

Unit Report For AC-1

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Unit Parameters

Unit Size:..... **55 Tons**
 Volts-Phase-Hertz:..... **460-3-60**
 Supply / Return:..... **Vertical/Vertical**
 Configuration:..... **VAV**
 Evaporator Coil Type:..... **Std Evap**
 Heating Capacity: **Low Gas Heat, Extended Chassis,**

Humidifier

Heat Option:..... **2 stage**
 Filter Option:..... **2" MERV 8 pleated filters (30%)**
 Greenspeed:..... **Selected**

Shipping Dimensions

Unit Length:..... **38' 8"**
 Unit Width:..... **7' 8"**
 Unit Height:..... **6' 11"**

Unit Operating Weight:..... **9659 lb**
 Unit Shipping Weight:..... **9694 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:..... **VAV**
 Control Expansion Module:..... **Selected**
 Digital Compressor:..... **Selected**

Exhaust/Outdoor Air

OA Intake/Return:..... **Economizer with Barometric Relief**

Supply Fan

Supply Fan Type:..... **FC Supply Fan**
 Supply Fan Motor HP:..... **15 Hp**

Condenser Coil

Cond. Coil Fin Coating:..... **Standard MCHX**

Mixed-Air and Outdoor Air Filters

Mixed-Air Filter Type:..... **2 in. MERV 8 Pleated**
 Mixed-Air Filter (Quantity) Size:..... **(12) 20x 25 x 2, (12) 20 x 20 x 2**
 Outdoor Air Filter (Cleanable Mesh):..... **(12) 16 x 25 x 1, (2) 16 x 20 x 1**

No Optional Warranty Specified

An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

NOTE: Please see Warranty Catalog 808-218 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
48P7-0556404Y5SN48	Rooftop Unit With Greenspeed Intelligence	1
	Base Unit	
	Economizer with Barometric Relief	
	2" MERV 8 pleated filters (30%)	
	BACnet	
	CEM / Phase Monitor	
	Digital Compressor	
	Vertical Supply/ Return, VAV Greenspeed	
	Low Gas Heat, Extended Chassis, Humidifier	
	Supply VFD	
	15 Hp Supply Fan Motor	

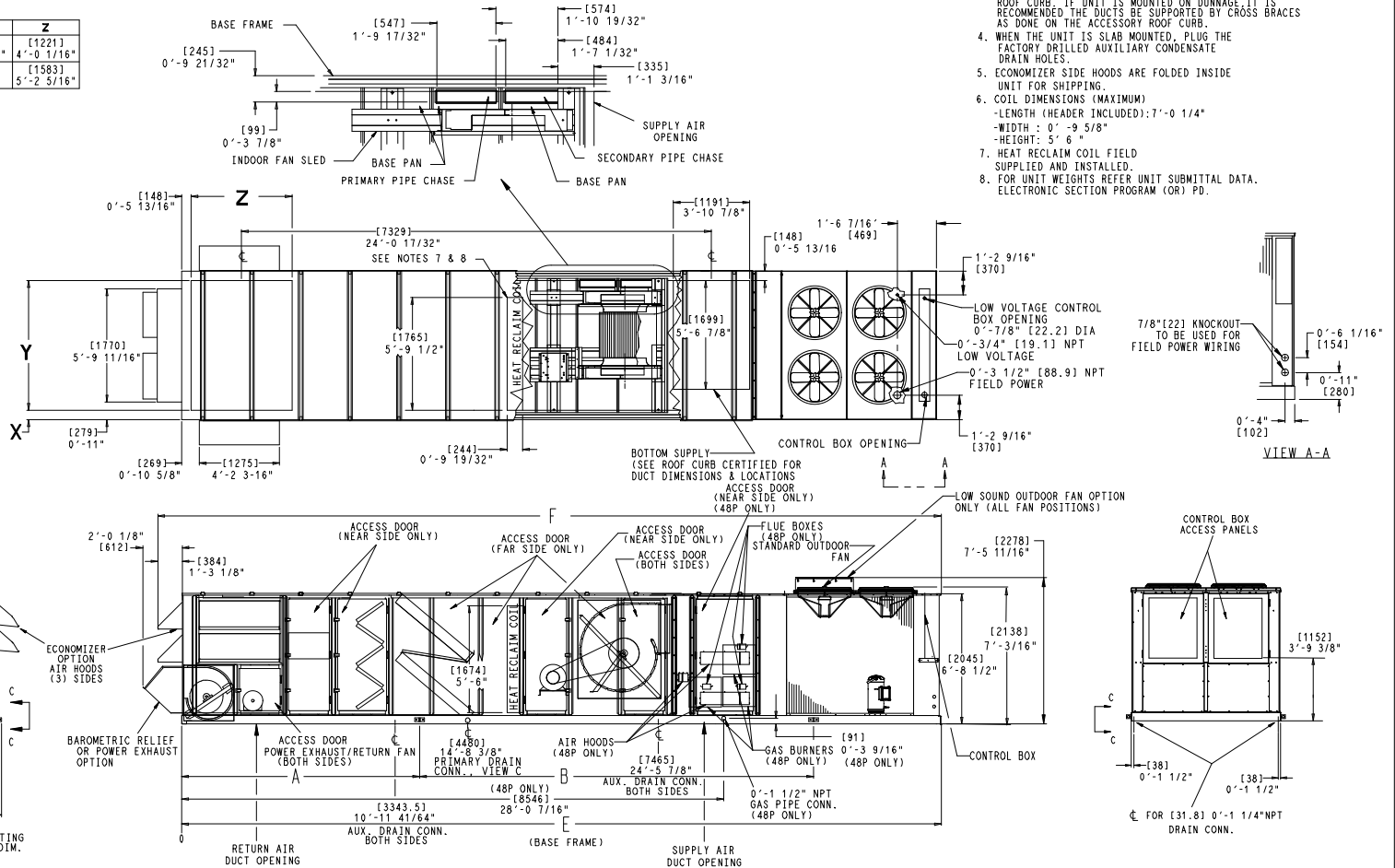
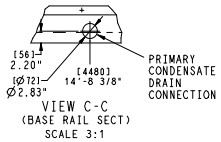
Certified Drawing for AC-1

