62	749	37.88	769	40.14
37000	627	27.20	649	29.15	670	31.03	691	32.83	711	34.75	732	36.89	753	39.16	773	41.49
38000	633	28.58	655	30.46	676	32.47	696	34.34	716	36.21	736	38.25	757	40.49	777	42.85
39000	640	30.10	661	31.86	682	33.90	702	35.91	722	37.81	741	39.76	761	41.92	781	44.25
40000	648	31.77	667	33.38	687	35.36	708	37.48	727	39.48	746	41.43	765	43.48	785	45.74
41000	656	33.53	674	35.06	693	36.91	714	39.05	733	41.19	752	43.20	770	45.20	789	47.36
42000	665	35.36	682	36.89	700	38.59	719	40.65	739	42.88	758	45.02	776	47.06	794	49.15
43000	673	37.22	690	38.83	707	40.45	725	42.37	744	44.58	763	46.86	782	49.00	799	51.08
44000	681	39.11	698	40.85	715	42.46	732	44.23	750	46.36	769	48.68	787	50.97	805	53.13
45000	689	41.02	707	42.91	723	44.59	739	46.27	757	48.25	775	50.53	793	52.93	811	55.22
46000	697	42.95	715	45.00	731	46.80	747	48.47	763	50.31	781	52.48	799	54.88	816	57.32

Cfm Std. Air	Total Static Pressure															
	4.250		4.500		4.750		5.000		5.250		5.500		5.750		6.000	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	757	31.09	778	33.17	798	35.25	818	37.32	837	39.37	856	41.41	874	43.44	891	45.47
28000	758	31.95	779	34.07	799	36.22	819	38.38	839	40.53	858	42.67	876	44.79	894	46.90
29000	759	32.88	780	34.99	800	37.17	820	39.38	840	41.62	859	43.86	877	46.08	895	48.29
30000	762	33.93	782	35.99	802	38.16	821	40.39	841	42.67	860	44.98	879	47.30	897	49.61
31000	765	35.12	784	37.12	804	39.23	823	41.45	842	43.74	861	46.08	880	48.46	898	50.85
32000	769	36.43	788	38.40	806	40.45	825	42.61	844	44.87	862	47.21	881	49.61	899	52.05
33000	774	37.84	792	39.80	810	41.82	828	43.91	846	46.12	864	48.42	882	50.81	900	53.26
34000	779	39.31	797	41.29	814	43.31	831	45.38	849	47.52	866	49.76	884	52.11	901	54.54
35000	784	40.81	801	42.85	819	44.89	836	46.96	853	49.08	870	51.27	886	53.55	903	55.93
36000	788	42.32	806	44.44	823	46.54	840	48.64	857	50.76	873	52.93	890	55.16	906	57.48
37000	793	43.80	811	46.04	828	48.22	845	50.38	862	52.53	878	54.71	894	56.93	910	59.20
38000	796	45.24	815	47.61	833	49.91	850	52.15	866	54.36	883	56.57	898	58.80	914	61.07
39000	800	46.68	819	49.14	837	51.56	855	53.92	871	56.22	887	58.49	903	60.76	919	63.05
40000	804	48.16	823	50.66	841	53.18	859	55.66	876	58.08	892	60.44	908	62.78	923	65.10
41000	808	49.72	827	52.21	845	54.78	863	57.36	880	59.91	897	62.39	913	64.82	928	67.21
42000	812	51.41	831	53.85	849	56.42	867	59.05	884	61.70	901	64.31	917	66.85	933	69.34
43000	817	53.25	835	55.61	853	58.13	871	60.77	888	63.47	905	66.18	922	68.85	938	71.46
44000	822	55.27	839	57.52	857	59.96	874	62.56	892	65.27	909	68.03	926	70.81	942	73.55
45000	828	57.41	844	59.61	861	61.95	878	64.47	896	67.15	913	69.92	929	72.75	946	75.58
46000	833	59.62	850	61.84	866	64.11	883	66.53	900	69.14	916	71.88	933	74.72	950	77.61

Performance Data

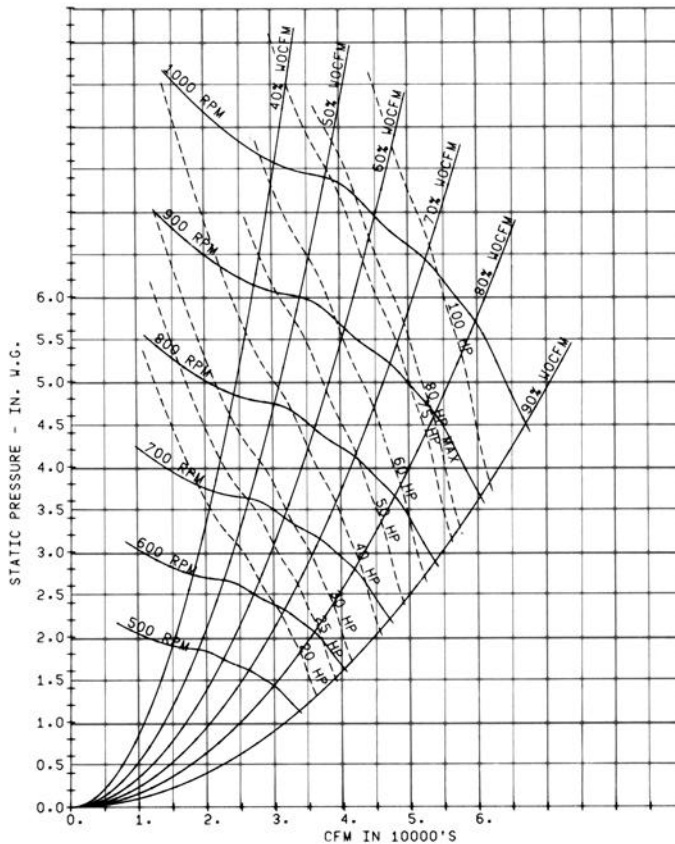
90 Tons

Table 51-1 — Supply Fan Performance WITH INLET VANES — 90 Ton “E” Style (Cont.)

Cfm Std.	Total Static Pressure							
	6.250		6.500		6.750		7.000	
Air	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27000	909	47.49	925	49.52	942	51.54	958	53.57
28000	911	49.01	928	51.11	944	53.21	960	55.31
29000	913	50.48	930	52.67	946	54.84	963	57.02
30000	914	51.90	932	54.18	948	56.44	965	58.70
31000	916	53.24	933	55.62	950	57.98	966	60.33
32000	917	54.51	934	56.98	951	59.45	968	61.90
33000	918	55.76	935	58.29	952	60.84	969	63.38
34000	919	57.04	936	59.59	953	62.18	970	64.80
35000	921	58.40	938	60.94	955	63.55		
36000	923	59.89	939	62.40	956	64.98		
37000	926	61.55	942	63.99	958	66.53		
38000	930	63.39	945	65.77	961	68.25		
39000	934	65.36	949	67.72	964	70.15		
40000	938	67.44	953	69.81	968	72.21		
41000	943	69.60	958	71.99				
42000	948	71.80	963	74.24				
43000	953	74.02	968	76.54				
44000	957	76.23						
45000	962	78.39						
46000								

NOTES:

1. Shaded areas indicate non-standard BHP or RPM selection. Contact your local Trane representative for more information.
2. Supply fan performance table includes internal resistance of rooftop. For total static pressure determination, system external static must be added to appropriate component static pressure drops (evaporator coil, filters, optional economizer, optional heating system, optional roof curb).
3. Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from the supply fan to the space cannot exceed 4.0" H₂O.
4. Maximum Cfm as follows: 90 Ton - 45,000 Cfm
5. Minimum motor horsepower is 30 hp.
6. See RT-EB-81 for further details.



S*HE 90
 Dual 27 x 25 Fans
 Entrance Losses
 With IGV
 Without Evaporator Coil
 Without Filters
 Without Return Air Dampers
 Without Exhaust Fan

Important: Maximum static pressure leaving the rooftop is 4.0" H₂O positive. The static pressure drops from fan to the space cannot exceed 4.0" H₂O.

Performance Data

Table 56-1 — Component Static Pressure Drops (in. W.G.)

