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**Date** 

02/10/2022

**Project Name** 

Pleasant Hill Phase 2

Project Number Client / Purchaser



### **Submittal Summary Page**

Qty	Tag #	Model # / Material #	Description
1	RTU-26	ZS-20S30U4B1ACA2A1	20 Ton, Single Packaged R-410A Air Conditioner, Two Stage Cooling, 9.8 EER, 300 MBH Input Stainless Steel, Two Stage Gas Heat, 460-3-60, Single Wall Construction  • VFD with Bypass and Intellispeed  • Dry Bulb Low Leak Economizer w/Barometric Relief 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" Pleated Filters (MERV 8)  • Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.  • Standard Condenser Coil  • Standard Evaporator Coil  • Standard Access Doors  • Galvanized Steel Drain Pan
1	RTU-26	ZW-20S30U4B1ACA2A1	20 Ton, 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  • VFD with Bypass and Intellispeed  • Dry Bulb Low Leak Economizer w/Barometric Relief 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" Pleated Filters (MERV 8)  • Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.  • Standard Condenser Coil  • Standard Evaporator Coil  • Standard Access Doors  • Galvanized Steel Drain Pan

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

# FRASER-JOHNSTON

## ReliaPlus™ 100 15-25 Ton Package

### Fraser-Johnston Single Package R-410A Air

Conditioner

Project Name: Pleasant Hill Phase 2 Unit Model #: ZS-20S30U4B1ACA2A1

Quantity: 1 Tag #: RTU-26 System: ZS-20S30U4B1ACA2A1

	Cooling F	Perfo	rman	ce		
Total gross capacity Sensible gross capa Total net capacity Sensible net capacity Sensible net capacit Efficiency (at ARI) Integrated eff. (at AR Ambient DB temp. Entering DB temp. Leaving DB temp. Leaving WB temp. Leaving WB temp. Leaving WB temp.	city /	0.101		<u> </u>	12.30 95.0 80.0 67.0 58.1	MBH MBH EER IEER °F °F
Leaving air temp dev					55.80	°F
Power input (w/o blo Sound power	wer)				22.57	kW dB(A)
Souria power	Refr	igera	nt		32	ub(A)
Refrigerant type	IXCII	igera			R-410A	
Sys1					22 lbs	
Sys2					23 lbs	8 oz
G	as Heating	g Per	form	ance		
Entering DB temp. Heating output capaci Supply air Heating input capaci Leaving DB temp. Air temp. rise SSE Stages	- ' '				8000	MBH CFM MBH °F °F
Supp	Supply Air Blower Performance					
Supply air Ext. static pressure Addl. Unit Losses (O Blower speed Max BHP of Motor (i Duct location Motor rating Actual required BHP Power input Elevation Drive type	ptions/Acce	essorie	es) actor)		8000 1.0 0.15 1023 8.63 Bottom 7.50 6.83 5.72	IWG IWG RPM HP HP
	Electr	ical D	ata			
Power supply Unit min circuit ampa Unit max over-currer	t protection					Amps Amps
	Dimensio					
Hgt 53 in. Weight with factory in				Wth		2 in. 3 lbs.
Clearances						
Right 36 in. Top 72 in.	Front Bottom		in. in.	Rear Left		9 in. 4 in





#### 20 Ton

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

#### **Unit Features**

- · Two 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
- Dual Refrigerant Circuits for Efficient Part Load Operation with Scroll Compressors
- Dry Bulb Low Leak Economizer w/Barometric Relief 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" Pleated Filters (MERV 8)
- Solid Core Liquid Line Filter Driers
- 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")
- Short Circuit Current: 5kA RMS Symmetrical
- Single Point Power Connection
- Through-the-Curb and Through-The-Base Utility Connections
- Standard Condenser Coil
- Standard Evaporator Coil
- Crane Required to Unload Unit
- Galvanized Steel Drain Pan
- Standard Access Doors

#### **BAS Controller**

- VFD with Bypass and Intellispeed
- 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

