City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
07-1404		390 B017001

Location of Construction:	Owner Name:	Owner Address:	Phone:
67 HOPE AVE	NAPPI SABATINO M & FRANCE	101 CHELSEY AVE	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Coastline Air Mechanical Services /	40 Lori Lane Westbrook	2072320113
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	R2

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
New Single Family Home	New Single Family Home with York Affinity Direct Vent Heating/Air Conditioning System	$200.00	$17,300.00	

FIRE DEPT: ☒ Approved ☐ Denied

NFPA 58

Signature: JMB

INSPECTION: Use Group: R3 Type: HVAC

IMC-2003/LP Rules

Signature: JMB 11/19/07

Proposed Project Description:

Install York Affinity Gas burning Direct Vent Heating/ Air Conditioning System + 1000 gal LP TANK

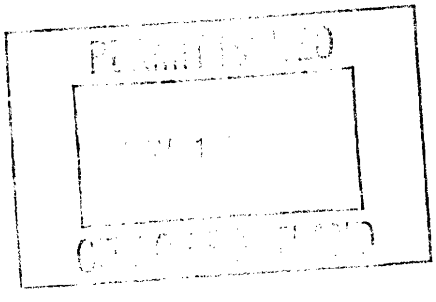
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
lmd	11/09/2007

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..



Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☒ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: JMB 11/19/07	Date:	Date: JMB

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

874-8693 INSPECTIONS.

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

PERMIT ISSUED

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL Hope St Lot #17 Riverwalk Portland Use of Building Resi Date Nov 9th 07

Name and address of owner of appliance MR MRS NAPPI

Lot #17 Hope St Riverwalk Portland, ME 04101

Installer's name and address COASTLine Air Mech LLC

PO Box 125 Westbrook, ME 04098-125 Telephone 1-207-232-0113

Location of appliance:

- ☒ Basement
- ☐ Floor
- ☐ Attic
- ☐ Roof

NOV 9 2007

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: York Affinity

U.L. Approved ☒ Yes ☐ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☒ Yes ☐ No

IF NO Explain: _____

The Type of License of Installer:

- ☐ Master Plumber # _____
- ☐ Solid Fuel # ~~#~~ _____
- ☐ Oil # JY1000 8258
- ☐ Gas # PNT 2671
- ☐ Other _____

Type of Chimney:

- ☐ Masonry Lined
  Factory built _____
- ☐ Metal
  Factory Built U.L. Listing # _____
- ☒ Direct Vent
  Type PVC 3" UL# _____

Type of Fuel Tank

- ☐ Oil
- ☒ Gas

Size of Tank 1000 PROPANE

Number of Tanks (1)

Distance from Tank to Center of Flame 70 ft **feet.**

Cost of Work: $ 17,300 —

Permit Fee: $ 200.00

Approved

Fire: _____

Ele.: _____

Bldg.: _____

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature _____ Date Approved _____

Signature of Installer Thomas N. Smart Tom Smart

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

#1648

City of Portland, Maine - Building or Use Permit

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07-1404	11/09/2007	390 B017001

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Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Coastline Air Mechanical Services /	40 Lori Lane Westbrook	(207) 232-0113
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		HVAC	

Proposed Use:	Proposed Project Description:
New Single Family Home with York Affinity Direct Vent Heating/Air Conditioning System and 1000 gal LP tank	Install York Affinity Gas burning Direct Vent Heating/ Air Conditioning System and 1000 gal LP tank

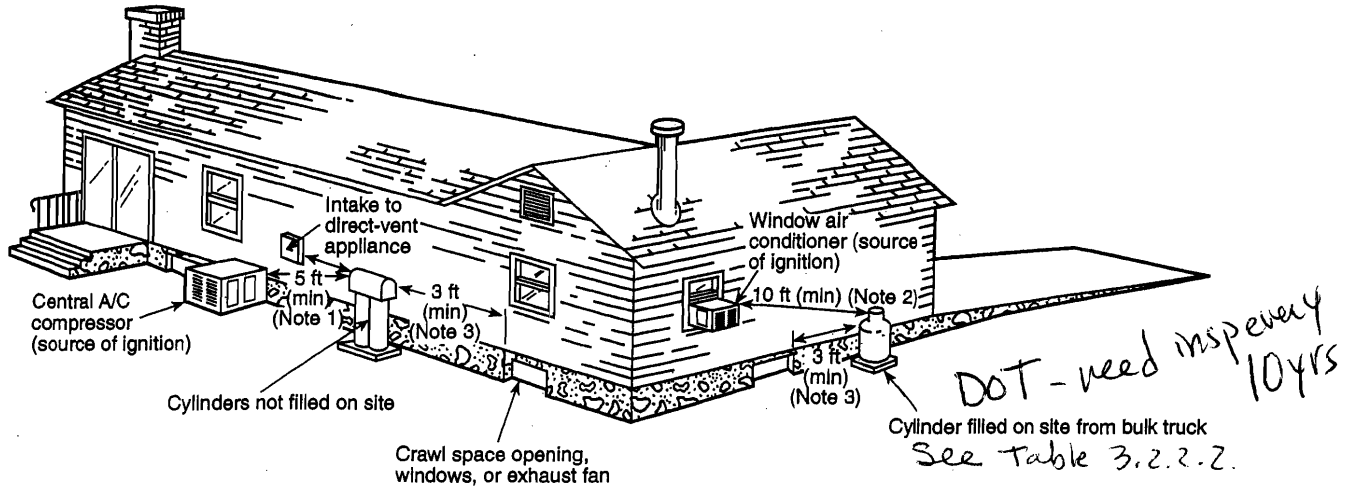
Dept: Zoning **Status:** Approved **Reviewer:** Jeanine Bourke **Approval Date:** 11/19/2007

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved **Reviewer:** Jeanine Bourke **Approval Date:** 11/19/2007

Note: **Ok to Issue:** ☑

FIGURE I.1(a) Cylinders. *(This figure for illustrative purposes only; code shall govern.)*



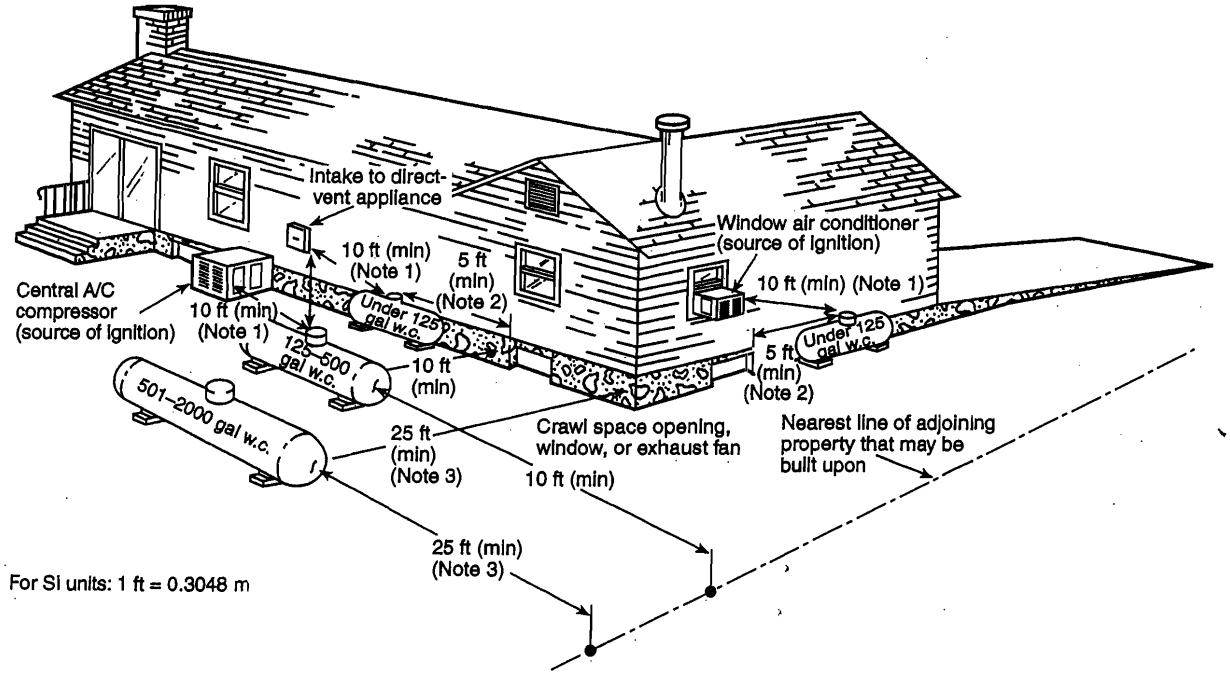
For SI units: 1 ft = 0.3048 m

Note 1: 5-ft minimum from relief valve in any direction away from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 3.2.2.2(b).

Note 2: If the cylinder is filled on site from a bulk truck, the filling connection and vent valve must be at least 10 ft from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 3.2.2.2(e).

Note 3: Refer to 3.2.2.2(b).

FIGURE I.1(b) Aboveground ASME containers. *(This figure for illustrative purposes only; code shall govern.)*



For SI units: 1 ft = 0.3048 m

Note 1: Regardless of its size, any ASME container filled on site must be located so that the filling connection and fixed maximum liquid level gauge are at least 10 ft from any external source of ignition (e.g., open flame, window A/C, compressor), intake to direct-vented gas appliance, or intake to a mechanical ventilation system. Refer to 3.2.2.2(d).

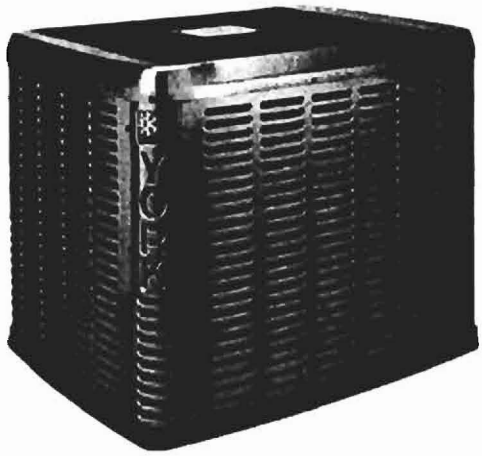
Note 2: Refer to 3.2.2.2(d)

Note 3: This distance may be reduced to no less than 10 ft for a single container of 1200 gal (4.5 m^3) water capacity or less, provided such container is at least 25 ft from any other LP-Gas container of more than 125 gal (0.5 m^3) water capacity. Refer to 3.2.2.2 Exception No. 2.

YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

AFFINITY
R-410A SPLIT-SYSTEM AIR CONDITIONERS
UP TO 18 SEER
MODELS:
CZE024 THRU 060
(2 THRU 5 NOMINAL TONS)



ARI PERFORMANCE CERTIFIED
ARI Standard 210/240
Unitary Air Conditioners

ENERGY STAR

Good Housekeeping Promises
LIMITED WARRANTY TO CONSUMERS
REPLACEMENT OR REFUND IF DEFECTIVE

c UL us
LISTED

ISO 9000 REGISTRATION
ISO 9001
Certified Quality
Management System

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

Visit us on the web at www.york.com for the most up-to-date technical information.

Additional rating information can be found at www.ariprimenet.org.

DESCRIPTION

The CZE Series condensing unit is the outdoor part of a versatile air conditioning system. It is designed to be custom matched with one of our complete line of evaporator sections, each designed to serve a specific function. Matching air handlers are available for upflow, downflow, and horizontal left or right application to provide a complete system. Electric heaters are available if required. Add-on coils are available for use with upflow, downflow, or horizontal furnaces. Field installed accessories are available as needed.

WARRANTY

5-year limited parts warranty.
10-year limited compressor warranty.

Premium System Warranty - Limited lifetime compressor and 10-year parts when matched with an approved York Affinity furnace and coil or UPG air handler.

FEATURES

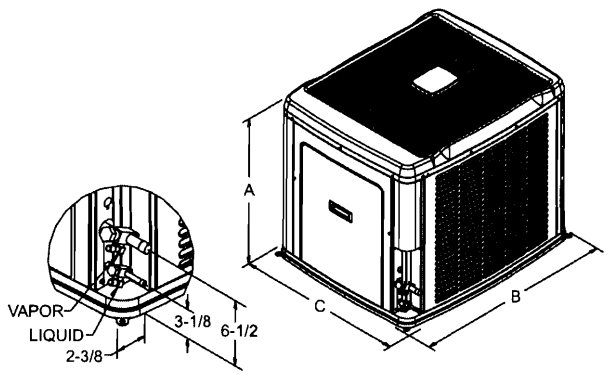
- **Superior Coil Protection** – A stamped decorative metal coil guard completely protects coil from debris and other large damaging material while a polymer mesh further protects the coil against smaller particles.
- **Color Grilles** - Engineered around the needs and wants of the consumer, Affinity units are now available with a choice of color options designed to compliment any home.
- **Isolated Compressor Compartment** – A molded composite bulkhead isolates the compressor from the rest of the unit reducing sound and vibration.
- **Protected Compressors** – Each compressor is protected against abnormal pressures by an internal pressure relief valve and factory installed high and low pressure controls.
- **Environmentally Friendly Refrigerant** – Next generation refrigerant R-410A delivers environmentally friendly performance with zero ozone depletion.
- **Durable Finish** – Automotive quality finish provides the ultimate protection from harmful U.V. rays and rust creep ensuring long-lasting high quality appearance. A powder-paint topcoat is applied over a baked-on primer, using a galvanized, zinc coated steel base material. The result is a finish that has been proven in testing to provide 33% greater durability than conventional powder-coat finishes.
- **Lower Installed Cost** – Designed to provide enhanced installability by featuring a slide-down control compartment and angled service valves to reduce overall installation time and cost.
- **Low Operating Sound Levels** – A fan design boasting technology adapted from aeronautic and defense engineering provides for whisper quiet operation by allowing airflow to flow smoothly and efficiently across the fan tips.
- **Filter-Drier** – A factory installed, solid core liquid line filter-drier filters harmful debris and moisture from the system.
- **Easy Service Access** – A full end, full service, access panel with handle makes for easy entry to internal components.
- **Composite Base** - Strong and durable composite base pan resists rust and corrosion while it helps reduce vibrations and noise.
- **Quiet drive system** - The swept-wing fan, composite base pan, isolated compressor compartment, electronically controlled fan motor and two-stage compressor are engineered as a system to reduce overall sound to a mere whisper.
- **Low RPM fan motor** - Helps to reduce airflow noise.

Certified in accordance with the Unitary Small Equipment certification program, which is based on ARI Standard 210/240.

Physical and Electrical Data

MODEL		CZE02411	CZE03611	CZE03811	CZE04811	CZE06011
Unit Supply Voltage		208-230V, 1ϕ, 60Hz				
Normal Voltage Range [1]		187 to 252				
Minimum Circuit Ampacity		13.3	22.3	23.6	27.9	33.5
Max. Overcurrent Device Amps [2]		20	35	40	45	50
Min. Overcurrent Device Amps [3]		15	25	25	30	35
Compressor Type		Scroll	Scroll	Scroll	Scroll	Scroll
Compressor Amps	Rated Load	10.3	16.7	16.7	21.2	25.6
	Locked Rotor	52	82	82	96	118
Crankcase Heater		No	No	No	No	No
Fan Motor Amps	Rated Load	0.5	1.5	2.8	1.5	1.5
Fan Diameter Inches		22	22	22	22	22
Fan Motor	Rated HP	1/15	1/4	1/3	1/4	1/4
	Nominal RPM	850	850	685	850	850
	Nominal CFM	2,000	3,450	2500	3,250	3,150
Coil	Face Area Sq. Ft.	17.15	20.58	20.58	20.58	20.58
	Rows Deep	1	1	2	2	2
	Fins / Inch	22	22	22	22	22
Liquid Line Set OD (Field Installed)		3/8	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)		3/4	3/4	7/8	7/8	1-1/8
Unit Charge (Lbs. - Oz.) [4]		7 - 5	8 - 4	11 - 4	14 - 2	13 - 9
Charge Per Foot, Oz.		0.62	0.62	0.67	0.67	0.75
Operating Weight Lbs.		195	210	260	260	270

1 Rated in accordance with ARI Standard 110, 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 The Unit Charge is correct for the outdoor unit, matched indoor coil 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.



All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.

Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
024	33-1/2	37	31	3/8"	3/4"
036	39-1/2	37	31		
038	39-1/2	37	31		7/8"
048	39-1/2	37	31		
060	39-1/2	37	31		7/8" *

* Expander fitting required for 1-1/8" line set.

Additional R-410A Charge / TXV Size for Various Matched Systems					
Outdoor Unit	CZE02411	CZE03611	CZE03811	CZE04811	CZE06011
Approved System Thermal Expansion Valve[1]	1TVM0902	1TVM0902	1TVM0903	1TVM0905	1TVM0905
Factory R-410A Charge, lbs-oz	7 - 5	8 - 4	11 - 4	14 - 2	13 - 9
Indoor Coil[2]	Additional Charge, Oz				
FC/MC/PC24A	M902 + 2	–	–	–	–
FC/MC/PC24B	M902 + 2	–	–	–	–
FC/MC/PC30A	M902 + 5	–	–	–	–
FC/MC/PC30B	M902 + 5	–	–	–	–
FC/MC/PC36A	M902 + 8	–	–	–	–
FC/MC/PC36B	M902 + 8	–	–	–	–
FC/MC/PC36C	–	–	–	–	–
FC/MC/PC42B	–	M902 + 8	M903 + 0	–	–
FC/MC/PC42C	–	M902 + 8	M903 + 0	–	–
FC/MC/PC48C	–	M902 + 11	M903 + 13	–	–
FC/MC/PC48D	–	M902 + 11	M903 + 13	–	–
FC/PC60C	–	–	M903 + 19	M905 + 9	M905 + 9
FC/MC/PC60D	–	–	M903 + 19	M905 + 9	M905 + 9
MC61D	–	–	M903 + 28	M905 + 9	M905 + 9
HC18	–	–	–	–	–
HC30	–	–	–	–	–
HC36B	M902 + 11	–	–	–	–
HC42	–	M902 + 11	M903 + 13	–	–
HC60	–	–	M903 + 19	M905 + 9	M905 + 9
HD24	–	–	–	–	–
HD36	M902 + 9	–	–	–	–
HD48	–	M902 + 10	M903 + 13	–	–
HD60	–	–	M903 + 19	M905 + 9	M905 + 9
AV24	M902 + 4	–	–	–	–
AV36	–	–	–	–	–
AV/SV48	–	M902 + 17	M903 + 19	M905 + 9	–
AV/SV60	–	–	M903 + 19	M905 + 9	M905 + 9
G2FD030(S,H)17	M902 + 3	–	–	–	–
G2FD035(S,H)14	M902 + 3	–	–	–	–
G2FD036(S,H)17	M902 + 8	–	–	–	–
G2FD036(S,H)21	–	–	–	–	–
G2FD046(S,H)17	–	M902 + 0	M903 + 0	–	–
G2FD048(S,H)21,24	–	M902 + 11	M903 + 13	–	–
G2FD060(S,H)24	–	–	M903 + 19	M905 + 9	M905 + 9
G2FD061H24	–	–	M903 + 28	M905 + 9	M905 + 9
G1HA036H17	M902 + 16	–	–	–	–
G1HA048H21	–	M902 +8	M903 +8	–	–
G1HA060H24	–	–	M903 + 19	M905 + 9	M905 + 9
G1HD036	M902 + 11	–	–	–	–
G1HD048	–	M902 + 3	M903 + 3	–	–
G1HD060	–	–	M903 + 8	M905 + 0	M905 + 0
G1FA/G1UA030S14	M902 + 0	–	–	–	–
G1FA/G1UA036S14	M902 + 5	–	–	–	–
G1FA/G1UA036S17,21	M902 + 3	–	–	–	–
G1FA/G1UA048S17	–	M902 + 0	M903 + 0	–	–
G1FA/G1UA048S21	–	M902 + 8	M903 + 8	–	–
G1FA/G1UA060S21,24	–	–	M903 + 19	M905 + 9	M905 + 9
F2FV060	–	–	M903 + 19	M905 + 9	M905 + 9
F4FV060H06T2C	–	–	M903 + 19	M905 + 9	M905 + 9

For notes see Page 4.

Additional R-410A Charge / TXV Size for Various Matched Systems (Continued)					
Outdoor Unit	CZE02411	CZE03611	CZE03811	CZE04811	CZE06011
Approved System Thermal Expansion Valve[1]	1TVM0902	1TVM0902	1TVM0903	1TVM0905	1TVM0905
Factory R-410A Charge, lbs-oz	7 - 5	8 - 4	11 - 4	14 - 2	13 - 9
Airflow					
Variable Speed Indoor					
MV12BV	650/825	775/1200	770/1200	–	–
MV16CV	–	775/1185	770/1200	–	–
MV12D	–	–	770/1200	–	–
MV20DV	–	775/1200	770/1200	1000/1600	1180/1845
AV24	800/535	–	–	–	–
AV/SV48	540/835	810/1235	810/1235	1130/1665	–
AV/SV60	540/835	–	–	–	1145/1765
F*FV060	–	–	770/1200	1000/1600	1200/1845
PV8*A12	580/875	–	–	–	–
PV8*B16	540/835	795/1200	640/1200	–	–
PV8*C16	540/835	795/1200	640/1200	–	–
PV8*C20	520/800	780/1170	640/1200	1030/1610	–
PV9A12	625/800	–	–	–	–
P(C,V)9B12	560/800	770/1200	770/1200	–	–
P(C,V)9C16	640/800	780/1200	780/1200	1040/1600	–
P(C,V)9C20	650/800	800/1200	800/1200	1010/1600	1040/1620
P(C,V)9D20	–	770/1200	770/1200	1020/1600	1030/1620
Hi CFM	800	1200	1200	1600	1900
Max Low CFM	700	1000	1000	1350	1600
Recommended Low CFM	600	750	750	900	1050

FOOTNOTES:

1 Only the TXV kits listed above are approved for use in these systems.
2 Systems matched with furnace or air handlers not equipped with blower-off delays may require blower Time Delay Kit 2FD06700224.

PROCEDURES:

1. Unit factory charge listed on the unit nameplate includes refrigerant for the condenser, the smallest evaporator and 15 feet of interconnecting line tubing.
2. Verify the TXV and additional charge required for specific evaporator coil in the system using the above table.
3. Additional charge for the amount of interconnecting line tubing greater than 15 feet at the rate specified on the previous page.
4. Permanently mark the unit nameplate with the total system charge. Total System Charge = Base Charge (as shipped) + adder for evaporator + adder for line set.

COOLING CAPACITY - With Air Handler Coils

UNIT MODEL	AIR HANDLER			COIL	COOLING					
	MODEL	ELECTRIC HEAT KW[2]	W	MODEL[1]	STAGE	RATED CFM	NET MBH TOTAL	NET MBH SENS.	SEER	EER
1 & 3 PH 13 SEER AC WITH MA										
CZE02411	AV24	2,5,8,10,15	17	–	1	625	18.5	14.9	15.00	13.20
					2	800	24.0	19.0		12.00
	MV12B	5,8,10	17	FC/MC36B	1	650	18.5	14.9	15.00	13.20
					2	825	24.0	19.0		12.00
CZE03611	AV/SV48	5,8,10,15,18,20,25	24	–	1	810	23.8	17.5	15.25	12.40
					2	1200	36.0	26.3		12.00
	MV12B	5,8,10	17	FC/MC42B	1	775	23.8	17.5	15.25	12.40
					2	1200	35.0	26.3		12.00
	MV16C	5,8,10,15,18,20	21	FC/MC48C	1	775	25.4	18.7	15.50	13.20
					2	1185	36.0	27.2		12.00
	MV20D	10,15,20,25	24	FC/MC48D	1	775	25.4	18.8	15.75	13.25
					2	1185	36.0	27.2		12.00
CZE03811	AV/SV48	5,8,10,15,18,20,25	24	–	1	810	24.4	17.6	16.75	14.55
					2	1200	35.6	25.6		12.00
	F*FV060	5,8,10,15,20,25	24	–	1	770	24.4	17.6	17.50	14.55
					2	1200	34.8	25.6		12.00
	MV16C	5,8,10,15,18,20	17	FC/MC42C	1	775	24.6	17.7	17.50	14.35
					2	1200	34.6	25.5		12.00
	MV16C	5,8,10,15,18,20	21	FC/MC48C	1	770	24.6	17.7	17.50	14.50
					2	1200	34.8	25.6		12.00
	MV12D	10,15,20,25	24	FC/MC48D	1	770	24.6	17.7	17.75	14.50
					2	1200	35.2	25.9		12.00
	MV20D	10,15,20,25	24	FC/MC48D	1	770	24.4	17.6	17.50	14.50
					2	1200	34.8	25.6		12.00
	MV12D	10,15,20,25	24	FC/MC60D	1	775	24.6	17.7	17.75	14.65
					2	1200	35.0	25.9		12.00
	MV20D	10,15,20,25	24	FC/MC60D	1	775	24.4	17.6	17.50	14.55
					2	1200	34.8	25.6		12.00
	MV12D	10,15,20,25	24	MC61D	1	770	24.8	17.9	18.00	14.65
					2	1200	35.2	26.1		12.00
	MV20D	10,15,20,25	24	MC61D	1	770	24.6	17.7	17.75	14.55
					2	1200	35.0	25.8		12.00
CZE04811	AV/SV48	5,8,10,15,18,20,25	24	–	1	1130	33.4	25.1	15.00	13.20
					2	1600	47.0	36.6		12.00
	F*FV060	5,8,10,15,20,25	24	–	1	1000	33.4	25.1	15.75	13.20
					2	1600	47.0	36.6		12.00
	MV20D	10,15,20,25	24	FC/MC60D	1	1000	33.4	25.1	15.50	13.15
					2	1600	47.0	36.6		12.00
	MV20D	10,15,20,25	24	MC61D	1	1000	33.6	25.3	16.00	13.30
					2	1560	47.0	37.1		12.00
CZE06011	AV/SV60	5,8,10,15,18,20,25	24	–	1	1145	39.0	29.5	13.75	11.60
					2	1845	54.0	42.4		11.00
	F*FV060	5,8,10,15,20,25	24	–	1	1200	39.0	29.5	13.75	11.60
					2	1845	55.0	42.4		11.00
	MV20D	10,15,20,25	24	FC/MC60D	1	1200	39.0	29.5	13.50	11.70
					2	1845	54.5	42.4		11.00
	MV20D	10,15,20,25	24	MC61D	1	1180	39.5	29.7	14.00	11.90
					2	1850	55.0	42.7		11.50

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ARI Standards 210.
Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.
EER (Energy Efficiency Ratio) is the total cooling output in BTU's 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 BTU's 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.
2 Single phase units require single phase 4HK heaters.