Project: RLR - Kroger GA-422
Prepared By: Samuel Harvey

06/22/2022
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UNIT SIZE	MM	A FT. IN.	MM	B FT. IN.	MM	E FT. IN.	MM	F FT. IN.
055 LOW HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
055 HIGH HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
060 LOW HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
060 HIGH HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"

RETURN OPTION	X	Y	Z
RETURN FAN	[656] 2'-1 13/16"	[1330] 4'-4 3/8"	[1221] 4'-0 1/16"
POWER EXHAUST	[148] 0'-5 13/16"	[2032] 6'-8"	[1583] 5'-2 5/16"



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- NOTES:
- DIMENSIONS IN () ARE IN MILLIMETERS.
 - UNIT CLEARANCES
TOP - DO NOT RESTRICT CONDENSER FANS
CONTROL BOX END - 6'-0"
SIDES - 6'-0"
ECONOMIZER END - 6'-0" (EXCEPT POWER EXHAUST UNITS 10'-0")
 - DOWNSHOT DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB. IF UNIT IS MOUNTED ON DUNNAGE, IT IS RECOMMENDED THE DUCTS BE SUPPORTED BY CROSS BRACES AS DONE ON THE ACCESSORY ROOF CURB.
 - WHEN THE UNIT IS SLAB MOUNTED, PLUG THE FACTORY DRILLED AUXILIARY CONDENSATE DRAIN HOLES.
 - ECONOMIZER SIDE HOODS ARE FOLDED INSIDE UNIT FOR SHIPPING.
 - COIL DIMENSIONS (MAXIMUM)
-LENGTH (HEADER INCLUDED): 7'-0 1/4"
-WIDTH: 0'-9 5/8"
-HEIGHT: 5'-6"
 - HEAT RECLAIM COIL FIELD SUPPLIED AND INSTALLED.
 - FOR UNIT WEIGHTS REFER UNIT SUBMITTAL DATA. ELECTRONIC SECTION PROGRAM (OR) PD.

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48/50 P, VERT SUPPLY & RETURN	48ZZ502048	REV
U.S. ECCN: NSR	1 OF 1	12/12/19	06/06/19	W/EXT CHASSIS FOR AUX. COIL, SIZE 055-060		F

Performance Summary For AC-1

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Part Number: **48P7-0556404Y5SN48**

Unit Refrigerant: **R410A**
 EER (AHRI 340/360): **9.8**
 IEER (AHRI 340/360): **14.1**

Unit Dimensions

Unit Length: **38' 8"**
 Unit Width: **7' 8"**
 Unit Height: **6' 11"**
 Unit Operating Weight: **9659** lb
 Unit Shipping Weight: **9694** lb

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

Unit

Heating Type: **Gas Heat**
 Supply/Return: **Vertical/Vertical**
 Application Type: **VAV**
 Voltage: **460-3-60**
 Evaporator Type: **Std Evap**
 Cooling Airflow: **19000** CFM
 Altitude: **0** ft
 Cond. Ent. Air Temp: **95.0** F
 Ent. Air Dry Bulb: **77.5** F
 Ent. Air Wet Bulb: **63.7** F
 Ent. Air Enthalpy: **28.92** BTU/lb
 Lvg. Air Dry Bulb: **54.5** F
 Lvg. Air Wet Bulb: **53.0** F
 Lvg. Air Enthalpy: **21.95** BTU/lb
 Gross Cooling Capacity: **596.07** MBH
 Gross Sensible Clg. Cap: **472.27** MBH
 Compressor Power: **45.9** kW
 Coil Bypass Factor: **0.158**
 Refrigerant Charge, Circuit A: **37.6** lb
 Refrigerant Charge, Circuit B: **50.3** lb

Part Load(%) Operation

Cooling Capacity Steps: **13-25, 38-50, 63-75, 88-100**

Gas Heating Data:

Heating Airflow: **19000** CFM
 Heating Ent. Air Temp: **65.0** F
 Gas Input: **650** MBH
 Number of Heating Steps: **2**
 Gas Output: **527** MBH
 Heating Lvg. Air Temp: **90.7** F
 Steady State Eff: **80.7**
 Temp.Rise: **25.7** F

Supply Fan Information:

Ext.Static Pressure: **1.25** in wg
 Low Gas Heat Loss: **0.34** in wg
 Economizer Loss: **0.13** in wg
 Pleated Filters Loss: **0.02** in wg
 Humidimizer Loss: **0.22** in wg
 Selection Static Pressure: **1.95** in wg
 Supply Fan Type: **FC Supply Fan**
 Supply Fan RPM: **537** *
 Supply Fan BHP: **11.95** BHP
 Supply Fan Motor HP: **15** Hp

Field supplied and installed sheave package may be required

Performance Summary For AC-1

Project: RLR - Kroger GA-422
Prepared By: Samuel Harvey

06/22/2022
09:36AM

Performance Summary For AC-1

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Electrical Data

Voltage Range:.....	414 - 508
Compressor #1 Qty:.....	4
Compressor #1 RLA:.....	18.6
Compressor #1 LRA:.....	125
Outdoor Fan Motor Qty:.....	4
Outdoor Fan FLA (ea):.....	2.9
Indoor Fan Motor HP:.....	15
Indoor Fan Motor FLA:.....	21
Power Supply MCA:.....	112
Power Supply MOCP (Fuse or HACR):.....	125
Minimum Non-Fused Disconnect Amperage:.....	123.05

