PO Box 5036
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Submittal

Job: 1403

Nathan Clifford
180 Falmouth Street
Portland, ME

Spec Section No: 230000 2.16
Submittal No: 1
Revision No: 0
Sent Date: 3/24/2014
Due Date: 3/31/2014

Spec Section Title:

Submittal Title: Split AC Units

Contractor:
Ranor Mechanical
Wes Sirois

Contractor's Stamp

CCB, Inc

Architect's Stamp

Engineer's Stamp

Digitally signed by Wesley P. Sirois
DN: cn=Wesley P. Sirois, o=Ranor Mechanical, ou, email=wes@ranormech.com, c=US
Date: 2014.03.31 12:53:59 -04'00'

Submittal Information Form

Specifications Dated: 2/21/14

Drawings Dated (if applicable): 2/21/14

1	Project:	Nathan Clifford School
2	Specification Title:	na
3	Description:	ALTERNATE AIR CONDITIONING ONLY
4	Section:	na
5	Page/Sheet #:	na
6	Article/Paragraph:	
7	Basis of Design:	Yes / No (if no please fill out 8-12)
8	Proposed Substitution:	
9	Manufacturer:	GUARDIAN COND UNIT/ YORK AHU
10	Trade Name:	York
11	Model #:	RAC13J364S21/AHR36B3XH21

12 Please list SPECIFICALLY the deviations from the basis of design:

13 Equipment Lead Time (after approved submittals): 6 WEEK

TECHNICAL GUIDE

RAC SERIES

SPLIT-SYSTEM AIR CONDITIONERS

13 SEER – R-410A – 1 PHASE

1.5 THRU 5 NOMINAL TONS

MODELS: RAC13J18 THRU 60

AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

ISO 9000 REGISTRATION
ISO 9001
Certified Quality
Management System

C US

Due to continuous product improvement, specifications are subject to change without notice.

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Additional rating information can be found at:
www.ahridirectory.org

WARRANTY SUMMARY*

Standard 5-Years limited parts warranty.
Standard 5-Years limited compressor warranty.
Extended 10-Years limited parts and compressor warranty when product is registered online within 90 days of purchase for replacement or closing for new home construction.
*Does not apply to R-22 models, 3-Phase models, or internet sales.
See Limited Warranty certificate in User's Information Manual for details.

DESCRIPTION

The 13 SEER Series unit is the outdoor part of a versatile climate system. It is designed with a matching indoor coil component from Johnson Controls Unitary Products. Available for typical applications this climate system is supported with accessories and documents to serve specific functions.

FEATURES

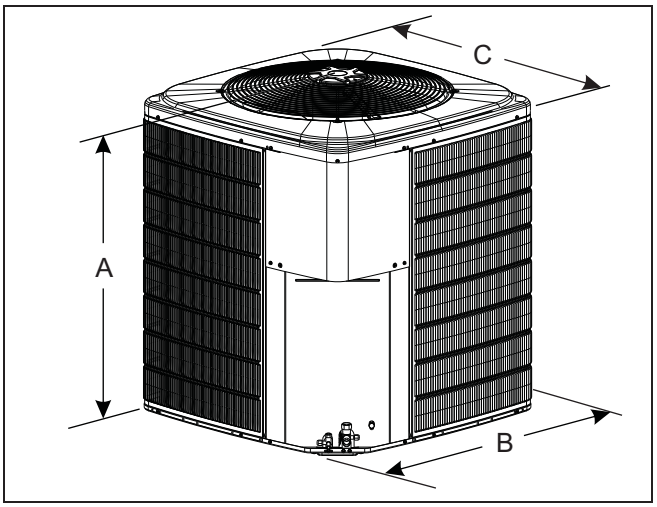
- **Small Footprint** - Extremely lightweight with a compact footprint, it is a perfect fit for any application.
- **Quality Condenser Coils -** The coil is constructed of aluminum microchannel tubing and enhanced aluminum fins for reduced size and increased efficiency.
- **Coil Protection** - Coils are protected from damage by a slotted, stamped steel coil guard.
- **Optional Factory E-Coat -** Available ElectroFin® or factory approved equivalent (contact the factory for details) coated coil on select models.
- **Protected Compressor -** Compressors are protected internally by a high pressure relief valve and a temperature sensor, and externally by the system high pressure switch. A factory installed liquid line filter-drier further protects the compressor against moisture and debris.
- **Environmentally Friendly Refrigerant -** The R-410A refrigerant delivers environmentally friendly performance with zero ozone depletion.
- **Durable Finish -** An automotive quality finish provides the ultimate protection from harmful UV rays and rust-creep, ensuring a long-lasting, high quality apprearance. A powder paint top coat is applied over a baked on primer using a galvanized, zinc coated steel base material.
- **Lower Installed Cost -** Installation time and costs are reduced by easy power and control wiring connections. The unit is factory charged for a 15-foot lineset. The small base dimension means less space is required on the ground or roof.
- **Top Discharge -** Warm air from the top mounted fan is blown up, away fro0m the structure and any landscaping. This allows compact location on multi-unit applications.
- **Low Operating Sound Levels -** The upward air flow carries the normal operating noise away from the living area. The rigid top panel effectively isolates any motor sound. Isolator mounted compressor and the condenser coil muffle the normal fan motor and compressor operating sounds.
- **Low Maintenance -** Long life, permanently lubricated motor-bearings need no annual servicing.
- **Easy Service Access -** Fully exposed refrigerant connections and a single panel covering the electrical controls make for easy servicing of the unit.
- **Secured Service Valves -** Secured, re-usable service valves are provided on both the liquid and vapor sweat connections for ease of evacuating and charging.
- **Agency Listed -** Safety certified by CSA to UL 1995 / CSA 22.2. Performance certified to ANSI/AHRI Standard 210/240 in accordance with the Unitary Small Equipment certification program.

Physical and Electrical Data

MODEL		RAC13J18 4S21(E)	RAC13J24 4S21(E)	RAC13J30 4S21(E)	RAC13J36 4S21(E)	RAC13J42 4S21(E)	RAC13J48 4S21(E)	RAC13J60 4S21(E)
Unit Supply Voltage		208-230V, 1ϕ, 60Hz						
Normal Voltage Range [1]		187 to 252						
Minimum Circuit Ampacity		10.0	12.4	14.7	17.9	21.5	21.1	34.5
Max. Overcurrent Device Amps [2]		15	20	25	30	35	35	60
Min. Overcurrent Device Amps [3]		15	15	15	20	25	25	35
Compressor Amps	Type	Rotary	Recip	Recip	Recip	Recip	Recip	Scroll
	Rated Load	7.6	9.3	10.6	13.1	16	15.7	26.4
	Locked Rotor	40	43	54	74	88	84	134
Crankcase Heater		No	No	No	No	No	No	No
Factory External Discharge Muffler		No	No	No	No	No	Yes	No
Factory External Check Valve		No	No	No	No	No	No	No
HS Kit Required with TXV [4]		Yes	Yes	Yes	Yes	Yes	Yes	No
Fan Diameter Inches		17.5	17.5	17.5	22.0	22.0	22.0	24.0
Fan Motor	Rated HP	1/12	1/8	1/4	1/4	1/4	1/4	1/4
	Rated Load Amps	0.5	0.8	1.4	1.5	1.5	1.5	1.5
	Nominal RPM	1100	1075	1100	850	850	850	850
	Nominal CFM	1400	1950	2050	3200	3050	2950	3400
Coil	Face Area Sq. Ft.	9.60	9.60	9.60	13.07	14.16	14.16	18.68
	Rows Deep	1	1	1	1	1	1	1
	Fins / Inch	23	23	23	23	23	23	23
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		5/8	3/4	3/4	3/4	7/8	7/8	7/8
Unit Charge (Lbs. - Oz.) [5]		3 - 3	3 - 13	3 - 14	4 - 9	4 - 10	4 - 9	5 - 8
Charge Per Foot, Oz.		0.58	0.62	0.62	0.62	0.67	0.67	0.67
Operating Weight Lbs.		97	129	131	145	164	173	220

Models with "E" on the end of the model number have an ElectroFin® or factory approved equivalent (contact the factory for details) coating on the outdoor coil.

1. Rated in accordance with AHRI Standard 110-2012, utilization range "A".
2. Dual element fuses or HACR circuit breaker. Maximum allowable overcurrent protection.
3. Dual element fuses or HACR circuit breaker. Minimum recommended overcurrent protection.
4. See Hard Start Kit Accessory Installation Manual for Hard Start Kit part number for each model.
5. The Unit Charge is correct for the outdoor unit, smallest matched indoor unit, and 15 feet of refrigerant tubing. For tubing lengths other than 15 feet, add or subtract the amount of refrigerant, using the difference in length multiplied by the per foot value.



Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
18	28-1/4	24	24	3/8	3/4
24	28-1/4	24	24		
30	28-1/4	24	24		
36	28-1/4	29-1/2	29-1/2		
42	30-1/4	29-1/2	29-1/2		7/8
48	30-1/4	29-1/2	29-1/2		
60	32-1/4	34	34		

All dimensions are in inches and are subject to change without notice.
Overall height is from bottom of basepan to top of fan guard.
Overall length and width include screw heads.

System Charge for Various Matched Systems							
Outdoor Unit	RAC13J18 4S21(E)	RAC13J24 4S21(E)	RAC13J30 4S21(E)	RAC13J36 4S21(E)	RAC13J42 4S21(E)	RAC13J48 4S21(E)	RAC13J60 4S21(E)
Required Orifice or TXV [1,2]	0.048/4F1	0.055/4F1	0.061/4F1	0.065/4G1	0.073/4G1	0.073/4H1	0.084/4J1
Indoor Unit [3,4,5]	**Additional Charge, oz.**						
RFCX18BE	0	–	–	–	–	–	–
RFCX24BE	–	4	–	–	–	–	–
RFCX30BE	–	4	0	–	–	–	–
RFCX36CE	–	4	2	0	–	–	–
RFCX42DE	–	–	–	8	10	–	–
RFCX48DE	–	–	–	–	9	0	–
RFCX60DE	–	–	–	–	14	–	4
RFCX18BP	0	–	–	–	–	–	–
RFCX24BP	–	4	–	–	–	–	–
RFCX30BP	–	–	0	–	–	–	–
RFCX36BP	–	–	2	0	–	–	–
RFCX42CP	–	–	–	8	10	–	–
RFCX48DP	–	–	–	–	9	0	–
RFCX60DP	–	–	–	–	15	–	4
FC/MC/PC18	0	–	–	–	–	–	–
FC/MC/PC32	–	4	0	–	–	–	–
FC/MC/PC35	–	4	0	–	–	–	–
FC/MC/PC36	–	0	–	–	–	–	–
FC/MC/PC37	–	4	2	0	–	–	–
FC/MC/PC43	–	4	2	0	0	–	–
FC/MC/PC48	–	–	–	8	10	4	–
FC/MC/PC60	–	–	–	–	9	0	0
FC/MC62	–	–	–	–	14	–	4
FC64	–	–	–	–	23	–	11
UC18	0	–	–	–	–	–	–
UC36	–	0	–	–	–	–	–
UC48	–	–	–	8	4	4	–
UC60	–	–	–	–	9	0	0
Some of the combinations shown in the above System Charge table require Advanced Main Air Circulating Fan indoor product. For approved coil only matches, please see the “COOLING CAPACITY - Upflow, Downflow & Horizontal Furnaces and Coils” table.							

FOOTNOTES:

1. For applications requiring a TXV use S1-1TVM*** series kit.
2. Approved orifice(s) shipped with outdoor unit.
3. Systems matched with furnaces or air handlers not equipped with blower-off delays may require blower Time Delay Kit S1-2FD06700224.
4. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.
5. Refer to Cooling Performance Data tables for actual system performance for specified system matches.

PROCEDURES:

1. Unit factory charge listed on the unit nameplate includes refrigerant for the outdoor unit, the smallest matched indoor unit, and 15 feet of interconnecting line tubing.
2. Verify the TXV or orifice and additional charge required for specific matched indoor unit in the system using the above table.
3. Add additional charge for the amount of interconnecting line tubing greater than 15 feet at the rate specified in Physical and Electrical Data Table.
4. For indoor matches requiring additional charge, the refrigerant needs to be weighed in for specific matched indoor unit and lineset length.
5. Permanently mark the unit nameplate with the total system charge. Total System Charge = Base Charge (as shipped) + charge adder for matched indoor unit + charge adder for line set.

IMPORTANT

Models 12-48 require Hard Start Kits for TXV matches. Refer to the Hard Start Kit Accessory Installation Manual for the Hard Start Kit part number for each model.

