
SUBMITTAL DATA

Order #: **Date:** 10/03/2019

Project: Kohls 10472 - Lees Summit, MO- Rev 1

Project #:

Submitter: Matthew McNair
DXFD-UPG National Accounts
5005 York Drive,
Norman, Oklahoma 73069
(405) 419-6543

Date

10/03/2019

Project Name

Kohls 10472 - Lees Summit, MO- Rev 1

Project Number**Client / Purchaser**

Submittal Summary Page

Qty	Tag #	Model #	Description
8	AC- 1 thru 8	ZJ240S30R4D5BCAKG1	<p>20 Ton, York Large Sunline Single Packaged R-410A Air Conditioner, Four Stage Cooling, 11.0 EER, 300 MBH Input Stainless Steel, Two Stage Gas Heat, 460-3-60, Single Wall Construction</p> <ul style="list-style-type: none">• 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.• Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)• 7.5 HP High Static Belt Drive Blower• 2" Throwaway Filters• Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.• Non Powered Convenience Outlet (110 VAC)• HACR Circuit Breaker/Disconnect• Phase Monitor• Standard Condenser Coil• Standard Evaporator Coil• Stainless Steel Drain Pan• Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels
1	AC- 9	ZJ180S30P4D5BCAKG1	<p>15 Ton, York Large Sunline Single Packaged R-410A Air Conditioner, Four Stage Cooling, 12.2 EER, 300 MBH Input Stainless Steel, Two Stage Gas Heat, 460-3-60, Single Wall Construction</p> <ul style="list-style-type: none">• 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.• Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)• 5 HP Standard Static Belt Drive Blower• 2" Throwaway Filters• Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.• Non Powered Convenience Outlet (110 VAC)• HACR Circuit Breaker/Disconnect

Qty	Tag #	Model #	Description
			<ul style="list-style-type: none"> • Phase Monitor • Standard Condenser Coil • Standard Evaporator Coil • Stainless Steel Drain Pan • Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels
1	Office Unit	YK-AN-RSO C-W	Space Sensor w/Cool-Warm & Override
8		A-AN-RO York-JCI Log o	Space Sensor w/ Override
1	AC- 9	1RC0497	Roof Curb 14" High Full Perimeter Transition Curb with wood nailer. Allow replacement of ZF180 / J15ZF / ZS-15 / ZST15 with other Large Sunline product.
9	AC- 1 thru 9	10-KOHL-S-CLIP-5020	15-25 T S' Hold Down Clips Set (6)

Equipment start-up and commissioning by a factory trained technician is recommended.
Contact your supplying distributor or sales representative for additional information & guidance.



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

York Single Package R-410A Air Conditioner

Project Name: Kohls 10472 - Lees Summit, MO- Rev 1

Unit Model #: ZJ240S30R4D5BCAKG1

Quantity: 8 Tag #: AC- 1 thru 8

System: ZJ240S30R4D5BCAKG1

Cooling Performance

Total gross capacity	258.5 MBH
Sensible gross capacity	188.5 MBH
Total net capacity	241.9 MBH
Sensible net capacity	171.9 MBH
Efficiency (at ARI)	11.00 EER
Integrated eff. (at ARI)	12.50 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	58.2 °F
Leaving WB temp.	56.8 °F
Power input (w/o blower)	18.30 kW
Sound power	92 dB(A)

Refrigerant

Refrigerant type	R-410A
Sys1	12 lbs
Sys2	13 lbs
Sys3	12 lbs
Sys4	12 lbs

Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	240 MBH
Supply air	8000 CFM
Heating input capacity (Max)	300 MBH
Leaving DB temp.	87.8 °F
Air temp. rise	27.8 °F
SSE	80.0 %
Stages	2

Supply Air Blower Performance

Supply air	8000 CFM
Ext. static pressure	0.6 IWG
Add. Unit Losses (Options/Accessories)	0.15 IWG
Blower speed	925 RPM
Max BHP of Motor (including service factor)	8.63 HP
Duct location	Bottom
Motor rating	7.50 HP
Actual required BHP	5.80 HP
Power input	4.86 kW
Elevation	0 ft.
Drive type	BELT

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	47.7 Amps
Unit max over-current protection	50 Amps

Dimensions & Weight

Hgt	53 in.	Len	181 in.	Wth	92 in.
Weight with factory installed options	3177 lbs.				

Clearances

Right	36 in.	Front	36 in.	Rear	49 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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



20 Ton

- York Sunline Units are Manufactured at an ISO 9001 Registered Facility and Each Rooftop is Completely Computer-Run Tested Prior to Shipment.

Unit Features

- Four Stage Cooling
- 300 MBH Input Stainless Steel, Two Stage Gas Heat
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards).
- 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
- Four Independent Refrigerant Circuits for Efficient Part Load Operation with Scroll Compressors
- Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 7.5 HP High Static Belt Drive Blower
- Solid Core Liquid Line Filter Driers
- Unit Ships with 2" Throwaway Filters
- Replacement Filters: For 2" filters 12 - (12" x 24" x 2") OR For 4" filters 2 - (20" X 24" x 4") AND 4 - (24" X 24" x 4")
- Non Powered Convenience Outlet (110 VAC)
- HACR Circuit Breaker/Disconnect
- Single Point Power Connection
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Phase Monitor
- Standard Condenser Coil
- Standard Evaporator Coil
- Crane Required to Unload Unit
- Stainless Steel Drain Pan
- Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels

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. BACnet MS/TP, Modbus and N2 communication card.

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.
- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display. Allows all units to operate in the cooling mode down to 0 °F outdoor ambient without additional components or intervention.

Warranty



Large Sunline 15-25 Ton Package

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York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ240S30R4D5BCAKG1**

Quantity: **8** Tag #: **AC- 1 thru 8**

System: **ZJ240S30R4D5BCAKG1**

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Fifteen (15) Year Warranty - Stainless Steel Tubular Heat Exchangers



Large Sunline 15-25 Ton Package

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York Single Package R-410A Air Conditioner

Project Name: Kohls 10472 - Lees Summit, MO- Rev 1

Unit Model #: ZJ240S30R4D5BCAKG1

Quantity: 8 Tag #: AC- 1 thru 8

System: ZJ240S30R4D5BCAKG1

Factory Installed Options

ZJ240S30R4D5BCAKG1

Equipment Options		Option(s) Selected
Product Category:	ZJ	York Large Sunline Single Packaged R-410A Air Conditioner 11.0 EER
Nominal Cooling Capacity:	240	20 Ton Four Stage Cooling
Heat Type and Nominal Heat Capacity:	S30	300 MBH Input Stainless Steel, Two Stage Gas Heat
Blower Option:	R	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. 7.5 HP High Static Belt Drive Blower
Voltage:	4	460-3-60
Outside Air Option:	D	Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Service Options:	5	Non Powered Convenience Outlet (110 VAC) HACR Circuit Breaker/Disconnect
Sensor Options:	B	Phase Monitor
Controls:	C	Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.
Refrigeration:	A	Standard Condenser Coil Standard Evaporator Coil
Additional Options:	K	2" Throwaway Filters
Cabinet Options:	G	Single Wall Construction Stainless Steel Drain Pan Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels
Product Generation:	1	

Project Name: Kohls 10472 - Lees Summit, MO- Rev 1

Unit Model #: ZJ240S30R4D5BCAKG1


Quantity: 8 Tag #: AC- 1 thru 8

System: ZJ240S30R4D5BCAKG1

Consolidated Drawing

NOTES:

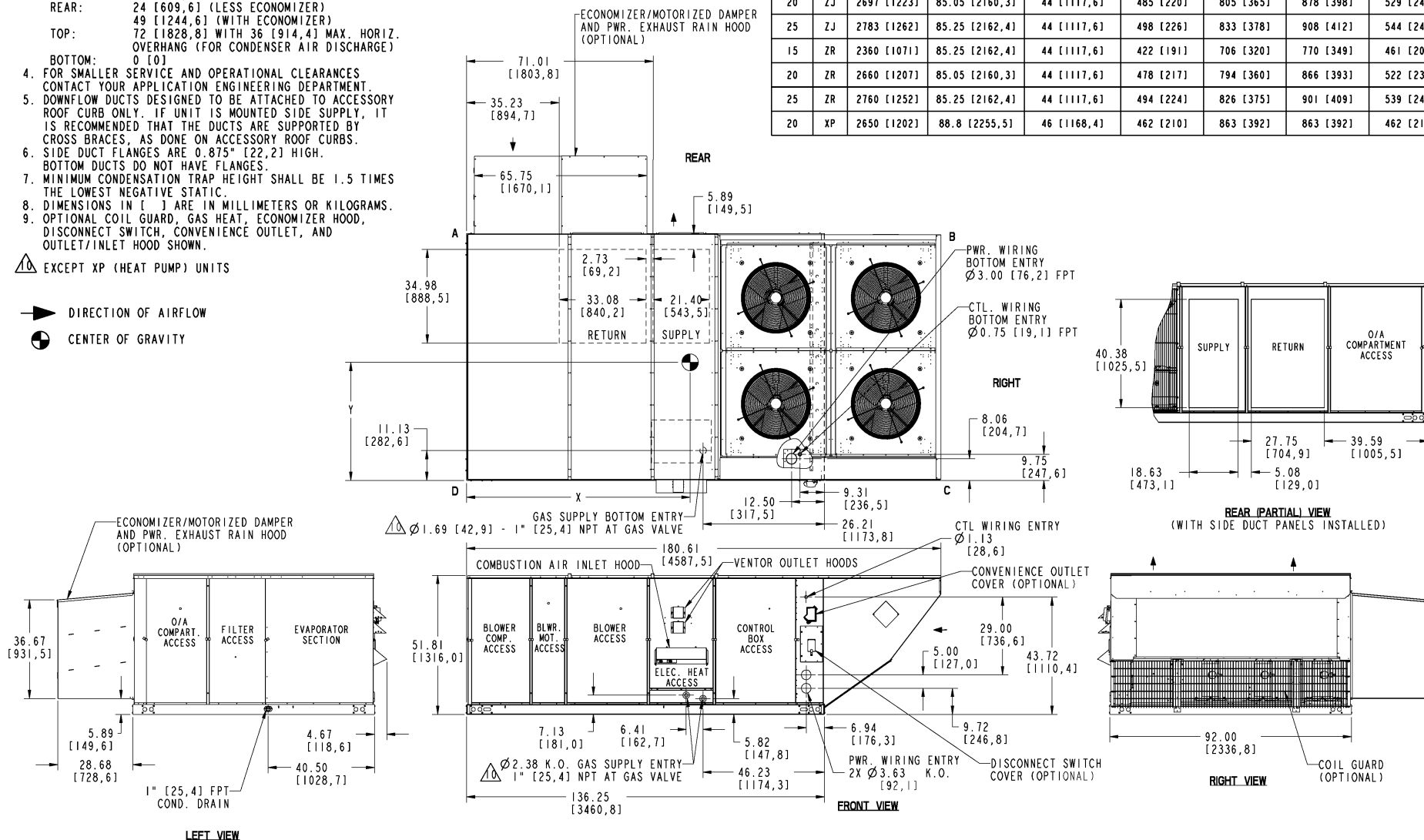
- FOR OUTDOOR USE ONLY.
- WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
- MIN. CLEARANCES TO BE:
RIGHT SIDE: 36 [914,4]
LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
36 [914,4] (WITH ECONOMIZER)
FRONT:
36 [914,4]
REAR:
24 [609,6] (LESS ECONOMIZER)
49 [1244,6] (WITH ECONOMIZER)
TOP:
72 [1828,8] WITH 36 [914,4] MAX. HORIZ.
OVERHANG (FOR CONDENSER AIR DISCHARGE)
0 [0]
BOTTOM:
0 [0]
- FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
- 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.
- SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
- MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
- DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
- OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

 EXCEPT XP (HEAT PUMP) UNITS

 DIRECTION OF AIRFLOW

 CENTER OF GRAVITY

TONNAGE	UNIT	OPERATING WEIGHT (LBS) (BASE UNIT)	CENTER OF GRAVITY LOCATION (BASE UNIT)		4 POINT CORNER LOADS (LBS) (BASE UNIT)			
			X	Y	A	B	C	D
15	ZJ	2609 [1183]	85.25 [2162,4]	44 [1117,6]	467 [212]	781 [354]	852 [387]	510 [231]
17.5	ZJ	2665 [1209]	85.25 [2162,4]	44 [1117,6]	477 [216]	797 [362]	870 [395]	520 [236]
20	ZJ	2697 [1223]	85.05 [2160,3]	44 [1117,6]	485 [220]	805 [365]	878 [398]	529 [240]
25	ZJ	2783 [1262]	85.25 [2162,4]	44 [1117,6]	498 [226]	833 [378]	908 [412]	544 [247]
15	ZR	2360 [1071]	85.25 [2162,4]	44 [1117,6]	422 [191]	706 [320]	770 [349]	461 [209]
20	ZR	2660 [1207]	85.05 [2160,3]	44 [1117,6]	478 [217]	794 [360]	866 [393]	522 [237]
25	ZR	2760 [1252]	85.25 [2162,4]	44 [1117,6]	494 [224]	826 [375]	901 [409]	539 [245]
20	XP	2650 [1202]	88.8 [2255,5]	46 [1168,4]	462 [210]	863 [392]	863 [392]	462 [210]