SCCR, Short Circuit Current Rating: 5kA

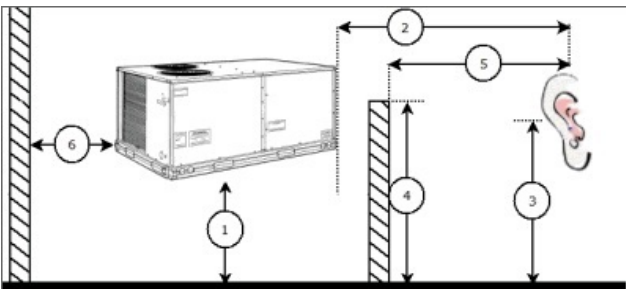
An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

Acoustic Information

	Discharge, Lw	Inlet, Lw	Outdoor, Lw
63 Hz	94.0	86.0	64.9
125 Hz	94.1	76.1	72.2
250 Hz	92.3	73.3	78.9
500 Hz	86.7	66.7	82.6
1000 Hz	79.7	62.7	84.2
2000 Hz	73.3	62.3	81.0
4000 Hz	65.5	52.5	74.4
8000 Hz	55.6	39.6	67.7

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

Performance Summary For AC-1

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
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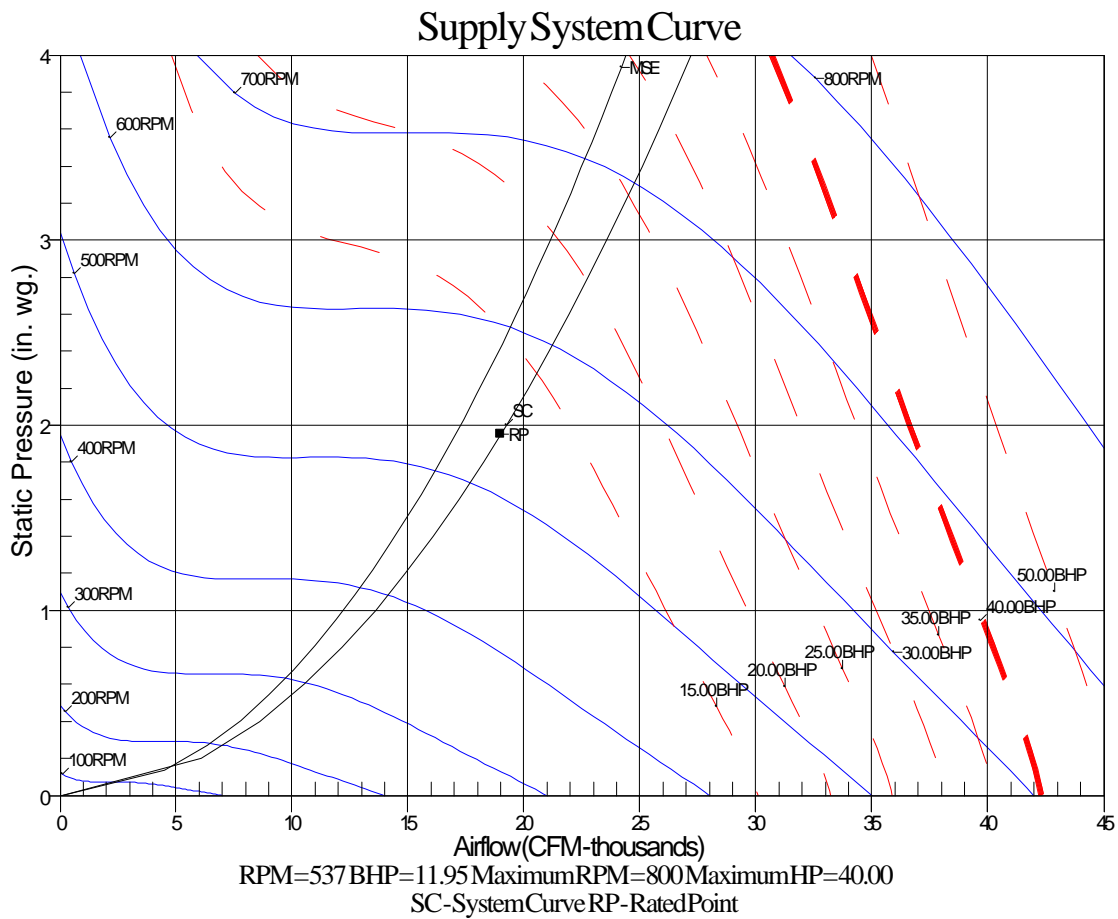
- 2. Horizontal distance from unit to receiver:.....**50.0** ft
- 3. Receiver height above ground:.....**5.7** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	64.9	72.2	78.9	82.6	84.2	81.0	74.4	67.7	88.5 Lw
B	38.7	56.1	70.3	79.4	84.2	82.2	75.4	66.6	87.5 LwA
C	31.5	38.8	45.5	49.2	50.8	47.6	41.0	34.3	55.1 Lp
D	5.3	22.7	36.9	46.0	50.8	48.8	42.0	33.2	54.2 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



Unit Report For AC-2

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Unit Parameters

Unit Size:..... **60 Tons**
 Volts-Phase-Hertz:..... **460-3-60**
 Supply / Return:..... **Vertical/Vertical**
 Configuration:..... **VAV**
 Evaporator Coil Type:..... **Std Evap**
 Heating Capacity: **Low Gas Heat, Extended Chassis,**

Humidifier

Heat Option:..... **2 stage**
 Filter Option:..... **2" MERV 8 pleated filters (30%)**
 Greenspeed:..... **Selected**

Shipping Dimensions

Unit Length:..... **38' 8"**
 Unit Width:..... **7' 8"**
 Unit Height:..... **6' 11"**

Unit Operating Weight:..... **9759 lb**
 Unit Shipping Weight:..... **9794 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:..... **VAV**
 Control Expansion Module:..... **Selected**
 Digital Compressor:..... **Selected**

