

Project Name: **454B Stock**

Unit Model #: **KJ120N24R4AAAAA1A1**

Quantity: **1**

System: **KJ120N24R4AAAAA1A1**

Cooling Performance

Total gross capacity	126.7 MBH
Sensible gross capacity	89.5 MBH
Efficiency (at ARI)	12.20 EER
Integrated eff. (at ARI)	15.00 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Evap Coil Leaving DB temp.	59.3 °F
Evap Coil Leaving WB temp.	57.0 °F
Unit Leaving DB temp.	61.2 °F
Unit Leaving WB temp.	57.7 °F
Leaving air temp dew point	55.50 °F
Power input (w/o blower)	8.80 kW
Sound power	89 dB(a)

Refrigerant

Refrigerant type	R-454B
Sys1	6 lb 8 oz
Sys2	6 lb 12 oz

Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	194.0 MBH
Supply air	4000 cfm
Heating input capacity (Max)	240 MBH
Leaving DB temp.	104.9 °F
Air temp. rise	44.9 °F
SSE	81.0 %
Stages	2

Supply Air Blower Performance

Supply air	4000 cfm
Ext. static pressure	0.6 IWG
Blower speed	1041 rpm
Max BHP of Motor (including service factor)	3.45 HP
Duct location	Bottom
Motor rating	3.00 HP
Actual required BHP	2.56 HP
Power input	2.39 kW
Elevation	0 ft
Drive type	BELT

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	25.3 A
Unit max over-current protection	30 A

Dimensions & Weight

Hgt 51 in	Len 89 in	Wth 59 in
Weight with factory installed options	1185 lb	

Clearances

Right	12 in	Front	48 in	Rear	12 in
Top	72 in	Bottom	0 in	Left	36 in

Note: Please refer to the tech guide for listed maximum static pressures



Unit Features

- Refrigerant Detection System (RDS) is Factory Installed
- Two Stage Cooling
- 240 MBH Input Aluminized Steel, Two Stage Gas Heat
- Either supply and/or return can be field converted from vertical to horizontal configuration without cutting panels.
- Full perimeter base rails with built in rigging capabilities
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards)
- Scroll Compressor[s]
- Slide-out Blower/3 HP Belt Drive Motor Assembly
- Unit Ships with 2" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 4 - (24" x 20").
- Single Point Power Connection
- Through-the-Curb and Through-the-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Micro-Channel "all-aluminum" condenser coil, Copper tube/aluminum fin evaporator coil
- Composite Drain Pan - Front Connection
- Tool-free maintenance with features like hinged doors for all-access panels, slide-out blower and blower motor tray

10 Ton

- York Sun Pro units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Product Features

- All units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

BAS Controller

- IntelliSpeed control of the VFD based on stages of cooling. Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10.
- Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors.

Standard Unit Controller: Smart Equipment Control Board

- Safety Monitoring - Monitors the High and Low-Pressure Switches, the Freezestats, the Gas Valve, if Applicable, and the Temperature Limit Switch on Gas and Electric Heat Units. The Unit Control Board will Alarm on Ignition Failures, Safety Lockouts and Repeated Limit Switch Trips.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Ten (10) Year Limited Warranty - Aluminized Steel Heat Exchanger



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Additional Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	25.3 A
Unit max over-current protection	30 A
Min Voltage	432 V
Max Voltage	504 V
Comp #1 RLA	7.1
Comp #1 LRA	69.0
Comp #2 RLA	7.1
Comp #2 LRA	69
Indoor Mtr Voltage	460-3-60
Indoor Mtr FLA	6.1
Outdoor Mtr Qty	2
Outdoor Fan Voltage	460-1-60
OD Fan Mtr FLA (ea.)	1.6
Power Ex Mtr Qty (if applicable)	1
Powered Ex Voltage(if applicable)	460-1-60
Power Ex Mtr FLA (ea) (if applicable)	2.2
Combustion Mtr Qty	1
Combustion Motor Voltage	208/230-1-60
Combustion Mtr FLA (ea)	0.5



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Factory Installed Options**KJ120N24R4AAAAA1A1**