Nominal Tons	Cfm Std Air	Evaporator Coil				Heating System								Filters					Economizer	
		Standard		High Capacity		SFHC		SEHC		SLHC		SSHC		Throwaway		Perm	Bag	Cartridge	Std	With Or
		Wet	Dry	Wet	Dry	Low	High	All KW's	Low	High	Low	High	Fiber	High Effic.	Mesh	And Prefilter	And Prefilter	Roof Curb	Without Exhaust Fan	
20	4000	.09	.07	.13	.10	.02	NA	.02	.05	.06	.02	.06	.03	.03	.01	.3	.24	.01	.03	
	6000	.17	.14	.25	.19	.05	.05	.04	.09	.12	.05	.12	.06	.06	.02	.5	.44	.02	.06	
	8000	.28	.22	.40	.32	.09	.09	.07	.15	.19	.10	.20	.09	.09	.03	.71	.68	.05	.12	
	9000	.34	.27	.48	.39	.12	.12	.09	.19	.24	.12	.22	.11	.11	.04	.83	.81	.07	.15	
	10000	.41	.32	.58	.46	.14	.15	.11	.23	.28	.15	.29	.13	.13	.05	.95	.95	.10	.19	
	12000	.54	.43	.76	.62	.20	.22	.17	.33	.40	.22	.42	.15	.15	.06	1.19	1.26	.14	.27	
25	5000	.08	.07	.19	.14	.03	NA	.03	.07	.09	.04	.09	.05	.05	.02	.40	.34	.01	.03	
	6000	.12	.09	.25	.19	—	.05	—	—	—	—	—	—	—	—	.50	.44	—	—	
	7500	.17	.14	.36	.28	.08	.08	.06	.14	.17	.09	.18	.09	.09	.03	.66	.62	.04	.10	
	10000	.28	.22	.58	.46	.14	.15	.11	.23	.28	.15	.29	.13	.13	.05	.95	.95	.10	.19	
	11000	.34	.26	.66	.54	.17	.18	.13	.29	.33	.19	.35	.15	.15	.06	1.06	1.11	.12	.23	
	12500	.41	.32	.82	.67	.22	.23	.18	.33	.42	.24	.42	.19	.19	.08	1.29	1.34	.19	.30	
14000	.49	.38	.99	.80	.28	.29	.21	.41	.53	.30	.53	.24	.24	.10	—	—	.24	.39		
30	6000	.09	.07	.19	.14	.05	.05	.04	.09	.12	.05	.12	.04	.04	.01	.34	.26	.02	.06	
	9000	.17	.14	.36	.28	.11	.12	.09	.19	.24	.12	.22	.07	.07	.02	.54	.48	.07	.15	
	12000	.28	.22	.57	.46	.20	.21	.16	.31	.39	.22	.41	.11	.11	.04	.75	.75	.16	.27	
	14000	.36	.28	.73	.60	.26	.29	.22	.40	.51	.30	.50	.14	.14	.06	.95	.95	.25	.39	
	15000	.40	.32	.82	.67	.30	.33	.25	.45	.57	.33	.52	.16	.16	.07	1.03	1.06	.30	.43	
	17000	.49	.39	.99	.83	.39	.42	.35	.58	.73	.42	.67	.21	.21	.09	1.20	1.30	.39	.59	
40	8000	.09	.07	.19	.14	.09	NA	.07	.09	.11	.05	.11	.04	.04	.02	.37	.31	.01	.03	
	10000	.13	.10	.27	.20	—	.11	—	—	—	—	—	—	—	—	.49	.43	—	—	
	12000	.17	.14	.36	.28	.20	.15	.16	.17	.22	.11	.21	.08	.08	.03	.61	.56	.04	.07	
	16000	.28	.22	.57	.46	.34	.26	.29	.28	.36	.20	.36	.12	.12	.05	.88	.87	.10	.09	
	17000	.31	.24	.63	.50	N/A	.29	.32	.31	.39	.22	.41	.13	.13	.06	.95	.95	.12	.11	
	20000	.40	.32	.82	.67	N/A	.41	.44	.42	.52	.30	.51	.17	.17	.08	1.17	1.22	.19	.17	
22000	.47	.37	.96	.80	N/A	.50	.53	.51	.63	.36	.62	.21	.21	.10	—	—	.23	.20		
50/55	10000	.10	.08	.21	.16	.12	.10	.11	.13	.16	.07	.15	.04	.04	.01	.37	.30	.03	.05	
	14000	.17	.14	.36	.28	.26	.20	.22	.22	.28	.15	.28	.07	.07	.03	.56	.50	.07	.08	
	17000	.24	.19	.49	.39	.39	.29	.32	.31	.40	.22	.41	.10	.10	.04	.72	.68	.12	.11	
	20000	.31	.25	.64	.52	.58	.41	.44	.42	.52	.30	.51	.12	.12	.05	.88	.88	.19	.17	
	24000	.42	.34	.86	.70	.73	.58	.62	.48	.72	.45	.75	.16	.16	.07	1.11	1.17	.30	.23	
	28000	.54	.44	1.1	.90	.99	.79	.84	.62	.98	.61	.99	.20	.20	.10	—	—	.39	.30	
60	12000	.12	.09	.22	.18	.10	.08	.16	.10	.13	.06	.11	.05	.05	.01	.44	.37	.02	.07	
	16000	.19	.15	.36	.29	.18	.14	.29	.17	.21	.11	.19	.07	.07	.02	.63	.58	.05	.10	
	20000	.28	.21	.52	.42	.27	.21	.44	.24	.31	.16	.27	.10	.10	.03	.84	.82	.10	.16	
	24000	.37	.29	.70	.57	.40	.30	.62	.33	.42	.22	.39	.11	.11	.04	1.06	1.08	.16	.23	
	28000	.46	.37	.90	.73	.48	.33	.85	.44	.55	.32	.50	.17	.17	.06	—	—	.30	.30	
	30000	.50	.41	1.0	.82	.62	.38	.98	.51	.63	.37	.57	.20	.20	.07	—	—	.34	.34	
70	12000	.13	.10	N/A	N/A	.10	.08	.16	.10	.13	.06	.11	.05	.05	.01	.44	.37	.02	.07	
	16000	.21	.16	N/A	N/A	.18	.14	.29	.17	.21	.11	.19	.07	.07	.02	.63	.58	.05	.10	
	20000	.29	.23	N/A	N/A	.27	.21	.44	.24	.31	.16	.27	.10	.10	.03	.84	.82	.10	.16	
	22000	.34	.27	N/A	N/A	.33	.25	.53	.29	.37	.19	.33	.12	.12	.04	.95	.95	.13	.20	
	24000	.39	.31	N/A	N/A	.40	.30	.62	.33	.42	.22	.39	.14	.14	.04	1.06	1.08	.16	.23	
	26000	.44	.35	N/A	N/A	.47	.32	.73	.39	.49	.27	.45	.16	.16	.05	1.17	1.23	.23	.26	
	28000	.49	.39	N/A	N/A	.54	.33	.85	.44	.55	.32	.50	.17	.17	.06	1.22	1.29	.30	.30	
	31000	.58	.46	N/A	N/A	.60	.40	1.04	.49	.61	.39	.55	.21	.21	.07	—	—	.37	.36	
33000	.63	.50	N/A	N/A	.65	.46	1.18	.52	.67	.44	.60	.24	.24	.08	—	—	.42	.40		
75	12000	.22	.18	.22	.18	.10	.08	.16	.10	.13	.06	.11	.05	.05	.01	.44	.37	.02	.07	
	16000	.36	.29	.36	.29	.18	.14	.29	.17	.21	.11	.19	.07	.07	.02	.63	.58	.05	.10	
	20000	.52	.42	.52	.42	.27	.21	.44	.24	.31	.16	.27	.10	.10	.03	.84	.82	.10	.16	
	22000	.61	.49	.61	.49	.33	.25	.53	.29	.37	.19	.33	.12	.12	.04	.95	.95	.13	.20	
	24000	.70	.57	.70	.57	.40	.30	.62	.33	.42	.22	.39	.14	.14	.04	1.06	1.08	.16	.23	
	26000	.80	.64	.80	.64	.47	.32	.73	.39	.49	.27	.45	.16	.16	.05	1.17	1.23	.23	.26	
	28000	.90	.73	.90	.73	.54	.33	.85	.44	.55	.32	.50	.17	.17	.06	1.22	1.29	.30	.30	
	31000	1.06	.87	1.06	.87	.60	.40	1.04	.49	.61	.39	.55	.21	.21	.07	—	—	.37	.36	
33000	1.16	.96	1.16	.96	.65	.46	1.18	.52	.67	.44	.60	.24	.24	.08	—	—	.42	.40		
90	27000	.32	.25	.64	.51	NA	.25	.13	NA	NA	NA	NA	.11	.13	NA	.68	.65	—	.20	
	32000	.42	.33	.82	.68	NA	.31	.16	NA	NA	NA	NA	.14	.16	NA	.84	.84	—	.31	
	37000	.54	.42	1.05	.88	NA	.39	.23	NA	NA	NA	NA	.17	.19	NA	1.02	1.04	—	.41	
	42000	.66	.52	1.30	1.05	NA	.46	.29	NA	NA	NA	NA	.21	.22	NA	1.19	1.06	—	.52	
	45000	.74	.58	1.43	1.20	NA	.52	.32	NA	NA	NA	NA	.24	.24	NA	—	—	—	.63	
105	31000	.54	.44	.78	.76	NA	.28	.17	NA	NA	NA	NA	.13	.13	NA	.82	.80	—	.22	
	35000	.66	.52	.98	.78	NA	.36	.21	NA	NA	NA	NA	.16	.16	NA	.96	.96	—	.32	
	39000	.78	.62	1.24	.94	NA	.42	.26	NA	NA	NA	NA	.19	.19	NA	1.09	1.12	—	.44	
	43000	.88	.74	1.33	1.10	NA	.45	.30	NA	NA	NA	NA	.22	.22	NA	1.22	1.30	—	.54	
	46000	.98	.82	1.48	1.24	NA	.55	.34	NA	NA	NA	NA	.24	.24	NA	—	—	—	.64	
115/130	31000	.78	.76	NA	NA	NA	.28	.17	NA	NA	NA	NA	.13	.13	NA	.82	.80	—	.22	
	35000	.98	.78	NA	NA	NA	.36	.21	NA	NA	NA	NA	.16	.16	NA	.96	.96	—	.32	
	39000	1.24	.94	NA	NA	NA	.42	.26	NA	NA	NA	NA	.19	.19	NA	1.09	1.12	—	.44	
	43000	1.33	1.10	NA	NA	NA	.45	.30	NA	NA	NA	NA	.22	.22	NA	1.22	1.30	—	.54	
46000	1.48	1.24	NA	NA	NA	.55	.34	NA	NA	NA	NA	.24	.24	NA	—	—	—	.64		

