Inspections Division
Date: 02/10/17

SUBMITTAL DATA

For: Approval

Order #: **Date:** 01/11/2017

Project: Lancaster RTU

Project #:

Location:

Date
01/11/2017
Project Name
Lancaster RTU
Project Number
Client / Purchaser

Inspections Division
Date: 02/10/17

Submittal Summary Page

Qty	Tag #	Model #	Description
1		ZF090N12D2B1AAA1A1	7.5 Ton, Two Stage Cooling, Single Packaged R-410A Air Conditioner, Standard Efficiency, 11 EER / 12.2 IEER (CV) / 13.5 IEER (Intellispeed) / 12.2 IEER (VAV), 120 MBH Input Aluminized Steel, Two Stage Gas Heat, 208/230-3-60 • Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511) • 3 HP High Static Belt Drive Blower • Standard 2" Throwaway Filters • Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors • Micro-Channel "all-aluminum" condenser coil, Copper tube/aluminum fin evaporator coil • Standard Cabinet with Composite Drain Pan
1		2EC0401	Kit, Single Enthalpy Field Installed
1		S1-YK-MAP1810-0P	MAP (Multiple Access Portal) Gateway- For use with SimplicitySE Control.
3		ZE048H07B2C1AAA1A1	4 Ton, Single Stage Cooling, York Small Sunline Single Packaged R-410A Air Conditioner, 12.0 EER / 14.0 SEER, 75 MBH Input, Single Stage Gas Aluminum Steel, 208/230-3-60 • Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511) • 1.5 HP Standard Static Belt Drive Blower • 1" Throwaway Filters • Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors • Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil • Galvanized Steel Drain Pan • Standard Access Doors
3		1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
3		2EC0401	Kit, Single Enthalpy Field Installed

Inspections Division
Date: 02/10/17

Qty	Tag #	Model #	Description
1		ZE036H05B2C1AAA1A1	3 Ton, Single Stage Cooling, York Small Sunline Single Packa 410A Air Conditioner, 12.0 EER / 14.0 SEER, 50 MBH Input, Single Stage Gas Aluminum Steel, 208/230-3-60 • Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511) • 1.5 HP Standard Static Belt Drive Blower • 1" Throwaway Filters • Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors • Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil • Galvanized Steel Drain Pan • Standard Access Doors
1		1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
1		2EC0401	Kit, Single Enthalpy Field Installed
1		ZE060H10B2C1AAA1A1	5 Ton, Single Stage Cooling, York Small Sunline Single Packaged R-410A Air Conditioner, 11.8 EER / 14.0 SEER, 100 MBH Input, Single Stage Gas Aluminum Steel, 208/230-3-60 • Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511) • 1.5 HP Standard Static Belt Drive Blower • 1" Throwaway Filters • Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors • Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil • Galvanized Steel Drain Pan • Standard Access Doors
1		1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
1		2EC0401	Kit, Single Enthalpy Field Installed
1		ZE048H07B2C1AAA1A1	4 Ton, Single Stage Cooling, York Small Sunline Single Packaged R-410A Air Conditioner, 12.0 EER / 14.0 SEER, 75 MBH Input, Single Stage Gas Aluminum Steel, 208/230-3-60 • Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511) • 1.5 HP Standard Static Belt Drive Blower • 1" Throwaway Filters • Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors • Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil • Galvanized Steel Drain Pan • Standard Access Doors

Inspections Division
Date: 02/10/17

Qty	Tag #	Model #	Description
1		1RC0434	Roof Curb - 14" High, Flat, Uninsulated, Full Perimeter (Shippe Knocked Down)
1		1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
1		2EC0401	Kit, Single Enthalpy Field Installed

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

Predator (3-12.5 Ton Package)
N524

York Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZF090N12D2B1AAA1A1**

Quantity: **1** | System: **ZF090N12D2B1AAA1A1**

Cooling Performance		
Total gross capacity	99.5	MBH
Sensible gross capacity	70.0	MBH
Total net capacity	93.1	MBH
Sensible net capacity	63.6	MBH
Efficiency (at ARI)	11.00	EER
Integrated eff. (at ARI)	12.20	IEER
Ambient DB temp.	86.8	°F
Entering DB temp.	80.0	°F
Entering WB temp.	67.0	°F
Leaving DB temp.	58.4	°F
Leaving WB temp.	56.5	°F
Power input (w/o blower)	6.81	kW
Sound power	89	dB(A)

Refrigerant	
Refrigerant type	R-410A

Gas Heating Performance		
Entering DB temp.	60	°F
Heating output capacity (Max)	96	MBH
Supply air	3000	CFM
Heating input capacity (Max)	120	MBH
Leaving DB temp.	89.6	°F
Air temp. rise	29.6	°F
SSE	80.0	%
Stages	2	

Supply Air Blower Performance		
Supply air	3000	CFM
Ext. static pressure	0.6	IWG
Addl. Unit Losses (Options/Accessories)	0.2	IWG
Blower speed	1245	RPM
Max BHP of Motor (including service factor)	3.45	HP
Duct location	Bottom	
Motor rating	3.00	HP
Actual required BHP	2.03	HP
Power input	1.89	kW
Elevation	62	ft.
Drive type	BELT	

Electrical Data		
Power supply	230-3-60	
Unit min circuit ampacity	42.4	Amps
Unit max over-current protection	50	Amps

Dimensions & Weight					
Hgt	42 in.	Len	89 in.	Wth	59 in.
Weight with factory installed options					1075 lbs.

