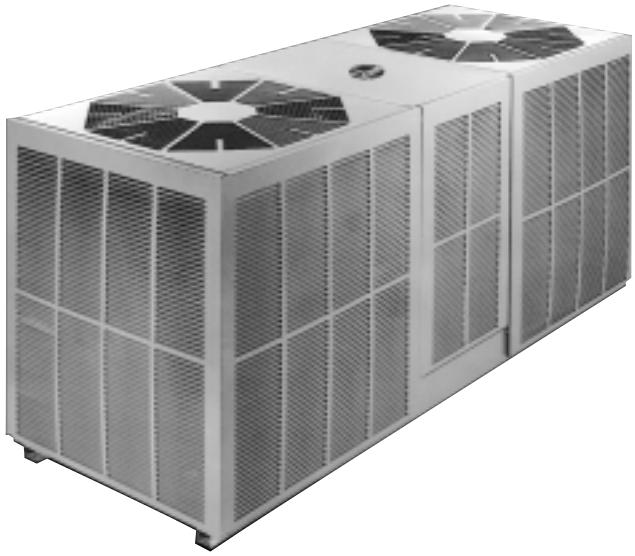
FORM NO. A11-165 REV. 5
Supersedes Form No. A11-165 Rev. 4

Commercial
Standard Efficiency
Condensing Units



(RAWD- 100, 125 & 151)
10, 12.5 & 15 TON MODELS
[35.2, 44.0 & 52.8 kW]

(RAWE- 181 & 241)
15 & 20 TON MODELS
[52.8 & 70.3 kW]

Accredited by the RvA
ISO 9001:2000
Certificate Number: 30164

ARI PERFORMANCE CERTIFIED

c UL us LISTED

10, 12.5 & 15 NOMINAL TON UNITS
[35.2, 44.0 & 52.8 kW]
RAWD- SERIES

15 & 20 NOMINAL TON UNITS
[52.8 & 70.3 kW]
RAWE- SERIES

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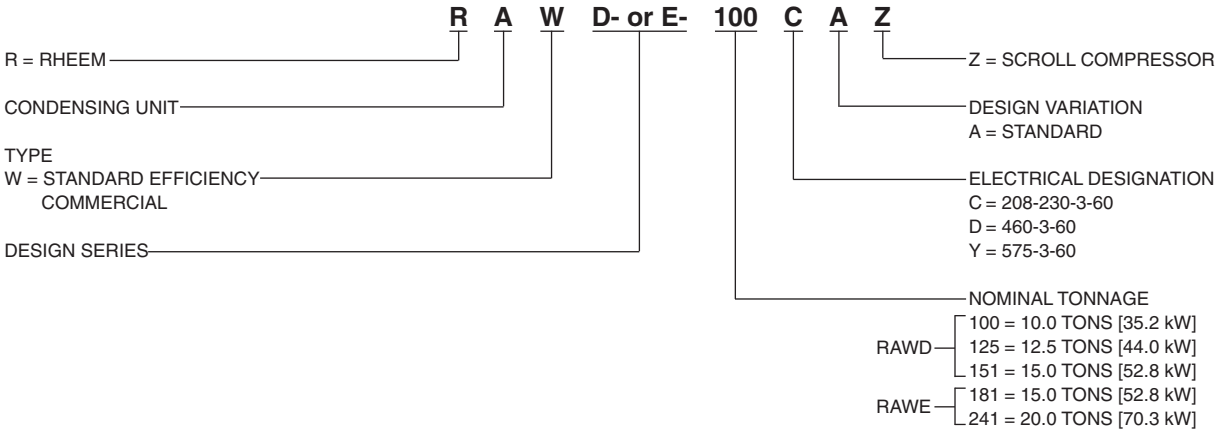
WHY USE A HIGH EFFICIENCY, AIR COOLED SPLIT SYSTEM?

- The size ranges offered by Rheem® allow you to mix or match components to meet actual job requirements, thus eliminating the need to use oversized or undersized equipment. Equipment sized to meet the actual load will provide better operating economy, better humidity control, and longer equipment life.
- With an air cooled system, you have no water or sewer connections to make, and no troublesome and costly water treatment problems.
- Since the condensing unit is located outside the building, and the low profile air handling unit can be installed in the drop ceiling or in the conditioned space, you will not need a separate equipment room which takes up valuable building space.
- Remote mounting of the already quiet condensing unit keeps the compressor and condenser fan noise outside, and the vertical discharge fans carry the sound up and away from the surrounding area.
- Because of the simple design of the Rheem condensing unit, installation is quick and simple, and very little maintenance is required.
- Energy Efficiency Ratings (EER's) to 9.2!

MODEL IDENTIFICATION



[ ] Designates Metric Conversions

CONDENSING UNIT ACCESSORIES

ACCESSORY DESCRIPTION	MODEL NUMBER	SIZES USED ON
Unit LIft Kit	RXAH-A01	100, 125, 151
Anti-Short Cycle Timer Kit	RXAT-A01	100, 125, 151, 181, 241
Low Ambient Kit	RXAZ-B200	181, 241
Sight Glass	RXAG-A048	100, 125, 151, 181
Sight Glass	RXAG-A020	241
Liquid Line Solenoid Valve	RXAV-BD048	*100, 125, 151, 181, 241
Suction Line Service Valve	RXMV-AB	100, 125
Suction Line Service Valve	RXMV-AE	151, 181, 241

*Cannot be used as a pump down solenoid.

STANDARD UNIT FEATURES

CABINET—Galvanized steel with powder coat paint finish. The powder coat paint finish is high gloss, durable and capable of withstanding a 1000-HR salt spray test per ASTM B117. The unit is of the frame and panel type of construction which allows all access panels to be opened or removed without affecting the structural strength of the unit. Fastening screws are also of the 1000-HR type. Stamped louver panels offer 100% protection for the condenser coil are standard.

BASE PAN—Galvanized steel with powder coat paint finish.

COMPRESSORS—The compressor is single speed with a fully hermetic scroll on -AWD-100, -125 and -151 [35.2, 44.0 and 52.8 kW] models. The compressor is tandem scroll set on -AWE-181 and -241 [52.8 and 70.3 kW] models. Modulation (50%) is available on -AWE-181 and -241. All compressors have inherent high temperature protection.

CONDENSER COIL—Constructed with copper tubes and aluminum fins mechanically bonded to the tubes for maximum heat transfer capabilities. All coil assemblies are leak tested up to 450 PSIG [3100 kPa] internal pressure.

REFRIGERANT CONNECTIONS—All field sweat joints are made external of the unit, and are located close to the ground for a neat looking installation.

CRANKCASE HEATERS—Standard on all models, except -AWD-151.

LOW AMBIENT CONTROL—A pressure sensitive fan cycling control allows operation down to 0°F [–17.8°C].

SERVICE VALVES—Standard on liquid line for all models. Optional on vapor line.

SERVICE ACCESS—Control box with separate line and control voltages, as well as compressor and other refrigerant controls are accessible through access panels. These panels may be open or completely removed without affecting normal operation of the unit.

HIGH PRESSURE CONTROL—Manual reset control deactivates system (opens contactor circuit) if abnormally high pressure occurs.

LOW PRESSURE CONTROL—Automatic reset control deactivates system if abnormally low pressure or refrigerant loss occurs.

CONDENSER FAN MOTORS—Direct drive, single-phase permanently lubricated “PSC” motors with inherent thermal overload.

TRANSFORMER—75VA step-down type, line to 24 volts.

CONTACTOR—An electrical switch which operates the compressor and condenser fans. Its 24 volt coil is activated through the high pressure control and low pressure control on a call for cooling.

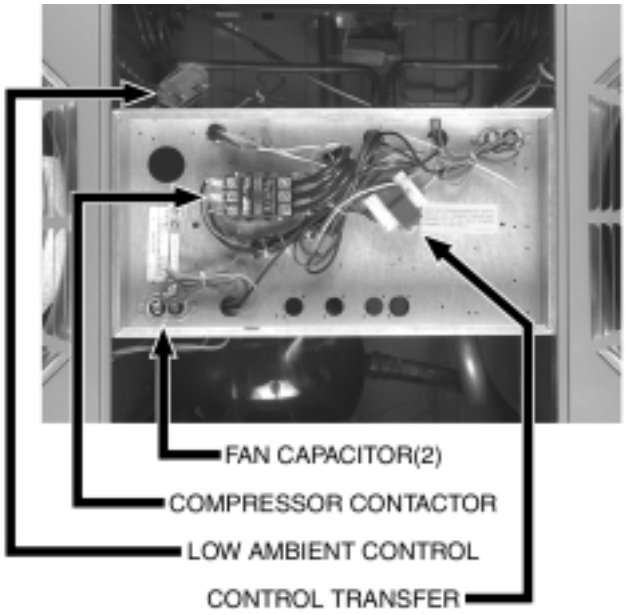
TESTING—All units are run-tested at the factory prior to shipment. Units are shipped with a nitrogen holding charge.

EQUIPMENT GROUND—Lug for field connection of ground wire.

[ ] Designates Metric Conversions

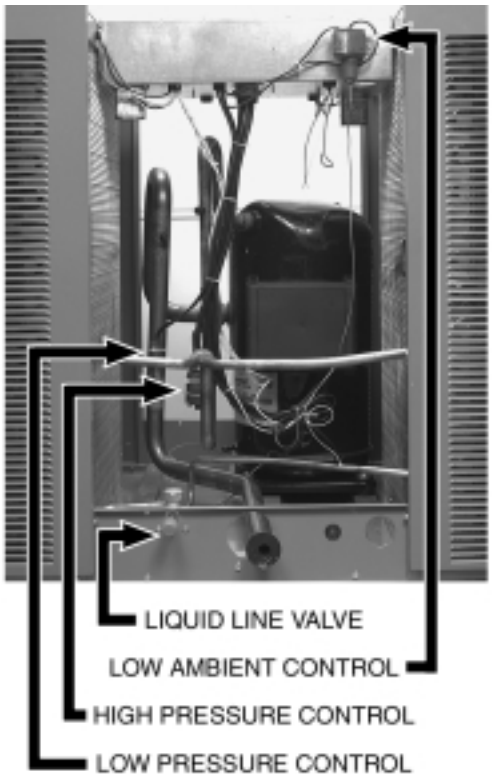
10 & 12.5 TON [35.17 & 44.0 kW] MODELS (RAWD-100/RAWD-125) TYPICAL

CONTROL BOX



(OVERHEAD VIEW)

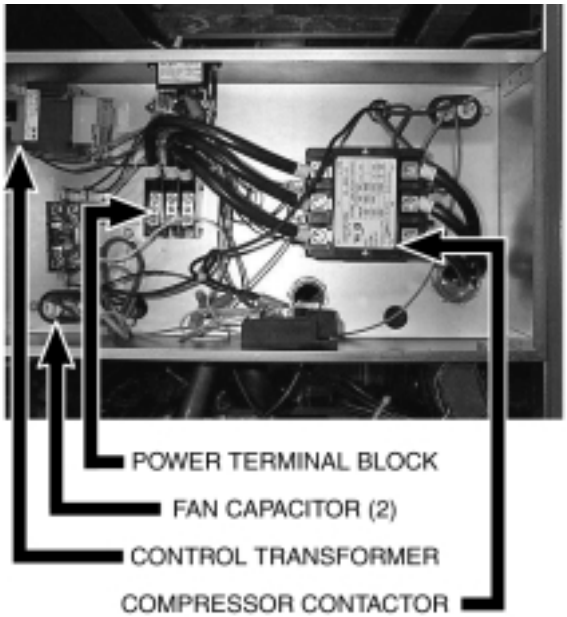
COMPRESSOR COMPARTMENT



(SIDE VIEW)

15 TON [52.8 kW] MODELS (RAWD-151)

CONTROL BOX



(OVERHEAD VIEW)

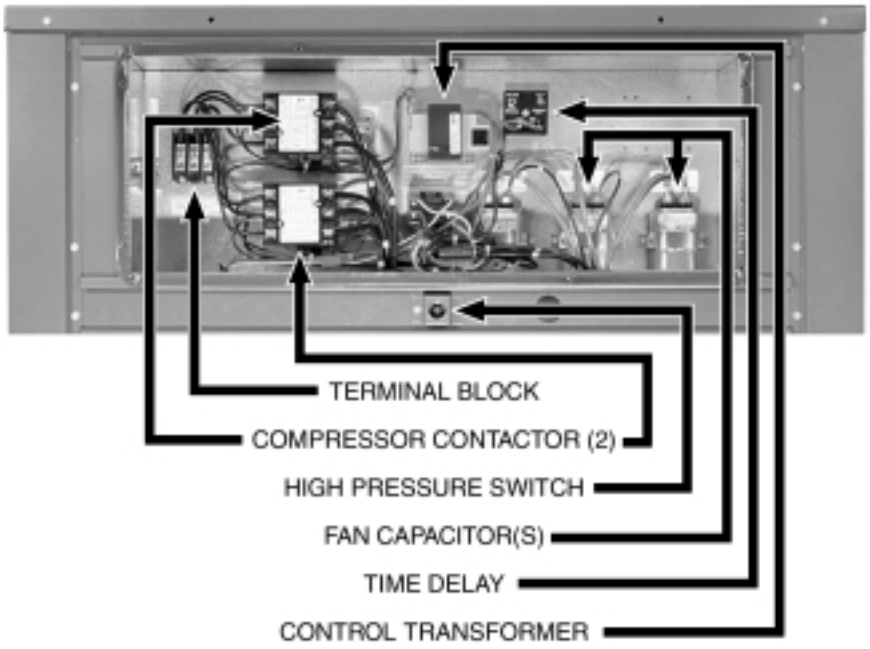
COMPRESSOR COMPARTMENT

(SIDE VIEW)

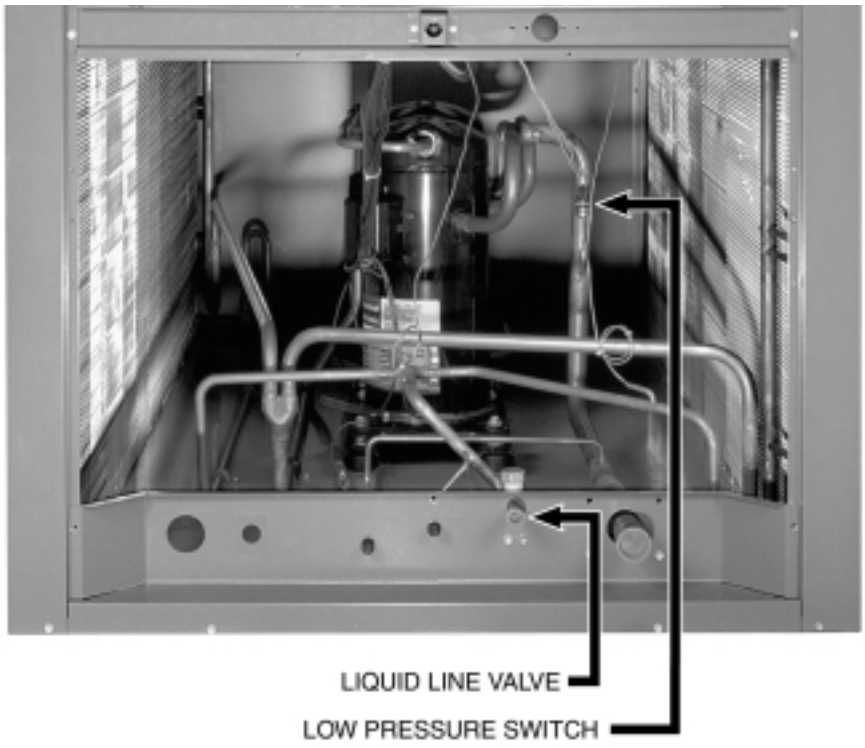
[ ] Designates Metric Conversions

15 & 20 TON [52.8 & 70.3 kW] MODELS (-AWE-181, 241)

CONTROL BOX



COMPRESSOR COMPARTMENT



[ ] Designates Metric Conversions

SELECTION PROCEDURE—
MATCHED SYSTEMS

Example 1: Determine the Net System Performance of Condensing Unit RAWE-181 with RHGG-180 at 5100 CFM [2406.9 L/s] at .30" external static pressure [.07 kPa], 80°F [26.7°C] DB/67°F [19.4°C] WB entering indoor air and 95°F [35.0°C] DB outdoor ambient.

From Cooling Performance Data, page 17–Condensing Unit RAWE-181 with Air Handler RHGG-180

Total Cap. (gross) = 187.7 x 1000 = 187,700 BTUH [55.01 kW]
Sens. Cap. (gross) = 133.1 x 1000 = 133,100 BTUH [39.0 kW]
Power (gross) = 16.7 x 1000 = 16,700 WATTS

From Commercial Air Handler Form No. H11-514, Wet Coil Airflow Performance Data, page 13:

Power = 1,480 WATTS (K-Drive, 4 turns open)
= 1,480 x 3,412 = 5,050 BTUH (1.48 kW)

Therefore, the Net Performance is:

Total Cap. (net) = 187,700 – 5,050 = 182,650 BTUH [53.52 kW]
Sens. Cap (net) = 133,100 – 5,050 = 128,050 BTUH [37.53 kW]
Power (net) = 16,700 + 1,480 = 18,180 WATTS
EER = 182,650 ÷ 18,180 = 10.05 BTUH/WATT [2.95 w/w]

Example 2: Determine the Sensible Net Capacity at 75°F [23.9°C] DB entering indoor air with the other conditions from Example 1 being the same.