Notes:

1. Static pressure drops of accessory components must be added to external static pressure to enter fan selection tables.
2. Gas heat section maximum temperature rise of 60 F.
3. Throwaway filter option limited to 300 ft/min face velocity.
4. Bag filter option limited to 740 ft/min face velocity.
5. Horizontal roof curbs assume 0.50" static pressure drop or double the standard roof curb pressure drop, whichever is greater.
6. No additional pressure loss for model SXHC.
7. 90-130 ton roofcurbs adds no pressure drop.

Performance Data

Table 57-1 — 20-75 Ton Supply Air Fan Drive Selections

Nominal Tons	3 Hp		5 Hp		7½ Hp		10 Hp		15 Hp		20 Hp		25 Hp		30 Hp		40 Hp		
	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	
20	600	6	700	7	900	9	1100	B											
	700	7	800	8	1000	A	1200	C											
	800	8	900	9	1100	B	1300	D											
	900	9	1000	A	1200	C	1400	E											
25	600	6	700	7	800	8	1000	A	1200	C									
	700	7	800	8	900	9	1100	B	1300	D									
	800	8	900	9	1000	A	1200	C	1400	E									
	900	9	1000	A	1100	B	1300	D	1500	F									
30			600	6	700	7	800	8	900	9	1100	B							
			700	7	800	8	900	9	1000	A	1200	C							
			800	8	900	9	1000	A	1100	B	1300	D							
			900	9	1000	A	1100	B	1200	C									
40					500	5	700	7	800	8	900	9	1000	A					
					600	6	800	8	900	9	1000	A	1100	B					
					700	7	900	9	1000	A	1100	B							
					800	8													
50/55					500	5	600	6	700	7	800	8	900	9	1000	A			
					600	6	700	7	800	8	900	9	1000	A	1100	B			
					700	7	800	8	900	9	1000	A	1100	B					
					800	8	900	9	1000	A	1100	B							
60					500	3	600	6	700	7	800	8	900	8	900	A	900	9	
					600	6	700	7	800	8	900	9	1000	A	1000	B	1000	A	
					700	7	800	8	900	9	1000	A					1100	B	
70/75					500	5	600	6	700	7	800	8	900	8	900	A	900	9	
					600	6	700	7	800	8	900	9	1000	A	1000	B	1000	A	
					700	7	800	8	900	9	1000	A					1100	B	

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Table 57-2 — 90-130 Ton Supply Air Fan Drive Selections

Nominal Tons	30 HP		40 HP		50 HP		60 HP		80 HP	
	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No
90	600	6	600	6	700	7	800	8	900	9
	700	7	700	7	800	8	900	9		
			800	8	900	9				
105/115/130	600	6	600	6	700	7	800	8	900	9
	700	7	700	7	800	8	900	9		
			800	8	900	9				

AHU-14

Performance Data

Table 58-1 — Modulating 100% Exhaust Fan Performance

Nominal Tons	Cfm		Negative Static Pressure														
	Std Air	0.250		0.500		0.750		1.000		1.250		1.500		1.750		2.000	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20	4000	399	0.38	538	0.75	640	1.08	730	1.45	811	1.87	882	2.34	947	2.88		
	6000	453	0.74	570	1.17	675	1.65	765	2.22	845	2.78						
	8000	547	1.59	619	1.81	711	2.48	797	3.01								
	10000	640	2.79														
25	4000	399	0.38	538	0.75	640	1.08	730	1.45	811	1.87	822	2.34	947	2.88	1017	3.55
	6000	453	0.74	570	1.17	675	1.65	765	2.22	845	2.78	912	3.27	975	3.77	1036	4.30
	8000	547	1.59	619	1.81	711	2.48	797	3.01	876	3.66	947	4.40				
	10000	640	2.79	712	3.25	767	3.48	837	4.26	911	5.04						
30	4000	399	0.38	538	0.75	640	1.08	730	1.45	811	1.87	882	2.34	947	2.88	1017	3.55
	6000	453	0.74	570	1.17	675	1.65	765	2.22	845	2.78	912	3.27	975	3.77	1036	4.30
	8000	547	1.59	619	1.81	711	2.48	797	3.01	876	3.66	947	4.40	1013	5.18	1075	5.94
	10000	640	2.79	712	3.25	767	3.48	837	4.26	911	5.04	980	5.70	1045	6.46	1106	7.31
40	7500	334	0.75	438	1.21	535	1.77	616	2.35	686	2.98	750	3.64	809	4.34	864	5.06
	9000	362	1.09	449	1.57	536	2.16	618	2.84	689	3.52	753	4.24	812	4.99	867	5.77
	12000	435	2.19	496	2.70	563	3.35	628	4.04	693	4.83	757	5.71	817	6.63	873	8.53
	14000	486	3.22	542	3.86	594	4.47	653	5.25	707	6.04	763	6.91	819	7.86	874	8.89
50	9000	362	1.09	449	1.57	536	2.16	618	2.84	689	3.52	753	4.24	812	4.99	867	5.77
	12000	435	2.19	496	2.70	563	3.35	628	4.04	693	4.83	757	5.71	817	6.63	873	7.53
	15000	511	3.85	567	4.56	614	5.18	667	5.96	720	6.80	771	7.66	824	8.60	876	9.63
	18000	590	6.21	642	7.16	685	7.97	724	8.69	766	9.54	812	10.54	856	11.55	898	12.56
55	20000	644	8.26	692	9.35	735	10.33	772	11.17	807	11.97	844	12.91	885	14.00	926	15.13
	10000	386	1.40	463	1.90	540	2.48	618	3.18	691	3.94	755	4.70	814	5.48	869	6.30
	13000	461	2.67	518	3.23	578	3.88	639	4.61	698	5.39	759	6.26	818	8.22	874	8.21
	16000	537	4.55	592	5.35	636	6.00	683	6.74	735	7.64	783	8.53	831	9.47	880	10.48
60	19000	617	7.19	667	8.21	710	9.10	747	9.87	785	10.68	827	11.66	870	12.73	911	31.80
	21500	685	10.08	731	11.26	772	12.36	809	13.33	842	14.20	874	15.08	910	16.10	948	17.28
	12000	351	1.49	423	2.09	502	3.00	572	4.02	634	5.07	690	6.09	740	7.04	784	7.91
	15000	412	2.68	460	3.15	521	3.96	585	5.02	646	6.24	702	7.53	754	8.83	801	10.14
70/75	18000	478	4.41	516	4.88	557	5.54	607	6.49	662	7.66	715	9.01	766	10.48	814	12.01
	21000	547	6.75	578	7.36	612	7.92	647	8.71	688	9.77	735	11.03	781	12.46	827	14.03
	24000	617	9.83	644	10.59	672	11.22	702	11.88	732	12.77	766	13.89	805	15.22	846	16.72
	27000	688	15.11	711	15.09	736	15.45	761	16.18	788	17.02	815	17.92	844	18.99	876	20.31