Clearances					
Right	12 in.	Front	36 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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

7.5 Ton

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

Unit Features

- Standard Cabinet with Composite Drain Pan
- Two Stage Cooling
- 120 MBH Input Aluminized Steel, Two Stage Gas Heat
- Full perimeter base rails with built in rigging capabilities
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards)
- Reciprocating Compressor
- Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 3 HP High Static Belt Drive Blower
- Unit Ships with 2" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 4 - (24" x 16"). Unit accepts 2" or 4" wide filters.
- Short Circuit Current: 5kA RMS Symmetrical
- Through-the-Curb and Through-the-Base Utility Connections
- Single Point Power Connection
- Micro-Channel "all-aluminum" condenser coil, Copper tube/aluminum fin evaporator coil
- Hinged Access Panels

Standard Unit Controller: Simplicity 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 re
- 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

BAS Controller

- Simplicity SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors

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

Predator (3-12.5 Ton Package) N524

York Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZF090N12D2B1AAA1A1**

Quantity: **1** | System: **ZF090N12D2B1AAA1A1**

Factory Installed Options

ZF090N12D2B1AAA1A1

Product Category:	**ZF**	Single Packaged R-410A Air Conditioner, Standard Efficiency 11 EER / 12.2 IEER (CV) / 13.5 IEER (Intellispeed) / 12.2 IEER (VAV)
Nominal Cooling Capacity:	**090**	7.5 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	**N12**	120 MBH Input Aluminized Steel, Two Stage Gas Heat
Airflow:	**D**	3 HP High Static Belt Drive Blower
Voltage:	**2**	208/230-3-60
Economizer / Damper:	**B**	Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Controls:	**A**	Simplicity® SE 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**	Standard Cabinet with Composite Drain Pan

Field Installed Accessories

- 2EC0401 - Kit, Single Enthalpy Field Installed (1.0 lbs)
- S1-YK-MAP1810-0P - MAP (Multiple Access Portal) Gateway- For use with SimplicitySE Control. (0.3 lbs)

Predator (3-12.5 Ton Package) N524

York Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZF090N12D2B1AAA1A1**

Quantity: **1** | System: **ZF090N12D2B1AAA1A1**

Consolidated Drawing

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: 36 [915]
   REAR: 36 [915]
   TOP: 72 [1830]
   BOTTOM: 0 [0]
4. TO REMOVE THE SLIDE-OUT DRAIN PAIN, A REAR 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. BOTTOM DUCTS DO NOT HAVE FLANGES.
8. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
9. DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
10. OPTIONAL COIL GUARDS, POWER EXHAUST, GAS HEAT, ECONOMIZER, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND BAROMETRIC RELIEF & FRESH AIR HOODS SHOWN.
11. DELETED
12. 8 TUBE HEAT EXCHANGER IS NOT AVAILABLE FOR 3 & 4 TON 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
6.5	ZF	860 [390]	38 [965]	24 [610]	200 [91]	149 [68]	218 [99]	292 [133]
7.5	ZF	880 [399]	38 [965]	24 [610]	205 [93]	153 [69]	223 [101]	299 [136]
5	ZH	864 [393]	40 [1016]	26 [660]	210 [95]	171 [78]	217 [99]	266 [121]
6.5 & 7.5	ZH	910 [413]	38 [965]	24 [610]	212 [96]	158 [72]	230 [104]	309 [140]
5	ZJ	770 [349]	40 [1016]	24 [610]	172 [78]	141 [64]	205 [93]	251 [114]
4	ZR	880 [399]	40 [1016]	26 [660]	214 [97]	174 [79]	221 [100]	271 [123]
5	ZR	868 [394]	40 [1016]	26 [660]	211 [96]	172 [78]	218 [99]	267 [121]
6.5	ZR	957 [435]	38 [965]	23 [584]	214 [97]	161 [73]	249 [113]	333 [151]
7.5	ZR	965 [438]	38 [965]	23 [584]	216 [98]	161 [73]	251 [114]	337 [153]
3	ZT	922 [418]	42.4 [1077]	24.7 [627]	202 [92]	184 [84]	255 [116]	281 [128]
4	ZT	960 [436]	42.5 [1080]	25.5 [648]	217 [98]	198 [90]	260 [118]	285 [129]
5	ZT	968 [439]	41.6 [1057]	25.5 [648]	223[101]	196 [89]	257 [117]	293 [133]

TOP VIEW

REAR (PARTIAL VIEW)
(INTAKE HOOD NOT SHOWN IN THIS VIEW)

DETAIL A

LEFT VIEW

FRONT VIEW
(OPTIONAL FRONT COIL GUARD NOT SHOWN IN THIS VIEW)

RIGHT VIEW

Predator (3-12.5 Ton Package)
N524

York Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZF090N12D2B1AAA1A1**
Quantity: **1**	System: **ZF090N12D2B1AAA1A1**

Low Leak Downflow Economizer

Low Leak Downflow Economizer (shown with optional Power Exhaust)

Low leak economizers are capable achieving low leakage rates of 3 cfm/sq. ft at 1” of static pressure, meeting or exceeding the following standards:

- ASHRAE 90.1-2010
- ASHRAE 62
- AMCA 511 (licensed as Class 1A damper)
- International Energy Conservation Code (IECC)
- California Title 24

The outdoor intake opening shall be covered with a rain hood that matches the exterior of the unit. Water eliminator/filters shall be provided.