From Cooling Performance Data, page 17–Condensing Unit RAWE-181 with Air Handler RHGG-180

Sens. Cap (net) = 128,050 BTUH [37.53 kW] (from Example 1)

Adjust Capacity for temperature other than 80°F [26.7°C] entering air:

adjustment: [1.10 x 5100 x (1-.16) x (75-80]) = – 23,562 BTUH [6.91 kW]

Therefore, Sensible Capacity (net) at 75°F [23.9°C] entering air is:

128,050 – 23,562 = 104,488 BTUH [30.62 kW] (Sensible)

[ ] Designates Metric Conversions

SELECTION PROCEDURE—
MIXED SYSTEMS

Example 3: Determine the Net System Performance of Condensing Unit RAWE-181 with Air Handler RHGG-240 at 6800 CFM [3209.2 L/s] @ .80" external static pressure [.20 kPa], 80°F [26.7°C] DB/67°F [19.4°C] WB entering indoor air and 95°F [35.0°C] DB outdoor ambient.

a. From the Condensing Unit Gross Capacity and Power table, page 10 in this book:
Plot Condensing Unit Data (Figure 1)

40°F [4.4°C]	45°F [7.2°C]	50°F [10.0°C]
186.600 BTUH [54.69 kW]	195,100 BTUH [57.18 kW]	203,500 BTUH [59.64 kW]
16,500 WATTS	16,900 WATTS	17,200 WATTS

b. From Commercial Air Handler Form No. H11-514, page 16:
Plot Evaporator Performance Data (Figure 1)

40°F [4.4°C]	45°F [7.2°C]	50°F [10.0°C]
298,200 BTUH [84.76 kW]	254,100 BTUH [74.47 kW]	200,700 BTUH [58.82 kW]
Airflow Correction	Airflow Correction	Airflow Correction
x .91 Factor	x .91 Factor	x .91 Factor
271,362 BTUH [79.53 kW] TOTAL	231,231 BTUH [67.77 kW] TOTAL	182,637 BTUH [53.53 kW] TOTAL

c. From Indoor Blower Performance Data Table, page 14 of Form No. H11-514:

Power = 2,850 WATTS (K-Drive, 5 1/2 turns open)
= 2,850 x 3.412 = 9,724 BTUH [2.85 kW]

d. Corrected Total Cap (gross) = 201,000 BTUH [58.91 kW] from plot
Corrected Sens. (gross) = 178,225 from evaporator table by interpolation @ plot E.T. x .88 airflow = 156.841 BTUH [45.97 kW]
Power (gross) = 17,100 (from plot)

e. Therefore, the Net Performance is:

Total (net) = 201,000 – 9,724 = 191,276 BTUH [56.06 kW]
Sens. (net) = 156,841 – 9,724 = 147,117 BTUH [43.12 kW]
Power (net) = 17,100 + 2,850 = 19,950 WATTS
EER = 191,276 ÷ 19,950 = 9.6 BTUH/WATT [2.81 w/w]

[ ] Designates Metric Conversions

Example 4: Determine the Sensible Net Capacity at 75°F [23.9°C] dbE with the other conditions from Example 3 being the same.

From the Commercial Air Handler Performance Data in Form No. H11-514, page 16:

Adjusted Sens. Cap (gross) = Sens. Cap. @ 75°F [23.9°C]
= 137,917 BTUH [40.42 kW]—Interpolation from air handler performance data @ plot E.T.
x .88 Airflow Correction Factor

Adjusted Sens. Cap. (net) = 121,366 BTUH [35.57 kW]
121,366 – 9,724 = 111,643 BTUH [32.72 kW]

From Example 3, Total Cap. (net), Power (net) and EER remain the same.

Example 5: Determine Net System Performance with 100 feet [30.5 m] equivalent length of 1 5/8" [41.28 mm] O.D. vapor line, with other conditions in Example 3 being the same.

From Vapor Line System Capacity Loss chart on page 22 in this book:
Capacity Loss = 2.5% per 100 feet [30.5 m] of line

The Condensing Unit Performance Data includes 25 feet [7.6 m] of recommended vapor line. Therefore, calculate the System Performance with 75 feet [22.9 m] of additional line:

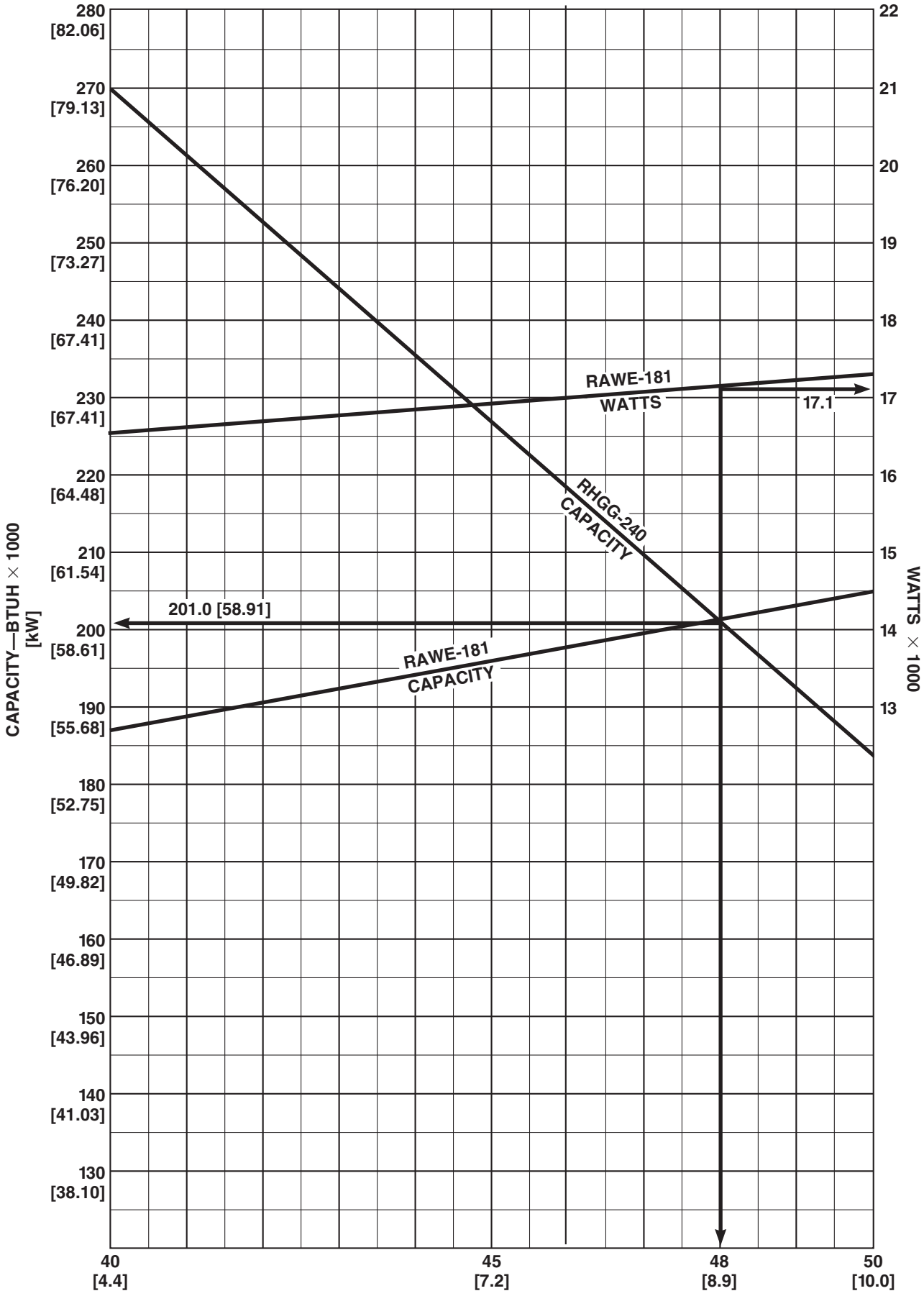
Sens. (gross) = 201,100 – [(.025 x 75 ÷ 100) x 201,100] = 197,329 BTUH [57.83 kW]
Sens. (gross) = 178,229 – [(.025 x 75 ÷ 100) x 178,229] = 174,887 BTUH [51.25 kW]

Therefore, the Net Performance is:

Total Net = 197,329 – 9,724 = 187,605 BTUH [54.98 kW]
Sens. Net = 178,229 – 9,724 = 168,505 BTUH [49.38 kW]
Power Net = 19,950 WATTS
EER = 187,605 ÷ 19,950 = 9.40 BTUH/WATT [2.75 w/w]

[ ] Designates Metric Conversions

FIGURE 1
MIXED SYSTEM



CONDENSING UNIT—GROSS CAPACITY AND POWER

RAWD-100						
°F [°C] OUTDOOR AMBIENT TEMPERATURE	SATURATED EVAPORATOR TEMPERATURE °F [°C]					
	40 [4.4]		45 [7.2]		50 [10.0]	
	MBH [kW]	KW	MBH [kW]	KW	MBH [kW]	KW
75 [24]	131.0 [38.40]	10.2	144.0 [42.21]	10.8	158.0 [46.31]	11.4
80 [27]	126.0 [36.93]	10.6	140.5 [41.18]	11.2	153.5 [44.99]	11.9
85 [29]	122.0 [35.76]	11.0	136.0 [39.86]	11.6	149.0 [43.67]	12.3
90 [32]	117.5 [34.44]	11.4	130.5 [38.25]	12.0	144.0 [42.21]	12.8
95 [35]	113.0 [33.12]	11.8	126.0 [36.93]	12.4	139.0 [40.74]	13.2
100 [38]	109.0 [31.95]	12.3	121.5 [35.61]	12.9	134.0 [39.28]	13.6
105 [41]	105.0 [30.78]	12.7	117.0 [34.29]	13.4	128.0 [37.52]	14.0
110 [43]	101.0 [29.60]	13.1	112.0 [32.83]	13.7	123.0 [36.05]	14.5
115 [46]	97.0 [28.43]	13.5	107.0 [31.36]	14.2	118.0 [34.59]	15.0

RAWD-125						
°F [°C] OUTDOOR AMBIENT TEMPERATURE	SATURATED EVAPORATOR TEMPERATURE °F [°C]					
	40 [4.4]		45 [7.2]		50 [10.0]	
	MBH [kW]	KW	MBH [kW]	KW	MBH [kW]	KW
75 [24]	156.4 [45.83]	12.1	169.2 [49.58]	12.4	182.6 [53.50]	12.7
80 [27]	152.6 [44.71]	12.6	165.4 [48.46]	12.9	178.4 [52.27]	13.2
85 [29]	149.1 [43.69]	13.2	161.3 [47.26]	13.5	174.1 [51.01]	13.8
90 [32]	145.5 [42.63]	13.8	157.4 [46.12]	14.1	169.9 [49.78]	14.4
95 [35]	142.0 [41.61]	14.5	153.6 [45.00]	14.8	165.9 [48.61]	15.1
100 [38]	138.1 [40.46]	15.2	149.4 [43.77]	15.5	161.3 [47.26]	15.8
105 [41]	134.2 [39.32]	15.9	145.4 [42.60]	16.2	156.9 [46.76]	16.6
110 [43]	130.6 [38.27]	16.8	141.2 [41.37]	17.1	152.5 [44.68]	17.4
115 [46]	126.8 [37.15]	17.6	137.2 [40.20]	18.0	148.0 [43.36]	18.3

RAWD-151						
°F [°C] OUTDOOR AMBIENT TEMPERATURE	SATURATED EVAPORATOR TEMPERATURE °F [°C]					
	40 [4.4]		45 [7.2]		50 [10.0]	
	MBH [kW]	KW	MBH [kW]	KW	MBH [kW]	KW
75 [24]	194.8 [57.09]	13.5	201.2 [58.97]	14.0	207.7 [60.87]	14.6
80 [27]	189.6 [55.57]	14.1	196.1 [57.47]	14.7	202.6 [59.38]	15.2
85 [29]	184.5 [54.07]	14.8	190.9 [55.95]	15.3	197.4 [57.85]	15.9
90 [32]	179.3 [52.55]	15.4	185.8 [54.45]	16.0	192.3 [56.36]	16.5
95 [35]	174.2 [51.05]	16.1	180.6 [52.93]	16.7	187.1 [54.83]	17.2
100 [38]	169.0 [49.52]	16.8	175.5 [51.43]	17.3	182.0 [53.34]	17.9
105 [41]	163.9 [48.03]	17.4	170.3 [49.91]	18.0	176.8 [51.81]	18.5
110 [43]	158.7 [46.51]	18.1	165.2 [48.42]	18.6	171.7 [50.32]	19.2
115 [46]	153.6 [45.02]	18.7	160.0 [46.89]	19.3	166.5 [48.80]	19.8

KW —Condensing Unit Power (Compressor + Fan)
MBH—Gross Capacity x 1000 BTUH [kW]

NOTES: 1. All values at approximately 20°F [11.1°C] subcooling
2. Data includes 25 feet [7.62 m] of recommended vapor and liquid lines

[ ] Designates Metric Conversions

CONDENSING UNIT—GROSS CAPACITY AND POWER

RAWE-181						
°F [°C] OUTDOOR AMBIENT TEMPERATURE	SATURATED EVAPORATOR TEMPERATURE °F [°C]					
	40 [4.4]		45 [7.2]		50 [10.0]	
	MBH [kW]	KW	MBH [kW]	KW	MBH [kW]	KW
75 [24]	198.7 [58.23]	13.7	207.1 [60.70]	14.0	215.5 [63.16]	14.4
80 [27]	195.6 [57.32]	14.4	204.1 [59.82]	14.7	212.5 [62.28]	15.1
85 [29]	192.6 [56.45]	15.1	201.1 [58.94]	15.5	209.5 [61.40]	15.8
90 [32]	189.6 [55.57]	15.8	198.1 [58.06]	16.2	206.5 [60.52]	16.5
95 [35]	186.6 [54.69]	16.5	195.1 [57.18]	16.9	203.5 [59.64]	17.2
100 [38]	183.6 [53.81]	17.2	192.1 [56.30]	17.6	200.5 [58.76]	17.9
105 [41]	180.6 [52.93]	17.9	189.1 [55.42]	18.3	197.5 [57.88]	18.6
110 [43]	177.6 [52.05]	18.6	186.1 [54.54]	19.0	194.5 [57.00]	19.3
115 [46]	174.6 [51.17]	19.3	183.1 [53.66]	19.7	191.5 [56.12]	20.1

RAWE-241						
°F [°C] OUTDOOR AMBIENT TEMPERATURE	SATURATED EVAPORATOR TEMPERATURE °F [°C]					
	40 [4.4]		45 [7.2]		50 [10.0]	
	MBH [kW]	KW	MBH [kW]	KW	MBH [kW]	KW
75 [24]	276.3 [80.98]	18.2	312.7 [91.64]	19.0	349.1 [102.31]	19.7
80 [27]	264.3 [77.46]	18.9	300.7 [88.13]	19.7	337.2 [98.82]	20.4
85 [29]	252.3 [73.94]	19.6	288.8 [84.64]	20.4	325.2 [95.31]	21.1
90 [32]	240.3 [70.42]	20.3	276.8 [81.12]	21.1	313.2 [91.79]	21.9
95 [35]	228.4 [66.94]	22.0	264.8 [77.61]	22.4	301.2 [88.27]	22.8
100 [38]	216.4 [63.42]	22.7	252.8 [74.09]	23.1	289.2 [84.76]	23.5
105 [41]	204.4 [59.90]	23.5	240.8 [70.57]	23.8	277.3 [81.27]	24.2
110 [43]	192.4 [56.39]	24.2	228.9 [67.08]	24.5	265.3 [77.75]	24.9
115 [46]	180.5 [52.90]	24.9	216.9 [63.57]	25.2	253.3 [74.23]	25.6

KW —Condensing Unit Power (Compressor + Fan)
MBH—Gross Capacity x 1000 BTUH [kW]

NOTES: 1. All values at approximately 20°F [11.1°C] subcooling
2. Data includes 25 feet [7.62 m] of recommended vapor and liquid lines

[ ] Designates Metric Conversions

UNIT DIMENSIONS (RAWD-)

10 TON [35.17 kW]

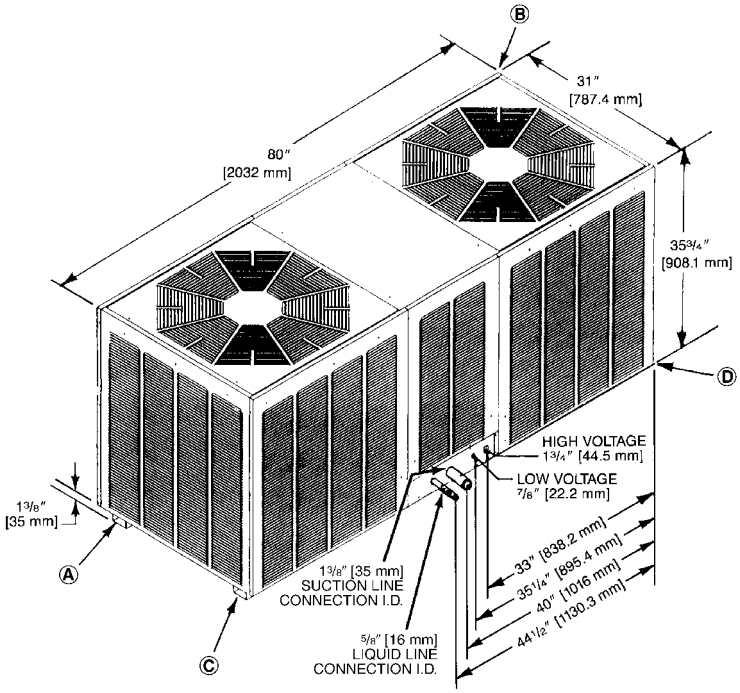
CORNER WEIGHTS (LBS.) [kg]

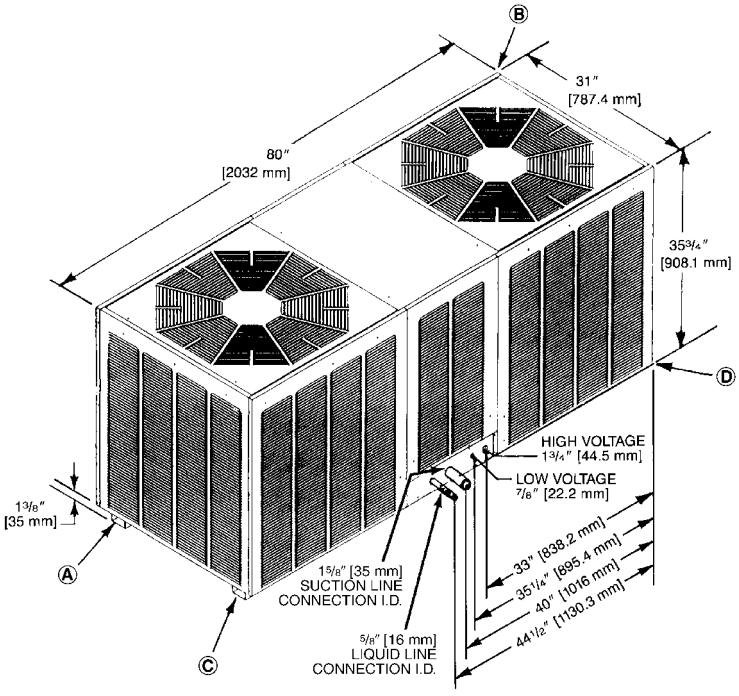
MODEL	A	B	C	D
RAWD-100	144 [65.32]	159 [72.12]	98 [44.45]	108 [48.99]
TOTAL WEIGHT = 509 LBS. [230.88 kg]				
TOTAL VOLUME = 51.3 CU. FT. [1.45 m^3]				

12.5 TON [44.0 kW]

CORNER WEIGHTS (LBS.) [kg]

MODEL	A	B	C	D
RAWD-125	164 [74.4]	174 [78.9]	111 [50.3]	116 [52.6]
TOTAL WEIGHT = 565 LBS. [256.3 kg]				
TOTAL VOLUME = 51.3 CU. FT. [1.45 m^3]				





15 TON [52.8 kW]

CORNER WEIGHTS (LBS.) [kg]

MODEL	A	B	C	D
RAWD-151	171 [77.6]	141 [64.0]	127 [57.6]	167 [75.7]
TOTAL WEIGHT = 606 LBS. [274.9 kg]				
TOTAL VOLUME = 51.3 CU. FT. [1.45 m^3]				