Nominal Tons	Cfm		Negative Static Pressure																		
	Std Air	0.250		0.500		0.750		1.000		1.250		1.500		1.750		2.000		2.250		2.500	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
90-130	28000	516	11.42	551	12.41	586	13.70	622	15.25	657	16.71	690	18.16	723	19.90	754	21.74	785	23.60	815	25.45
	30000	550	13.94	579	14.86	614	16.25	646	17.72	680	19.45	712	20.93	743	22.54	773	24.41	803	26.38	832	28.36
	32000	583	16.82	609	17.68	642	19.12	672	20.58	704	22.34	735	24.12	764	25.67	793	27.42	822	29.41	850	31.50
	34000	617	20.09	640	20.92	670	22.30	700	23.87	728	25.53	759	27.51	788	29.30	815	30.96	842	32.82	869	34.93
	36000	650	23.76	672	24.58	699	25.86	728	27.55	755	29.19	782	31.11	811	33.21	838	35.05	864	36.81	889	38.77
	38000	684	27.86	704	28.68	728	29.87	757	31.60	783	33.33	808	35.14	834	37.30	861	39.48	887	41.38	911	43.23
	40000	718	32.41	737	33.24	758	34.36	785	36.02	811	37.91	835	39.71	859	41.74	885	44.08	910	46.33	934	48.32

Notes:
 1. Shaded areas indicate non-standard drive selections. These drive selections must be manually factory selected.
 2. Refer to General Data Table for minimum and maximum hp's.

Performance Data

Table 59-1 — 20-75 Ton 100% Exhaust Fan Drive Selections

Nominal Tons	1 ½ Hp		3 Hp		5 Hp		7 ½ Hp		10 Hp		15		20	
	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No
20	500	5	600	6										
	600	6	700	7										
	700	7	800	8										
			900	9										
25			500	5	700	7								
			600	6	800	8								
			700	7	900	9								
			800	8	1000	A								
			900	9										
30			500	5	700	7	800	8						
			600	6	800	8	900	9						
			700	7	900	9	1000	A						
			800	8	1000	A	1100	B						
			900	9										
40					500	5	600	6	700	7				
					600	6	700	7	800	8				
					700	7	800	8						
					800	8								
50/55					400	4	600	6	700	7	700	7		
					500	5	700	7	800	8	800	8		
					600	6	800	8			900	9		
					700	7								
60					400	4	600	6	600	6	700	7	800	8
					500	5	700	7	700	7	800	8		
					600	6								
70/75					400	4	600	6	600	6	700	7	800	8
					500	5	700	7	700	7	800	8		
					600	6								

AHU-15



700 7

Table 59-2 — 90-130 Ton 100% Exhaust Fan Drive Selections

Nominal Tons	15 HP		20 HP		25 HP		30 HP		40 HP	
	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No	RPM	Drive No
90	500	5	600	6	700	7	700	7	800	8
	600	6	700	7	800	8	800	8		
105-130	500	5	600	6	700	7	700	7	800	8
	600	6	700	7	800	8	800	8		

AHU-14



Electrical Data

Electrical Service Sizing

Note: To correctly size electrical service wiring for. . .

- SAHC, SXHC/E, SFHC/E, SSHC, and SLHC units solve Equations 1 thru 4.
- 200/230V SEHC units (dual-source-power) solve Equations 1 thru 4 and 9 thru 11.
- All other SEHC and SEHE units (single-source-power) solve Equations 1 thru 8.

Equation No. 1: Minimum Circuit Ampacity (MCA)

MCA = [1.25 x The largest of these:
(Largest Compressor RLA **OR**
Largest Motor FLA)]

- + Remaining Compressor RLA
- + Remaining Supply Fan FLA
- + Remaining Exhaust Fan FLA
- + Total Condenser Fan FLA

Note: Round off the calculated MCA value to the nearest whole ampere. (If the MCA value ends in “.5”, round it upward.)

Equation No. 2: Maximum Fuse Size (MFS)

Case A:

Compressor is the largest load

MFS = (2.25 x Largest
Compressor RLA)

- + Total Remaining Compressor RLA
- + Total Supply Fan FLA
- + Total Exhaust Fan FLA
- + Total Condenser Fan FLA

Case B:

Compressor is NOT the largest load

MFS = (4.0 x Largest Motor RLA)
+ Total Compressor RLA
+ Total Remaining Supply Fan FLA
+ Total Remaining Exhaust Fan FLA
+ Total Condenser Fan FLA

Note: Select the standard fuse rating **equal to MFS**; or select the **next lower** standard fuse rating. (Standard fuse sizes are taken from NEC 240-6.)

Equation No. 3: Recommended Dual-Element Fuse Size (RDE)

RDE = [1.5 x The larger of these:
(Largest Compressor RLA **or**
Largest Motor FLA)]

- + Remaining Compressor RLA
- + Total Remaining Supply Fan FLA
- + Total Remaining Exhaust Fan FLA
- + Total Condenser Fan FLA

Note: Select the standard fuse rating **equal to RDE**; or select the **next larger** standard fuse rating. However, the RDE rating selected must **not** exceed the selected MFS rating. (Standard fuse sizes are taken from NEC 240-6.)

Equation No. 4: Disconnect Switch Size (DSS)

DSS = 1.15 x
(Total Compressor RLA
+ Total Supply Fan FLA
+ Total Exhaust Fan FLA
+ Total Condenser Fan FLA)

Note: Select a disconnect switch size that is **equal to or larger than** the DSS value calculated.

All Single-Source-Power SEHC/E Units

After solving Equations 1 thru 4, solve Equations 5 thru 8. Then compare the:

- MCA values calculated in Equations 1 and 5;
- MFS values calculated in Equations 2 and 6;
- RDE values calculated in Equations 3 and 7; **and**,
- DSS values calculated in Equations 4 and 8.

In each instance, use the **largest** value of each pair to size the unit's electrical service.

Equation No. 5: Minimum Circuit Ampacity (MCA)

MCA = 1.25 X
(Electric Heat Coil FLA
+ Total Supply Fan FLA
+ Total Exhaust Fan FLA)

Equation No. 6: Maximum Fuse Size (MFS)

MFS = 1.25 X
(Electric Heat Coil FLA
+ Total Supply Fan FLA
+ Total Exhaust Fan FLA)

Note: Select the standard fuse rating **equal to MFS**; or select the **next larger** standard fuse rating.

Equation No. 7: Recommended Dual-Element Fuse Size (RDE)

RDE = Electric Heat Coil FLA
+ (1.5 x Largest Single Fan FLA)
+ Total Remaining Supply Fan FLA
+ Total Remaining Exhaust Fan FLA

Note: Select the standard fuse rating **equal to RDE**; or select the **next larger** standard fuse rating. However, the RDE size selected must not exceed the selected MFS size!

Equation No. 8: Disconnect Switch Size (DSS)

DSS = 1.15 x
(Electric Heat Coil FLA
+ Total Supply Fan FLA
+ Total Exhaust Fan FLA)

Note: Select a disconnect switch size that is **equal to or larger than** the DSS value calculated.

Dual-Source-Power SEHC Units (200/230V Only):

Solve Equations 1 thru 4 for refrigeration-side MCA, MFS, RDE and DSS values.