COOLING CAPACITY - With Air Handler Coils

UNIT MODEL	AIR HANDLER		COIL MODEL[1]	COOLING				
	MODEL	WIDTH		RATED CFM	NET MBH		SEER	EER
					TOTAL	SENS.		
13 SEER AC WITH AIR HANDLERS								
RAC13J184S21(E)	RFCX18BE	17.5	–	610	17.9	13.8	14.75	12.25
	RFCX18BP	17.5	–	665	17.8	13.8	13.00	11.00
RAC13J244S21(E)	RFCX24BE	17.5	–	795	24.4	17.4	14.50	12.00
	RFCX24BP	17.5	–	740	23.8	16.5	13.00	11.00
	RFCX30BE	17.5	–	795	24.4	17.4	14.50	12.00
	RFCX36CE	21.0	–	855	25.2	18.5	15.00	12.50
RAC13J304S21(E)	RFCX30BE	17.5	–	985	29.4	21.4	14.00	11.75
	RFCX30BP	17.5	–	1095	29.4	22.2	13.00	11.00
	RFCX36BP	17.5	–	1060	29.8	22.0	13.00	11.00
	RFCX36CE	21.0	–	1000	30.2	22.0	14.75	12.25
RAC13J364S21(E)	RFCX36BP	17.5	–	1245	34.6	24.6	13.00	11.00
	RFCX36CE	21.0	–	1190	35.6	25.4	14.25	12.00
	RFCX42CP	21.0	–	1230	35.6	25.4	13.00	11.25
	RFCX42DE	24.5	–	1180	35.8	25.8	14.50	12.25
RAC13J424S21(E)	RFCX42CP	21.0	–	1485	42.0	30.8	13.00	11.00
	RFCX42DE	24.5	–	1385	42.0	30.6	14.25	12.00
	RFCX48DE	24.5	–	1385	42.0	30.4	14.00	12.00
	RFCX48DP	24.5	–	1320	41.0	28.8	13.00	11.00
	RFCX60DE	24.5	–	1390	42.0	31.0	14.50	12.00
	RFCX60DP	24.5	–	1350	42.0	30.2	13.00	11.00
RAC13J484S21(E)	RFCX48DE	24.5	–	1600	47.0	34.6	13.75	11.50
	RFCX48DP	24.5	–	1610	48.0	34.6	13.00	11.00
RAC13J604S21(E)	RFCX60DE	24.5	–	1835	56.5	41.1	13.50	11.50
	RFCX60DP	24.5	–	1620	55.0	39.1	13.00	11.00

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ANSI/AHRI Standard 210/240.
Cooling MBH based on 80°F entering air temperature, 50% RH (Relative Humidity), and rated air flow.
EER (Energy Efficiency Ratio) is the total cooling output in BTUs at 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.
SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTUs during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

1. MC coils available with a factory installed horizontal drain pan. See price pages for specific model number.

— = Not applicable.
MA Modular Air Handlers use Coil Only Ratings.

COOLING CAPACITY - Upflow, Downflow & Horizontal Furnaces and Coils (Coil Only Ratings)

UNIT MODEL	COIL		CFM RANGE (MIN.-MAX.)	COOLING				
	MODEL	WIDTH		RATED CFM	NET MBH		SEER [1]	EER
					TOTAL	SENS.		
13 SEER AC COIL ONLY RATINGS								
RAC13J184S21(E)	FC/MC/PC18	14.5,17.5	450-750	600	17.5	12.9	13.00	11.00
	UC18	14.5,17.5	450-750	600	17.5	12.9	13.00	11.00
RAC13J244S21(E)	FC/MC/PC32	14.5	600-1000	800	24.0	16.7	13.00	11.00
	FC/MC/PC35	17.5,21.0	600-1000	800	24.0	16.7	13.00	11.00
	FC/MC/PC36	14.5,17.5,21.0	600-1000	800	24.0	16.7	13.00	11.00
	FC/MC/PC37	14.5	600-1000	800	24.0	16.7	13.00	11.00
	FC/MC/PC43	17.5,21.0	600-1000	800	24.0	16.7	13.00	11.00
	UC36	14.5,17.5,21.0	600-1000	800	24.0	16.7	13.00	11.00
RAC13J304S21(E)	FC/MC/PC32	14.5	800-1200	1000	29.0	21.0	13.00	11.00
	FC/MC/PC35	17.5,21.0	800-1200	1000	29.0	21.0	13.00	11.00
	FC/MC/PC37	14.5	800-1200	1000	29.0	21.0	13.00	11.00
	FC/MC/PC43	17.5,21.0	800-1200	1000	29.0	21.0	13.00	11.00
RAC13J364S21(E)	FC/MC/PC37	14.5	1000-1400	1200	35.0	24.8	13.00	11.00
	FC/MC/PC43	17.5,21.0	1000-1400	1200	35.0	24.8	13.00	11.00
	FC/MC/PC48	21.0,24.5	1000-1400	1200	35.0	24.8	13.00	11.00
	UC48	21.0,24.5	1000-1400	1200	35.0	24.8	13.00	11.00
RAC13J424S21(E)	FC/MC/PC43	17.5,21.0	1200-1600	1400	41.5	29.8	13.00	11.00
	FC/MC/PC48	21.0,24.5	1200-1600	1400	42.0	30.0	13.00	11.00
	FC/MC/PC60	21.0,24.5	1200-1600	1400	41.5	29.6	13.00	11.00
	FC/MC62	24.5	1200-1600	1400	42.0	30.4	13.00	11.00
	FC64	24.5	1200-1600	1400	42.0	30.8	13.25	11.25
	UC48	21.0,24.5	1200-1600	1400	42.0	30.0	13.00	11.00
RAC13J484S21(E)	FC/MC/PC48	21.0,24.5	1400-1800	1600	48.0	34.4	13.00	11.00
	FC/MC/PC60	21.0,24.5	1400-1800	1600	48.0	34.4	13.00	11.00
	UC48	21.0,24.5	1400-1800	1600	48.0	34.4	13.00	11.00
	UC60	21.0,24.5	1400-1800	1600	48.0	34.4	13.00	11.00
RAC13J604S21(E)	FC/MC/PC60	21.0,24.5	1600-2000	1800	55.0	39.1	13.00	11.00
	FC/MC62	24.5	1600-2000	1800	55.5	40.1	13.00	11.00
	FC64	24.5	1600-2000	1800	57.5	42.1	13.50	11.25
	UC60	21.0,24.5	1600-2000	1600	53.5	37.0	13.00	10.75

1. Requires a S1-2FD06700224 Blower Time Delay unless a standard furnace is equipped with one.

MA Modular Air Handlers use Coil Only Ratings.

Furnaces that are listed individually in the above table, such as the RGF1L*P, RGF19*P, and RGF1L*E use Coil Only Ratings.

COOLING CAPACITY - With High Efficiency Motor Furnaces

UNIT MODEL	FURNACE		COIL MODEL[1]	COOLING				
	MODEL	WIDTH		RATED CFM	NET MBH		SEER	EER
					TOTAL	SENS.		
13 SEER AC WITH HIGH EFFICIENCY MOTOR FURNACES[2]								
RAC13J184S21(E)	RGF19*AE10	14.5	FC/MC/PC18A	600	17.6	13.1	13.40	11.75
	RGF19*AE10	14.5	UC18A	600	17.8	13.3	13.25	11.75
	RGF19*BE12	17.5	FC/MC/PC18B	600	17.8	13.3	14.15	12.35
	RGF19*BE12	17.5	UC18B	600	18.0	13.4	14.25	12.25
RAC13J244S21(E)	RGF19*AE10	14.5	FC/MC/PC32A	775	24.2	17.1	13.45	11.75
	RGF19*AE10	14.5	FC/MC/PC36A	800	24.2	17.0	13.50	11.75
	RGF19*AE10	14.5	FC/MC/PC37A	800	24.4	17.4	13.75	11.75
	RGF19*AE10	14.5	UC36A	800	24.4	17.1	13.50	11.50
	RGF19*BE12	17.5	FC/MC/PC35B	800	24.4	17.3	13.75	12.00
	RGF19*BE12	17.5	FC/MC/PC36B	800	24.2	17.1	13.80	12.00
	RGF19*BE12	17.5	FC/MC/PC43B	800	24.6	17.5	14.00	12.00
	RGF19*BE12	17.5	UC36B	800	24.4	17.2	13.75	12.00
	RGF19*CE16	21.0	FC/MC/PC35C	800	24.2	17.2	13.60	11.85
	RGF19*CE16	21.0	FC/MC/PC36C	800	24.2	17.1	13.55	11.80
	RGF19*CE16	21.0	FC/MC/PC43C	800	24.4	17.4	13.75	11.75
	RGF19*CE16	21.0	UC36C	800	24.4	17.2	13.50	11.75
	RGF19*CE20	21.0	FC/MC/PC35C	800	24.6	17.4	14.00	12.25
	RGF19*CE20	21.0	FC/MC/PC36C	800	24.4	17.2	14.00	12.00
	RGF19*CE20	21.0	FC/MC/PC43C	800	24.8	17.6	14.50	12.25
	RGF19*CE20	21.0	UC36C	800	24.6	17.3	14.00	12.25
RAC13J304S21(E)	RGF19*BE12	17.5	FC/MC/PC35B	950	29.0	20.9	14.00	11.90
	RGF19*BE12	17.5	FC/MC/PC43B	950	29.4	21.5	14.00	11.75
	RGF19*CE16	21.0	FC/MC/PC35C	1000	29.0	21.1	14.00	12.00
	RGF19*CE16	21.0	FC/MC/PC43C	1000	29.4	21.5	14.50	12.00
	RGF19*CE20	21.0	FC/MC/PC35C	1000	28.6	20.7	13.25	11.25
	RGF19*CE20	21.0	FC/MC/PC43C	1000	29.2	21.3	13.65	11.60
RAC13J364S21(E)	RGF19*BE12	17.5	FC/MC/PC43B	1125	34.8	24.3	13.50	11.50
	RGF19*CE16	21.0	FC/MC/PC43C	1175	35.2	25.1	13.75	12.00
	RGF19*CE16	21.0	FC/MC/PC48C	1150	35.2	24.9	13.75	12.00
	RGF19*CE16	21.0	FC/MC/PC48D	1175	35.2	24.9	14.00	12.00
	RGF19*CE16	21.0	UC48C	1150	35.2	24.9	13.75	12.00
	RGF19*CE16	21.0	UC48D	1175	35.2	24.9	13.75	12.00
	RGF19*CE20	21.0	FC/MC/PC43C	1150	35.0	24.9	14.00	12.00
	RGF19*CE20	21.0	FC/MC/PC48C	1150	35.2	24.9	14.00	12.00
	RGF19*CE20	21.0	FC/MC/PC48D	1175	35.2	25.1	14.00	12.25
	RGF19*CE20	21.0	UC48C	1150	35.2	24.9	14.00	12.00
	RGF19*CE20	21.0	UC48D	1175	35.2	24.9	14.00	12.25
	RGF19*DE20	24.5	FC/MC/PC48D	1175	35.4	25.1	14.00	12.25
	RGF19*DE20	24.5	UC48D	1175	35.4	24.9	14.00	12.25
RAC13J424S21(E)	RGF19*CE16	21.0	FC/MC/PC48C	1400	41.5	29.4	13.05	11.25
	RGF19*CE16	21.0	FC/MC/PC48D	1400	41.0	29.4	13.05	11.20
	RGF19*CE16	21.0	FC/MC62D	1400	41.5	30.0	13.05	11.25
	RGF19*CE16	21.0	FC64D	1400	42.5	31.0	13.50	11.55
	RGF19*CE20	21.0	FC/MC/PC43C	1325	41.0	29.0	13.50	11.60
	RGF19*CE20	21.0	FC/MC/PC48C	1325	41.5	29.6	13.65	11.70
	RGF19*CE20	21.0	FC/MC/PC48D	1350	41.5	29.6	13.75	11.75

For notes see Page 8.

COOLING CAPACITY - With High Efficiency Motor Furnaces (Continued)

UNIT MODEL	FURNACE		COIL MODEL[1]	COOLING				
	MODEL	WIDTH		RATED CFM	NET MBH		SEER	EER
					TOTAL	SENS.		
13 SEER AC WITH HIGH EFFICIENCY MOTOR FURNACES[2]								
RAC13J424S21(E)	RGF19*CE20	21.0	FC/MC/PC60D	1350	41.0	29.2	13.55	11.65
	RGF19*CE20	21.0	FC/MC62D	1350	41.5	30.2	13.70	11.75
	RGF19*CE20	21.0	FC64D	1350	43.0	31.2	14.20	12.05
	RGF19*CE20	21.0	UC48C	1325	41.5	29.6	13.55	11.70
	RGF19*CE20	21.0	UC48D	1350	41.5	29.6	13.50	11.50
	RGF19*CE20	21.0	UC60D	1350	41.0	29.2	13.25	11.50
	RGF19*DE20	24.5	FC/MC/PC48D	1325	42.0	29.8	13.80	11.85
	RGF19*DE20	24.5	FC/MC/PC60D	1325	41.0	29.2	13.60	11.70
	RGF19*DE20	24.5	FC/MC62D	1325	42.0	30.2	13.80	11.85
	RGF19*DE20	24.5	FC64D	1325	43.0	31.4	14.30	12.15
	RGF19*DE20	24.5	UC48D	1325	41.5	29.6	13.75	11.80
	RGF19*DE20	24.5	UC60D	1325	41.0	29.2	13.60	11.65
RAC13J484S21(E)	RGF19*CE20	21.0	FC/MC/PC48C	1500	47.5	33.6	13.05	11.25
	RGF19*DE20	24.5	FC/MC/PC48D	1525	48.0	34.2	13.25	11.50
	RGF19*DE20	24.5	FC/MC/PC60D	1550	47.5	33.8	13.25	11.50
RAC13J604S21(E)	RGF19*CE20	21.0	FC/MC62D	1550	54.0	37.8	13.25	11.00
	RGF19*CE20	21.0	FC64D	1550	56.0	39.3	13.50	11.50
	RGF19*DE20	24.5	FC/MC/PC60D	1550	53.5	36.7	13.25	11.00
	RGF19*DE20	24.5	FC/MC62D	1550	54.0	37.8	13.25	11.00
	RGF19*DE20	24.5	FC64D	1525	56.0	39.3	13.75	11.50

1. MC coils available with a factory installed horizontal drain pan. See price pages for specific model number.
2. High Efficiency Motor Furnaces have B.O.D (Blower on Delay) standard.