Simultaneous economizer/compressor operation is also possible. Dampers shall fully close on power loss.

Predator (3-12.5 Ton Package)
N524

York Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZF090N12D2B1AAA1A1**
Quantity: **1**	System: **ZF090N12D2B1AAA1A1**

Component Location

6 1/2 Through 10 Tons

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**

Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **3**

System: **ZE048H07B2C1AAA1A1 (3)**

Cooling Performance		
Total gross capacity	53.8	MBH
Sensible gross capacity	38.1	MBH
Total net capacity	51.3	MBH
Sensible net capacity	35.6	MBH
Seasonal Efficiency (at ARI)	14.00	SEER
Efficiency (at ARI)	12.00	EER
Ambient DB temp.	86.8	°F
Entering DB temp.	80.0	°F
Entering WB temp.	67.0	°F
Leaving DB temp.	58.0	°F
Leaving WB temp.	56.3	°F
Power input (w/o blower)	3.13	kW
Sound power	80	dB(A)

Refrigerant	
Refrigerant type	R-410A

Gas Heating Performance		
Entering DB temp.	60	°F
Heating output capacity (Max)	59	MBH
Supply air	1600	CFM
Heating input capacity (Max)	75	MBH
Leaving DB temp.	94.1	°F
Air temp. rise	34.1	°F
SSE	81.6	%
Stages	1	

Supply Air Blower Performance		
Supply air	1600	CFM
Ext. static pressure	0.6	IWG
Addl. Unit Losses (Options/Accessories)	0.11	IWG
Blower speed	1030	RPM
Duct location	Bottom	
Motor rating	1.50	HP
Actual required BHP	0.80	HP
Power input	0.75	kW
Elevation	62	ft.
Drive type	BELT	

Electrical Data		
Power supply	230-3-60	
Unit min circuit ampacity	23.7	Amps
Unit max over-current protection	30	Amps

Dimensions & Weight					
Hgt	33 in.	Len	83 in.	Wth	45 in.
Weight with factory installed options					651 lbs.

Clearances					
Right	24 in.	Front	32 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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

4 Ton

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

Unit Features

- Single Stage Gas Aluminum Steel
- Single Stage Cooling
- Single Stage Cooling
- 75 MBH Input
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 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
- Scroll Compressor
- Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 1" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 2 - (15" x 20" x 1" or 2") and 1 - (14" x 25" x 1" or 2"). Unit accepts 1" or 2" wide filters.
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Standard Access Doors

Standard Unit Controller: Simplicity 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.

BAS Controller

- Simplicity SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors

Warranty

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

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**

Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **3**

System: **ZE048H07B2C1AAA1A1 (3)**

Factory Installed Options

ZE048H07B2C1AAA1A1

Product Category:	**ZE**	York Small Sunline Single Packaged R-410A Air Conditioner 12.0 EER / 14.0 SEER
Nominal Cooling Capacity:	**048**	4 Ton Single Stage Cooling
Heat Type and Nominal Heat Capacity:	**H07**	Single Stage Gas Aluminum Steel 75 MBH Input
Airflow Options:	**B**	1.5 HP Standard Static Belt Drive Blower
Voltage:	**2**	208/230-3-60
Economizer / Damper:	**C**	Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Controls:	**A**	Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors
Refrigeration:	**A**	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
Additional Options:	**1**	1" Throwaway Filters
Cabinet Options:	**A**	Galvanized Steel Drain Pan Standard Access Doors
Product Generation:	**1**	

Field Installed Accessories

- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)
- 2EC0401 - Kit, Single Enthalpy Field Installed (1.0 lbs)

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **3** | System: **ZE048H07B2C1AAA1A1 (3)**

Consolidated Drawing

NOTES:
1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:
   - RIGHT SIDE: 24 [609,6]
   - LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER)
   - FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
     32 [812,8] (GAS HEAT)
   - REAR: 12 [304,8] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER OR FIXED AIR/MOTORIZED DAMPER)
   - TOP: 72 [1828,8]
   - BOTTOM: 0 [0]
4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
5. 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.
6. SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
7. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
8. DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
9. OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