[ ] Designates Metric Conversions

UNIT DIMENSIONS (RAWE-)

15 TON [52.8 kW]

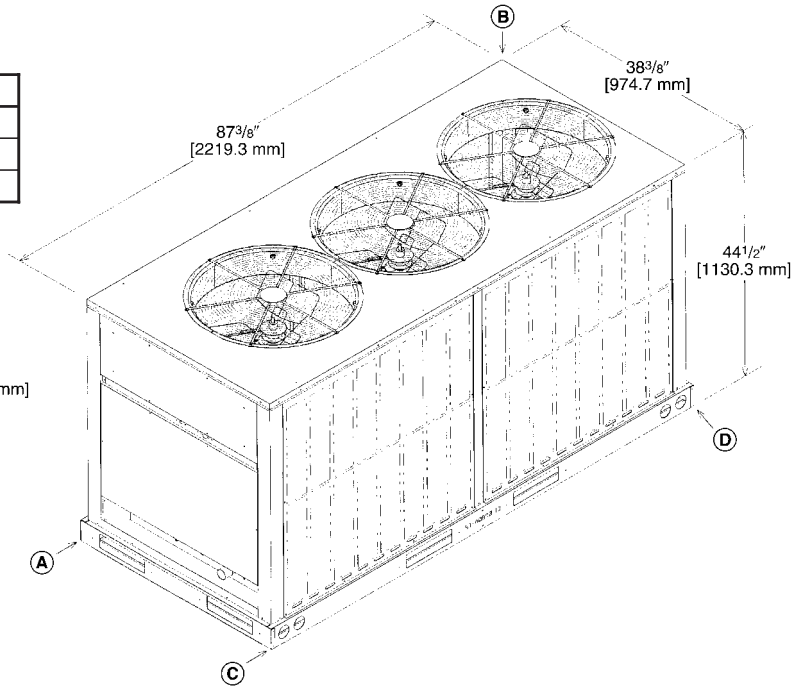
CORNER WEIGHTS (LBS.) [kg]

MODEL	A	B	C	D
RAWE-181	211 [96]	198 [90]	211 [96]	198 [90]
TOTAL WEIGHT = 818 LBS. [371.0 kg]				
TOTAL VOLUME = 83.3 CU. FT. [2.36 m^3]				

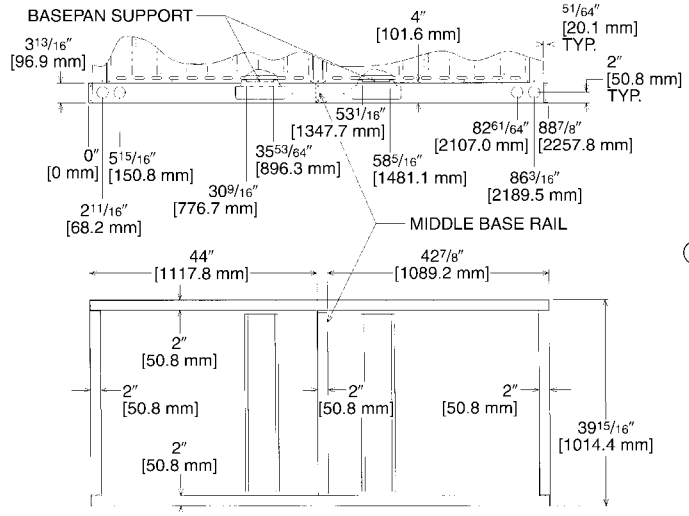
20 TON [70.3 kW]

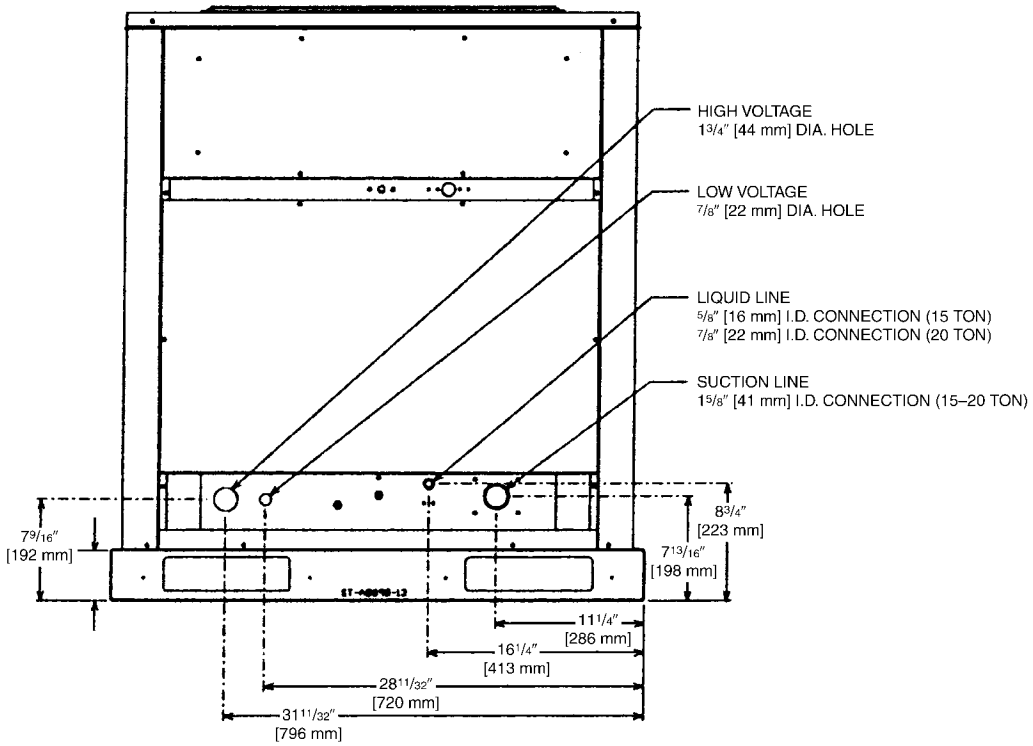
CORNER WEIGHTS (LBS.) [kg]

MODEL	A	B	C	D
RAWE-241	238 [108]	246 [112]	235 [107]	227 [103]
TOTAL WEIGHT = 945 LBS. [428.6 kg]				
TOTAL VOLUME = 83.3 CU. FT. [2.36 m^3]				



BOTTOM VIEW (RAWE-181/241)





PHYSICAL DATA TABLE

MODEL NO.	RAWD-100	RAWD-125	RAWD-151	RAWE-181	RAWE-241
Capacity (tons) [kW]	10 [35.2]	12.5 [44.0]	15 [52.8]	15 [52.8]	20 [70.3]
Operating Weight (lbs.) [kg]	509 [230.9]	565 [256.3]	606 [274.9]	819 [371.5]	945 [429.0]
Shipping Weight (lbs.) [kg]	599 [271.7]	655 [297.1]	692 [313.9]	859 [390.1]	985 [447.0]
COMPRESSOR: Quantity	1	1	1	2	2
Type	Scroll				
RPM	3500	3500	3500	3500	3500
Refrigerant Charge R-22 Oz. [g]	284 [8,051]	340 [9,639]	528/560 [14,969/15,876]	573 [16,244]	778 [22,056]
CONDENSER FANS: Quantity	2	2	2	3	3
CFM [L/s]	7440 [3511]	7440 [3511]	7200 [3398]	9900 [4672]	9900 [4672]
Diameter (in.) [mm]	24 [610]	24 [610]	24 [610]	24 [610]	24 [610]
Drive	Direct				
Motor Horsepower (ea.) [W]	1/3 [248.6]	1/3 [248.6]	1/3 [248.6]	1/3 [248.6]	1/3 [248.6]
Type	PSC	PSC	PSC	PSC	PSC
RPM	1075	1075	1075	1075	1075
CONDENSER COIL: Quantity	2	2	2	2	2
Rows	1	2	2	2	3
Fins per Inch	20	22	16	18	18
Square Feet [m^2]	41.5 [3.855]	41.5 [3.855]	41.5 [3.855]	40.375 [3.750]	40.375 [3.750]
Fins/Tubes	Aluminum/Copper				
REFRIGERANT CONN.: Vapor (in.) Sweat [mm]	1 3/8 [35]	1 3/8 [35]	1 5/8 [41]	1 5/8 [41]	1 5/8 [41]
Liquid (in.) Sweat [mm]	5/8 [16]	5/8 [16]	5/8 [16]	5/8 [16]	7/8 [22]
CABINET: Finish	Powder Coat				
Sheet Metal	Galvanized				
Gauge (nominal) Top	20	20	20	20	20
Sides	20	20	20	20	20
Base Rails	14	14	14	14	14
PACKAGE DIMENSIONS: Height (inches) [mm]	38 [965]	38 [965]	38 [965]	44.75 [1137]	44.75 [1137]
Width (inches) [mm]	35.25 [895]	35.25 [895]	35.25 [895]	38.375 [975]	38.375 [975]
Length (inches) [mm]	84.5 [2146]	84.5 [2146]	84.5 [2146]	83.875 [2130]	83.875 [2130]

[ ] Designates Metric Conversions

A.R.I. RATINGS

CONDENSING UNIT	INDOOR COIL AND/OR AIR HANDLER	TOTAL CAPACITY BTUH [kW]	NET SENSIBLE BTUH [kW]	NET LATENT BTUH [kW]	EER BTUH/WATT [w/w]	IPLV	SOUND RATING	INDOOR CFM [L/s]
RAWD-100	RHGE-100H	119,000 [34.88]	84,520 [24.77]	34,480 [10.11]	9.0 [2.64]	N/A	8.8	3,800 [1795]
RAWD-100	RHGE-100Z/Y	120,000 [35.17]	85,520 [25.06]	34,480 [10.11]	9.2 [2.69]	N/A	8.8	3,800 [1795]
RAWD-100	RCCU-D5013	115,000 [33.70]	89,500 [26.23]	25,500 [7.47]	9.0 [2.64]	N/A	8.8	3,800 [1795]
RAWD-100	RCJC-B100	120,000 [35.17]	85,520 [25.06]	34,480 [10.11]	9.2 [2.69]	N/A	8.8	3,800 [1795]
RAWD-125	RHGE-150	148,000 [43.36]	108,000 [31.65]	40,000 [11.72]	9.2 [2.69]	—	8.8	5,000 [2360]
RAWD-151 with Scroll	RHGE-150	164,000 [48.60]	123,750 [36.30]	40,250 [11.80]	9.0 [2.64]	N/A	8.8	6,000 [2830]
RAWD-151 with Scroll	RHGE-200	182,000 [53.30]	135,000 [39.60]	47,000 [13.80]	9.0 [2.64]	N/A	8.8	6,800 [3210]
RAWE-181	RHGG-180	180,000 [52.75]	125,372 [36.74]	54,628 [16.01]	9.0 [2.64]	9.5 [2.78]	8.8	5,100 [2407]
RAWE-181	RHGG-240	190,000 [55.68]	144,366 [42.31]	45,634 [13.37]	9.0 [2.64]	9.5 [2.78]	8.8	6,700 [3162]
RAWE-241	RHGG-240	238,000 [69.75]	169,400 [49.65]	68,600 [20.10]	9.0 [2.64]	9.5 [2.78]	8.8	7,100 [3351]

NOTE: Sound ratings in accordance with ARI Standard 270.

ELECTRICAL DATA TABLE—10, 12.5 & 15 TON [35.2, 44.0 & 52.8 kW]

MODEL NO. RAWD-	100CAZ	100DAZ	100YAZ	125CAZ	125DAZ	125YAZ	151CAZ	151DAZ	151YAZ
COMPRESSOR MOTOR: Electrical Characteristics	208/230-3-60	460-3-60	575-3-60	208/230-3-60	460-3-60	575-3-60	208/230-3-60	460-3-60	575-3-60
OPERATING CURRENT: Rated Load Amps*	37.8/37.8	17.2	13.7	42.3	21.8	17.3	57.8/57.8	28.0	21.6
Locked Rotor Amps*	278	127	100.0	350	158	125	380	190	150
CONDENSER FAN MOTORS: Volts & Phase	208/230-1	460-1	575-1	208/230-1	460-1	575-1	208/230-1	460-1	575-1
Full Load Amps (each)	2.2	1.3	1.0	2.2	1.3	1.0	2.2	1.3	1.0
SYSTEM CHARACTERISTICS: Unit FLA*	42.2	19.8	15.7	46.7	24.4	19.3	62.2	30.6	23.6
Minimum Amperes (Fuse)	70/70	30	25	57/57	40	30	100/100	45	35
Minimum Circuit Ampacity*	52/52	23	20	70/70	30	24	77/77	38	29
Max. Fuse Size or HACR Circuit Breaker Ampacity*	80/80	40	30	90/90	50	40	125/125	60	50
Wire Size 50'/100'	6/4	10/8	12/10	6/4	10/6	10/8	4/3	6/4	10/6
Disconnect Size	100	60	30	100	60	60	200	60	60

NOTE: N.E.C., C.E.C. and local codes take precedence over suggested wire and fuse sizes.
*Values shown are the most severe and may vary slightly depending on compressor model supplied.

ELECTRICAL DATA TABLE—15 & 20 TON [52.8 & 70.3 kW]

MODEL NO. RAWE-	181CAZ	181DAZ	181YAZ	241CAZ	241DAZ	241YAZ
COMPRESSOR MOTOR: Electrical Characteristics	208/230-3-60	460-3-60	575-3-60	208/230-3-60	460-3-60	575-3-60
OPERATING CURRENT: Rated Load Amps*	28.8/28.8	14.7	10.8	37.2/37.2	17.2	12.4
Locked Rotor Amps* (each)	195	95	80	239	125	80
CONDENSER FAN MOTORS: Volts & Phase	208/230-1	460-1	575-1	208/230-1	460-1	575-1
Full Load Amps (each)	2.4	1.4	1.0	2.4	1.1	.8
SYSTEM CHARACTERISTICS: Unit FLA*	64.8	33.6	24.6	81.6	37.7	27.2
Minimum Amperes (Fuse)	80/80	45	30	110/110	50	35
Minimum Circuit Ampacity*	72/72	38	28	91/91	42	31
Max. Fuse Size or HACR Circuit Breaker Ampacity*	100/100	50	35	125/125	50	40
Wire Size 50'/100'	4/3	8/6	10/6	2/2	6/4	8/6
Disconnect Size	100	60	60	200	60	60

NOTE: N.E.C., C.E.C. and local codes take precedence over suggested wire and fuse sizes. **[ ] Designates Metric Conversions**
*Values shown are the most severe and may vary slightly depending on compressor model supplied.

COOLING PERFORMANCE DATA

CONDENSING UNIT **RAWD-100** **WITH COOLING COIL** **RCCU-D5013**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]
DR ①			.10	.05	.00	.10	.05	.00	.10	.05	.00
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	154.6 [45.31]	149.2 [43.73]	143.8 [42.14]	149.0 [43.67]	143.7 [42.11]	138.5 [40.59]	136.6 [40.03]	131.8 [38.63]	127.0 [37.22]
		Sens BTUH [kW]	99.3 [29.10]	90.8 [26.61]	82.3 [24.12]	117.6 [34.47]	107.6 [31.53]	97.5 [28.57]	130.5 [38.25]	119.4 [34.99]	108.3 [31.74]
		Power	10.3	10.1	10.0	10.1	10.0	9.8	9.7	9.5	9.3
	80 [26.7]	Total BTUH [kW]	141.2 [41.38]	136.3 [39.95]	131.3 [38.48]	135.5 [39.71]	130.8 [38.33]	126.0 [36.93]	123.2 [36.11]	118.9 [34.85]	114.6 [33.59]
		Sens BTUH [kW]	90.4 [26.49]	82.7 [24.24]	75.0 [21.98]	108.7 [31.86]	99.4 [29.13]	90.2 [26.44]	121.7 [35.67]	111.3 [32.62]	100.9 [29.57]
		Power	10.7	10.5	10.3	10.5	10.3	10.1	10.0	9.9	9.7
	85 [29.4]	Total BTUH [kW]	133.8 [39.21]	129.1 [37.84]	124.4 [36.46]	128.1 [37.54]	123.6 [36.22]	119.1 [34.90]	115.8 [33.94]	111.7 [32.74]	107.7 [31.56]
		Sens BTUH [kW]	85.9 [25.17]	78.5 [23.01]	71.2 [20.87]	104.2 [30.54]	95.3 [27.93]	86.4 [25.32]	115.8 [33.94]	107.2 [31.42]	97.2 [28.49]
		Power	11.0	10.8	10.7	10.9	10.7	10.5	10.4	10.2	10.0
	90 [32.2]	Total BTUH [kW]	130.6 [38.28]	126.0 [36.93]	121.4 [35.58]	124.9 [36.60]	120.5 [35.32]	116.1 [34.03]	112.6 [33.00]	108.6 [31.83]	104.7 [30.68]
		Sens BTUH [kW]	84.4 [24.74]	77.2 [22.63]	70.0 [20.51]	102.7 [30.10]	94.0 [27.55]	85.2 [24.97]	112.6 [33.00]	105.8 [31.01]	95.9 [28.11]
		Power	11.4	11.2	11.0	11.2	11.0	10.9	10.8	10.6	10.4
	95 [35]	Total BTUH [kW]	129.8 [38.04]	125.2 [36.69]	120.7 [35.37]	124.1 [36.37]	119.7 [35.08]	115.4 [33.82]	111.8 [32.77]	107.8 [31.59]	103.9 [30.45]
		Sens BTUH [kW]	84.7 [24.82]	77.5 [22.71]	70.2 [20.57]	103.0 [30.19]	94.2 [27.61]	85.4 [25.03]	111.8 [32.77]	106.1 [31.09]	96.2 [28.19]
		Power	11.7	11.6	11.4	11.6	11.4	11.2	11.1	10.9	10.8
	100 [37.8]	Total BTUH [kW]	129.5 [37.95]	125.0 [36.63]	120.4 [35.29]	123.8 [36.28]	119.5 [35.02]	115.2 [33.76]	111.5 [32.68]	107.6 [31.53]	103.7 [30.39]
		Sens BTUH [kW]	85.4 [25.03]	78.1 [22.89]	70.8 [20.75]	103.8 [30.42]	94.9 [27.81]	86.1 [25.23]	111.5 [32.68]	106.8 [31.30]	96.8 [28.37]
		Power	12.1	11.9	11.7	11.9	11.8	11.6	11.5	11.3	11.1
	105 [40.6]	Total BTUH [kW]	128.1 [37.54]	123.6 [36.22]	119.1 [34.90]	122.4 [35.87]	118.1 [34.61]	113.8 [33.35]	110.0 [32.24]	106.2 [31.12]	102.3 [29.98]
		Sens BTUH [kW]	85.3 [25.00]	78.1 [22.89]	70.8 [20.75]	103.7 [30.39]	94.8 [27.78]	86.0 [25.20]	110.0 [32.24]	106.2 [31.12]	96.7 [28.34]
		Power	12.5	12.3	12.1	12.3	12.1	11.9	11.8	11.6	11.5
	110 [43.3]	Total BTUH [kW]	123.6 [36.22]	119.2 [34.93]	114.9 [33.67]	117.9 [34.55]	113.7 [33.32]	109.6 [32.12]	105.5 [30.92]	101.8 [29.83]	98.1 [28.75]
		Sens BTUH [kW]	83.1 [24.35]	76.0 [22.27]	68.9 [20.19]	101.4 [29.72]	92.8 [27.20]	84.1 [24.65]	105.5 [30.92]	101.8 [29.83]	94.9 [27.81]
		Power	12.8	12.6	12.4	12.7	12.5	12.3	12.2	12.0	11.8
	115 [46.1]	Total BTUH [kW]	114.2 [33.47]	110.2 [32.30]	106.2 [31.12]	108.5 [31.80]	104.7 [30.68]	100.9 [29.57]	96.2 [28.19]	92.8 [27.20]	89.4 [26.20]
		Sens BTUH [kW]	77.5 [22.71]	70.8 [20.75]	64.2 [18.82]	95.8 [28.08]	87.6 [25.67]	79.4 [23.27]	96.2 [28.19]	92.8 [27.20]	89.4 [26.20]
		Power	13.2	13.0	12.8	13.0	12.8	12.6	12.6	12.4	12.2