Furnaces that are listed individually in the above table, such as the RGF1L*P, RGF19*P, and RGF1L*E use Coil Only Ratings.

ACCESSORIES

Refer to Price Manual for specific model numbers.

Off Cycle Timer Delay - Provides a 5-minute off cycle to prevent rapid recycling of the compressor.

Start Assist Kit (S1-2SA067*) - Provides increased starting torque for areas with low voltage. See Hard Start Kit Accessory Installation Manual for Hard Start Kit part number for each model.

TXV Kits - S1-1TVM series thermal expansion valves precisely meter refrigerant for optimum performance over a wide range of conditions. See System Charge table for TXV part number for each model.

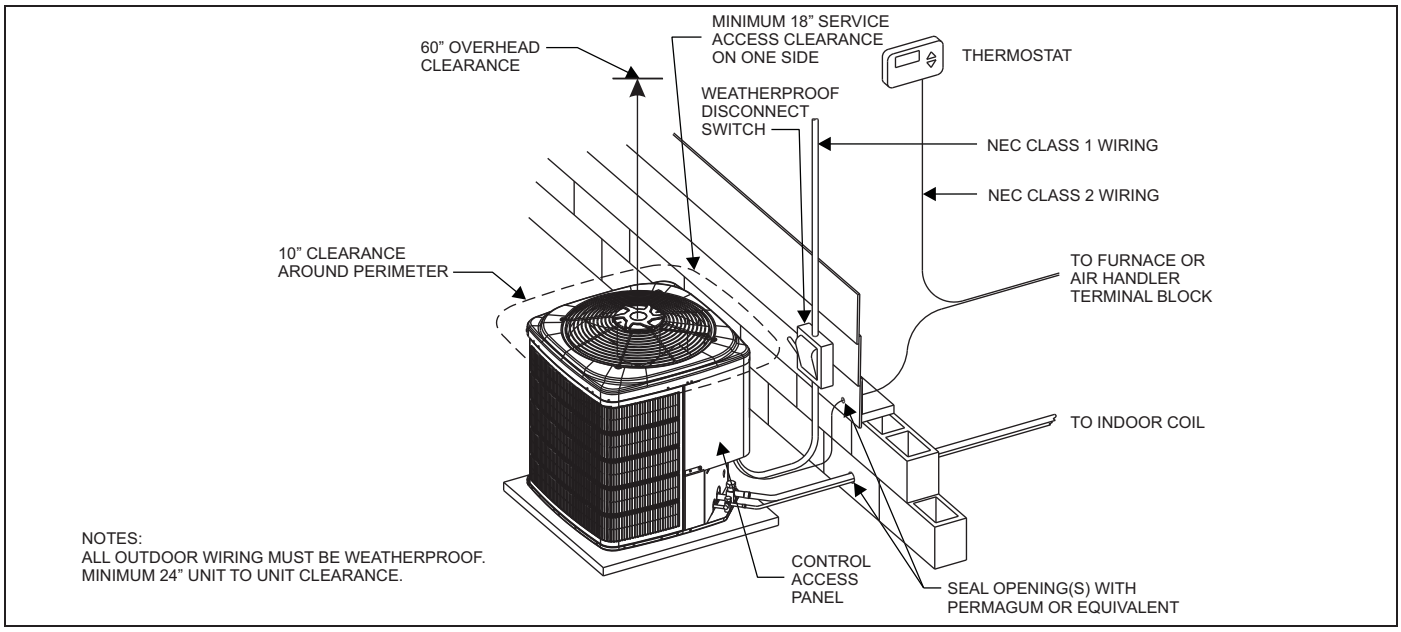
Thermostats - Compatible thermostat controls are available through accessory sourcing. For optimum performance and installation, refer to the UPGNET “Low Voltage Wiring Diagram” document to select and apply controls.

SOUND POWER RATINGS

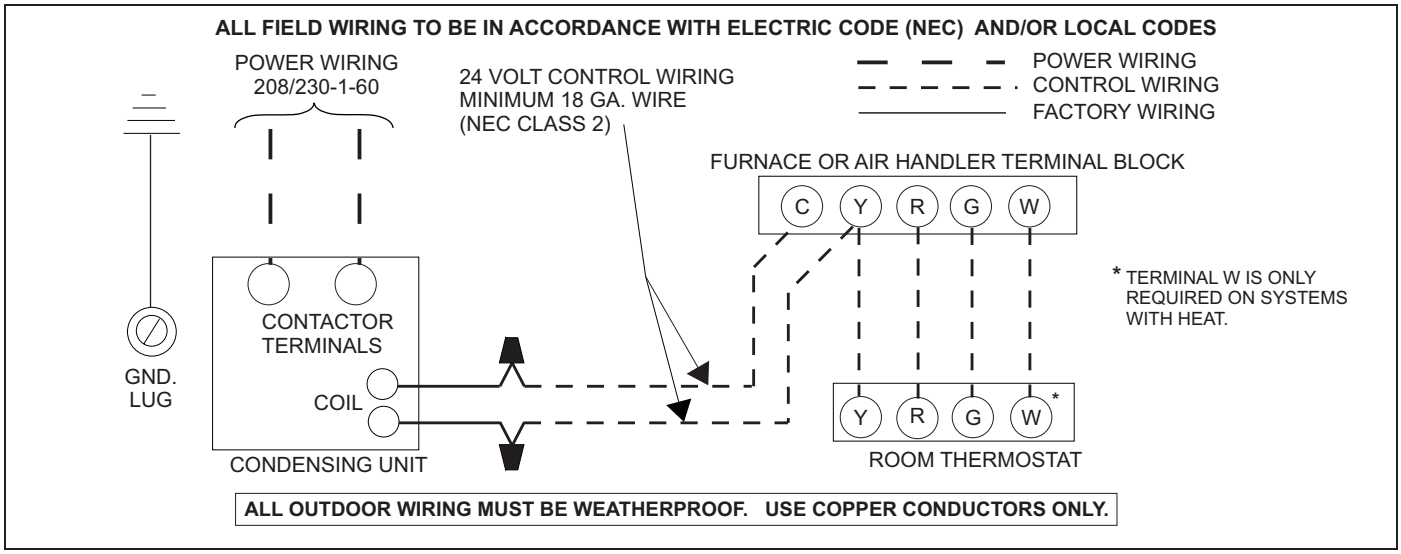
UNIT MODEL	(dBA)
18	75
24	76
30	76
36	76
42	76
48	77
60	75

Rated in accordance with ARI Standard 270-1995.

TYPICAL INSTALLATION



TYPICAL FIELD WIRING



COOLING PERFORMANCE DATA																
AIR CONDITIONER MODEL NO.		**RAC13J184S21(E)**														
INDOOR COIL MODEL NO.		**FC/MC/PC18**														
CONDENSING ENTERING AIR TEMPERATURE	**IDCFM**	450					600					750				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	16.3	18.4	18.3	20.1	20.7	17.5	19.0	18.7	20.2	20.9	18.7	19.6	19.1	20.3	21.1
	S.C.	16.3	14.5	12.7	12.6	9.7	17.5	17.1	14.2	13.6	10.3	18.7	17.2	15.7	14.6	10.9
	KW	1.16	1.16	1.16	1.15	1.14	1.21	1.21	1.21	1.20	1.20	1.26	1.26	1.27	1.26	1.25
75	T.C.	15.6	17.4	17.3	19.0	19.9	16.8	18.1	17.7	19.3	20.1	18.1	18.8	18.2	19.5	20.3
	S.C.	15.6	14.3	12.2	12.2	9.3	16.8	16.3	13.8	13.4	10.1	18.1	18.4	15.4	14.6	10.8
	KW	1.28	1.28	1.28	1.28	1.27	1.34	1.34	1.34	1.33	1.33	1.39	1.39	1.39	1.39	1.39
85	T.C.	14.8	16.4	16.2	18.0	19.2	16.1	17.2	16.7	18.4	19.3	17.4	18.0	17.3	18.8	19.5
	S.C.	14.8	14.0	11.8	11.7	9.0	16.1	15.6	13.5	13.2	9.8	17.4	17.2	15.1	14.6	10.6
	KW	1.40	1.41	1.40	1.41	1.41	1.46	1.46	1.46	1.46	1.47	1.52	1.52	1.52	1.52	1.52
95	T.C.	14.0	15.4	15.1	17.0	18.4	15.4	16.3	15.8	17.5	18.6	16.7	17.2	16.4	18.0	18.7
	S.C.	14.0	13.8	11.3	11.3	8.6	15.4	14.8	13.1	13.0	9.6	16.7	15.9	14.9	14.6	10.5
	KW	1.53	1.53	1.53	1.53	1.54	1.59	1.59	1.59	1.59	1.60	1.65	1.65	1.65	1.65	1.66
105	T.C.	13.0	14.2	13.7	15.6	17.1	14.3	15.1	14.3	16.1	17.3	15.5	16.1	15.0	16.6	17.4
	S.C.	13.0	13.1	10.7	10.8	8.3	14.3	14.0	12.4	12.5	9.3	15.5	14.9	14.0	14.3	10.3
	KW	1.69	1.69	1.69	1.70	1.71	1.75	1.75	1.75	1.76	1.77	1.82	1.82	1.81	1.82	1.83
115	T.C.	12.1	13.0	12.3	14.3	15.9	13.2	14.0	13.0	14.7	16.0	14.3	15.0	13.6	15.2	16.2
	S.C.	12.1	12.4	10.1	10.3	8.0	13.2	13.1	11.7	12.1	9.0	14.3	13.8	13.2	13.9	10.1
	KW	1.85	1.85	1.84	1.85	1.87	1.91	1.91	1.91	1.92	1.94	1.98	1.98	1.97	1.98	2.00
125	T.C.	11.1	11.9	10.9	12.9	14.7	12.1	12.9	11.6	13.4	14.8	13.1	13.9	12.3	13.8	14.9
	S.C.	11.1	11.8	9.5	9.8	7.6	12.1	12.3	10.9	11.7	8.7	13.1	12.8	12.3	13.5	9.8
	KW	2.00	2.00	1.99	2.01	2.04	2.08	2.07	2.06	2.08	2.10	2.15	2.14	2.13	2.15	2.16
NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).																

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC18	1.00	1.00	1.00
–	UC18	1.00	1.00	1.00
RFCX18BE	–	1.02	1.07	0.92
RFCX18BP	–	1.02	1.07	1.02

Furnaces	Coils	T.C.	S.C.	KW
RGF19*AE10	FC/MC/PC18A	1.01	1.02	0.94
RGF19*AE10	UC18A	1.02	1.03	0.95
RGF19*BE12	FC/MC/PC18B	1.02	1.03	0.91
RGF19*BE12	UC18B	1.03	1.04	0.92

COOLING PERFORMANCE DATA																
AIR CONDITIONER MODEL NO.		**RAC13J244S21(E)**														
INDOOR COIL MODEL NO.		**FC/MC/PC36**														
CONDENSING ENTERING AIR TEMPERATURE	**IDCFM**	600					800					1000				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	20.5	25.5	25.4	27.0	28.2	22.6	26.7	26.5	28.3	29.5	24.7	28.0	27.7	29.6	30.8
	S.C.	20.5	19.1	16.6	16.3	13.3	22.6	22.0	18.8	18.0	14.2	24.7	24.9	21.0	19.7	15.1
	KW	1.66	1.67	1.67	1.67	1.67	1.73	1.74	1.74	1.74	1.74	1.81	1.81	1.82	1.82	1.82
75	T.C.	19.1	23.5	23.4	25.5	27.2	21.4	25.0	24.7	26.9	28.6	23.7	26.4	26.0	28.2	29.9
	S.C.	19.1	18.5	15.7	15.8	12.8	21.4	21.1	18.0	17.6	13.8	23.7	23.8	20.4	19.4	14.9
	KW	1.79	1.80	1.80	1.81	1.82	1.87	1.87	1.88	1.89	1.90	1.95	1.95	1.95	1.97	1.98
85	T.C.	17.7	21.6	21.3	24.0	26.3	20.2	23.2	22.8	25.4	27.6	22.7	24.8	24.3	26.9	28.9
	S.C.	17.7	17.9	14.9	15.3	12.3	20.2	20.3	17.3	17.2	13.5	22.7	22.7	19.7	19.1	14.6
	KW	1.92	1.92	1.92	1.95	1.98	2.01	2.01	2.01	2.04	2.06	2.09	2.10	2.09	2.12	2.14
95	T.C.	16.3	19.6	19.3	22.5	25.3	19.0	21.5	21.0	24.0	26.7	21.7	23.3	22.6	25.5	28.0
	S.C.	16.3	17.3	14.1	14.7	11.9	19.0	19.5	16.5	16.8	13.1	21.6	21.6	19.0	18.9	14.4
	KW	2.05	2.05	2.05	2.09	2.14	2.14	2.15	2.14	2.18	2.22	2.24	2.24	2.23	2.27	2.30
105	T.C.	15.0	17.7	17.1	20.1	23.1	17.4	19.5	18.8	21.6	24.4	19.8	21.3	20.4	23.1	25.8
	S.C.	15.0	15.9	13.1	13.8	11.1	17.4	17.8	15.3	15.9	12.5	19.8	19.8	17.4	18.0	13.9
	KW	2.17	2.17	2.16	2.22	2.28	2.28	2.28	2.26	2.31	2.37	2.38	2.39	2.36	2.41	2.45
115	T.C.	13.8	15.8	15.0	17.9	20.9	15.9	17.6	16.6	19.3	22.2	18.0	19.4	18.3	20.7	23.6
	S.C.	13.8	14.6	12.1	12.9	10.4	15.9	16.3	14.0	15.0	11.8	17.9	17.9	15.8	17.1	13.3
	KW	2.29	2.29	2.27	2.34	2.41	2.41	2.41	2.38	2.44	2.51	2.53	2.53	2.49	2.54	2.60
125	T.C.	12.5	13.9	12.8	15.7	18.7	14.4	15.7	14.5	17.0	20.1	16.2	17.5	16.2	18.4	21.4
	S.C.	12.5	13.4	11.2	12.0	9.6	14.4	14.7	12.7	14.1	11.2	16.1	16.1	14.3	16.2	12.8
	KW	2.41	2.41	2.38	2.46	2.55	2.54	2.54	2.50	2.56	2.65	2.67	2.67	2.61	2.67	2.75
NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).																