COOLING CAPACITY - With Variable Speed Furnaces

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL[1]	W	COOLING					
				STAGE	RATED CFM	NET MBH		SEER	EER
						TOTAL	SENSIBLE		
CZE02411	PV8*A12	FC/MC/PC30A	14	1	580	18.2	14.2	15.00	13.15
				2	875	23.8	19.7		12.00
	PV9*A12	FC/MC/PC30A	14	1	625	18.4	14.8	14.75	13.05
				2	800	23.6	18.9		11.50
	P(C,V)9*B12	FC/MC/PC30B	17	1	625	18.4	14.8	14.75	13.05
				2	800	23.6	18.9		11.50
	PV8*A12	FC/MC/PC36A	14	1	560	18.2	14.6	15.00	13.15
				2	800	23.8	19.0		12.00
	PV9*A12	FC/MC/PC36A	14	1	560	18.2	14.6	15.00	13.15
				2	800	23.8	19.0		12.00
	P(C,V)9*B12	FC/MC/PC36B	17	1	560	18.2	14.6	15.00	13.15
				2	800	23.8	19.0		12.00
	P(C,V)9*B12	HD36	–	1	560	18.2	14.6	15.00	13.15
				2	800	23.8	19.0		12.00
CZE03611	PV8*B16	FC/MC/PC42B	17	1	795	24.0	18.0	15.00	12.55
				2	1200	35.4	27.2		12.00
	P(C,V)9*B12	FC/MC/PC42B	17	1	770	23.8	17.6	15.00	12.30
				2	1200	35.2	23.9		12.00
	PV8*C16	FC/MC/PC42C	21	1	795	24.0	18.0	15.50	12.55
				2	1200	35.4	27.2		12.00
	PV8*C20	FC/MC/PC42C	21	1	795	24.0	18.0	15.50	12.55
				2	1200	35.4	27.2		12.00
	P(C,V)9*C16	FC/MC/PC42C	21	1	770	23.8	17.6	15.00	12.30
				2	1200	35.2	23.9		12.00
	P(C,V)9*C20	FC/MC/PC42C	21	1	770	23.8	17.6	15.50	12.30
				2	1200	35.4	23.9		12.00
	PV8*C16	FC/MC/PC48C	21	1	780	25.4	19.0	15.50	13.30
				2	1200	35.4	27.6		12.00
	PV8*C20	FC/MC/PC48C	21	1	780	25.4	19.0	15.75	13.30
				2	1170	36.0	27.6		12.00
	P(C,V)9*C16	FC/MC/PC48C	21	1	780	25.4	18.8	15.50	13.10
				2	1200	36.0	25.5		12.00
	P(C,V)9*C20	FC/MC/PC48C	21	1	800	25.6	18.9	15.50	13.25
				2	1200	36.0	25.6		12.00
	P(C,V)9*D20	FC/MC/PC48D	24	1	770	25.4	18.8	15.50	13.20
				2	1200	36.0	25.5		12.00
	PV8*C20	HC42	21	1	795	24.0	18.0	15.00	12.55
				2	1200	35.2	27.2		12.00
	P(C,V)9*C20	HC42	21	1	795	24.0	18.0	15.00	12.55
				2	1200	35.2	27.2		12.00
	PV8*C20	HD48	–	1	795	24.0	18.0	15.00	12.55
				2	1200	35.2	27.2		12.00
	P(C,V)9*C20	HD48	–	1	795	24.0	18.0	15.00	12.55
				2	1200	35.2	27.2		12.00

For notes see Page 8.

COOLING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL[1]	W	COOLING					
				STAGE	RATED CFM	NET MBH		SEER	EER
						TOTAL	SENSIBLE		
CZE03811	PV8*B16	FC/MC/PC42B	17	1	640	23.8	17.2	17.25	14.05
				2	1200	34.8	25.9		12.00
	PV8*C16	FC/MC/PC42C	21	1	640	24.2	17.4	17.25	14.30
				2	1200	34.8	26.0		12.00
	PV8*C20	FC/MC/PC42C	21	1	640	24.2	17.4	17.25	14.30
				2	1200	35.0	26.0		12.00
	P(C,V)9*C16	FC/MC/PC42C	21	1	780	25.0	18.0	17.00	14.30
				2	1200	34.8	25.9		12.00
	P(C,V)9*C20	FC/MC/PC42C	21	1	800	24.6	17.7	17.00	14.15
				2	1200	35.0	25.9		12.00
	PV8*C16	FC/MC/PC48C	21	1	640	24.2	17.4	17.25	14.30
				2	1200	34.8	26.0		12.00
	PV8*C20	FC/MC/PC48C	21	1	640	24.2	17.4	17.50	14.30
				2	1200	35.0	26.0		12.00
	P(C,V)9*C16	FC/MC/PC48C	21	1	780	25.0	18.0	17.25	14.30
				2	1200	34.8	25.9		12.00
	P(C,V)9*C20	FC/MC/PC48C	21	1	800	24.6	17.7	17.25	14.15
				2	1200	35.0	25.9		12.00
	P(C,V)9*D20	FC/MC/PC48D	24	1	770	24.4	17.6	17.25	14.15
				2	1200	35.0	25.9		12.00
	PV8*C16	FC/PC60C	21	1	640	24.0	17.3	17.25	14.20
				2	1200	34.4	25.8		12.00
	PV8*C20	FC/PC60C	21	1	640	24.0	17.3	17.50	14.20
				2	1200	34.8	25.8		12.00
	P(C,V)9*C16	FC/PC60C	21	1	780	24.6	17.7	17.00	14.05
				2	1200	34.4	25.9		12.00
	P(C,V)9*C20	FC/PC60C	21	1	800	25.0	18.0	17.25	14.35
				2	1200	35.0	25.9		12.00
	P(C,V)9*D20	FC/MC/PC60D	24	1	770	24.8	17.9	17.50	14.30
				2	1200	35.0	25.9		12.00
	PV8*C16	HC42	21	1	640	24.2	17.4	17.00	14.30
				2	1200	34.8	26.0		12.00
	PV8*C20	HC42	21	1	640	24.2	17.4	17.00	14.30
				2	1200	35.0	26.0		12.00
	P(C,V)9*C16	HC42	21	1	780	25.0	18.0	17.00	14.30
				2	1200	34.8	25.9		12.00
	P(C,V)9*C20	HC42	21	1	800	24.6	17.7	17.00	14.15
				2	1200	35.0	25.9		12.00
	P(C,V)9*D20	HC60	24	1	770	24.8	17.9	17.50	14.30
				2	1200	35.0	25.9		12.00
	PV8*C16	HD48	–	1	640	24.2	17.4	17.00	14.30
				2	1200	34.8	26.0		12.00
	PV8*C20	HD48	–	1	640	24.2	17.4	17.00	14.30
				2	1200	35.0	26.0		12.00
	P(C,V)9*C16	HD48	–	1	780	25.0	18.0	17.00	14.30
				2	1200	34.8	25.9		12.00
	P(C,V)9*C20	HD48	–	1	800	24.6	17.7	17.00	14.15
				2	1200	35.0	25.9		12.00
	P(C,V)9*D20	HD60	–	1	770	24.8	17.9	17.25	14.30
				2	1200	35.0	25.9		12.00
	P(C,V)9*D20	MC61D	24	1	770	24.8	17.9	17.50	14.25
				2	1200	35.2	26.1		12.00

For notes see Page 8.

COOLING CAPACITY - With Variable Speed Furnaces (Continued)

UNIT MODEL	VARIABLE SPEED FURNACE MODEL	COIL MODEL[1]	W	COOLING					
				STAGE	RATED CFM	NET MBH		SEER	EER
						TOTAL	SENSIBLE		
CZE04811	PV8*C20	FC/PC60C	21	1	1030	33.6	25.8	15.50	13.10
				2	1610	47.0	37.6		12.00
	P(C,V)9*C20	FC/PC60C	21	1	1010	33.4	25.1	15.00	12.80
				2	1610	47.0	33.5		12.00
	PV8*C20	FC/MC/PC60D	24	1	1030	33.6	25.8	15.50	13.10
				2	1610	47.0	37.6		12.00
	P(C,V)9*D20	FC/MC/PC60D	24	1	1020	33.4	25.2	15.25	12.90
				2	1600	44.0	33.6		12.00
	PV8*C20	HC60	24	1	1030	33.6	25.8	15.50	13.10
				2	1610	47.0	37.6		12.00
	P(C,V)9*D20	HC60	24	1	1020	33.4	25.2	15.25	12.90
				2	1600	44.0	33.6		12.00
	PV8*C20	HD60	–	1	1030	33.6	25.8	15.50	13.10
				2	1610	47.0	37.6		12.00
	P(C,V)9*D20	HD60	–	1	1020	33.4	25.2	15.25	12.90
				2	1600	44.0	33.6		12.00
	PV8*C20	MC61D	24	1	1030	33.8	26.1	15.50	13.20
				2	1500	47.0	36.7		12.00
	P(C,V)9*D20	MC61D	24	1	1020	33.8	25.4	15.50	13.05
				2	1600	44.5	33.8		12.00
CZE06011	PV8*C20	FC/PC60C	21	1	1120	38.5	28.9	13.50	11.50
				2	1730	54.5	42.1		11.00
	P(C,V)9*C20	FC/PC60C	21	1	1040	38.5	28.9	13.25	11.35
				2	1620	54.0	38.6		11.00
	PV8*C20	FC/MC/PC60D	24	1	1120	38.5	28.9	13.50	11.50
				2	1730	54.5	42.1		11.00
	P(C,V)9*D20	FC/MC/PC60D	24	1	1030	38.5	28.9	13.25	11.40
				2	1620	54.0	38.6		11.00
	P(C,V)9*D20	HC60	24	1	1030	38.5	28.9	13.25	11.40
				2	1620	54.0	38.6		11.00
	PV8*C20	HD60	–	1	1120	38.5	28.9	13.25	11.50
				2	1620	54.0	42.1		11.00
	P(C,V)9*D20	HD60	–	1	1030	38.5	28.9	13.50	11.40
				2	1620	54.0	38.6		11.00
	P(C,V)9*C20	MC61D	24	1	1030	38.5	29.1	13.25	11.50
				2	1640	54.5	38.8		11.00
	P(C,V)9*D20	MC61D	24	1	1030	38.5	29.1	13.50	11.50
				2	1620	54.5	38.8		11.00

1 MC coils available with a factory installed horizontal drain pan.

ACCESSORIES*

Hard Start Kit (024-31994-000, 024-31995-000) - Provides increased starting torque for areas with low voltage.

TXV Kits - 1TV09 series thermal expansion valves precisely meter refrigerant for optimum performance

Dehumidistat (2HU16700124) - Provides increased dehumidification when matched with variable speed furnace or air handler.

Room Thermostats - A wide selection of compatible thermostats are available to provide optimum performance and features for any installation.

1 Heat Stage only, manual, mechanical thermostat. Add subbase for 3H/2C.

3H/2C, manual change-over electronic non-programmable thermostat.

3H/2C, auto/manual changeover, electronic programmable, deluxe 7-day, thermostat.

3H/2C, auto/manual changeover, electronic programmable.

* For the most current accessory information, refer to the price book or consult factory.

SOUND POWER RATINGS*

UNIT MODEL	(dBA)
024	71
036	73
038	70
048	72
060	74

* Rated in accordance with ARI 270-95 Standards.

COLOR GRILLES

CHOICE OF SEVERAL COLOR COIL GRILLES TO COMPLIMENT ANY HOME.		
Color Grill	Color Description	
1CP0130	Terra Cotta	024
1CP0136	Terra Cotta	036, 038, 048, 060
1CP0230	Jet Black	024
1CP0236	Jet Black	036, 038, 048, 060
1CP0330	Stone	024
1CP0336	Stone	036, 048, 060
1CP0430	Bermuda	024
1CP0436	Bermuda	036, 038, 048, 060
1CP0530	Gunmetal	024
1CP0536	Gunmetal	036, 038, 048, 060
1CP0630	Chocolate	024
1CP0636	Chocolate	036, 038, 048, 060

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE02411														
INDOOR COIL MODEL NO.		FC/MC36B + MV12B														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	550					600					650				
	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.	16.5	17.0	16.4	15.3	19.2	17.1	17.2	16.5	17.2	19.6	17.6	17.5	16.6	19.0	20.0
	S.C.	17.0	16.3	13.7	11.9	10.9	17.5	17.1	14.0	13.6	11.2	17.9	18.0	14.2	15.2	11.5
	K.W.	0.8	0.7	0.7	0.5	0.7	0.7	0.7	0.8	0.6	0.7	0.6	0.7	0.8	0.7	0.7
75	T.C.	15.8	16.1	15.4	17.2	18.3	16.3	16.4	15.7	17.6	18.6	16.9	16.7	16.0	18.0	18.9
	S.C.	16.2	15.7	13.1	13.4	10.6	16.7	16.5	13.5	14.0	10.8	17.2	17.3	13.9	14.6	11.1
	K.W.	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9
85	T.C.	15.1	15.2	14.5	19.0	17.4	15.6	15.6	15.0	18.1	17.6	16.2	15.9	15.4	17.1	17.7
	S.C.	15.4	15.2	12.5	14.9	10.3	15.9	15.9	13.0	14.5	10.5	16.4	16.7	13.5	14.0	10.6
	K.W.	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0	1.1	1.0	0.9	0.9	1.0	1.0	1.0
95	T.C.	14.4	14.3	13.5	20.9	16.5	14.9	14.7	14.2	18.5	16.6	15.5	15.1	14.8	16.1	16.6
	S.C.	14.6	14.6	11.9	16.4	10.0	15.2	15.3	12.5	14.9	10.1	15.7	16.0	13.2	13.3	10.2
	K.W.	1.2	1.2	1.2	1.6	1.1	1.1	1.1	1.2	1.4	1.2	1.1	1.1	1.2	1.2	1.2
105	T.C.	13.7	13.3	12.5	19.5	15.5	14.1	13.8	13.0	17.2	15.4	14.6	14.2	13.5	15.0	15.3
	S.C.	13.9	13.7	11.2	15.7	9.6	14.4	14.4	11.9	14.3	9.7	14.8	15.0	12.5	12.9	9.8
	K.W.	1.4	1.4	1.4	1.9	1.3	1.3	1.3	1.4	1.6	1.3	1.3	1.3	1.4	1.4	1.4
115	T.C.	13.0	12.4	11.5	18.1	14.4	13.4	12.9	11.9	16.0	14.3	13.8	13.4	12.3	13.9	14.1
	S.C.	13.1	12.9	10.6	15.0	9.3	13.6	13.5	11.2	13.7	9.4	14.0	14.1	11.9	12.5	9.5
	K.W.	1.6	1.6	1.6	2.1	1.5	1.5	1.5	1.5	1.8	1.5	1.5	1.5	1.5	1.6	1.6
125	T.C.	12.3	11.4	10.5	16.7	13.3	12.6	12.0	10.7	14.8	13.1	13.0	12.6	11.0	12.8	12.9
	S.C.	12.4	12.1	9.9	14.3	8.9	12.8	12.6	10.6	13.2	9.0	13.2	13.1	11.3	12.1	9.1
	K.W.	1.7	1.8	1.7	2.4	1.7	1.7	1.7	1.7	2.1	1.7	1.7	1.7	1.7	1.7	1.7
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV24	–	1.00	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	0.99	0.99	1.01
PV9*A12	FC/MC/PC24A	0.99	0.99	1.01
P(C,V)9*B12	FC/MC/PC24B	0.99	0.99	1.01
PV8*A12	FC/MC/PC30A	0.99	0.99	1.01
PV9*A12	FC/MC/PC30A	0.99	0.99	1.01
P(C,V)9*B12	FC/MC/PC30B	0.99	0.99	1.01
PV8*A12	FC/MC/PC36A	0.99	0.98	0.99
P(C,V)9*B12	FC/MC/PC36A	0.99	0.98	0.99
P(C,V)9*B12	FC/MC/PC36B	0.99	0.98	0.99
PV9*A12	HD36	0.99	0.99	1.01

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE02411														
INDOOR COIL MODEL NO.		FC/MC36B + MV12B														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	700					800					900				
	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.	24.4	25.4	24.4	27.1	28.8	25.2	25.7	24.8	27.4	29.1	26.0	26.0	25.2	27.8	29.3
	S.C.	24.4	23.9	19.6	19.7	15.7	25.1	24.7	20.3	20.3	16.1	25.9	25.6	21.0	21.0	16.4
	K.W.	1.3	24.1	1.3	1.4	1.4	1.3	12.7	1.3	1.4	1.4	1.3	1.3	1.3	1.4	1.4
75	T.C.	23.7	24.2	23.3	26.0	27.5	24.4	24.6	23.7	26.3	27.7	25.1	25.1	24.1	26.6	27.9
	S.C.	23.6	23.1	19.0	19.2	15.2	24.3	24.0	19.7	19.9	15.6	25.0	24.8	20.4	20.5	15.9
	K.W.	1.5	16.7	1.5	1.5	1.6	1.5	9.1	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.6
85	T.C.	23.0	22.9	22.2	24.9	26.1	23.6	23.5	22.6	25.1	26.3	24.2	24.1	22.9	25.4	26.6
	S.C.	22.9	22.2	18.4	18.8	14.6	23.4	23.2	19.1	19.4	15.1	24.0	24.1	19.8	20.1	15.5
	K.W.	1.7	9.2	1.7	1.7	1.8	1.7	5.5	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.8
95	T.C.	22.3	21.7	21.2	23.8	24.8	22.8	22.4	21.5	24.0	25.0	23.3	23.2	21.8	24.2	25.2
	S.C.	22.1	21.4	17.9	18.4	14.1	22.6	22.4	18.5	19.0	14.6	23.0	23.4	19.2	19.6	15.0
	K.W.	1.9	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0
105	T.C.	21.1	20.4	19.7	22.1	23.0	21.6	21.1	20.1	22.4	23.2	22.1	21.7	20.3	22.7	23.4
	S.C.	21.0	20.4	17.0	17.5	13.5	21.4	21.2	17.6	18.1	13.9	21.8	22.0	18.3	18.7	14.3
	K.W.	2.2	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3
115	T.C.	20.0	19.2	18.4	20.6	21.2	20.5	19.8	18.7	20.9	21.5	20.9	20.2	19.0	21.1	21.7
	S.C.	20.0	19.5	16.1	16.7	13.0	20.3	20.1	16.8	17.3	13.3	20.7	20.6	17.4	17.8	13.7
	K.W.	2.5	2.4	2.5	2.5	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
125	T.C.	18.9	18.0	17.0	19.0	19.5	19.3	18.4	17.3	19.3	19.8	19.7	18.8	17.6	19.6	20.0
	S.C.	18.9	18.6	15.2	15.9	12.4	19.2	18.9	15.9	16.5	12.7	19.5	19.3	16.6	17.0	13.0
	K.W.	2.8	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV24	–	1.00	1.00	1.00

Variable Speed Furnace	Coi	T.C.	S.C.	KW
PV8*A12	FC/MC/PC24A	0.98	0.99	1.02
PV9*A12	FC/MC/PC24A	0.98	0.99	1.02
P(C,V)9*B12F	FC/MC/PC24B	0.98	0.99	1.02
PV8*A12	FC/MC/PC30A	0.98	0.99	1.02
PV9*A12	FC/MC/PC30A	0.98	0.99	1.02
P(C,V)9*B12	FC/MC/PC30B	0.98	0.99	1.02
PV8*A12	FC/MC/PC36A	0.99	1.00	1.00
P(C,V)9*B12	FC/MC/PC36A	0.99	1.00	1.00
P(C,V)9*B12	FC/MC/PC36B	0.99	1.00	1.00
PV9*A12	HD36	0.98	0.99	1.02

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE03611														
INDOOR COIL MODEL NO.		FC/MC48C + MV16C														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	750					800					850				
	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.	26.9	27.8	26.7	30.6	31.8	27.4	27.9	27.1	30.8	32.3	28.0	27.9	27.4	31.1	32.7
	S.C.	25.7	25.5	20.0	20.1	16.1	26.3	24.9	20.7	20.9	16.4	26.8	24.3	21.3	21.7	16.8
	K.W.	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2
75	T.C.	25.1	26.1	25.4	28.8	30.6	25.6	26.2	25.7	29.0	31.0	26.2	26.4	26.0	29.2	31.3
	S.C.	24.3	23.9	19.3	19.4	15.5	24.9	23.8	20.0	20.2	15.9	25.5	23.7	20.6	20.9	16.3
	K.W.	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.4	1.4
85	T.C.	23.2	24.4	24.1	27.0	29.3	23.8	24.6	24.3	27.2	29.7	24.4	24.9	24.6	27.4	30.0
	S.C.	23.0	22.4	18.6	18.7	15.0	23.6	22.7	19.3	19.4	15.4	24.3	23.1	19.9	20.1	15.9
	K.W.	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95	T.C.	21.3	22.7	22.8	25.2	28.1	22.0	23.0	23.0	25.4	28.4	22.7	23.4	23.2	25.5	28.6
	S.C.	21.7	20.9	17.9	18.1	14.4	22.3	21.7	18.6	18.7	14.9	23.0	22.4	19.2	19.3	15.5
	K.W.	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
105	T.C.	20.3	21.3	21.2	23.6	26.2	20.9	21.6	21.5	23.7	26.4	21.5	21.8	21.7	23.9	26.6
	S.C.	20.6	19.7	17.1	17.4	13.8	21.2	20.4	17.7	18.0	14.2	21.8	21.0	18.3	18.6	14.7
	K.W.	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2
115	T.C.	19.4	20.0	19.7	22.0	24.3	19.8	20.2	20.0	22.1	24.5	20.3	20.3	20.2	22.2	24.6
	S.C.	19.6	18.5	16.3	16.7	13.2	20.1	19.1	16.9	17.3	13.6	20.6	19.7	17.5	17.9	13.9
	K.W.	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
125	T.C.	18.4	18.7	18.3	20.5	22.4	18.7	18.7	18.5	20.5	22.6	19.1	18.8	18.7	20.6	22.7
	S.C.	18.6	17.4	15.5	16.1	12.6	19.0	17.8	16.1	16.7	12.9	19.4	18.3	16.6	17.2	13.2
	K.W.	3.0	2.9	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.87																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	1.00	1.00	1.00
MV12B	FC/MC42B	0.97	0.94	1.01
MV20D	FC/MC48D	1.00	1.01	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.98	0.96	1.01
P(C,V)9*B12	FC/MC/PC42B	0.98	0.94	1.03
PV8*C16	FC/MC/PC42C	0.98	0.94	1.03
PV8*C20	FC/MC/PC42C	0.98	0.94	1.03
P(C,V)9*C16	FC/MC/PC42C	0.98	0.94	1.03
P(C,V)9*C20	FC/MC/PC42C	0.98	0.94	1.03
PV8*C16	FC/MC/PC48C	1.00	1.02	1.00
PV8*C20	FC/MC/PC48C	1.00	1.02	1.00
P(C,V)9*C16	FC/MC/PC48C	1.00	1.01	1.01
P(C,V)9*C20	FC/MC/PC48C	1.00	1.01	1.01
P(C,V)9*D20	FC/MC/PC48D	1.00	1.01	1.01
PV8*C20	HC42	0.98	0.94	1.03
P(C,V)9*C20	HC42	0.98	0.94	1.03
PV8*C20	HD48	0.98	0.94	1.03
P(C,V)9*C20	HD48	0.98	0.94	1.03

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE03611														
INDOOR COIL MODEL NO.		FC/MC48C + MV16C														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1100					1200					1300				
	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.	34.1	36.8	36.5	38.0	39.8	34.7	37.1	36.6	37.5	39.3	35.4	37.3	36.6	37.1	38.8
	S.C.	35.3	32.2	26.2	26.1	20.1	36.6	32.8	28.0	25.9	20.3	37.0	33.5	29.8	25.7	20.5
	K.W.	1.9	2.0	2.1	2.0	2.0	1.9	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1
75	T.C.	33.2	35.5	35.1	37.3	39.1	33.9	35.7	35.3	37.0	38.8	34.6	36.0	35.5	36.8	38.5
	S.C.	34.5	32.0	26.3	26.1	20.3	35.6	32.7	27.9	26.3	20.5	36.8	33.4	29.4	26.5	20.7
	K.W.	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
85	T.C.	32.4	34.1	33.8	36.5	38.5	33.1	34.4	34.1	36.5	38.4	33.8	34.6	34.3	36.5	38.3
	S.C.	33.7	31.7	26.5	26.2	20.5	34.6	32.6	27.8	26.8	20.7	35.5	33.4	29.0	27.3	20.8
	K.W.	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.5	2.6	2.6
95	T.C.	31.6	32.7	32.4	35.8	37.8	32.3	33.0	32.8	36.0	37.9	32.9	33.3	33.2	36.2	38.0
	S.C.	32.9	31.5	26.6	26.3	20.6	33.6	32.4	27.6	27.2	20.8	34.3	33.3	28.6	28.1	21.0
	K.W.	2.8	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.9	2.9	2.8	2.8	2.8	2.9	2.9
105	T.C.	29.1	30.7	30.5	33.5	34.7	29.9	30.9	30.8	33.7	35.5	30.7	31.1	31.1	33.9	36.2
	S.C.	30.3	30.3	25.2	25.1	21.4	31.1	30.6	26.1	26.0	20.9	32.0	30.8	27.0	26.9	20.5
	K.W.	3.2	3.2	3.2	3.3	3.3	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.2	3.3	3.3
115	T.C.	26.7	28.8	28.5	31.3	31.7	27.6	28.9	28.9	31.5	33.1	28.5	29.0	29.1	31.8	34.4
	S.C.	27.7	29.1	23.8	23.9	22.1	28.8	28.8	24.6	24.8	21.0	29.8	28.4	25.4	25.7	19.9
	K.W.	3.6	3.6	3.6	3.7	3.7	3.7	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7
125	T.C.	24.2	26.9	26.6	29.0	28.8	25.3	26.9	26.9	29.4	30.7	26.3	26.9	27.2	29.6	32.7
	S.C.	25.1	27.9	22.4	22.7	22.9	26.4	27.0	23.1	23.6	21.1	27.6	26.0	23.8	24.5	19.3
	K.W.	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.2
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	1.00	1.00	1.00
MV12B	FC/MC42B	0.97	0.97	1.01
MV20D	FC/MC48D	1.00	1.01	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.98	1.00	1.01
P(C,V)9*B12	FC/MC/PC42B	0.98	0.88	1.03
PV8*C16	FC/MC/PC42C	1.00	1.01	1.00
PV8*C20	FC/MC/PC42C	1.00	1.01	1.00
P(C,V)9*C16	FC/MC/PC42C	1.00	0.94	1.01
P(C,V)9*C20	FC/MC/PC42C	1.00	0.94	1.01
PV8*C16	FC/MC/PC48C	1.00	1.01	1.00
PV8*C20	FC/MC/PC48C	1.00	1.01	1.00
P(C,V)9*C16	FC/MC/PC48C	1.00	0.94	1.01
P(C,V)9*C20	FC/MC/PC48C	1.00	0.94	1.01
P(C,V)9*D20	FC/MC/PC48D	1.00	0.94	1.01
PV8*C20	HC42	1.00	1.01	1.00
P(C,V)9*C20	HC42	1.00	0.94	1.01
PV8*C20	HD48	1.00	1.01	1.00
P(C,V)9*C20	HD48	1.00	0.94	1.01

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE03811														
INDOOR COIL MODEL NO.		FC/MC61D + MV12D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	700					750					800				
	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.	22.3	24.6	25.5	28.6	30.4	23.3	24.9	26.2	28.9	31.5	24.3	25.3	26.8	29.2	32.7
	S.C.	22.2	21.3	18.4	18.2	15.0	23.2	22.2	19.2	18.9	15.3	24.2	23.1	20.0	19.5	15.5
	K.W.	1.2	1.1	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0
75	T.C.	21.2	23.0	23.9	27.0	29.2	22.1	23.4	24.4	27.3	30.1	23.0	23.7	25.0	27.6	30.9
	S.C.	21.1	20.5	17.6	17.6	14.3	22.0	21.4	18.4	18.2	14.6	22.9	22.3	19.2	18.9	14.9
	K.W.	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2
85	T.C.	20.1	21.5	22.2	25.4	28.0	20.9	21.8	22.7	25.7	28.6	21.7	22.1	23.1	25.9	29.2
	S.C.	20.0	19.7	16.8	17.0	13.6	20.8	20.6	17.6	17.6	13.9	21.6	21.5	18.3	18.3	14.3
	K.W.	1.5	1.5	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.5	1.5	1.4	1.4	1.4
95	T.C.	19.0	19.9	20.5	23.9	26.8	19.7	20.2	20.9	24.1	27.1	20.5	20.6	21.3	24.3	27.5
	S.C.	18.9	19.0	16.0	16.4	12.9	19.6	19.8	16.8	17.0	13.3	20.4	20.7	17.5	17.6	13.6
	K.W.	1.7	1.7	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
105	T.C.	17.7	18.3	18.5	21.7	24.5	18.4	18.7	19.0	21.9	24.8	19.1	19.2	19.4	22.1	25.2
	S.C.	17.6	17.9	15.2	15.6	12.2	18.3	18.7	15.9	16.2	12.6	18.9	19.4	16.6	16.8	12.9
	K.W.	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
115	T.C.	16.4	16.7	16.6	19.6	22.3	17.1	17.2	17.1	19.7	22.6	17.7	17.8	17.6	19.9	23.0
	S.C.	16.3	16.9	14.4	14.8	11.5	17.0	17.6	15.0	15.4	11.9	17.6	18.2	15.7	16.0	12.3
	K.W.	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
125	T.C.	15.2	15.1	14.7	17.5	20.1	15.7	15.7	15.2	17.6	20.4	16.3	16.4	15.8	17.7	20.7
	S.C.	15.1	15.9	13.6	14.1	10.7	15.6	16.5	14.2	14.6	11.2	16.2	17.0	14.8	15.2	11.6
	K.W.	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	0.98	0.99	0.99
F*FV060	–	0.98	0.99	0.99
MV12B	FC/MC42B	0.99	0.98	1.01
MV16C	FC/MC48C	0.99	0.99	1.00
MV12D	FC/MC48D	0.99	0.99	1.00
MV20D	FC/MC48D	0.98	0.99	0.99
MV12D	FC/MC60D	0.99	0.99	0.99
MV20D	MC60D	0.98	0.99	0.99
MV20D	MC61D	0.99	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.96	0.90	1.00
PV8*C16	FC/MC/PC42C	0.98	0.91	1.00
PV8*C20	FC/MC/PC42C	0.98	0.91	1.00
P(C,V)9*C16	FC/MC/PC42C	1.01	1.02	1.03
P(C,V)9*C20	FC/MC/PC42C	0.99	1.02	1.03
PV8*C16	FC/MC/PC48C	0.98	0.91	1.00
PV8*C20	FC/MC/PC48C	0.98	0.91	1.00
P(C,V)9*C16	FC/MC/PC48C	1.01	1.02	1.03
P(C,V)9*C20	FC/MC/PC48C	0.99	1.02	1.03
P(C,V)9*D20	FC/MC/PC48D	0.98	1.00	1.02
PV8*C16	FC/PC60C	0.98	0.91	1.00
PV8*C20	FC/PC60C	0.98	0.91	1.00
P(C,V)9*C16	FC/PC60C	1.01	1.02	1.03
P(C,V)9*C20	FC/PC60C	0.99	1.02	1.03
P(C,V)9*D20	FC/MC/PC60D	0.99	1.02	1.03
PV8*C16	HC42	0.98	0.91	1.00
PV8*C20	HC42	0.98	0.91	1.00
P(C,V)9*C16	HC42	1.01	1.02	1.03
P(C,V)9*C20	HC42	0.99	1.02	1.03
P(C,V)9*D20	HC60	0.99	1.02	1.03
PV8*C16	HD48	0.98	0.91	1.00
PV8*C20	HD48	0.98	0.91	1.00
P(C,V)9*C16	HD48	1.01	1.02	1.03
P(C,V)9*C20	HD48	0.99	1.02	1.03
P(C,V)9*D20	HD60	0.99	1.02	1.03
P(C,V)9*D20	MC61D	1.00	1.01	1.02