10 EXCEPT XN & 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
3	ZE	470 [213]	34.5 [876,3]	18.25 [463,6]	111 [50]	80 [36]	117 [53]	162 [73]
4	ZE	598 [271]	36 [914,4]	18.50 [469,9]	139 [63]	108 [49]	154 [70]	198 [90]
5	ZE	632 [287]	37.5 [952,5]	18.2 [462,3]	139 [63]	117 [53]	171 [78]	204 [93]
3	ZF	468 [212]	33 [838,2]	18.25 [463,6]	114 [52]	76 [35]	111 [50]	167 [76]
4	ZF	541 [245]	31.50 [800,1]	18.50 [469,9]	138 [63]	85 [39]	122 [55]	196 [89]
5	ZF	569 [258]	37 [939,8]	15 [381]	105 [48]	86 [39]	170 [77]	208 [94]
6	ZF	640 [290]	37 [939,8]	15 [381]	118 [54]	96 [44]	192 [87]	234 [106]
3	ZR	575 [261]	40 [1016]	20 [508]	132 [60]	125 [57]	155 [70]	164 [74]
4	ZR	585 [265]	40 [1016]	20 [508]	134 [61]	127 [58]	158 [72]	167 [76]
5	ZR	590 [268]	40 [1016]	20 [508]	135 [61]	128 [58]	159 [72]	168 [76]
3	XN	610 [277]	38.3 [972,8]	18.75 [476,3]	136 [62]	119 [54]	165 [75]	190 [86]
4	XN	616 [279]	38.2 [970,3]	18.4 [467,4]	135 [61]	117 [53]	169 [77]	195 [88]
5	XN	620 [281]	38.6 [980,4]	18 [457,2]	132 [60]	117 [53]	174 [79]	197 [89]
3	XP	575 [261]	39 [990,6]	20 [508]	135 [61]	121 [55]	151 [69]	168 [76]
4	XP	585 [265]	39 [990,6]	20 [508]	137 [62]	124 [56]	154 [70]	171 [78]
5	XP	590 [268]	39 [990,6]	20 [508]	138 [63]	125 [57]	155 [70]	172 [78]

REAR (PARTIAL VIEW)
(RAIN HOOD NOT SHOWN IN THIS VIEW)

LEFT VIEW

FRONT VIEW

RIGHT VIEW

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE048H07B2C1AAA1A1**
Quantity: **3**	System: **ZE048H07B2C1AAA1A1 (3)**

Typical Application

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE048H07B2C1AAA1A1**
Quantity: **3**	System: **ZE048H07B2C1AAA1A1 (3)**

Typical Field Power and Control Wiring

TYPICAL POWER WIRING

TYPICAL COOL/HEAT CONTROL WIRING

COOLING ONLY (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOLING THERMOSTAT.

COOLING / HEATING (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON THE SECOND STAGE COOLING OR TO HAVE AN ELECTRIC HEAT ACCESSORY WITH TWO STAGES OF HEAT, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

COOLING / HEATING (ELECTRONIC THERMOSTAT) MULTI STAGE

[1] ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL.

[2] SECOND STAGE COOLING IS NOT REQUIRED ON UNITS LESS ECONOMIZER.

[3] SECOND STAGE HEATING IS ONLY REQUIRED ON UNITS WITH A TWO STAGE ELECTRIC HEATER OR 2 STAGE GAS HEAT.

[4] REMOVE JUMPER J2 FROM TERMINALS 4 AND 9 ON JUMPER PLUG CONNECTOR P6 ON UNITS WITH ECONOMIZER. TERMINALS A1 AND A2 PROVIDE A RELAY OUT-PUT TO CLOSE THE OUTDOOR ECONOMIZER DAMPERS WHEN THE THERMOSTAT SWITCHES TO THE SET-BACK POSITION.

COOLING / HEATING (ELECTRONIC THERMOSTAT) SINGLE STAGE

[1]ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE036H05B2C1AAA1A1**

Quantity: **1** | System: **ZE036H05B2C1AAA1A1**

Cooling Performance		
Total gross capacity	39.5	MBH
Sensible gross capacity	28.1	MBH
Total net capacity	37.7	MBH
Sensible net capacity	26.3	MBH
Seasonal Efficiency (at ARI)	14.00	SEER
Efficiency (at ARI)	12.00	EER
Ambient DB temp.	86.8	°F
Entering DB temp.	80.0	°F
Entering WB temp.	67.0	°F
Leaving DB temp.	58.3	°F
Leaving WB temp.	56.5	°F
Power input (w/o blower)	2.27	kW
Sound power	81	dB(A)

Refrigerant	
Refrigerant type	R-410A

Gas Heating Performance		
Entering DB temp.	60	°F
Heating output capacity (Max)	40	MBH
Supply air	1200	CFM
Heating input capacity (Max)	50	MBH
Leaving DB temp.	90.9	°F
Air temp. rise	30.9	°F
SSE	81.6	%
Stages	1	

Supply Air Blower Performance		
Supply air	1200	CFM
Ext. static pressure	0.6	IWG
Addl. Unit Losses (Options/Accessories)	0.08	IWG
Blower speed	918	RPM
Duct location	Bottom	
Motor rating	1.50	HP
Actual required BHP	0.57	HP
Power input	0.54	kW
Elevation	62	ft.
Drive type	BELT	

Electrical Data		
Power supply	230-3-60	
Unit min circuit ampacity	19.6	Amps
Unit max over-current protection	25	Amps

Dimensions & Weight					
Hgt	33 in.	Len	83 in.	Wth	45 in.
Weight with factory installed options					568 lbs.

Clearances					
Right	24 in.	Front	32 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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

3 Ton

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

Unit Features

- Single Stage Gas Aluminum Steel
- Single Stage Cooling
- Single Stage Cooling
- 50 MBH Input
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 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
- Scroll Compressor
- Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 1" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 2 - (15" x 20" x 1" or 2") and 1 - (14" x 25" x 1" or 2"). Unit accepts 1" or 2" wide filters.
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Standard Access Doors

Standard Unit Controller: Simplicity 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.