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

### Warranty

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



## ReliaPlus™ 100 15-25 Ton Package

Fraser-Johnston Single Package R-410A Air Conditioner

Project Name: Pleasant Hill Phase 2 Unit Model #: ZS-20S30U4B1ACA2A1

Quantity: 1 Tag #: RTU-26 System: ZS-20S30U4B1ACA2A1

Additional Electrical Data				
Power supply	460-3-60			
Unit min circuit ampacity	54.3	Amps		
Unit max over-current protection	70	Amps		
Min Voltage	432	V		
Max Voltage	504	V		
Comp #1 ŘLA	17.9			
Comp #1 LRA	125			
Comp #2 RLA	17.9			
Comp #2 LRA	125			
Indoor Mtr Voltage	460-3-60			
Indoor Mtr FLA	9.7			
Outdoor Mtr Qty	2			
Outdoor Fan Voltage	460-3-60			
OD Fan Mtr FLA (ea.)	2.2			
Power Ex Mtr Qty	1			
Powered Ex Voltage	460-1-60			
Power Ex Mtr FLA (ea)	2.2			
Combustion Mtr Qty	1			
Combustion Motor Voltage	460-1-60			
Combustion Mtr FLA (ea)	0.3			



## ReliaPlus™ 100 15-25 Ton Package

Fraser-Johnston Single Package R-410A Air Conditioner

ZS-20S30U4B1ACA2A1

Project Name: Pleasant Hill Phase 2 Unit Model #: Quantity: 1 Tag #: RTU-26 Consolidated Drawing NOTES: CENTER OF GRAVITY OPERATING I. FOR OUTDOOR USE ONLY LOCATION (BASE UNIT) 4 POINT CORNER LOADS (LBS) (BASE UNIT) TONNAGE WEIGHT (LBS) (BASE UNIT) 2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS. MIN. CLEARANCES TO BE: 17.5 ZS 470 [213] 511 [232] RIGHT SIDE: 36 [914,4] 2006 [910] 70.98 [1802,9] 45 [1143] 534 [242] 491 [223] LEFT SIDE: 24 [609,6] (LESS ECONOMIZER) ECONOMIZER/ 36 [914,4] (WITH ECONOMIZER) MOTORIZED DAMPER ZS 2533 [1149] 70 [1778] 44 [1117,6] 589 [267] 622 [282] 679 [308] 643 [292] & PWR. EXHAUST RAIN HOOD (OPTIONAL: 36 [914,4] 25 ZS 2597 [1178] 70 [1778] 44.5 [1130,3] 611 [277] 645 [293] 689 [313] 652 [296] REAR: 24 [609,6] (LESS ECONOMIZER) 49 [1244,6] (WITH ECONOMIZER) 15 ΧA 45 [1143] 454 [206] 592 [269] 619 [281] 475 [216] 2140 [971] 77.1 [1958,3] TOP: 72 [1828,8] WITH 36 [914,4] MAX. HORIZ. [1803,8] OVERHANG (FOR CONDENSER AIR DISCHARGE) 0 [0] 35.23 4. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT [894,7] DOWNFLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY REAR 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. [1670,1] - 5.89 [149.5] 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. S RETURN DIMENSIONS IN E J ARE IN MILLIMETERS OR KILOGRAMS. OPTIONAL COIL GUARD, GAS HEAT, ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN. RIGHT 34.98 [69,2] [888.5] 33 08 21.40<del>-</del> [543,5] BOTTOM ENTRY [840,2] 10 EXCEPT XA (HEAT PUMP) UNITS. RETURN SUPPLY Ø3.00 [76,2] FPT COMPARTMENT 40.38 [1025,5] DIRECTION OF AIRFLOW BOTTOM ENTRY Ø 0.75 [19,1] FPT CENTER OF GRAVITY [204,8] 27.75 39.59 9.75 [704.9] [1005.5] D 18.63 11.13 [473,1] [129,0] [282,6] [236,5] [317,5] REAR (PARTIAL) VIEW (WITH SIDE DUCT FLANGE PANELS INSTALLED) GAS SUPPLY BOTTOM ENTRY 46.21 Ø 1.69 [42,9] - I" [25,4] NPT AT GAS VALVE [1173.8] -ECONOMIZER/MOTORIZED DAMPER AND PWR. EXHAUST RAIN HOOD CTL WIRING ENTRY COMBUSTION AIR INLET HOOD--VENTOR OUTLET HOODS (OPTIONAL) [28,6] CONVENIENCE OUTLET COVER (OPTIONAL) CONTROL BOX OUTDOOR AIR BLOWER BLOWER EVAPORATOR BLOWER COMP. ACCESS MOTOR ACCESS 26.00 36.67 FILTER 51.81 [931,5] [1315.9] [660,5] E E ELEC. HEAT ACCESS [246,8] -DISCONNECT SWITCH [181,0] [162,7] COVER (OPTIONAL) 92.00 5.89 [147,8] [118,6] [149.6] Ø 2.38 K.O. GAS SUPPLY ENTRY-I" [25.4] FPT-[292.1] 46.23 -COIL GUARD [1028.7] I" [25,4] NPT AT GAS VALVE COND. DRAIN PWR WIRING ENTRY [1174,3] 28.68 -RIGHT VIEW (OPTIONAL) 136.25 Ø3.63 K.O. [92,1] [728,6] [3460,8] FRONT VIEW LEFT VIEW