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC32	1.00	1.00	1.00
–	FC/MC/PC35	1.00	1.00	1.00
–	FC/MC/PC36	1.00	1.00	1.00
–	FC/MC/PC37	1.00	1.00	1.00
–	FC/MC/PC43	1.00	1.00	1.00
–	UC36	1.00	1.00	1.00
RFCX24BE	–	1.02	1.04	0.93
RFCX30BE	–	1.02	1.04	0.93
RFCX36CE	–	1.05	1.11	0.92
RFCX24BP	–	0.99	0.99	0.99

Furnaces	Coils	T.C.	S.C.	KW
RGF19*AE10	FC/MC/PC32A	1.01	1.02	0.94
RGF19*AE10	FC/MC/PC36A	1.01	1.02	0.94
RGF19*AE10	FC/MC/PC37A	1.02	1.04	0.95
RGF19*AE10	UC36A	1.02	1.02	0.97
RGF19*BE12	FC/MC/PC35B	1.02	1.04	0.93
RGF19*BE12	FC/MC/PC36B	1.01	1.02	0.92
RGF19*BE12	FC/MC/PC43B	1.03	1.05	0.94
RGF19*BE12	UC36B	1.02	1.03	0.93
RGF19*CE16	FC/MC/PC35C	1.01	1.03	0.94
RGF19*CE16	FC/MC/PC36C	1.01	1.02	0.94
RGF19*CE16	FC/MC/PC43C	1.02	1.04	0.95
RGF19*CE16	UC36C	1.02	1.03	0.95
RGF19*CE20	FC/MC/PC35C	1.03	1.04	0.92
RGF19*CE20	FC/MC/PC36C	1.02	1.03	0.93
RGF19*CE20	FC/MC/PC43C	1.03	1.05	0.93
RGF19*CE20	UC36C	1.03	1.04	0.92

COOLING PERFORMANCE DATA

AIR CONDITIONER MODEL NO.		RAC13J304S21(E)														
INDOOR COIL MODEL NO.		FC/MC/PC32														
CONDENSING ENTERING AIR TEMPERATURE	IDCFM	800					1000					1200				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	30.2	33.4	32.8	35.2	36.5	31.7	33.9	33.4	35.5	36.7	33.2	34.3	34.1	35.9	36.9
	S.C.	28.9	26.3	22.1	21.6	16.3	30.3	29.5	24.0	23.0	17.4	31.8	32.6	25.9	24.4	18.5
	KW	2.18	2.20	2.20	2.21	2.23	2.27	2.28	2.29	2.42	2.32	2.37	2.36	2.38	2.63	2.41
75	T.C.	28.0	30.7	30.0	32.9	34.7	29.7	31.5	30.7	33.3	34.8	31.3	32.4	31.5	33.8	35.0
	S.C.	26.9	25.2	20.9	20.7	15.6	28.4	27.6	23.0	22.4	16.7	30.0	30.1	25.1	24.1	17.8
	KW	2.36	2.37	2.37	2.40	2.43	2.46	2.47	2.47	2.49	2.53	2.56	2.56	2.56	2.58	2.62
85	T.C.	25.9	28.0	27.2	30.6	32.8	27.7	29.2	28.0	31.2	33.0	29.5	30.5	28.8	31.7	33.1
	S.C.	24.8	24.0	19.8	19.8	15.0	26.5	25.8	22.0	21.8	16.1	28.2	27.5	24.3	23.8	17.1
	KW	2.54	2.54	2.54	2.59	2.64	2.65	2.65	2.64	2.56	2.73	2.76	2.75	2.74	2.54	2.83
95	T.C.	23.8	25.3	24.5	28.3	31.0	25.7	26.9	25.3	29.0	31.1	27.6	28.6	26.2	29.7	31.3
	S.C.	22.8	22.9	18.6	18.9	14.4	24.6	23.9	21.0	21.2	15.4	26.5	25.0	23.5	23.5	16.5
	KW	2.72	2.72	2.71	2.78	2.84	2.84	2.83	2.81	2.64	2.94	2.95	2.94	2.92	2.49	3.04
105	T.C.	21.8	23.1	21.7	25.2	27.9	23.4	24.6	22.6	25.8	28.0	25.0	26.1	23.5	26.4	28.1
	S.C.	20.9	21.1	17.4	17.7	13.4	22.4	22.2	19.3	19.3	14.5	24.0	23.3	21.3	20.8	15.7
	KW	2.91	3.02	2.88	2.96	3.04	3.03	3.08	2.99	2.90	3.14	3.15	3.14	3.10	2.84	3.24
115	T.C.	19.8	21.1	19.1	22.2	25.0	21.2	22.4	19.9	22.7	25.0	22.6	23.6	20.8	23.2	25.0
	S.C.	19.0	19.3	16.2	16.7	12.5	20.3	20.5	17.7	17.4	13.7	21.6	21.6	19.2	18.2	14.9
	KW	3.10	3.31	3.05	3.14	3.23	3.22	3.33	3.17	3.16	3.33	3.34	3.34	3.29	3.18	3.43
125	T.C.	17.8	19.0	16.4	19.2	22.0	19.0	20.1	17.3	19.6	22.0	20.1	21.2	18.2	20.0	22.0
	S.C.	17.1	17.5	15.1	15.6	11.6	18.2	18.7	16.1	15.6	12.9	19.2	20.0	17.1	15.6	14.2
	KW	3.28	3.61	3.22	3.31	3.42	3.41	3.57	3.34	3.42	3.52	3.53	3.54	3.47	3.53	3.63

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC32	1.00	1.00	1.00
–	FC/MC/PC35	1.00	1.00	1.00
–	FC/MC/PC37	1.00	1.00	1.00
–	FC/MC/PC43	1.00	1.00	1.00
RFCX30BE	–	1.01	1.02	0.95
RFCX36CE	–	1.04	1.05	0.94
RFCX30BP	–	1.01	1.06	1.01
RFCX36BP	–	1.03	1.05	1.03

Furnaces	Coils	T.C.	S.C.	KW
RGF19*BE12	FC/MC/PC35B	1.00	1.00	0.92
RGF19*BE12	FC/MC/PC43B	1.01	1.02	0.95
RGF19*CE16	FC/MC/PC35C	1.00	1.00	0.92
RGF19*CE16	FC/MC/PC43C	1.01	1.02	0.93
RGF19*CE20	FC/MC/PC35C	0.99	0.99	0.96
RGF19*CE20	FC/MC/PC43C	1.01	1.01	0.95

COOLING PERFORMANCE DATA																	
AIR CONDITIONER MODEL NO.		**RAC13J364S21(E)**															
INDOOR COIL MODEL NO.		**FC/MC/PC37**															
CONDENSING ENTERING AIR TEMPERATURE	**IDCFM**	1000					1200					1400					
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80	
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72	
65	T.C.	35.3	37.4	37.0	39.3	40.4	36.3	38.1	37.4	39.7	40.2	37.3	38.8	37.8	40.1	40.1	
	S.C.	33.1	29.8	25.3	24.2	18.1	34.1	31.8	26.8	25.2	18.5	35.2	33.8	28.3	26.1	18.9	
	KW	2.40	2.42	2.41	2.44	2.44	2.49	2.50	2.50	2.53	2.53	2.58	2.58	2.60	2.61	2.63	
75	T.C.	33.8	35.6	35.1	37.7	39.3	34.9	36.4	35.6	38.1	39.3	36.1	37.2	36.1	38.5	39.3	
	S.C.	31.7	29.4	24.8	23.9	17.9	32.9	31.4	26.5	25.1	18.5	34.1	33.3	28.2	26.3	19.1	
	KW	2.61	2.63	2.62	2.66	2.67	2.71	2.72	2.71	2.75	2.77	2.80	2.80	2.80	2.83	2.86	
85	T.C.	32.4	33.8	33.3	36.2	38.1	33.6	34.7	33.8	36.6	38.3	34.8	35.6	34.4	37.0	38.4	
	S.C.	30.4	29.0	24.3	23.5	17.7	31.7	30.9	26.1	25.0	18.5	33.0	32.8	28.0	26.5	19.3	
	KW	2.82	2.84	2.84	2.88	2.91	2.92	2.93	2.92	2.96	3.00	3.02	3.03	3.01	3.05	3.09	
95	T.C.	31.0	32.0	31.5	34.6	37.0	32.3	33.0	32.1	35.0	37.3	33.6	34.0	32.7	35.4	37.6	
	S.C.	29.0	28.6	23.7	23.1	17.5	30.5	30.5	25.8	24.9	18.5	31.9	32.3	27.9	26.6	19.5	
	KW	3.04	3.05	3.05	3.09	3.14	3.14	3.15	3.13	3.18	3.23	3.24	3.25	3.22	3.27	3.32	
105	T.C.	28.0	28.9	27.8	31.1	34.3	28.9	29.9	28.5	31.6	34.6	29.9	30.9	29.2	32.0	34.9	
	S.C.	26.3	26.2	22.0	21.9	16.6	27.4	27.8	23.8	23.8	17.7	28.5	29.4	25.6	25.7	18.9	
	KW	3.25	3.25	3.23	3.30	3.37	3.36	3.36	3.33	3.39	3.47	3.47	3.47	3.43	3.49	3.56	
115	T.C.	25.0	25.9	24.3	27.8	31.7	25.7	26.9	25.1	28.2	32.0	26.4	27.9	25.9	28.7	32.3	
	S.C.	23.7	23.9	20.3	20.8	15.8	24.4	25.2	21.8	22.8	17.0	25.2	26.6	23.4	24.7	18.3	
	KW	3.45	3.46	3.42	3.50	3.60	3.57	3.57	3.52	3.60	3.70	3.68	3.69	3.63	3.70	3.79	
125	T.C.	22.1	22.9	20.7	24.4	29.0	22.5	23.9	21.7	24.9	29.3	22.9	24.9	22.6	25.4	29.6	
	S.C.	21.1	21.5	18.6	19.7	15.0	21.5	22.7	19.9	21.7	16.3	21.9	23.8	21.1	23.8	17.7	
	KW	3.65	3.66	3.60	3.70	3.83	3.78	3.78	3.71	3.80	3.93	3.90	3.91	3.83	3.91	4.03	
NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).																	

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC37	1.00	1.00	1.00
–	FC/MC/PC43	1.00	1.00	1.00
–	FC/MC/PC48	1.00	1.00	1.00
–	UC48	1.00	1.00	1.00
RFCX36CE	–	1.02	1.02	0.93
RFCX42DE	–	1.02	1.04	0.92
RFCX36BP	–	0.99	0.99	0.99
RFCX42CP	–	1.02	1.02	0.99

Furnaces	Coils	T.C.	S.C.	KW
RGF19*BE12	FC/MC/PC43B	0.99	0.98	0.95
RGF19*CE16	FC/MC/PC43C	1.01	1.01	0.92
RGF19*CE16	FC/MC/PC48C	1.01	1.00	0.92
RGF19*CE16	FC/MC/PC48D	1.01	1.00	0.92
RGF19*CE16	UC48C	1.01	1.00	0.92
RGF19*CE16	UC48D	1.01	1.00	0.92
RGF19*CE20	FC/MC/PC43C	1.00	1.00	0.92
RGF19*CE20	FC/MC/PC48C	1.01	1.00	0.92
RGF19*CE20	FC/MC/PC48D	1.01	1.01	0.90
RGF19*CE20	UC48C	1.01	1.00	0.92
RGF19*CE20	UC48D	1.01	1.00	0.90
RGF19*DE20	FC/MC/PC48D	1.01	1.01	0.91
RGF19*DE20	UC48D	1.01	1.00	0.91