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE03811														
INDOOR COIL MODEL NO.		FC/MC61D + MV12D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1050					1150					1250				
	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.	34.2	33.4	36.9	41.1	44.9	35.2	35.6	37.6	41.7	45.8	36.2	37.8	38.2	42.3	46.7
	S.C.	34.1	34.3	26.6	26.6	21.0	35.0	34.6	27.9	27.9	21.8	36.0	34.8	29.3	29.1	22.7
	K.W.	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.8	1.8
75	T.C.	32.6	32.5	34.9	38.9	42.9	33.5	34.1	35.5	39.4	43.7	34.4	35.7	36.0	40.0	44.5
	S.C.	32.5	32.3	25.7	25.8	20.3	33.4	32.9	27.0	27.0	21.1	34.2	33.4	28.3	28.2	22.0
	K.W.	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0
85	T.C.	31.1	31.5	32.9	36.6	40.8	31.9	32.5	33.4	37.1	41.6	32.7	33.6	33.8	37.7	42.3
	S.C.	30.9	30.3	24.9	24.9	19.6	31.7	31.2	26.1	26.1	20.5	32.5	32.1	27.4	27.3	21.3
	K.W.	2.1	2.2	2.2	2.2	2.3	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3
95	T.C.	29.5	30.6	30.9	34.4	38.8	30.2	31.0	31.3	34.9	39.5	31.0	31.4	31.7	35.4	40.1
	S.C.	29.3	28.3	24.1	24.0	19.0	30.1	29.5	25.2	25.2	19.8	30.8	30.7	26.4	26.4	20.6
	K.W.	2.4	2.4	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.5
105	T.C.	27.7	28.5	28.6	31.8	36.0	28.4	29.0	28.9	32.3	36.5	29.2	29.6	29.2	32.7	37.1
	S.C.	27.5	27.1	23.0	23.0	18.1	28.3	28.1	24.1	24.2	18.8	29.0	29.1	25.2	25.5	19.6
	K.W.	2.7	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.8	2.9	2.8	2.8	2.8	2.8	2.9
115	T.C.	25.9	26.4	26.3	29.3	33.3	26.7	27.1	26.6	29.7	33.7	27.4	27.7	26.8	30.2	34.1
	S.C.	25.8	26.0	22.0	22.1	17.2	26.5	26.8	23.0	23.3	17.9	27.2	27.6	24.0	24.5	18.6
	K.W.	3.1	3.1	3.1	3.2	3.2	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.2	3.2
125	T.C.	24.2	24.3	24.1	26.8	30.5	24.9	25.1	24.3	27.2	30.8	25.6	25.9	24.5	27.6	31.2
	S.C.	24.1	24.8	21.0	21.1	16.3	24.8	25.4	21.9	22.4	16.9	25.4	26.0	22.8	23.6	17.6
	K.W.	3.5	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.5	3.6	3.5	3.5	3.5	3.5	3.6
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	0.99	0.99	1.00
F*FV060	–	0.99	0.99	1.00
MV12B	FC/MC42B	0.98	0.97	1.01
MV16C	FC/MC48C	0.99	0.99	1.00
MV12D	FC/MC48D	0.99	0.99	1.00
MV20D	FC/MC48D	0.99	0.99	1.00
MV12D	FC/MC60D	0.99	0.99	1.00
MV20D	FC/MC60D	0.99	0.99	1.00
MV20D	MC61D	0.99	1.00	1.00

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*B16	FC/MC/PC42B	0.99	1.00	1.01
PV8*C16	FC/MC/PC42C	1.00	1.00	1.01
PV8*C20	FC/MC/PC42C	1.00	1.00	1.01
P(C,V)9*C16	FC/MC/PC42C	0.99	1.00	1.02
P(C,V)9*C20	FC/MC/PC42C	0.99	1.00	1.02
PV8*C16	FC/MC/PC48C	1.00	1.00	1.01
PV8*C20	FC/MC/PC48C	1.00	1.00	1.01
P(C,V)9*C16	FC/MC/PC48C	0.99	1.00	1.02
P(C,V)9*C20	FC/MC/PC48C	0.99	1.00	1.02
P(C,V)9*D20	FC/MC/PC48D	0.99	1.00	1.02
PV8*C16	FC/PC60C	1.00	1.00	1.01
PV8*C20	FC/PC60C	1.00	1.00	1.01
P(C,V)9*C16	FC/PC60C	0.99	1.00	1.02
P(C,V)9*C20	FC/PC60C	0.99	1.00	1.02
P(C,V)9*D20	FC/MC/PC60D	0.99	1.00	1.02
PV8*C16	HC42	1.00	1.00	1.01
PV8*C20	HC42	1.00	1.00	1.01
P(C,V)9*C16	HC42	0.99	1.00	1.02
P(C,V)9*C20	HC42	0.99	1.00	1.02
P(C,V)9*D20	HC60	0.99	1.00	1.02
PV8*C16	HD48	1.00	1.00	1.01
PV8*C20	HD48	1.00	1.00	1.01
P(C,V)9*C16	HD48	0.99	1.00	1.02
P(C,V)9*C20	HD48	0.99	1.00	1.02
P(C,V)9*D20	HD60	0.99	1.00	1.02
P(C,V)9*D20	MC61D	0.99	1.00	1.02

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE04811														
INDOOR COIL MODEL NO.		FC/MC60D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	950					1000					1050				
	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.	29.9	33.7	34.9	37.9	45.0	31.0	34.1	35.3	38.5	45.5	32.1	34.5	35.8	39.0	46.1
	S.C.	33.1	31.3	26.6	26.1	21.6	34.2	32.4	27.6	27.0	22.3	35.4	33.5	28.6	27.8	22.9
	K.W.	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75	T.C.	28.3	31.6	32.6	36.3	42.7	29.3	32.1	33.1	36.8	43.2	30.4	32.5	33.5	37.3	43.7
	S.C.	31.3	30.0	25.4	25.5	20.9	32.4	31.1	26.4	26.4	21.5	33.5	32.1	27.4	27.2	22.1
	K.W.	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85	T.C.	26.7	29.5	30.3	34.6	40.3	27.6	30.0	30.8	35.1	40.8	28.6	30.5	31.3	35.6	41.2
	S.C.	29.5	28.8	24.3	24.8	20.1	30.5	29.8	25.3	25.7	20.7	31.6	30.7	26.3	26.6	21.3
	K.W.	2.3	2.2	2.3	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2
95	T.C.	25.1	27.5	28.0	32.9	38.0	26.0	28.0	28.5	33.4	38.4	26.9	28.5	29.0	33.9	38.8
	S.C.	27.7	27.6	23.2	24.2	19.3	28.7	28.5	24.2	25.1	19.9	29.7	29.3	25.1	26.0	20.5
	K.W.	2.6	2.6	2.6	2.5	2.5	2.6	2.5	2.6	2.5	2.5	2.6	2.5	2.6	2.5	2.5
105	T.C.	23.7	25.4	25.8	30.2	35.1	24.5	25.9	26.3	30.6	35.5	25.3	26.3	26.8	31.0	35.9
	S.C.	26.1	25.8	22.1	23.2	18.4	27.0	26.6	23.0	24.0	18.9	27.9	27.4	23.9	24.9	19.4
	K.W.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
115	T.C.	22.4	23.4	23.7	27.7	32.2	23.0	23.8	24.1	28.0	32.6	23.7	24.2	24.6	28.3	33.0
	S.C.	24.6	23.9	21.0	22.2	17.5	25.4	24.7	21.9	23.0	18.0	26.2	25.5	22.8	23.8	18.4
	K.W.	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
125	T.C.	21.1	21.4	21.6	25.1	29.3	21.6	21.8	22.0	25.3	29.7	22.1	22.1	22.4	25.5	30.1
	S.C.	23.0	22.1	19.9	21.2	16.5	23.7	22.9	20.8	22.0	17.0	24.4	23.6	21.6	22.7	17.4
	K.W.	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	1.00	1.00	1.00
AV/SV60	–	1.00	1.00	1.00
F*FV060	–	1.00	1.00	1.00
MV20D	MC61D	1.00	1.01	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	1.00	1.03	1.02
P(C,V)9*C20	FC/PC60C	0.94	1.00	0.93
PV8*C20	FC/MC/PC60D	1.00	1.03	1.02
P(C,V)9*D20	FC/MC/PC60D	0.94	1.00	0.92
PV8*C20	HC60	1.00	1.03	1.02
P(C,V)9*D20	HC60	0.94	1.00	0.92
PV8*C20	HD60	1.00	1.03	1.02
P(C,V)9*D20	HD60	0.94	1.00	0.92
PV8*C20	MC61D	1.00	1.04	1.00
P(C,V)9*D20	MC61D	0.95	1.01	0.93

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE04811														
INDOOR COIL MODEL NO.		FC/MC60D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1500					1600					1700				
	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	52.5	48.5	54.2	62.6	50.6	52.9	49.1	54.8	63.1	51.6	53.3	49.6	55.3	63.6
	S.C.	52.8	50.4	38.3	38.5	30.4	53.8	51.3	39.7	39.7	31.3	54.8	52.2	41.1	41.0	32.3
	K.W.	2.6	2.6	2.6	2.7	2.8	2.6	2.7	2.7	2.7	2.9	2.7	2.7	2.7	2.8	2.9
75	T.C.	47.4	49.9	46.0	51.7	59.5	48.3	50.4	46.5	52.2	60.0	49.2	50.8	47.1	52.7	60.4
	S.C.	50.4	48.4	37.1	37.4	29.6	51.3	49.4	38.5	38.7	30.5	52.2	50.4	39.8	39.9	31.3
	K.W.	2.9	3.0	2.9	3.0	3.2	3.0	3.0	3.0	3.1	3.2	3.0	3.0	3.0	3.1	3.2
85	T.C.	45.2	47.4	43.5	49.2	56.4	46.0	47.9	44.0	49.6	56.8	46.9	48.4	44.5	50.0	57.2
	S.C.	47.9	46.4	35.9	36.4	28.9	48.8	47.5	37.2	37.6	29.6	49.7	48.6	38.5	38.9	30.2
	K.W.	3.3	3.3	3.3	3.4	3.5	3.3	3.3	3.3	3.4	3.5	3.4	3.4	3.4	3.5	3.6
95	T.C.	42.9	44.9	40.9	46.7	53.3	43.7	45.5	41.5	47.0	53.7	44.5	46.0	41.9	47.3	54.1
	S.C.	45.5	44.4	34.6	35.3	28.1	46.3	45.6	35.9	36.6	28.7	47.1	46.7	37.2	37.9	29.2
	K.W.	3.6	3.6	3.6	3.7	3.8	3.6	3.7	3.6	3.8	3.9	3.7	3.7	3.7	3.8	3.9
105	T.C.	40.4	41.9	39.0	43.3	49.5	41.1	42.4	39.5	43.6	49.8	41.7	42.8	39.9	43.9	50.2
	S.C.	42.8	42.1	33.9	34.0	26.7	43.4	43.0	35.0	35.3	27.3	44.1	43.9	36.1	36.5	27.9
	K.W.	4.2	4.1	4.1	4.2	4.3	4.2	4.2	4.2	4.3	4.4	4.3	4.2	4.2	4.3	4.4
115	T.C.	37.9	39.0	37.2	40.1	45.7	38.4	39.4	37.6	40.4	46.1	38.9	39.8	38.0	40.6	46.3
	S.C.	40.1	39.9	33.2	32.7	25.3	40.6	40.5	34.2	33.9	26.0	41.1	41.1	35.1	35.1	26.7
	K.W.	4.7	4.7	4.7	4.7	4.8	4.8	4.7	4.7	4.8	4.9	4.8	4.8	4.7	4.8	4.9
125	T.C.	35.4	36.1	35.4	36.9	42.0	35.8	36.4	35.7	37.1	42.3	36.2	36.7	36.0	37.3	42.5
	S.C.	37.4	37.7	32.5	31.4	23.9	37.8	38.0	33.3	32.6	24.6	38.1	38.3	34.0	33.8	25.4
	K.W.	5.3	5.2	5.2	5.2	5.3	5.4	5.2	5.2	5.3	5.4	5.4	5.3	5.3	5.3	5.4
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV48	–	1.00	1.00	1.00
AV/SV60	–	1.00	1.00	1.00
F*FV060	–	1.00	1.00	1.00
MV20D	MC61D	1.00	1.01	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	1.00	1.03	1.02
P(C,V)9*C20	FC/PC60C	0.94	0.92	0.93
PV8*C20	FC/MC/PC60D	1.00	1.03	1.02
P(C,V)9*D20	FC/MC/PC60D	0.94	0.92	0.92
PV8*C20	HC60	1.00	1.03	1.02
P(C,V)9*D20	HC60	0.94	0.92	0.92
PV8*C20	HD60	1.00	1.03	1.02
P(C,V)9*D20	HD60	0.94	0.92	0.92
PV8*C20	MC61D	1.00	1.00	1.00
P(C,V)9*D20	MC61D	0.95	0.92	0.93

COOLING PERFORMANCE DATA - LOW CFM 1-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE06011														
INDOOR COIL MODEL NO.		MC61D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1100					1150					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.	38.7	40.9	41.4	45.9	50.5	39.4	41.5	41.8	46.3	51.1	40.1	42.2	42.2	46.7	51.7
	S.C.	42.1	38.7	32.0	32.2	25.9	42.8	39.7	32.8	32.8	26.0	43.6	40.8	33.5	33.4	26.1
	K.W.	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2
75	T.C.	37.0	39.1	39.4	43.7	48.1	37.6	39.6	39.8	44.0	48.7	38.2	40.2	40.1	44.4	49.3
	S.C.	40.2	37.2	31.1	31.2	25.0	40.8	38.1	31.8	31.8	25.1	41.5	39.1	32.5	32.3	25.3
	K.W.	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.6	2.5
85	T.C.	35.2	37.3	37.5	41.5	45.8	35.7	37.7	37.8	41.8	46.3	36.3	38.1	38.1	42.1	46.9
	S.C.	38.3	35.6	30.2	30.2	24.0	38.9	36.5	30.9	30.7	24.3	39.4	37.4	31.5	31.3	24.5
	K.W.	2.9	2.9	2.9	2.9	2.9	3.0	2.9	2.9	2.9	2.9	3.0	2.9	3.0	2.9	2.9
95	T.C.	33.5	35.5	35.5	39.2	43.4	33.9	35.8	35.7	39.5	44.0	34.3	36.1	36.0	39.8	44.5
	S.C.	36.5	34.1	29.4	29.1	23.0	36.9	35.0	30.0	29.7	23.4	37.3	35.8	30.5	30.3	23.7
	K.W.	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
105	T.C.	31.6	32.9	33.0	36.5	40.6	32.1	33.3	33.2	36.8	40.9	32.5	33.6	33.5	37.1	41.3
	S.C.	34.5	32.1	28.2	28.0	22.0	34.9	32.8	28.7	28.6	22.3	35.3	33.6	29.3	29.1	22.6
	K.W.	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.8	3.9	3.8	3.8
115	T.C.	29.8	30.5	30.6	33.9	37.8	30.3	30.8	30.8	34.2	38.0	30.8	31.1	31.0	34.4	38.2
	S.C.	32.5	30.2	27.1	26.9	20.9	33.0	30.8	27.6	27.5	21.2	33.4	31.4	28.0	28.1	21.6
	K.W.	4.4	4.3	4.3	4.3	4.3	4.4	4.3	4.3	4.3	4.3	4.4	4.3	4.3	4.3	4.3
125	T.C.	28.0	28.0	28.2	31.3	35.0	28.5	28.3	28.3	31.5	35.1	29.0	28.6	28.4	31.8	35.1
	S.C.	30.6	28.2	26.0	25.8	19.9	31.1	28.7	26.4	26.4	20.2	31.6	29.3	26.8	27.0	20.5
	K.W.	4.9	4.8	4.8	4.8	4.8	4.9	4.8	4.8	4.8	4.8	4.9	4.8	4.8	4.8	4.8
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

LOW CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV60	–	1.00	0.99	1.00
F*FV060	–	1.00	0.99	1.00
MV20D	FC/MC60D	0.99	0.99	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.99	0.97	1.01
P(C,V)9*D20	FC/PC60C	0.98	0.97	0.99
PV8*C20	FC/MC/PC60D	0.99	0.97	1.01
P(C,V)9*D20	FC/MC/PC60D	0.98	0.97	0.99
PV8*C20	MC61D	0.99	0.98	0.99
P(C,V)9*D20F	MC61D	0.99	0.98	0.99
P(C,V)9*D20	HC60	0.98	0.97	1.00
PV8*C20	HD60	0.99	0.97	1.01
P(C,V)9*D20	HD60	0.99	0.97	1.01

COOLING PERFORMANCE DATA - HIGH CFM 2-STAGE OPERATION																
OUTDOOR UNIT MODEL NO.		CZE06011														
INDOOR COIL MODEL NO.		MC61D + MV20D														
CONDENSER ENTERING AIR TEMPERATURE	ID CFM	1750					1850					1950				
	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.	53.8	58.0	57.9	64.1	68.1	54.8	58.2	58.5	64.2	68.1	55.7	58.3	59.0	64.3	68.2
	S.C.	58.7	54.4	46.0	46.2	33.8	59.7	55.6	47.0	46.8	34.6	60.6	56.8	48.0	47.4	35.3
	K.W.	3.5	3.5	3.5	3.6	3.7	3.5	3.6	3.6	3.7	3.8	3.6	3.6	3.7	3.8	3.8
75	T.C.	51.8	55.2	55.5	61.1	65.7	52.6	55.5	55.8	61.3	65.9	53.4	55.9	56.1	61.5	66.1
	S.C.	56.4	52.9	44.9	44.7	33.4	57.3	54.2	45.8	45.4	34.1	58.1	55.5	46.7	46.2	34.7
	K.W.	3.9	4.0	4.0	4.1	4.2	4.0	4.0	4.0	4.1	4.2	4.1	4.1	4.1	4.2	4.3
85	T.C.	49.8	52.3	53.0	58.0	63.4	50.5	52.9	53.2	58.4	63.7	51.2	53.4	53.3	58.7	64.0
	S.C.	54.1	51.4	43.7	43.1	33.0	54.9	52.9	44.6	44.1	33.5	55.6	54.3	45.4	45.0	34.1
	K.W.	4.4	4.4	4.4	4.5	4.6	4.4	4.5	4.5	4.6	4.7	4.5	4.6	4.5	4.7	4.8
95	T.C.	47.7	49.5	50.5	55.0	61.1	48.4	50.2	50.5	55.5	61.5	48.9	51.0	50.5	56.0	62.0
	S.C.	51.9	49.9	42.5	41.6	32.6	52.5	51.5	43.3	42.7	33.0	53.1	53.0	44.1	43.7	33.4
	K.W.	4.8	4.9	4.9	5.0	5.1	4.9	4.9	4.9	5.0	5.2	5.0	5.0	5.0	5.1	5.3
105	T.C.	45.2	46.6	47.2	51.7	57.2	45.7	47.1	47.3	52.1	57.6	46.3	47.6	47.3	52.4	58.0
	S.C.	49.1	47.7	40.9	40.3	31.2	49.7	48.9	41.7	41.3	31.6	50.2	50.2	42.6	42.2	32.1
	K.W.	5.5	5.5	5.5	5.6	5.8	5.5	5.6	5.6	5.7	5.8	5.6	5.6	5.6	5.7	5.9
115	T.C.	42.7	43.8	44.0	48.5	53.5	43.2	44.1	44.2	48.7	53.9	43.7	44.4	44.3	49.0	54.2
	S.C.	46.4	45.5	39.3	39.1	29.8	46.9	46.5	40.2	40.0	30.3	47.4	47.5	41.1	40.8	30.8
	K.W.	6.1	6.2	6.1	6.2	6.4	6.2	6.2	6.2	6.3	6.4	6.3	6.3	6.2	6.4	6.5
125	T.C.	40.2	41.0	40.8	45.3	49.8	40.7	41.1	41.0	45.4	50.1	41.1	41.2	41.3	45.5	50.4
	S.C.	43.7	43.3	37.7	37.8	28.4	44.2	44.0	38.7	38.6	28.9	44.7	44.8	39.7	39.3	29.5
	K.W.	6.8	6.8	6.7	6.9	7.0	6.8	6.8	6.8	6.9	7.0	6.9	6.9	6.9	7.0	7.1
NOTE: ALL CAPACITIES ARE NET (KBTUH) WITH INDOOR FAN HEAT ALREADY DEDUCTED AT 1250 BTUH/1000 CFM.																

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.

NOTE: KW RATING IS FOR OUTDOOR AND INDOOR UNITS.

HIGH CFM

Air Handler	Coil	T.C.	S.C.	KW
AV/SV60	–	1.00	0.99	1.00
F*FV060	–	1.00	0.99	1.00
MV20D	FC/MC60D	0.99	0.99	0.99

Variable Speed Furnace	Coil	T.C.	S.C.	KW
PV8*C20	FC/PC60C	0.99	0.99	1.01
P(C,V)9*D20	FC/PC60C	0.98	0.90	0.99
PV8*C20	FC/MC/PC60D	0.99	0.99	1.01
P(C,V)9*D20	FC/MC/PC60D	0.98	0.90	0.99
PV8*C20	MC61D	0.99	0.91	0.99
P(C,V)9*D20	MC61D	0.99	0.91	0.99
P(C,V)9*D20	HC60	0.98	0.90	1.00
PV8*C20	HD60	0.99	0.99	1.01
P(C,V)9*D20	HD60	0.99	0.99	1.01

NOTES

246747-YTG-G-1006
Supersedes: 246747-YTG-F-0806

Unitary Products Group
5005 York Drive
Norman OK 73069

SUBMITTAL DATA SHEET

YORK®
Heating ▪ Air Conditioning

CONDENSING HIGH EFFICIENCY
DOWNFLOW/HORIZONTAL TWO STAGE GAS FURNACES
MODELS: PT9

JOB NAME: **LOCATION:**

PURCHASER: **ORDER NO:**

ENGINEER:

SUBMITTED TO: **FOR:** **REF:** **APPROVAL:** **CONSTRUCTION:**

SUBMITTED BY: **DATE:**

UNIT DESIGNATION: **SCHEDULE NO.** **MODEL NO.**

PRODUCT DATA

Heating Performance

Input Capacity _____ **MBH**
Output Capacity _____ **MBH**
Air Temp. Rise _____ **°F**

Supply Air Blower Performance

Total Supply Air _____ **CFM**
Total External Static Pressure _____ **IWG**
Blower Speed (circle) _____ **HI MH ML L**
Motor Rating _____ **HP**

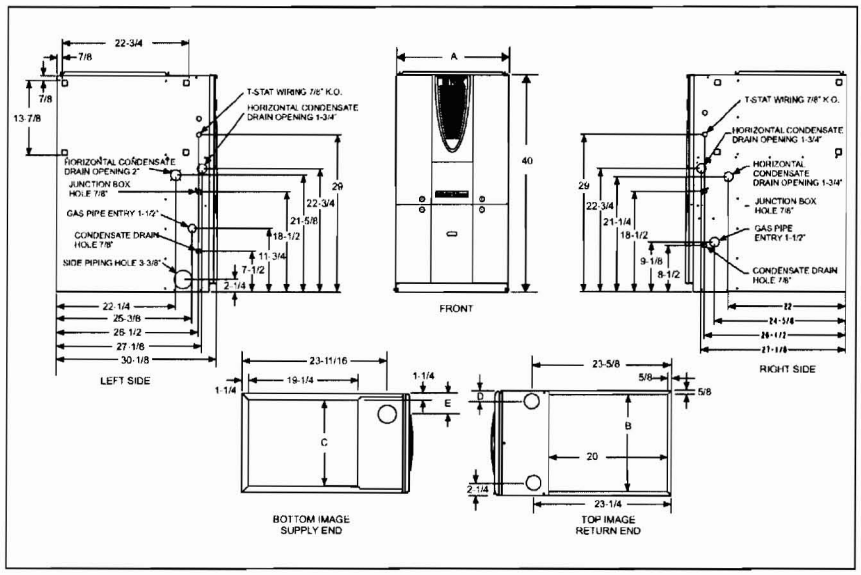
Electrical Data

Power Supply _____/__/__
Total Unit Ampacity _____ **AMPS**
Minimum Wire Size _____ **AWG**
Maximum Overcurrent Device
☐ **Fuses** ☐ **Circuit Breaker** ____ **AMPS**

Unit Weight

Total Unit Weight _____ **LBS**

DIMENSIONS - INCHES



Models	CFM	CABINET SIZE	CABINET DIMENSION				
			A (in.)	B (in.)	C (in.)	D (in.)	E (in.)
PT9B12N060DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9B12N080DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9C16N080DH11	1600	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9C20N100DH11	2000	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9D20N120DH11	2000	D	24-1/2	23-1/4	22	2-1/2	3

ENERGY STAR

EFFICIENCY RATING CERTIFIED Gama

ISO 9001 Certified Quality Management System

Good Housekeeping Promises

CLEARANCES

DOWNFLOW	
Top	1
Front	3
Vent Pipe	0
Rear	0
L & R Sides	0
Bottom	1" Special floorbase or A/C coil required for use on combustible floor

HORIZONTAL	
Top	0
Front	3
Vent Pipe	0
Rear	0
L & R Sides	1
Bottom	May be applied directly on a combustible floor

FEATURES

- Compact, easy to install, ideal height 40" cabinet.
- May be installed as either two-pipe (sealed combustion) or single-pipe vent (using indoor combustion air)
- Blower-off delay for cooling SEER improvement.
- Easy to connect power/control wiring.
- Built-in, high level self diagnostics with fault code display.
- Low unit amp requirement for easy replacement application.
- Integrated control module for reliable, economical operation.
- Insulated blower compartment for quiet operation.
- Electronic Hot Surface Ignition saves fuel cost with increased dependability and reliability.
- Induced combustion system with inshot main burners for quiet, efficient operation.
- No special vent termination kit required.
- 100% shut off main gas valve for extra safety.
- PSC - four speed, direct drive motor with large, quiet blower.
- 24V, 40 VA control transformer and blower relay supplied for add-on cooling.
- Hi-tech tubular aluminized steel primary heat exchanger.
- Secondary (condensing) heat exchanger of 29-4C high-grade stainless steel.
- Timed on, adjustable off blower capability for maximum comfort.
- Internal vent coupling for maximum serviceability.
- Independent door removal for greater durability and ease of access.
- 3-way transition facilitates fresh air piping.
- Two stage heating operation includes:
  - Two stage gas valve
  - Two stage inducer operation
- ClimaTraK comfort system allows dealer to customize comfort settings based on regional location.