Exhaust/Outdoor Air

OA Intake/Return:..... **Economizer with Barometric Relief**

Supply Fan

Supply Fan Type:..... **FC Supply Fan**
 Supply Fan Motor HP:..... **15 Hp**

Condenser Coil

Cond. Coil Fin Coating:..... **Standard MCHX**

Mixed-Air and Outdoor Air Filters

Mixed-Air Filter Type:..... **2 in. MERV 8 Pleated**
 Mixed-Air Filter (Quantity) Size:..... **(12) 20x 25 x 2, (12) 20 x 20 x 2**
 Outdoor Air Filter (Cleanable Mesh):..... **(12) 16 x 25 x 1, (2) 16 x 20 x 1**

No Optional Warranty Specified

An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

NOTE: Please see Warranty Catalog 808-218 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
48P7-0606404Y5SN48	Rooftop Unit With Greenspeed Intelligence	1
	Base Unit	
	Economizer with Barometric Relief	
	2" MERV 8 pleated filters (30%)	
	BACnet	
	CEM / Phase Monitor	
	Digital Compressor	
	Vertical Supply/ Return, VAV Greenspeed	
	Low Gas Heat, Extended Chassis, Humidifier	
	Supply VFD	
	15 Hp Supply Fan Motor	

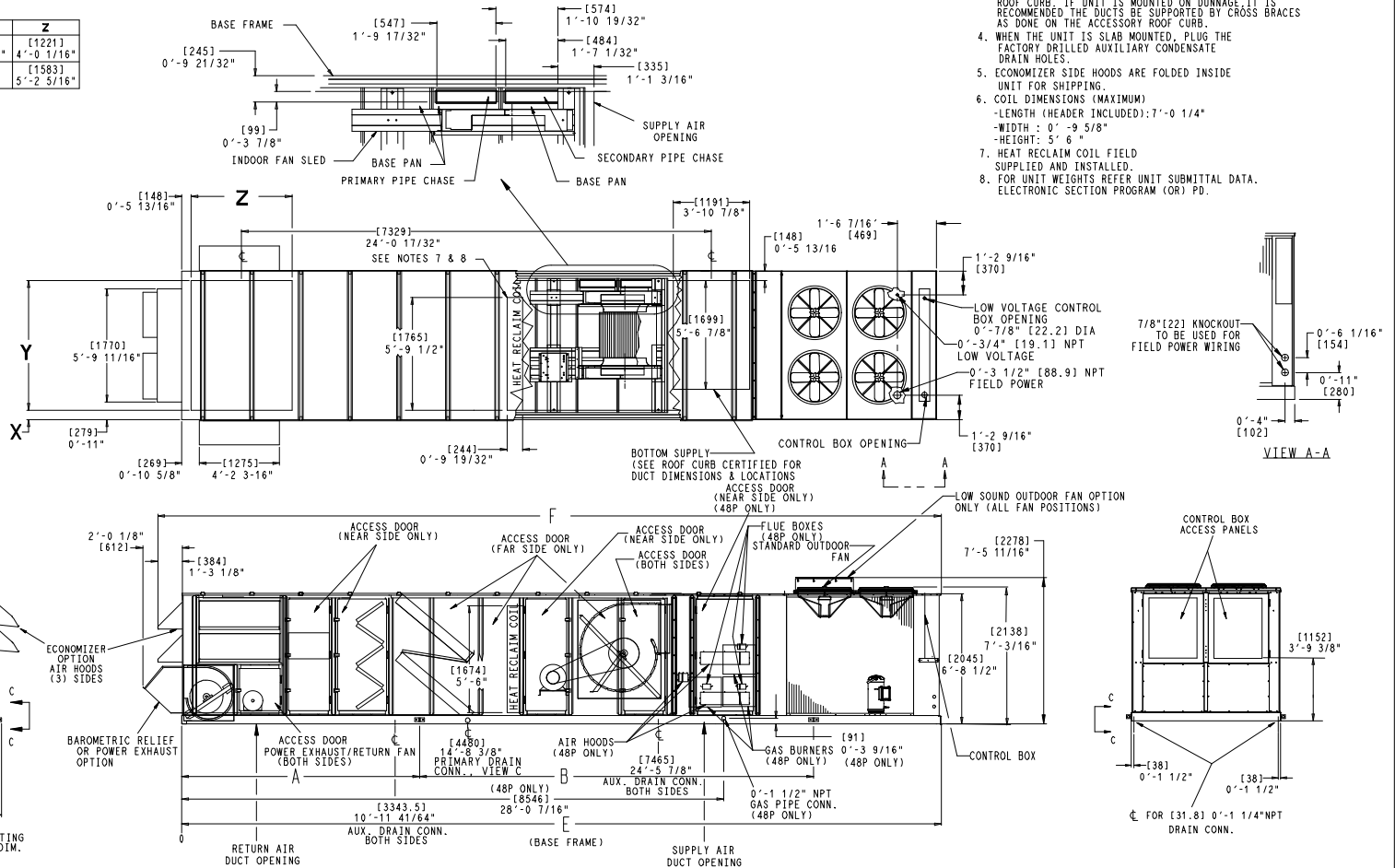
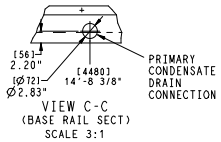
Certified Drawing for AC-2

Project: RLR - Kroger GA-422
Prepared By: Samuel Harvey

06/22/2022
09:36AM

UNIT SIZE	MM	A FT. IN.	MM	B FT. IN.	MM	E FT. IN.	MM	F FT. IN.
055 LOW HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
055 HIGH HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
060 LOW HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"
060 HIGH HEAT	2959	9'-8 1/2"	6940	22'-9 1/4"	11780	38'-7 13/16"	12164	39'-10 7/8"

RETURN OPTION	X	Y	Z
RETURN FAN	[656] 2'-1 13/16"	[1330] 4'-4 3/8"	[1221] 4'-0 1/16"
POWER EXHAUST	[148] 0'-5 13/16"	[2032] 6'-8"	[1583] 5'-2 5/16"