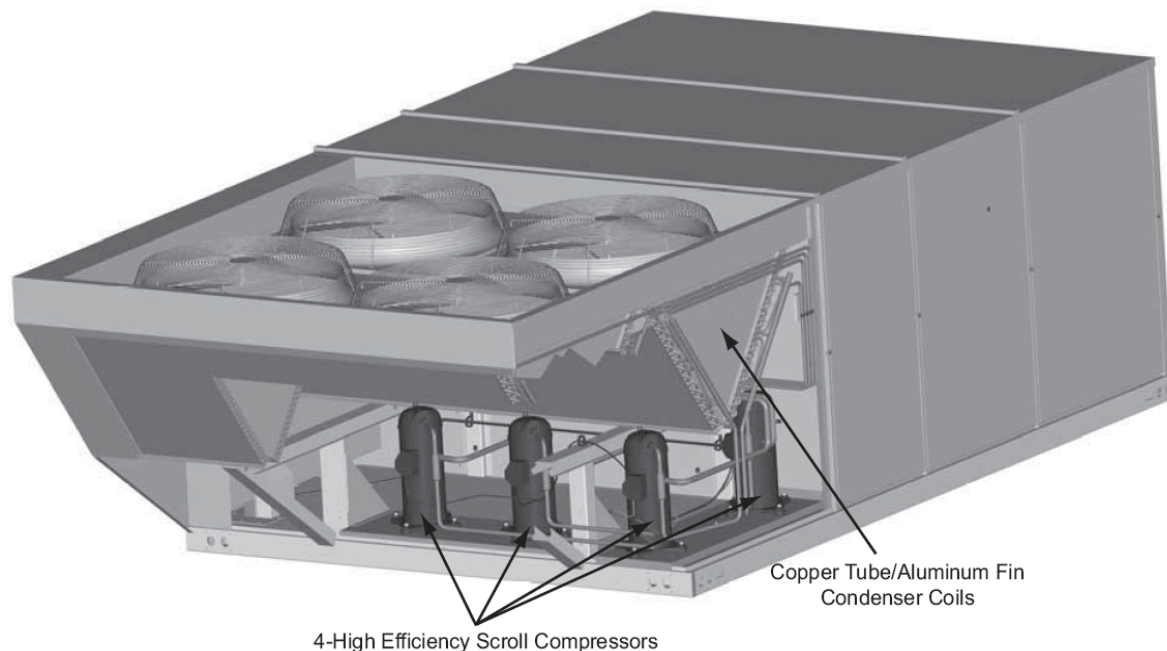
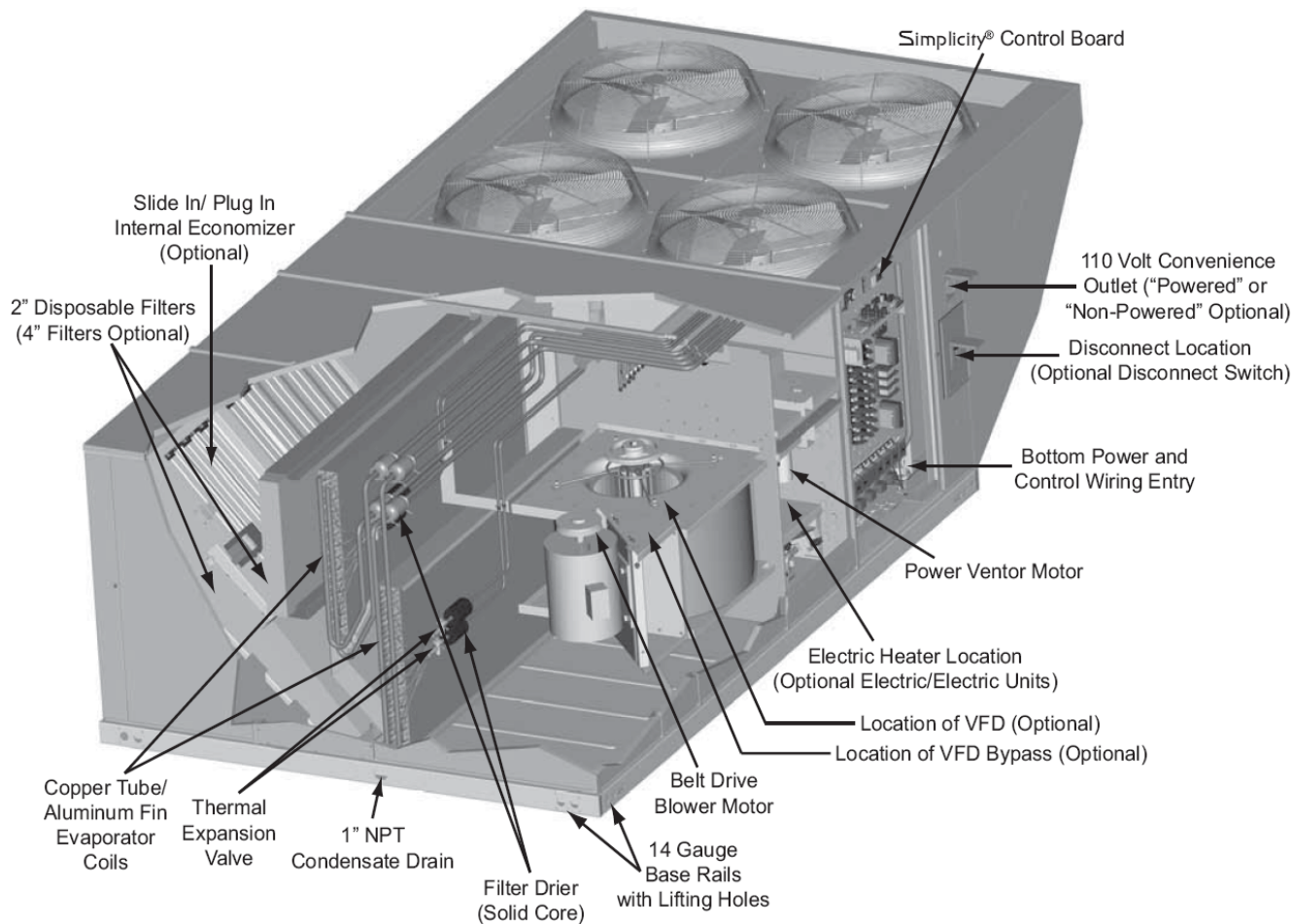
Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ240S30R4D5BCAKG1**