CONDENSING UNIT **RAWD-100** **WITH COOLING COIL** **RCJC-B100**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]
DR ①			.19	.16	.13	.19	.16	.13	.19	.16	.13
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	158.8 [46.54]	154.2 [45.19]	149.7 [43.87]	153.3 [44.93]	148.7 [43.58]	144.2 [42.26]	141.4 [41.44]	136.8 [40.09]	132.3 [38.77]
		Sens BTUH [kW]	95.3 [27.93]	86.8 [25.44]	78.3 [22.95]	112.0 [32.82]	103.6 [30.36]	95.1 [27.87]	123.9 [36.31]	115.4 [33.82]	107.0 [31.36]
		Power	10.6	10.4	10.2	10.4	10.2	10.0	10.0	9.8	9.6
	80 [26.7]	Total BTUH [kW]	145.8 [42.73]	141.3 [41.41]	136.7 [40.06]	140.3 [41.12]	135.8 [39.80]	131.2 [38.45]	128.4 [37.63]	123.9 [36.31]	119.3 [34.96]
		Sens BTUH [kW]	87.1 [25.53]	78.7 [23.06]	70.2 [20.57]	103.9 [30.45]	95.5 [27.99]	87.0 [25.50]	115.8 [33.94]	107.3 [31.45]	98.9 [28.98]
		Power	10.9	10.7	10.5	10.8	10.6	10.4	10.3	10.1	9.9
	85 [29.4]	Total BTUH [kW]	138.7 [40.65]	134.1 [39.30]	129.6 [37.98]	133.2 [39.04]	128.6 [37.69]	124.1 [36.37]	121.3 [35.55]	116.7 [34.20]	112.2 [32.88]
		Sens BTUH [kW]	83.0 [24.32]	74.6 [21.86]	66.1 [19.37]	99.8 [29.25]	91.3 [26.76]	82.9 [24.30]	111.6 [32.71]	103.2 [30.24]	94.7 [27.75]
		Power	11.3	11.1	10.9	11.1	10.9	10.7	10.7	10.5	10.3
	90 [32.2]	Total BTUH [kW]	135.6 [39.74]	131.0 [38.39]	126.5 [37.07]	130.1 [38.13]	125.5 [36.78]	121.0 [35.46]	118.2 [34.64]	113.6 [33.29]	109.1 [31.97]
		Sens BTUH [kW]	81.7 [23.94]	73.2 [21.45]	64.8 [18.99]	98.4 [28.84]	90.0 [26.38]	81.5 [23.89]	110.3 [32.33]	101.8 [29.83]	93.4 [27.37]
		Power	11.6	11.5	11.3	11.5	11.3	11.1	11.0	10.8	10.6
	95 [35]	Total BTUH [kW]	134.8 [39.51]	130.2 [38.16]	125.7 [36.84]	129.3 [37.89]	124.7 [36.55]	120.2 [35.23]	117.4 [34.41]	112.8 [33.06]	108.3 [31.74]
		Sens BTUH [kW]	81.9 [24.00]	73.5 [21.54]	65.0 [19.05]	98.7 [28.93]	90.3 [26.46]	81.8 [23.97]	110.6 [32.41]	102.1 [29.92]	93.6 [27.42]
		Power	12.0	11.8	11.6	11.8	11.7	11.5	11.4	11.2	11.0
	100 [37.8]	Total BTUH [kW]	134.5 [39.42]	130.0 [38.10]	125.4 [36.75]	129.0 [37.81]	124.5 [36.49]	120.0 [35.17]	117.1 [34.32]	112.6 [32.00]	108.1 [31.68]
		Sens BTUH [kW]	82.6 [24.21]	74.2 [21.75]	65.7 [19.25]	99.4 [29.13]	90.9 [26.64]	82.5 [24.18]	111.2 [32.59]	102.8 [30.13]	94.3 [27.64]
		Power	12.4	12.2	12.0	12.2	12.0	11.8	11.7	11.6	11.4
	105 [40.6]	Total BTUH [kW]	133.1 [39.01]	128.6 [37.69]	124.0 [36.34]	127.6 [37.40]	123.1 [36.08]	118.5 [34.73]	115.7 [33.91]	111.2 [32.59]	106.6 [31.24]
		Sens BTUH [kW]	82.5 [24.18]	74.1 [21.72]	65.6 [19.23]	99.3 [29.10]	90.8 [26.61]	82.4 [24.15]	111.1 [32.56]	102.7 [30.10]	94.2 [27.61]
		Power	12.7	12.5	12.3	12.6	12.4	12.2	12.1	11.9	11.7
	110 [43.3]	Total BTUH [kW]	128.8 [37.75]	124.2 [36.40]	119.7 [35.08]	123.3 [63.14]	118.7 [34.79]	114.2 [33.47]	111.4 [32.65]	106.8 [31.30]	102.3 [29.98]
		Sens BTUH [kW]	80.5 [23.59]	72.0 [21.10]	63.6 [18.64]	97.3 [28.52]	88.8 [26.02]	80.4 [23.56]	109.1 [31.97]	100.7 [29.51]	92.2 [27.02]
		Power	13.1	12.9	12.7	12.9	12.7	12.5	12.5	12.3	12.1
	115 [46.1]	Total BTUH [kW]	119.7 [35.08]	115.2 [33.76]	110.6 [32.41]	114.3 [33.50]	109.7 [32.15]	105.2 [30.83]	102.4 [30.01]	97.8 [28.62]	93.3 [27.34]
		Sens BTUH [kW]	75.3 [22.07]	66.9 [19.61]	58.4 [17.12]	92.1 [26.99]	83.6 [24.50]	75.2 [22.04]	102.4 [30.01]	95.5 [27.99]	87.0 [25.50]
		Power	13.4	13.2	13.1	13.3	13.1	12.9	12.8	12.6	12.4

DR —Depression ratio
dbE—Entering air dry bulb
wbE—Entering air wet bulb
Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power—KW input

[ ] Designates Metric Conversions

NOTES:
① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].
② Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
③ Power input is gross, which does not include indoor blower motor.
④ Refer to the "Systems Selection Performance Program and Data Diskette" to interpolate or extrapolate above data.

COOLING PERFORMANCE DATA

CONDENSING UNIT **RAWD-100** **WITH AIR HANDLER** **RHGE-100H**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①												
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]			4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	
DR ①			.19	.16	.13	.19	.16	.13	.19	.16	.13	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	158.9 [46.57]	154.4 [45.25]	149.8 [43.90]	153.4 [44.96]	148.9 [43.64]	144.3 [42.29]	141.5 [41.47]	137.0 [40.15]	132.4 [38.80]	
		Sens BTUH [kW]	95.4 [27.96]	86.9 [25.47]	78.5 [23.01]	112.2 [32.88]	103.7 [30.39]	95.3 [27.93]	124.0 [36.34]	115.6 [33.88]	107.1 [31.39]	
		Power	10.4	10.2	10.0	10.3	10.1	9.9	9.8	9.6	9.4	
	80 [26.7]	Total BTUH [kW]	145.9 [42.76]	141.4 [41.44]	136.9 [40.12]	140.5 [41.18]	135.9 [39.83]	131.4 [38.51]	128.6 [37.69]	124.0 [36.34]	119.5 [35.02]	
		Sens BTUH [kW]	87.3 [25.59]	78.8 [23.09]	70.4 [20.63]	104.1 [30.51]	95.6 [28.02]	87.1 [25.53]	115.9 [33.97]	107.4 [31.48]	99.0 [29.01]	
		Power	10.8	10.6	10.4	10.6	10.4	10.2	10.2	10.0	9.8	
	85 [29.4]	Total BTUH [kW]	138.8 [40.68]	134.2 [39.33]	129.7 [38.01]	133.3 [39.07]	128.8 [37.75]	124.2 [36.40]	121.4 [35.58]	116.9 [34.24]	112.3 [32.91]	
		Sens BTUH [kW]	83.2 [24.38]	74.7 [21.89]	66.2 [19.40]	99.9 [29.28]	91.5 [26.82]	83.0 [24.32]	111.8 [32.77]	103.3 [30.27]	94.9 [27.81]	
		Power	11.1	10.9	10.8	11.0	10.8	10.6	10.5	10.3	10.1	
	90 [32.2]	Total BTUH [kW]	135.7 [39.77]	131.1 [38.42]	126.6 [37.10]	130.2 [38.16]	125.7 [36.84]	121.1 [35.49]	118.3 [34.67]	113.8 [33.35]	109.2 [32.00]	
		Sens BTUH [kW]	81.8 [23.97]	73.4 [21.51]	64.9 [19.02]	98.6 [28.90]	90.1 [26.41]	81.7 [23.94]	110.4 [32.36]	102.0 [29.89]	93.5 [27.40]	
		Power	11.5	11.3	11.1	11.3	11.1	11.0	10.9	10.7	10.5	
	95 [35]	Total BTUH [kW]	134.9 [39.54]	130.4 [38.22]	125.8 [36.87]	129.4 [37.92]	124.9 [36.60]	120.3 [35.26]	117.5 [34.44]	113.0 [33.12]	108.4 [31.77]	
		Sens BTUH [kW]	82.1 [24.06]	73.6 [21.57]	65.2 [19.11]	98.8 [28.96]	90.4 [26.49]	81.9 [24.00]	110.7 [32.44]	102.2 [29.95]	93.8 [27.49]	
		Power	11.9	11.7	11.5	11.7	11.5	11.3	11.2	11.0	10.8	
	100 [37.8]	Total BTUH [kW]	134.7 [39.48]	130.1 [38.13]	125.6 [36.81]	129.2 [37.86]	124.6 [36.52]	120.1 [35.20]	117.3 [34.38]	112.7 [33.03]	108.2 [31.71]	
		Sens BTUH [kW]	82.8 [24.27]	74.3 [21.78]	65.8 [19.28]	99.5 [29.16]	91.1 [26.70]	82.6 [24.21]	111.4 [32.65]	102.9 [30.16]	94.5 [27.70]	
		Power	12.2	12.0	11.8	12.1	11.9	11.7	11.6	11.4	11.2	
	105 [40.6]	Total BTUH [kW]	133.2 [39.04]	128.7 [37.72]	124.2 [36.40]	127.8 [37.45]	123.2 [36.11]	118.7 [34.79]	115.9 [33.97]	111.3 [32.62]	106.8 [31.30]	
		Sens BTUH [kW]	82.7 [24.24]	74.2 [21.75]	65.8 [19.28]	99.4 [29.13]	91.0 [26.67]	82.5 [24.18]	111.3 [32.62]	102.8 [30.13]	94.4 [27.67]	
		Power	12.6	12.4	12.2	12.4	12.2	12.0	11.9	11.8	11.6	
	110 [43.3]	Total BTUH [kW]	128.9 [37.78]	124.4 [36.46]	119.8 [35.11]	123.4 [36.16]	118.9 [34.85]	114.3 [33.50]	111.5 [32.68]	107.0 [31.36]	102.4 [30.01]	
		Sens BTUH [kW]	80.6 [23.62]	72.2 [21.16]	63.7 [18.67]	97.4 [28.55]	88.9 [26.05]	80.5 [23.59]	109.2 [32.00]	100.8 [29.54]	92.3 [27.05]	
		Power	12.9	12.7	12.5	12.8	12.6	12.4	12.3	12.1	11.9	
	115 [46.1]	Total BTUH [kW]	119.9 [35.14]	115.3 [33.79]	110.8 [32.47]	114.4 [33.53]	109.9 [32.21]	105.3 [30.86]	102.5 [30.04]	98.0 [28.72]	93.4 [27.37]	
		Sens BTUH [kW]	75.5 [22.13]	67.0 [19.64]	58.5 [17.14]	92.2 [27.02]	83.8 [24.56]	75.3 [22.07]	102.5 [30.04]	95.6 [28.02]	87.2 [25.56]	
		Power	13.3	13.1	12.9	13.1	12.9	12.7	12.7	12.5	12.3	

CONDENSING UNIT **RAWD-100** **WITH AIR HANDLER** **RHGE-100Z**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①												
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]			4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	4560 [2152.08]	3800 [1793.40]	3040 [1434.72]	
DR ①			.19	.16	.13	.19	.16	.13	.19	.16	.13	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	159.1 [46.63]	154.5 [45.28]	150.0 [43.96]	153.6 [45.02]	149.1 [43.70]	144.5 [42.35]	141.7 [41.53]	137.2 [40.21]	132.6 [38.86]	
		Sens BTUH [kW]	95.6 [28.02]	87.1 [25.53]	78.7 [23.06]	112.3 [32.91]	103.9 [30.45]	95.4 [27.96]	124.2 [36.40]	115.7 [33.91]	107.3 [31.45]	
		Power	10.5	10.3	10.1	10.3	10.1	9.9	9.9	9.7	9.5	
	80 [26.7]	Total BTUH [kW]	146.1 [42.82]	141.6 [41.50]	137.0 [40.15]	140.6 [41.21]	136.1 [39.89]	131.6 [38.57]	128.7 [37.72]	124.2 [36.40]	119.7 [35.08]	
		Sens BTUH [kW]	87.5 [25.64]	79.0 [23.15]	70.6 [20.69]	104.2 [30.54]	95.8 [28.08]	87.3 [25.59]	116.1 [34.03]	107.6 [31.53]	99.2 [29.07]	
		Power	10.8	10.6	10.5	10.7	10.5	10.3	10.2	10.0	9.8	
	85 [29.4]	Total BTUH [kW]	139.0 [40.74]	134.4 [39.39]	129.9 [38.07]	133.5 [39.12]	128.9 [37.78]	124.4 [36.46]	121.6 [35.64]	117.0 [34.29]	112.5 [32.97]	
		Sens BTUH [kW]	83.3 [24.41]	74.9 [21.95]	66.4 [19.46]	100.1 [29.34]	91.7 [26.87]	83.2 [24.38]	112.0 [32.82]	103.5 [30.33]	95.0 [27.84]	
		Power	11.2	11.0	10.8	11.0	10.8	10.7	10.6	10.4	10.2	
	90 [32.2]	Total BTUH [kW]	135.9 [39.83]	131.3 [38.48]	126.8 [37.16]	130.4 [38.22]	125.8 [36.87]	121.3 [35.55]	118.5 [34.73]	113.9 [33.38]	109.4 [32.06]	
		Sens BTUH [kW]	82.0 [24.03]	73.5 [21.54]	65.1 [19.08]	98.8 [28.96]	90.3 [26.46]	81.9 [24.00]	110.6 [32.42]	102.2 [29.95]	93.7 [27.46]	
		Power	11.6	11.4	11.2	11.4	11.2	11.0	10.9	10.7	10.5	
	95 [35]	Total BTUH [kW]	135.1 [39.59]	130.5 [38.25]	126.0 [36.93]	129.6 [37.98]	125.1 [36.66]	120.5 [35.32]	117.7 [34.49]	113.2 [33.18]	108.6 [31.83]	
		Sens BTUH [kW]	82.3 [24.12]	73.8 [21.63]	65.3 [19.14]	99.0 [29.01]	90.6 [26.55]	82.1 [24.06]	110.9 [32.50]	102.4 [30.01]	94.0 [27.55]	
		Power	11.9	11.7	11.5	11.8	11.6	11.4	11.3	11.1	10.9	
	100 [37.8]	Total BTUH [kW]	134.8 [39.51]	130.3 [38.19]	125.8 [36.87]	129.4 [37.92]	124.8 [36.58]	120.3 [35.26]	117.5 [34.44]	112.9 [33.09]	108.4 [31.77]	
		Sens BTUH [kW]	82.9 [24.30]	74.5 [21.83]	66.0 [19.34]	99.7 [29.22]	91.3 [26.76]	82.8 [24.27]	111.6 [32.71]	103.1 [30.22]	94.6 [27.72]	
		Power	12.3	12.1	11.9	12.1	11.9	11.7	11.7	11.5	11.3	
	105 [40.6]	Total BTUH [kW]	133.4 [39.10]	128.9 [37.78]	124.3 [36.43]	127.9 [37.48]	123.4 [36.16]	118.9 [34.85]	116.0 [34.00]	111.5 [32.68]	107.0 [31.36]	
		Sens BTUH [kW]	82.8 [24.27]	74.4 [21.80]	65.9 [19.31]	99.6 [29.19]	91.2 [26.73]	82.7 [24.24]	111.5 [32.68]	103.0 [30.19]	94.6 [27.72]	
		Power	12.6	12.4	12.2	12.5	12.3	12.1	12.0	11.8	11.6	
	110 [43.3]	Total BTUH [kW]	129.1 [37.84]	124.5 [36.49]	120.0 [35.17]	123.6 [36.22]	119.1 [34.90]	114.5 [33.56]	111.7 [32.74]	107.2 [31.42]	102.6 [30.07]	
		Sens BTUH [kW]	80.8 [23.68]	72.4 [21.22]	63.9 [18.73]	97.6 [28.60]	89.1 [26.11]	80.7 [23.65]	109.4 [32.06]	101.0 [29.60]	92.5 [27.11]	
		Power	13.0	12.8	12.6	12.8	12.6	12.4	12.4	12.2	12.0	
	115 [46.1]	Total BTUH [kW]	120.1 [35.20]	115.5 [33.85]	111.0 [32.53]	114.6 [33.50]	110.0 [32.24]	105.5 [30.92]	102.7 [30.10]	98.1 [28.75]	93.6 [27.43]	
		Sens BTUH [kW]	75.6 [22.16]	67.2 [19.69]	58.7 [17.20]	92.4 [27.08]	84.0 [24.62]	75.5 [22.13]	102.7 [30.10]	95.8 [28.08]	87.3 [25.59]	
		Power	13.3	13.1	13.0	13.2	13.0	12.8	12.7	12.5	12.3	

DR —Depression ratio
dbE —Entering air dry bulb
wbE—Entering air wet bulb
Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power—KW input

[ ] Designates Metric Conversions

NOTES:
① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].
② Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
③ Power input is gross, which does not include indoor blower motor.
④ Refer to the "Systems Selection Performance Program and Data Diskette" to interpolate or extrapolate above data.

