

Unit Report For 30 Ton

Unit Parameters

Unit Size: _____ **030 (30 Tons)**
Volts-Phase-Hertz: _____ **460-3-60**
Supply / Return: _____ **Vertical/Vertical**
Configuration: _____ **Staged Air Volume**
Evaporator Coil Type: _____ **Standard**
Heating Capacity: _____ **High Gas Heat**
Heat Option: _____ **2 Stage**
Greenspeed: _____ **Selected**

Shipping Dimensions

Unit Length: _____ **13' 9"**
Unit Width: _____ **7' 10"**
Unit Height: _____ **6' 1"**

Unit Operating Weight: _____ **4692 lb**
Unit Shipping Weight: _____ **4730 lb**

***Weights and Dimensions are approximate. Weight does not include curbs and accessories. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions refer to certified drawings.

** Shipping Weight does not include extended leadtime options' weight.

Factory Installed Options

Application Type: _____ **Staged Air Volume**

Exhaust/Outdoor Air

OA Intake/Return: _____ **Non-Modulating Power Exhaust**
Outdoor Air Intake: _____ **Differential Dry-Bulb Ultra Low Leak Economizer**

Supply Fan

Supply Fan Type: _____ **Forward Curve**
Supply Fan Motor HP: _____ **15 HP**

Condenser Coil

Cond. Coil Fin Coating: _____ **MCHX Cond, Al/Cu Evap**

Mixed-Air and Outdoor Air Filters

Mixed-Air Filter Type: _____ **Standard Efficiency Throwaway**
Mixed-Air Filter (Quantity) Size _____ **(10) 20 x 24 x 2**
Outdoor Air Filter (Cleanable Mesh) _____ **(8) 16 x 25 x 2, (4) 20 x 25 x 2**

Warranty Information

First Year - Parts Only (Standard)
Start-up, First Unit
Complete Unit 1st Year Carrier CCS Labor
Compressor Years 2-5 Parts Only

An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 60192 and a non-corrosive localized environment.

Certified Drawing for 30 Ton

- NOTES:
 1. WEIGHTS INCLUDE ECONOMIZER (STD).
 2. ⊕ CENTER OF GRAVITY.
 3. FOR MULTIPLE UNIT APPLICATIONS SEE LITERATURE.

4. UNIT CLEARANCES:

TOP OF UNITS: NO OVERHANG
 CONDENSER COIL: 4'-0" [1219]
 ECONOMIZER SIDE: 6'-0" [1829]
 HEAT SIDE: 4'-0" [1219]
 FILTER ACCESS SIDE: 10'-0" [3048]
 (FOR REMOVAL OF EVAPORATOR COIL)

5. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES, CONTACT CARRIER APPLICATION ENGINEERING DEPARTMENT.
 6. BOTTOM DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB. IF UNIT IS MOUNTED ON DUNNAGE, IT IS RECOMMENDED THE DUCTS MUST BE SUPPORTED BY CROSS BRACES AS DONE ON ACCESSORY ROOF CURB.