COOLING PERFORMANCE DATA

AIR CONDITIONER MODEL NO.		RAC13J424S21(E)														
INDOOR COIL MODEL NO.		FC/MC/PC43														
CONDENSING ENTERING AIR TEMPERATURE	IDCFM	1200					1400					1600				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	41.8	43.9	43.7	47.2	49.9	43.3	45.0	44.7	47.9	50.9	44.7	46.0	45.7	48.5	51.9
	S.C.	41.6	36.4	30.9	29.8	23.8	43.0	38.5	32.5	31.0	24.2	44.3	40.7	34.0	32.2	24.5
	KW	2.79	2.81	2.82	2.82	2.85	2.80	2.82	2.82	2.83	2.85	2.80	2.83	2.82	2.84	2.86
75	T.C.	39.8	41.2	41.3	45.1	48.2	41.4	42.3	42.2	45.7	49.0	42.9	43.3	43.2	46.4	49.8
	S.C.	39.5	35.2	29.8	29.1	23.1	41.0	37.4	31.6	30.6	23.8	42.5	39.7	33.5	32.1	24.5
	KW	3.08	3.10	3.10	3.13	3.17	3.10	3.11	3.11	3.14	3.18	3.12	3.13	3.12	3.15	3.19
85	T.C.	37.8	38.6	38.8	43.0	46.5	39.4	39.6	39.7	43.6	47.1	41.0	40.6	40.7	44.3	47.7
	S.C.	37.5	34.1	28.7	28.4	22.4	39.1	36.4	30.8	30.2	23.4	40.7	38.7	32.9	32.0	24.5
	KW	3.38	3.39	3.39	3.44	3.50	3.41	3.41	3.41	3.46	3.51	3.43	3.42	3.42	3.47	3.52
95	T.C.	35.8	35.9	36.3	40.9	44.8	37.5	36.9	37.3	41.5	45.2	39.2	37.9	38.2	42.1	45.6
	S.C.	35.4	33.0	27.6	27.7	21.7	37.1	35.3	30.0	29.8	23.0	38.8	37.6	32.3	31.9	24.4
	KW	3.67	3.68	3.68	3.76	3.82	3.71	3.70	3.70	3.77	3.83	3.75	3.72	3.72	3.79	3.84
105	T.C.	33.1	33.1	32.6	37.0	41.6	34.7	34.2	33.5	37.6	42.0	36.3	35.4	34.4	38.2	42.4
	S.C.	32.7	31.0	26.3	26.4	20.7	34.3	33.1	28.4	28.6	22.1	35.9	35.2	30.5	30.8	23.5
	KW	3.98	3.98	3.96	4.05	4.14	4.02	4.01	3.98	4.07	4.16	4.06	4.05	4.01	4.09	4.18
115	T.C.	30.5	30.2	28.9	33.3	38.4	32.0	31.6	29.8	33.8	38.8	33.4	33.0	30.8	34.4	39.3
	S.C.	30.2	29.1	25.0	25.1	19.8	31.6	30.9	26.8	27.4	21.3	33.1	32.7	28.7	29.6	22.7
	KW	4.27	4.27	4.22	4.33	4.45	4.32	4.31	4.26	4.36	4.48	4.37	4.36	4.29	4.39	4.51
125	T.C.	27.9	27.4	25.2	29.5	35.2	29.2	29.0	26.2	30.0	35.7	30.6	30.5	27.1	30.5	36.2
	S.C.	27.6	27.3	23.7	23.8	18.9	28.9	28.8	25.3	26.2	20.4	30.3	30.3	26.9	28.5	21.8
	KW	4.57	4.56	4.49	4.62	4.77	4.62	4.62	4.53	4.65	4.80	4.67	4.67	4.57	4.68	4.84

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC43	1.00	1.00	1.00
–	FC/MC/PC48	1.01	1.01	1.01
–	FC/MC/PC60	1.00	0.99	1.00
–	FC/MC62	1.01	1.02	1.01
–	FC64	1.01	1.03	0.99
–	UC48	1.01	1.01	1.01
RFCX42DE	–	1.01	1.03	0.93
RFCX48DE	–	1.01	1.02	0.93
RFCX60DE	–	1.01	1.04	0.93
RFCX42CP	–	1.01	1.03	1.01
RFCX48DP	–	0.99	0.97	0.99
RFCX60DP	–	1.01	1.01	1.01

Furnaces	Coils	T.C.	S.C.	KW
RGF19*CE16	FC/MC/PC48C	1.00	0.99	0.98
RGF19*CE16	FC/MC/PC48D	0.99	0.99	0.97
RGF19*CE16	FC/MC62D	1.00	1.01	0.98
RGF19*CE16	FC64D	1.02	1.04	0.98
RGF19*CE20	FC/MC/PC43C	0.99	0.97	0.94
RGF19*CE20	FC/MC/PC48C	1.00	0.99	0.94
RGF19*CE20	FC/MC/PC48D	1.00	0.99	0.94
RGF19*CE20	FC/MC/PC60D	0.99	0.98	0.93
RGF19*CE20	FC/MC62D	1.00	1.01	0.94
RGF19*CE20	FC64D	1.04	1.05	0.95
RGF19*CE20	UC48C	1.00	0.99	0.94
RGF19*CE20	UC48D	1.00	0.99	0.96
RGF19*CE20	UC60D	0.99	0.98	0.94
RGF19*DE20	FC/MC/PC48D	1.01	1.00	0.94
RGF19*DE20	FC/MC/PC60D	0.99	0.98	0.93
RGF19*DE20	FC/MC62D	1.01	1.01	0.94
RGF19*DE20	FC64D	1.04	1.05	0.94
RGF19*DE20	UC48D	1.00	0.99	0.93
RGF19*DE20	UC60D	0.99	0.98	0.93

COOLING PERFORMANCE DATA																
AIR CONDITIONER MODEL NO.		**RAC13J484S21(E)**														
INDOOR COIL MODEL NO.		**FC/MC/PC48**														
CONDENSING ENTERING AIR TEMPERATURE	**IDCFM**	1400					1600					1800				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	49.7	51.4	50.5	55.8	54.6	52.0	53.1	51.9	56.3	55.4	54.4	54.7	53.2	56.9	56.3
	S.C.	46.9	42.8	35.7	35.7	25.9	48.8	45.6	37.9	37.1	27.3	50.8	48.3	40.1	38.5	28.8
	KW	3.36	3.41	3.42	3.45	3.50	3.38	3.42	3.43	3.46	3.52	3.41	3.43	3.45	3.47	3.53
75	T.C.	47.5	48.6	47.7	52.8	52.3	49.8	50.3	48.9	53.6	53.1	52.0	52.1	50.1	54.3	53.8
	S.C.	44.6	41.7	34.7	34.6	25.2	46.6	44.5	36.9	36.3	26.6	48.6	47.2	39.0	37.9	27.9
	KW	3.65	3.68	3.68	3.74	3.82	3.67	3.70	3.70	3.76	3.83	3.70	3.72	3.72	3.77	3.85
85	T.C.	45.4	45.8	44.8	49.9	50.1	47.5	47.6	46.0	50.8	50.7	49.7	49.4	47.1	51.7	51.3
	S.C.	42.3	40.6	33.7	33.5	24.6	44.4	43.4	35.8	35.4	25.8	46.4	46.1	37.9	37.3	27.0
	KW	3.93	3.95	3.95	4.04	4.14	3.97	3.98	3.97	4.06	4.15	4.00	4.01	3.99	4.08	4.17
95	T.C.	43.2	42.9	42.0	46.9	47.9	45.3	44.8	43.0	48.0	48.4	47.3	46.7	44.1	49.1	48.9
	S.C.	40.1	39.6	32.7	32.4	23.9	42.1	42.3	34.8	34.6	25.0	44.2	45.0	36.9	36.7	26.1
	KW	4.22	4.22	4.22	4.34	4.46	4.26	4.26	4.24	4.36	4.47	4.30	4.30	4.27	4.39	4.49
105	T.C.	39.8	39.3	37.3	42.4	43.5	41.6	41.1	38.4	43.4	44.0	43.4	42.8	39.5	44.3	44.5
	S.C.	36.8	36.7	30.7	30.7	22.7	38.6	39.0	32.7	32.8	23.7	40.5	41.2	34.7	34.9	24.8
	KW	4.52	4.52	4.49	4.62	4.77	4.57	4.57	4.52	4.65	4.79	4.61	4.61	4.55	4.67	4.81
115	T.C.	36.4	35.9	32.7	37.9	39.3	38.0	37.5	33.9	38.9	39.7	39.6	39.0	35.1	39.8	40.2
	S.C.	33.6	34.0	28.7	29.0	21.5	35.2	35.7	30.6	31.1	22.5	36.9	37.4	32.5	33.1	23.6
	KW	4.82	4.82	4.76	4.89	5.07	4.87	4.86	4.79	4.92	5.10	4.92	4.91	4.82	4.95	5.13
125	T.C.	33.1	32.4	28.1	33.5	35.0	34.5	33.8	29.4	34.4	35.5	35.9	35.3	30.6	35.2	35.9
	S.C.	30.4	31.2	26.7	27.3	20.3	31.9	32.5	28.5	29.3	21.3	33.3	33.7	30.4	31.3	22.3
	KW	5.11	5.11	5.02	5.17	5.38	5.17	5.16	5.06	5.20	5.41	5.22	5.21	5.09	5.23	5.44

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC48	1.00	1.00	1.00
–	FC/MC/PC60	1.00	1.00	1.00
–	UC48	1.00	1.00	1.00
–	UC60	1.00	1.00	1.00
RFCX48DE	–	0.98	1.01	0.94
RFCX48DP	–	1.00	1.01	1.00

Furnaces	Coils	T.C.	S.C.	KW
RGF19*CE20	FC/MC/PC48C	0.99	0.98	0.97
RGF19*DE20	FC/MC/PC48D	1.00	0.99	0.96
RGF19*DE20	FC/MC/PC60D	0.99	0.98	0.95

COOLING PERFORMANCE DATA																
AIR CONDITIONER MODEL NO.		**RAC13J604S21(E)**														
INDOOR COIL MODEL NO.		**FC/MC/PC60**														
CONDENSING ENTERING AIR TEMPERATURE	**IDCFM**	1600					1800					2000				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	51.4	54.0	54.3	58.2	61.8	52.3	54.7	54.9	59.1	62.4	53.3	55.5	55.4	60.0	63.1
	S.C.	51.4	44.9	38.8	37.5	30.3	52.3	46.7	40.6	38.6	31.1	53.3	48.6	42.3	39.8	31.8
	KW	3.31	3.33	3.34	3.34	3.41	3.32	3.33	3.35	3.37	3.41	3.33	3.33	3.35	3.40	3.41
75	T.C.	50.5	52.7	52.8	56.9	60.2	51.6	53.5	53.5	57.7	60.8	52.6	54.3	54.1	58.6	61.4
	S.C.	50.5	45.3	38.8	37.5	29.7	51.6	47.2	40.6	38.8	30.6	52.6	49.2	42.4	40.1	31.4
	KW	3.85	3.86	3.87	3.89	3.95	3.86	3.86	3.87	3.91	3.95	3.87	3.87	3.88	3.94	3.96
85	T.C.	49.6	51.5	51.3	55.5	58.5	50.8	52.3	52.1	56.4	59.2	52.0	53.1	52.8	57.2	59.8
	S.C.	49.6	45.7	38.8	37.6	29.1	50.8	47.7	40.7	38.9	30.1	52.0	49.8	42.5	40.3	31.0
	KW	4.38	4.39	4.39	4.44	4.49	4.39	4.40	4.40	4.46	4.50	4.41	4.41	4.41	4.47	4.51
95	T.C.	48.8	50.2	49.8	54.2	56.9	50.0	51.1	50.6	55.0	57.5	51.3	51.9	51.4	55.8	58.2
	S.C.	48.7	46.1	38.8	37.6	28.5	50.0	48.2	40.7	39.1	29.6	51.3	50.4	42.6	40.6	30.6
	KW	4.91	4.92	4.92	4.99	5.03	4.92	4.93	4.93	5.00	5.05	4.94	4.94	4.94	5.01	5.06
105	T.C.	45.2	47.2	45.7	49.9	53.2	46.4	47.7	46.5	50.6	53.7	47.6	48.3	47.3	51.2	54.2
	S.C.	45.1	43.7	37.1	35.8	27.3	46.4	45.4	38.9	37.3	28.4	47.6	47.1	40.7	38.8	29.4
	KW	5.63	5.64	5.63	5.71	5.80	5.66	5.66	5.64	5.73	5.81	5.69	5.69	5.66	5.75	5.82
115	T.C.	41.8	44.2	41.7	45.7	49.7	42.9	44.5	42.5	46.2	50.0	44.0	44.8	43.2	46.8	50.3
	S.C.	41.7	41.4	35.4	34.1	26.2	42.8	42.7	37.1	35.6	27.2	43.9	43.9	38.9	37.1	28.2
	KW	6.34	6.34	6.31	6.40	6.54	6.38	6.38	6.33	6.44	6.55	6.41	6.41	6.35	6.47	6.57
125	T.C.	38.4	41.2	37.8	41.5	46.2	39.3	41.2	38.5	41.9	46.3	40.3	41.2	39.1	42.3	46.5
	S.C.	38.2	39.2	33.6	32.3	25.0	39.2	40.0	35.3	33.8	26.0	40.2	40.8	37.0	35.3	27.0
	KW	7.04	7.04	7.00	7.10	7.27	7.09	7.09	7.02	7.14	7.29	7.14	7.14	7.04	7.18	7.31
NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT. KW VALUES ARE FOR THE SYSTEM (OUTDOOR + INDOOR).																

Multipliers for determining the performance with other indoor sections.