FIELD INSTALLED ACCESSORIES

PROPANE (LP) CONVERSION KIT -

1NP0580 - All units

This accessory conversion kit may be used to convert natural gas (N) units for propane (LP) operation. Conversions must be made by qualified distributor or dealer personnel.

CONCENTRIC VENT TERMINATION -

1CT0302 (2")

1CT0303 (3")

HORIZONTAL SIDEWALL VENT TERMINATION -

1HT0901 (2")

For use through rooftop, sidewall. Allows combustion air to enter and exhaust to exit through single common hole. Eliminates unslightly elbows for a cleaner installation.

COMBUSTIBLE FLOOR BASE -

1CB0317 - 17 1/2" Cabinet
1CB0321 - 21" Cabinet
1CB0324 - 24-1/2" Cabinet

COIL TRANSITION KIT -

1TK0917 - 17-1/2" Furnace

1TK0921 - 21" Furnace

1TK0924 - 24-1/2" Furnace

Required in downflow applications when using G*FD series coils.

CONDENSATE NEUTRALIZER KIT - 1NK0301
Neutralizer cartidge has a 1/2" plastic tube fittings for installation in the drain line. Calcium carbonate refill media is also avaiable from the Source 1 Parts (p/n 026-30228-000).

HIGH ALTITUDE PRESSURE SWITCHES -

For installation where the altitude is less than 8,000 feet it is not required that the pressure switch be changed. For altitudes above 8,000 feet see kits below. Conversion must be made by qualified distributor or dealer personnel.

1PS0507 - 060 MBH
1PS0508 - 080/1200 MBH
1PS0509 - 080/1600 MBH
1PS0510 - 100 MBH
1PS0511 - 120 MBH

INTAKE/VENT SIZING - TWO PIPE SYSTEM

MAXIMUM ELBOWS AND VENT LENGTHS										
Models Input BTUH	Pipe Size Inches	Maximum Number of Elbows*								Minimum Length
		1	2	3	4	5	6	7	8	
60,000	1-1/2	15	10	N/A	N/A	N/A	N/A	N/A	N/A	5
60,000	2	60	55	50	45	40	35	25	15	5
60,000	3	85	80	75	70	65	60	50	40	20
80,000/1200	2	60	55	50	45	40	35	25	15	5
80,000/1200	3	85	80	75	70	65	60	50	40	20
80,000/1600	2	55	50	45	40	35	30	20	10	5
80,000/1600	3	80	75	70	65	60	55	45	35	20
100,000/2000	2	25	20	15	10	N/A	N/A	N/A	N/A	5
100,000/2000	3	80	75	70	65	60	55	45	35	5
120,000	3	55	50	45	40	35	25	15	N/A	5

* Three elbows (two in vent pipe and one in the air intake pipe) are already accounted for and need not be included in the elbow count from the Table above).

036-22917-002 Rev. A (1205)
Supersedes: 036-22917-001 Rev. A (0205)

SUBMITTAL DATA SHEET

YORK®
Heating and Air Conditioning

ADD - ON COILS FOR USE WITH SPLIT-SYSTEM COOLING & HEAT PUMPS

MODELS: MC, FC

JOB NAME:			**LOCATION:**	
PURCHASER:			**ORDER NO:**	
ENGINEER:				
SUBMITTED TO:	**FOR:**	**REF:**	**APPROVAL:**	**CONSTRUCTION:**
SUBMITTED BY:			**DATE:**	
UNIT DESIGNATION:			**SCHEDULE NO.**	**MODEL NO.**

PRODUCT DATA

Cooling Performance

Total Capacity*_____ MBH
Sensible Capacity*_____ MBH
Temperature of Air Entering
Indoor Coil_____°F (DB/WB

Supply Air Blower Performance

Total Supply Air_____CFM
Total Resistance External To Unit _____IWG
Blower Speed Tap _____RPM
Motor Rating _____HP

Electrical Data

Power Supply _____/__/__
Total Unit Ampacity _____AMPS
Minimum Wire Size _____AWG
(Copper conductors)
Maximum Overcurrent Device_____AMPS
- ☐ **Fuses (Dual Element)**
- ☐ **Circuit Breaker (HACR)**

Unit Weight

Total Operating Weight _____LBS
(Including field-installed accessories)
*** Shown in Outdoor Unit Technical Guide**

CLEARANCES

Front	24"
Rear	0"*
Sides	0"*

* 0 Clearance allowed when Electric Heater is not installed.

ISO 9001
Certified Quality
Management System

FEATURES

MC & FC COILS

- Rifled copper tubes and aluminum fins
- MicroBlue™ fin coating
- Sweat connect refrigerant connections
- MC - upflow, downflow and horizontal applications
- FC - upflow or downflow applications
- 3/4" insulation standard
- Available with or without factory installed R-22 TXV

MATCHED INDOOR UNIT

- ☐ Model Number (#_____)
- ☐ Submittal Part Number (#_____

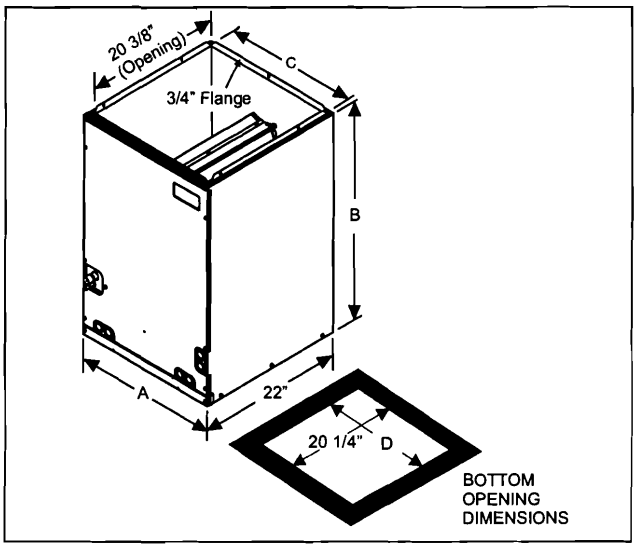
MATCHED OUTDOOR UNIT

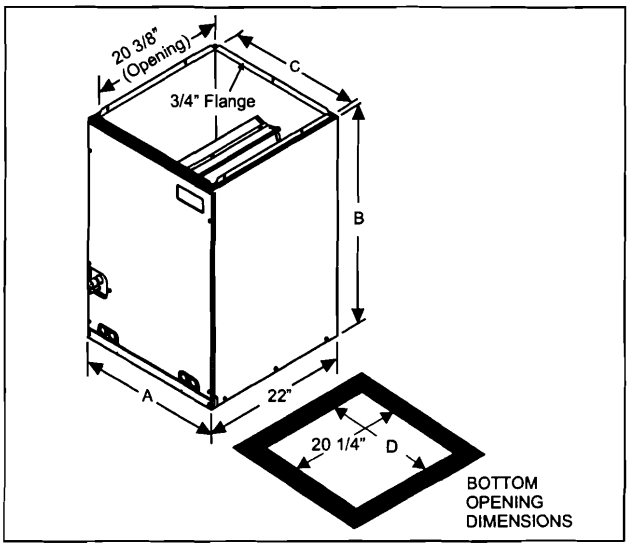
- ☐ Model Number (#_____)
- ☐ Submittal Part Number (#_____

FIELD INSTALLED ACCESSORIES

- ☐ Electirc Heaters (#_____)
- ☐ Capacity (@_____Volts) _____MBH
- ☐ Power Input Requirement (Less Blower Motor) ____KW
- ☐ Filter Rack (#_____)
- ☐ Combustible Floor Base (#_____)
- ☐ Interconnecting Lines. . . . . Length_____Ft
- ☐ Thermal Expansion Valve Kit (#_____)

DIMENSIONS - INCHES





Dimensions - MC Coils

Model	A	B	C	D	Refrigerant Line Size[1]		Factory Installed TXV (R22)
					Liquid	Vapor	
MC18A2AH1	14.5	22	13 3/8	13.5	3/8	3/4	2A
MC18A3XH1	14.5	22	13 3/8	13.5	3/8	3/4	None
MC18B2AH1	17.5	22	16 3/8	16.5	3/8	3/4	2A
MC18B3XH1	17.5	22	16 3/8	16.5	3/8	3/4	None
MC24A2AH1	14.5	26.5	13 3/8	13.5	3/8	3/4	2A
MC24A3XH1	14.5	26.5	13 3/8	13.5	3/8	3/4	None
MC24B2AH1	17.5	26.5	16 3/8	16.5	3/8	3/4	2A
MC24B3XH1	17.5	26.5	16 3/8	16.5	3/8	3/4	None
MC30A2AH1	14.5	26.5	13 3/8	13.5	3/8	3/4	2A
MC30A3XH1	14.5	26.5	13 3/8	13.5	3/8	3/4	None
MC30B2AH1	17.5	26.5	16 3/8	16.5	3/8	3/4	2A
MC30B3XH1	17.5	26.5	16 3/8	16.5	3/8	3/4	None
MC35B3XH1	17.5	22	16 3/8	16.5	3/8	3/4	None
MC35C3XH1	21	26.5	19 7/8	20	3/8	3/4	None
MC36A2AH1	14.5	26.5	13 3/8	13.5	3/8	7/8	2A
MC36A3XH1	14.5	26.5	13 3/8	13.5	3/8	7/8	None
MC36B2AH1	17.5	26.5	16 3/8	16.5	3/8	7/8	2A
MC36B3XH1	17.5	26.5	16 3/8	16.5	3/8	7/8	None
MC36C2AH1	21	26.5	19 7/8	20	3/8	7/8	2A
MC36C3XH1	21	26.5	19 7/8	20	3/8	7/8	None
MC42B2CH1	17.5	32	16 3/8	16.5	3/8	7/8	2C
MC42B3XH1	17.5	32	16 3/8	16.5	3/8	7/8	None
MC42C2CH1	21	32	19 7/8	20	3/8	7/8	2C
MC42C3XH1	21	32	19 7/8	20	3/8	7/8	None
MC48C2CH1	21	32	19 7/8	20	3/8	7/8	2C
MC48C3XH1	21	32	19 7/8	20	3/8	7/8	None
MC48D2CH1	24.5	32	23 3/8	23.5	3/8	7/8	2C
MC48D3XH1	24.5	32	23 3/8	23.5	3/8	7/8	None
MC60D2CH1	24.5	32	23 3/8	23.5	3/8	7/8	2C
MC60D3XH1	24.5	32	23 3/8	23.5	3/8	7/8	None
MC61D2CH1	24.5	36	23 3/8	23.5	3/8	7/8	2C
MC61D3XH1	24.5	36	23 3/8	23.5	3/8	7/8	None

All MC coils include a factory installed horizontal drain pan.
(3X) = Models require field installed TXV.

1. Refrigerant line sizes may require larger lines for extended line lengths. See York bulletin #690.01-AD1V for details.

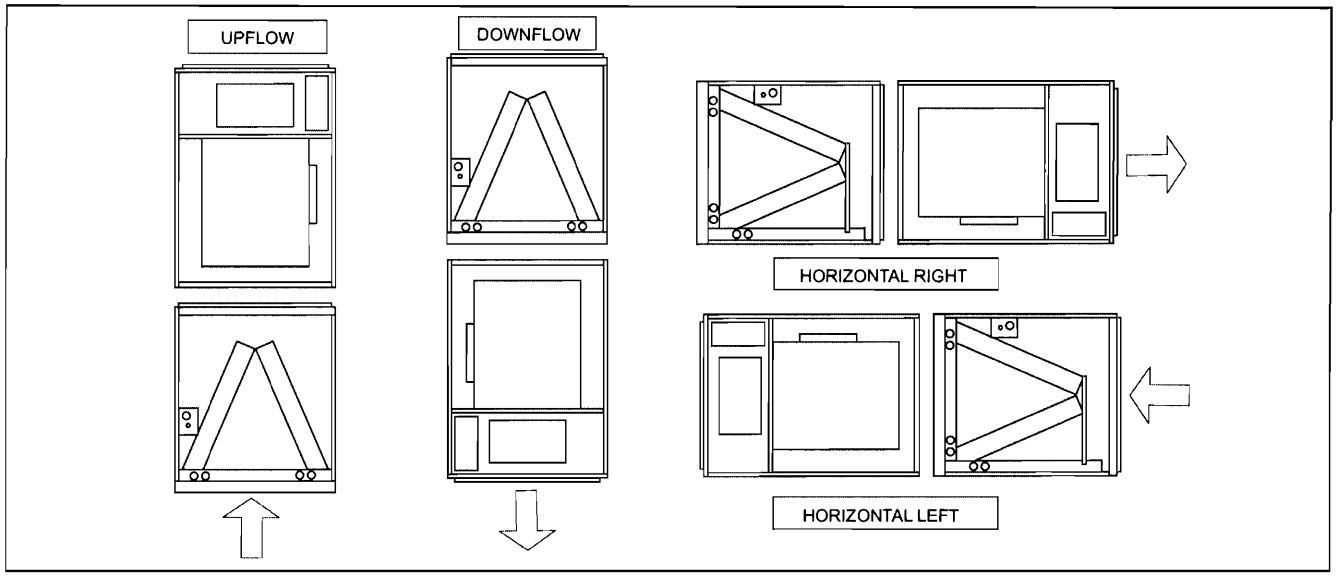
Dimensions - FC Coils

Model	A	B	C	D	Refrigerant Line Size[1]		Factory Installed TXV (R22)
					Liquid	Vapor	
FC18A2AN1	14.5	18	13 3/8	13.5	3/8	3/4	2A
FC18A3XN1	14.5	18	13 3/8	13.5	3/8	3/4	None
FC18B2AN1	17.5	18	16 3/8	16.5	3/8	3/4	2A
FC18B3XN1	17.5	18	16 3/8	16.5	3/8	3/4	None
FC24A2AN1	14.5	22	13 3/8	13.5	3/8	3/4	2A
FC24A3XN1	14.5	22	13 3/8	13.5	3/8	3/4	None
FC24B2AN1	17.5	22	16 3/8	16.5	3/8	3/4	2A
FC24B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC30A2AN1	14.5	22	13 3/8	13.5	3/8	3/4	2A
FC30A3XN1	14.5	22	13 3/8	13.5	3/8	3/4	None
FC30B2AN1	17.5	22	16 3/8	16.5	3/8	3/4	2A
FC30B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC35B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC35C3XN1	21	24.5	19 7/8	20	3/8	3/4	None
FC36A2AN1	14.5	24.5	13 3/8	13.5	3/8	7/8	2A
FC36A3XN1	14.5	24.5	13 3/8	13.5	3/8	7/8	None
FC36B2AN1	17.5	24.5	16 3/8	16.5	3/8	7/8	2A
FC36B3XN1	17.5	24.5	16 3/8	16.5	3/8	7/8	None
FC36C2AN1	21	24.5	19 7/8	20	3/8	7/8	2A
FC36C3XN1	21	24.5	19 7/8	20	3/8	7/8	None
FC42B2CN1	17.5	28	16 3/8	16.5	3/8	7/8	2C
FC42B3XN1	17.5	28	16 3/8	16.5	3/8	7/8	None
FC42C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC42C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC48C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC48C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC48D2CN1	24.5	28	23 3/8	23.5	3/8	7/8	2C
FC48D3XN1	24.5	28	23 3/8	23.5	3/8	7/8	None
FC60C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC60C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC60D2CN1	24.5	28	23 3/8	23.5	3/8	7/8	2C
FC60D3XN1	24.5	28	23 3/8	23.5	3/8	7/8	None

FC coils are not available with a factory installed horizontal drain pan.
(3X) = Models require field installed TXV.

1. Refrigerant line sizes may require larger lines for extended line lengths. See York bulletin #690.01-AD1V for details.

MODULAR AIR HANDLER TYPICAL APPLICATIONS*



* See installation manual for furnace applications.

NOTES

259069-YSD-A-0606
Supersedes: 258932/036-22999-001 Rev. A (0206)

MODINE

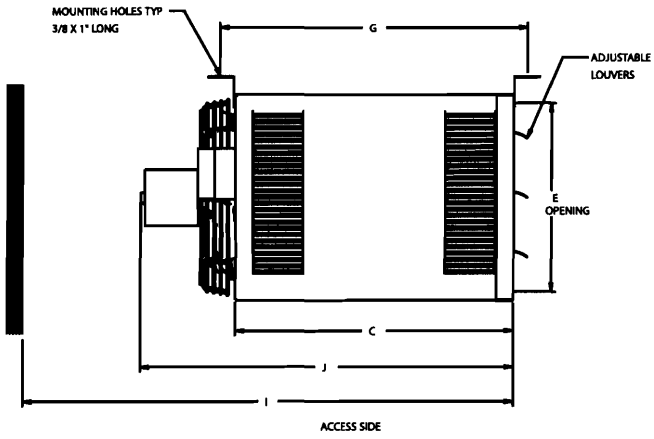
6-460.7

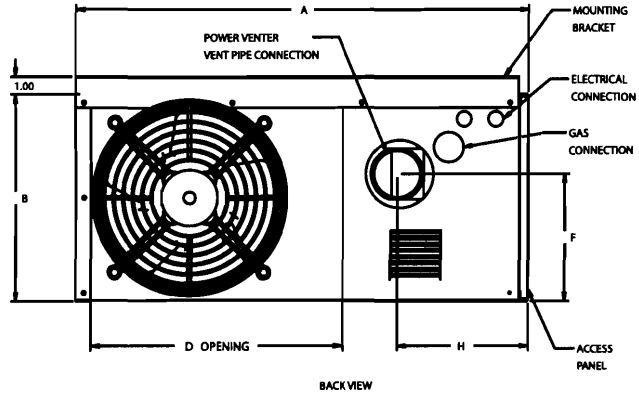
January, 2005

HOT DAWG

Certified for Residential and Commercial Use

SUBMITTAL DATA
power vented gas-fired unit heaters
model HD





Performance

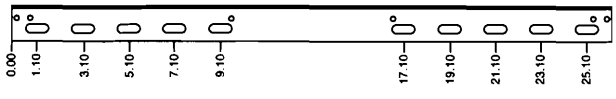
Models		HD30	HD45	HD60	HD75
Btu/Hr Input		30,000	45,000	60,000	75,000
Btu/Hr Output		24,000	36,000	48,000	60,000
Entering Airflow (CFM)		505	720	990	1,160
Outlet Velocity		523	749	653	769
Air Temp. Rise (°F)		44	46	45	48
Mounting Height (Max ft.)		10	10	12	14
Heat Throw (ft.)		25	27	36	38
Motor Data	Horsepower	1/25	1/15	1/12	1/12
	RPM	1,550	1,550	1,625	1,625
	Type	S.P.	S.P.	P.S.C.	P.S.C.
	Amps	1.5	2.4	1.2	1.2
Unit Total Amps		2.8	3.7	2.5	2.5
Vent Connector Size (in.)		3	3	3	3

Dimensions (inches)

Models	HD30	HD45	HD60	HD75
A	26.8	26.8	26.8	26.8
B	12.2	12.2	18.0	18.0
C	16.5	16.5	16.5	16.5
D	14.9	14.9	14.9	14.9
E	10.1	10.1	15.9	15.9
F	7.5	7.5	10.7	10.7
G	18.5	18.5	18.5	18.5
H	7.6	7.6	7.8	7.8
Gas Connection	1/2	1/2	1/2	1/2
I	34.5	34.5	34.5	34.5
J	22	22	25	25
Fan Diameter	10	10	14	14
Approx. Shipping Weight (lbs.)	55	60	80	85

Mounting

1" - angle, mounting brackets are slotted to accommodate joists on 16" or 24" centerlines.



Top View

Clearances

Unit Side	Clearance To Combustible Materials	Recommended Service Clearance
Top and Bottom	1"	1"
Access Side	18"	18"
Non-Access Side	1"	1"
Rear	18"	18"
Vent Connector	4"	4"

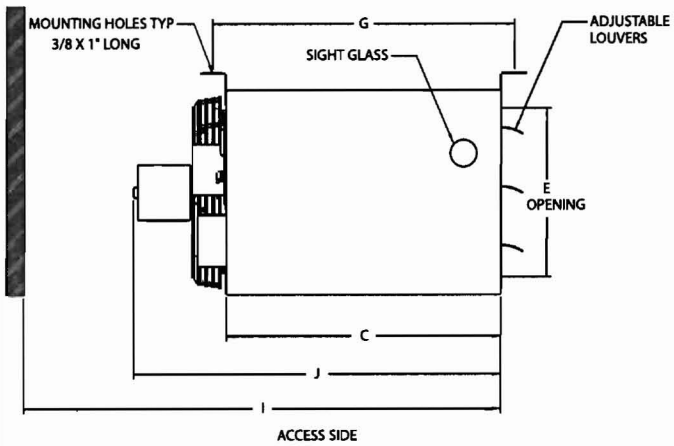
Control Codes

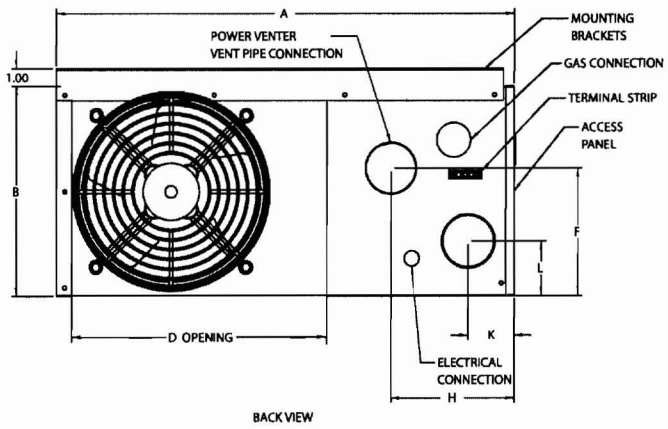
Control System Description	Control Code No.	Service Voltage	Thermostat Voltage	Type of Gas
Single Stage, Hot Surface Ignition, 100% Shut-Off, Multiple Retry with Auto Reset from Lockout. - Utilizes a single-stage combination gas control with built-in ignition control. Gas is lit with a hot surface igniter on call for heat.	34 74	115V 115V	24V 24V	natural propane

- Ratings shown are for elevation up to 2000 feet above sea level (in Canada, refer to rating plate). For elevations above 2000 ft., ratings should be reduced by approximately 4% for each 1000 ft. above sea level.
- Mounting Height is measured from the bottom of the unit.
- Heat Throws are calculated at 65°F ambient and unit fired at full rated input. Throws for HD30 and HD45 are based on 8-foot mounting heights and at 10-foot heights for HD60 and HD75.
- S.P. = shaded pole, P.S.C. = permanent split capacitor

Certified for Residential and Commercial Use

SUBMITTAL DATA
separated combustion gas-fired unit heaters
model HDS





Performance

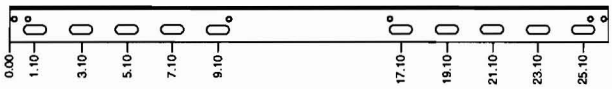
Models		HDS30	HDS45	HDS60	HDS75
Btu/Hr Input		30,000	45,000	60,000	75,000
Btu/Hr Output		24,000	36,000	48,000	60,000
Entering Airflow (CFM)		505	720	990	1,160
Outlet Velocity		523	749	653	769
Air Temp. Rise (°F)		44	46	45	48
Mounting Height (Max ft.)		10	10	12	14
Heat Throw (ft.)		25	27	36	38
Motor Data	Horsepower	1/25	1/15	1/12	1/12
	RPM	1,550	1,550	1,625	1,625
	Type	S.P.	S.P.	P.S.C.	P.S.C.
	Amps	1.5	2.4	1.2	1.2
Unit Total Amps		2.8	3.7	2.5	2.5
Vent Connector Size (in.)		3	3	3	4

Dimensions (inches)

Models	HDS30	HDS45	HDS60	HDS75
A	26.8	26.8	26.8	26.8
B	12.2	12.2	18.0	18.0
C	16.5	16.5	16.5	16.5
D	14.9	14.9	14.9	14.9
E	10.1	10.1	15.9	15.9
F	7.25	7.25	10.75	10.75
G	18.5	18.5	18.5	18.5
H	7.6	7.6	7.835	7.835
Gas Connection	1/2	1/2	1/2	1/2
I	34.5	34.5	34.5	34.5
J	22	22	25	25
K	2.74	2.74	3.15	3.15
L	3.19	3.19	5.55	5.55
Fan Diameter	10	10	14	14
Approx. Shipping Weight (lbs.)	55	60	80	85

Mounting

1" - angle, mounting brackets are slotted to accommodate joists on 16" or 24" centerlines.



Top View

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Control System Description	Control Code No.	Service Voltage	Thermostat Voltage	Type of Gas
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- Ratings shown are for elevation up to 2000 feet above sea level (in Canada, refer to rating plate). For elevations above 2000 ft., ratings should be reduced by approximately 4% for each 1000 ft. above sea level.
- Mounting Height is measured from the bottom of the unit.
- Heat Throws are calculated at 65°F ambient and unit fired at full rated input. Throws for HDS30 and HDS45 are based on 8-foot mounting heights and at 10-foot heights for HDS60 and HDS75.
- S.P. = shaded pole, P.S.C. = permanent split capacitor

12/04 - Litho in USA

SUBMITTAL DATA SHEET

YORK
Heating and Air Conditioning

AFFINITY
R-410A SPLIT SYSTEM AIR CONDITIONER UNITS
UP TO 18 SEER 2, 3, 4 & 5 TON
MODELS: CZE024 THRU 060

JOB NAME: LOCATION:

PURCHASER: ORDER NO:

ENGINEER:

SUBMITTED TO: FOR: REF: APPROVAL: CONSTRUCTION:

SUBMITTED BY: DATE:

UNIT DESIGNATION: SCHEDULE NO. MODEL NO.

PRODUCT DATA

Cooling Performance

Total Capacity _____ MBH

Outdoor Design Temp_____ °F

Electrical Data

Power Supply____/___/_____

Total Unit Ampacity _____AMPs

Power Input Req_____KW

Minimum Wire Size_____AWG

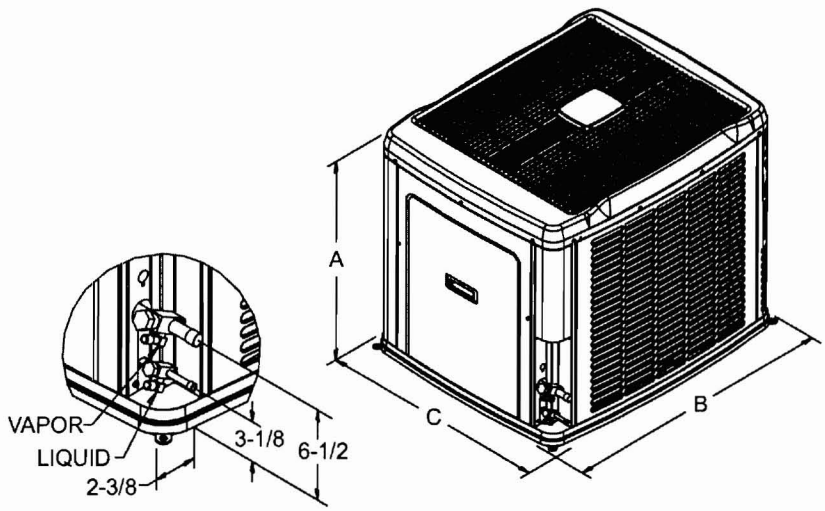
Maximum Overcurrent Device

☐ Fuses ☐ Circuit Breaker

Unit Weight

Unit Weight _____LBS

DIMENSIONS - INCHES



All dimensions are in inches.They are subject to change without notice. Certified dimensions will be provided upon request.

Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
024	33-1/2	37	31	3/8"	3/4"
036	39-1/2	37	31		
038	39-1/2	37	31		7/8"
048	39-1/2	37	31		
060	39-1/2	37	31		7/8" *

* Expander fitting required for 1-1/8" line set.

CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI.