BAS Controller

- Simplicity SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors

Warranty

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

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE036H05B2C1AAA1A1**

Quantity: **1** | System: **ZE036H05B2C1AAA1A1**

Factory Installed Options

ZE036H05B2C1AAA1A1

Product Category:	**ZE**	York Small Sunline Single Packaged R-410A Air Conditioner 12.0 EER / 14.0 SEER
Nominal Cooling Capacity:	**036**	3 Ton Single Stage Cooling
Heat Type and Nominal Heat Capacity:	**H05**	Single Stage Gas Aluminum Steel 50 MBH Input
Airflow Options:	**B**	1.5 HP Standard Static Belt Drive Blower
Voltage:	**2**	208/230-3-60
Economizer / Damper:	**C**	Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Controls:	**A**	Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors
Refrigeration:	**A**	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
Additional Options:	**1**	1" Throwaway Filters
Cabinet Options:	**A**	Galvanized Steel Drain Pan Standard Access Doors
Product Generation:	**1**	

Field Installed Accessories

- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)
- 2EC0401 - Kit, Single Enthalpy Field Installed (1.0 lbs)

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE036H05B2C1AAA1A1**

Quantity: **1** | System: **ZE036H05B2C1AAA1A1**

Consolidated Drawing

NOTES:
1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:
   - RIGHT SIDE: 24 [609,6]
   - LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER)
   - FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
     32 [812,8] (GAS HEAT)
   - REAR: 12 [304,8] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER OR FIXED AIR/MOTORIZED DAMPER)
   - TOP: 72 [1828,8]
   - BOTTOM: 0 [0]
4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
5. 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.
6. SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
7. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
8. DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
9. OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

10 EXCEPT XN & 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
3	ZE	470 [213]	34.5 [876,3]	18.25 [463,6]	111 [50]	80 [36]	117 [53]	162 [73]
4	ZE	598 [271]	36 [914,4]	18.50 [469,9]	139 [63]	108 [49]	154 [70]	198 [90]
5	ZE	632 [287]	37.5 [952,5]	18.2 [462,3]	139 [63]	117 [53]	171 [78]	204 [93]
3	ZF	468 [212]	33 [838,2]	18.25 [463,6]	114 [52]	76 [35]	111 [50]	167 [76]
4	ZF	541 [245]	31.50 [800,1]	18.50 [469,9]	138 [63]	85 [39]	122 [55]	196 [89]
5	ZF	569 [258]	37 [939,8]	15 [381]	105 [48]	86 [39]	170 [77]	208 [94]
6	ZF	640 [290]	37 [939,8]	15 [381]	118 [54]	96 [44]	192 [87]	234 [106]
3	ZR	575 [261]	40 [1016]	20 [508]	132 [60]	125 [57]	155 [70]	164 [74]
4	ZR	585 [265]	40 [1016]	20 [508]	134 [61]	127 [58]	158 [72]	167 [76]
5	ZR	590 [268]	40 [1016]	20 [508]	135 [61]	128 [58]	159 [72]	168 [76]
3	XN	610 [277]	38.3 [972,8]	18.75 [476,3]	136 [62]	119 [54]	165 [75]	190 [86]
4	XN	616 [279]	38.2 [970,3]	18.4 [467,4]	135 [61]	117 [53]	169 [77]	195 [88]
5	XN	620 [281]	38.6 [980,4]	18 [457,2]	132 [60]	117 [53]	174 [79]	197 [89]
3	XP	575 [261]	39 [990,6]	20 [508]	135 [61]	121 [55]	151 [69]	168 [76]
4	XP	585 [265]	39 [990,6]	20 [508]	137 [62]	124 [56]	154 [70]	171 [78]
5	XP	590 [268]	39 [990,6]	20 [508]	138 [63]	125 [57]	155 [70]	172 [78]

REAR (PARTIAL VIEW)
(RAIN HOOD NOT SHOWN IN THIS VIEW)

LEFT VIEW

FRONT VIEW

RIGHT VIEW

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE036H05B2C1AAA1A1**
Quantity: **1**	System: **ZE036H05B2C1AAA1A1**

Typical Application

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE036H05B2C1AAA1A1**
Quantity: **1**	System: **ZE036H05B2C1AAA1A1**

Typical Field Power and Control Wiring

TYPICAL POWER WIRING

TYPICAL COOL/HEAT CONTROL WIRING

COOLING ONLY (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOLING THERMOSTAT.

COOLING / HEATING (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON THE SECOND STAGE COOLING OR TO HAVE AN ELECTRIC HEAT ACCESSORY WITH TWO STAGES OF HEAT, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

COOLING / HEATING (ELECTRONIC THERMOSTAT) MULTI STAGE

[1] ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL.

[2] SECOND STAGE COOLING IS NOT REQUIRED ON UNITS LESS ECONOMIZER.

[3] SECOND STAGE HEATING IS ONLY REQUIRED ON UNITS WITH A TWO STAGE ELECTRIC HEATER OR 2 STAGE GAS HEAT.

[4] REMOVE JUMPER J2 FROM TERMINALS 4 AND 9 ON JUMPER PLUG CONNECTOR P6 ON UNITS WITH ECONOMIZER. TERMINALS A1 AND A2 PROVIDE A RELAY OUT-PUT TO CLOSE THE OUTDOOR ECONOMIZER DAMPERS WHEN THE THERMOSTAT SWITCHES TO THE SET-BACK POSITION.