NOTE: For dry bulb temperatures different than those listed (between 73-87 °F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

Air Handlers	Coils	T.C.	S.C.	KW
–	FC/MC/PC60	1.00	1.00	1.00
–	FC/MC62	1.01	1.03	1.01
–	FC64	1.05	1.08	1.02
–	UC60	0.97	0.95	1.00
RFCX60DE	–	1.03	1.05	0.98
RFCX60DP	–	1.00	1.00	1.00

Furnaces	Coils	T.C.	S.C.	KW
RGF19*CE20	FC/MC62D	0.98	0.97	0.98
RGF19*CE20	FC64D	1.02	1.01	0.97
RGF19*DE20	FC/MC/PC60D	0.97	0.94	0.97
RGF19*DE20	FC/MC62D	0.98	0.97	0.98
RGF19*DE20	FC64D	1.02	1.01	0.97

810767-UTG-B-0613
Supersedes: 810767-UTG-A-0313

York International Corp.
5005 York Drive
Norman, OK 73069

1055230-YTG-C-0214

YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

SINGLE PIECE AIR HANDLERS

FOR USE WITH SPLIT-SYSTEM COOLING & HEAT PUMPS

MODELS: AHR18 THRU 60*

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specifications are subject to change without notice.
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Additional rating information can be found at:

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WARRANTY

Standard 5-year limited parts warranty.

Extended 10-year limited parts warranty when product is registered online within 90 days of purchase for replacement or closing for new home construction.

DESCRIPTION

This fan coil line offers the ultimate in application flexibility. This unit may be used for upflow, downflow, horizontal right, or horizontal left applications.

All JCI Unitary Products air handlers and coils use a TXV to provide our customers with the optimum performance and refrigerant control. Air handlers are shipped with “Flex-coils” without a factory installed metering device. For added flexibility, an R-22 or R-410A TXV or orifice can be field installed to meet your refrigerant choice.

FEATURES

Thermal Expansion Valve - Provides the ultimate refrigerant control required for today’s high efficient product. The UPG bolt-on TXV provides the added flexibility to convert the air handler to the required refrigerant. The UPG TXV is a true bolt-on which does not require brazing to replace or install.

Insulated Cabinet - All air handler cabinets are thermally insulated with 3/4” foil faced insulation to prevent sweating.

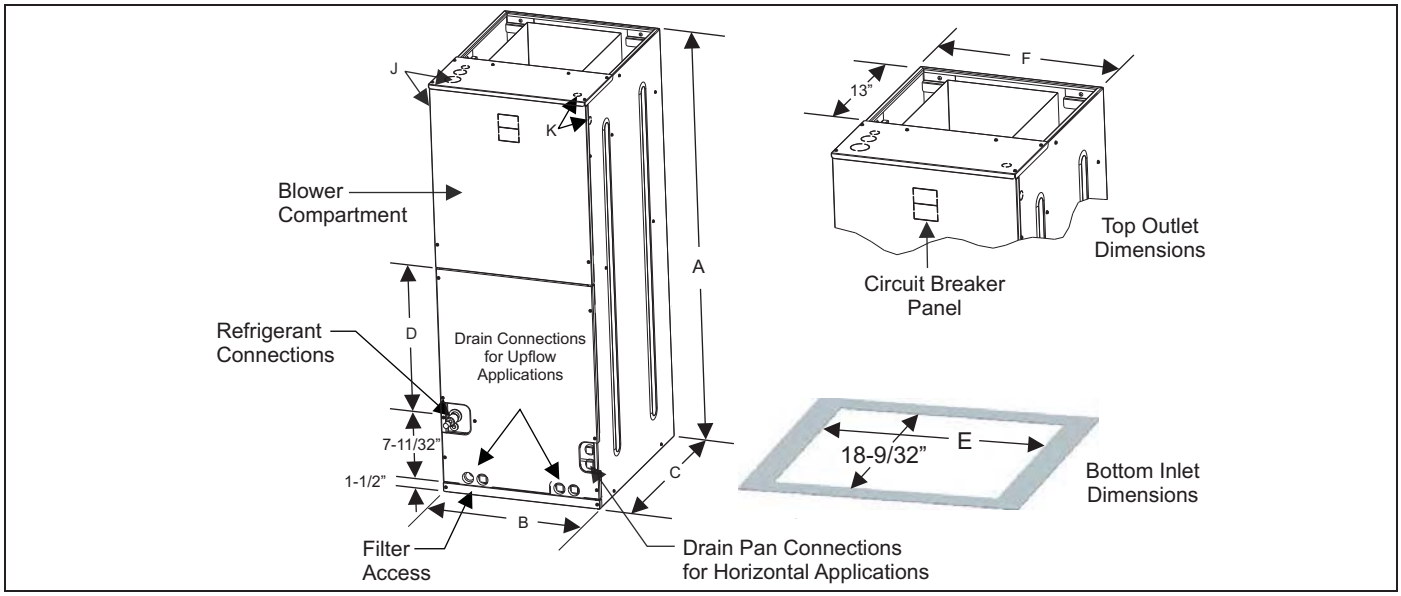
Factory Sealed - Achieves 2% or less total airflow leakage rate at duct blaster field test conditions for system airflow verification.

Durable Finish Inside and Out - Air handler casings are made of pre-painted galvanized steel which provides a better paint to steel bond that resists corrosion and rust creep. All internal coil sheet metal parts are made of G60 galvanized or prepainted G30 galvanized.

Filters - All models have internal filter racks provided for use with 1” thick standard size filters.

Electric Heat Kits - New 6HK series of field installed electric heat kits are available for installation friendly and easy service applications. These 6HK kits are unique to these new models.

DIMENSIONS & DUCT CONNECTION DIMENSIONS



Dimensions[1]

Models	Dimensions						Wiring Knockouts[2]		Refrigerant Connections Line Size	
	A	B	C	D	E	F	J	K		
	Height	Width	Depth				Power	Control	Liquid	Vapor
AHR18B3XH21	46	17-1/2	21-1/2	16-/2	13-29/32	16-1/2	7/8 (1/2) 1-3/8(1) 1-23/32 (1-1/4)	7/8 (1/2)	3/8	3/4
AHR22B3XH21	46	17-1/2		16-/2	13-29/32	16-1/2				
AHR24B3XH21	46	17-1/2		16-/2	13-29/32	16-1/2				
AHR30B3XH21	46	17-1/2		16-/2	13-29/32	16-1/2				
AHR36B3XH21	46	17-1/2		16-/2	13-29/32	16-1/2				
AHR29C3XH21	52	21		21-1/2	17-13/32	20				
AHR34C3XH21	52	21		21-1/2	17-13/32	20				
AHR42C3XH21	52	21		21-1/2	17-13/32	20				
AHR48D3XH21	57	24-1/2		26	20-29/32	23-1/2				7/8
AHR60D3XH21	57	24-1/2		26	20-29/32	23-1/2				

1. All dimensions are in inches.
2. Actual size (conduit size).

COIL TECHNICAL DATA

Models	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fins Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type
AHR18B	Cooling /Heat Pump	Sweat	3.4	2	14	(2) 14 x 17.5	1 x 0.866	3/8	Enhanced
AHR22B	Cooling /Heat Pump	Sweat	3.9	2	14	(2) 16 x 17.5	1 x 0.866	3/8	Enhanced
AHR24B	Cooling /Heat Pump	Sweat	3.9	3	12	(2) 16 x 17.5	1 x 0.866	3/8	Enhanced
AHR29C	Cooling /Heat Pump	Sweat	4.4	2	14	(2) 18 x 17.5	1 x 0.866	3/8	Enhanced
AHR30B	Cooling /Heat Pump	Sweat	3.9	3	12	(2) 16 x 17.5	1 x 0.866	3/8	Enhanced
AHR34C	Cooling /Heat Pump	Sweat	3.4	3	14	(2) 14 x 17.5	1 x 0.866	3/8	Enhanced
AHR36B	Cooling /Heat Pump	Sweat	4.9	3	12	(2) 20 x 17.5	1 x 0.866	3/8	Enhanced
AHR42C	Cooling /Heat Pump	Sweat	5.4	3	12	(2) 22 x 17.5	1 x 0.866	3/8	Enhanced
AHR48D	Cooling /Heat Pump	Sweat	5.8	3	11	(2) 24 x 17.5	1 x 0.866	3/8	Enhanced
AHR60D	Cooling /Heat Pump	Sweat	6.8	3	12	(2) 28 x 17.5	1 x 0.866	3/8	Enhanced

COOLING CAPACITY[1]

Models	Rated CFM[2]	Entering Air Dry/Wet Bulb (°F)	MBH@ Evap. Temp. and Corresponding R-410A Pressure (°F/PSIG)			
			35/107.9	40/118.9	45/130.7	50/143.3
AHR18B	665	85/72	40.7	35.6	30.5	24.1
		80/67	35.0	29.5	23.9	18.6
		75/62	27.9	22.7	18.1	12.4
		70/57	22.1	19.8	16.9	14.1
AHR22B	800	85/72	47.7	42.6	35.3	30.3
		80/67	40.1	34.7	28.9	22.8
		75/62	32.7	27.1	24.7	19.1
		70/57	25.7	23.5	20.5	17.1
AHR24B	740	85/72	47.9	42.4	36.8	29.9
		80/67	40.9	35.2	29.0	22.6
		75/62	33.6	28.0	21.7	15.5
		70/57	26.2	23.0	19.9	16.9
AHR29C	1000	85/72	38.9	35.4	31.6	27.6
		80/67	33.9	30.3	26.8	23.0
		75/62	27.3	23.7	22.5	18.0
		70/57	22.6	20.1	17.5	14.8
AHR30B	1115	85/72	65.8	60.4	50.7	41.5
		80/67	58.0	49.5	39.9	31.2
		75/62	47.1	38.9	30.4	21.1
		70/57	37.1	33.1	28.2	23.9
AHR34C	1000	85/72	35.0	31.8	28.4	24.7
		80/67	32.2	29.1	25.7	22.3
		75/62	26.4	23.4	21.0	17.1
		70/57	21.4	18.6	20.2	12.1
AHR36B	1060	85/72	71.1	62.4	51.5	44.3
		80/67	59.2	51.0	42.0	32.7
		75/62	48.0	39.6	30.8	21.8
		70/57	37.3	32.8	28.3	24.0
	1245	85/72	83.2	66.7	60.1	48.9
		80/67	66.0	59.5	47.8	37.1
		75/62	55.0	45.2	35.5	24.8
		70/57	42.9	38.1	32.6	27.6
AHR42C	1230	85/72	68.2	72.9	62.8	51.6
		80/67	66.3	59.7	48.6	38.4
		75/62	56.4	45.4	36.1	25.5
		70/57	43.7	38.3	33.3	28.3
	1485	85/72	69.8	86.0	74.0	59.1
		80/67	68.5	69.5	56.6	44.2
		75/62	65.3	54.1	42.0	29.8
		70/57	51.0	45.4	39.1	32.8
AHR48D	1320	85/72	87.5	75.9	64.4	51.7
		80/67	71.2	59.9	49.8	37.2
		75/62	56.5	46.6	35.4	23.3
		70/57	43.5	39.5	34.0	28.4
	1610	85/72	102.3	90.1	76.1	60.5
		80/67	83.7	71.5	57.3	43.6
		75/62	67.0	54.0	41.2	27.0
		70/57	50.9	46.6	39.8	33.4

(For notes see page 4.)

COOLING CAPACITY[1] (Continued)

Models	Rated CFM[2]	Entering Air Dry/Wet Bulb (°F)	MBH@ Evap. Temp. and Corresponding R-410A Pressure (°F/PSIG)			
			35/107.9	40/118.9	45/130.7	50/143.3
AHR60D	1350	85/72	93.7	82.0	70.0	57.4
		80/67	76.5	65.5	54.1	41.4
		75/62	60.9	50.3	38.4	26.2
		70/57	46.6	41.6	35.5	29.8
	1620	85/72	70.8	96.4	82.4	66.2
		80/67	89.9	76.0	62.8	47.3
		75/62	71.4	58.3	44.8	29.9
		70/57	55.0	48.4	41.9	34.9
	1870	85/72	126.4	110.6	92.8	74.5
		80/67	102.1	86.3	70.0	53.1
		75/62	81.5	65.6	50.0	34.1
		70/57	62.1	55.3	47.1	39.4

1. Actual capacity varies with the outdoor AC or HP that is used with the system.
2. Airflow is calculated for each system tonnage.

APPLICATION FACTORS - RATED CFM VS. ACTUAL CFM

% Of Rated Airflow (CFM)	80%	90%	100%	110%	120%
Capacity Factor	0.96	0.98	1.00	1.02	1.03

PHYSICAL & ELECTRICAL DATA - COOLING ONLY

Models		AHR18B	AHR22B	AHR24B	AHR29C	AHR30B	AHR34C	AHR36B	AHR42C	AHR48D	AHR60D
Blower - Diameter x Width		10 x 8	10 x 8	10 x 8	10 x 10	10 x 8	10 x 10	10 x 8	10 x 10	10X10	10X10
Motor	HP	1/4 HP	1/3 HP	1/4 HP	1/2 HP	3/4 HP	1/2 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP
	Nominal RPM	1075	1039	1075	1075	1075	1075	1075	1075	1075	1075
Voltage		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Full Load Amps @230V		1.4	2.2	1.4	2.3	3.0	2.3	3.0	3.0	3.0	3.0
Filter[1]	Type	DISPOSABLE OR PERMANENT									
	Size	16 x 20 x 1	16 x 20 x 1	16 x 20 x 1	20 x 20 x 1	16 x 20 x 1	20 x 20 x 1	16 x 20 x 1	20 x 20 x 1	22 x 20 x 1	22 x 20 x 1
	Permanent Type Kit	1PF0601BK	1PF0601BK	1PF0601BK	1PF0602BK	1PF0601BK	1PF0602BK	1PF0601BK	1PF0602BK	1PF0603BK	1PF0603BK
Shipping / Operating Weight (lbs.)		112/100	112/100	117/102	131/116	117/105	132/117	122/110	148/133	165/147	168/150

1. Field Supplied.

KW & MBH CONVERSIONS - FOR TOTAL POWER INPUT REQUIREMENT

For a power distribution voltage that is different than the provided nominal voltage, multiply the kW and MBH data from the table by the conversion factor in the following table.