ENERGY STAR

Good Housekeeping Promises

c UL us LISTED

ISO 9001 Certified Quality Management System

FEATURES

- UL approval (units & accessories)
- CSA listed and ARI certified
- Copper tube/aluminum fin coil
- Hi and Lo pressure switches standard
- Durable construction
- Powder-painted steel cabinet
- Factory wired
- R-410A total system charge (thru 15 ft. of lines)
- Sweat refrigerant connections
- Re-usable service valves
- Slide down electrical compartment for easy access
- Stamped coil guard
- Composite base pan
- Isolated compressor compartment
- Full service access panel
- Comfort alert compressor protection
- Quietdrive system
- Optional stylized color panels
- Swept wing fan design
- Premium system warranty* - Limited Lifetime Compressor Warranty, 10 year parts warranty

* Must be matched with an approved York, coil and/or Air Handler, otherwise reverts to 10 year compressor warranty and 5 year parts warranty.

MATCHING AIR SIDE EQUIPMENT

Model No. (_____)

Submittal Form No. (_____)

FIELD INSTALLED ACCESSORIES

Dehumidification Control (2HU16700124) (_____)

Thermostat (_____)

Thermal Expansion Valve* (_____)

Hard Start Kit (_____)

* Must be installed for proper performance.

(Refer to Technical Guide for detailed specifications on the unit and its accessories.)

CLEARANCES

Front of Unit	24 inch
All Other Sides	12 inch
Above Unit	60 inch
Below Unit	0 inch

*Must be installed for proper performance.

NOTES:

036-22883-002 Rev. C (0905)
Supersedes: 036-22883-002 Rev. B (0505)

YORK®

Heating ▪ Air Conditioning

TECHNICAL GUIDE

ADD - ON COILS FOR USE WITH SPLIT-SYSTEM COOLING & HEAT PUMPS

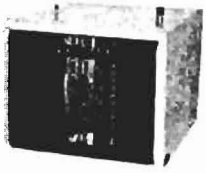
MODELS: MC, PC, FC, HD, HC, UC
600 - 2000 CFM 1.5 - 5 TON COILS

HORIZONTAL DUCT
HD

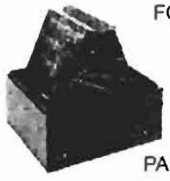
FULL CASED MULTI-POSITION
MC

UPFLOW UNCASED
UC

UPFLOW/DOWNFLOW FULL CASED
FC



HORIZONTAL CASED
HC



UPFLOW PARTIAL CASED
PC

ISO 9001 REGISTRATION

ISO 9001
Certified Quality
Management System

c UL

LIMITED WARRANTY TO CONSUMERS
Good Housekeeping Promises
REPLACEMENT OR REFUND IF DEFECTIVE

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

Visit us on the web at www.york.com for the most up-to-date technical information.

Additional rating information can be found at www.ariprimenet.org.

DESCRIPTION

These cooling and heat pump coils are designed to be installed with UPG furnaces and to be matched with UPG cooling and heat pump outdoor units. All UPG coils utilize a TXV to provide our customers with the optimum performance and refrigerant control required for 13+ SEER systems. Coils can be ordered with a R22 TXV factory installed that can be easily converted to R410A by changing the bolt-on TXV.

"Flex-coils" are also available without a factory installed metering device. For added application flexibility a R22 or R410A TXV is installed, on **"Flex-coils"**, in the field to meet your refrigerant choice.

Upflow/Downflow Coils Full Cased and Partial Cased Coils – Designed for high-efficiency to match any system, full cased in the upflow or downflow and the partial cased in the upflow only application.

Multi-Position Coils - Designed for high-efficiency like the upflow/downflow coil but with the added flexibility that allows it to be installed any position, upflow, downflow, horizontal right or left. This coil can be easily applied to our furnace and modular air handler in any configuration.

Horizontal Duct Coils - Available for both cooling and heat pump dedicated horizontal, slab coil, applications. Field transition may be required.

Dedicated Horizontal Cased Coils – These coils are cooling only or heat pump approved for horizontal furnace or modular air handler applications. Unlike the horizontal duct coils these cased coils match the dimensions of the furnace or modular blower.

FEATURES

Thermal Expansion Valve - Provides flexibility to convert any coil to R22 or R410A refrigerant. A true bolt-on TXV, valve assembly and equalizer tube are bolt-on, no brazing required. TXV and sensing bulb are mounted inside the cased coil cabinet. (Must be field supplied for all "Flex-coils")

MicroBlue™ Coated Fins - All coils are treated with a **MicroBlue™** Hydrophilic coating to enhance the removal of condensate during the refrigeration cycle and reduce the possibility of water blow-off. The **MicroBlue™** coating also reduces the growth of germ causing microbes.

Insulated Cabinet - Evaporator coil cabinets are thermally insulated with foil faced insulation to prevent sweating. HD coils use fiberglass turfskin insulation.

Internally Clean - All evaporator coils are factory leak-tested, dehydrated, sealed and shipped with a holding charge. The suction and liquid lines are sealed with rubber plugs, no cutting of connection stubs to attach line set.

Durable Finish Inside and Out - Coil casings are made of pre-painted steel. The pre-treated flat galvanized steel provides a better paint to steel bond, which resists corrosion and rust creep. All internal metal parts are made of G90 pre-painted steel i.e. triangular plates, top plates, horizontal supports etc. (Coil header plates are non-painted due to the brazing process during production.)

Optimum Heat Transfer - Using the latest in heat transfer technology, staggered rows of copper tubes are mechanically expanded into aluminum fins to provide optimum air to surface contact for ample moisture removal as well as high performance ratings.

ACCESSORIES

Refer to Price Manual for specific model numbers.

TXV Kits - Thermal expansion valve kits are available for "Flex-coil" applications and converting R22 to R410A refrigerant or as a service replacement. All TXV kits are non-braze, all connections are bolt-on including the valve assembly and equalizer tube. (No orifice or any other metering device is to be used in conjunction with the TXV).

Coil Casing Without Coil – Coil casings are available in each width that can be installed with the furnace or modular air handler during initial installation. This option is available to allow the installer the flexibility to install the coil at a later date without duct modifications.

COOLING CAPACITY - Coil Only*

Model	Rated CFM	Entering Air °F (Wet Bulb)	MBH @ Evaporator Temperature and Corresponding Pressure °F / PSIG			
			35 / 61.5	40 / 68.5	45 / 76.0	50 / 84.0
UPFLOW "A" TYPE						
FC18A PC18A	675	72	25.3	23.1	20.6	17.9
		67	23.4	21.1	18.7	16.1
		62	19.2	12.0	18.7	12.4
		57	15.6	13.5	11.3	8.8
FC18B PC18B	850	72	28.1	25.7	22.9	19.9
		67	26.0	23.5	20.8	17.9
		62	21.3	18.9	16.4	13.7
		57	17.3	15.0	12.6	9.8
FC24A PC24A	675	72	35.6	32.5	29.0	25.2
		67	32.9	29.7	26.3	22.7
		62	27.0	23.9	20.7	17.4
		57	21.9	19.0	15.9	12.4
FC24B PC24B	850	72	35.6	32.5	29.0	25.2
		67	32.9	29.7	26.3	22.7
		62	27.0	23.9	20.7	17.4
		57	21.9	19.0	15.9	12.4
FC30A PC30A FC30B PC30B	1025	72	38.9	35.4	31.6	27.6
		67	33.9	30.3	26.8	23.0
		62	27.3	23.7	22.5	18.0
		57	22.6	20.1	17.5	14.8
FC35B PC35B FC35C PC35C	1025	72	46.1	41.9	37.4	33.0
		67	36.9	32.6	28.6	24.3
		62	28.9	24.2	26.4	19.7
		57	24.7	22.9	21.1	19.7
FC36A PC36A	1150	72	46.0	41.9	37.4	32.9
		67	36.8	32.5	28.5	24.2
		62	28.8	24.1	26.4	19.6
		57	24.7	22.9	21.1	19.6
FC36B PC36B FC36C PC36C	1250	72	51.1	46.5	41.5	36.6
		67	40.9	36.1	31.7	26.9
		62	32.0	26.8	29.3	21.8
		57	27.4	25.4	23.4	21.8
FC42B PC42B FC42C PC42C	1400	72	86.6	74.5	62.0	49.0
		67	69.4	58.2	47.4	36.3
		62	54.1	43.0	35.1	29.3
		57	46.5	40.7	35.1	29.3
FC48C PC48C	1620	72	99.4	85.5	71.2	56.2
		67	79.6	66.8	54.4	41.6
		62	62.1	49.4	40.2	33.7
		57	53.3	46.7	40.2	33.7
FC60C PC60C FC60D PC60D	1850	72	118.7	100.0	81.1	61.5
		67	95.0	78.4	61.9	45.4
		62	74.0	58.0	45.7	36.7
		57	63.6	54.8	45.7	36.7

* - See Condensing Unit or Heat Pump Technical Guide for Total Cooling Capacity and Sensible Capacity.

COOLING CAPACITY - COIL ONLY*

Model Coil	Rated CFM	Entering Air °F (Wet Bulb)	MBH@ Evaporator Temperature and Corresponding Pressure °F / PSIG			
			35 / 61.5	40 / 68.5	45 / 76.0	50 / 84.0
FULL-CASED "A" TYPE MULTI-POSITION						
MC18A	550	72	25.8	23.5	21.0	18.2
		67	23.7	21.5	19.0	16.4
		62	19.5	17.3	14.9	12.6
		57	15.8	13.5	11.5	9.0
MC18B	650	72	28.7	26.1	23.3	20.2
		67	26.4	23.9	21.1	18.2
		62	21.6	19.2	16.6	14.0
		57	17.5	15.2	12.8	10.0
MC24A MC24B	850	72	36.3	33.0	29.5	25.6
		67	33.4	30.2	26.7	23.1
		62	27.4	24.3	21.0	17.7
		57	22.2	19.3	16.2	12.6
MC30A MC30B	1025	72	41.5	37.8	33.7	29.5
		67	36.2	32.4	28.6	24.5
		62	29.1	25.3	24.0	19.2
		57	24.1	21.5	18.7	15.8
MC35B MC35C	1025	72	46.9	42.7	38.2	33.6
		67	37.6	33.2	29.1	24.7
		62	29.3	24.6	26.9	20.0
		57	25.2	23.3	21.5	20.0
MC36A	1150	72	46.8	42.6	38.1	33.6
		67	37.5	33.1	29.1	24.7
		62	29.3	24.6	26.8	20.0
		57	25.1	23.2	21.4	20.0
MC36B	1250	72	52.0	47.3	42.3	37.3
		67	41.7	36.8	32.3	27.4
		62	32.5	27.3	29.8	22.2
		57	27.9	25.8	23.8	22.2
MC36C	1250	72	53.4	48.6	43.4	38.3
		67	42.8	37.8	33.1	28.2
		62	33.4	28.1	30.6	22.8
		57	28.7	26.5	24.5	22.8
MC42B MC42C	1400	72	88.4	76.0	63.3	50.0
		67	70.8	59.4	48.4	37.0
		62	55.2	43.9	35.8	29.9
		57	47.4	41.5	35.8	29.9
MC48C MC48D	1650	72	100.5	86.4	72.0	56.8
		67	80.4	67.5	55.0	42.1
		62	62.7	49.9	40.7	34.0
		57	53.9	47.2	40.7	34.0
MC60D	1825	72	119.9	101.0	80.0	62.2
		67	96.0	79.2	62.6	45.8
		62	74.8	58.6	46.2	37.0
		57	64.3	55.4	46.2	37.0
MC61D	2000	72	124.8	105.2	85.3	64.7
		67	99.9	82.5	65.2	47.7
		62	77.9	61.1	48.1	38.6
		57	66.9	57.7	48.1	38.6

* See Condensing Unit or Heat Pump Technical Guide for Total Cooling Capacity and Sensible Capacity.

Notes:

MC coils available with a factory installed horizontal drain pan option (H).

COOLING CAPACITY - Coil Only*

MODEL	RATED CFM	ENTERING AIR °F (Wet Bulb)	MBH @ Evaporator Temperature and Corresponding Pressure °F/ PSIG			
			35 / 61.5	40 / 68.5	45 / 76.0	50 / 84.0
HORIZONTAL DUCT TYPE						
HD24S**H1	815	72	35.3	32.4	28.7	24.9
		67	32.6	29.4	26.0	22.5
		62	26.7	23.7	20.5	17.2
		57	21.7	18.8	15.7	12.3
HD36S**H1	1192	72	57.9	52.7	47.1	41.5
		67	46.4	41.1	35.9	30.4
		62	36.2	30.4	26.5	24.7
		57	31.1	28.7	26.5	24.7
HD48S**H1	1610	72	83.4	71.7	59.7	47.1
		67	66.8	56.1	45.6	34.9
		62	52.1	41.5	33.7	28.3
		57	44.7	39.2	33.7	28.3
HD60S**H1	2100	72	133.0	112.4	90.9	69.2
		67	106.5	87.9	69.4	50.0
		62	83.0	65.0	51.3	41.1
		57	71.2	61.4	51.3	41.1

* See Condensing Unit or Heat Pump Technical Guide for Total Cooling Capacity and Sensible Capacity.

COOLING CAPACITY - COIL ONLY*

Model	Rated CFM	Entering Air °F (Wet Bulb)	MBH @ EVAPORATOR TEMPERATURE AND CORRESPONDING PRESSURE °F / PSIG			
			35/61.5	40/68.5	45/76.0	50/84.0
HC18A	600	72	26.4	24.0	21.5	18.6
		67	24.3	22.0	19.4	16.8
		62	20.0	17.7	15.3	12.9
		57	16.1	14.0	11.8	9.2
HC30A	1000	72	42.7	38.9	34.7	30.6
		67	34.3	30.3	26.5	22.5
		62	26.7	22.5	24.5	19.8
		57	22.9	21.2	19.6	18.3
HC36B	1200	72	73.4	63.1	52.5	41.5
		67	58.8	49.3	40.2	30.7
		62	45.8	36.4	29.7	24.8
		57	39.3	34.4	28.1	23.2
HC42C	1400	72	84.9	73.0	60.1	48.1
		67	68.0	58.9	46.5	35.6
		62	53.1	42.2	34.4	28.8
		57	45.5	40.0	32.0	26.7
HC60C	1800	72	112.8	95.0	77.0	58.4
		67	90.3	74.5	58.8	43.1
		62	70.3	55.1	43.4	34.9
		57	60.4	52.1	40.4	31.9

* See Condensing Unit or Heat Pump Technical Guide for Total Cooling Capacity and Sensible Capacity.

COOLING CAPACITY - COIL ONLY*

Model Coil	Rated CFM	Entering Air °F (Wet Bulb)	MBH@ Evaporator Temperature and Corresponding Pressure °F / PSIG			
			35 / 61.5	40 / 68.5	45 / 76.0	50 / 84.0
uncased upflow						
UC18A UC18B	60	72	23.3	21.3	19.0	17.5
		67	21.5	19.5	17.3	14.9
		62	17.7	15.6	13.5	11.4
		57	14.4	12.4	10.4	8.0
UC24A UC24B	800	72	27.4	25.0	22.3	19.4
		67	25.3	22.9	20.3	17.5
		62	20.8	18.4	15.9	13.4
		57	16.9	14.6	12.2	9.4
UC30A UC30B	1000	72	35.2	32.0	28.6	24.8
		67	32.4	28.6	25.3	21.9
		62	26.6	23.6	21.5	18.7
		57	25.2	22.7	20.2	17.6
UC36A	1150	72	46.8	42.7	37.9	33.0
		67	43.1	39.2	34.9	30.4
		62	35.3	32.1	28.6	24.9
		57	33.3	26.9	26.9	23.4
UC36B UC36C	1200	72	49.3	44.9	39.9	34.7
		67	45.4	41.3	36.7	32.0
		62	37.2	33.8	30.1	26.2
		57	35.0	28.3	28.3	24.6
UC42B UC42C	1400	72	86.7	73.0	59.2	44.9
		67	69.4	57.2	45.2	33.1
		62	54.0	42.3	33.4	26.8
		57	46.4	40.0	33.4	26.8
UC48C UC48D	1600	72	62.4	56.8	50.5	44.4
		67	57.4	53.2	46.5	40.5
		62	47.1	42.8	38.1	33.2
		57	44.3	40.3	35.8	31.2
UC60C UC60D	1800	72	95.4	82.1	68.4	54.0
		67	76.4	64.1	52.2	39.9
		62	59.6	47.4	38.6	32.4
		57	51.2	44.8	38.6	32.4

* See Condensing Unit or Heat Pump Technical Guide for Total Cooling Capacity and Sensible Capacity.

APPLICATION FACTOR-RATED CFM VS. ACTUAL CFM

% OF RATED AIR FLOW	80%	90%	RATED CFM	110%	120%
CAPACITY FACTOR	0.96	0.98	1.00	1.02	1.03

NOTE:Do not exceed minimum/maximum CFM limits shown under Air Flow Data.

APPLICATION LIMITATIONS

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

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

Entering Air Temperature Limits			
Wet Bulb Temp. °F		Dry Bulb Temp. °F	
Min.	Max.	Min.	Max.
57	72	65	95

STATIC PRESSURE VS. AIRFLOW (BASED ON WET COIL)

UPFLOW CASED "A" TYPE

Model	Airflow	Wet Coil
FC18A PC18A	600	0.16
	800	0.23
	1000	0.30
FC18B PC18B	600	0.14
	800	0.20
	1000	0.26
FC24A PC24A	600	0.15
	800	0.21
	1000	0.27
FC24B PC24B	600	0.13
	800	0.18
	1000	0.23
FC30A PC30A	800	0.21
	1000	0.27
	1200	0.33
FC30B PC30B	800	0.18
	1000	0.23
	1200	0.29
FC35B PC35B	800	0.16
	1000	0.22
	1200	0.29
FC35C PC35C	800	0.14
	1000	0.20
	1200	0.27
FC36A PC36A	1000	0.24
	1200	0.32
	1400	0.40
FC36B PC36B	1000	0.15
	1200	0.22
	1400	0.28
FC36C PC36C	1000	0.10
	1200	0.15
	1400	0.20
FC42B PC42B	1200	0.21
	1400	0.28
	1600	0.34
	1800	0.40
FC42C PC42C	1200	0.14
	1400	0.19
	1600	0.24
	1800	0.28
FC48C PC48C	1600	0.29
	1800	0.35
	2000	0.40
	2200	0.46
FC48D PC48D	1600	0.25
	1800	0.30
	2000	0.35
	2200	0.40
FC60C PC60C	1600	0.28
	1800	0.33
	2000	0.38
	2200	0.43
FC60D PC60D	1600	0.21
	1800	0.27
	2000	0.32
	2200	0.38

HORIZONTAL - DUCT TYPE

Model	Airflow	Wet Coil
HD24S**H1	600	0.02
	800	0.09
	1000	0.19
HD36S**H1	1000	0.19
	1200	0.28
	1400	0.38
HD48S**H1	1200	0.14
	1400	0.19
	1600	0.25
	1800	0.32
HD60S**H1	1600	0.16
	1800	0.20
	2000	0.25
	2200	0.30

HORIZONTAL CASED

Model	Airflow	Wet Coil
HC18A	600	0.07
	800	0.12
	1000	0.19
HC30A	800	0.21
	900	0.25
	1150	0.30
	1200	0.31
HC36B	1000	0.20
	1100	0.24
	1200	0.27
	1300	0.30
HC42C	1400	0.25
	1500	0.28
	1550	0.30
	1600	0.33
HC60C	1700	0.25
	1800	0.28
	1850	0.30
	1900	0.31
	2000	0.34

CASED "A" TYPE MULTI-POSITION

Model	Airflow	Wet Coil
MC18A	600	0.22
	800	0.29
	1000	0.36
MC18B	600	0.20
	800	0.26
	1000	0.32
MC24A	600	0.21
	800	0.27
	1000	0.33
MC24B	600	0.19
	800	0.24
	1000	0.29
MC30A	600	0.21
	800	0.27
	1000	0.33
MC30B	600	0.19
	800	0.24
	1000	0.29
MC35B	600	0.22
	800	0.26
	1000	0.34
MC35C	600	0.20
	800	0.24
	1000	0.32
MC36A	800	0.22
	1000	0.30
	1200	0.38
MC36B	800	0.15
	1000	0.21
	1200	0.28
MC36C	1000	0.16
	1200	0.21
	1400	0.26
MC42B	1200	0.27
	1400	0.34
	1600	0.40
MC42C	1200	0.20
	1400	0.25
	1600	0.30
	1800	0.34
MC48C	1200	0.24
	1400	0.30
	1600	0.35
	1800	0.41
MC48D	1200	0.20
	1400	0.26
	1600	0.31
	1800	0.36
MC60D	1600	0.27
	1800	0.33
	2000	0.38
	2200	0.44
MC61D	1600	0.24
	1800	0.29
	2000	0.35
	2200	0.40

UNCASED UPFLOW - "A" TYPE

Model	Airflow	Wet Coil
UC18A	600	0.16
	800	0.23
	1000	0.30
UC18B	600	0.14
	800	0.20
	1000	0.26
UC24A	600	0.15
	800	0.21
	1000	0.27
UC24B	600	0.13
	800	0.18
	1000	0.23
UC30A	800	0.21
	1000	0.27
	1200	0.33
UC30B	800	0.18
	1000	0.23
	1200	0.29
UC36A	1000	0.24
	1200	0.32
	1400	0.40
UC36B	1000	0.15
	1200	0.22
	1400	0.28
UC36C	1000	0.10
	1200	0.15
	1400	0.20
UC42B	1200	0.21
	1400	0.28
	1600	0.34
UC42C	1200	0.14
	1400	0.19
	1600	0.24
	1800	0.28
UC48C	1200	0.18
	1400	0.24
	1600	0.29
	1800	0.35
UC48D	1200	0.14
	1400	0.20
	1600	0.25
	1800	0.30
UC60C	1600	0.28
	1800	0.33
	2000	0.38
	2200	0.43
UC60D	1600	0.21
	1800	0.27
	2000	0.32
	2200	0.38

PHYSICAL DATA
CASED (FC) AND PARTIAL CASED (PC) UPFLOW "A" TYPE

Model	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV	Operating Weight (Lbs.)
FC18A3XN1	Cooling/ Heat Pump	Sweat	3.4	2	14	(2) 14 x 17.5	1 x 0.866	3/8	Enhanced	None	42
PC18A3XN1											36
FC18A2AN1			3.4	2	14	(2) 14 x 17.5				2A	42
PC18A2AN1											36
FC18B3XN1			3.4	2	14	(2) 14 x 17.5				None	44
PC18B3XN1											37
FC18B2AN1			3.4	2	14	(2) 14 x 17.5				2A	44
PC18B2AN1											37
FC24A3XN1			4.38	2	14	(2) 18 x 17.5				None	46
PC24A3XN1											40
FC24A2AN1			4.38	2	14	(2) 18 x 17.5				2A	46
PC24A2AN1											40
FC24B3XN1			4.38	2	14	(2) 18 x 17.5				None	50
PC24B3XN1											42
FC24B2AN1			4.38	2	14	(2) 18 x 17.5				2A	50
PC24B2AN1											42
FC30A3XN1			4.38	2	14	(2) 18 x 17.5				None	46
PC30A3XN1											40
FC30A2AN1			4.38	2	14	(2) 18 x 17.5				2A	46
PC30A2AN1											40
FC30B3XN1			4.38	2	14	(2) 18 x 17.5				None	50
PC30B3XN1											42
FC30B2AN1			4.38	2	14	(2) 18 x 17.5				2A	50
PC30B2AN1											42
FC35B3XN1			3.9	3	12	(2) 16 x 17.5				None	53
PC35B3XN1											45
FC35C3XN1			3.9	3	12	(2) 16 x 17.5				None	55
PC35C3XN1											46
FC36A3XN1			4.86	2	14	(2) 20 x 17.5				None	51
PC36A3XN1											44
FC36A2AN1			4.86	2	14	(2) 20 x 17.5				2A	51
PC36A2AN1											44
FC36B3XN1			4.86	2	14	(2) 20 x 17.5				None	53
PC36B3XN1											45
FC36B2AN1			4.86	2	14	(2) 20 x 17.5				2A	53
PC36B2AN1											45
FC36C3XN1			4.86	2	14	(2) 20 x 17.5				None	55
PC36C3XN1											46
FC36C2AN1			4.86	2	14	(2) 20 x 17.5				2A	55
PC36C2AN1											46
FC42B3XN1			5.83	2	14	(2) 24 x 17.5				None	62
PC42B3XN1											50
FC42B2CN1			5.83	2	14	(2) 24 x 17.5				2C	62
PC42B2CN1											50
FC42C3XN1			5.83	2	14	(2) 24 x 17.5				None	64
PC42C3XN1											54
FC42C2CN1			5.83	2	14	(2) 24 x 17.5				2C	64
PC42C2CN1											54
FC48C3XN1			5.35	3	12	(2) 22 x 17.5				None	65
PC48C3XN1											56
FC48C2CN1			5.35	3	12	(2) 22 x 17.5				2C	65
PC48C2CN1											56
FC48D3XN1			5.35	3	12	(2) 22 x 17.5				None	73
PC48D3XN1											58
FC48D2CN1			5.35	3	12	(2) 22 x 17.5				2C	73
PC48D2CN1											58
FC60C3XN1			5.83	3	12	(2) 24 x 17.5				None	65
PC60C3XN1											58
FC60C2CN1			5.83	3	12	(2) 24 x 17.5				2C	65
PC60C2CN1											58
FC60D3XN1			5.83	3	12	(2) 24 x 17.5				None	78
PC60D3XN1											60
FC60D2CN1			5.83	3	12	(2) 24 x 17.5				2C	78
PC60D2CN1											60

HORIZONTAL - DUCT TYPE

Model	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per in.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV	Operating Weight (Lbs.)
HD24S3XH1	Cooling / Heat Pump	Sweat	3.67	3	12	22 x 24	1 x 0.866	3/8	Enhanced	None	33
HD24S2AH1										2A	35
HD36S3XH1			4.33	3	12	26 x 24				None	35
HD36S2AH1										2A	37
HD48S3XH1			5.41	3	12	26 x 30				None	38
HD48S2CH1										2C	40
HD60S3XH1			5.83	3	12	28 x 30				None	46
HD60S2CH1										2C	48

UNCASED UPFLOW - "A" TYPE

Model	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV	Operating Weight (Lbs.)
UC18A3XN1	Cooling / Heat Pump	Sweat	3.67	2	14	(2) 16 x 16.5	1 x 0.866	3/8	Enhanced	None	18
UC18A2AN1										2A	
UC18B3XN1			3.67	2	14	(2) 16 x 16.5				None	20
UC18B2AN1										2A	
UC24A3XN1			4.58	2	14	(2) 20 x 16.5				None	22
UC24A2AN1										2A	
UC24B3XN1			4.58	2	14	(2) 20 x 16.5				None	23
UC24B2AN1										2A	
UC30A3XN1			4.58	2	14	(2) 20 x 16.5				None	22
UC30A2AN1										2A	
UC30B3XN1			4.58	2	14	(2) 20 x 16.5				None	23
UC30B2AN1										2A	
UC36A3XN1			5.04	2	14	(2) 22 x 16.5				None	25
UC36A2AN1										2A	
UC36B3XN1			5.04	2	14	(2) 22 x 16.5				None	28
UC36B2AN1										2A	
UC36C3XN1			5.04	2	14	(2) 22 x 16.5				None	30
UC36C2AN1										2A	
UC42B3XN1			5.96	2	14	(2) 26 x 16.5				None	34
UC42B2CN1										2C	
UC42C3XN1			5.96	2	14	(2) 26 x 16.5				None	36
UC42C2CN1										2C	
UC48C3XN1			5.50	3	12	(2) 24 x 16.5				None	38
UC48C2CN1										2C	
UC48D3XN1			5.50	3	12	(2) 24 x 16.5				None	42
UC48D2CN1										2C	
UC60C3XN1			5.96	3	12	(2) 26 x 16.5				None	42
UC60C2CN1										2C	
UC60D3XN1			5.96	3	12	(2) 26 x 16.5				None	45
UC60D2CN1										2C	

FULL CASED "A" TYPE MULTI-POSITION

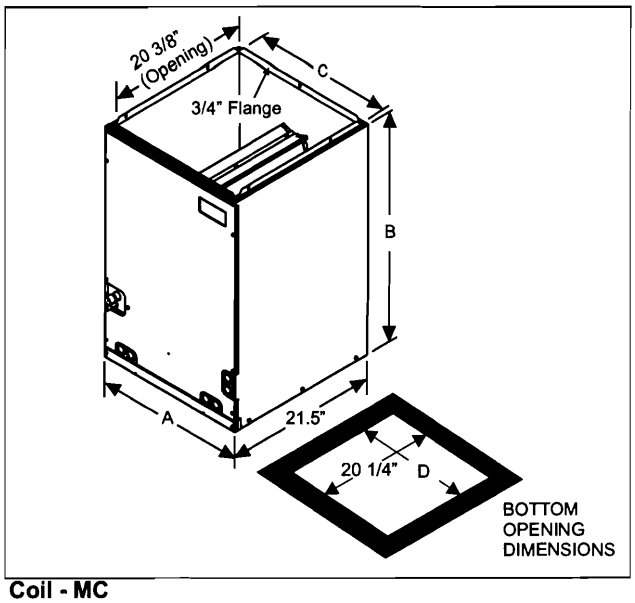
Model	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV	Operating Weight (Lbs.)
MC18A3XH1	Cooling / Heat Pump	Sweat	3.40	2	14	(2) 14 x 17.5	1 x 0.866	3/8	Enhanced	None	53
MC18A2AH1										2A	
MC18B3XH1			3.40	2	14	(2) 14 x 17.5				None	53
MC18B2AH1										2A	
MC24A3XH1			4.38	2	14	(2) 18 x 17.5				None	56
MC24A2AH1										2A	
MC24B3XH1			4.38	2	14	(2) 18 x 17.5				None	56
MC24B2AH1										2A	
MC30A3XH1			4.38	2	14	(2) 18 x 17.5				None	56
MC30A2AH1										2A	
MC30B3XH1			4.38	2	14	(2) 18 x 17.5				None	56
MC30B2AH1										2A	
MC35B3XH1			3.9	3	12	(2) 16 x 17.5				None	65
MC35C3XH1										None	
MC36A3XH1			4.86	2	14	(2) 20 x 17.5				None	64
MC36A2AH1										2A	
MC36B3XH1			4.86	2	14	(2) 20 x 17.5				None	65
MC36B2AH1										2A	
MC36C3XH1			4.86	2	14	(2) 20 x 17.5				None	65
MC36C2AH1										2A	
MC42B3XH1			5.83	2	14	(2) 24 x 17.5				None	72
MC42B2CH1										2C	
MC42C3XH1			5.83	2	14	(2) 24 x 17.5				None	72
MC42C2CH1										2C	
MC48C3XH1			5.35	3	12	(2) 22 x 17.5				None	82
MC48C2CH1										2C	
MC48D3XH1			5.35	3	12	(2) 22 x 17.5				None	82
MC48D2CH1										2C	
MC60D3XH1			5.83	3	12	(2) 24 x 17.5				None	86
MC60D2CH1										2C	
MC61D3XH1			6.80	3	12	(2) 28 x 17.5				None	98
MC61D2CH1										2C	

Note: MC coils available with a factory installed horizontal drain pan option (H).