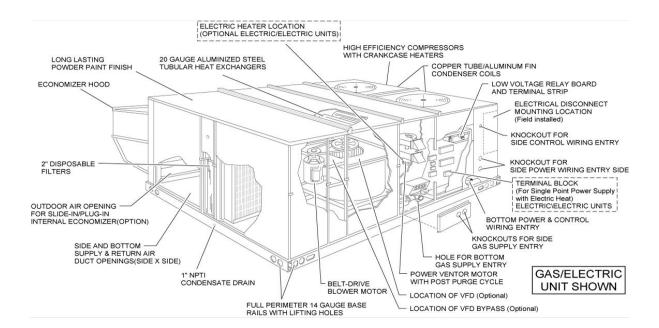
## ReliaPlus™ 100 15-25 Ton Package

Fraser-Johnston Single Package R-410A Air Conditioner

Project Name: Pleasant Hill Phase 2 Unit Model #: ZS-20S30U4B1ACA2A1

Quantity: 1 Tag #: RTU-26

Component Locations





## ReliaPlus™ 100 15-25 Ton Package

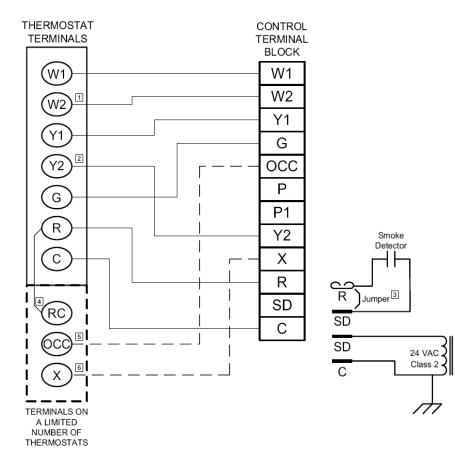
# Fraser-Johnston Single Package R-410A Air Conditioner