DISTRIBUTION POWER	NOMINAL VOLTAGE	CONVERSION FACTOR
208V	240V	0.75
220V	240V	0.84
230V	240V	0.92

ELECTRICAL DATA - COOLING ONLY

Models	Motor FLA[1]	Minimum Circuit Ampacity	MOP[2]	Minimum Wire Size (AWG)[3]
AHR18B / AHR24B	1.4	1.8	15	14
AHR22B	2.2	2.8	15	14
AHR29C/AHR34C	2.3	2.9	15	14
AHR30B / AHR36B / AHR42C / AHR48D / AHR60D	3.0	3.8	15	14

1. FLA = Full Load Amps
2. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse.
3. 75°C, copper wire only. If wire other than non-plated, 75°C ambient, copper wire is used, consult applicable tables of the NEC and local codes.

ELECTRICAL HEAT: MINIMUM FAN SPEED

Heater Kit Models[1,2]	Nom. kW @240V	Air Handler Models									
		AHR18B	AHR22B	AHR24B	AHR29C	AHR30B	AHR34C	AHR36B	AHR42C	AHR48D	AHR60D
6HK(0,1)6500206	2.4kW	Low	Med	Low	Med	Low	Med	Low	Low	Low	Low
6HK(0,1)6500506	4.8kW	Med	Med	Low	Med	Low	Med	Low	Low	Low	Low
6HK(0,1)6500806	7.7kW	Med	High	Med	High	Med	Med	Med	Med	Low	Low
6HK(0,1)6501006 6HK06501025	9.6kW	Med	High	High	High	Med	High	High	Med	Med	Med
6HK(1,2)6501306	12.5kW	–	High	High	High	High	High	High	High	Med	Med
6HK(1,2)6501506 6HK06501525	14.4kW	–	High	High	High	High	High	High	High	Med	Med
6HK(1,2)6501806 6HK06501825	17.3kW	–	–	–	–	–	–	High	–	Med	Med
6HK(1,2)6502006 6HK16502025	19.2kW	–	–	–	–	–	–	High	–	High	High
6HK(1,2)6502506 6HK16502525	24kW	–	–	–	–	–	–	–	–	–	High

1. (0,1) - 0 = no circuit breaker OR 1 = with circuit breaker.
2. (1,2) - 1 = with circuit breaker, no breaker jumper bar OR 2 = with circuit breaker & breaker jumper bar.

ELECTRIC HEAT PERFORMANCE DATA: 208/230-1-60 & 208/230-3-60

Heater Models[1,2]		Nominal kW @240V	Total Heat[3]				kW Staging			
			kW		MBH		W1 Only		W1 + W2	
			208V	230V	208V	230V	208V	230V	208V	230V
1PH	6HK(0,1)6500206	2.4	1.8	2.2	6.2	7.5	1.8	2.2	1.8	2.2
	6HK(0,1)6500506	4.8	3.6	4.4	12.3	15.0	3.6	4.4	3.6	4.4
	6HK(0,1)6500806	7.7	5.8	7.1	19.7	24.1	5.8	7.1	5.8	7.1
	6HK(0,1)6501006	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	6HK(1,2)6501306	12.5	9.4	11.5	32.0	39.2	3.1	3.8	9.4	11.5
	6HK(1,2)6501506	14.4	10.8	13.2	36.9	45.1	3.6	4.4	10.8	13.2
	6HK(1,2)6501806	17.3	13.0	15.9	44.3	54.2	6.5	7.9	13.0	15.9
	6HK(1,2)6502006	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	6HK(1,2)6502506	24.0	18.0	22.0	61.5	75.2	7.2	8.8	18.0	22.0
3PH	6HK06501025	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	6HK06501525	14.4	10.8	13.2	36.9	45.1	10.8	13.2	10.8	13.2
	6HK06501825	17.3	13.0	15.9	44.3	54.2	13.0	15.9	13.0	15.9
	6HK16502025	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	6HK16502525	24.0	18.0	22.0	61.5	75.2	9.0	11.0	18.0	22.0

1. (0,1) - 0 = no circuit breaker OR 1 = with circuit breaker.
2. (1,2) - 1 = with circuit breaker, no breaker jumper bar OR 2 = with circuit breaker & breaker jumper bar.
3. For different power distributions, see conversion table on Page 4.

ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY: 208/230-1-60

Air Handler Models	Heater Models[1,2]	Heater Amps @240V	Field Wiring					
			Min. Circuit Ampacity		MOP.[3]		Min Wire Size (AWG)[4]	
			208V	230V	208V	230V	208V	230V
AHR18B	6HK(0,1)6500206	10.0	12.6	14.3	15	15	12	12
	6HK(0,1)6500506	20.0	23.4	26.8	25	30	10	10
	6HK(0,1)6500806	32.0	36.4	41.8	40	45	8	8
	6HK(0,1)6501006	40.0	45.1	51.8	50	60	8	6
AHR22B	6HK(0,1)6500206	10	13.5	15.3	15	20	12	12
	6HK(0,1)6500506	20	24.3	27.8	25	30	10	10
	6HK(0,1)6500806	32	37.3	42.8	40	45	8	8
	6HK(0,1)6501006	40	46.0	52.8	50	60	6	6
	6HK(1,2)6501306	52	59.0	67.8	60	70	6	4
	6HK(1,2)6501506	60	67.7	77.8	70	80	4	4
AHR24B	6HK(0,1)6500206	10.0	12.6	14.3	15	15	12	12
	6HK(0,1)6500506	20.0	23.4	26.8	25	30	10	10
	6HK(0,1)6500806	32.0	36.4	41.8	40	45	8	8
	6HK(0,1)6501006	40.0	45.1	51.8	50	60	8	6
	6HK(1,2)6501306	52.0	58.1	66.8	60	70	6	4
	6HK(1,2)6501506	60.0	66.8	76.8	70	80	4	4
AHR29C AHR34C	6HK(0,1)6500206	10.0	13.8	15.4	15	20	12	12
	6HK(0,1)6500506	20.0	24.6	27.9	25	30	10	10
	6HK(0,1)6500806	32.0	37.6	42.9	40	45	8	8
	6HK(0,1)6501006	40.0	46.3	52.9	50	60	6	6
	6HK(1,2)6501306	52.0	59.3	67.9	60	70	6	4
	6HK(1,2)6501506	60.0	68.0	77.9	70	80	4	4
AHR30B AHR42C	6HK(0,1)6500206	10.0	14.6	16.3	15	20	12	12
	6HK(0,1)6500506	20.0	25.4	28.8	30	30	10	10
	6HK(0,1)6500806	32.0	38.4	43.8	40	45	8	8
	6HK(0,1)6501006	40.0	47.1	53.8	50	60	6	6
	6HK(1,2)6501306	52.0	60.1	68.8	70	70	6	4
	6HK(1,2)6501506	60.0	68.8	78.8	70	80	4	4
AHR36B AHR48D	6HK(0,1)6500206	10.0	14.6	16.3	15	20	12	12
	6HK(0,1)6500506	20.0	25.4	28.8	30	30	10	10
	6HK(0,1)6500806	32.0	38.4	43.8	40	45	8	8
	6HK(0,1)6501006	40.0	47.1	53.8	50	60	8	6
	6HK(1,2)6501306	52.0	60.1	68.8	70	70	6	4
	6HK(1,2)6501506	60.0	68.8	78.8	70	80	4	4
	6HK(1,2)6501806	72.0	81.8	93.8	90	100	4	3
	6HK(1,2)6502006	80.0	90.4	103.8	100	110	3	2
AHR60D	6HK(0,1)6500206	10.0	14.6	16.3	15	20	12	12
	6HK(0,1)6500506	20.0	25.4	28.8	30	30	10	10
	6HK(0,1)6500806	32.0	38.4	43.8	40	45	8	8
	6HK(0,1)6501006	40.0	47.1	53.8	50	60	8	6
	6HK(1,2)6501306	52.0	60.1	68.8	70	70	6	4
	6HK(1,2)6501506	60.0	68.8	78.8	70	80	4	4
	6HK(1,2)6501806	72.0	81.8	93.8	90	100	4	3
	6HK(1,2)6502006	80.0	90.4	103.8	100	110	3	2
	6HK(1,2)6502506	100.0	112.1	128.8	125	150	2	1

1. (0,1) - maybe 0 (no circuit breaker) or 1 (with circuit breaker).
2. (1,2) maybe 1 (with circuit breaker, no breaker jumper bar) or 2 (with circuit breaker & breaker jumper bar).
3. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse.
4. Stated sizes are for 75°C, copper wire only. If wire other than non-plated, 75°C ambient, copper wire is used, consult applicable tables of the NEC and local codes.

ELECTRICAL DATA FOR MULTI-SOURCE POWER SUPPLY: 208/230-1-60

Air Handlers Models	Heater Models	Total Heater Amps @240V	Min. Circuit Ampacity						MOP[1]						Min. Wire Size (AWG)[2]					
			208V			230V			208V			230V			208V			230V		
			Circuit						Circuit						Circuit					
			1st[3]	2nd	3rd	1st[3]	2nd	3rd	1st[3]	2nd	3rd	1st[3]	2nd	3rd	1st[3]	2nd	3rd	1st[3]	2nd	3rd
AHR22B	6HK16501306	52	21.2	37.6	–	24.4	43.3	–	25	40	–	25	45	–	10	8	–	10	8	–
	6HK16501506	60	22.8	43.3	–	27.8	50.0	–	25	45	–	30	50	–	10	8	–	10	8	–
AHR24B	6HK16501306	52.0	20.6	37.6	–	23.4	43.3	–	25	40	–	25	45	–	10	8	–	10	8	–
	6HK16501506	60.0	23.5	43.3	–	26.8	50.0	–	25	45	–	30	50	–	10	8	–	10	8	–
AHR29C AHR34C	6HK16501306	52.0	21.3	37.6	–	24.5	43.3	–	25	40	–	25	45	–	10	8	–	10	8	–
	6HK16501506	60.0	24.2	43.3	–	27.9	50.0	–	25	45	–	30	50	–	10	8	–	10	8	–
AHR30B AHR42C	6HK16501306	52.0	22.6	37.6	–	25.4	43.3	–	25	40	–	30	45	–	10	8	–	10	8	–
	6HK16501506	60.0	25.5	43.3	–	28.8	50.0	–	30	45	–	30	50	–	10	8	–	10	8	–
AHR36B AHR48D	6HK16501306	52.0	22.6	37.6	–	25.4	43.3	–	25	40	–	30	45	–	10	8	–	10	8	–
	6HK16501506	60.0	25.5	43.3	–	28.8	50.0	–	30	45	–	30	50	–	10	8	–	10	8	–
	6HK16501806	72.0	42.8	39.0	–	48.8	45.0	–	45	40	–	50	45	–	8	8	–	8	8	–
	6HK16502006	80.0	47.1	43.3	–	53.8	50.0	–	50	45	–	60	50	–	8	8	–	6	8	–
AHR60D	6HK16501306	52.0	22.6	37.6	–	25.4	43.3	–	25	40	–	30	45	–	10	8	–	10	8	–
	6HK16501506	60.0	25.5	43.3	–	28.8	50.0	–	30	45	–	30	50	–	10	8	–	10	8	–
	6HK16501806	72.0	42.8	39.0	–	48.8	45.0	–	45	40	–	50	45	–	8	8	–	8	8	–
	6HK16502006	80.0	47.1	43.3	–	53.8	50.0	–	50	45	–	60	50	–	8	8	–	6	8	–
	6HK16502506	100	47.1	43.3	21.7	53.8	50.0	25.0	50	45	25	60	50	25	6	6	10	6	8	10

1. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse.
2. Stated sizes are for 75°C, copper wire only. If wire other than non-plated, 75°C ambient, copper wire is used, consult applicable tables of the NEC and local codes.
3. 1st Circuit includes the blower motor amps.

ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY - 208/230-3-60

Air Handler Models	Heater Models	Heater Amps @ 240V	Field Wiring					
			Min. Circuit Ampacity		MOP[1]		Min. Wire Size (AWG)[2]	
			208V	230V	208V	230V	208V	230V
AHR18B	6HK06501025	23.1	26.8	30.7	30	35	10	10
AHR24B	6HK06501025	23.1	26.8	30.7	30	35	10	10
	6HK06501525	34.6	39.2	45.0	40	45	8	8
AHR30B AHR42C	6HK06501025	23.1	28.8	32.7	30	35	10	8
	6HK06501525	34.6	41.2	47.0	45	50	8	8
AHR36B AHR48D	6HK06501025	23.1	28.8	32.7	30	35	10	8
	6HK06501525	34.6	41.2	47.0	45	50	8	8
	6HK06501825	41.6	48.8	55.8	50	60	8	6
	6HK16502025[3]	46.2	53.8	61.5	60	70	6	6
AHR60D	6HK06501025	23.1	28.8	32.7	30	35	10	8
	6HK06501525	34.6	41.2	47.0	45	50	8	8
	6HK06501825	41.6	48.8	55.8	50	60	8	6
	6HK16502025[3]	46.2	53.8	61.5	60	70	6	6
	6HK16502525[3]	57.7	66.3	75.9	70	80	4	4

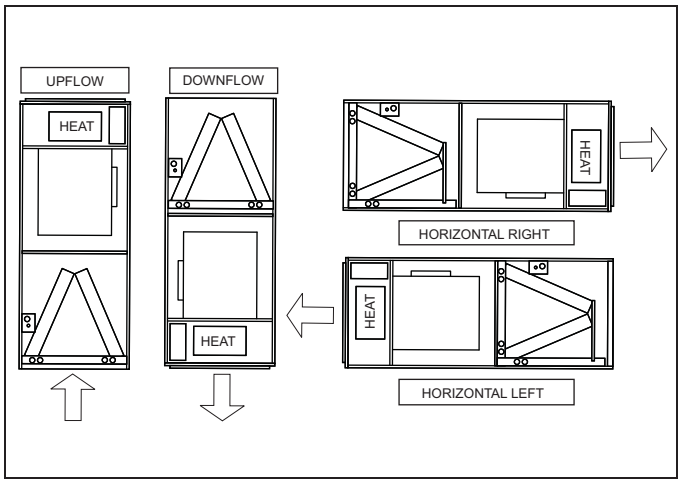
1. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse.
2. Stated sizes are for 75°C, copper wire only. If wire other than non-plated, 75°C ambient, copper wire is used, consult applicable tables of the NEC and local codes.
3. The 20kW and 25kW heater models (6HK16502025 and 6HK16502525) come with circuit breakers standard. Single source power MCA and MOP requirements are given here only for reference if used with field installed single point power modification.

ELECTRICAL DATA FOR MULTI-SOURCE POWER SUPPLY: 208/230-3-60

Air Handler Models	Heater Models	Total Heater Amps @ 240V	Min. Circuit Ampacity				MOP[1]				Min. Wire Size (AWG)[2]			
			208V		230V		208V		230V		208V		230V	
			Circuit				Circuit				Circuit			
			1st[3]	2nd	1st[3]	2nd	1st[3]	2nd	1st[3]	2nd	1st[3]	2nd	1st[3]	2nd
AHR36B AHR48D	6HK16502025	46.2	28.8	25.0	32.6	28.9	30	25	35	30	10	10	8	10
AHR60D	6HK16502025	46.2	28.8	25.0	32.6	28.9	30	25	35	30	10	10	8	10
	6HK16502525	57.7	35.0	31.3	39.8	36.1	35	35	40	40	8	8	8	8

1. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse.
2. Stated sizes are for 75°C, copper wire only. If wire other than non-plated, 75°C ambient, copper wire is used, consult applicable tables of the NEC and local codes.
3. 1st Circuit includes the blower motor amps.

TYPICAL APPLICATIONS



ACCESSORIES

Refer to Price Manual for specific model numbers.

TXV Kits - TXV kits are available for "Flex-coil" applications and converting R22 to R410A or as a service replacement. All kits are bolt-on and require no brazing to install.

Electric Heaters - 6HK models shown under electrical data include sequential operation and temperature dual limit switches for safe, efficient operation. Circuit breakers are provided where shown.

LIMITATIONS

These units must be wired and installed in accordance with all national and local safety codes.

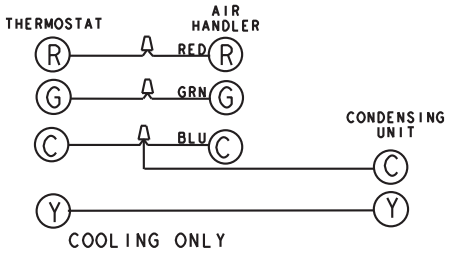
Voltage limits are as follows:

Air Handler Voltage	Voltage code	Normal Operating Voltage Range[1]
208/230-1-60	06	187-253

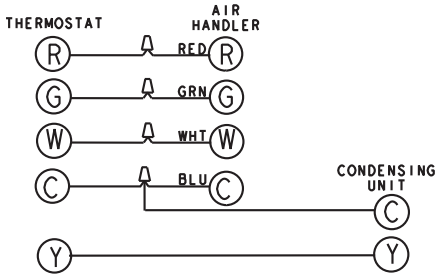
1. Rated in accordance with ARI Standard 110, utilization range "A".

Airflow must be within the minimum and maximum limits approved for electric heat, evaporator coils and outdoor units.

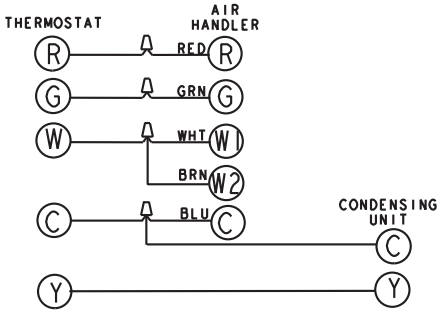
TYPICAL THERMOSTAT CONNECTIONS



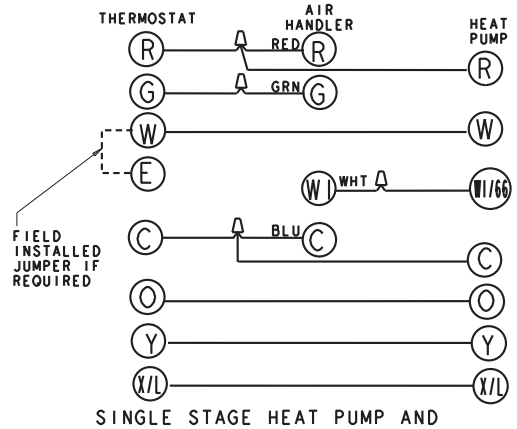
COOLING ONLY



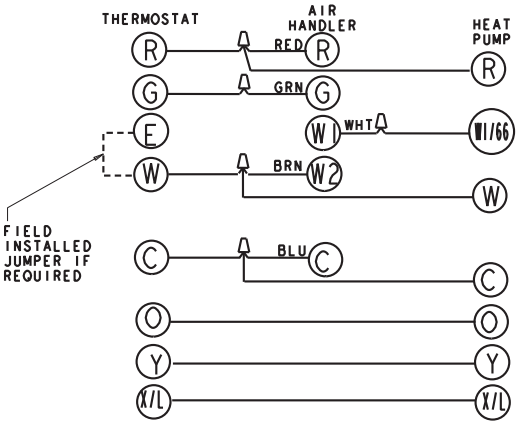
COOLING WITH ELECTRIC HEAT
(10 KW AND BELOW)



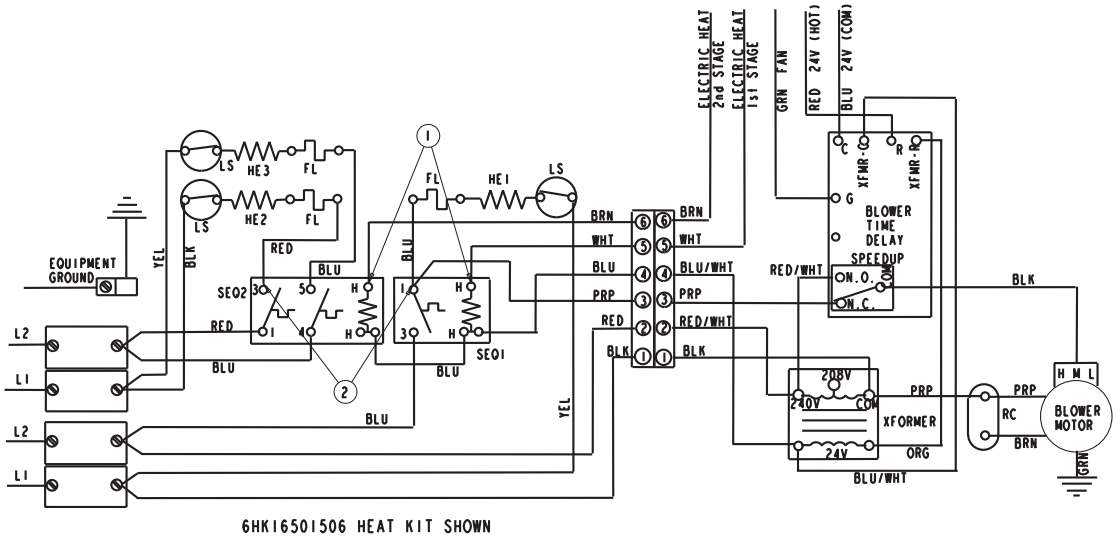
COOLING WITH ELECTRIC HEAT
(13 KW AND ABOVE)



SINGLE STAGE HEAT PUMP AND
ELECTRIC HEAT (10 KW AND BELOW)



SINGLE STAGE HEAT PUMP AND
ELECTRIC HEAT (13 KW AND ABOVE)



6HK16501506 HEAT KIT SHOWN

TO CHANGE THE QUANTITY OF HEAT DURING HEAT PUMP DEFROST CYCLE ① REVERSE THE BROWN AND WHITE WIRE CONNECTIONS ON THE SEQUENCERS IN THE HEATER KIT. ②THE PURPLE WIRE MUST BE MOVED FROM #1 ON SEQUENCER 1 TO #3 ON SEQUENCER 2

AIR FLOW DATA (CFM)[1]

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
208 Volt								
AHR18B	High	1024	1000	970	930	860	810	NA
	Medium	756	731	700	670	620	550	NA
	Low	557	531	495	445	375	315	195
AHR22B	High	1214	1177	1136	1071	1019	951	828
	Medium	705	684	661	592	548	404	266
	Low	534	512	460	394	261	167	125
AHR24B	High	995	970	935	900	925	795	645
	Medium	820	810	780	745	695	545	485
	Low	715	695	640	405	370	375	220
AHR29C	High	1605	1548	1486	1420	1356	1159	913
	Medium	981	960	921	815	756	697	614
	Low	769	717	654	561	510	451	389
AHR30B	High	1380	1315	1245	1160	1075	990	885
	Medium	1060	1040	1005	955	890	860	820
	Low	1035	980	910	825	770	685	485
AHR34C	High	1496	1423	1328	1217	1105	1041	942
	Medium	976	907	843	815	742	686	582
	Low	729	687	647	602	498	447	366
AHR36B	High	1410	1335	1270	1190	1110	990	820
	Medium	1215	1170	1115	1050	935	850	740
	Low	950	935	895	855	NA	NA	NA
AHR42C	High	1800	1725	1645	1545	1360	1200	1050
	Medium	1535	1480	1415	1280	1155	1010	870
	Low	1225	1195	1095	1025	925	825	680
AHR48D	High	1890	1830	1755	1650	1565	1450	1285
	Medium	1515	1480	1450	1380	1295	1115	985
	Low	1170	1165	1140	1100	965	860	745
AHR60D	High	1911	1841	1757	1668	1564	1439	1233
	Medium	1556	1507	1450	1388	1266	1246	989
	Low	1211	1181	1151	1062	992	911	827
230 Volt								
AHR18B	High	1145	1100	1055	1005	930	845	725
	Medium	755	750	725	665	605	485	435
	Low	680	655	625	585	540	395	300
AHR22B	High	1294	1254	1189	1133	1064	996	907
	Medium	803	785	763	729	645	585	422
	Low	615	600	566	492	447	284	183
AHR24B	High	1305	1285	1225	1175	920	915	835
	Medium	930	920	890	845	705	760	505
	Low	735	730	700	670	545	470	NA
AHR29C	High	1711	1665	1598	1513	1435	1309	1088
	Medium	1134	1111	1068	998	909	813	735
	Low	887	861	792	695	649	576	486
AHR30B	High	1450	1380	1300	1215	1130	1030	910
	Medium	1330	1280	1205	1135	1050	975	780
	Low	1160	1120	1065	1005	930	825	635
AHR34C	High	1579	1511	1399	1273	1145	1068	978
	Medium	1108	1057	987	924	849	770	703
	Low	849	802	756	712	630	527	170
AHR36B	High	1470	1390	1325	1245	1155	1045	880
	Medium	1325	1265	1205	1125	1025	965	840
	Low	1115	1075	1025	950	NA	NA	NA

(For notes see page 11.)

AIR FLOW DATA (CFM)[1] (Continued)

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
230 Volt								
AHR42C	High	1750	1670	1570	1477	1260	1125	935
	Medium	1590	1520	1435	1277	1150	1010	870
	Low	1330	1280	1200	1083	980	850	NA
AHR48D	High	2005	1940	1850	1755	1650	1530	1405
	Medium	1705	1665	1605	1510	1425	1340	1185
	Low	1355	1330	1300	1245	1170	990	980
AHR60D	High	2034	1955	1858	1753	1640	1522	1296
	Medium	1733	1672	1609	1527	1431	1272	1220
	Low	1388	1359	1313	1255	1133	1004	912

1. Air handler units have been tested to UL 1995 / CSA 22.2 standards up to 0.30" wc. external static pressure.
Dry coil conditions only, tested without filters.
For optimal performance, external static pressures of 0.2" to 0.5" are recommended. Applications above 0.6" are not recommended.
Airflow data shown is from testing performed at 230V. AHE units use a X13 motor, and there is minimal variation of airflow at other distribution voltage values. The above data can be used for airflow at other distribution voltages.

NOTES

1055230-YTG-C-0214
Supersedes: 1055230-YTG-B-0913

York International Corp.
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