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- NOTES:
1. DIMENSIONS IN () ARE IN MILLIMETERS.
 2. UNIT CLEARANCES
TOP - DO NOT RESTRICT CONDENSER FANS CONTROL BOX END - 6'-0" SIDES - 6'-0" ECONOMIZER END - 6'-0" (EXCEPT POWER EXHAUST UNITS 10'-0")
 3. DOWNSHOT DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB. IF UNIT IS MOUNTED ON DUNNAGE, IT IS RECOMMENDED THE DUCTS BE SUPPORTED BY CROSS BRACES AS DONE ON THE ACCESSORY ROOF CURB.
 4. WHEN THE UNIT IS SLAB MOUNTED, PLUG THE FACTORY DRILLED AUXILIARY CONDENSATE DRAIN HOLES.
 5. ECONOMIZER SIDE HOODS ARE FOLDED INSIDE UNIT FOR SHIPPING.
 6. COIL DIMENSIONS (MAXIMUM)
-LENGTH (HEADER INCLUDED): 7'-0 1/4"
-WIDTH: 0'-9 5/8"
-HEIGHT: 5'-6"
 7. HEAT RECLAIM COIL FIELD SUPPLIED AND INSTALLED.
 8. FOR UNIT WEIGHTS REFER UNIT SUBMITTAL DATA. ELECTRONIC SECTION PROGRAM (OR) PD.

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48/50 P, VERT SUPPLY & RETURN W/EXT CHASSIS FOR AUX. COIL, SIZE 055-060	48ZZ502048	REV
U.S. ECCN: NSR	1 OF 1	12/12/19	06/06/19			F

Performance Summary For AC-2

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Part Number:.....**48P7-0606404Y5SN48**

Unit Refrigerant:.....**R410A**
 EER (AHRI 340/360):.....**9.8**
 IEER (AHRI 340/360):.....**13.6**

Unit Dimensions

Unit Length:.....**38' 8"**
 Unit Width:.....**7' 8"**
 Unit Height:.....**6' 11"**
 Unit Operating Weight:.....**9759** lb
 Unit Shipping Weight:.....**9794** lb

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

Unit

Heating Type:.....**Gas Heat**
 Supply/Return:.....**Vertical/Vertical**
 Application Type:.....**VAV**
 Voltage:.....**460-3-60**
 Evaporator Type:.....**Std Evap**
 Cooling Airflow:.....**18000** CFM
 Altitude:.....**0** ft
 Cond. Ent. Air Temp:.....**95.0** F
 Ent. Air Dry Bulb:.....**78.3** F
 Ent. Air Wet Bulb:.....**64.3** F
 Ent. Air Enthalpy:.....**29.36** BTU/lb
 Lvg. Air Dry Bulb:.....**53.2** F
 Lvg. Air Wet Bulb:.....**52.0** F
 Lvg. Air Enthalpy:.....**21.37** BTU/lb
 Gross Cooling Capacity:.....**647.30** MBH
 Gross Sensible Clg. Cap:.....**487.40** MBH
 Compressor Power:.....**53.5** kW
 Coil Bypass Factor:.....**0.149**
 Refrigerant Charge, Circuit A:.....**37.6** lb
 Refrigerant Charge, Circuit B:.....**50.3** lb

Part Load(%) Operation

Cooling Capacity Steps:.....**13-25, 38-50, 63-75, 88-100**

Gas Heating Data:

Heating Airflow:.....**18000** CFM
 Heating Ent. Air Temp:.....**65.0** F
 Gas Input:.....**650** MBH
 Number of Heating Steps:.....**2**
 Gas Output:.....**527** MBH
 Heating Lvg. Air Temp:.....**92.1** F
 Steady State Eff:.....**80.7**
 Temp.Rise:.....**27.1** F

Supply Fan Information:

Ext.Static Pressure:.....**1.25** in wg
 Low Gas Heat Loss:.....**0.31** in wg
 Economizer Loss:.....**0.12** in wg
 Pleated Filters Loss:.....**0.02** in wg
 Humidimizer Loss:.....**0.20** in wg
 Selection Static Pressure:.....**1.90** in wg
 Supply Fan Type:.....**FC Supply Fan**
 Supply Fan RPM:.....**533** *
 Supply Fan BHP:.....**11.31** BHP
 Supply Fan Motor HP:.....**15** Hp

Field supplied and installed sheave package may be required

Performance Summary For AC-2

Project: RLR - Kroger GA-422
Prepared By: Samuel Harvey

06/22/2022
09:36AM

Performance Summary For AC-2

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Electrical Data

Voltage Range:.....	414 - 508
Compressor #1 Qty:.....	4
Compressor #1 RLA:.....	23.1
Compressor #1 LRA:.....	150
Outdoor Fan Motor Qty:.....	4
Outdoor Fan FLA (ea):.....	2.9
Indoor Fan Motor HP:.....	15
Indoor Fan Motor FLA:.....	21
Power Supply MCA:.....	131
Power Supply MOCP (Fuse or HACR):.....	150
Minimum Non-Fused Disconnect Amperage:.....	143.75

SCCR, Short Circuit Current Rating: 5kA

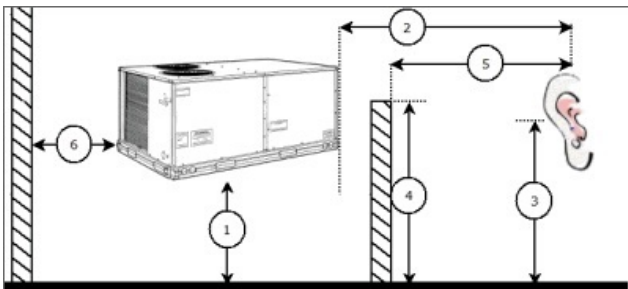
An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

Acoustic Information

	Discharge, Lw	Inlet, Lw	Outdoor, Lw
63 Hz	93.8	85.8	65.0
125 Hz	94.0	76.0	73.9
250 Hz	92.1	73.1	80.7
500 Hz	86.5	66.5	84.7
1000 Hz	79.5	62.5	86.8
2000 Hz	73.1	62.1	82.5
4000 Hz	65.4	52.4	75.5
8000 Hz	55.5	39.5	68.4