Quantity: **8** Tag #: **AC- 1 thru 8**

System: **ZJ240S30R4D5BCAKG1**

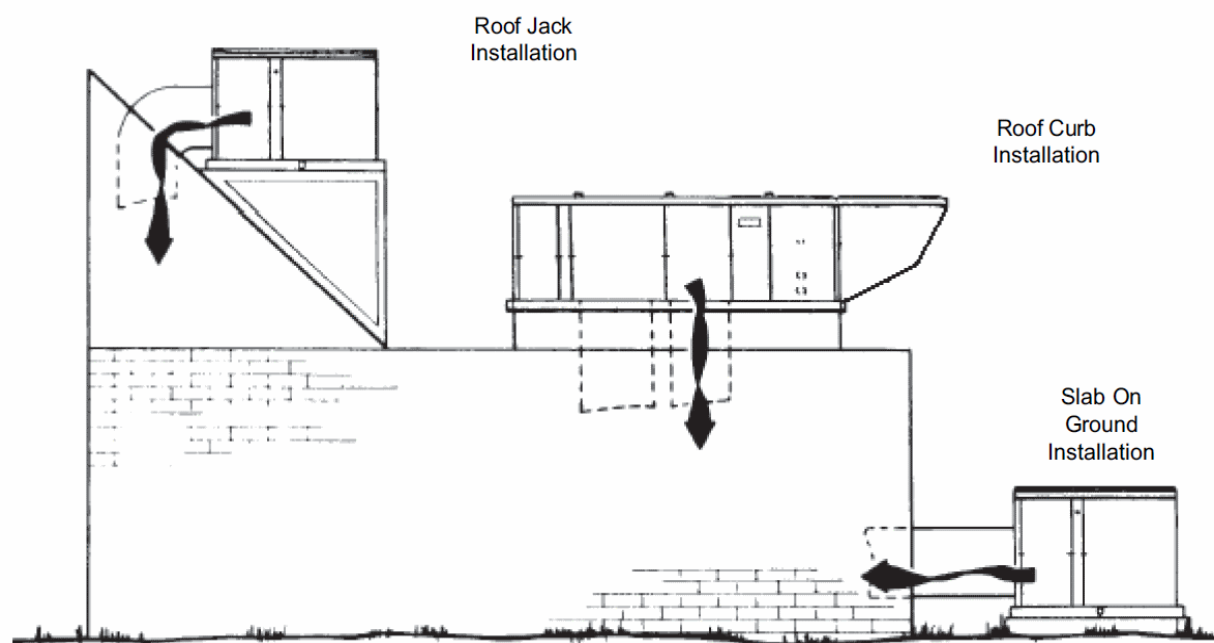
Component Locations



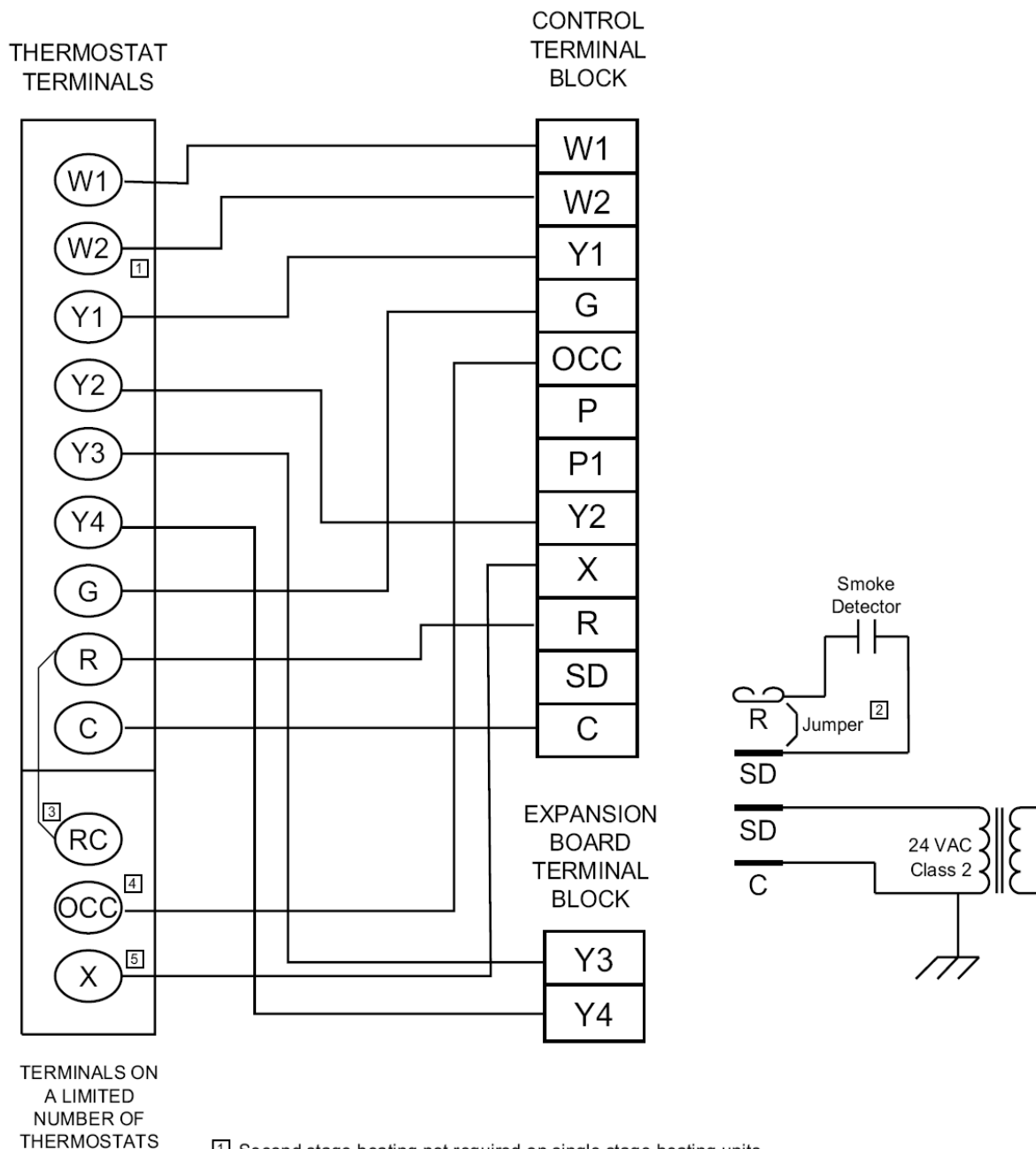
York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**Unit Model #: **ZJ240S30R4D5BCAKG1**Quantity: **8** Tag #: **AC- 1 thru 8**System: **ZJ240S30R4D5BCAKG1**

Typical Application



Typical Control Diagram



- 1 Second stage heating not required on single stage heating units.
- 2 Jumper is required if there is no Smoke Detector circuit.
- 3 Jumper is required for any combination of R, RC, or RH.
- 4 OCC is an output from the thermostat to indicate the Occupied condition.
- 5 X is an input to the thermostat to display Error Status conditions.

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ240S30R4D5BCAKG1**

Quantity: **8** Tag #: **AC- 1 thru 8**

System: **ZJ240S30R4D5BCAKG1**

Seismic Certification

835356-UAD-A-0112



SPECIAL SEISMIC CERTIFICATION
OF NON-STRUCTURAL
COMPONENTS AND SYSTEMS



CERTIFICATE OF COMPLIANCE

Dynamic Certification Laboratories has qualified the listed packaged rooftop units as CERTIFIED for seismic applications in accordance with the following codes and standards:

CBC 2010, IBC 2009, ICC-ES AC-156 2010, ASCE 7-05

The following model designations are included in this certification. A complete list of certified models, options, and installation methods are detailed in report number 90300-1108b by Dynamic Certification Laboratories, provided by the equipment manufacturer upon request.

Unitary Product Group Packaged Rooftop Units (UPG)

Seismic Qualification Testing was conducted in accordance with and in strict adherence to the standards set forth within the American Society of Civil Engineers (ASCE 7) by the independent approval agency, Dynamic Certification Laboratories. The above referenced equipment is APPROVED for seismic applications when properly installed and used as intended.

The basis of this certification is through testing of the active and energized components per AC156. This certification covers multiple UPG brands, including York, Johnson Controls, Coleman, Luxaire, Evcon and Fraser-Johnston.

The seismic values are obtained from the Maximum Considered Earthquake Short Period Spectral Response Acceleration, S_d s, as determined by the ASCE 7 seismic maps. Various installation locations/isolation configurations are covered under this certification, limited by the S_d s value stated in the following table. A seismic importance factor, I_p , of 1.5 applies to this certification to include essential facility requirements and life safety applications for post event functionality. The units are approved for both a rigid and flexible mount configuration.