Project Name: Pleasant Hill Phase 2 Unit Model #: ZS-20S30U4B1ACA2A1

Quantity: 1 Tag #: RTU-26

**Typical Control Diagram** 

### **Typical Control Diagram**



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



## **Submittal Summary Page**

Qty	Tag #	Model # / Material #	Description
11	RTU- 1,2,3,4,5,6,1 1,12,13,17,2 0	ZE036J05B4C1ACA2B2	3 Ton, Single Packaged R-410A Air Conditioner, Single Stage Cooling, 12.0 EER / 14.0 SEER, Single Stage Gas Stainless Steel, 50 MBH Input, 460-3-60  • 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  • 2" Pleated Filters (MERV 8)  • Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.  • Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil  • Galvanized Steel Drain Pan  • Hinged & Tool Free Filter, Motor, and Electrical Access Panels
11	RTU- 1,2,3,4,5,6,1 1,12,13,17,2 0	1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
1	RTU-7	ZE072J10D4C1ACA2B1	<ul> <li>6 Ton, Single Packaged R-410A Air Conditioner, Two Stage Cooling / Intellispeed w/VFD Standard, 11.00 EER, Single Stage Gas Stainless Steel, 100 MBH Input, 460-3-60</li> <li>Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection &amp; Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)</li> <li>3 HP High Static Belt Drive Blower</li> <li>2" Pleated Filters (MERV 8)</li> <li>Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.</li> <li>Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil</li> <li>Galvanized Steel Drain Pan</li> <li>Hinged &amp; Tool Free Filter, Motor, and Electrical Access Panels</li> </ul>
1	RTU-7	1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
10	RTU- 8,9,10,15,18, 21,22,23,27, 28	ZE048J07B4C1ACA2B2	<ul> <li>4 Ton, Single Packaged R-410A Air Conditioner, Single Stage</li> <li>Cooling, 12.0 EER / 14.0 SEER, Single Stage Gas Stainless Steel,</li> <li>75 MBH Input, 460-3-60</li> <li>Dry Bulb Economizer and Hood (No Barometric Relief Damper)</li> <li>with Economizer Fault Detection &amp; Diagnostic (Meets ASHRAE</li> </ul>

Qty	Tag #	Model # / Material #	Description
			<ul> <li>90.1-2013, IECC 2015, California Title 24, AMCA 511)</li> <li>1.5 HP Standard Static Belt Drive Blower</li> <li>2" Pleated Filters (MERV 8)</li> <li>Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.</li> <li>Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil</li> <li>Galvanized Steel Drain Pan</li> <li>Hinged &amp; Tool Free Filter, Motor, and Electrical Access Panels</li> </ul>
10	RTU- 8,9,10,15,18, 21,22,23,27, 28	1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
5	RTU- 14,16,24,25, 29	ZE060J10B4C1ACA2B2	<ul> <li>5 Ton, Single Packaged R-410A Air Conditioner, Single Stage Cooling, 11.8 EER / 14.0 SEER, Single Stage Gas Stainless Steel, 100 MBH Input, 460-3-60</li> <li>Dry Bulb Economizer and Hood (No Barometric Relief Damper) with Economizer Fault Detection &amp; Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)</li> <li>1.5 HP Standard Static Belt Drive Blower</li> <li>2" Pleated Filters (MERV 8)</li> <li>Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.</li> <li>Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil</li> <li>Galvanized Steel Drain Pan</li> <li>Hinged &amp; Tool Free Filter, Motor, and Electrical Access Panels</li> </ul>
5	RTU-14,16,	1RD0410	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)

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





Project Name: Pleasant Hill Phase 2 Unit Model #: ZE048J07B4C1ACA2B2

System: ZE048J07B4C1ACA2B2

Quantity: 10 Tag #:<mark>RTU-</mark> 8,9,10,15,18,21,22,23<mark>,27,28</mark>

Cooling Performance					
Total gross capacity	50.8	MBH			
Sensible gross capacity	36.7	MBH			
Total net capacity	48.1	MBH			
Sensible net capacity	34.0	MBH			
Seasonal Efficiency (at ARI)		SEER			
Efficiency (at ARI)	12.00	EER			
Ambient DB temp.	95.0	°F			
Entering DB temp.	80.0	°F			
Entering WB temp.	67.0	°F			
Leaving DB temp.	58.8	-			
Leaving WB temp.	56.9	-			
Leaving air temp dew point	55.70	°F			
Power input (w/o blower)	3.49	kW			
Sound power	80	dB(A)			
Refrigerant					
Refrigerant type	R-410A				
Sys1	5 lbs	6 oz			
Gas Heating Performance					