COOLING PERFORMANCE DATA

CONDENSING UNIT **RAWD-125** **WITH AIR HANDLER** **RHGE-150**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			6000 [2832]	5000 [2360]	4000 [1888]	6000 [2832]	5000 [2360]	4000 [1888]	6000 [2832]	5000 [2360]	4000 [1888]
DR ①			.21	.18	.15	.21	.18	.15	.21	.18	.15
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	179.3 [52.53]	173.7 [50.89]	168.2 [49.28]	169.2 [49.58]	163.6 [47.93]	158.1 [46.32]	160.5 [47.03]	154.9 [45.39]	149.4 [43.77]
		Sens BTUH [kW]	110.2 [32.29]	99.6 [29.18]	89.1 [26.11]	128.2 [37.56]	117.6 [34.46]	107.1 [31.38]	146.0 [42.78]	135.4 [39.67]	124.9 [36.60]
		Power	12.7	12.5	12.3	12.4	12.2	12.0	12.2	11.9	11.7
	80 [26.7]	Total BTUH [kW]	176.6 [51.74]	171.1 [50.13]	165.5 [48.49]	166.5 [48.78]	160.9 [47.14]	155.4 [45.53]	157.8 [46.24]	152.2 [44.59]	146.7 [42.98]
		Sens BTUH [kW]	109.0 [31.94]	98.5 [28.86]	87.9 [25.75]	127.0 [37.21]	116.5 [34.13]	105.9 [31.03]	144.8 [42.43]	134.2 [39.32]	123.7 [36.24]
		Power	13.3	13.1	12.9	13.0	12.8	12.6	12.8	12.5	12.3
	85 [29.4]	Total BTUH [kW]	174.0 [50.98]	168.4 [49.34]	162.9 [47.73]	163.9 [48.02]	158.3 [46.38]	152.8 [44.77]	155.2 [45.47]	149.6 [43.83]	144.1 [42.22]
		Sens BTUH [kW]	107.9 [31.61]	97.3 [28.51]	86.8 [25.43]	125.9 [36.89]	115.3 [33.78]	104.8 [30.71]	143.6 [42.07]	133.1 [39.00]	122.5 [35.89]
		Power	13.9	13.7	13.5	13.7	13.4	13.2	13.4	13.1	12.9
	90 [32.2]	Total BTUH [kW]	171.4 [50.22]	165.8 [48.58]	160.3 [46.97]	161.3 [47.26]	155.7 [45.62]	150.1 [43.98]	152.6 [44.71]	147.0 [43.07]	141.4 [41.43]
		Sens BTUH [kW]	106.7 [31.26]	96.2 [28.19]	85.6 [25.08]	124.7 [36.54]	114.2 [33.46]	103.6 [30.35]	142.6 [41.78]	131.9 [38.65]	121.4 [35.57]
		Power	14.6	14.3	14.1	14.3	14.0	13.8	14.0	13.7	13.5
	95 [35]	Total BTUH [kW]	168.7 [49.43]	163.1 [47.79]	157.6 [46.18]	158.6 [46.47]	153.0 [44.83]	147.5 [43.22]	149.9 [43.92]	144.3 [42.28]	138.8 [40.67]
		Sens BTUH [kW]	105.5 [30.91]	95.0 [27.84]	84.4 [24.73]	123.6 [36.21]	113.0 [33.11]	102.5 [30.03]	141.3 [41.40]	130.8 [38.32]	120.2 [35.22]
		Power	15.2	14.9	14.7	14.9	14.6	14.4	14.6	14.3	14.1
	100 [37.8]	Total BTUH [kW]	165.9 [48.61]	160.3 [46.97]	154.8 [45.36]	155.8 [45.65]	150.2 [44.01]	144.7 [42.40]	147.1 [43.10]	141.5 [41.46]	136.0 [39.85]
		Sens BTUH [kW]	104.3 [30.56]	93.8 [27.48]	83.2 [24.38]	122.4 [35.86]	111.8 [32.76]	101.3 [29.68]	140.1 [41.05]	129.6 [37.97]	119.0 [34.87]
		Power	15.8	15.5	15.3	15.5	15.2	15.0	15.2	14.9	14.7
	105 [40.6]	Total BTUH [kW]	162.9 [47.73]	157.4 [46.12]	151.8 [44.48]	152.8 [44.77]	147.2 [43.13]	141.7 [41.52]	144.1 [42.22]	138.5 [40.58]	133.0 [38.97]
		Sens BTUH [kW]	103.0 [30.18]	92.5 [27.10]	81.9 [24.00]	121.1 [35.48]	110.5 [32.38]	100.0 [29.30]	138.8 [40.67]	128.3 [37.59]	117.7 [34.49]
		Power	16.4	16.1	15.9	16.1	15.8	15.6	15.8	15.5	15.3
	110 [43.3]	Total BTUH [kW]	159.7 [46.79]	154.1 [45.15]	148.6 [43.54]	149.6 [43.83]	144.0 [42.19]	138.5 [40.58]	140.9 [41.28]	135.3 [39.64]	129.8 [38.03]
		Sens BTUH [kW]	101.7 [29.80]	91.1 [26.69]	80.6 [23.62]	119.7 [35.07]	109.1 [31.97]	98.6 [28.89]	137.5 [40.29]	126.9 [37.18]	116.4 [34.11]
		Power	17.0	16.7	16.5	16.7	16.4	16.2	16.4	16.2	15.9
	115 [46.1]	Total BTUH [kW]	156.2 [45.77]	150.6 [44.13]	145.1 [42.51]	146.1 [42.81]	140.5 [41.17]	135.0 [39.56]	137.4 [40.26]	131.8 [38.62]	126.3 [37.01]
		Sens BTUH [kW]	100.2 [29.36]	89.6 [26.25]	79.1 [23.18]	118.2 [34.63]	107.7 [31.56]	97.1 [28.45]	136.0 [39.85]	125.4 [36.74]	114.9 [33.67]
		Power	17.6	17.3	17.1	17.3	17.0	16.8	17. 0	16.8	16.5

CONDENSING UNIT **RAWD-151** **WITH AIR HANDLER** **RHGE-150**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			7200 [3398]	6000 [2832]	4800 [2265]	7200 [3398]	6000 [2832]	4800 [2265]	7200 [3398]	6000 [2832]	4800 [2265]
DR ①			.22	.19	.14	.22	.19	.14	.22	.19	.14
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	196.6 [57.62]	190.5 [55.83]	184.3 [54.01]	194.0 [56.86]	187.9 [55.07]	181.7 [53.25]	171.4 [50.23]	165.2 [48.42]	159.0 [46.60]
		Sens BTUH [kW]	122.7 [35.96]	110.5 [32.38]	98.4 [28.84]	149.4 [43.78]	137.3 [40.24]	125.1 [36.66]	163.7 [47.98]	152.0 [44.55]	139.8 [40.97]
		Power	14.0	13.7	13.4	13.8	13.5	13.2	13.3	13.1	12.8
	80 [26.7]	Total BTUH [kW]	193.7 [56.77]	187.5 [54.95]	181.3 [53.13]	191.1 [56.01]	184.9 [54.19]	178.7 [52.37]	168.5 [49.38]	162.3 [47.57]	156.1 [45.75]
		Sens BTUH [kW]	121.3 [35.55]	109.1 [31.97]	97.0 [28.43]	148.0 [43.37]	135.9 [39.83]	123.7 [36.25]	163.4 [47.89]	150.3 [44.05]	138.4 [40.56]
		Power	14.7	14.4	14.1	14.5	14.2	13.9	14.1	13.8	13.5
	85 [29.4]	Total BTUH [kW]	189.9 [55.65]	183.7 [53.84]	177.5 [52.02]	187.3 [54.89]	181.1 [53.08]	174.9 [51.26]	164.6 [48.24]	158.4 [46.42]	152.2 [44.61]
		Sens BTUH [kW]	119.7 [35.08]	107.5 [31.51]	95.4 [27.96]	146.4 [42.91]	134.3 [39.36]	122.1 [35.78]	161.7 [47.39]	149.4 [43.78]	136.8 [40.09]
		Power	15.4	15.1	14.9	15.2	14.9	14.6	14.8	14.5	14.2
	90 [32.2]	Total BTUH [kW]	185.0 [54.22]	178.8 [52.40]	172.6 [50.58]	182.4 [53.46]	176.2 [51.64]	170.0 [49.82]	159.8 [46.83]	153.6 [45.02]	147.4 [43.20]
		Sens BTUH [kW]	117.8 [34.52]	105.6 [30.95]	93.5 [27.40]	144.5 [42.35]	132.4 [38.80]	120.2 [35.23]	158.4 [46.42]	147.6 [43.26]	134.8 [39.51]
		Power	16.1	15.8	15.6	15.9	15.6	15.4	15.5	15.2	14.9
	95 [35]	Total BTUH [kW]	179.2 [52.52]	173.0 [50.70]	166.8 [48.88]	176.6 [51.76]	170.4 [49.94]	164.2 [48.12]	154.0 [45.13]	147.8 [43.32]	141.6 [41.50]
		Sens BTUH [kW]	115.6 [33.88]	103.4 [30.30]	91.3 [26.76]	142.3 [41.70]	130.1 [38.13]	118.0 [34.58]	154.0 [45.13]	144.5 [42.35]	132.9 [38.95]
		Power	16.8	16.6	16.3	16.6	16.3	16.1	16.2	15.9	15.7
	100 [37.8]	Total BTUH [kW]	172.3 [50.50]	166.1 [48.68]	159.9 [46.86]	169.7 [49.73]	163.5 [47.92]	157.3 [46.10]	147.1 [43.11]	140.9 [41.29]	134.7 [39.48]
		Sens BTUH [kW]	112.9 [33.09]	100.8 [29.54]	88.6 [25.97]	139.7 [40.94]	127.5 [37.37]	115.4 [33.82]	147.1 [43.11]	140.9 [41.29]	130.3 [38.19]
		Power	17.6	17.3	17.0	17.3	17.1	16.8	16.9	16.7	16.4
	105 [40.6]	Total BTUH [kW]	164.4 [48.18]	158.2 [46.36]	152.0 [44.55]	161.8 [47.42]	155.6 [45.60]	149.4 [43.78]	139.1 [40.77]	132.9 [38.95]	126.7 [37.13]
		Sens BTUH [kW]	109.8 [32.18]	97.7 [28.63]	85.6 [25.09]	136.6 [40.03]	124.4 [36.46]	112.3 [32.91]	139.1 [40.77]	132.9 [38.95]	126.7 [37.13]
		Power	18.3	18.0	17.7	18.1	17.8	17.5	17.6	17.4	17.1
	110 [43.3]	Total BTUH [kW]	155.3 [45.51]	149.1 [43.70]	142.9 [41.88]	152.7 [44.75]	146.5 [42.93]	140.3 [41.12]	130.1 [38.13]	123.9 [36.31]	117.7 [34.49]
		Sens BTUH [kW]	106.2 [31.12]	94.1 [27.58]	82.0 [24.03]	133.0 [38.98]	120.8 [35.40]	108.7 [31.86]	130.1 [38.13]	123.9 [36.31]	117.7 [34.49]
		Power	19.0	18.7	18.4	18.8	18.5	18.2	18.4	18.1	17.8
	115 [46.1]	Total BTUH [kW]	145.1 [42.52]	138.9 [40.71]	132.7 [38.89]	142.5 [41.76]	136.3 [39.95]	130.1 [38.13]	119.8 [35.11]	113.6 [33.29]	107.4 [31.48]
		Sens BTUH [kW]	102.1 [29.92]	89.9 [26.35]	77.8 [22.80]	128.8 [37.75]	116.7 [34.20]	104.5 [30.63]	119.8 [35.11]	113.6 [33.29]	107.4 [31.48]
		Power	19.7	19.4	19.2	19.5	19.2	18.9	19.1	18.8	18.5

DR —Depression ratio
dbE —Entering air dry bulb
wbE—Entering air wet bulb
Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power—KW input

[ ] Designates Metric Conversions

NOTES:
① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].
② Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
③ Power input is gross, which does not include indoor blower motor.
④ Refer to the "Systems Selection Performance Program and Data Diskette" to interpolate or extrapolate above data.

COOLING PERFORMANCE DATA

CONDENSING UNIT **RAWD-151** **WITH AIR HANDLER** **RHGE-200**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			8160 [3851]	6800 [3209]	5440 [2567]	8160 [3851]	6800 [3209]	5440 [2567]	8160 [3851]	6800 [3209]	5440 [2567]
DR ①			.26	.22	.17	.26	.22	.17	.26	.22	.17
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	216.4 [63.42]	210.2 [61.60]	204.0 [59.79]	213.8 [62.66]	207.6 [60.84]	201.4 [59.02]	191.1 [56.01]	184.9 [54.19]	178.7 [52.37]
		Sens BTUH [kW]	135.6 [39.74]	123.5 [36.19]	111.3 [32.62]	162.4 [47.59]	150.2 [44.02]	138.1 [40.47]	177.1 [51.90]	164.9 [48.33]	152.8 [44.78]
		Power	15.5	15.2	14.9	15.3	15.0	14.7	14.8	14.6	14.3
	80 [26.7]	Total BTUH [kW]	213.4 [62.54]	207.2 [60.72]	201.0 [58.91]	210.8 [61.78]	204.6 [59.96]	198.4 [58.15]	188.2 [55.16]	182.0 [53.34]	175.8 [51.52]
		Sens BTUH [kW]	134.2 [39.33]	122.1 [35.78]	109.9 [32.21]	161.0 [47.18]	148.8 [43.61]	136.7 [40.06]	175.4 [51.40]	163.5 [47.92]	151.4 [44.37]
		Power	16.2	15.9	15.6	16.0	15.7	15.4	15.6	15.3	15.0
	85 [29.4]	Total BTUH [kW]	209.6 [61.43]	203.4 [59.61]	197.2 [57.79]	207.0 [60.67]	200.8 [58.85]	194.6 [57.03]	184.3 [54.01]	178.1 [52.20]	171.9 [50.38]
		Sens BTUH [kW]	132.6 [38.86]	120.5 [35.32]	108.3 [31.74]	159.4 [46.72]	147.2 [43.14]	135.1 [39.59]	174.4 [51.11]	161.9 [47.45]	149.8 [43.90]
		Power	16.9	16.6	16.4	16.7	16.4	16.1	16.3	16.0	15.7
	90 [32.2]	Total BTUH [kW]	204.7 [59.99]	198.5 [58.17]	192.3 [56.36]	202.1 [59.23]	195.9 [57.41]	189.7 [55.60]	179.5 [52.61]	173.3 [50.79]	167.1 [48.97]
		Sens BTUH [kW]	130.7 [38.30]	118.6 [34.76]	106.4 [31.18]	157.5 [46.16]	145.3 [42.58]	133.2 [39.04]	172.7 [50.61]	160.0 [46.89]	147.9 [43.35]
		Power	17.6	17.3	17.1	17.4	17.1	16.9	17.0	16.7	16.4
	95 [35]	Total BTUH [kW]	198.9 [58.29]	192.7 [56.47]	186.5 [54.66]	196.3 [57.53]	190.1 [55.71]	183.9 [53.90]	173.7 [50.91]	167.5 [49.09]	161.3 [47.27]
		Sens BTUH [kW]	128.5 [37.66]	116.4 [34.11]	104.2 [30.54]	155.3 [45.51]	143.1 [41.94]	131.0 [38.39]	169.9 [49.79]	157.8 [46.25]	145.7 [42.70]
		Power	18.3	18.1	17.8	18.1	17.8	17.6	17.7	17.4	17.2
	100 [37.8]	Total BTUH [kW]	192.0 [56.27]	185.8 [54.45]	179.6 [52.64]	189.4 [55.51]	183.2 [53.69]	177.0 [51.87]	166.8 [48.88]	160.6 [47.07]	154.4 [45.25]
		Sens BTUH [kW]	125.9 [36.90]	113.7 [33.32]	101.6 [29.78]	152.6 [44.72]	140.5 [41.18]	128.3 [37.60]	166.8 [48.88]	155.2 [45.48]	143.0 [41.91]
		Power	19.1	18.8	18.5	18.8	18.6	18.3	18.4	18.2	17.9
	105 [40.6]	Total BTUH [kW]	184.1 [53.95]	177.9 [52.14]	171.7 [50.32]	181.5 [53.19]	175.3 [51.38]	169.1 [49.56]	158.8 [46.54]	152.6 [44.72]	146.4 [42.91]
		Sens BTUH [kW]	122.8 [35.99]	110.7 [32.44]	98.5 [28.87]	149.6 [43.84]	137.4 [40.27]	125.3 [36.72]	158.8 [46.54]	152.1 [44.58]	140.0 [41.03]
		Power	19.8	19.5	19.2	19.6	19.3	19.0	19.1	18.9	18.6
	110 [43.3]	Total BTUH [kW]	175.0 [51.29]	168.8 [49.47]	162.6 [47.65]	172.4 [50.53]	166.2 [48.71]	160.0 [46.89]	149.8 [43.90]	143.6 [42.09]	137.4 [40.27]
		Sens BTUH [kW]	119.2 [34.93]	107.1 [31.39]	94.9 [27.81]	146.0 [42.79]	133.8 [39.21]	121.7 [35.67]	149.8 [43.90]	143.6 [42.09]	136.4 [39.97]
		Power	20.5	20.2	19.9	20.3	20.0	19.7	19.9	19.6	19.3
	115 [46.1]	Total BTUH [kW]	164.8 [48.30]	158.6 [46.48]	152.4 [44.66]	162.2 [47.54]	156.0 [45.72]	149.8 [43.90]	139.5 [40.88]	133.4 [39.10]	127.2 [37.28]
		Sens BTUH [kW]	115.0 [33.70]	102.9 [30.16]	90.7 [26.58]	141.8 [41.56]	129.6 [37.98]	117.5 [34.44]	139.5 [40.88]	133.4 [39.10]	127.2 [37.28]
		Power	21.2	20.9	20.7	21.0	20.7	20.4	20.6	20.3	20.0