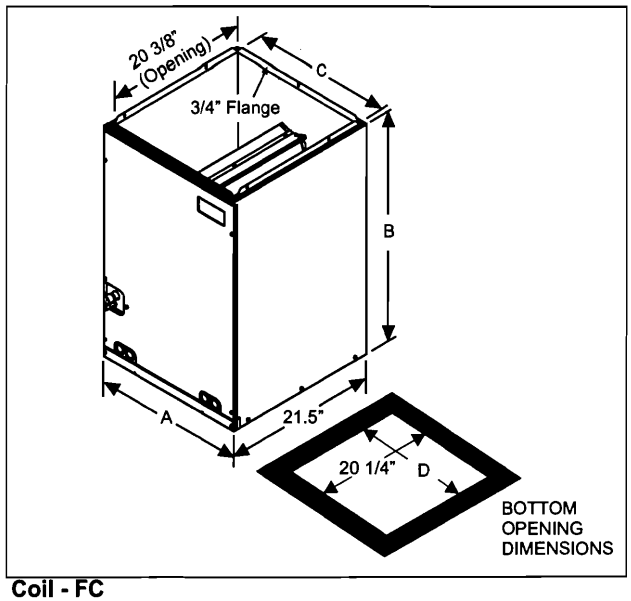
HORIZONTAL CASED TYPE

Model	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV	Operating Weight (Lbs.)
HC18A3XH1	Cooling / Heat Pump	Sweat	3.40	2	14	(2) 14 x 17.5	1 x 0.866	3/8	Enhanced	None	40
HC18A2AH1										2A	
HC30A3XH1			3.40	3	12	(2) 14 x 17.5				None	49
HC30A2AH1										2A	
HC36B3XH1			3.88	3	12	(2) 16 x 17.5				None	54
HC36B2AH1										2A	
HC42C3XH1			4.86	3	12	(2) 20 x 17.5				None	66
HC42C2CH1										2C	
HC60D3XH1			5.83	3	12	(2) 24 x 17.5				None	76
HC60D2CH1										2C	

DIMENSIONS



Coil - MC



Coil - FC

Dimensions - MC Coils

Model	A	B	C	D	Refrigerant Line Size*		Factory Installed TXV (R22)
					Liquid	Vapor	
MC18A2AH1	14.5	22	13 3/8	13.5	3/8	3/4	2A
MC18A3XH1	14.5	22	13 3/8	13.5	3/8	3/4	None
MC18B2AH1	17.5	22	16 3/8	16.5	3/8	3/4	2A
MC18B3XH1	17.5	22	16 3/8	16.5	3/8	3/4	None
MC24A2AH1	14.5	26.5	13 3/8	13.5	3/8	3/4	2A
MC24A3XH1	14.5	26.5	13 3/8	13.5	3/8	3/4	None
MC24B2AH1	17.5	26.5	16 3/8	16.5	3/8	3/4	2A
MC24B3XH1	17.5	26.5	16 3/8	16.5	3/8	3/4	None
MC30A2AH1	14.5	26.5	13 3/8	13.5	3/8	3/4	2A
MC30A3XH1	14.5	26.5	13 3/8	13.5	3/8	3/4	None
MC30B2AH1	17.5	26.5	16 3/8	16.5	3/8	3/4	2A
MC30B3XH1	17.5	26.5	16 3/8	16.5	3/8	3/4	None
MC35B3XH1	17.5	22	16 3/8	16.5	3/8	3/4	None
MC35C3XH1	21	26.5	19 7/8	20	3/8	3/4	None
MC36A2AH1	14.5	26.5	13 3/8	13.5	3/8	7/8	2A
MC36A3XH1	14.5	26.5	13 3/8	13.5	3/8	7/8	None
MC36B2AH1	17.5	26.5	16 3/8	16.5	3/8	7/8	2A
MC36B3XH1	17.5	26.5	16 3/8	16.5	3/8	7/8	None
MC36C2AH1	21	26.5	19 7/8	20	3/8	7/8	2A
MC36C3XH1	21	26.5	19 7/8	20	3/8	7/8	None
MC42B2CH1	17.5	32	16 3/8	16.5	3/8	7/8	2C
MC42B3XH1	17.5	32	16 3/8	16.5	3/8	7/8	None
MC42C2CH1	21	32	19 7/8	20	3/8	7/8	2C
MC42C3XH1	21	32	19 7/8	20	3/8	7/8	None
MC48C2CH1	21	32	19 7/8	20	3/8	7/8	2C
MC48C3XH1	21	32	19 7/8	20	3/8	7/8	None
MC48D2CH1	24.5	32	23 3/8	23.5	3/8	7/8	2C
MC48D3XH1	24.5	32	23 3/8	23.5	3/8	7/8	None
MC60D2CH1	24.5	32	23 3/8	23.5	3/8	7/8	2C
MC60D3XH1	24.5	32	23 3/8	23.5	3/8	7/8	None
MC61D2CH1	24.5	36	23 3/8	23.5	3/8	7/8	2C
MC61D3XH1	24.5	36	23 3/8	23.5	3/8	7/8	None

All MC coils include a factory installed horizontal drain pan.
(3X) = Models require field installed TXV.

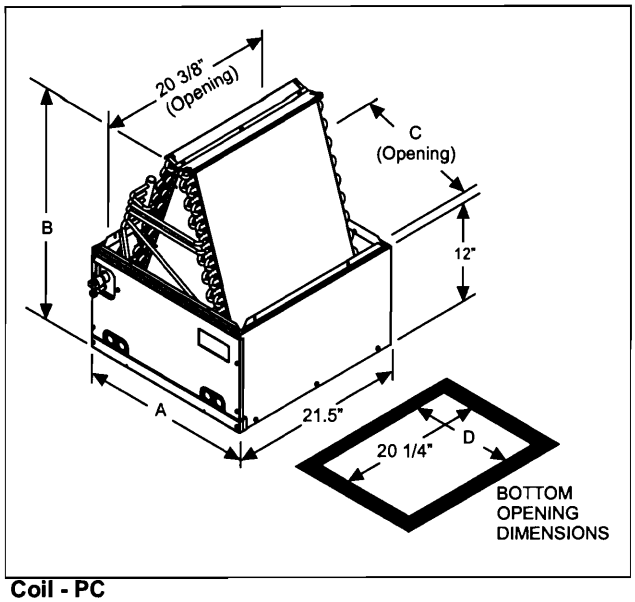
* Refrigerant line sizes may require larger lines for extended line lengths. See York bulletin #690.01-AD1V for details.

Dimensions - FC Coils

Model	A	B	C	D	Refrigerant Line Size*		Factory Installed TXV (R22)
					Liquid	Vapor	
FC18A2AN1	14.5	18	13 3/8	13.5	3/8	3/4	2A
FC18A3XN1	14.5	18	13 3/8	13.5	3/8	3/4	None
FC18B2AN1	17.5	18	16 3/8	16.5	3/8	3/4	2A
FC18B3XN1	17.5	18	16 3/8	16.5	3/8	3/4	None
FC24A2AN1	14.5	22	13 3/8	13.5	3/8	3/4	2A
FC24A3XN1	14.5	22	13 3/8	13.5	3/8	3/4	None
FC24B2AN1	17.5	22	16 3/8	16.5	3/8	3/4	2A
FC24B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC30A2AN1	14.5	22	13 3/8	13.5	3/8	3/4	2A
FC30A3XN1	14.5	22	13 3/8	13.5	3/8	3/4	None
FC30B2AN1	17.5	22	16 3/8	16.5	3/8	3/4	2A
FC30B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC35B3XN1	17.5	22	16 3/8	16.5	3/8	3/4	None
FC35C3XN1	21	24.5	19 7/8	20	3/8	3/4	None
FC36A2AN1	14.5	24.5	13 3/8	13.5	3/8	7/8	2A
FC36A3XN1	14.5	24.5	13 3/8	13.5	3/8	7/8	None
FC36B2AN1	17.5	24.5	16 3/8	16.5	3/8	7/8	2A
FC36B3XN1	17.5	24.5	16 3/8	16.5	3/8	7/8	None
FC36C2AN1	21	24.5	19 7/8	20	3/8	7/8	2A
FC36C3XN1	21	24.5	19 7/8	20	3/8	7/8	None
FC42B2CN1	17.5	28	16 3/8	16.5	3/8	7/8	2C
FC42B3XN1	17.5	28	16 3/8	16.5	3/8	7/8	None
FC42C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC42C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC48C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC48C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC48D2CN1	24.5	28	23 3/8	23.5	3/8	7/8	2C
FC48D3XN1	24.5	28	23 3/8	23.5	3/8	7/8	None
FC60C2CN1	21	28	19 7/8	20	3/8	7/8	2C
FC60C3XN1	21	28	19 7/8	20	3/8	7/8	None
FC60D2CN1	24.5	28	23 3/8	23.5	3/8	7/8	2C
FC60D3XN1	24.5	28	23 3/8	23.5	3/8	7/8	None

FC coils are not available with a factory installed horizontal drain pan.
(3X) = Models require field installed TXV.

* Refrigerant line sizes may require larger lines for extended line lengths. See York bulletin #690.01-AD1V for details.



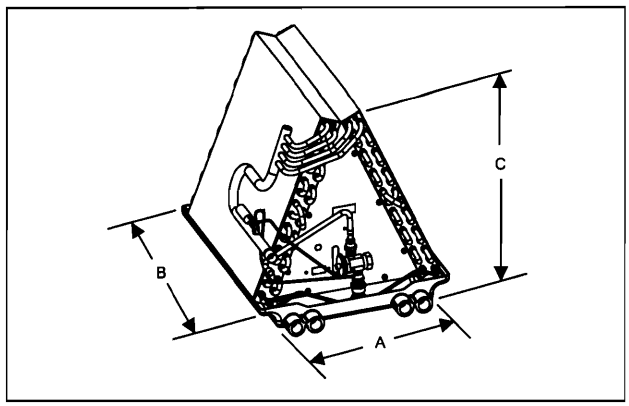
Coil - PC

Dimensions - PC Coils

Model	A	B	C	D	Refrigerant Line Size*		Factory Installed TXV (R22)
					Liquid	Vapor	
PC18A2AN1	14.5	17 3/4	13 3/8	13.5	3/8	3/4	2A
PC18A3XN1	14.5	17 3/4	13 3/8	13.5	3/8	3/4	None
PC18B2AN1	17.5	17	16 3/8	16.5	3/8	3/4	2A
PC18B3XN1	17.5	17	16 3/8	16.5	3/8	3/4	None
PC24A2AN1	14.5	21 7/8	13 3/8	13.5	3/8	3/4	2A
PC24A3XN1	14.5	21 7/8	13 3/8	13.5	3/8	3/4	None
PC24B2AN1	17.5	21 3/8	16 3/8	16.5	3/8	3/4	2A
PC24B3XN1	17.5	21 3/8	16 3/8	16.5	3/8	3/4	None
PC30A2AN1	14.5	21 7/8	13 3/8	13.5	3/8	3/4	2A
PC30A3XN1	14.5	21 7/8	13 3/8	13.5	3/8	3/4	None
PC30B2AN1	17.5	21 3/8	16 3/8	16.5	3/8	3/4	2A
PC30B3XN1	17.5	21 3/8	16 3/8	16.5	3/8	3/4	None
PC35B3XN1	17.5	18 7/8	16 3/8	16.5	3/8	3/4	None
PC35C3XN1	21	18 3/4	19 7/8	20	3/8	3/4	None
PC36A2AN1	14.5	23 7/8	13 3/8	13.5	3/8	7/8	2A
PC36A3XN1	14.5	23 7/8	13 3/8	13.5	3/8	7/8	None
PC36B2AN1	17.5	23 1/8	16 3/8	16.5	3/8	7/8	2A
PC36B3XN1	17.5	23 1/8	16 3/8	16.5	3/8	7/8	None
PC36C2AN1	21	22 7/8	19 7/8	20	3/8	7/8	2A
PC36C3XN1	21	22 7/8	19 7/8	20	3/8	7/8	None
PC42B2CN1	17.5	27 5/8	16 3/8	16.5	3/8	7/8	2C
PC42B3XN1	17.5	27 5/8	16 3/8	16.5	3/8	7/8	None
PC42C2CN1	21	27 1/8	19 7/8	20	3/8	7/8	2C
PC42C3XN1	21	27 1/8	19 7/8	20	3/8	7/8	None
PC48C2CN1	21	25 3/8	19 7/8	20	3/8	7/8	2C
PC48C3XN1	21	25 3/8	19 7/8	20	3/8	7/8	None
PC48D2CN1	24.5	24 5/8	23 3/8	23.5	3/8	7/8	2C
PC48D3XN1	24.5	24 5/8	23 3/8	23.5	3/8	7/8	None
PC60C2CN1	21	27 1/2	19 7/8	20	3/8	7/8	2C
PC60C3XN1	21	27 1/2	19 7/8	20	3/8	7/8	None
PC60D2CN1	24.5	26 7/8	23 3/8	23.5	3/8	7/8	2C
PC60D3XN1	24.5	26 7/8	23 3/8	23.5	3/8	7/8	None

PC coils are not available with a factory installed horizontal drain pan.
(3X) = Models require field installed TXV.

* Refrigerant line sizes may require larger lines for extended line lengths. See York bulletin #690.01-AD1V for details.

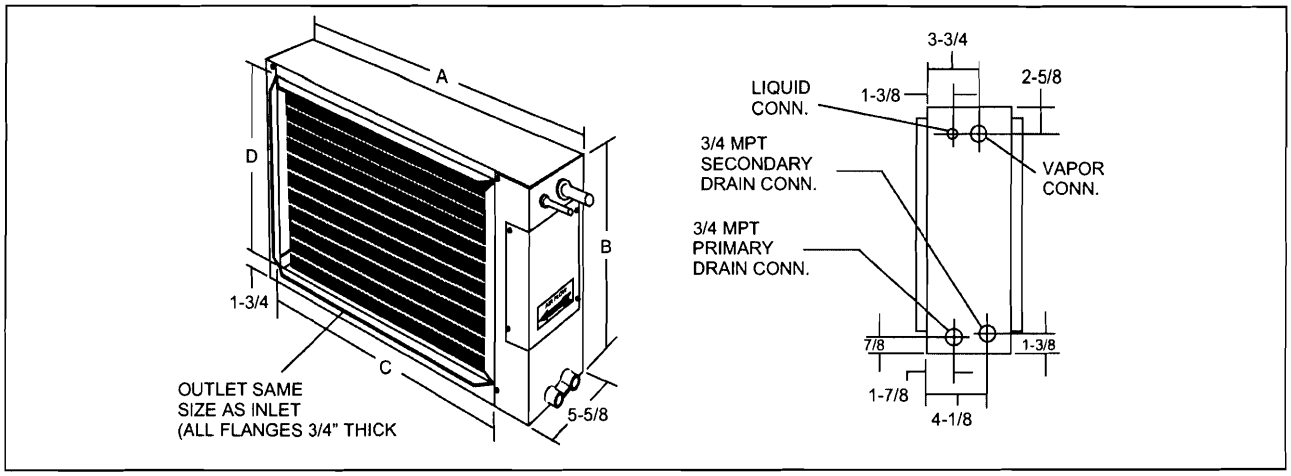


COIL - UC

Dimensions - UC Coils

Model	Dimensions — Inches			Refrigerant Connections	
	A	B	C	Line Size	
				Liquid	Vapor
UC18A3XN1	13	19.875	17	3/8	3/4
UC18A2AN1					
UC18B3XN1	16		16.5		
UC18B2AN1					
UC24A3XN1	13		21		
UC24A2AN1					
UC24B3XN1	16		20.5		
UC24B2AN1					
UC30A3XN1	13		21		
UC30A2AN1					
UC30B3XN1	16		20.5		
UC30B2AN1					
UC36A3XN1	13		23.5		7/8
UC36A2AN1					
UC36B3XN1	16		22.5		
UC36B2AN1					
UC36C3XN1	19.5		22		
UC36C2AN1					
UC42B3XN1	16		26.5		
UC42B2CN1					
UC42C3XN1	19.5		25.5		
UC42C2CN1					
UC48C3XN1	19.5		23.5		
UC48C2CN1					
UC48D3XN1	23		23		
UC48D2CN1					
UC60C3XN1	19.5		25.5		
UC60C2CN1					
UC60D3XN1	23		25		
UC60D2CN1					

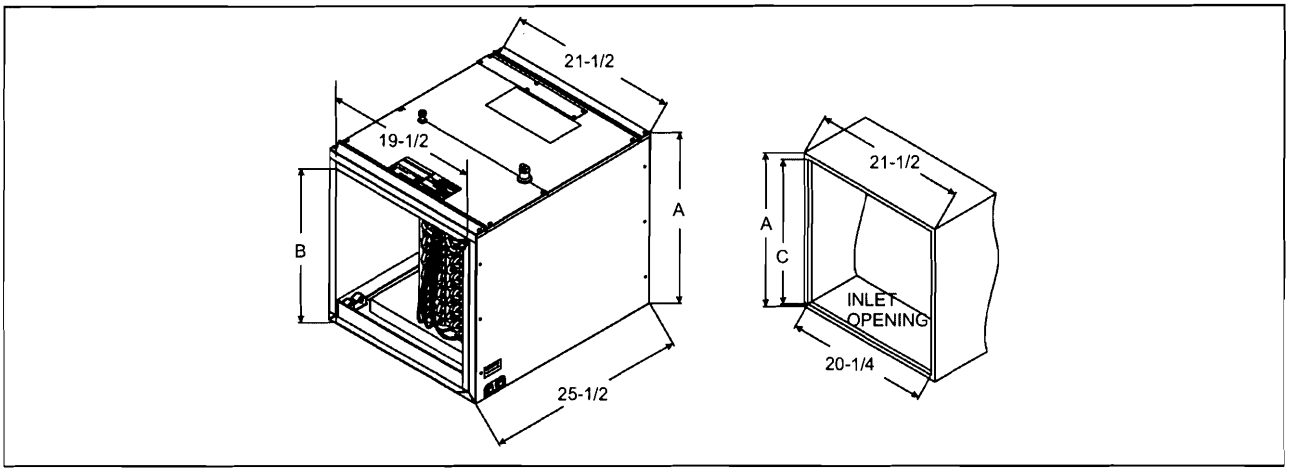
(3X) = Models require field installed TXV.



COIL - HD

Dimensions - HD Coils

Model	Dimensions — Inches				Refrigerant Connections	
					Line Size	
	A	B	C	D	Liquid	Vapor
HD24S**H1	28-3/4	24	23-3/4	21-5/8	3/8	3/4
HD36S**H1	28-3/4	28	23-3/4	25-5/8		7/8
HD48S**H1	34-3/4	28	29-3/4	25-5/8		
HD60S**H1	34-3/4	30	29-3/4	27-5/8		



COIL - HC

Dimensions - HD Coils

Model	Dimensions — Inches			Refrigerant Connections	
				Line Size	
	A	B	C	Liquid	Vapor
HC18A**H1	15-5/16	13-1/4	14-3/16	3/8	3/4
HC30A**H1					7/8
HC36B**H1	17-9/16	15-1/2	16-7/16		
HC42C**H1	21-5/16	19-1/4	20-3/16		
HC60D**H1	25-5/16	23-1/4	24-3/16		

NOTES

NOTES

NOTES

261627-YTG-A-0906
Supersedes: 258920-YTG-A-0606

Unitary Products Group

5005 York Drive

Norman OK 73069

036-21633-002 Rev. A (1205)

YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

AFFINITY

MODELS: PT9

GAS-FIRED
CONDENSING / HIGH EFFICIENCY
DOWNFLOW/HORIZONTAL
TWO STAGE FURNACES

NATURAL GAS
60 - 120 MBH INPUT

ISO 9001
Certified Quality
Management System

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

Visit us on the web at www.york.com for the most up-to-date technical information.

Additional rating information can be found at www.gamanet.org.

DESCRIPTION

These Category IV, highly efficient, compact, condensing type furnaces are designed for residential and commercial installations in a basement, closet, alcove, recreation room or garage where the ambient temperature is above 32°F, or higher. They may be either side wall or thru-roof vented using approved plastic type combustion air and vent piping. All units are factory assembled, wired and tested to assure dependable and economical installation and operation.

WARRANTY

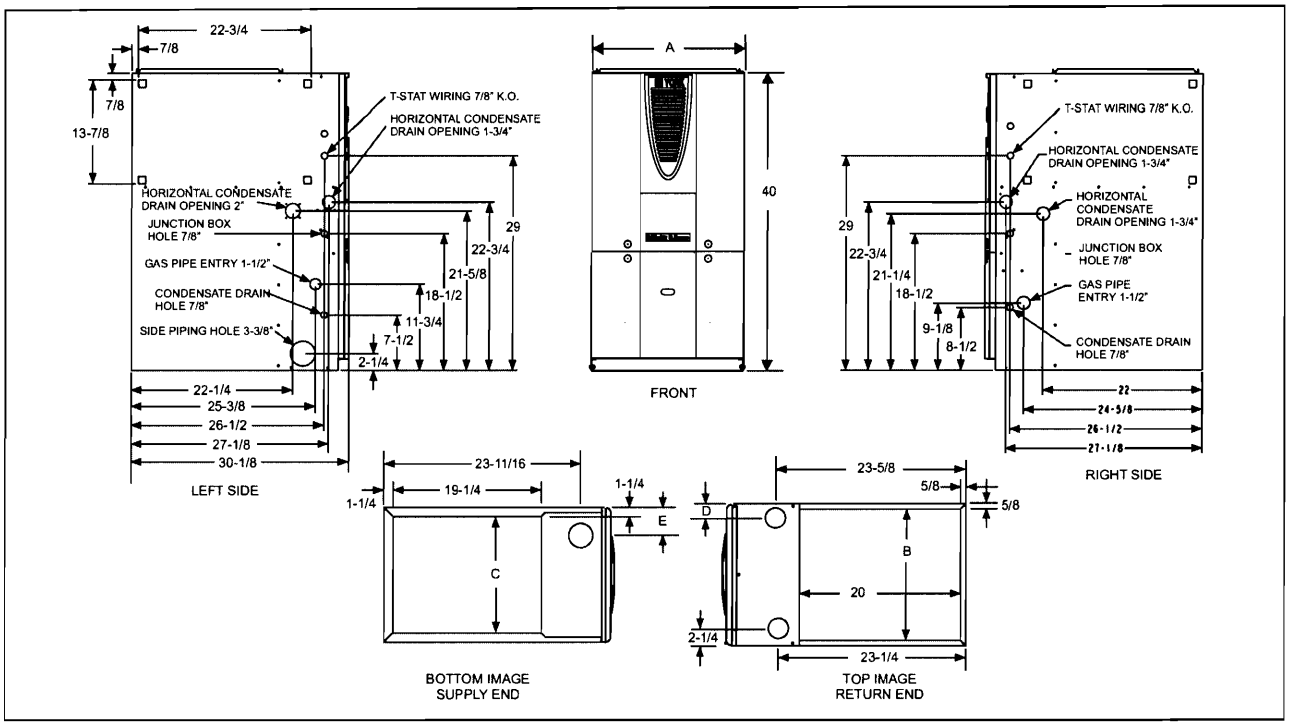
Lifetime limited warranty on both heat exchangers to the original purchaser; a 20-year limited warranty from original installation date to subsequent purchaser.

10-year warranty on commercial applications.

5-year limited parts warranty.

FEATURES

- Two stage heating operation includes:
  - Two stage gas valve
  - Two stage inducer operation
- Provides increased comfort level & very quiet unit operation
- Adjustable delay timer allows two stage operation with single stage thermostat
- Compact, easy to install, ideal height 40" cabinet
- Blower-off delay for cooling SEER improvement.
- Easy to connect power/control wiring.
- Built-in, high level self diagnostics with fault code display.
- Low unit amp requirement for easy replacement application.
- Integrated control module for reliable, economical operation.
- May be installed as either two-pipe (sealed combustion) or single pipe vent (using indoor combustion air)
- Top intake & vent connection allows installation in narrow locations.
- Electronic Hot Surface Ignition saves fuel cost with increased dependability and reliability.
- Induced combustion system with inshot main burners for quiet, efficient operation.
- No special vent termination kit required.
- 100% shut off main gas valve for extra safety.
- PSC - four speed, direct drive motor with large, quiet blower.
- 24V, 40 VA control transformer and blower relay supplied for add-on cooling.
- Hi-tech tubular aluminized steel primary heat exchanger.
- Secondary (condensing) heat exchanger of 29-4C high-grade stainless steel.
- Timed on, adjustable off blower capability for maximum comfort.
- Independent door removal for greater durabilty and ease of access.
- Easy access from front of unit for cleaning, maintenance or service.
- Protection from intake, exhaust or condensate blockage.
- Insulated blower compartment for quiet operation.
- 3-way transition facilitates fresh air piping.
- ClimaTraK comfort system allows dealer to customize comfort settings based on regional location.