Then, use Equations 9, 10 and 11 to determine electric heat section MCA, MFS and DSS values.

Equation No. 9: Minimum Circuit Ampacity (MCA)

MCA = 1.25 X
Electric Heat Coil FLA

Equation No. 10: Maximum Fuse Size (MFS)

MFS = 1.25 X
Electric Heat Coil FLA

Note: Select a standard fuse rating **equal to MFS**; or select the **next larger** standard fuse rating.

Equation No. 11: Disconnect Switch Size (DSS)

DSS = 1.15 x
Electric Heat Coil FLA

Note: Select a disconnect switch size that is **equal to or larger than** the DSS value calculated.

Electrical Data

Table 63-1 — 20-130 Ton Electrical Service Sizing Data³ — Compressor

Nominal Tons	Coil Type	Compressor			Nominal Voltage							
		Number Per Unit	Standard	High	200		230		460		575	
			Capacity KW (ea)	Capacity KW (ea)	RLA (ea)	LRA ¹ (ea)	RLA (ea)	LRA ¹ (ea)	RLA (ea)	LRA ¹ (ea)	RLA (ea)	LRA ¹ (ea)
Compressor												
20	Std and Hi-Cap	2	10.1	10.5	41.9	213	41.9	247	18.2	95	14.6	76
25	Std and Hi-cap	1	15.6	16.1	62.8	323	62.8	376	27.3	142	21.8	114
		1	10.4	10.7	41.9	213	41.9	247	18.2	95	14.6	76
30	Std and Hi-Cap	2	16.1	16.7	62.8	323	62.8	376	27.3	142	21.8	114
40	Std and Hi-Cap	4	10.1	10.4	41.9	213	41.9	247	18.2	95	14.6	76
50	Std and Hi-Cap	2	15.4	16.0	62.8	323	62.8	376	27.3	142	21.8	114
		2	10.3	10.6	41.9	213	41.9	247	18.2	95	14.6	76
55	Std and Hi-Cap	4	16.3	16.9	62.8	323	62.8	376	27.3	142	21.8	114
60	Std and Hi-Cap	4	15.7	16.2	62.8	323	62.8	376	27.3	142	21.8	114
70	Std	2	37.7	—	165.6	430/729	144	375/631	72.0	188/315	57.6	150/245
75	Std	2	39.8	—	179.4	430/729	156	375/631	78.0	188/315	62.4	150/245
	Hi-Cap	2	—	49.1	179.4	430/729	156	375/631	78.0	188/315	62.4	150/245
90	Std and Hi-Cap	2	44.3	47.0	170	430/729	148	375/631	74	188/315	59	150/245
105	Std and Hi Cap (40 Ton)	1	45.0	46.1	170 (179) ²	430/729	148 (156) ²	375/631	74 (78) ²	188/315	59 (62) ²	150/245
	(50 Ton)	1	53.8	55.3	198	550/910	172	480/792	86	240/396	69	190/315
115	Std	2	54.8	—	198	550/910	172	480/792	86	240/396	69	190/315
130	Std	2	68.4	—	244	620/990	212	535/860	106	278/430	85	220/346

Notes

- LRA values shown for 70-130 units are for PWS/XL startings.
- 40-ton compressor RLA values enclosed in parentheses apply **only** to S*HEs with the optional high-capacity I-F evaporator coil.
- Use this table only for sizing electrical service. DO NOT USE FOR CALCULATING EER.

Table 63-2 — 20-130 Ton Electrical Service Sizing Data — Motors

Nominal Tons	Nominal Voltage			
	200	230	460	575
	FLA	FLA	FLA	FLA
Condenser Fan Motors				
20	8.2	8.2	3.6	2.8
25	12.3	12.3	5.4	4.2
30	12.3	12.3	5.4	4.2
40	16.4	16.4	7.2	5.6
50	24.6	24.6	10.8	8.4
55	24.6	24.6	10.8	8.4
60	24.6	24.6	10.8	8.4
70	24.6	24.6	10.8	8.4
75	24.6	24.6	10.8	8.4
90	32.8	32.8	14.4	11.2
105	36.9	36.9	16.2	12.6
115	41.0	41.0	24.0	14.0
130	49.2	49.2	28.8	16.8

Motor Hp	Supply Fan Motor			
3	11.1	9.6	4.8	3.9
5	17.5	15.2	7.6	6.1
7½	25.3	22.0	11.0	9.0
10	32.2	28.0	14.0	11.0
15	48.3	42.0	21.0	17.0
20	62.1	54.0	27.0	22.0
25	78.2	68.0	34.0	27.0
30	92.0	80.0	40.0	32.0
40	119.6	104.0	52.0	41.0

Motor Hp	50 Or 100% Exhaust Fan Motor			
1½	6.0	5.2	2.6	2.1
3	11.1	9.6	4.8	3.9
5	17.5	15.2	7.6	6.1
7½	25.3	22.0	11.0	9.0
10	32.2	28.0	14.0	11.0
15	48.3	42.0	21.0	17.0
20	62.1	54.0	27.0	22.0
25	78.2	68.0	34.0	27.0
30	92.0	80.0	40.0	32.0
40	119.6	104.0	52.0	41.0

Table 63-3 — 20-130 Ton Electrical Service Sizing Data — Electric Heat Module (Electric Heat Units Only)

Module KW	Voltage			
	200	230	460	575
	FLA	FLA	FLA	FLA
30	83.3	72.2	36.1	28.9
50	138.8	120.3	60.1	48.1
70	194.3	168.4	84.2	67.4
90	249.8	216.5	108.3	86.6
110	305.3	264.6	132.3	105.9
130			156.4	125.1
150			180.4	144.3
170			204.5	163.6
190			228.5	182.8

Note:

Electric heat FLA are determined at 208, 240, 480 and 600 volts.

Table 63-4 — Voltage Utilization Range

Unit Voltage	Voltage Utilization Range
200/60/3	180-220
230/60/3	207-253
380/50/3	342-418
415/50/3	373-457
460/60/3	414-506
575/60/3	517-633

Sequence Of Operation

Shutoff VAV Rooftops

Temperature Controls

Units are provided with a supply air temperature sensor and Honeywell W7100 discharge air temperature controller. The supply air temperature sensor sends a continuous feedback signal to the W 7100 controller. This signal modulates the economizer and sequences the stages of mechanical cooling in response to the supply air temperature deviation from set point.

An optional zone air temperature sensor is available which provides continuous input to the W7100 controller. The controller will reset the supply air temperature upwards based on a predetermined amount of reset which is adjustable from a remote potentiometer,

The W7100 controller provides anti-short cycle protection by utilizing a minimum four minute time-delay between successive on and off stages.

Cooling

On units with economizer, a call for cooling will modulate the fresh air dampers open. The rate of economizer modulation is based on deviation of the discharge temperature from set point, i.e., the further away from set point, the faster the fresh air damper will open. First stage of cooling will be allowed to start after the economizer reaches full open.

At outdoor air temperatures above the enthalpy control setting, mechanical cooling only is used and the fresh air dampers remain at minimum position.

On units without economizer, mechanical cooling only is used to satisfy the cooling requirements.

The inlet vanes will close when the supply fan is shut down, except during night setback.

Night Setback/Morning Warmup

Standard heating options are available on shutoff/VAV units for use with night setback and/or morning warmup operation only.

Night setback and morning warmup are operated through the time clock provided in the remote panel with night setback. When the time clock switches to night setback or morning warmup operation, the outdoor air dampers close and cooling is locked out. As the building cools due to decreased load, the night setback thermostat energizes

the rooftop heating function (single stage of heat provided on all units) and the evaporator fan. The rooftop unit will cycle through the evening as heating is required in the space. When the time clock switches from night setback to daytime operation, all heating functions are locked out and normal cooling operation begins.

Morning warmup is two-stage. When night setback terminates, the rooftop will heat to stage 2 set point. The rooftop can "reheat" as many times as necessary to maintain stage 2 set point until stage 1 set point (typically 1 F higher than stage 2) is reached. At this point, the unit is released to daytime mode and cannot heat until the next night setback cycle.

When using the night setback/morning warmup options in a heating/cooling rooftop, airflow must be maintained through the rooftop unit. This can be accomplished by electrically tying the VAV boxes to the rooftop time clock or by using changeover thermostats. Either of these methods will assure adequate airflow through the unit and satisfactory heating of the building.