CONDENSING UNIT **RAWE-181** **WITH AIR HANDLER** **RHGG-180**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			6120 [8400]	5100 [2407]	4080 [1926]	6120 [8400]	5100 [2407]	4080 [1926]	6120 [8400]	5100 [2407]	4080 [1926]
DR ①			.13	.11	.09	.13	.11	.09	.13	.11	.09
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	205.5 [60.23]	198.7 [58.23]	191.9 [56.24]	199.5 [58.47]	192.6 [56.45]	185.8 [54.45]	189.2 [55.45]	182.4 [53.46]	175.5 [51.43]
		Sens BTUH [kW]	124.3 [8.40]	111.9 [32.79]	99.4 [29.13]	147.9 [43.35]	135.5 [39.71]	123.1 [36.08]	170.4 [49.94]	158.0 [46.31]	145.5 [42.64]
		Power	15.2	14.9	14.6	14.9	14.6	14.3	14.6	14.3	14.0
	80 [26.7]	Total BTUH [kW]	205.8 [60.31]	199.0 [58.32]	192.2 [56.33]	199.8 [58.56]	192.9 [56.53]	186.1 [54.54]	189.5 [55.54]	182.7 [53.54]	175.8 [51.52]
		Sens BTUH [kW]	124.2 [36.40]	111.7 [32.74]	99.3 [29.10]	147.8 [43.32]	135.4 [39.68]	123.0 [36.05]	170.3 [49.91]	157.8 [46.25]	145.4 [42.61]
		Power	15.9	15.7	15.4	15.7	15.4	15.1	15.4	15.1	14.8
	85 [29.4]	Total BTUH [kW]	205.0 [60.08]	198.2 [58.09]	191.3 [56.06]	198.9 [58.29]	192.1 [56.30]	185.3 [54.31]	188.6 [55.27]	181.8 [53.28]	175.0 [51.29]
		Sens BTUH [kW]	123.7 [36.25]	111.3 [32.62]	98.9 [28.98]	147.3 [43.17]	134.9 [39.54]	122.5 [35.90]	169.8 [49.76]	157.4 [46.13]	144.9 [42.47]
		Power	16.7	16.4	16.1	16.5	16.2	15.9	16.2	15.9	15.6
	90 [32.2]	Total BTUH [kW]	203.2 [59.55]	196.4 [57.56]	189.5 [55.54]	197.1 [57.76]	190.3 [55.77]	183.5 [53.78]	186.8 [54.75]	180.0 [52.75]	173.2 [50.76]
		Sens BTUH [kW]	122.9 [36.02]	110.5 [32.38]	98.1 [28.75]	146.6 [42.96]	134.2 [39.33]	121.7 [35.67]	169.0 [49.53]	156.6 [45.89]	144.2 [42.26]
		Power	17.5	17.2	16.9	17.2	17.0	16.7	17.0	16.7	16.4
	95 [35]	Total BTUH [kW]	200.6 [58.79]	193.8 [56.80]	187.0 [54.80]	194.6 [57.03]	187.7 [55.01]	180.9 [53.02]	184.3 [54.01]	177.5 [52.02]	170.6 [50.00]
		Sens BTUH [kW]	121.9 [35.73]	109.5 [32.09]	97.1 [28.46]	145.5 [42.64]	133.1 [39.01]	120.7 [35.37]	168.0 [49.24]	155.6 [45.60]	143.1 [41.94]
		Power	18.3	18.0	17.7	18.0	17.7	17.4	17.7	17.5	17.2
	100 [37.8]	Total BTUH [kW]	197.5 [57.88]	190.7 [55.89]	183.9 [53.90]	191.5 [56.12]	184.6 [54.10]	177.8 [52.11]	181.2 [53.10]	174.4 [51.11]	167.5 [49.09]
		Sens BTUH [kW]	120.6 [35.34]	108.2 [31.71]	95.8 [28.08]	144.3 [42.29]	131.9 [38.66]	119.4 [34.99]	166.7 [48.85]	154.3 [45.22]	141.9 [41.59]
		Power	19.1	18.8	18.5	18.8	18.5	18.2	18.5	18.2	17.9
	105 [40.6]	Total BTUH [kW]	194.1 [56.89]	187.2 [54.86]	180.4 [52.87]	188.0 [55.10]	181.2 [53.10]	174.3 [51.08]	177.7 [52.08]	170.9 [50.09]	164.1 [48.09]
		Sens BTUH [kW]	119.2 [34.93]	106.8 [31.30]	94.3 [27.64]	142.8 [41.85]	130.4 [38.22]	118.0 [34.58]	165.3 [48.44]	152.9 [44.81]	140.4 [41.15]
		Power	19.8	19.5	19.3	19.6	19.3	19.0	19.3	19.0	18.7
	110 [43.3]	Total BTUH [kW]	190.4 [55.80]	183.6 [53.81]	176.8 [51.81]	184.3 [54.01]	177.5 [52.02]	170.7 [50.03]	174.1 [51.02]	167.2 [49.00]	160.4 [47.01]
		Sens BTUH [kW]	117.6 [34.47]	105.2 [30.83]	92.7 [27.17]	141.2 [41.38]	128.8 [37.75]	116.4 [34.11]	163.7 [47.98]	151.2 [44.31]	138.8 [40.68]
		Power	20.6	20.3	20.0	20.4	20.1	19.8	20.1	19.8	19.5
	115 [46.1]	Total BTUH [kW]	186.8 [54.75]	179.9 [52.72]	173.1 [50.73]	180.7 [52.96]	173.9 [50.97]	167.0 [48.94]	170.4 [49.94]	163.6 [47.95]	156.8 [45.95]
		Sens BTUH [kW]	115.9 [33.97]	103.4 [30.30]	91.0 [26.67]	139.5 [40.88]	127.1 [37.25]	114.6 [33.59]	161.9 [47.45]	149.5 [43.81]	137.1 [40.18]
		Power	21.4	21.1	20.8	21.1	20.8	20.6	20.9	20.6	20.3

DR —Depression ratio
dbE —Entering air dry bulb
wbE—Entering air wet bulb
Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power—KW input

[ ] Designates Metric Conversions

NOTES:
① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].
② Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
③ Power input is gross, which does not include indoor blower motor.
④ Refer to the "Systems Selection Performance Program and Data Diskette" to interpolate or extrapolate above data.

COOLING PERFORMANCE DATA

CONDENSING UNIT **RAWE-181** **WITH AIR HANDLER** **RHGG-240**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			8040 [8400]	6700 [3162]	5360 [2530]	8040 [8400]	6700 [3162]	5360 [2530]	8040 [8400]	6700 [3162]	5360 [2530]
DR ①			.18	.13	.06	.18	.13	.06	.18	.13	.06
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	217.9 [63.86]	211.0 [61.84]	204.2 [59.85]	211.8 [62.07]	205.0 [60.08]	198.1 [58.06]	201.5 [59.05]	194.7 [57.06]	187.9 [55.07]
		Sens BTUH [kW]	145.6 [8.40]	133.2 [39.04]	120.8 [35.40]	169.2 [49.59]	156.8 [45.95]	144.4 [42.32]	191.7 [56.18]	179.3 [52.55]	166.8 [48.88]
		Power	15.6	15.3	15.0	15.3	15.0	14.7	15.1	14.8	14.5
	80 [26.7]	Total BTUH [kW]	218.1 [63.92]	211.3 [61.93]	204.5 [59.93]	212.1 [62.16]	205.2 [60.14]	198.4 [58.15]	201.8 [59.14]	195.0 [57.15]	188.1 [55.13]
		Sens BTUH [kW]	145.5 [42.64]	133.1 [39.01]	120.6 [35.34]	169.1 [49.56]	156.7 [45.92]	144.3 [42.29]	191.6 [56.15]	179.1 [52.49]	166.7 [48.85]
		Power	16.4	16.1	15.8	16.1	15.8	15.5	15.8	15.5	15.3
	85 [29.4]	Total BTUH [kW]	217.3 [63.68]	210.5 [61.69]	203.6 [59.67]	211.2 [61.90]	204.4 [59.90]	197.6 [57.91]	201.0 [58.91]	194.1 [56.89]	187.3 [54.89]
		Sens BTUH [kW]	145.0 [42.50]	132.6 [38.86]	120.2 [35.23]	168.7 [49.44]	156.2 [45.78]	143.8 [42.14]	191.1 [56.01]	178.7 [52.37]	166.3 [48.74]
		Power	17.2	16.9	16.6	16.9	16.6	16.3	16.6	16.3	16.0
	90 [32.2]	Total BTUH [kW]	215.5 [63.16]	208.7 [61.16]	201.9 [59.17]	209.4 [61.37]	202.6 [59.38]	195.8 [57.38]	199.2 [58.38]	192.3 [56.36]	185.5 [54.36]
		Sens BTUH [kW]	144.3 [42.29]	131.8 [38.63]	119.4 [34.99]	167.9 [49.21]	155.5 [45.57]	143.0 [41.91]	190.3 [55.77]	177.9 [52.14]	165.5 [48.50]
		Power	17.9	17.6	17.3	17.7	17.4	17.1	17.4	17.1	16.8
	95 [35]	Total BTUH [kW]	213.0 [62.42]	206.1 [60.40]	199.3 [58.41]	206.9 [60.64]	200.1 [58.64]	193.2 [56.62]	196.6 [57.62]	189.8 [55.62]	183.0 [53.63]
		Sens BTUH [kW]	143.2 [41.97]	130.8 [38.33]	118.4 [34.70]	166.9 [48.91]	154.4 [45.25]	142.0 [41.62]	189.3 [55.48]	176.9 [51.84]	164.5 [48.21]
		Power	18.7	18.4	18.1	18.5	18.2	17.9	18.2	17.9	17.6
	100 [37.8]	Total BTUH [kW]	209.9 [61.52]	203.0 [59.49]	196.2 [57.50]	203.8 [59.73]	197.0 [57.74]	190.1 [55.71]	193.5 [56.71]	186.7 [54.72]	179.9 [52.72]
		Sens BTUH [kW]	142.0 [41.62]	129.5 [37.95]	117.1 [34.32]	165.6 [48.53]	153.2 [44.90]	140.7 [41.24]	188.0 [55.10]	175.6 [51.46]	163.2 [47.83]
		Power	19.5	19.2	18.9	19.2	18.9	18.6	19.0	18.7	18.4
	105 [40.6]	Total BTUH [kW]	206.4 [60.49]	199.6 [58.50]	192.7 [56.47]	200.3 [58.70]	193.5 [56.71]	186.7 [54.72]	190.0 [55.68]	183.2 [53.69]	176.4 [51.70]
		Sens BTUH [kW]	140.5 [41.18]	128.1 [37.54]	115.7 [33.91]	164.1 [48.09]	151.7 [44.46]	139.3 [40.82]	186.6 [54.69]	174.2 [51.05]	161.7 [47.39]
		Power	20.3	20.0	19.7	20.0	19.7	19.4	19.7	19.4	19.1
	110 [43.3]	Total BTUH [kW]	202.7 [59.41]	195.9 [57.41]	189.1 [55.42]	196.7 [57.65]	189.8 [55.62]	183.0 [53.63]	186.4 [54.63]	179.6 [52.64]	172.7 [50.61]
		Sens BTUH [kW]	138.9 [40.71]	126.5 [37.07]	114.0 [33.41]	162.5 [47.62]	150.1 [43.99]	137.7 [40.36]	185.0 [54.22]	172.6 [50.58]	160.1 [46.92]
		Power	21.1	20.8	20.5	20.8	20.5	20.2	20.5	20.2	19.9
	115 [46.1]	Total BTUH [kW]	199.1 [58.35]	192.3 [56.36]	185.4 [54.34]	193.0 [56.56]	186.2 [54.57]	179.4 [52.58]	182.7 [53.54]	175.9 [51.55]	169.1 [49.56]
		Sens BTUH [kW]	137.2 [40.21]	124.7 [36.55]	112.3 [32.91]	160.8 [47.13]	148.4 [43.49]	136.0 [39.86]	182.7 [53.54]	170.8 [50.06]	158.4 [46.42]
		Power	21.8	21.5	21.2	21.6	21.3	21.0	21.3	21.0	20.7

CONDENSING UNIT **RAWE-241** **WITH AIR HANDLER** **RHGG-240**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			8520 [4021]	7100 [3351]	5680 [2681]	8520 [4021]	7100 [3351]	5680 [2681]	8520 [4021]	7100 [3351]	5680 [2681]
DR ①			.14	.11	.08	.14	.11	.08	.14	.11	.08
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	269.4 [99.15]	260.4 [76.32]	251.4 [73.68]	256.8 [75.26]	247.7 [72.59]	238.7 [69.96]	242.3 [71.01]	233.2 [68.34]	224.2 [65.71]
		Sens BTUH [kW]	162.6 [47.65]	145.8 [42.73]	129.0 [37.81]	195.2 [57.21]	178.4 [52.28]	161.6 [47.36]	223.6 [65.53]	206.8 [60.61]	190.0 [55.68]
		Power	19.5	19.1	18.8	19.4	19.0	18.6	19.0	18.6	18.2
	80 [26.7]	Total BTUH [kW]	271.1 [79.45]	262.1 [76.81]	253.1 [74.18]	258.5 [75.76]	249.5 [73.12]	240.4 [70.45]	244.0 [71.51]	234.9 [68.84]	225.9 [66.20]
		Sens BTUH [kW]	163.0 [47.77]	146.2 [42.85]	129.4 [37.92]	195.6 [57.32]	178.8 [52.40]	162.0 [47.48]	224.0 [65.65]	207.2 [60.72]	190.4 [55.80]
		Power	20.7	20.3	19.9	20.5	20.1	19.7	20.1	19.8	19.4
	85 [29.4]	Total BTUH [kW]	271.8 [79.66]	262.8 [77.02]	253.8 [74.38]	259.2 [75.96]	250.1 [73.30]	241.1 [70.66]	244.6 [71.69]	235.6 [69.05]	226.6 [66.41]
		Sens BTUH [kW]	163.4 [47.89]	146.7 [42.99]	129.9 [38.07]	196.0 [57.44]	179.3 [52.55]	162.5 [47.62]	224.4 [65.77]	207.7 [60.87]	190.9 [55.95]
		Power	21.8	21.4	21.0	21.6	21.2	20.8	21.3	20.9	20.5
	90 [32.2]	Total BTUH [kW]	271.4 [79.54]	262.4 [76.90]	253.4 [74.26]	258.8 [75.85]	249.7 [73.18]	240.7 [70.54]	244.2 [71.57]	235.2 [68.93]	226.2 [66.29]
		Sens BTUH [kW]	163.8 [48.01]	147.0 [43.08]	130.2 [38.16]	196.4 [57.56]	179.6 [52.64]	162.9 [47.74]	224.8 [65.88]	208.0 [60.96]	191.2 [56.04]
		Power	22.9	22.5	22.1	22.7	22.3	21.9	22.4	22.0	21.6
	95 [35]	Total BTUH [kW]	269.9 [79.10]	260.9 [76.46]	251.9 [73.82]	257.3 [75.41]	248.2 [72.74]	239.2 [70.10]	242.8 [71.16]	233.7 [68.49]	224.7 [65.85]
		Sens BTUH [kW]	163.8 [48.01]	147.0 [43.08]	130.3 [38.19]	196.4 [57.56]	179.6 [52.64]	162.9 [47.74]	224.8 [65.88]	208.0 [60.96]	191.3 [56.06]
		Power	24.0	23.6	23.2	23.8	23.4	23.1	23.5	23.1	22.7
	100 [37.8]	Total BTUH [kW]	267.3 [78.34]	258.3 [75.70]	249.3 [73.06]	254.7 [74.65]	245.6 [71.98]	236.6 [69.34]	240.1 [70.37]	231.1 [67.73]	222.1 [65.09]
		Sens BTUH [kW]	163.3 [47.86]	146.5 [42.93]	129.8 [38.04]	195.9 [57.41]	179.1 [52.49]	162.4 [47.59]	224.3 [65.74]	207.5 [60.81]	190.8 [55.92]
		Power	25.1	24.8	24.4	25.0	24.6	24.2	24.6	24.2	23.8
	105 [40.6]	Total BTUH [kW]	263.5 [77.22]	254.5 [74.59]	245.5 [71.95]	250.9 [73.53]	241.9 [70.89]	232.8 [68.23]	236.4 [69.28]	227.3 [66.62]	218.3 [63.98]
		Sens BTUH [kW]	162.1 [47.51]	145.3 [42.58]	128.5 [37.66]	194.7 [57.06]	177.9 [52.14]	161.2 [47.24]	223.1 [65.38]	206.3 [60.46]	189.5 [55.54]
		Power	26.3	25.9	25.5	26.1	25.7	25.3	25.8	25.4	25.0
	110 [43.3]	Total BTUH [kW]	258.6 [75.79]	249.6 [73.15]	240.5 [70.48]	245.9 [72.07]	236.9 [69.43]	227.9 [66.79]	231.4 [67.82]	222.4 [65.18]	213.4 [62.54]
		Sens BTUH [kW]	159.9 [46.86]	143.2 [41.97]	126.4 [37.04]	192.6 [56.45]	175.8 [51.52]	159.0 [46.60]	220.9 [64.74]	204.2 [59.85]	187.4 [54.92]
		Power	27.4	27.0	26.6	27.2	26.8	26.4	26.9	26.5	26.1
	115 [46.1]	Total BTUH [kW]	252.4 [73.97]	243.4 [71.33]	234.4 [68.70]	239.8 [70.28]	230.8 [67.64]	221.7 [64.97]	225.3 [66.03]	216.2 [63.36]	207.2 [60.72]
		Sens BTUH [kW]	156.7 [45.92]	139.9 [41.00]	123.2 [36.11]	189.3 [55.48]	172.5 [50.55]	155.8 [45.66]	217.7 [63.80]	200.9 [58.88]	184.2 [53.98]
		Power	28.5	28.1	27.7	28.3	27.9	27.5	28.0	27.6	27.2

DR —Depression ratio
dbE —Entering air dry bulb
wbE—Entering air wet bulb

Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power—KW input

[ ] Designates Metric Conversions

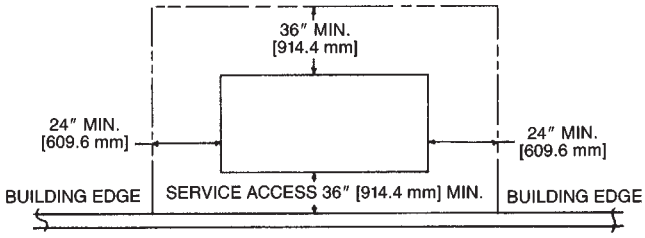
NOTES:

① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].
② Total and sensible capacity is gross, with no deduction for indoor blower motor heat.
③ Power input is gross, which does not include indoor blower motor.
④ Refer to the "Systems Selection Performance Program and Data Diskette" to interpolate or extrapolate above data.

GENERAL INSTALLATION

The condensing unit should be installed outdoors. It should be located as near as possible to the evaporator section to keep connecting refrigerant tubing lengths to a minimum. The unit must be installed to allow a free air flow to the condenser coils.

If several units are installed adjacent to each other, care must be taken to avoid recirculation of air from one condenser to another. In all installations, adequate space must be provided for installation and servicing.