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

Performance Summary For AC-2

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

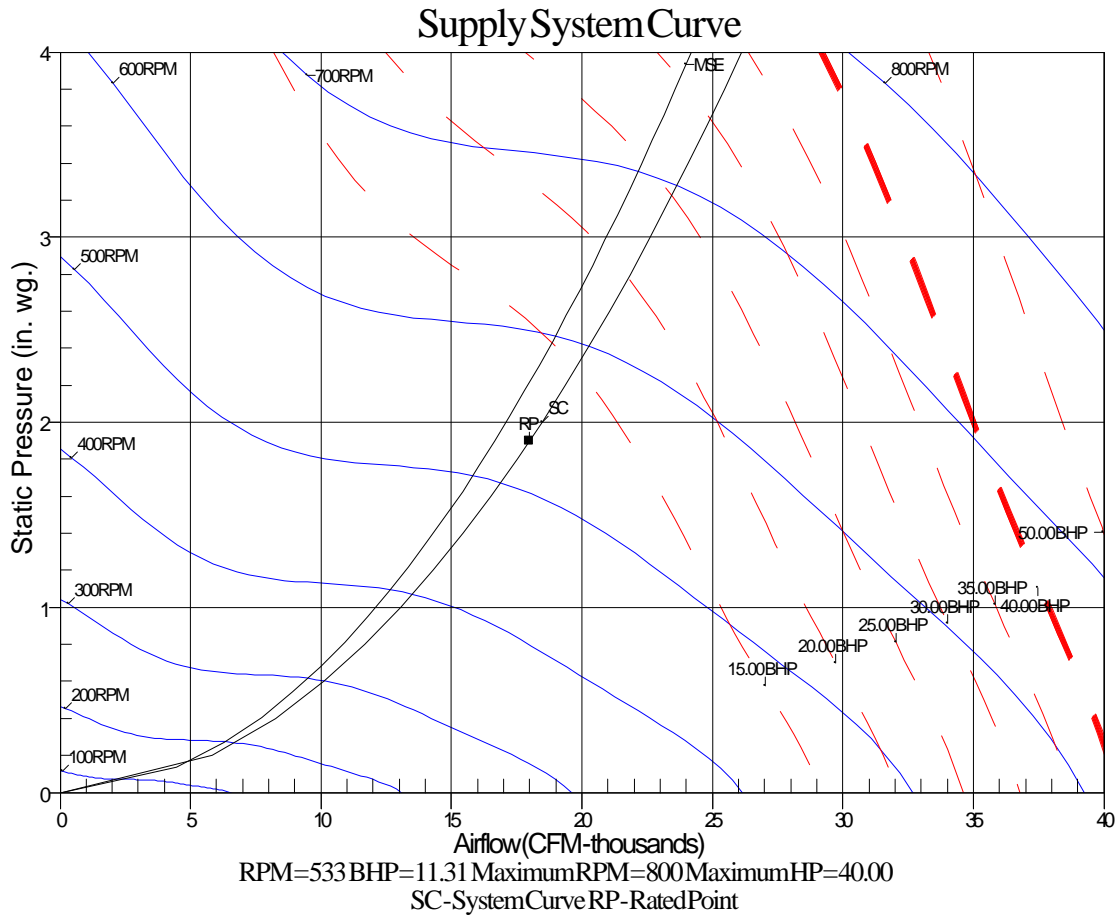
- 2. Horizontal distance from unit to receiver:.....**50.0** ft
- 3. Receiver height above ground:.....**5.7** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	65.0	73.9	80.7	84.7	86.8	82.5	75.5	68.4	90.6 Lw
B	38.8	57.8	72.1	81.5	86.8	83.7	76.5	67.3	89.6 LwA
C	31.6	40.5	47.3	51.3	53.4	49.1	42.1	35.0	57.2 Lp
D	5.4	24.4	38.7	48.1	53.4	50.3	43.1	33.9	56.3 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



Unit Report For AC-3

Project: RLR - Kroger GA-422
 Prepared By: Samuel Harvey

06/22/2022
 09:36AM

Unit Parameters

Unit Size:..... **40 Tons**
 Volts-Phase-Hertz:..... **460-3-60**
 Supply / Return:..... **Vertical/Vertical**
 Configuration:..... **VAV**
 Evaporator Coil Type:..... **Hi cap Evap**
 Heating Capacity: **High Gas Heat, Extended Chassis,**

Humidimizer

Heat Option:..... **2 stage**
 Filter Option:..... **2" MERV 8 pleated filters (30%)**
 Greenspeed:..... **Selected**

Shipping Dimensions

Unit Length:..... **30' 1"**
 Unit Width:..... **7' 8"**
 Unit Height:..... **5' 11"**

Unit Operating Weight:..... **7662 lb**
 Unit Shipping Weight:..... **7693 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:..... **VAV**
 Control Expansion Module:..... **Selected**
 Digital Compressor:..... **Selected**

Exhaust/Outdoor Air

OA Intake/Return:..... **Economizer with Barometric Relief**

Supply Fan

Supply Fan Type:..... **FC Supply Fan**
 Supply Fan Motor HP:..... **20 Hp**

Condenser Coil

Cond. Coil Fin Coating:..... **Standard MCHX**

Mixed-Air and Outdoor Air Filters

Mixed-Air Filter Type:..... **2 in. MERV 8 Pleated**
 Mixed-Air Filter (Quantity) Size:..... **(8) 20x 25 x 2, (8) 20 x 20 x 2**
 Outdoor Air Filter (Cleanable Mesh):..... **(5) 20 x 20 x 2, (2) 20 x 25 x 1**