Inlet Vane Controls

VAV units ordered with supply fan inlet vane controls (i.e., model no. digit 2.1 includes "N") are equipped with 2 static pressure regulators that control the action of inlet vane actuator(s).

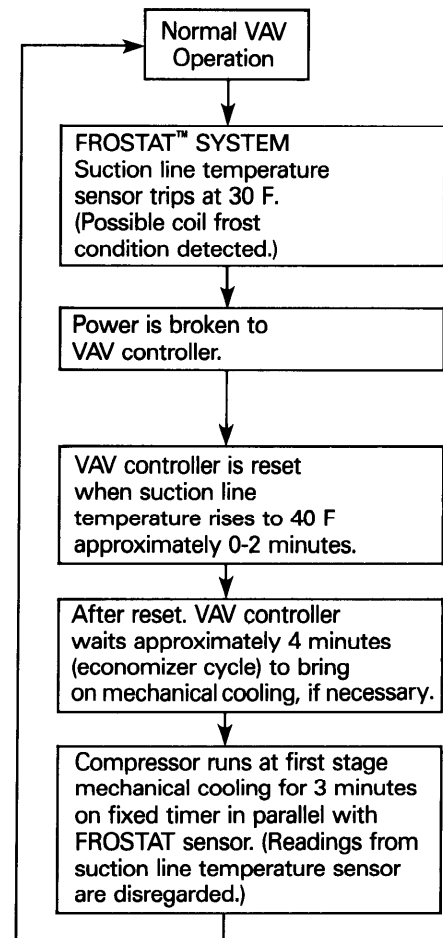
Inlet vane assemblies installed on the supply fan inlets regulate fan capacity and limit horsepower at lower system air requirements. When in any position other than full open, the vanes pre-spin intake air in the same direction as supply fan rotation. As the vanes approach the full-closed position, the amount of "spin" induced by the vanes increases at the same time that intake airflow and fan horsepower diminish.

The field-adjustable static pressure regulators (1S22 and 1S23) are factory-installed in the unit control panel to govern the supply fan inlet vane actuators. These controls monitor duct static pressure (rather than atmospheric pressure) via a factory-installed pressure-sensing tube in the supply fanboard, and then modulate the inlet vane actuators accordingly to maintain the optimal rooftop discharge static.

FROSTAT™ Suction Line Temperature Sensing

The FROSTAT system eliminates hot gas bypass and adds a suction line surface temperature switch near the TXV bulb location to shut the cooling off when coil frosting conditions occur. The supply fans are not shut off and will de-ice the coil. Timers prevent the compressor from rapid cycling.

The following flow chart describes the operation of FROSTAT suction line temperature sensing in large VAV rooftop units



Economizer Cycle

Note that the economizer is only allowed to function freely if ambient conditions are **below** the factory-set control range of enthalpy switch 3S20.

If outside air is **not** suitable for "economizing", the fresh air dampers drive to the minimum open position. (A potentiometer located on top of the economizer actuator cover establishes the minimum damper position.)

Sequence Of Operation

Temperature Controls

A 20-volt dc regulated power supply is provided to the thermostat. A continuous signal of 1 to 16 volts dc is returned to the Honeywell Master Energy Controller (W973) by the thermostat. This signal is monitored by the controller to determine actual zone heating and cooling requirements. The controller will then, according to the voltage value received, operate the necessary mechanical components through relay stages which are sensitive to the zone signal.

The control system provides two to four stages of mechanical refrigeration, depending upon tonnage and either of the following:

- Three stages of electric heat.
- Two stages of gas heat.

Cooling

On those units with an economizer cycle, outdoor air is used to provide natural cooling at outdoor enthalpy below the setting on the enthalpy control (approximately 70 F at 55 percent relative humidity). Mechanical cooling is available to aid the economizer cycle at any ambient condition.

During economizer operation, the controller modulates the outdoor and return air dampers between the minimum and full open settings to satisfy cooling requirements. If cooling demands cannot be met by the full open outdoor air dampers, mechanical cooling is activated (first and second stages if necessary). The outdoor air dampers remain open to take advantage of free natural cooling. However, due to the temperature sensing ability of the unit discharge sensor, the outdoor air dampers will begin to close at a discharge air temperature (off the evaporator coil) of 62 F. The outdoor air dampers will go to the minimum position at a discharge temperature of 50 F. This feature is termed positive modulating low limit.

At outdoor air temperatures above the enthalpy control setting, mechanical cooling only is used and the outdoor air dampers remain at minimum position.

If the unit does not include an economizer cycle, mechanical cooling only is used to satisfy cooling requirements. Outdoor air dampers may be set manually for a maximum of 25 percent outdoor air, if rooftop is equipped with 0 to 25 percent manual fresh air damper.

Heating

Gas-Fired Heating

Upon a call for heating, the master energy controller closes the first stage heating contacts beginning the firing sequence. First, the heat exchanger combustion blower begins operation. Upon positive proving of combustion airflow, a prepurge cycle is executed. Then the ignition sequence takes place.

If ignition is not proven, the ignition transformer is de-energized. After a time delay another prepurge cycle takes place followed by another attempt to ignite. If ignition fails a second time, the cycle repeats on 235 and 350 MBh modules. 500, 850 and 1000 MBh modules, the heating section, will be shut down and locked out until manually reset at the unit.

As additional heat is required, the master energy controller will close the second stage heating contacts and either the second stage of the gas valve or a second stage gas valve will open depending on heat module size.

During heating operation, an electronic flame safety control provides continuous flame supervision. If combustion should become unstable for any reason, heating will automatically shut down. After one minute, another 60 second prepurge and ignition cycle begins.

As the heating requirement is satisfied, the master energy controller will open the second stage heating relay de-energizing the second stage of heat. When the requirement is fully satisfied, the first stage contacts are opened de-energizing the first stage of heat.

The specific sequence of operation of the gas heat will depend on the size of the heat exchanger.

Electric Heating

The three stages of electric heat will be sequenced on the zone demand signal from the room thermostat. The zone signal is relayed to the master energy controller and the stages are sequenced based on load demand.

Steam or Hot Water Heating

Upon a call for heat, the master energy controller will close the heating contact feeding a varying voltage signal to the valve actuator. The valve will modulate to meet building demand as indicated by the voltage signal. When heating is satisfied, the heating relay will be de-energized, stopping the signal to the valve actuator. The valve will modulate closed.