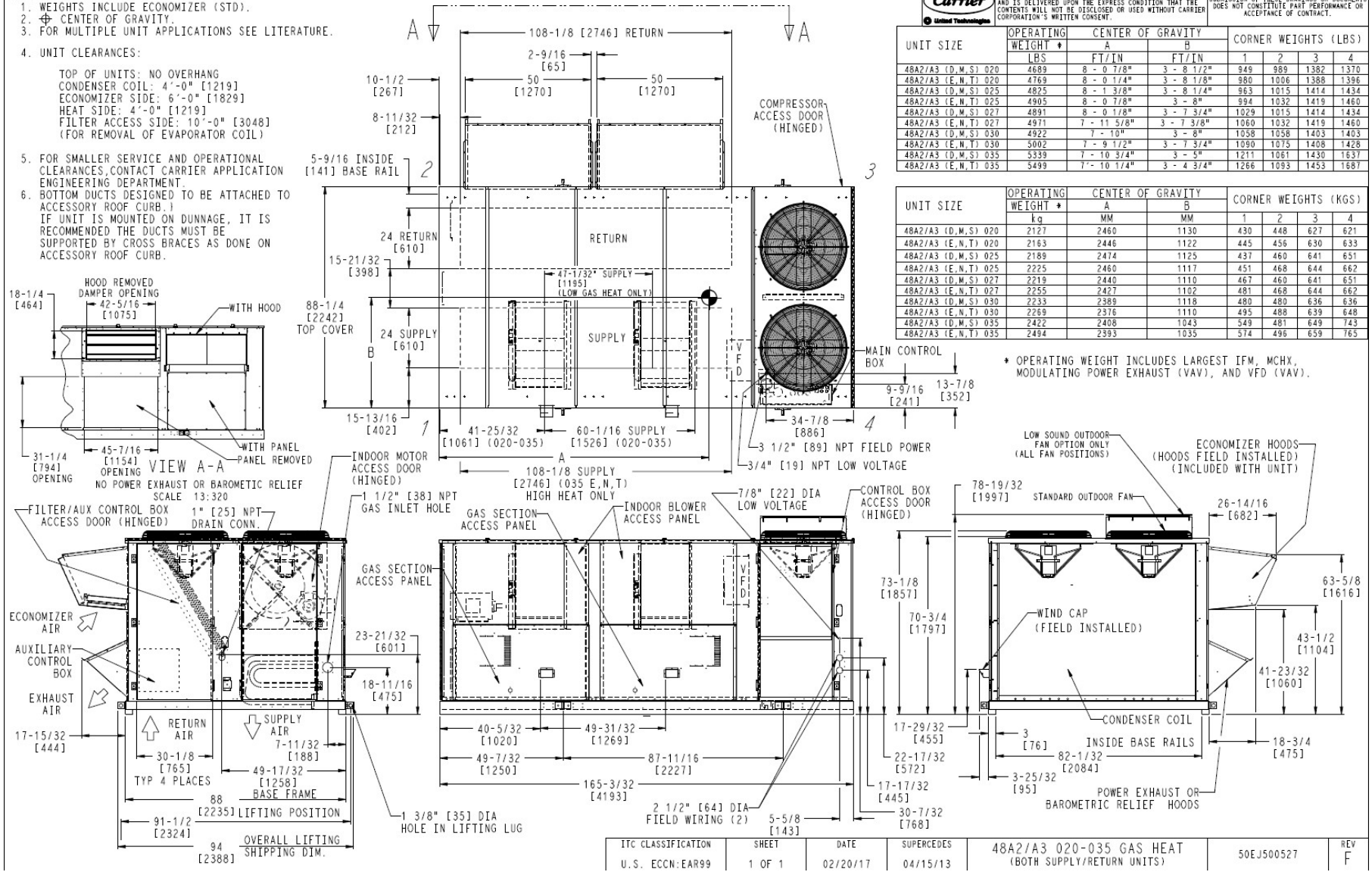
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UNIT SIZE	OPERATING WEIGHT #	CENTER OF GRAVITY		CORNER WEIGHTS (LBS)			
		A	B	1	2	3	4
4BA2/A3 (D.M.S) 020	4689	8 - 0 7/8"	3 - 8 1/2"	949	989	1382	1370
4BA2/A3 (E.N.T) 020	4769	8 - 0 1/4"	3 - 8 1/8"	980	1006	1386	1396
4BA2/A3 (D.M.S) 025	4825	8 - 1 3/8"	3 - 8 1/4"	963	1015	1414	1434
4BA2/A3 (E.N.T) 025	4905	8 - 0 7/8"	3 - 8"	994	1032	1419	1460
4BA2/A3 (D.M.S) 027	4891	8 - 0 1/8"	3 - 7 3/4"	1029	1015	1414	1434
4BA2/A3 (E.N.T) 027	4971	7 - 11 5/8"	3 - 7 3/8"	1060	1032	1419	1460
4BA2/A3 (D.M.S) 030	4922	7 - 10"	3 - 8"	1058	1058	1403	1403
4BA2/A3 (E.N.T) 030	5002	7 - 9 1/2"	3 - 7 3/4"	1090	1075	1408	1428
4BA2/A3 (D.M.S) 035	5339	7 - 10 3/4"	3 - 5"	1211	1061	1430	1637
4BA2/A3 (E.N.T) 035	5499	7 - 10 1/4"	3 - 4 3/4"	1266	1093	1453	1687