COOLING / HEATING (ELECTRONIC THERMOSTAT) SINGLE STAGE

[1]ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE060H10B2C1AAA1A1**

Quantity: **1** | System: **ZE060H10B2C1AAA1A1**

Cooling Performance		
Total gross capacity	64.2	MBH
Sensible gross capacity	46.7	MBH
Total net capacity	60.4	MBH
Sensible net capacity	42.9	MBH
Seasonal Efficiency (at ARI)	14.00	SEER
Efficiency (at ARI)	11.80	EER
Ambient DB temp.	86.8	°F
Entering DB temp.	80.0	°F
Entering WB temp.	67.0	°F
Leaving DB temp.	58.4	°F
Leaving WB temp.	56.8	°F
Power input (w/o blower)	3.85	kW
Sound power	82	dB(A)

Refrigerant	
Refrigerant type	R-410A

Gas Heating Performance		
Entering DB temp.	60	°F
Heating output capacity (Max)	79	MBH
Supply air	2000	CFM
Heating input capacity (Max)	100	MBH
Leaving DB temp.	96.6	°F
Air temp. rise	36.6	°F
SSE	80.8	%
Stages	1	

Supply Air Blower Performance		
Supply air	2000	CFM
Ext. static pressure	0.6	IWG
Addl. Unit Losses (Options/Accessories)	0.15	IWG
Blower speed	1151	RPM
Duct location	Bottom	
Motor rating	1.50	HP
Actual required BHP	1.19	HP
Power input	1.11	kW
Elevation	62	ft.
Drive type	BELT	

Electrical Data		
Power supply	230-3-60	
Unit min circuit ampacity	28.7	Amps
Unit max over-current protection	35	Amps

Dimensions & Weight					
Hgt	33 in.	Len	83 in.	Wth	45 in.
Weight with factory installed options					689 lbs.

Clearances					
Right	24 in.	Front	32 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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

5 Ton

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

Unit Features

- Single Stage Gas Aluminum Steel
- Single Stage Cooling
- Single Stage Cooling
- 100 MBH Input
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 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
- Scroll Compressor
- Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 1" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 2 - (15" x 20" x 1" or 2") and 1 - (14" x 25" x 1" or 2"). Unit accepts 1" or 2" wide filters.
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Standard Access Doors

Standard Unit Controller: Simplicity 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.

BAS Controller

- Simplicity SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors

Warranty

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

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE060H10B2C1AAA1A1**

Quantity: **1** | System: **ZE060H10B2C1AAA1A1**

Factory Installed Options

ZE060H10B2C1AAA1A1

Product Category:	**ZE**	York Small Sunline Single Packaged R-410A Air Conditioner 11.8 EER / 14.0 SEER
Nominal Cooling Capacity:	**060**	5 Ton Single Stage Cooling
Heat Type and Nominal Heat Capacity:	**H10**	Single Stage Gas Aluminum Steel 100 MBH Input
Airflow Options:	**B**	1.5 HP Standard Static Belt Drive Blower
Voltage:	**2**	208/230-3-60
Economizer / Damper:	**C**	Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Controls:	**A**	Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors
Refrigeration:	**A**	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
Additional Options:	**1**	1" Throwaway Filters
Cabinet Options:	**A**	Galvanized Steel Drain Pan Standard Access Doors
Product Generation:	**1**	

Field Installed Accessories

- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)
- 2EC0401 - Kit, Single Enthalpy Field Installed (1.0 lbs)

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE060H10B2C1AAA1A1**

Quantity: **1** | System: **ZE060H10B2C1AAA1A1**

Consolidated Drawing

NOTES:
1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:
   - RIGHT SIDE: 24 [609,6]
   - LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER)
   - FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
     32 [812,8] (GAS HEAT)
   - REAR: 12 [304,8] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER OR FIXED AIR/MOTORIZED DAMPER)
   - TOP: 72 [1828,8]
   - BOTTOM: 0 [0]
4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
5. 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.
6. SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
7. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
8. DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
9. OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

10 EXCEPT XN & 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
3	ZE	470 [213]	34.5 [876,3]	18.25 [463,6]	111 [50]	80 [36]	117 [53]	162 [73]
4	ZE	598 [271]	36 [914,4]	18.50 [469,9]	139 [63]	108 [49]	154 [70]	198 [90]
5	ZE	632 [287]	37.5 [952,5]	18.2 [462,3]	139 [63]	117 [53]	171 [78]	204 [93]
3	ZF	468 [212]	33 [838,2]	18.25 [463,6]	114 [52]	76 [35]	111 [50]	167 [76]
4	ZF	541 [245]	31.50 [800,1]	18.50 [469,9]	138 [63]	85 [39]	122 [55]	196 [89]
5	ZF	569 [258]	37 [939,8]	15 [381]	105 [48]	86 [39]	170 [77]	208 [94]
6	ZF	640 [290]	37 [939,8]	15 [381]	118 [54]	96 [44]	192 [87]	234 [106]
3	ZR	575 [261]	40 [1016]	20 [508]	132 [60]	125 [57]	155 [70]	164 [74]
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3	XN	610 [277]	38.3 [972,8]	18.75 [476,3]	136 [62]	119 [54]	165 [75]	190 [86]
4	XN	616 [279]	38.2 [970,3]	18.4 [467,4]	135 [61]	117 [53]	169 [77]	195 [88]
5	XN	620 [281]	38.6 [980,4]	18 [457,2]	132 [60]	117 [53]	174 [79]	197 [89]
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5	XP	590 [268]	39 [990,6]	20 [508]	138 [63]	125 [57]	155 [70]	172 [78]