Maximum Design S_d s Values of UPG Packaged Rooftop Units				
Series	Size	Tons	S_d s (g)	F_p/W_p
ZF/ZS 180/J**ZF/T*	180 (48")	15	2.0	1.5
ZF/ZS/J**ZF/T*	210, 240, 300 (53")	17.5, 20, 25	2.0	1.5
XP/XA/J**XP/T*180	180 (53")	15	2.0	1.5
XP/XA/J**XP/T*240	240 (53")	20	2.0	1.5
ZJ/ZW/J**ZJ/T*	180, 210, 240, 300 (53")	15, 17.5, 20, 25	2.0	1.5
ZR/ZK 180/J**ZR/T*	240, 300 (53")	15, 20, 25	2.0	1.5

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Dynamic Certification Laboratories 1315 Greg Street, Suite 109, Sparks, NV 89431 – ph: 775-358-5085

www.shaketest.com

York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**Unit Model #: **ZJ240S30R4D5BCAKG1**Quantity: **8** Tag #: **AC- 1 thru 8**System: **ZJ240S30R4D5BCAKG1**

Seismic Certification



SPECIAL SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS AND SYSTEMS



CERTIFICATE OF COMPLIANCE

Table of Seismic Design Parameters					
Site Class	F_a	I_p	a_p	R_p	z/h
D	1.0	1.5	2.5	6.0	1.0

Site and Project Requirements

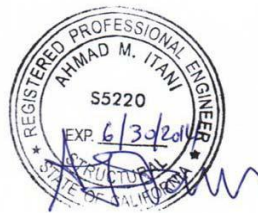
It is the responsibility of the Design Professional of Record to:

- Provide engineering for the anchorage and restraint of the unit
- Validate Certification Design Parameters with actual site conditions
- Provide engineering of all equipment support structures
- Confirm component configuration

Certification Issued by: Dynamic Certification Laboratories

Document Control Number: 90300-1108b-1

Issue Date: 12/19/11



Dr. Ahmad Itani, SE
Dynamic Certification Laboratories



Randy Forristall
YORK Unitary Engineering
Johnson Controls, Incorporated

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York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ180S30P4D5BCAKG1**

Quantity: **1** Tag #: **AC- 9**

System: **ZJ180S30P4D5BCAKG1**

Cooling Performance

Total gross capacity	188.2 MBH
Sensible gross capacity	136.6 MBH
Total net capacity	177.0 MBH
Sensible net capacity	125.4 MBH
Efficiency (at ARI)	12.20 EER
Integrated eff. (at ARI)	14.00 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	58.9 °F
Leaving WB temp.	57.1 °F
Power input (w/o blower)	12.90 kW
Sound power	92 dB(A)

Refrigerant

Refrigerant type	R-410A
Sys1	12 lbs
Sys2	11 lbs 12 oz
Sys3	12 lbs 4 oz
Sys4	13 lbs 8 oz

Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	240 MBH
Supply air	6000 CFM
Heating input capacity (Max)	300 MBH
Leaving DB temp.	97.0 °F
Air temp. rise	37.0 °F
SSE	80.0 %
Stages	2

Supply Air Blower Performance

Supply air	6000 CFM
Ext. static pressure	0.3 IWG
Add. Unit Losses (Options/Accessories)	0.1 IWG
Blower speed	930 RPM
Max BHP of Motor (including service factor)	5.75 HP
Duct location	Bottom
Motor rating	5.00 HP
Actual required BHP	3.64 HP
Power input	3.27 kW
Elevation	0 ft.
Drive type	BELT

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	37.6 Amps
Unit max over-current protection	40 Amps

Dimensions & Weight

Hgt	53 in.	Len	181 in.	Wth	92 in.
Weight with factory installed options	3084 lbs.				

Clearances

Right	36 in.	Front	36 in.	Rear	49 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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



15 Ton

- York Sunline Units are Manufactured at an ISO 9001 Registered Facility and Each Rooftop is Completely Computer-Run Tested Prior to Shipment.

Unit Features

- Four Stage Cooling
- 300 MBH Input Stainless Steel, Two Stage Gas Heat
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards).
- 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
- Four Independent Refrigerant Circuits for Efficient Part Load Operation with Scroll Compressors
- Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 5 HP Standard Static Belt Drive Blower
- Solid Core Liquid Line Filter Driers
- Unit Ships with 2" Throwaway Filters
- Replacement Filters: For 2" filters 12 - (12" x 24" x 2") OR For 4" filters 2 - (20" X 24" x 4") AND 4 - (24" X 24" x 4")
- Non Powered Convenience Outlet (110 VAC)
- HACR Circuit Breaker/Disconnect
- Single Point Power Connection
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Phase Monitor
- Standard Condenser Coil
- Standard Evaporator Coil
- Crane Required to Unload Unit
- Stainless Steel Drain Pan
- Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels

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. BACNet MS/TP, Modbus and N2 communication card.

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.
- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display. Allows all units to operate in the cooling mode down to 0 °F outdoor ambient without additional components or intervention.

Warranty



YORK®

Large Sunline 15-25 Ton Package

York Single Package R-410A Air Conditioner

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Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ180S30P4D5BCAKG1**

Quantity: **1** Tag #: **AC- 9**

System: **ZJ180S30P4D5BCAKG1**

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Fifteen (15) Year Warranty - Stainless Steel Tubular Heat Exchangers



Large Sunline 15-25 Ton Package

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York Single Package R-410A Air Conditioner

Project Name: Kohls 10472 - Lees Summit, MO- Rev 1

Unit Model #: ZJ180S30P4D5BCAKG1

Quantity: 1 Tag #: AC- 9

System: ZJ180S30P4D5BCAKG1

Factory Installed Options

ZJ180S30P4D5BCAKG1

Equipment Options		Option(s) Selected
Product Category:	ZJ	York Large Sunline Single Packaged R-410A Air Conditioner 12.2 EER
Nominal Cooling Capacity:	180	15 Ton Four Stage Cooling
Heat Type and Nominal Heat Capacity:	S30	300 MBH Input Stainless Steel, Two Stage Gas Heat
Blower Option:	P	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. 5 HP Standard Static Belt Drive Blower
Voltage:	4	460-3-60
Outside Air Option:	D	Dry Bulb Low Leak Economizer w/Barometric Relief and Power Exhaust and Hoods (Bottom Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Service Options:	5	Non Powered Convenience Outlet (110 VAC) HACR Circuit Breaker/Disconnect
Sensor Options:	B	Phase Monitor
Controls:	C	Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.
Refrigeration:	A	Standard Condenser Coil Standard Evaporator Coil
Additional Options:	K	2" Throwaway Filters
Cabinet Options:	G	Single Wall Construction Stainless Steel Drain Pan Hinged & Tool Free Filter, Blower, Motor and Electrical Access Panels
Product Generation:	1	

Project Name: Kohls 10472 - Lees Summit, MO- Rev 1

Unit Model #: ZJ180S30P4D5BCAKG1


Quantity: 1 Tag #: AC-9

System: ZJ180S30P4D5BCAKG1

Consolidated Drawing

NOTES:

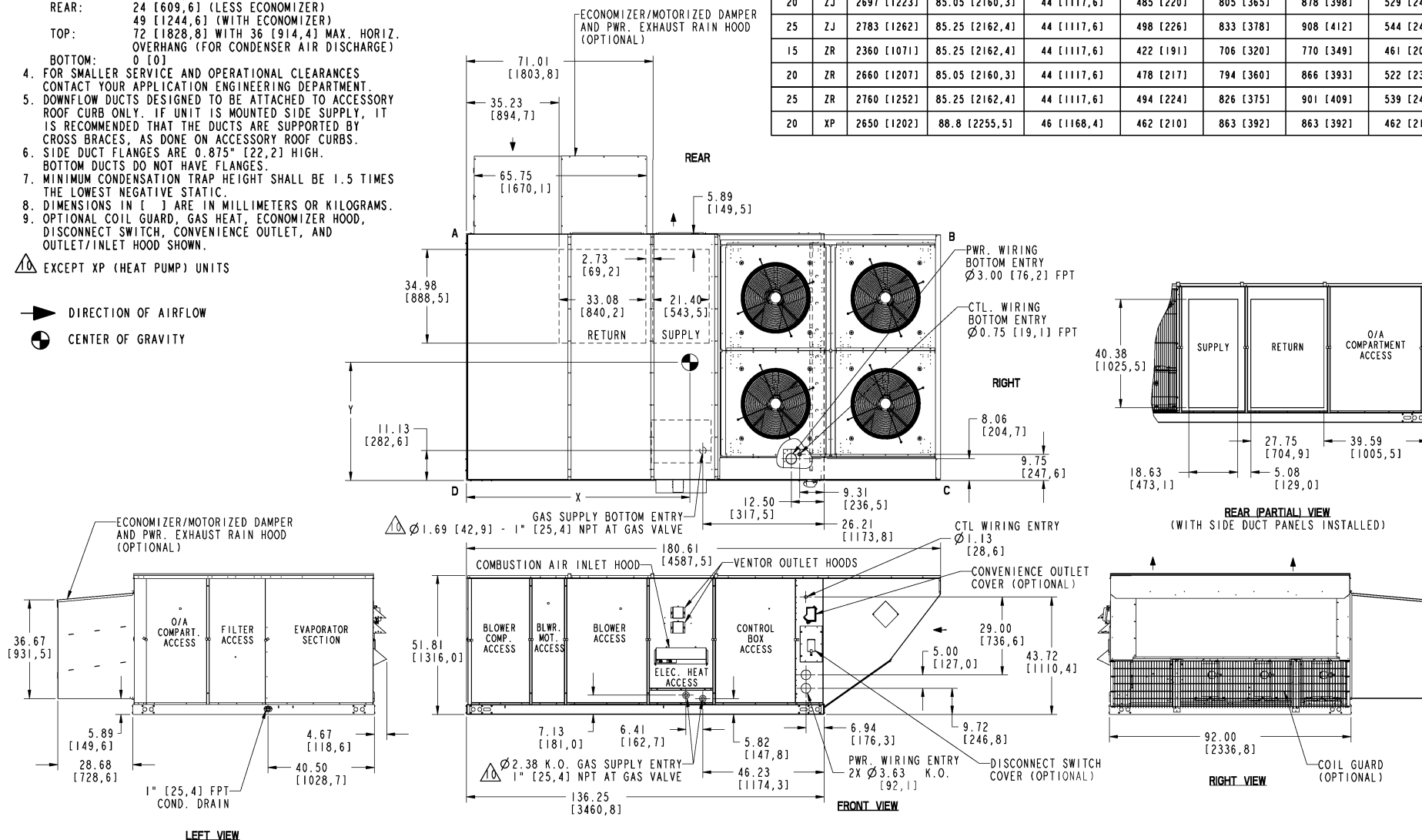
- FOR OUTDOOR USE ONLY.
- WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
- MIN. CLEARANCES TO BE:
RIGHT SIDE: 36 [914,4]
LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
36 [914,4] (WITH ECONOMIZER)
FRONT:
36 [914,4]
REAR:
24 [609,6] (LESS ECONOMIZER)
49 [1244,6] (WITH ECONOMIZER)
TOP:
72 [1828,8] WITH 36 [914,4] MAX. HORIZ.
OVERHANG (FOR CONDENSER AIR DISCHARGE)
0 [0]
BOTTOM:
0 [0]
- FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
- 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.
- SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
- MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
- DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
- OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

 EXCEPT XP (HEAT PUMP) UNITS

 DIRECTION OF AIRFLOW

 CENTER OF GRAVITY

TONNAGE	UNIT	OPERATING WEIGHT (LBS) (BASE UNIT)	CENTER OF GRAVITY LOCATION (BASE UNIT)		4 POINT CORNER LOADS (LBS) (BASE UNIT)			
			X	Y	A	B	C	D
15	ZJ	2609 [1183]	85.25 [2162,4]	44 [1117,6]	467 [212]	781 [354]	852 [387]	510 [231]
17.5	ZJ	2665 [1209]	85.25 [2162,4]	44 [1117,6]	477 [216]	797 [362]	870 [395]	520 [236]
20	ZJ	2697 [1223]	85.05 [2160,3]	44 [1117,6]	485 [220]	805 [365]	878 [398]	529 [240]
25	ZJ	2783 [1262]	85.25 [2162,4]	44 [1117,6]	498 [226]	833 [378]	908 [412]	544 [247]
15	ZR	2360 [1071]	85.25 [2162,4]	44 [1117,6]	422 [191]	706 [320]	770 [349]	461 [209]
20	ZR	2660 [1207]	85.05 [2160,3]	44 [1117,6]	478 [217]	794 [360]	866 [393]	522 [237]
25	ZR	2760 [1252]	85.25 [2162,4]	44 [1117,6]	494 [224]	826 [375]	901 [409]	539 [245]
20	XP	2650 [1202]	88.8 [2255,5]	46 [1168,4]	462 [210]	863 [392]	863 [392]	462 [210]