No Optional Warranty Specified

An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

NOTE: Please see Warranty Catalog 808-218 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
48P7A0406404Y5W5C0	Rooftop Unit With Greenspeed Intelligence	1
	Base Unit	
	Hi cap Evap	
	Economizer with Barometric Relief	
	2" MERV 8 pleated filters (30%)	
	BACnet	
	CEM / Phase Monitor	
	Digital Compressor	
	Vertical Supply/ Return, VAV Greenspeed	
	High Gas Heat, Extended Chassis, Humidimizer	
	Supply VFD	
	20 Hp Supply Fan Motor	

Certified Drawing for AC-3

Project: RLR - Kroger GA-422
Prepared By: Samuel Harvey

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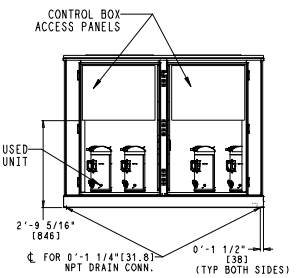
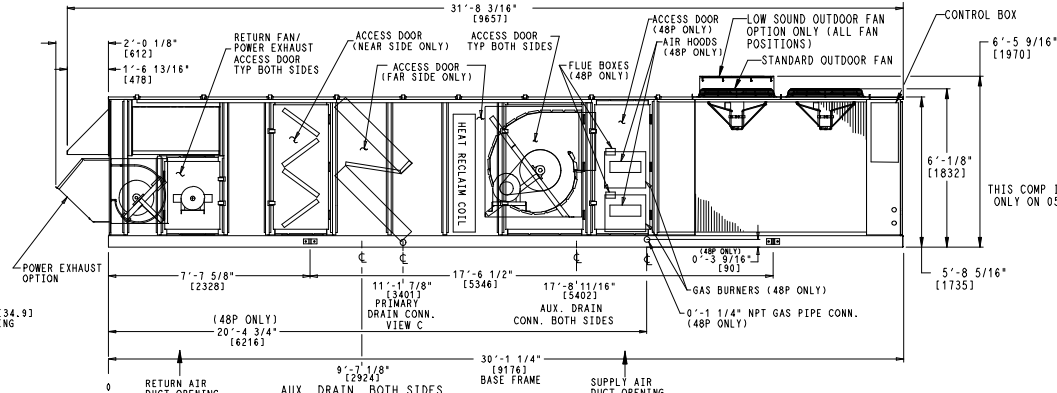
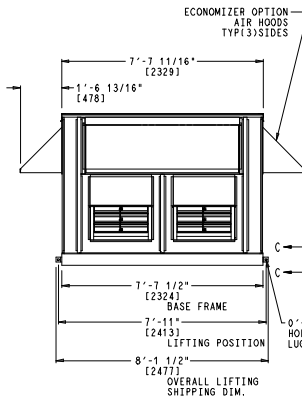
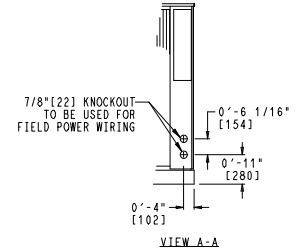
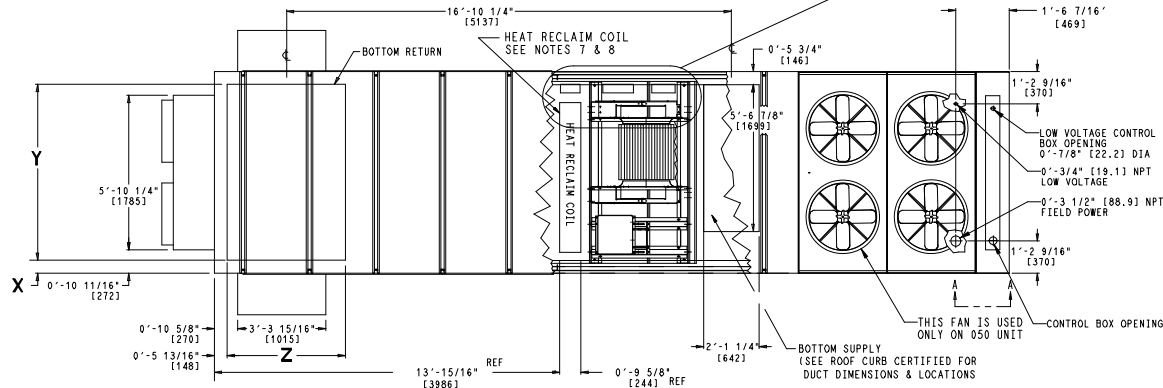
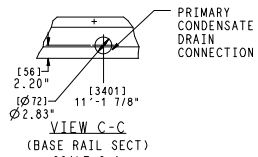
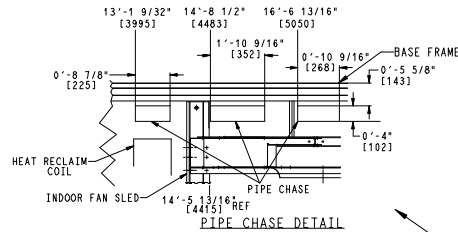
- NOTES:
- DIMENSIONS IN [] ARE IN MILLIMETERS.
 - UNIT CLEARANCES
TOP - DO NOT RESTRICT CONDENSER FANS
CONTROL BOX END - 6'-0"
SIDES - 6'-0"
ECONOMIZER END - 6'-0" (EXCEPT POWER EXHAUST UNITS 10'-0")
 - DOWNSHOT DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB. IF UNIT IS MOUNTED ON DUNNAGE IT IS RECOMMENDED THE DUCTS BE SUPPORTED BY CROSS BRACES AS DONE ON THE ACCESSORY ROOF CURB.
 - WHEN THE UNIT IS SLAB MOUNTED, PLUG THE FACTORY DRILLED AUXILIARY CONDENSATE DRAIN HOLES.
 - ECONOMIZER SIDE HOODS ARE FOLDED INSIDE UNIT FOR SHIPPING.
 - COIL DIMENSIONS (MAXIMUM)
-LENGTH (HEADER INCLUDED): 7'-0 1/4"
-WIDTH : 0'-9 5/8"
-HEIGHT: 4'-5 15/16"
 - HEAT RECLAIM COIL FIELD SUPPLIED AND INSTALLED.
 - FOR UNIT WEIGHTS REFER UNIT SUBMITTAL DATA. ELECTRONIC SECTION PROGRAM (OR) PD.