REAR (PARTIAL VIEW)
(RAIN HOOD NOT SHOWN IN THIS VIEW)

LEFT VIEW

FRONT VIEW

RIGHT VIEW

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE060H10B2C1AAA1A1**
Quantity: **1**	System: **ZE060H10B2C1AAA1A1**

Typical Application

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE060H10B2C1AAA1A1**
Quantity: **1**	System: **ZE060H10B2C1AAA1A1**

Typical Field Power and Control Wiring

TYPICAL POWER WIRING

TYPICAL COOL/HEAT CONTROL WIRING

COOLING ONLY (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOLING THERMOSTAT.

COOLING / HEATING (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON THE SECOND STAGE COOLING OR TO HAVE AN ELECTRIC HEAT ACCESSORY WITH TWO STAGES OF HEAT, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

COOLING / HEATING (ELECTRONIC THERMOSTAT) MULTI STAGE

[1] ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL.

[2] SECOND STAGE COOLING IS NOT REQUIRED ON UNITS LESS ECONOMIZER.

[3] SECOND STAGE HEATING IS ONLY REQUIRED ON UNITS WITH A TWO STAGE ELECTRIC HEATER OR 2 STAGE GAS HEAT.

[4] REMOVE JUMPER J2 FROM TERMINALS 4 AND 9 ON JUMPER PLUG CONNECTOR P6 ON UNITS WITH ECONOMIZER. TERMINALS A1 AND A2 PROVIDE A RELAY OUT-PUT TO CLOSE THE OUTDOOR ECONOMIZER DAMPERS WHEN THE THERMOSTAT SWITCHES TO THE SET-BACK POSITION.

COOLING / HEATING (ELECTRONIC THERMOSTAT) SINGLE STAGE

[1]ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **1** | System: **ZE048H07B2C1AAA1A1**

Cooling Performance		
Total gross capacity	53.8	MBH
Sensible gross capacity	38.1	MBH
Total net capacity	51.3	MBH
Sensible net capacity	35.6	MBH
Seasonal Efficiency (at ARI)	14.00	SEER
Efficiency (at ARI)	12.00	EER
Ambient DB temp.	86.8	°F
Entering DB temp.	80.0	°F
Entering WB temp.	67.0	°F
Leaving DB temp.	58.0	°F
Leaving WB temp.	56.3	°F
Power input (w/o blower)	3.13	kW
Sound power	80	dB(A)

Refrigerant	
Refrigerant type	R-410A

Gas Heating Performance		
Entering DB temp.	60	°F
Heating output capacity (Max)	59	MBH
Supply air	1600	CFM
Heating input capacity (Max)	75	MBH
Leaving DB temp.	94.1	°F
Air temp. rise	34.1	°F
SSE	81.6	%
Stages	1	

Supply Air Blower Performance		
Supply air	1600	CFM
Ext. static pressure	0.6	IWG
Addl. Unit Losses (Options/Accessories)	0.11	IWG
Blower speed	1030	RPM
Duct location	Bottom	
Motor rating	1.50	HP
Actual required BHP	0.80	HP
Power input	0.75	kW
Elevation	62	ft.
Drive type	BELT	

Electrical Data		
Power supply	230-3-60	
Unit min circuit ampacity	23.7	Amps
Unit max over-current protection	30	Amps

Dimensions & Weight					
Hgt	33 in.	Len	83 in.	Wth	45 in.
Weight with factory installed options					651 lbs.

Clearances					
Right	24 in.	Front	32 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

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

4 Ton

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

Unit Features

- Single Stage Gas Aluminum Steel
- Single Stage Cooling
- Single Stage Cooling
- 75 MBH Input
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 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
- Scroll Compressor
- Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 1" Throwaway Filters
- Solid Core Liquid Line Filter Driers
- Replacement Filters: 2 - (15" x 20" x 1" or 2") and 1 - (14" x 25" x 1" or 2"). Unit accepts 1" or 2" wide filters.
- Through-the-Curb and Through-The-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Standard Access Doors

Standard Unit Controller: Simplicity 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.

BAS Controller

- Simplicity SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors

Warranty

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

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **1** | System: **ZE048H07B2C1AAA1A1**

Factory Installed Options

ZE048H07B2C1AAA1A1

Product Category:	**ZE**	York Small Sunline Single Packaged R-410A Air Conditioner 12.0 EER / 14.0 SEER
Nominal Cooling Capacity:	**048**	4 Ton Single Stage Cooling
Heat Type and Nominal Heat Capacity:	**H07**	Single Stage Gas Aluminum Steel 75 MBH Input
Airflow Options:	**B**	1.5 HP Standard Static Belt Drive Blower
Voltage:	**2**	208/230-3-60
Economizer / Damper:	**C**	Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
Controls:	**A**	Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors
Refrigeration:	**A**	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
Additional Options:	**1**	1" Throwaway Filters
Cabinet Options:	**A**	Galvanized Steel Drain Pan Standard Access Doors
Product Generation:	**1**	

Field Installed Accessories

- 1RC0434 - Roof Curb - 14" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (86.0 lbs)
- 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (6.0 lbs)
- 2EC0401 - Kit, Single Enthalpy Field Installed (1.0 lbs)