The unit must not be connected to any duct work. Do not locate unit under a roof drip; if necessary, install gutters, etc., to prevent water run-off from hitting the unit. To prevent air recirculation, it is recommended that the unit not be installed under an overhang, but if necessary **allow a minimum of 60 inches [1524 mm] above the unit for air discharge.**

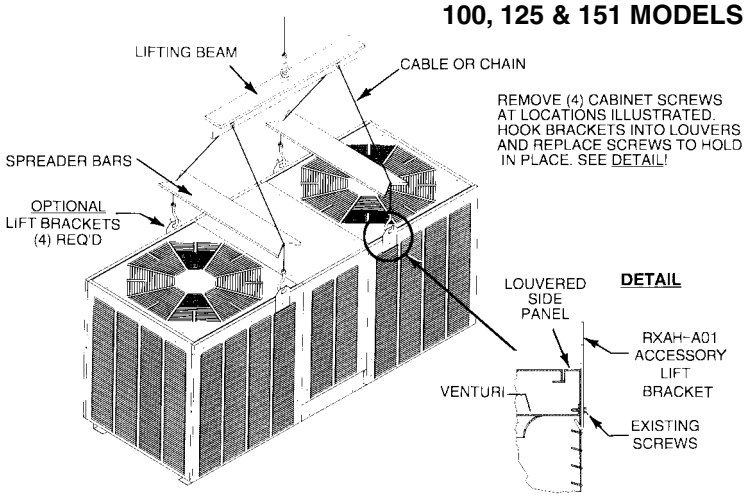
ROOFTOP INSTALLATION

If rooftop installation is required, make certain that the building construction is adequate for the weight of the unit. (Refer to physical data chart.) Before placing the unit on the roof, make certain that the nylon rigging slings are of sufficient length to maintain equilibrium of the unit when lifting. Under no circumstances should the unit be lifted by only one corner for rooftop installation.

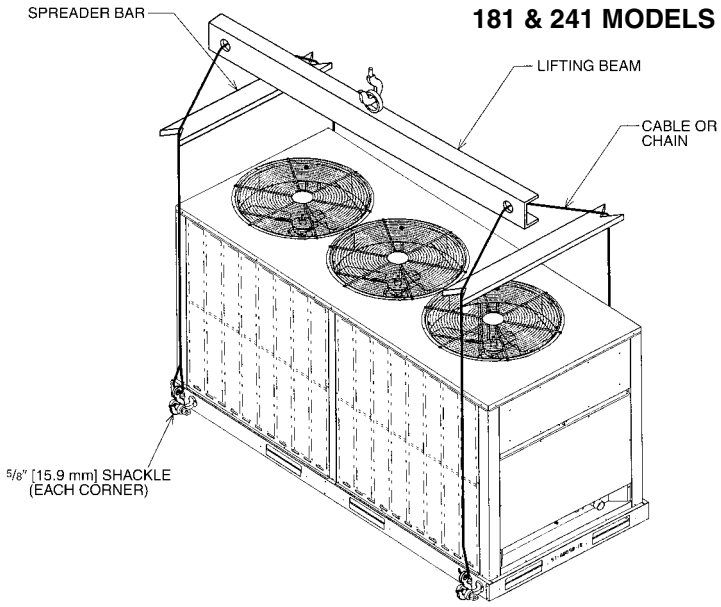
[ ] Designates Metric Conversions

RIGGING

100, 125 & 151 MODELS



181 & 241 MODELS



SLAB INSTALLATION

Condensing units should be set on a solid level foundation. When installed at ground level, the unit should be placed on a 60 inch [1524 mm] cement slab. If the pad is formed at the installation site, do not pour the pad tight against the structure, otherwise vibration will be transmitted from the unit through the pad.

GENERAL TERMS OF LIMITED WARRANTY*

Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated, in accordance with the terms of the limited warranty.

Air Conditioner Motor Compressor .....Five (5) Years
Any Other Part.....One (1) Year

***For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.**

TYPICAL REFRIGERANT PIPING RECOMMENDATIONS

General Notes:

1. Vertical risers not to exceed 60 feet [18.29 mm].
2. Locate the condensing unit and evaporator(s) as close together as possible to minimize piping runs.
3. Condensing units are shipped with a nitrogen holding charge. Evacuate condensing unit before charging with refrigerant.

EQUIVALENT LENGTH (FT.) [m] OF STRAIGHT TYPE "L" TUBING FOR NON-FERROUS VALVES AND FITTINGS (BRAZED)

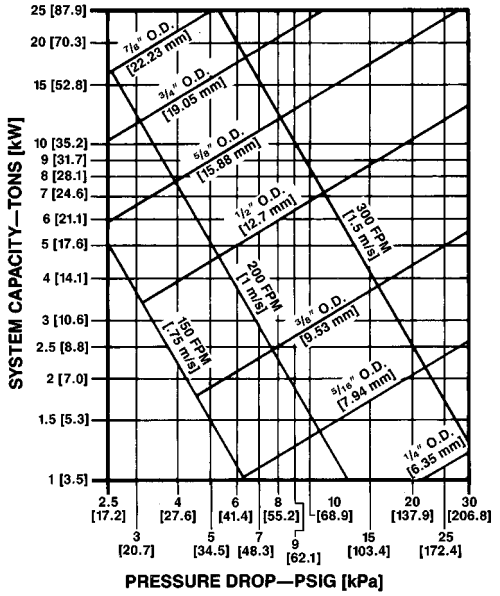
TUBE SIZE (IN.) [mm] O.D.	SOLE-NOID VALVE	ANGLE VALVE	SHORT RADIUS ELL	LONG RADIUS ELL	TEE LINE FLOW	TEE BRANCH FLOW
1/2 [12.7]	70 [21.34]	24 [7.32]	4.7 [1.43]	3.2 [0.98]	1.7 [0.52]	6.6 [2.01]
5/8 [15.88]	72 [21.95]	25 [7.62]	5.7 [1.74]	3.9 [1.19]	2.3 [0.70]	8.2 [2.50]
3/4 [19.05]	75 [22.86]	25 [7.62]	6.5 [1.98]	4.5 [1.37]	2.9 [0.88]	9.7 [3.00]
7/8 [22.23]	78 [23.77]	28 [8.53]	7.8 [2.38]	5.3 [1.62]	3.7 [1.13]	12.0 [3.66]
1 1/8 [28.58]	87 [26.52]	29 [8.84]	2.7 [0.82]	1.9 [0.58]	5.2 [1.59]	8.0 [2.44]
1 3/8 [34.93]	102 [31.09]	33 [10.06]	3.2 [0.98]	2.2 [0.67]	6.9 [2.10]	10.0 [3.05]
1 5/8 [41.28]	115 [35.05]	34 [10.36]	3.8 [1.16]	2.6 [0.79]	8.7 [2.65]	12.0 [3.66]
2 1/8 [53.98]	141 [42.98]	39 [11.89]	5.2 [1.59]	3.4 [1.04]	12.0 [3.66]	16.0 [4.88]

RECOMMENDED VAPOR AND LIQUID LINE SIZES FOR VARIOUS LENGTHS OF RUN

LINEAR LENGTH (FT.) [m]	LIQUID LINE O.D. SIZES (IN.) [mm]			VAPOR LINE O.D. SIZES (IN.) [mm]		
	150	180	240	150	180	240
0-15 [0-4.57]	5/8 [15.9]	5/8 [15.9]	7/8 [22.2]	1 3/8 [34.9]	1 5/8 [41.3]	1 5/8 [41.3]
16-50 [4.88-15.24]	5/8 [15.9]	5/8 [15.9]	7/8 [22.2]	1 5/8 [41.3]	1 5/8 [41.3]	1 5/8 [41.3]
51-100 [15.54-30.48]	5/8 [15.9]	3/4 [19.1]	7/8 [22.2]	1 5/8 [41.3]	1 5/8 [41.3]	2 1/8 [54.0]
101-150 [30.78-45.72]	5/8 [15.9]	3/4 [19.1]	7/8 [22.2]	2 1/8 [54.0]	2 1/8 [54.0]	2 1/8 [54.0]

NOTE: Runs between condenser and evaporator not to exceed 150' [45.7 m] linear length.

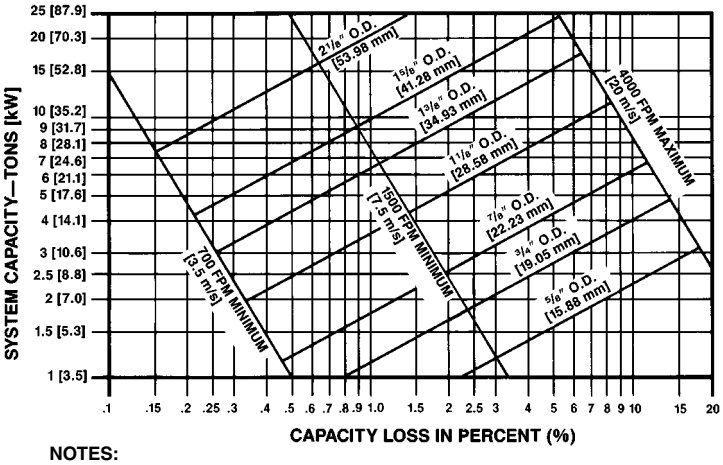
LIQUID LINE PRESSURE DROP PER 100 FEET [30.48 m] EQUIVALENT LENGTH (TYPE L COPPER TUBING)



NOTES:

1) When evaporator coil is above condenser, the pressure drop due to vertical lift (.5 PSIG per foot of lift) [1.05 kPa per meter] **must** be added to the pressure drop derived from this curve.
2) Size liquid line for **no more** than 10°F [5.6°C] loss (approximately 30 PSIG [206.8 kPa] total pressure drop).
3) **Do not oversize liquid line.** Oversized liquid lines add significantly to the amount of refrigerant required to charge the system.
4) The maximum recommended velocity with solenoid valves or other quick closing devices in the liquid line is 300 FPM [1.5 m/s].

VAPOR LINE SYSTEM CAPACITY LOSS IN PERCENT PER 100 FEET [30.48 m] EQUIVALENT LENGTH (TYPE L COPPER TUBING)



NOTES:

1) The minimum velocity line (700 fpm) [3.6 m/s] is recommended.
2) For vapor pressure drop (PSIG) [6.9 kPa], multiply percent (%) loss by 1.18.
3) Size vapor lines for no more than 2°F [1.1°C] loss which corresponds to approximately 3 PSIG [20.7 kPa] pressure drop.
4) Pitch all horizontal vapor lines downward in the direction of flow (1/2" [12.7 mm] to10' [3.0 m] run).

WARNING

Do not use oxygen to purge lines or pressure system for leak test. Oxygen reacts violently with oil, which can cause an explosion resulting in severe personal injury or death.

REQUIRED OZS. [g] R22 CHARGE PER FT. [m] OF TUBING

TUBE SIZE O.D. (IN.) [mm]	LIQUID TUBE (OZ.) [g]	SUCTION TUBE (OZ.) [g]
1/2 [12.7]	1.20 [34.0]	—
5/8 [15.88]	1.86 [52.7]	—
7/8 [22.23]	2.67 [75.7]	.06 [1.70]
1 1/8 [28.58]	—	.15 [4.25]
1 3/8 [34.93]	—	.22 [6.24]
1 5/8 [41.28]	—	.29 [8.22]
2 1/8 [53.98]	—	.43 [12.19]

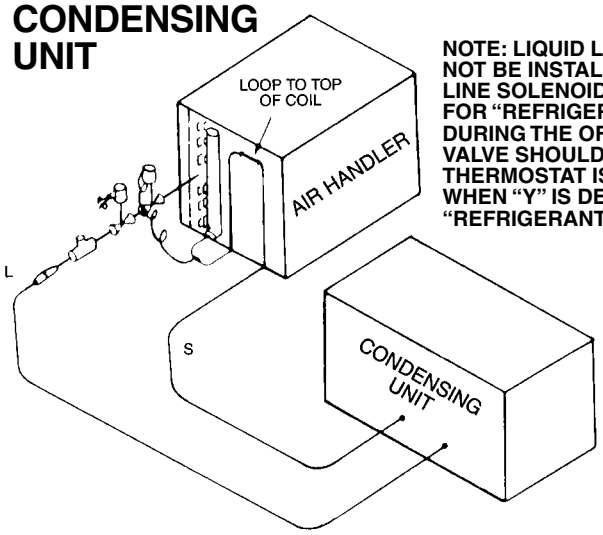
BASIC SYSTEM CHARGE*

12.5 Ton [44.0 kW]	15 Ton [52.8 kW]	20 Ton [70.3 kW]
340 oz. [9,639.9 g]	458 oz. [12,984.1 g]	566 oz. [16,045.8 g]

*System with 0 feet [m] of tubing.

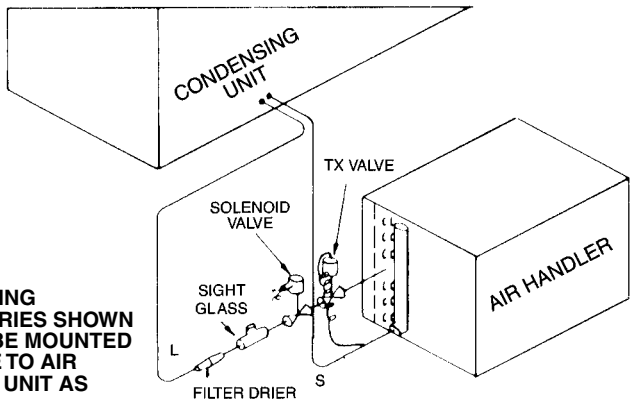
TYPICAL REFRIGERANT PIPING RECOMMENDATIONS (cont.)

COIL ABOVE CONDENSING UNIT



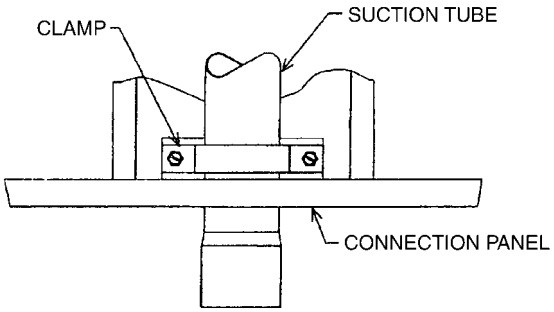
NOTE: LIQUID LINE SOLENOID VALVE MUST NOT BE INSTALLED FOR PUMP DOWN. LIQUID LINE SOLENOID VALVE MAY BE INSTALLED FOR "REFRIGERANT ISOLATION" ONLY DURING THE OFF-CYCLE. THE SOLENOID VALVE SHOULD BE CLOSED WHEN THE THERMOSTAT IS SATISFIED (VALVE CLOSED WHEN "Y" IS DE-ENERGIZED) FOR EFFECTIVE "REFRIGERANT ISOLATION".

COIL BELOW CONDENSING UNIT

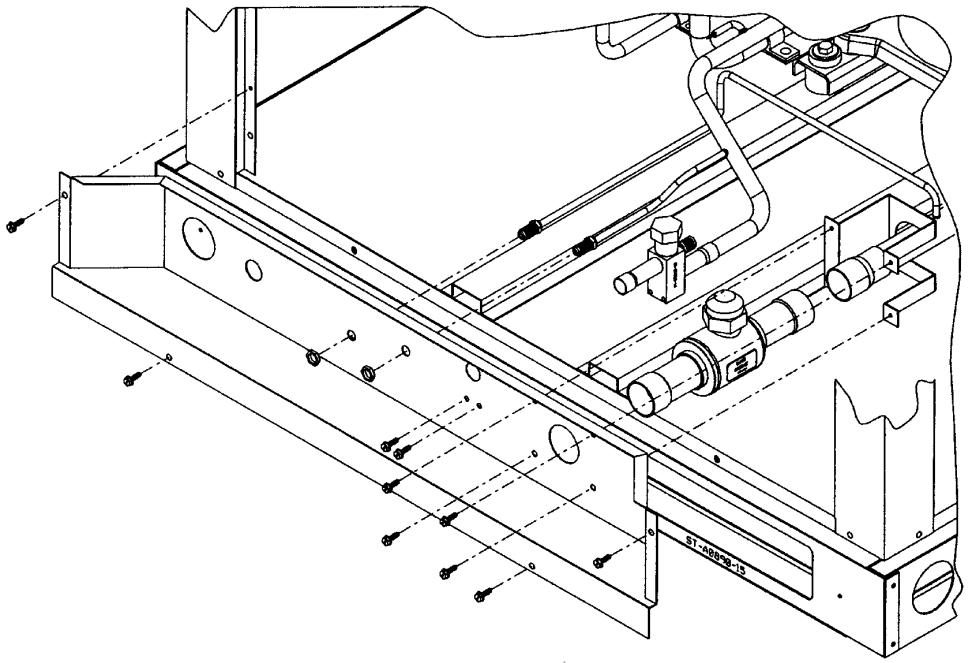


NOTE: PIPING ACCESSORIES SHOWN SHOULD BE MOUNTED AS CLOSE TO AIR HANDLER UNIT AS POSSIBLE

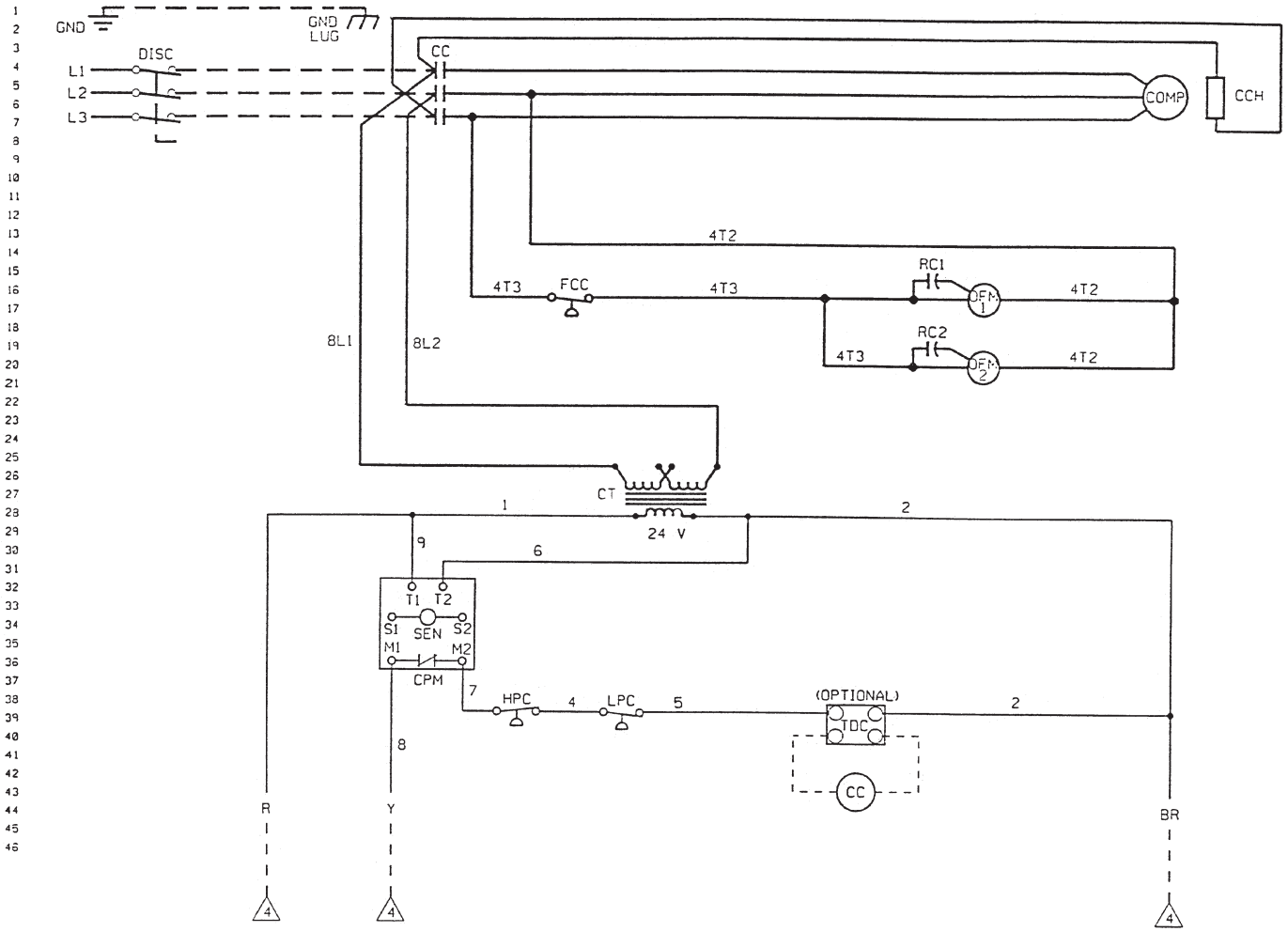
-AWE-181 & 241 MODELS SUCTION CLAMP



-AWE-181 & 241 MODELS WITH OPTIONAL SUCTION SERVICE VALVE



TYPICAL WIRING SCHEMATICS—(RAWD-)