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RETURN OPTION	X	Y	Z
RETURN FAN	2'-4 15/16" [735]	3'-8 3/8" [1127]	3'-1 3/16" [945]
POWER EXHAUST	0'-5 13/16" [148]	6'-8" [2032]	4'-5 3/4" [1366]



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48/50 P, VERTICAL SUPPLY & RETURN, W/EXT CHASSIS FOR AUX. COIL, SIZE 040/050	REV
U.S. ECCN: NSR	1 OF 1	12/12/19	06/03/19	48ZZ502038	E

Performance Summary For AC-3

Project: RLR - Kroger GA-422
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Part Number: **48P7A0406404Y5W5C0**

Unit Refrigerant: **R410A**
 EER (AHRI 340/360): **10.0**
 IEER (AHRI 340/360): **13.9**

Unit Dimensions

Unit Length: **30' 1"**
 Unit Width: **7' 8"**
 Unit Height: **5' 11"**
 Unit Operating Weight: **7662** lb
 Unit Shipping Weight: **7693** lb

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

Unit

Heating Type: **Gas Heat**
 Supply/Return: **Vertical/Vertical**
 Application Type: **VAV**
 Voltage: **460-3-60**
 Evaporator Type: **Hi cap Evap**
 Cooling Airflow: **17300** CFM
 Altitude: **0** ft
 Cond. Ent. Air Temp: **95.0** F
 Ent. Air Dry Bulb: **77.9** F
 Ent. Air Wet Bulb: **63.9** F
 Ent. Air Enthalpy: **29.07** BTU/lb
 Lvg. Air Dry Bulb: **57.4** F
 Lvg. Air Wet Bulb: **54.9** F
 Lvg. Air Enthalpy: **23.12** BTU/lb
 Gross Cooling Capacity: **463.17** MBH
 Gross Sensible Clg. Cap: **382.38** MBH
 Compressor Power: **31.2** kW
 Coil Bypass Factor: **0.215**
 Refrigerant Charge, Circuit A: **31.1** lb
 Refrigerant Charge, Circuit B: **49.6** lb

Part Load(%) Operation

Cooling Capacity Steps: **23-47, 50-73, 77-100**

Gas Heating Data:

Heating Airflow: **17300** CFM
 Heating Ent. Air Temp: **65.0** F
 Gas Input: **650** MBH
 Number of Heating Steps: **2**
 Gas Output: **527** MBH
 Heating Lvg. Air Temp: **93.2** F
 Steady State Eff: **81**
 Temp.Rise: **28.2** F

Supply Fan Information:

Ext.Static Pressure: **1.25** in wg
 High Gas Heat Loss: **1.40** in wg
 High Capacity Coil Loss: **0.41** in wg
 Economizer Loss: **0.28** in wg
 Pleated Filters Loss: **0.02** in wg
 Humidimizer Loss: **0.19** in wg
 Selection Static Pressure: **3.54** in wg
 Supply Fan Type: **FC Supply Fan**
 Supply Fan RPM: **831** *
 Supply Fan BHP: **20.65** BHP
 Supply Fan Motor HP: **20** Hp

Performance Summary For AC-3

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Field supplied and installed sheave package may be required

Performance Summary For AC-3

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Electrical Data

Voltage Range:.....	414 - 508
Compressor #1 Qty:.....	1
Compressor #1 RLA:.....	26.9
Compressor #1 LRA:.....	179
Compressor #2 Qty:.....	2
Compressor #2 RLA:.....	26.9
Compressor #2 LRA:.....	179
Outdoor Fan Motor Qty:.....	3
Outdoor Fan FLA (ea):.....	2.9
Indoor Fan Motor HP:.....	20
Indoor Fan Motor FLA:.....	27
Power Supply MCA:.....	103
Power Supply MOCP (Fuse or HACR):.....	125
Minimum Non-Fused Disconnect Amperage:.....	110.4

SCCR, Short Circuit Current Rating: 5kA

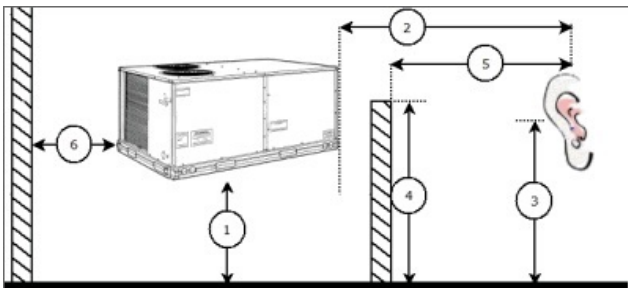
An uncoated Novation condenser coil was selected for this product. This is based on an installed location with postal code: 30092 and a non-corrosive localized environment.

Acoustic Information

	Discharge, Lw	Inlet, Lw	Outdoor, Lw
63 Hz	99.7	91.7	64.2
125 Hz	99.8	81.8	72.2
250 Hz	95.0	76.0	79.0
500 Hz	95.7	75.7	82.2
1000 Hz	85.9	68.9	84.0
2000 Hz	79.9	68.9	79.8
4000 Hz	72.6	59.6	73.7
8000 Hz	63.4	47.4	65.9

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



Performance Summary For AC-3

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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	64.2	72.2	79.0	82.2	84.0	79.8	73.7	65.9	88.1 Lw
B	38.0	56.1	70.4	79.0	84.0	81.0	74.7	64.8	87.0 LwA
C	30.9	38.9	45.7	48.9	50.7	46.5	40.4	32.6	54.7 Lp
D	4.7	22.8	37.1	45.7	50.7	47.7	41.4	31.5	53.7 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