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU** | Unit Model #: **ZE048H07B2C1AAA1A1**

Quantity: **1** | System: **ZE048H07B2C1AAA1A1**

Consolidated Drawing

NOTES:
1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:
   - RIGHT SIDE: 24 [609,6]
   - LEFT SIDE: 24 [609,6] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER)
   - FRONT: 24 [609,6] (COOLING/ELECTRIC HEAT)
     32 [812,8] (GAS HEAT)
   - REAR: 12 [304,8] (LESS ECONOMIZER)
     36 [914,4] (WITH ECONOMIZER OR FIXED AIR/MOTORIZED DAMPER)
   - TOP: 72 [1828,8]
   - BOTTOM: 0 [0]
4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
5. 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.
6. SIDE DUCT FLANGES ARE 0.875" [22,2] HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
7. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
8. DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
9. OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

10 EXCEPT XN & 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
3	ZE	470 [213]	34.5 [876,3]	18.25 [463,6]	111 [50]	80 [36]	117 [53]	162 [73]
4	ZE	598 [271]	36 [914,4]	18.50 [469,9]	139 [63]	108 [49]	154 [70]	198 [90]
5	ZE	632 [287]	37.5 [952,5]	18.2 [462,3]	139 [63]	117 [53]	171 [78]	204 [93]
3	ZF	468 [212]	33 [838,2]	18.25 [463,6]	114 [52]	76 [35]	111 [50]	167 [76]
4	ZF	541 [245]	31.50 [800,1]	18.50 [469,9]	138 [63]	85 [39]	122 [55]	196 [89]
5	ZF	569 [258]	37 [939,8]	15 [381]	105 [48]	86 [39]	170 [77]	208 [94]
6	ZF	640 [290]	37 [939,8]	15 [381]	118 [54]	96 [44]	192 [87]	234 [106]
3	ZR	575 [261]	40 [1016]	20 [508]	132 [60]	125 [57]	155 [70]	164 [74]
4	ZR	585 [265]	40 [1016]	20 [508]	134 [61]	127 [58]	158 [72]	167 [76]
5	ZR	590 [268]	40 [1016]	20 [508]	135 [61]	128 [58]	159 [72]	168 [76]
3	XN	610 [277]	38.3 [972,8]	18.75 [476,3]	136 [62]	119 [54]	165 [75]	190 [86]
4	XN	616 [279]	38.2 [970,3]	18.4 [467,4]	135 [61]	117 [53]	169 [77]	195 [88]
5	XN	620 [281]	38.6 [980,4]	18 [457,2]	132 [60]	117 [53]	174 [79]	197 [89]
3	XP	575 [261]	39 [990,6]	20 [508]	135 [61]	121 [55]	151 [69]	168 [76]
4	XP	585 [265]	39 [990,6]	20 [508]	137 [62]	124 [56]	154 [70]	171 [78]
5	XP	590 [268]	39 [990,6]	20 [508]	138 [63]	125 [57]	155 [70]	172 [78]

REAR (PARTIAL VIEW)
(RAIN HOOD NOT SHOWN IN THIS VIEW)

LEFT VIEW

FRONT VIEW

RIGHT VIEW

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

F

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE048H07B2C1AAA1A1**
Quantity: **1**	System: **ZE048H07B2C1AAA1A1**

Typical Application

Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE048H07B2C1AAA1A1**
Quantity: **1**	System: **ZE048H07B2C1AAA1A1**

Typical Field Power and Control Wiring

TYPICAL POWER WIRING

TYPICAL COOL/HEAT CONTROL WIRING

COOLING ONLY (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON SECOND STAGE COOLING, USE A 2 STAGE COOLING THERMOSTAT.

COOLING / HEATING (24 VOLT THERMOSTAT)

[1]24 VOLT THERMOSTAT. TO CONTROL THE ECONOMIZER ON THE SECOND STAGE COOLING OR TO HAVE AN ELECTRIC HEAT ACCESSORY WITH TWO STAGES OF HEAT, USE A 2 STAGE COOL AND HEAT THERMOSTAT.

COOLING / HEATING (ELECTRONIC THERMOSTAT) MULTI STAGE

[1] ELECTRONIC PROGRAMMABLE THERMOSTAT TYPICAL.

[2] SECOND STAGE COOLING IS NOT REQUIRED ON UNITS LESS ECONOMIZER.

[3] SECOND STAGE HEATING IS ONLY REQUIRED ON UNITS WITH A TWO STAGE ELECTRIC HEATER OR 2 STAGE GAS HEAT.

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COOLING / HEATING (ELECTRONIC THERMOSTAT) SINGLE STAGE

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Small Sunline (3-6 Ton Package) N543

Single Package R-410A Air Conditioner

Inspections Division
Date: 02/10/17

Project Name: **Lancaster RTU**	Unit Model #: **ZE048H07B2C1AAA1A1**
Quantity: **1**	System: **ZE048H07B2C1AAA1A1**

1RC0434 Roof Curb

* Supply and Return Air (including duct support rails) shown are typical for bottom duct applications.

For location of horizontal duct applications (on back of unit), refer to Unit Dimensions details.

DUCT SIZES:
Supply Air = 19" x 19"
Return Air = 19" x 19"

1RC0434 Roof Curb Dimensions