UNIT SIZE	OPERATING WEIGHT #	CENTER OF GRAVITY		CORNER WEIGHTS (KGS)			
		A	B	1	2	3	4
4BA2/A3 (D.M.S) 020	2127	2460	1130	430	448	627	621
4BA2/A3 (E.N.T) 020	2163	2446	1122	445	456	630	633
4BA2/A3 (D.M.S) 025	2189	2474	1125	437	460	641	651
4BA2/A3 (E.N.T) 025	2225	2460	1117	451	468	644	662
4BA2/A3 (D.M.S) 027	2219	2440	1110	467	460	641	651
4BA2/A3 (E.N.T) 027	2255	2427	1102	481	468	644	662
4BA2/A3 (D.M.S) 030	2233	2389	1118	480	480	636	636
4BA2/A3 (E.N.T) 030	2289	2376	1110	495	488	639	648
4BA2/A3 (D.M.S) 035	2422	2408	1043	549	481	649	743
4BA2/A3 (E.N.T) 035	2494	2393	1035	574	496	659	765

* OPERATING WEIGHT INCLUDES LARGEST IFM, MCHX, MODULATING POWER EXHAUST (VAV), AND VFD (VAV).



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	4BA2/A3 020-035 GAS HEAT	50EJ500527	REV
U.S. ECCN:EAR99	1 OF 1	02/20/17	04/15/13	(BOTH SUPPLY/RETURN UNITS)		F

Performance Summary For 30 Ton

Part Number: _____ **48A6E030-PG651GG**

Unit Refrigerant: _____ **R410A**
 EER (AHRI 340/360): _____ **9.8**
 IEER (AHRI 340/360): _____ **14.0**

Unit Dimensions

Unit Length: _____ **13' 9"**
 Unit Width: _____ **7' 10"**
 Unit Height: _____ **6' 1"**
 Unit Operating Weight: _____ **4692 lb**
 Unit Shipping Weight: _____ **4730 lb**

***Unit operating weight does not include accessories weight.**

Unit

Heating Type: _____ **Gas Heat**
 Supply/Return: _____ **Vertical/Vertical**
 Application Type: _____ **Staged Air Volume**
 Voltage: _____ **460-3-60**
 Cooling Airflow: _____ **11000 CFM**
 Altitude: _____ **0 ft**
 Cond. Ent. Air Temp: _____ **95.0 F**
 Ent. Air Dry Bulb: _____ **80.0 F**
 Ent. Air Wet Bulb: _____ **67.0 F**
 Ent. Air Enthalpy: _____ **31.44 BTU/lb**
 Lvg. Air Dry Bulb: _____ **58.4 F**
 Lvg. Air Wet Bulb: _____ **57.3 F**
 Lvg. Air Enthalpy: _____ **24.57 BTU/lb**
 Gross Cooling Capacity: _____ **339.80 MBH**
 Gross Sensible Clg. Cap: _____ **256.57 MBH**
 Compressor Power: _____ **25.9 kW**
 Coil Bypass Factor: _____ **0.143**
 Refrigerant Charge, Circuit A: _____ **15.1 lb**
 Refrigerant Charge, Circuit B: _____ **15.3 lb**

Part Load(%) Operation

Cooling Capacity Steps _____ **25,50,75,100**

Gas Heating Data:

Heating Airflow: _____ **11000 CFM**
 Heating Ent. Air Temp: _____ **68.0 F**
 Gas Input: _____ **394 / 525 MBH**
 Number of Heating Steps _____ **2**
 Gas Input (Min): _____ **394 MBH**
 Gas Input (Max): _____ **525 MBH**
 Gas Output: _____ **425.25 MBH**
 Heating Lvg. Air Temp: _____ **103.8 F**
 Steady State Eff _____ **81**
 Temp.Rise: _____ **35.8 F**

Supply Fan Information:

Ext.Static Pressure: _____ **1.50 in wg**
 Selection Static Pressure: _____ **1.50 in wg**
 Supply Fan RPM: _____ **908 ***
 Supply Fan BHP: _____ **7.89 BHP**
 Supply Fan Motor HP: _____ **15 HP**

Field supplied and installed sheave package may be required

Power Exhaust Information:

Airflow: _____ **5500 CFM**

Selection Static Pressure: _____ **1.03** in wg

Electrical Data

Voltage Range:	414 - 508
Compressor #A1 RLA:	11.2
Compressor #A1 LRA:	75
Compressor #A2 RLA:	11.2
Compressor #A2 LRA:	75
Compressor #B1 RLA:	11.2
Compressor #B1 LRA:	75
Compressor #B2 RLA:	11.2
Compressor #B2 LRA:	75
Indoor Fan Motor HP	15
Indoor Fan Motor FLA:	21
Combustion Fan Quantity	2
Combustion Fan FLA (ea.):	1.1
Pwr. Exhaust Fan Motor Qty	4
Pwr. Exhaust Fan Motor FLA (ea.):	3.15
Power Supply MCA:	90
Power Supply MOCP (Fuse or HACR)	110
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea.)]:	2 / 3.3

SCCR, Short Circuit Current Rating: 5kA

An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 60192 and a non-corrosive localized environment.

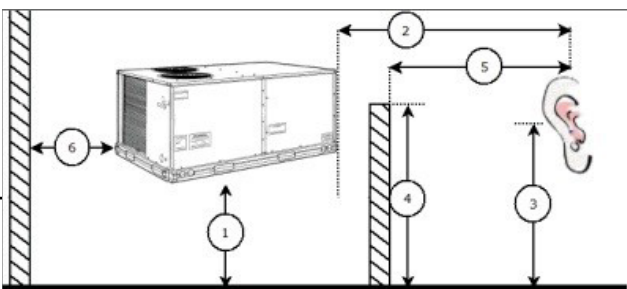
Acoustic Information

	Discharge, Lw	Inlet, Lw	Outdoor, Lw
63 Hz	92.0	88.9	63.9
125 Hz	84.7	79.1	72.2
250 Hz	81.4	75.8	78.9
500 Hz	82.5	71.5	82.1
1000 Hz	83.2	73.0	84.1
2000 Hz	80.3	68.9	78.8
4000 Hz	76.4	67.4	72.5
8000 Hz	69.8	62.8	64.6

Discharge / Inlet Duct Sound Power test data rated in accordance with the AHRI 260 Standard.

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Advanced Acoustics



Advanced Acoustics Parameters

- 1. Unit height above ground: _____ **30.0** ft
- 2. Horizontal distance from unit to receiver: _____ **50.0** ft
- 3. Receiver height above ground: _____ **5.7** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	63.9	72.2	78.9	82.1	84.1	78.8	72.5	64.6	87.9 Lw
B	37.7	56.1	70.3	78.9	84.1	80.0	73.5	63.5	86.7 LwA
C	30.6	38.9	45.6	48.8	50.8	45.5	39.2	31.3	54.5 Lp
D	4.4	22.8	37.0	45.6	50.8	46.7	40.2	30.2	53.4 LpA

Legend

- A Sound Power Levels at Unit's Acoustic Center, Lw
- B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
- C Sound Pressure Levels at Specific Distance from Unit, Lp
- D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