CABINET AND DUCT DIMENSIONS

Models	CFM	CABINET SIZE	CABINET DIMENSION				
			A (IN.)	B (IN.)	C (IN.)	D (IN.)	E (IN.)
PT9B12N060DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9B12N080DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9C16N080DH11	1600	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9C20N100DH11	2000	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9D20N120DH11	2000	D	24-1/2	23-1/4	22	2-1/2	3

COMBUSTION AIR SUPPLY AND VENT PIPING - TWO PIPE SYSTEM

MAXIMUM ELBOWS AND VENT LENGTHS									
Models Input BTUH	Pipe Size Inches	Maximum Number of Elbows*							Minimum Length
		1	2	3	4	5	6	7	8	
60,000	1-1/2	15	10	N/A	N/A	N/A	N/A	N/A	N/A	5
60,000	2	60	55	50	45	40	35	25	15	5
60,000	3	85	80	75	70	65	60	50	40	20
80,000/1200	2	60	55	50	45	40	35	25	15	5
80,000/1200	3	85	80	75	70	65	60	50	40	20
80,000/1600	2	55	50	45	40	35	30	20	10	5
80,000/1600	3	80	75	70	65	60	55	45	35	20
100,000	2	25	20	15	10	N/A	N/A	N/A	N/A	5
100,000	3	80	75	70	65	60	55	45	35	5
120,000	3	55	50	45	40	35	25	15	N/A	5

* Three elbows (two in vent pipe and one in the air intake pipe) are already accounted for and need not be included in the elbow count from the Table above.

ELECTRICAL AND PERFORMANCE DATA

Models	Input (High/Low)	Output (High/Low)	Nominal Airflow	Cabinet Width	Total Unit	AFUE	Air Temp. Rise
	MBH	MBH	CFM	In.	Amps	%	°F
PT9B12N060DH11	60 / 39	56 / 36	1200	17-1/2	9	92	35 - 65
PT9B12N080DH11	80 / 52	75 / 49	1200	17-1/2	9	92	35 - 65
PT9C16N080DH11	80 / 52	75 / 49	1600	21	12	92	35 - 65
PT9C20N100DH11	100 / 65	93 / 61	2000	21	14	92	35 - 65
PT9D20N120DH11	120 / 78	112 / 74	2000	24-1/2	14	92	35 - 65

Models	Input (High/Low)	Max. Outlet Air Temp.	Blower		Blower Size	Max. Over-current Protect	Min. Wire Size (awg) @ 75 ft. One Way	Operating Wgt.
	MBH	°F	HP	Amps	In.			Lbs.
PT9B12N060DH11	60 / 39	165	1/2	7.0	11 x 8	20	14	136
PT9B12N080DH11	80 / 52	165	1/2	7.0	11 x 8	20	14	143
PT9C16N080DH11	80 / 52	165	3/4	10.2	11 x 10	20	14	159
PT9C20N100DH11	100 / 65	165	1	12.7	11 x 11	20	12	164
PT9D20N120DH11	120 / 78	165	1	12.7	11 x 11	20	12	182

Annual Fuel Utilization Efficiency (AFUE) numbers are determined in accordance with DOE Test procedures.
Wire size and over current protection must comply with the National Electrical Code (NFPA-70-latest edition) and all local codes.
The furnace shall be installed so that the electrical components are protected from water.
* Wire size and overcurrent protection must comply with the National Electric Code.

NOTES:

1. For altitudes above 2000 ft. reduce capacity 4% for each 1000 ft. above sea level.
2. Wire size based on copper conductors, 60°C, 3% voltage drop.
3. Continuous return air temperature must not be below 55°F.
4. All filters must be high velocity cleanable type.

BLOWER PERFORMANCE CFM

AIRFLOW WITH TOP RETURN - WITHOUT FILTERS											
Models	Speed Tap	EXTERNAL STATIC PRESSURE, INCHES W.C.									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
PT9B12N060DH11	High	1687	1652	1631	1595	1557	1511	1456	1382	1313	1211
	Medium High	1193	1183	1173	1162	1142	1115	1076	1036	982	950
	Medium Low	933	933	921	911	902	872	825	793	771	712
	Low	752	745	731	718	698	652	602	580	536	496
PT9B12N080DH11	High	1686	1658	1623	1572	1534	1465	1391	1305	1202	1091
	Medium High	1257	1223	1218	1203	1177	1142	1094	1026	939	874
	Medium Low	977	982	976	955	934	899	843	791	738	686
	Low	775	777	757	733	698	663	627	584	549	490
PT9C16N080DH11	High	2071	2026	1981	1935	1864	1796	1713	1625	1532	1401
	Medium High	1583	1590	1569	1554	1532	1502	1457	1409	1327	1221
	Medium Low	1256	1275	1275	1288	1275	1265	1232	1187	1126	1023
	Low	937	939	936	945	942	936	912	874	810	726
PT9C20N100DH11	High	2404	2320	2225	2138	2034	1924	1816	1692	1559	1422
	Medium High	2018	1955	1883	1815	1750	1670	1586	1497	1394	1246
	Medium Low	1626	1581	1531	1488	1418	1363	1291	1225	1123	964
	Low	1336	1291	1249	1205	1155	1091	1018	951	884	759
PT9D20N120DH11	High	2520	2432	2353	2251	2152	2042	1947	1815	1701	1525
	Medium High	2018	1979	1945	1911	1863	1779	1705	1599	1493	1353
	Medium Low	1586	1545	1501	1457	1407	1351	1287	1216	1081	926
	Low	1321	1266	1213	1163	1111	1071	987	864	763	700

NOTES:

1. Airflow expressed in standard cubic feet per minute (CFM) and in cubic meters per minute (m^3/min).
2. Motor voltage at 115 V.

FILTER PERFORMANCE

The airflow capacity data published in the "Blower Performance" table listed above represents blower performance WITHOUT filters. To determine the approximate blower performance of the system, apply the filter drop value for the filter being used or select an appropriate value from the "Filter Performance" table shown.

NOTE: The filter pressure drop values in the "Filter Performance" table shown are typical values for the type of filter listed and should only be used as a guideline. Actual pressure drop ratings for each filter type vary between filter manufacturer.

FILTER SIZES

Input / Output BTU/H	CFM	Cabinet Size	Top Return Filter in
60/56	1200	B	(2) 14 x 20
80/75	1200	B	(2) 14 x 20
80/75	1600	C	(2) 14 x 20
100/95	2000	C	(2) 14 x 20
120/112	2000	D	(2) 14 x 20

APPLYING FILTER PRESSURE DROP TO DETERMINE SYSTEM AIRFLOW

To determine the approximate airflow of the unit with a filter in place, follow the steps below:

1. Select the filter type.
2. Determine the External System Static Pressure (ESP) without the filter.
3. Select a filter pressure drop from the table based upon the number of return air openings or return air opening size and add to the ESP from Step 3 to determine the total system static.
4. If total system static matches a ESP value in the airflow table (i.e. 0.20, 0.60, etc,) the system airflow corresponds to the intersection of the ESP column and Model/ Blower Speed row.
5. If the total system static falls between ESP values in the table (i.e. 0.58, 0.75, etc.), the static pressure may be rounded to the nearest value in the table determining the airflow using Step 5 or calculate the airflow by using the following example.

Example: For a 120,000 Btuh furnace operating on high speed blower, it is found that total system static is 0.58" w.c. To determine the system airflow, complete the following steps:

1. Obtain the airflow values at 0.50" & 0.60" ESP.
   Airflow @ 0.50": 2152CFM
   Airflow @ 0.60": 2042 CFM
2. Subtract the airflow @ 0.50" from the airflow @ 0.60" to obtain airflow difference.
   2042 - 2152 = -110 CFM
   Subtract the total system static from 0.50" and divide this difference by the difference in ESP values in the table, 0.60" - 0.50", to obtain a percentage.
   (0.58 - 0.50) / (0.60 - 0.50) = 0.8
3. Multiply percentage by airflow difference to obtain airflow reduction.
   (0.8) x (-110) = -88
4. Subtract airflow reduction value to airflow @ 0.50" to obtain actual airflow @ 0.58" ESP.
   2152 - 88 = 2064

FILTER PERFORMANCE - PRESSURE DROP INCHES W.C.

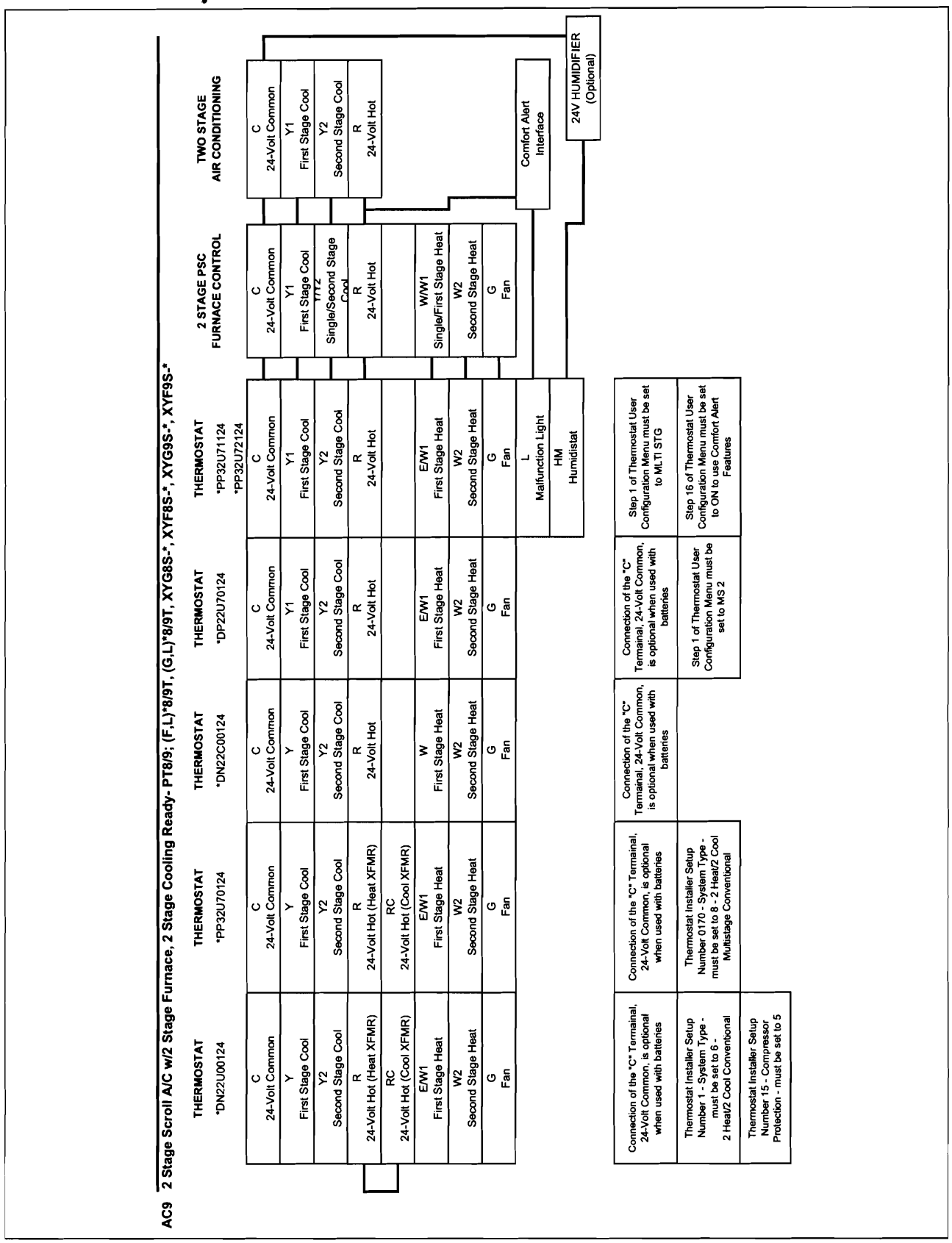
Airflow Range	Minimum Opening Size	Filter Type		
		Disposable	Washable Fibers	Pleated
CFM	in^2	In W.C.	In W.C.	In W.C.
0 - 750	230	0.01	0.01	0.15
751 - 1000	330	0.05	0.05	0.20
1001 - 1250	330	0.10	0.10	0.20
1251 - 1500	330	0.10	0.10	0.25
1501 - 1750	380	0.15	0.14	0.30
1751 - 2000	380	0.19	0.18	0.30
2001 & Above	463	0.19	0.18	0.30

UNIT CLEARANCES TO COMBUSTIBLES

Application	Top	Front	Rear	Left Side	Right Side	Flue	Floor/ Bottom	Closet	Alcove	Attic	Line Contact
	In.	In.	In.	In.	In.	In.	In.				
Downflow	1	3	0	0	0	0	1*	Yes	Yes	Yes	NA
Horizontal	0	3	0	1	1	0	0	Yes	Yes	Yes	Yes[2]

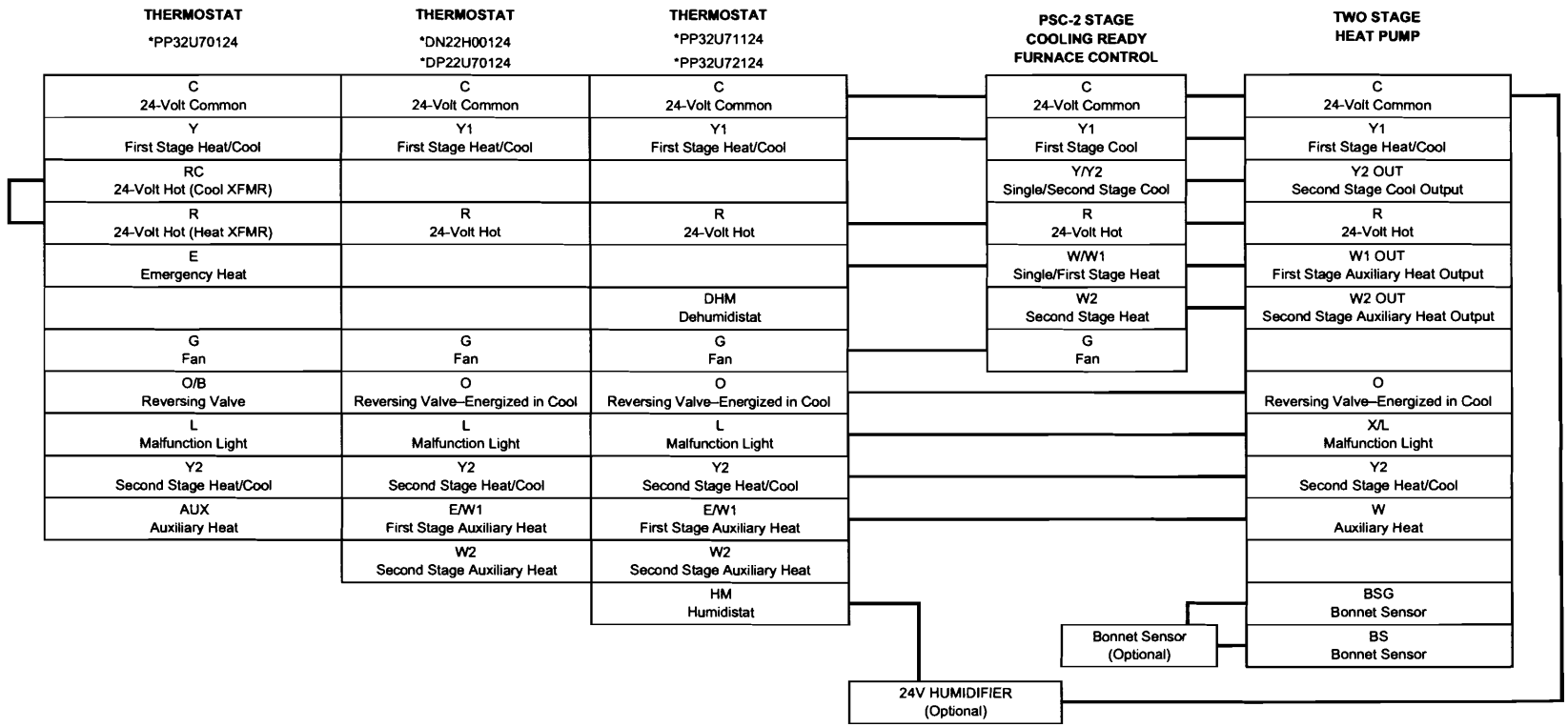
* Combustible floor base or air conditioning coil required for use on combustible floor.

For additional connection diagrams for all UPG equipment refer to "Low Voltage System Wiring" document available online at www.upgnet.com in the Product Catalog Section.



Thermostat Chart - AC

HP23 **Two Stage H/P - H*5B, YZE - w/Two Stage Furnace, 2 Stage Cooling Ready - PT8/9, (F,L)*8/9T, (G,L)*8/9T, XYG8S-*, XYF8S-*, XYG9S-*, XYF9S-* W/031-01996- Series Demand Control; Hot Heat Pump Mode OR Conventional**



Thermostat Installer Setup Number 0170 - System Type - must be set to 12 - 3 Heat/2 Cool Heat Pump	Selection of GAS/ELEC switch on thermostat not necessary	Step 1 of Thermostat User Configuration Menu must be set to Heat Pump 2
Thermostat Installer Setup Number 0190 - Reversing Valve (O/B) Operation - must be set to 0 - O/B Terminal Energized in Cooling	Step 1 of Thermostat User Configuration Menu must be set to Heat Pump 2	
Thermostat Installer Setup Number 0200 - Backup Heat Source - must be set to 1 - Heat Pump Backup Heat Source is Fossil Fuel		
Thermostat Installer Setup Number 0210 - External Fossil Fuel Kit - must be set to 0 - External Fossil Fuel Kit is Controlling Heat Pump Backup Heat		

Set W2 Delay on furnace to OFF	Change FFuel Jumper on Heat Pump to ON

ACCESSORIES

PROPANE (LP) CONVERSION KIT -

1NP0580 - All units

This accessory conversion kit may be used to convert natural gas units for propane (LP) operation. Conversions must be made by qualified distributor or dealer personnel.

CONCENTRIC VENT TERMINATION -

1CT0302 (2")

1CT0303 (3")

HORIZONTAL SIDEWALL VENT TERMINATION -

1HT0901 (2")

For use through rooftop, sidewall. Allows combustion air to enter and exhaust to exit through single common hole. Eliminates unslightly elbows for a cleaner installation.

COMBUSTIBLE FLOOR BASE -

1CB0317 - 17 1/2" Cabinet
1CB0321 - 21" Cabinet
1CB0324 - 24-1/2" Cabinet

COIL TRANSITION KIT -

1TK0917 - 17-1/2" Furnace

1TK0921 - 21" Furnace

1TK0924 - 24-1/2" Furnace

Required in downflow applications when using G*FD series coils.

CONDENSATE NEUTRALIZER KIT - 1NK0301

Neutralizer cartidge has a 1/2" plastic tube fittings for installation in the drain line. Calcium carbonate refill media is also avaiable from the Source 1 Parts (p/n 026-30228-000).

HIGH ALTITUDE PRESSURE SWITCHES -

For installation where the altitude is less than 8,000 feet it is not required that the pressure switch be changed. For altitudes above 8,000 feet see kits below. Conversion must be made by qualified distributor or dealer personnel.

1PS0507 - 060 MBH
1PS0508 - 080/1200 MBH
1PS0509 - 080/1600 MBH
1PS0510 - 100 MBH
1PS0511 - 120 MBH

ROOM THERMOSTATS - A wide selection of compatible thermosets are available to provide optimum performance and features for any installation.

1H/1C, manual change-over electronic non-programmable thermostat.

1H/1C, auto/manual changeover, electronic programmable, deluxe 7-day, thermostat.

1H/1C, auto/manual changeover, electronic programmable.

* For the most current accessory information, refer to the price book or consult factory.

036-21633-002 Rev. A (1205)
Supersedes: 035-21633-001 Rev. A (0205)

Unitary Products Group

5005 York Drive

Norman OK 73069

036-21633-002 Rev. A (1205)

YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

AFFINITY

MODELS: PT9

GAS-FIRED
CONDENSING / HIGH EFFICIENCY
DOWNFLOW/HORIZONTAL
TWO STAGE FURNACES

NATURAL GAS
60 - 120 MBH INPUT

ISO 9001
Certified Quality
Management System

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

Visit us on the web at www.york.com for the most up-to-date technical information.

Additional rating information can be found at www.gamanet.org.

DESCRIPTION

These Category IV, highly efficient, compact, condensing type furnaces are designed for residential and commercial installations in a basement, closet, alcove, recreation room or garage where the ambient temperature is above 32°F, or higher. They may be either side wall or thru-roof vented using approved plastic type combustion air and vent piping. All units are factory assembled, wired and tested to assure dependable and economical installation and operation.

WARRANTY

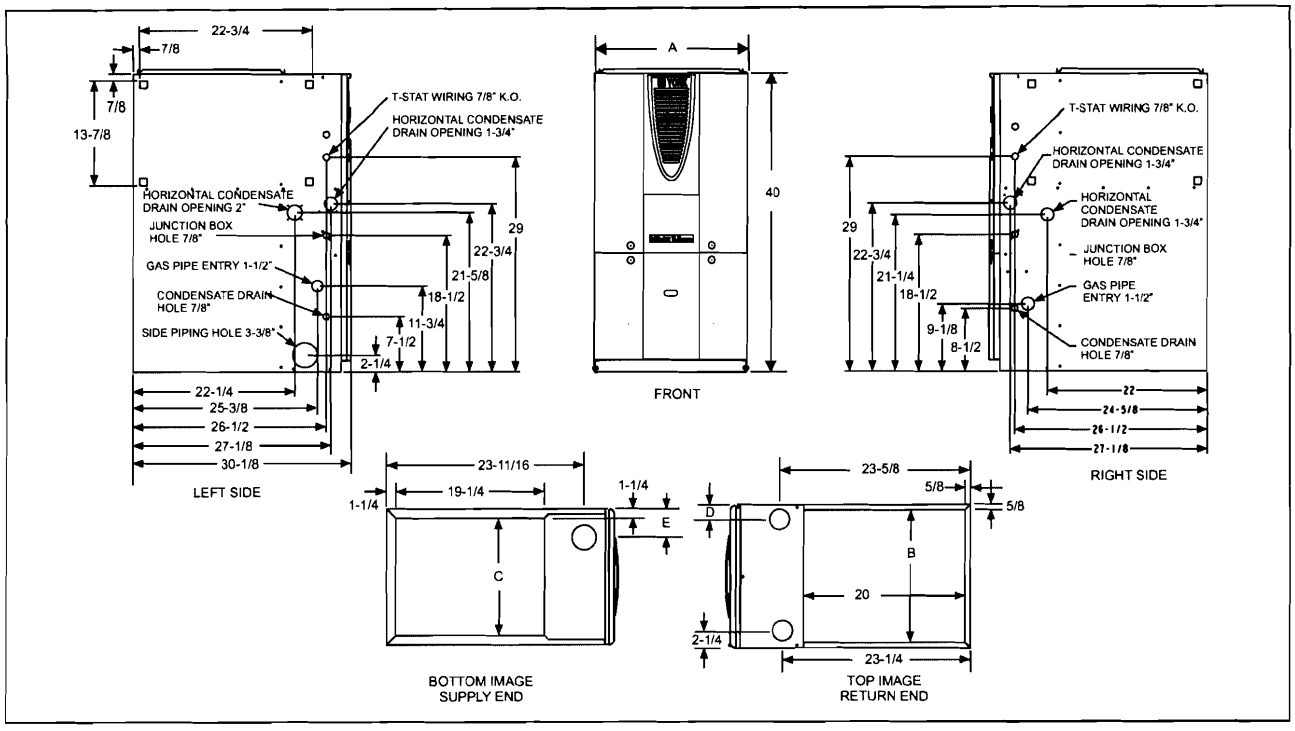
Lifetime limited warranty on both heat exchangers to the original purchaser; a 20-year limited warranty from original installation date to subsequent purchaser.

10-year warranty on commercial applications.

5-year limited parts warranty.

FEATURES

- Two stage heating operation includes:
  - Two stage gas valve
  - Two stage inducer operation
- Provides increased comfort level & very quiet unit operation
- Adjustable delay timer allows two stage operation with single stage thermostat
- Compact, easy to install, ideal height 40" cabinet
- Blower-off delay for cooling SEER improvement.
- Easy to connect power/control wiring.
- Built-in, high level self diagnostics with fault code display.
- Low unit amp requirement for easy replacement application.
- Integrated control module for reliable, economical operation.
- May be installed as either two-pipe (sealed combustion) or single pipe vent (using indoor combustion air)
- Top intake & vent connection allows installation in narrow locations.
- Electronic Hot Surface Ignition saves fuel cost with increased dependability and reliability.
- Induced combustion system with inshot main burners for quiet, efficient operation.
- No special vent termination kit required.
- 100% shut off main gas valve for extra safety.
- PSC - four speed, direct drive motor with large, quiet blower.
- 24V, 40 VA control transformer and blower relay supplied for add-on cooling.
- Hi-tech tubular aluminized steel primary heat exchanger.
- Secondary (condensing) heat exchanger of 29-4C high-grade stainless steel.
- Timed on, adjustable off blower capability for maximum comfort.
- Independent door removal for greater durabilty and ease of access.
- Easy access from front of unit for cleaning, maintenance or service.
- Protection from intake, exhaust or condensate blockage.
- Insulated blower compartment for quiet operation.
- 3-way transition facilitates fresh air piping.
- ClimaTraK comfort system allows dealer to customize comfort settings based on regional location.



CABINET AND DUCT DIMENSIONS

Models	CFM	CABINET SIZE	CABINET DIMENSION				
			A (IN.)	B (IN.)	C (IN.)	D (IN.)	E (IN.)
PT9B12N060DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9B12N080DH11	1200	B	17-1/2	16-1/4	15	1-3/4	2-3/8
PT9C16N080DH11	1600	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9C20N100DH11	2000	C	21	19-3/4	18-1/2	2-1/8	2-3/4
PT9D20N120DH11	2000	D	24-1/2	23-1/4	22	2-1/2	3

COMBUSTION AIR SUPPLY AND VENT PIPING - TWO PIPE SYSTEM

MAXIMUM ELBOWS AND VENT LENGTHS										
Models Input BTUH	Pipe Size Inches	Maximum Number of Elbows*								Minimum Length
		1	2	3	4	5	6	7	8	
60,000	1-1/2	15	10	N/A	N/A	N/A	N/A	N/A	N/A	5
60,000	2	60	55	50	45	40	35	25	15	5
60,000	3	85	80	75	70	65	60	50	40	20
80,000/1200	2	60	55	50	45	40	35	25	15	5
80,000/1200	3	85	80	75	70	65	60	50	40	20
80,000/1600	2	55	50	45	40	35	30	20	10	5
80,000/1600	3	80	75	70	65	60	55	45	35	20
100,000	2	25	20	15	10	N/A	N/A	N/A	N/A	5
100,000	3	80	75	70	65	60	55	45	35	5
120,000	3	55	50	45	40	35	25	15	N/A	5

* Three elbows (two in vent pipe and one in the air intake pipe) are already accounted for and need not be included in the elbow count from the Table above.

ELECTRICAL AND PERFORMANCE DATA

Models	Input (High/Low)	Output (High/Low)	Nominal Airflow	Cabinet Width	Total Unit	AFUE	Air Temp. Rise
	MBH	MBH	CFM	In.	Amps	%	°F
PT9B12N060DH11	60 / 39	56 / 36	1200	17-1/2	9	92	35 - 65
PT9B12N080DH11	80 / 52	75 / 49	1200	17-1/2	9	92	35 - 65
PT9C16N080DH11	80 / 52	75 / 49	1600	21	12	92	35 - 65
PT9C20N100DH11	100 / 65	93 / 61	2000	21	14	92	35 - 65
PT9D20N120DH11	120 / 78	112 / 74	2000	24-1/2	14	92	35 - 65

Models	Input (High/Low)	Max. Outlet Air Temp.	Blower		Blower Size	Max. Over-current Protect	Min. Wire Size (awg) @ 75 ft. One Way	Operating Wgt.
	MBH	°F	HP	Amps	In.			Lbs.
PT9B12N060DH11	60 / 39	165	1/2	7.0	11 x 8	20	14	136
PT9B12N080DH11	80 / 52	165	1/2	7.0	11 x 8	20	14	143
PT9C16N080DH11	80 / 52	165	3/4	10.2	11 x 10	20	14	159
PT9C20N100DH11	100 / 65	165	1	12.7	11 x 11	20	12	164
PT9D20N120DH11	120 / 78	165	1	12.7	11 x 11	20	12	182

Annual Fuel Utilization Efficiency (AFUE) numbers are determined in accordance with DOE Test procedures.
Wire size and over current protection must comply with the National Electrical Code (NFPA-70-latest edition) and all local codes.
The furnace shall be installed so that the electrical components are protected from water.
* Wire size and overcurrent protection must comply with the National Electric Code.