Equipment Options		Option(s) Selected
Product Category:	KJ	Single Packaged R-454B Air Conditioner, High Efficiency 12.2 EER
Nominal Cooling Capacity:	120	10 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	N24	240 MBH Input Aluminized Steel, Two Stage Gas Heat
Blower Option:	R	3 HP High Static Belt Drive Blower IntelliSpeed control of the VFD based on stages of cooling (Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10)
Voltage:	4	460-3-60
Outside Air Option:	A	
Service Options:	A	Refrigerant Detection System
Sensor Options:	A	
Controls:	A	Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors.
Refrigeration:	A	Micro-Channel "all-aluminum" condenser coil, Copper tube/aluminum fin evaporator coil
Additional Options:	1	Standard 2" Throwaway Filters
Cabinet Options:	A	Composite Drain Pan - Front Connection Tool-free maintenance with features like hinged doors for all-access panels, slide-out blower and blower motor tray
Product Generation:	1	

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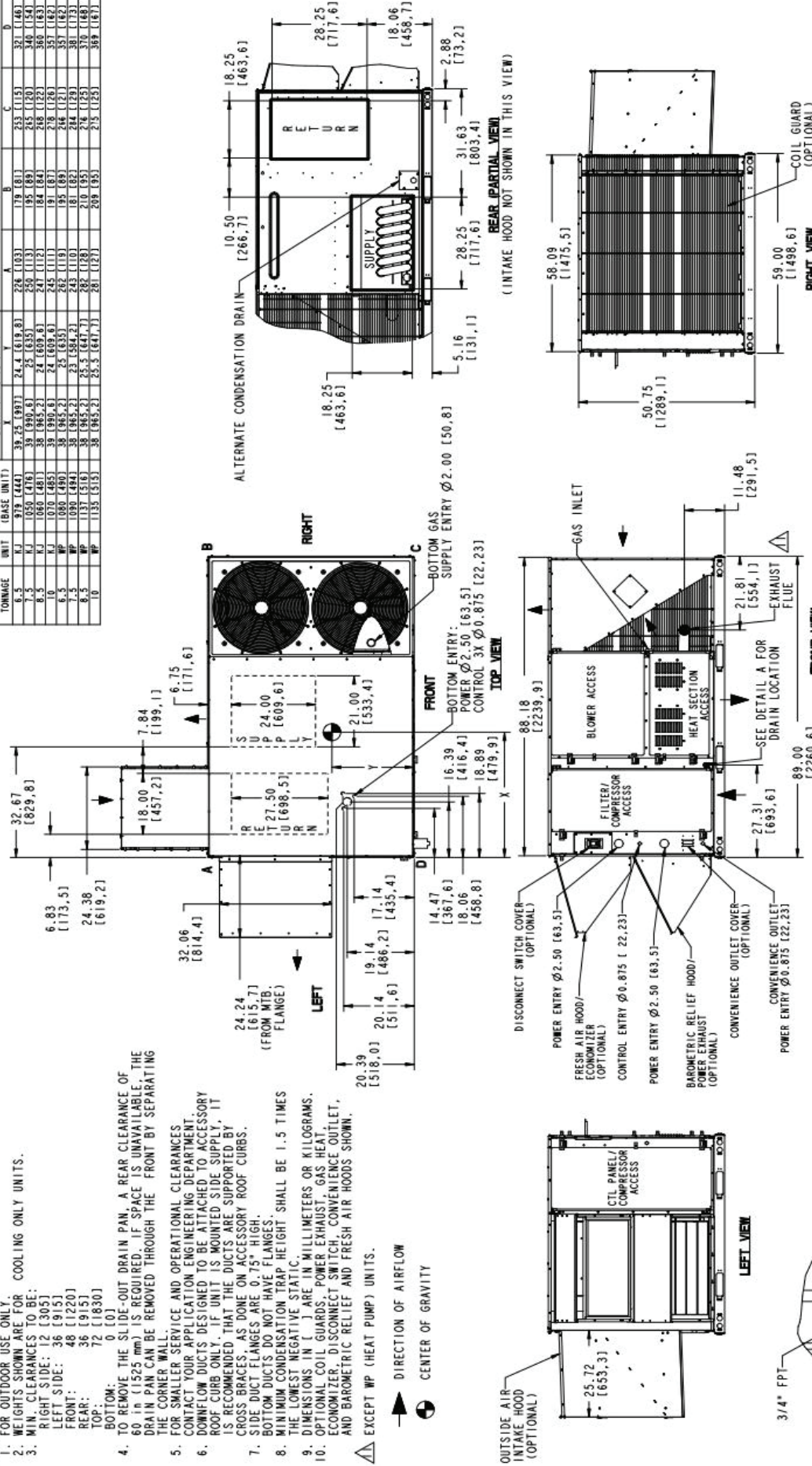
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Submittal