LOW VOLTAGE FIELD CONNECTION

COMPONENT CODE

CC	COMPRESSOR CONTACTOR
COMP	COMPRESSOR
CPM	COMP. PROT. MOD.
CT	CONTROL TRANSFORMER
FCC	FAN CYCLE CONTROL
HPC	HIGH PRESSURE CONTROL
HR	HEATER RELAY
LPC	LOW PRESSURE CONTROL
OFM	OUTDOOR FAN MOTOR
RC	RUN CAPACITOR
TDC	TIME DELAY CONTROL
TH	THERMOSTAT (H/C)
	WIRE NUT

NOTES:

1. REPLACEMENT WIRE & FUSES MUST BE SAME TYPE & SIZE AS ORIGINAL.
2. UNIT MUST BE PERMANENTLY GROUNDED & CONFORM TO N.E.C. & LOCAL CODES.
3. MAXIMUM IN RUSH VA NOT TO EXCEED 92 VA.
4. MINIMUM WIRE SIZE BASED ON 75 DEGREES C INSULATION COPPER WIRE.

WIRING INFORMATION

1. LINE VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
2. LOW VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
3. REPLACEMENT WIRE
   MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105°C MIN.)

WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C., (C.E.C.-CANADA) AND LOCAL CODES.

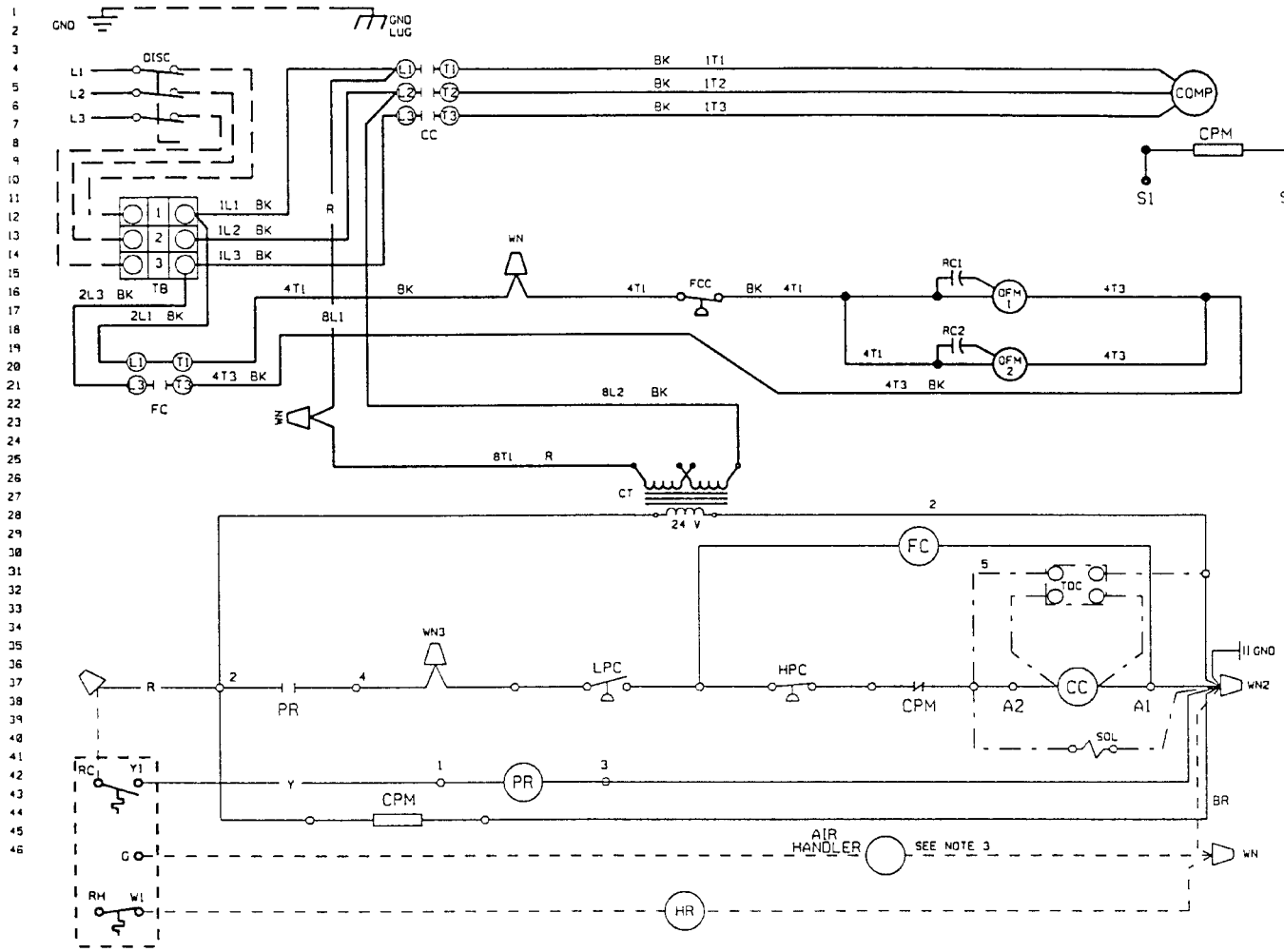
WIRE COLOR CODE

BK — BLACK	PU — PURPLE
BR — BROWN	RD — RED
BU — BLUE	WH — WHITE
GR — GREEN	YL — YELLOW
OR — ORANGE	

WIRING SCHEMATIC
10 TON [35.17 kW]
CONDENSING UNIT
208/230/460/575/3/60

90-42456-06-01

TYPICAL WIRING SCHEMATICS—(RAWD-)



COMPONENT CODE

CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
CPM	COMPRESSOR PROTECTION MODULE
CT	CONTROL TRANSFORMER
FC	FAN MOTOR CONTACTOR
FCC	FAN CYCLE CONTROL
GND	GROUND
HPC	HIGH PRESSURE CONTROL
LPC	LOW PRESSURE CONTROL
MS	METAL STRIP
OFM	OUTDOOR FAN MOTOR
PR	PILOT RELAY
RC	RUN CAPACITOR
TB	TERMINAL BLOCK
TDC	TIME DELAY CONTROL
THM	MOTOR SAFETY THERMOSTAT
	WIRE NUT

NOTES:

1. REPLACEMENT WIRE & FUSES MUST BE SAME TYPE & SIZE AS ORIGINAL.
2. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
3. MAXIMUM IN RUSH VA NOT TO EXCEED 92 VA.
4. MINIMUM WIRE SIZE BASED ON 75 DEGREES C INSULATION COPPER WIRE.

WIRING INFORMATION

1. LINE VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
2. LOW VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
3. REPLACEMENT WIRE
   MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105°C MIN.)

WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C., (C.E.C.-CANADA) AND LOCAL CODES.

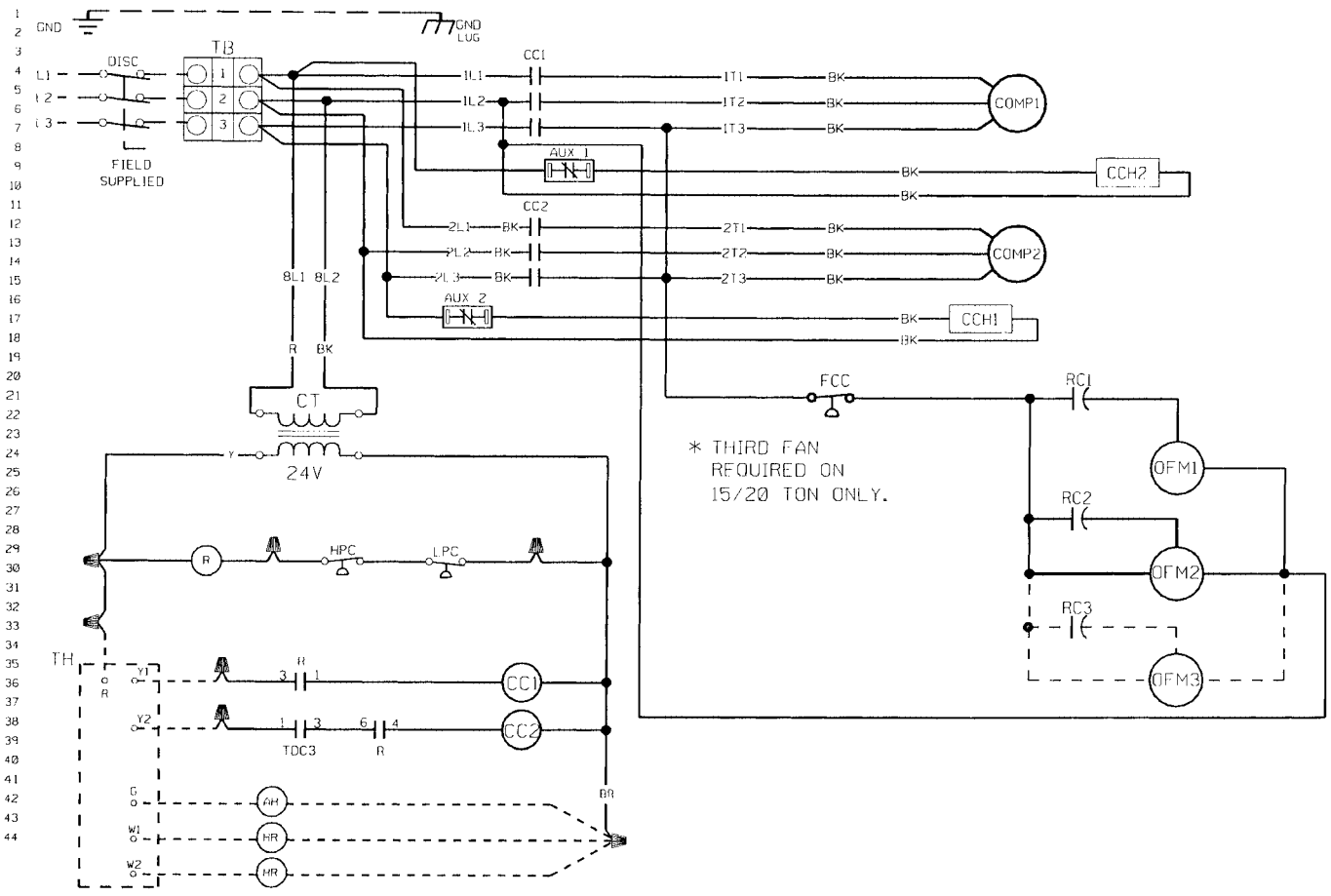
WIRE COLOR CODE

BK — BLACK	O — ORANGE
BR — BROWN	PR — PURPLE
BL — BLUE	R — RED
G — GREEN	W — WHITE
GY — GRAY	Y — YELLOW

WIRING SCHEMATIC CONDENSING UNIT -AWD-151 3 PHASE 208-230, 380, 460 & 575V, 60 Hz 200-220, 380-415V, 50 Hz

90-42456-12-02

TYPICAL WIRING SCHEMATICS—(RAWE-)



COMPONENT CODE

CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DISC	DISCONNECT SWITCH
FC	FAN MOTOR CONTACTOR
FCC	FAN CYCLE CONTROL
GND	GROUND
HR	HEATER RELAY
HPC	HIGH PRESSURE CONTROL
LPC	LOW PRESSURE CONTROL
MS	METAL STRIP
OFM	OUTDOOR FAN MOTOR
RC	RUN CAPACITOR
R	RELAY
TB	TERMINAL BLOCK
TH	THERMOSTAT HEATING
TDC	TIME DELAY CONTROL
THM	MOTOR SAFETY THERMOSTAT
TOR	THERMAL OVERLOAD RELAY
▲	WIRE NUT

NOTES:

1. REPLACEMENT WIRE & FUSES MUST BE SAME TYPE & SIZE AS ORIGINAL.
2. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
3. MAXIMUM IN RUSH VA NOT TO EXCEED 92 VA.
4. MINIMUM WIRE SIZE BASED ON 75 DEGREES C INSULATION COPPER WIRE.

WIRING INFORMATION

1. LINE VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
2. LOW VOLTAGE
   FACTORY STANDARD
   FACTORY OPTION
   FIELD INSTALLED
3. REPLACEMENT WIRE
   MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105°C MIN.)

WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C. (C.E.C.-CANADA) AND LOCAL . CODES AS APPLICABLE.

WIRE COLOR CODE

BK — BLACK	O — ORANGE
BR — BROWN	PR — PURPLE
BL — BLUE	R — RED
G — GREEN	W — WHITE
GY — GRAY	Y — YELLOW

WIRING SCHEMATIC
CONDENSING UNIT
10, 12½, 15 & 20 TON
208-230,
460, 575, 3 PH, 50 & 60 Hz
380, 3 PH, 60 Hz

90-42663-08-03

SAMPLE SPECIFICATIONS

Furnish and install as shown on the drawing Rheem Model _____ air cooled condensing unit suitable for outdoor application.

COMPRESSOR (-AWD-100, 125 and 151)—Unit shall have (1) scroll compressor. It shall be externally mounted on rubber grommets to reduce vibration transmission and noise to surrounding area. Maximum power input shall not be more than _____ at conditions specified.

COMPRESSOR (-AWE-181 and 241)—Units shall have (1) tandem compressor with crankcase heaters, inherent (high temperature) motor overload protection, and durable insulation on the motor windings. Compressor shall be 1750 RPM and have 50% modulation. They shall be mounted on isolators to reduce vibration transmission and noise to surrounding area. Maximum power input shall not be more than _____ on 15 nominal ton [52.8 kW] units and _____ on 20 nominal ton [70.3 kW] units at conditions specified.

HEAD PRESSURE CONTROL—All units shall have standard head pressure controls that cycle the condenser fan motors to maintain condensing pressures for operation down to 40°F [4.4°C] ambient (20 ton [70.3 kW] model only.)

LOW AMBIENT CONTROL—All units shall have standard head pressure controls that cycle the condenser fan motors to maintain condensing pressures for operation down to 0°F [–17.8°C] ambient.

CAPACITY—Capacity shall be _____ BTU/H when operating at _____ °F [°C] saturated suction temperature.

MOTORS & FANS—Each unit shall have two (-AWD-100, 125 and 151) three on (-AWE-181 and 241) 1075 RPM sleeve bearing, permanently lubricated motor(s) fixed with direct-drive, dual bladed fan(s). Motor(s) shall be equipped with inherent overload protection. Motor(s) & fan(s) shall be mounted on hinged top panel for easy access. Condenser air shall discharge vertically.

COILS—Coils shall be fabricated of 3/8" [9.53 mm] O.D. seamless copper tubing and aluminum fins with die-formed collars mechanically bonded to tubes arranged in a staggered pattern. All coils shall be submitted to an air pressure test of up to 450 PSIG after fabrication and dehydrated. Units shall be shippedwith a dry nitrogen holding charge. Coil design shall permit removal of service panels without affecting operation of the unit. Airflow shall be drawn through design providing uniform air distribution across the coil surface.

CASINGS—Casings shall make unit suitable for outdoor installation. Casing, base pan and framework shall be manufactured of galvanized sheet metal subjected to multistage cleaning, primed, and finished with a durable powder coat paint, capable of withstanding a 1000-HR salt spray test per ASTM B 117. Units shall have stamped louver panels offering 100% protection of the condenser coil. Openings shall be provided for power. Dimensions of entire assembly shall be not more than ____ inches [mm] high, ____ inches [mm] long and ____ inches [mm] wide.

REFRIGERATION CIRCUIT—Shall include the compressor, the condenser coils, all internal refrigerant piping and liquid line service valve. Refrigerant stubs shall be extended through the cabinet for external field connection without affecting accessibility to compressor compartment.

CONTROL PANEL—The panel shall be designed for single power source to the compressor and fan motor(s) and shall include fan cycling control, and compressor across-the-line contactor.

SAFETY CONTROLS—Manual reset high pressure and automatic reset low pressure control shall be provided.

FACTORY TESTING—All units shall be test run at the factory. They shall experience the following control testing procedures: High pressure control, switching of electrical components, and compressor operation.

SEQUENCE OF OPERATION

1. When the room temperature is above the thermostat setting, the thermostat (Y1) contacts close and energize the compressor contactor(s) through the safety circuit. On two stage cooling models, should the first stage not be able to satisfy the room requirements, the thermostat (Y2) contacts will close bringing on additional cooling. Two stage models include a 30 second delay between first and second stage. If the unit has “short cycled” and the optional time delay(s) have been supplied, the contactor(s) will remain de-energized for up to five minutes.
2. The system will continue cooling operation, as long as the safety devices remain closed and until the thermostat is satisfied. On two stage models the Y2 contacts will be opened followed by the Y1 contacts as the room conditions are satisfied.
3. When the thermostat is satisfied the compressor or contactor(s) are de-energized.

[ ] Designates Metric Conversions

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

RHEEM
AIR CONDITIONING
DIVISION

5600 Old Greenwood Road, Fort Smith, Arkansas 72908

"In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice."

PRINTED IN U.S.A. 9-07 DC

FORM NO. A11-165 REV. 5
Supersedes Form No. A11-165 Rev. 4