Dimensional Data

20-75 Tons

Figure 69-1 — 20-75 Ton Heating/Cooling Unit Dimensions

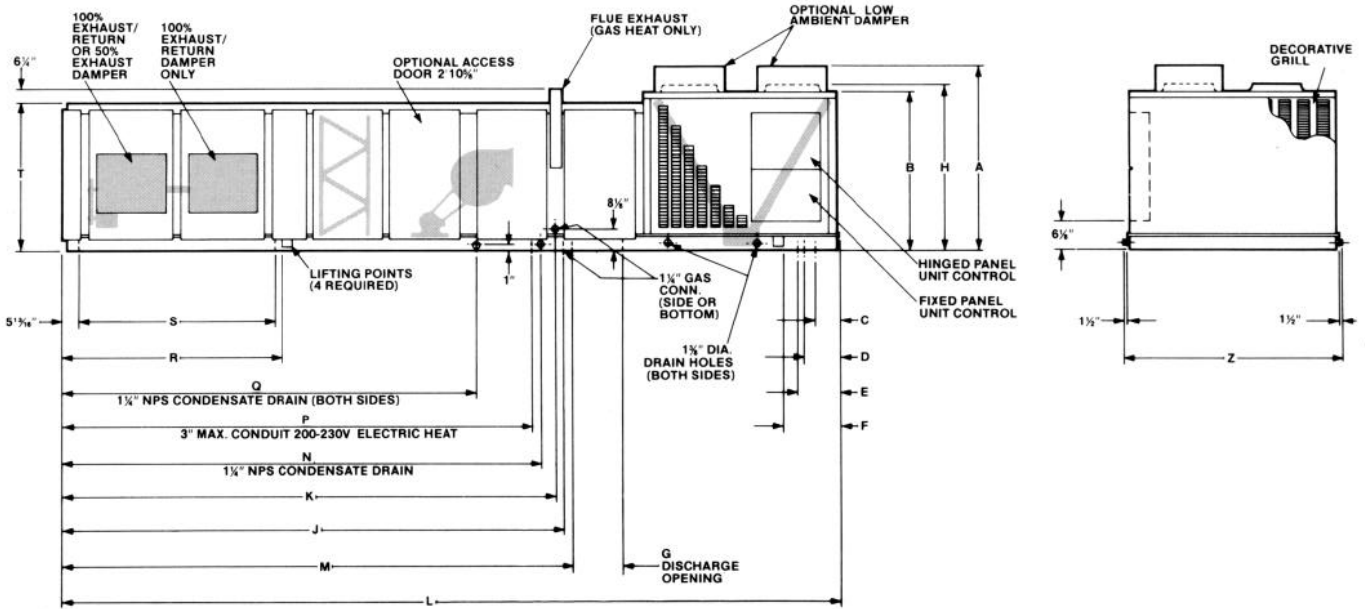
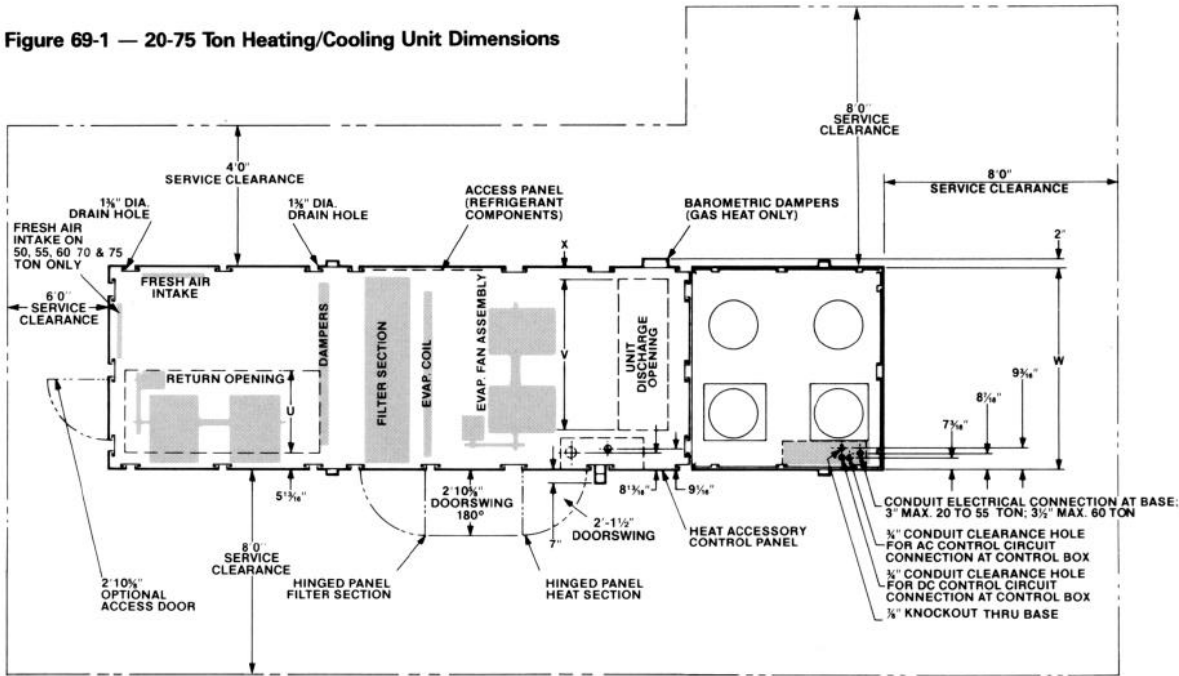


Table 69-1 — Heating/Cooling Unit Dimensions (Ft. In.) — SEHC, SFHC, SSHC, SLHC, SXHC

Nom. Tons	H	L	W	A	B	C	D	E	F	G	J ¹	K ¹	M	N	P	Q	R	S	T	U	V	X	Z
20 & 25	5-8 ¹ / ₁₆	24-1 ³ / ₁₆	7-6 ¹ / ₁₆	6-4 ⁷ / ₁₆	5-3 ¹ / ₁₆	0-9 ¹ / ₁₆	0-11	1-1 ¹ / ₂	0-11	2-2 ¹ / ₂	16-9 ³ / ₁₆ 16-9 ³ / ₁₆	16-6 16-6	16-3 ¹ / ₁₆	16-7	15-5 ⁵ / ₁₆	13-3	7-0	6-6 ¹ / ₁₆	3-9 ⁹ / ₁₆	3-4 ³ / ₁₆	5-7	0-5 ¹ / ₁₆	7-9 ¹ / ₁₆
30	6-2 ¹ / ₁₆	24-1 ³ / ₁₆	7-6 ¹ / ₁₆	6-9 ⁹ / ₁₆	5-8 ⁸ / ₁₆	0-9 ¹ / ₁₆	0-11	1-1 ¹ / ₂	0-11	2-2 ¹ / ₂	16-9 ³ / ₁₆ 16-9 ³ / ₁₆	16-6 16-6	16-3 ¹ / ₁₆	16-7	15-5 ⁵ / ₁₆	13-3	7-0	6-6 ¹ / ₁₆	4-9 ⁹ / ₁₆	3-4 ³ / ₁₆	5-7	0-5 ¹ / ₁₆	7-9 ¹ / ₁₆
40	6-7 ¹ / ₁₆	30-2 ¹ / ₁₆	7-6 ¹ / ₁₆	7-2 ¹ / ₁₆	6-1 ¹ / ₁₆	0-9 ¹ / ₁₆	1-1 ¹ / ₂	1-3 ¹ / ₂	2-5	2-5	20-1 ¹ / ₁₆ 20-6 ³ / ₁₆	19-6 20-3	19-10 ¹⁰ / ₁₆	19-7	18-11 ¹¹ / ₁₆	15-11 ¹¹ / ₁₆	8-0	7-8 ⁸ / ₁₆	5-9 ⁹ / ₁₆	3-4 ³ / ₁₆	5-7	0-5 ¹ / ₁₆	7-9 ¹ / ₁₆
50 & 55	5-8 ⁷ / ₁₆	32-10 ¹⁰ / ₁₆	7-6 ¹ / ₁₆	6-4 ¹ / ₁₆	5-3 ¹ / ₁₆	0-9 ¹ / ₁₆	1-1 ¹ / ₂	1-3 ¹ / ₂	2-5	2-5	20-1 ¹ / ₁₆ 20-6 ³ / ₁₆	19-6 20-3	19-10 ¹⁰ / ₁₆	19-7	18-11 ¹¹ / ₁₆	15-11 ¹¹ / ₁₆	8-0	7-8 ⁸ / ₁₆	6-9 ⁹ / ₁₆	3-4 ³ / ₁₆	5-7	0-5 ¹ / ₁₆	7-9 ¹ / ₁₆
60	6-7 ¹ / ₁₆	30-2 ¹ / ₁₆	9-8	7-2 ¹ / ₁₆	6-1 ¹ / ₁₆	0-9 ¹ / ₁₆	1-1 ¹ / ₂	1-3 ¹ / ₂	2-5	2-5	20-1 ¹ / ₁₆ 20-6 ³ / ₁₆	19-6 20-3	19-10 ¹⁰ / ₁₆	19-7	18-11 ¹¹ / ₁₆	15-11 ¹¹ / ₁₆	8-0	7-8 ⁸ / ₁₆	5-9 ⁹ / ₁₆	4-5 ⁵ / ₁₆	7-8 ¹ / ₂	0-5 ¹ / ₁₆	9-11
70 & 75	6-7 ¹ / ₁₆	30-2 ¹ / ₁₆	9-8	7-2 ¹ / ₁₆	6-1 ¹ / ₁₆	0-9 ¹ / ₁₆	1-1 ¹ / ₂	1-3 ¹ / ₂	1-4	2-5	20-1 ¹ / ₁₆ 20-6 ³ / ₁₆	19-6 20-3	19-10 ¹⁰ / ₁₆	19-7	18-11 ¹¹ / ₁₆	15-11 ¹¹ / ₁₆	8-0	7-8 ⁸ / ₁₆	5-9 ⁹ / ₁₆	4-5 ⁵ / ₁₆	7-8 ¹ / ₂	0-5 ¹ / ₁₆	9-11