NOTES:

1. For altitudes above 2000 ft. reduce capacity 4% for each 1000 ft. above sea level.
2. Wire size based on copper conductors, 60°C, 3% voltage drop.
3. Continuous return air temperature must not be below 55°F.
4. All filters must be high velocity cleanable type.

BLOWER PERFORMANCE CFM

AIRFLOW WITH TOP RETURN - WITHOUT FILTERS											
Models	Speed Tap	EXTERNAL STATIC PRESSURE, INCHES W.C.									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
PT9B12N060DH11	High	1687	1652	1631	1595	1557	1511	1456	1382	1313	1211
	Medium High	1193	1183	1173	1162	1142	1115	1076	1036	982	950
	Medium Low	933	933	921	911	902	872	825	793	771	712
	Low	752	745	731	718	698	652	602	580	536	496
PT9B12N080DH11	High	1686	1658	1623	1572	1534	1465	1391	1305	1202	1091
	Medium High	1257	1223	1218	1203	1177	1142	1094	1026	939	874
	Medium Low	977	982	976	955	934	899	843	791	738	686
	Low	775	777	757	733	698	663	627	584	549	490
PT9C16N080DH11	High	2071	2026	1981	1935	1864	1796	1713	1625	1532	1401
	Medium High	1583	1590	1569	1554	1532	1502	1457	1409	1327	1221
	Medium Low	1256	1275	1275	1288	1275	1265	1232	1187	1126	1023
	Low	937	939	936	945	942	936	912	874	810	726
PT9C20N100DH11	High	2404	2320	2225	2138	2034	1924	1816	1692	1559	1422
	Medium High	2018	1955	1883	1815	1750	1670	1586	1497	1394	1246
	Medium Low	1626	1581	1531	1488	1418	1363	1291	1225	1123	964
	Low	1336	1291	1249	1205	1155	1091	1018	951	884	759
PT9D20N120DH11	High	2520	2432	2353	2251	2152	2042	1947	1815	1701	1525
	Medium High	2018	1979	1945	1911	1863	1779	1705	1599	1493	1353
	Medium Low	1586	1545	1501	1457	1407	1351	1287	1216	1081	926
	Low	1321	1266	1213	1163	1111	1071	987	864	763	700

NOTES:

1. Airflow expressed in standard cubic feet per minute (CFM) and in cubic meters per minute (m^3/min).
2. Motor voltage at 115 V.

FILTER PERFORMANCE

The airflow capacity data published in the "Blower Performance" table listed above represents blower performance WITHOUT filters. To determine the approximate blower performance of the system, apply the filter drop value for the filter being used or select an appropriate value from the "Filter Performance" table shown.

NOTE: The filter pressure drop values in the "Filter Performance" table shown are typical values for the type of filter listed and should only be used as a guideline. Actual pressure drop ratings for each filter type vary between filter manufacturer.

FILTER SIZES

Input / Output BTU/H	CFM	Cabinet Size	Top Return Filter in
60/56	1200	B	(2) 14 x 20
80/75	1200	B	(2) 14 x 20
80/75	1600	C	(2) 14 x 20
100/95	2000	C	(2) 14 x 20
120/112	2000	D	(2) 14 x 20

APPLYING FILTER PRESSURE DROP TO DETERMINE SYSTEM AIRFLOW

To determine the approximate airflow of the unit with a filter in place, follow the steps below:

1. Select the filter type.
2. Determine the External System Static Pressure (ESP) without the filter.
3. Select a filter pressure drop from the table based upon the number of return air openings or return air opening size and add to the ESP from Step 3 to determine the total system static.
4. If total system static matches a ESP value in the airflow table (i.e. 0.20, 0.60, etc,) the system airflow corresponds to the intersection of the ESP column and Model/ Blower Speed row.
5. If the total system static falls between ESP values in the table (i.e. 0.58, 0.75, etc.), the static pressure may be rounded to the nearest value in the table determining the airflow using Step 5 or calculate the airflow by using the following example.

Example: For a 120,000 Btuh furnace operating on high speed blower, it is found that total system static is 0.58" w.c. To determine the system airflow, complete the following steps:

1. Obtain the airflow values at 0.50" & 0.60" ESP.
   Airflow @ 0.50": 2152CFM
   Airflow @ 0.60": 2042 CFM
2. Subtract the airflow @ 0.50" from the airflow @ 0.60" to obtain airflow difference.
   2042 - 2152 = -110 CFM
   Subtract the total system static from 0.50" and divide this difference by the difference in ESP values in the table, 0.60" - 0.50", to obtain a percentage.
   (0.58 - 0.50) / (0.60 - 0.50) = 0.8
3. Multiply percentage by airflow difference to obtain airflow reduction.
   (0.8) x (-110) = -88
4. Subtract airflow reduction value to airflow @ 0.50" to obtain actual airflow @ 0.58" ESP.
   2152 - 88 = 2064

FILTER PERFORMANCE - PRESSURE DROP INCHES W.C.

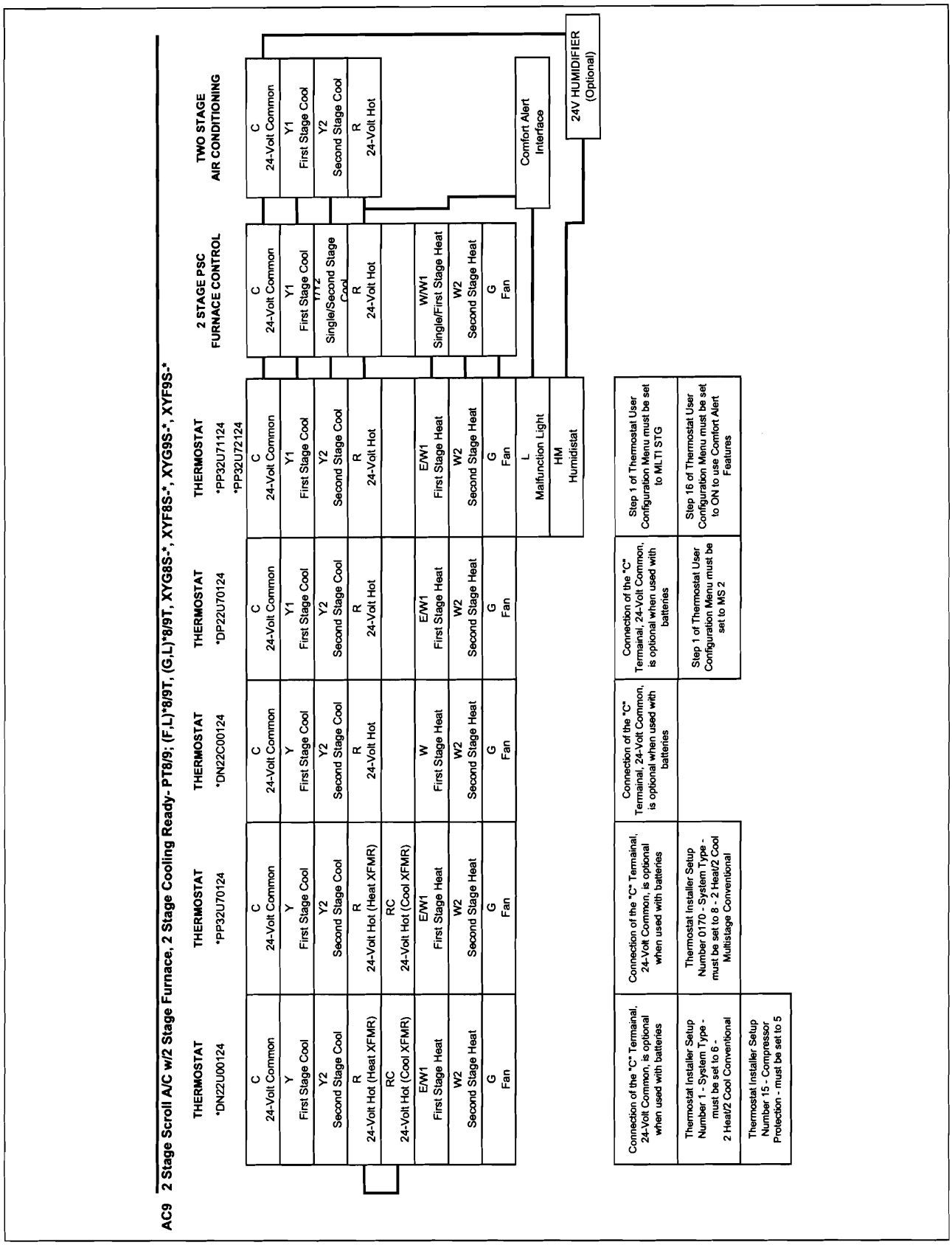
Airflow Range	Minimum Opening Size	Filter Type		
		Disposable	Washable Fibers	Pleated
CFM	in^2	In W.C.	In W.C.	In W.C.
0 - 750	230	0.01	0.01	0.15
751 - 1000	330	0.05	0.05	0.20
1001 - 1250	330	0.10	0.10	0.20
1251 - 1500	330	0.10	0.10	0.25
1501 - 1750	380	0.15	0.14	0.30
1751 - 2000	380	0.19	0.18	0.30
2001 & Above	463	0.19	0.18	0.30

UNIT CLEARANCES TO COMBUSTIBLES

Application	Top	Front	Rear	Left Side	Right Side	Flue	Floor/ Bottom	Closet	Alcove	Attic	Line Contact
	In.	In.	In.	In.	In.	In.	In.				
Downflow	1	3	0	0	0	0	1*	Yes	Yes	Yes	NA
Horizontal	0	3	0	1	1	0	0	Yes	Yes	Yes	Yes[2]

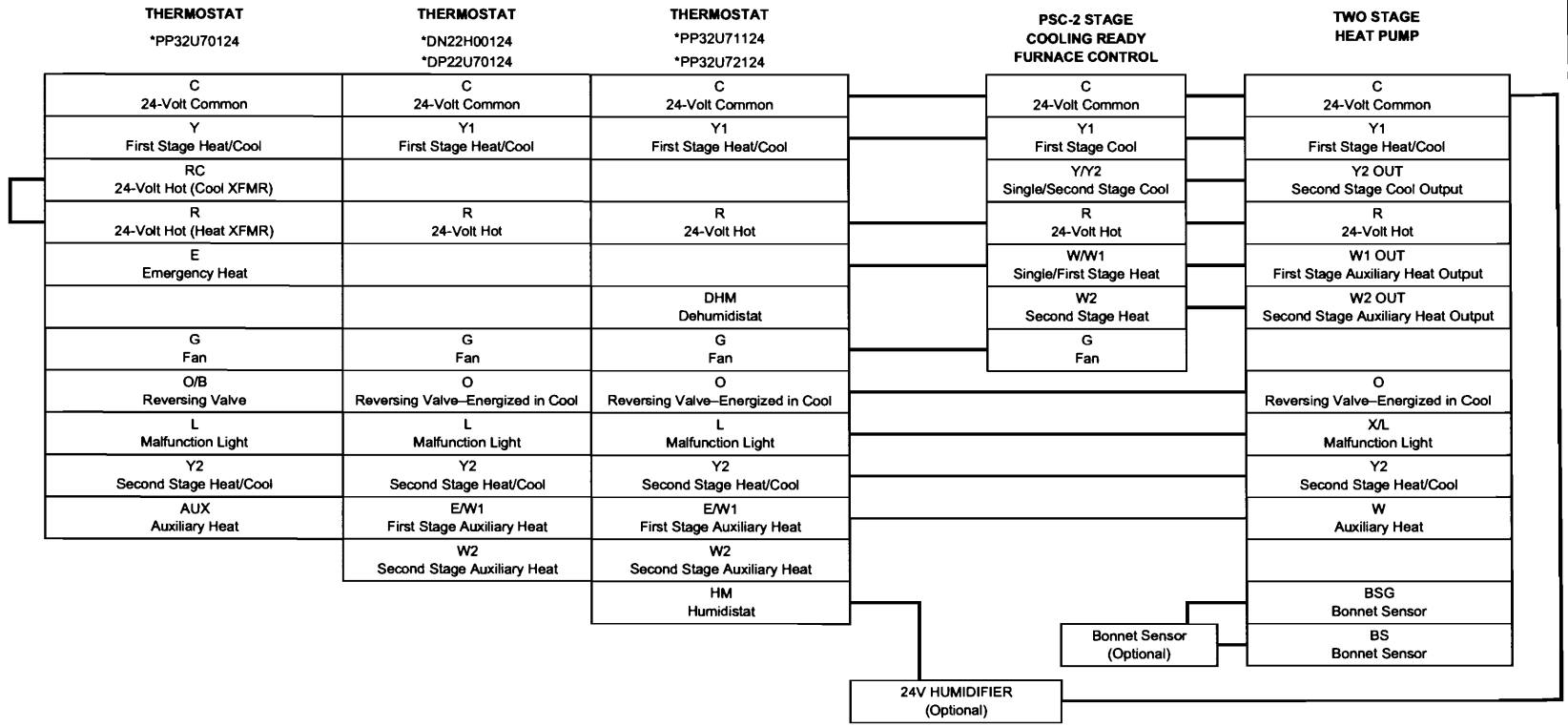
* Combustible floor base or air conditioning coil required for use on combustible floor.

For additional connection diagrams for all UPG equipment refer to "Low Voltage System Wiring" document available online at www.upgnet.com in the Product Catalog Section.



Thermostat Chart - AC

HP23 **Two Stage H/P - H*5B, YZE - w/Two Stage Furnace, 2 Stage Cooling Ready - PT8/9, (F,L)*8/9T, (G,L)*8/9T, XYG8S-*, XYF8S-*, XYG9S-*, XYF9S-***
W/031-01996- Series Demand Control; Hot Heat Pump Mode OR Conventional



Thermostat Installer Setup Number 0170 - System Type - must be set to 12 - 3 Heat/2 Cool Heat Pump	Selection of GAS/ELEC switch on thermostat not necessary	Step 1 of Thermostat User Configuration Menu must be set to Heat Pump 2
Thermostat Installer Setup Number 0190 - Reversing Valve (O/B) Operation - must be set to 0 - O/B Terminal Energized in Cooling	Step 1 of Thermostat User Configuration Menu must be set to Heat Pump 2	
Thermostat Installer Setup Number 0200 - Backup Heat Source - must be set to 1 - Heat Pump Backup Heat Source is Fossil Fuel		
Thermostat Installer Setup Number 0210 - External Fossil Fuel Kit - must be set to 0 - External Fossil Fuel Kit is Controlling Heat Pump Backup Heat		

Set W2 Delay on furnace to OFF

Change FFuel Jumper on Heat Pump to ON

ACCESSORIES

PROPANE (LP) CONVERSION KIT -

1NP0580 - All units

This accessory conversion kit may be used to convert natural gas units for propane (LP) operation. Conversions must be made by qualified distributor or dealer personnel.

CONCENTRIC VENT TERMINATION -

1CT0302 (2")

1CT0303 (3")

HORIZONTAL SIDEWALL VENT TERMINATION -

1HT0901 (2")

For use through rooftop, sidewall. Allows combustion air to enter and exhaust to exit through single common hole. Eliminates unslightly elbows for a cleaner installation.

COMBUSTIBLE FLOOR BASE -

1CB0317 - 17 1/2" Cabinet
1CB0321 - 21" Cabinet
1CB0324 - 24-1/2" Cabinet

COIL TRANSITION KIT -

1TK0917 - 17-1/2" Furnace

1TK0921 - 21" Furnace

1TK0924 - 24-1/2" Furnace

Required in downflow applications when using G*FD series coils.

CONDENSATE NEUTRALIZER KIT - 1NK0301

Neutralizer cartidge has a 1/2" plastic tube fittings for installation in the drain line. Calcium carbonate refill media is also avaiable from the Source 1 Parts (p/n 026-30228-000).

HIGH ALTITUDE PRESSURE SWITCHES -

For installation where the altitude is less than 8,000 feet it is not required that the pressure switch be changed. For altitudes above 8,000 feet see kits below. Conversion must be made by qualified distributor or dealer personnel.

1PS0507 - 060 MBH
1PS0508 - 080/1200 MBH
1PS0509 - 080/1600 MBH
1PS0510 - 100 MBH
1PS0511 - 120 MBH

ROOM THERMOSTATS - A wide selection of compatible thermosets are available to provide optimum performance and features for any installation.

1H/1C, manual change-over electronic non-programmable thermostat.

1H/1C, auto/manual changeover, electronic programmable, deluxe 7-day, thermostat.

1H/1C, auto/manual changeover, electronic programmable.

* For the most current accessory information, refer to the price book or consult factory.

036-21633-002 Rev. A (1205)
Supersedes: 035-21633-001 Rev. A (0205)

Unitary Products Group

5005 York Drive

Norman OK 73069

Load Preview Report

Scope	Area	Sens Gain	Lat Gain	Net Gain	Sens Loss	Win CFM	Sum CFM	Adj CFM	Sys CFM	Duct Size
Building: 2.68 Net Tons, 2.89 Recommended Tons, 642 ft.²/Ton, 41.26 MBH Heating										
Building	1,858	26,745	5,374	32,119	41,257	542	1,229		1,229	
System 1: 2.68 Net Tons, 2.89 Recommended Tons, 642 ft.²/Ton, 41.26 MBH Heating										
System 1	1,858	26,745	5,374	32,119	41,257	542	1,229		1,229	28x8
Zone 1	1,444	22,080	4,541	26,621	32,358	425	1,015		1,015	
1-Bedroom 1	180	2,963	311	3,274	5,191	68	136	161	136	1-7
2-Hall	32	446	230	676	222	3	20	20	20	1-3
3-Foyer	110	1,358	305	1,663	2,526	33	62	62	62	1-5
4-Dining	165	4,020	811	4,831	5,072	67	185	249	185	1-7
5-Mudroom	72	935	287	1,222	1,847	24	43	43	43	1-4
6-Laundry	65	1,519	252	1,771	1,770	23	70	87	70	1-5
7-Pantry	60	614	230	844	686	9	28	28	28	1-3
8-Bath 1	30	442	230	672	208	3	20	20	20	1-3
9-Kitchen	315	5,581	852	6,433	8,206	108	257	257	257	2-6
10-Living	352	3,672	803	4,475	6,193	81	169	169	169	1-7
11-Bath 2	63	530	230	760	437	6	24	24	24	1-3
Zone 2	414	4,665	833	5,498	8,899	117	214		214	
12-Master Bath	89	1,505	292	1,797	2,749	36	69	69	69	1-5
13-Master Bedroom	325	3,160	541	3,701	6,150	81	145	145	145	1-7

Total Building Summary Loads

	Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
3A	Window Double Pane Clear Glass Wood Frame	203	8,724	0	7,481	7,481
9G	French Door Double Clear Glass Wood Frame	42	1,710	0	1,016	1,016
11E	Door Metal Urethane Core	42	622	0	212	212
12H	Wall R-19 + 1/2" Gypsum Board(R-0.5)	1345	6,294	0	2,148	2,148
16E	Ceiling R-22 Insulation	1858	6,957	0	4,191	4,191
19D	Floor Over Basement/Encl Crawl Hardwood + R-19	1858	3,769	0	0	0
Subtotals for structure:			28,076	0	15,048	15,048
People:		20		4,600	6,000	10,600
Equipment:				0	0	0
Lighting:		0			0	0
Ductwork:			6,876	0	4,457	4,457
Infiltration: Winter CFM: 74, Summer CFM: 50			6,305	774	1,240	2,014
Ventilation: Winter CFM: 0, Summer CFM: 0			0	0	0	0
Sensible Gain Total:					26,745	
Temperature Swing Multiplier:					X 1.00	
Total Building Load Totals:			41,257	5,374	26,745	32,119

Check Figures

Total Building Supply CFM:	1,229	CFM Per Square ft.:	0.662
Square ft. of Room Area:	1,858	Square ft. Per Ton:	642
Volume (ft³) of Cond. Space:	14,862	Air Turnover Rate (per hour):	5.0

Building Loads

Total Heating Required With Outside Air:	41,257 Btuh	41.257	MBH
Total Sensible Gain:	26,745 Btuh	83	%
Total Latent Gain:	5,374 Btuh	17	%
Total Cooling Required With Outside Air:	32,119 Btuh	2.68	Tons (Based On Sensible + Latent)
		2.89	Tons (Based On 77% Sensible Capacity)

Notes

Calculations are based on 7th edition of ACCA Manual J.
All computed results are estimates as building use and weather may vary.
Be sure to select a unit that meets both sensible and latent loads.

System 1 (Imported) Summary Loads

	Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
3A	Window Double Pane Clear Glass Wood Frame	203	8,724	0	7,481	7,481
9G	French Door Double Clear Glass Wood Frame	42	1,710	0	1,016	1,016
11E	Door Metal Urethane Core	42	622	0	212	212
12H	Wall R-19 + 1/2" Gypsum Board(R-0.5)	1345	6,294	0	2,148	2,148
16E	Ceiling R-22 Insulation	1858	6,957	0	4,191	4,191
19D	Floor Over Basement/Encl Crawl Hardwood + R-19	1858	3,769	0	0	0
Subtotals for structure:			28,076	0	15,048	15,048
People:		20		4,600	6,000	10,600
Equipment:				0	0	0
Lighting:		0			0	0
Ductwork:			6,876	0	4,457	4,457
Infiltration: Winter CFM: 74, Summer CFM: 50			6,305	774	1,240	2,014
Ventilation: Winter CFM: 0, Summer CFM: 0			0	0	0	0
Sensible Gain Total:					26,745	
Temperature Swing Multiplier:					X 1.00	
System 1 (Imported) Load Totals:			41,257	5,374	26,745	32,119

Check Figures

Supply CFM:	1,229	CFM Per Square ft.:	0.662
Square ft. of Room Area:	1,858	Square ft. Per Ton:	642
Volume (ft³) of Cond. Space:	14,862	Air Turnover Rate (per hour):	5.0

System Loads

Total Heating Required With Outside Air:	41,257 Btuh	41.257	MBH
Total Sensible Gain:	26,745 Btuh	83	%
Total Latent Gain:	5,374 Btuh	17	%
Total Cooling Required With Outside Air:	32,119 Btuh	2.68	Tons (Based On Sensible + Latent)
		2.89	Tons (Based On 77% Sensible Capacity)

Notes

Calculations are based on 7th edition of ACCA Manual J.
All computed results are estimates as building use and weather may vary.
Be sure to select a unit that meets both sensible and latent loads.

System 1, Zone 1 Summary Loads

	Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
3A	Window Double Pane Clear Glass Wood Frame	150	6,447	0	6,198	6,198
9G	French Door Double Clear Glass Wood Frame	42	1,710	0	1,016	1,016
11E	Door Metal Urethane Core	42	622	0	212	212
12H	Wall R-19 + 1/2" Gypsum Board(R-0.5)	1006	4,708	0	1,607	1,607
16E	Ceiling R-22 Insulation	1444	5,407	0	3,257	3,257
19D	Floor Over Basement/Encl Crawl Hardwood + R-19	1444	2,930	0	0	0
Subtotals for structure:			21,824	0	12,290	12,290
People:		17		3,910	5,100	9,010
Equipment:				0	0	0
Lighting:		0			0	0
Ductwork:			5,393	0	3,679	3,679
Infiltration: Winter CFM: 61, Summer CFM: 40			5,141	631	1,011	1,642
Sensible Gain Total:					22,080	
Temperature Swing Multiplier:					X 1.00	
System 1, Zone 1 Load Totals:			32,358	4,541	22,080	26,621

Check Figures

Supply CFM:	1,015	CFM Per Square ft.:	0.703
Square ft. of Room Area:	1,444	Square ft. Per Ton:	601
Volume (ft^3) of Cond. Space:	11,548	Air Turnover Rate (per hour):	5.3

Zone Loads

Total Heating Required:	32,358 Btuh	32.358	MBH
Total Sensible Gain:	22,080 Btuh	83	%
Total Latent Gain:	4,541 Btuh	17	%
Total Cooling Required:	26,621 Btuh	2.22	Tons (Based On Sensible + Latent)
		2.40	Tons (Based On 77% Sensible Capacity)

Notes

Calculations are based on 7th edition of ACCA Manual J.
All cornputed results are estimates as building use and weather may vary.
Be sure to select a unit that meets both sensible and latent loads.

System 1, Zone 2 Summary Loads

	Component Description	Area Quan	Sen Loss	Lat Gain	Sen Gain	Total Gain
3A	Window Double Pane Clear Glass Wood Frame	53	2,277	0	1,283	1,283
12H	Wall R-19 + 1/2" Gypsum Board(R-0.5)	339	1,586	0	541	541
16E	Ceiling R-22 Insulation	414	1,550	0	934	934
19D	Floor Over Basement/Encl Crawl Hardwood + R-19	414	839	0	0	0
Subtotals for structure:			6,252	0	2,758	2,758
People:		3		690	900	1,590
Equipment:				0	0	0
Lighting:		0			0	0
Ductwork:			1,483	0	778	778
Infiltration: Winter CFM: 14, Summer CFM: 9			1,164	143	229	372
Sensible Gain Total:					4,665	
Temperature Swing Multiplier:					X 1.00	
System 1, Zone 2 Load Totals:			8,899	833	4,665	5,498

Check Figures

Supply CFM:	214	CFM Per Square ft.:	0.518
Square ft. of Room Area:	414	Square ft. Per Ton:	842
Volume (ft³) of Cond. Space:	3,314	Air Turnover Rate (per hour):	3.9

Zone Loads

Total Heating Required:	8,899 Btuh	8.899	MBH
Total Sensible Gain:	4,665 Btuh	85	%
Total Latent Gain:	833 Btuh	15	%
Total Cooling Required:	5,498 Btuh	0.46	Tons (Based On Sensible + Latent)
		0.49	Tons (Based On 77% Sensible Capacity)

Notes

Calculations are based on 7th edition of ACCA Manual J.
All computed results are estimates as building use and weather may vary.
Be sure to select a unit that meets both sensible and latent loads.

System 1 Room Load Summary

No	Room Name	Area SF	Htg Sens Btuh	Htg Rad Len	Run Duct Size	Run Duct Vel	Clg Sens Btuh	Clg Lat Btuh	Clg Nom CFM	Zone Adj Fact	Clg Adj CFM	Air Sys CFM
---Zone 1---												
1	Bedroom 1	180	5,191	8.7	1-7	510	2,963	311	136	1.18	161	136
2	Hall	32	222	0.4	1-3	418	446	230	20	1.00	20	20
3	Foyer	110	2,526	4.2	1-5	458	1,358	305	62	1.00	62	62
4	Dining	165	5,072	8.5	1-7	691	4,020	811	185	1.35	249	185
5	Mudroom	72	1,847	3.1	1-4	492	935	287	43	1.00	43	43
6	Laundry	65	1,770	3.0	1-5	512	1,519	252	70	1.25	87	70
7	Pantry	60	686	1.1	1-3	575	614	230	28	1.00	28	28
8	Bath 1	30	208	0.3	1-3	414	442	230	20	1.00	20	20
9	Kitchen	315	8,206	13.7	2-6	653	5,581	852	257	1.00	257	257
10	Living	352	6,193	10.3	1-7	632	3,672	803	169	1.00	169	169
11	Bath 2	63	437	0.7	1-3	496	530	230	24	1.00	24	24
	Zone 1 subtotal	1,444	32,358	53.9				22,080	4,541	1,015		1,122
---Zone 2---												
12	Master Bath	89	2,749	4.6	1-5	507	1,505	292	69	1.00	69	69
13	Master Bedroom	325	6,150	10.3	1-7	543	3,160	541	145	1.00	145	145
	Zone 2 subtotal	414	8,899	14.8				4,665	833	214		214
	System 1 total	1,858	41,257	68.8			26,745	5,374	1,229		1,337	1,229

System 1 Main Trunk Size: 28x8 in.
Velocity: 880 ft./min
Loss per 100 ft.: 0.069 in.wg

Cooling System Summary

	Cooling Tons	Sensible/Latent Split	Sensible Btuh	Latent Btuh	Total Btuh
Net Required:	2.68	83% / 17%	26,745	5,374	32,119
Recommended:	2.89	77% / 23%	26,745	7,989	34,734

Equipment Data

	Heating System	Cooling System
Type:		
Model:		
Brand:		
Efficiency:		
Sound:		
Capacity:		
Sensible Capacity:	n/a	0 Btuh
Latent Capacity:	n/a	0 Btuh