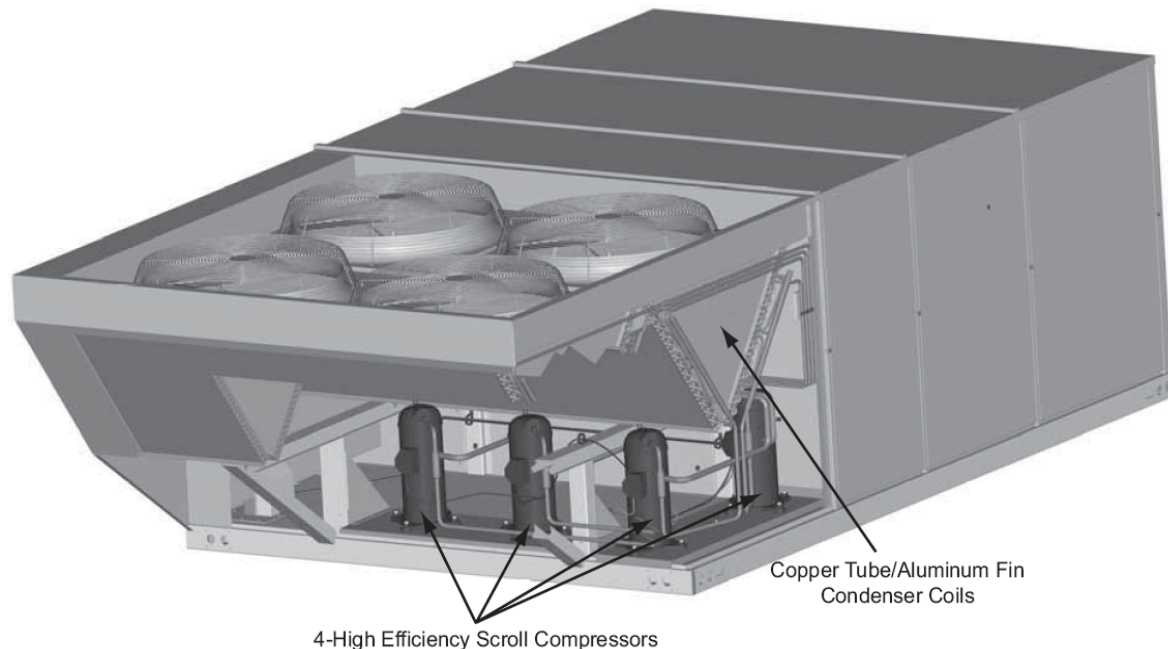
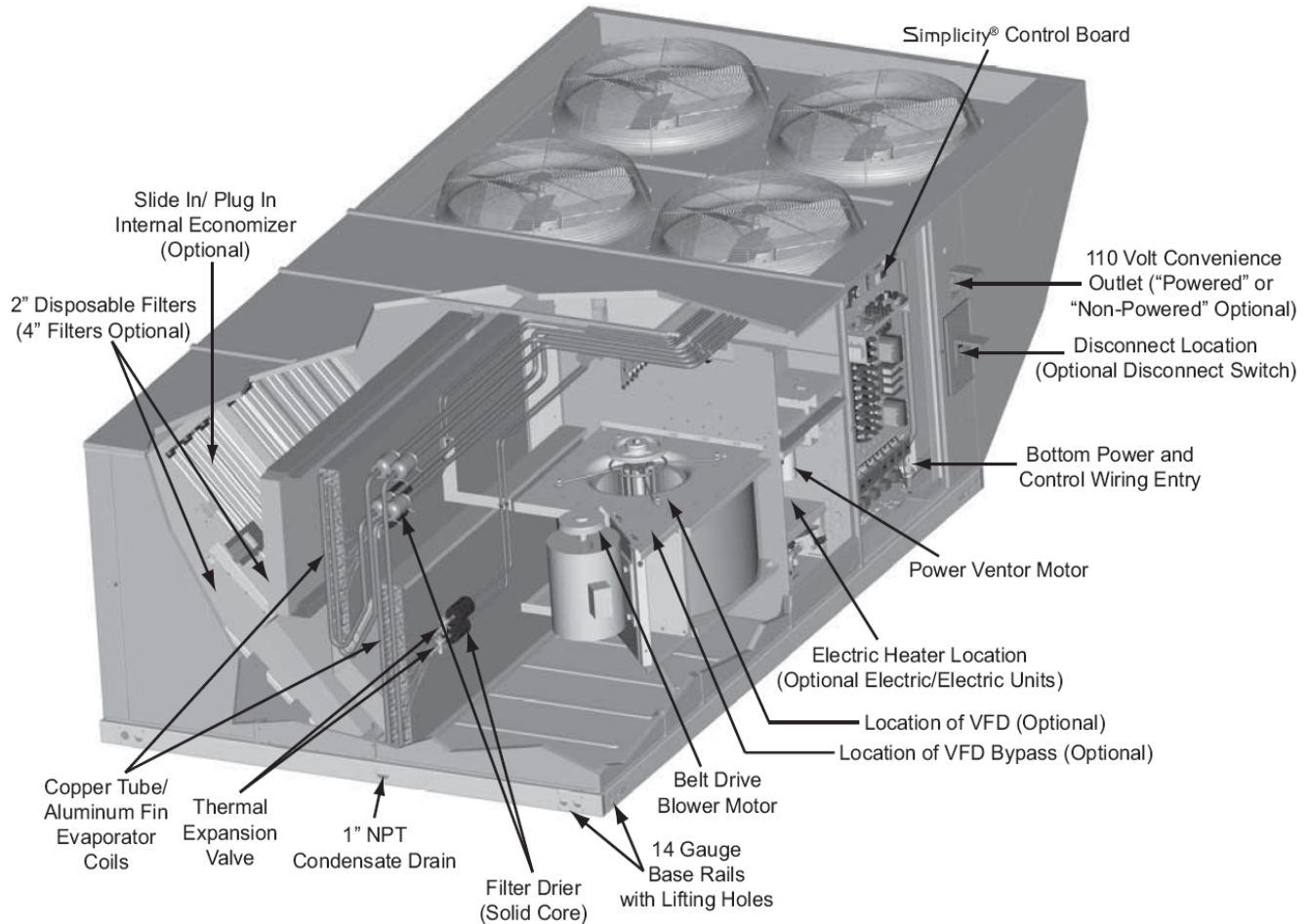
Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**