Note:
Dimensions shown are for High Heat gas heat units.
Low Heat

Dimensional Data

90-130 Tons

Figure 70-1 — 90, 105, 115, 130 Ton Heating/Cooling and Cooling Only Rooftop

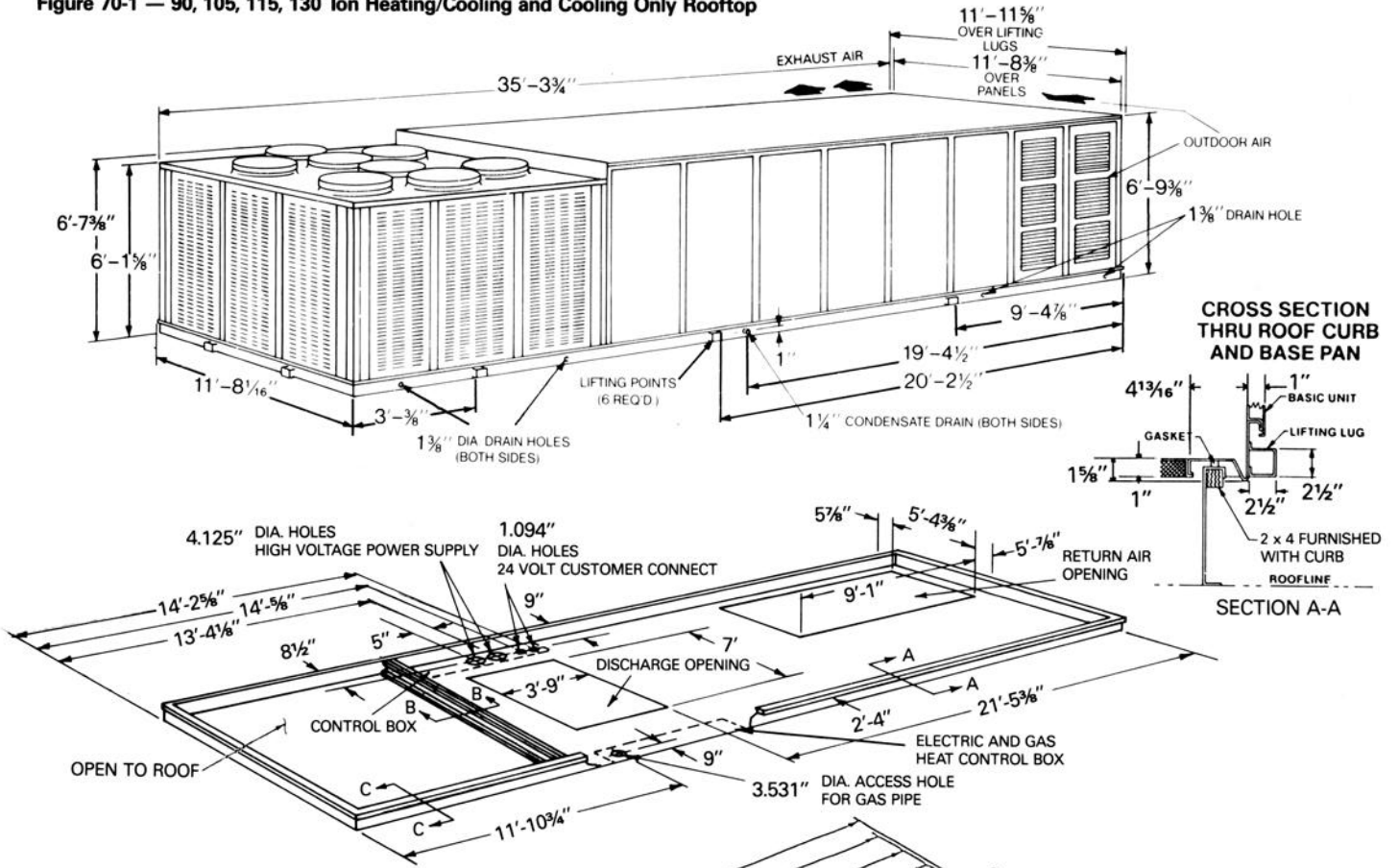
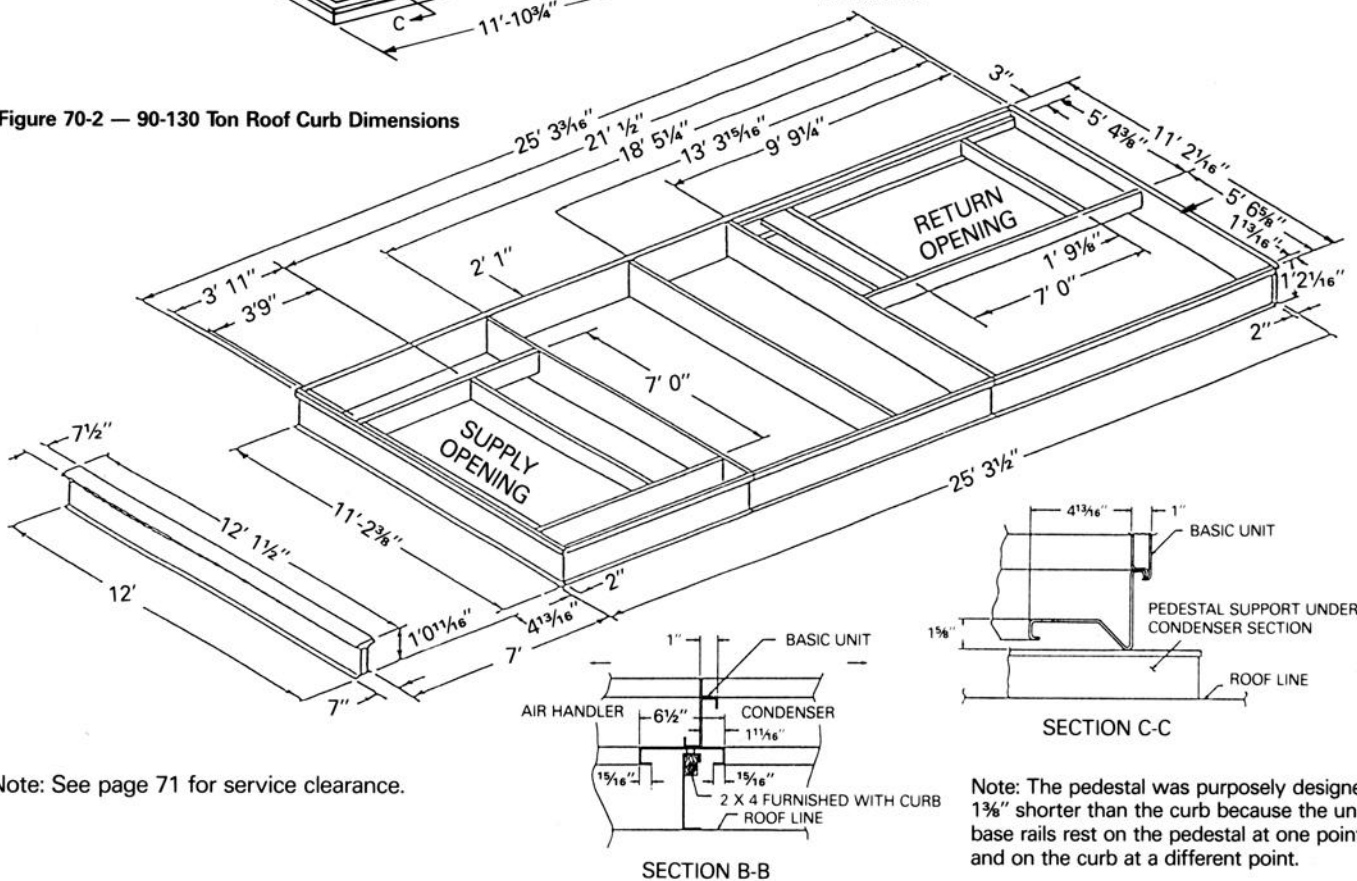


Figure 70-2 — 90-130 Ton Roof Curb Dimensions



Note: See page 71 for service clearance.

Note: The pedestal was purposely designed 1 3/8" shorter than the curb because the unit's base rails rest on the pedestal at one point and on the curb at a different point.