TOWNAGE	UNIT	OPERATING WEIGHT (LBS)	CENTER OF GRAVITY LOCATION (BASE UNIT)	4 POINT CORNER LOADS (LBS) (BASE UNIT)				
				A	B	C	D	
6.5	KJ	919 (444)	39.25 (191)	24.4 (119.8)	226 (103)	179 (81)	253 (115)	32 (146)
7.5	KJ	1050 (476)	39 (90.6)	25 (135)	250 (113)	95 (89)	295 (120)	340 (154)
8.5	KJ	1060 (481)	38 (98.5)	24 (160.9)	241 (112)	184 (84)	248 (122)	360 (163)
10	KJ	1070 (485)	39 (90.6)	24 (160.9)	245 (111)	187 (87)	278 (128)	357 (162)
6.5	WP	1080 (490)	38 (98.5)	25 (135)	262 (119)	95 (89)	244 (121)	35 (162)
7.5	WP	1237 (515)	38 (98.5)	25.5 (124.7)	283 (129)	187 (85)	274 (125)	379 (173)
8.5	WP	1315 (515)	38 (98.5)	25.5 (144.7)	283 (129)	210 (95)	274 (125)	379 (173)
10	WP	1315 (515)	38 (98.5)	25.5 (144.7)	283 (129)	210 (95)	274 (125)	379 (173)

NOTES:
1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.

3. MIN. CLEARANCES TO BE:
 RIGHT SIDE: 12 (305).
 LEFT SIDE: 36 (915).
 FRONT: 48 (1220).
 REAR: 36 (915).
 TOP: 72 (1830).
 BOTTOM: 0 (0).
4. TO REMOVE THE SIDE-OUT DRAIN PAN, A BEAR CLEARANCE OF 60 IN (1525 mm) IS REQUIRED. IF SPACE IS UNAVAILABLE, THE DRAIN PAN CAN BE REMOVED THROUGH THE FRONT BY SEPARATING THE CORNER WALL.
5. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES, CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
6. DOWNFLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. IF UNIT IS MOUNTED SIDE SUPPLY, IT IS RECOMMENDED THAT THE DUCTS ARE SUPPORTED BY CROSS BRACES, AS DONE ON ACCESSORY ROOF CURBS.
7. SIDE DUCT FLANGES ARE 0.75" HIGH.
8. BOTTOM DUCTS DO NOT HAVE FLANGES.
9. MINIMUM CONDENSATE TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
10. DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
11. OPTIONAL COIL GUARDS, POWER EXHAUST, GAS HEAT, ECONOMIZER, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND BAROMETRIC RELIEF AND FRESH AIR HOODS SHOWN.
- EXCEPT WP (HEAT PUMP) UNITS.



REV	DATE	REVISION RECORD	EC NO	DR	CK	ENG	THIRD ANGLE PROJECTION	ALL PROPRIETARY RIGHTS IN THE SUBJECT MATTER HEREON ARE RESERVED AND NO PERMISSION IS GRANTED TO REPRODUCE THIS PRINT IN WHOLE OR IN PART OR TO DISCLOSE ANY OF THE INFORMATION HEREON TO ANY OTHER PERSON WITHOUT WRITTEN RELEASE BY JOHNSON CONTROLS	SAFETY AND KEY CHARACTERISTICS PER EC-33P-337-2	
A	10-31-23	NEW DRAWING	100724					DRIVING PER ASME Y14.5-2009 TOLERANCES UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL = ± .1 TWO PLACE DECIMAL = ± .03 THREE PLACE DECIMAL = ± .010 HOLE IN FIT = ± .005 HOLE IN HOLE = ± .005 DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT	TYPE NOT APPLICABLE ENG SPEC NOT APPLICABLE SIZE 30" X 42"	
JOHN L. FAZARRO 10-31-23 CHIK L. HANNO 10-31-23 ENG B. VARRA 10-31-23 SCALE: 1/2" = 1'-0" SCALED 0.75								SUBMITTAL DATA DWG, "PRO STD DATA COIL, 30" JOHNSON CONTROLS UNITARY PRODUCTS GROUP NORMAN, OK 73069		PART NO. 6454071 REV. A

DETAIL A
SCALE 0.300

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Component Locations

Cooling With Gas Heat (6.5 Through 10 Tons)