Unit Model #: **ZJ180S30P4D5BCAKG1**

Quantity: **1** Tag #: **AC- 9**

System: **ZJ180S30P4D5BCAKG1**

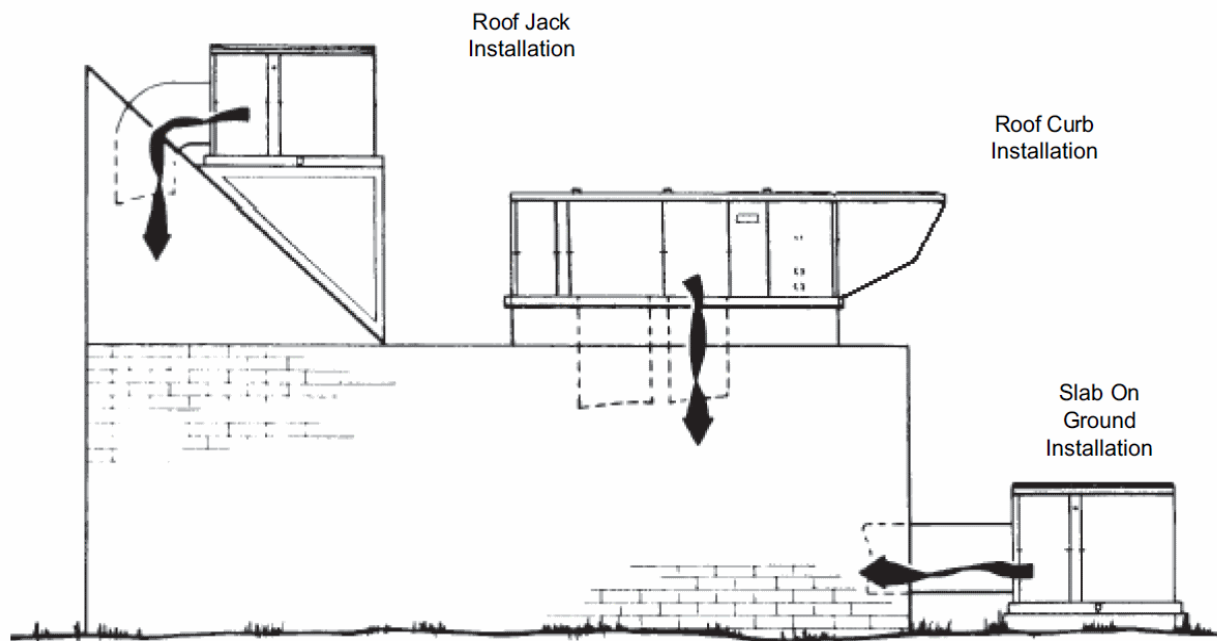
Component Locations



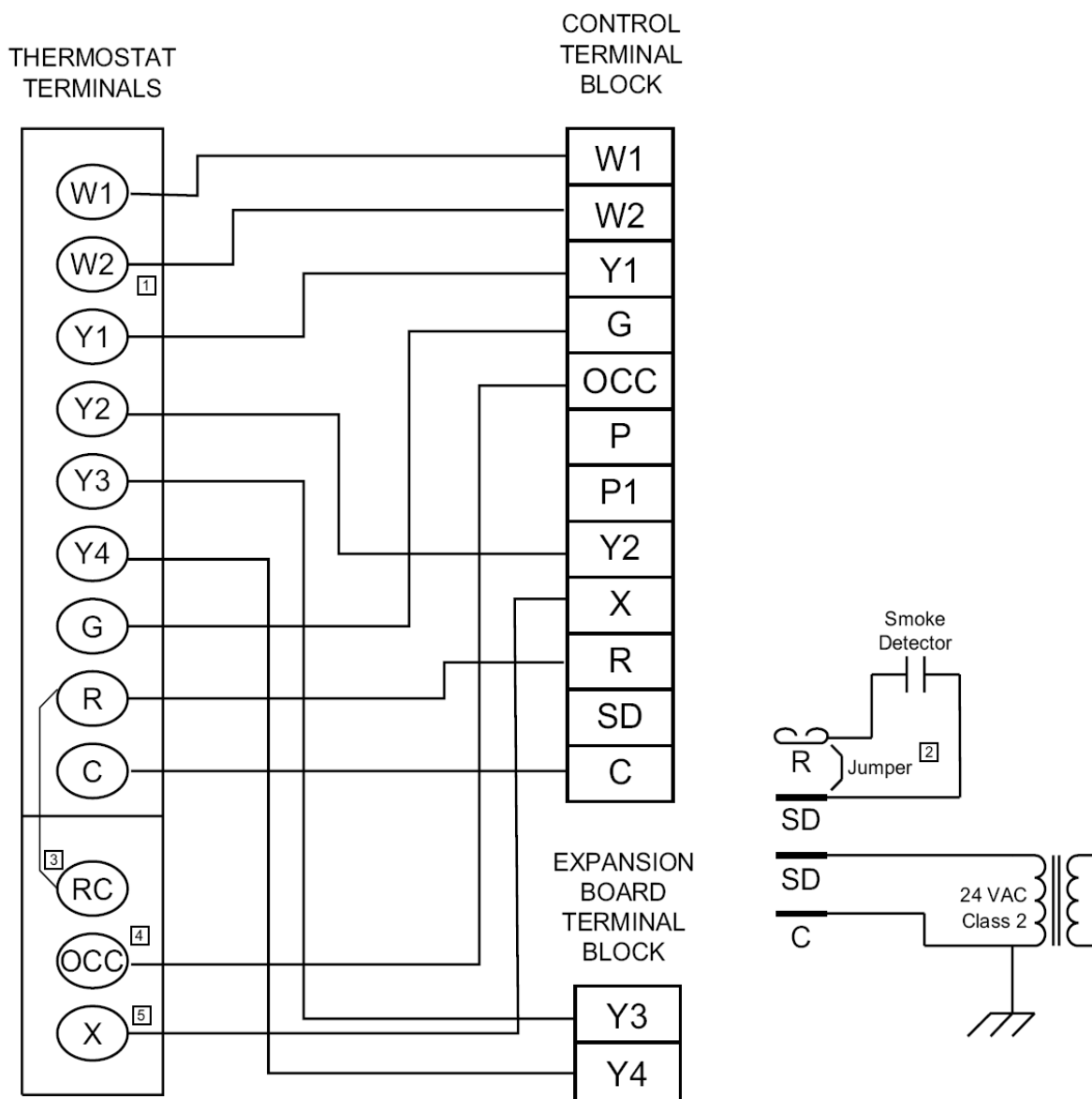
York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**Unit Model #: **ZJ180S30P4D5BCAKG1**Quantity: **1** Tag #: **AC- 9**System: **ZJ180S30P4D5BCAKG1**

Typical Application



Typical Control Diagram



TERMINALS ON
A LIMITED
NUMBER OF
THERMOSTATS

- [1] Second stage heating not required on single stage heating units.
- [2] Jumper is required if there is no Smoke Detector circuit.
- [3] Jumper is required for any combination of R, RC, or RH.
- [4] OCC is an output from the thermostat to indicate the Occupied condition.
- [5] X is an input to the thermostat to display Error Status conditions.

York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**Unit Model #: **ZJ180S30P4D5BCAKG1**Quantity: **1** Tag #: **AC- 9**System: **ZJ180S30P4D5BCAKG1**

Seismic Certification

835356-UAD-A-0112



SPECIAL SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS AND SYSTEMS



CERTIFICATE OF COMPLIANCE

Dynamic Certification Laboratories has qualified the listed packaged rooftop units as CERTIFIED for seismic applications in accordance with the following codes and standards:

CBC 2010, IBC 2009, ICC-ES AC-156 2010, ASCE 7-05

The following model designations are included in this certification. A complete list of certified models, options, and installation methods are detailed in report number 90300-1108b by Dynamic Certification Laboratories, provided by the equipment manufacturer upon request.

Unitary Product Group Packaged Rooftop Units (UPG)

Seismic Qualification Testing was conducted in accordance with and in strict adherence to the standards set forth within the American Society of Civil Engineers (ASCE 7) by the independent approval agency, Dynamic Certification Laboratories. The above referenced equipment is APPROVED for seismic applications when properly installed and used as intended.

The basis of this certification is through testing of the active and energized components per AC156. This certification covers multiple UPG brands, including York, Johnson Controls, Coleman, Luxaire, Evcon and Fraser-Johnston.

The seismic values are obtained from the Maximum Considered Earthquake Short Period Spectral Response Acceleration, S_d s, as determined by the ASCE 7 seismic maps. Various installation locations/isolation configurations are covered under this certification, limited by the S_d s value stated in the following table. A seismic importance factor, I_p , of 1.5 applies to this certification to include essential facility requirements and life safety applications for post event functionality. The units are approved for both a rigid and flexible mount configuration.

Maximum Design S_d s Values of UPG Packaged Rooftop Units				
Series	Size	Tons	S_d s (g)	Fp/Wp
ZF/ZS 180/J**ZF/T*	180 (48")	15	2.0	1.5
ZF/ZS/J**ZF/T*	210, 240, 300 (53")	17.5, 20, 25	2.0	1.5
XP/XA/J**XP/T*180	180 (53")	15	2.0	1.5
XP/XA/J**XP/T*240	240 (53")	20	2.0	1.5
ZJ/ZW/J**ZJ/T*	180, 210, 240, 300 (53")	15, 17.5, 20, 25	2.0	1.5
ZR/ZK 180/J**ZR/T*	240, 300 (53")	15, 20, 25	2.0	1.5

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Dynamic Certification Laboratories 1315 Greg Street, Suite 109, Sparks, NV 89431 – ph: 775-358-5085

www.shaketest.com

York Single Package R-410A Air Conditioner

Project Name: **Kohls 10472 - Lees Summit, MO- Rev 1**Unit Model #: **ZJ180S30P4D5BCAKG1**Quantity: **1** Tag #: **AC- 9**System: **ZJ180S30P4D5BCAKG1**

Seismic Certification



SPECIAL SEISMIC CERTIFICATION OF NON-STRUCTURAL COMPONENTS AND SYSTEMS



CERTIFICATE OF COMPLIANCE

Table of Seismic Design Parameters					
Site Class	F_a	I_p	a_p	R_p	z/h
D	1.0	1.5	2.5	6.0	1.0

Site and Project Requirements

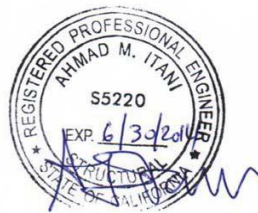
It is the responsibility of the Design Professional of Record to:

- Provide engineering for the anchorage and restraint of the unit
- Validate Certification Design Parameters with actual site conditions
- Provide engineering of all equipment support structures
- Confirm component configuration

Certification Issued by: Dynamic Certification Laboratories

Document Control Number: 90300-1108b-1

Issue Date: 12/19/11



Dr. Ahmad Itani, SE
Dynamic Certification Laboratories



Randy Forristall
YORK Unitary Engineering
Johnson Controls, Incorporated

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SWC KOHL'S HVAC
RTU Locations