Gas Heating Performance			
Entering DB temp.	65	°F	
Heating output capacity (Max)	59	MBH	
Supply air	1600	CFM	
Heating input capacity (Max)	75	MBH	
Leaving DB temp.	99.1	°F	
Air temp. rise	34.1	°F	
SSE	80.0	%	
Stages	1		
Supply Air Blower Performance			

Supply Air Blower Performa	ance
Supply air	1600 CFM
Ext. static pressure	0.75 IWG
Addl. Unit Losses (Options/Accessories)	0.11 IWG
Blower speed	1092 RPM
Max BHP of Motor (including service factor)	1.73 HP
Duct location )	Bottom
Motor rating	1.50 HP
Actual required BHP	.87 HP
Power input	0.81 kW
Elevation	0 ft.
Drive type	BELT

E	ectrical Da	ıta			
Power supply	4	460-3-60			
Unit min circuit ampacity			11 Amps		
Unit max over-current prote	ection		15 Amps		
Dimensions & Weight					
Hgt 33 in. Len Weight with factory installe	83 ir	n. Wth	45 in.		
Weight with factory installe	d options		708 lbs.		

	Clearances				
Right	24 in.	Front	32 in.	Rear	12 in.
Тор	72 in.	Bottom	0 in.	Left	24 in.

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





#### 4 Ton

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

#### **Unit Features**

- · Single Stage Cooling
- · Single Stage Gas Stainless Steel
- 75 MBH Input
- Either Supply and/or Return can be Field Converted from Vertical to Horizontal Configuration without Cutting Panels.
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards)
- Scroll Compressor
- 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
- Solid Core Liquid Line Filter Driers
- 2" Pleated Filters (MERV 8)
- 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.
- Short Circuit Current: 5kA RMS Symmetrical
- Through-the-Curb and Through-The-Base Utility Connections
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Hinged & Tool Free Filter, Motor, and Electrical Access Panels

### 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.

#### **BAS Controller**

 Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 communication card.

#### Warranty

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



Project Name: Pleasant Hill Phase 2 Unit Model #: ZE048J07B4C1ACA2B2

Quantity: 10 Tag #: RTU-8,9,10,15,18,21,22,23,27,28 System: ZE048J07B4C1ACA2B2

Additional Electrical Data					
Power supply	460-3-60				
Unit min circuit ampacity	11 Amps				
Unit max over-current protection	15 Amps				
Min Voltage	432 V				
Max Voltage	504 V				
Comp #1 ŘLA	6.2				
Comp #1 LRA	41.0				
Indoor Mtr Voltage	460-3-60				
Indoor Mtr FLA	2.1				
Outdoor Mtr Qty	1				
Outdoor Fan Voltage	460-1-60				
OD Fan Mtr FLA (ea.)	1.1				



Project Name: Pleasant Hill Phase 2 Unit Model #: ZE048J07B4C1ACA2B2

Quantity: 10 Tag # RTU-8,9,10,15,18,21,22,23,27,28 System: ZE048J07B4C1ACA2B2

### **Factory Installed Options**

### **ZE048J07B4C1ACA2B2**

Equipment Options		Option(s) Selected		
Product Category:	ZE	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:	J07	Single Stage Gas Stainless Steel 75 MBH Input		
Blower Option:	В	1.5 HP Standard Static Belt Drive Blower		
Voltage:	4	460-3-60		
Outside Air Option:		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)		
Service Options:	1			
Sensor Options:	<b>A</b>			
Controls:	C	Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.		
Refrigeration:	Α	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil		
Additional Options:	2	2" Pleated Filters (MERV 8)		
Cabinet Options:	В	Galvanized Steel Drain Pan Hinged & Tool Free Filter, Motor, and Electrical Access Panels		
Field Insta	lled A	ccessories		
O 1CV0402 - Concentric with Extern Diffuser,Flush Mount,18RD O 1CV0411 - Concentric & panel ga & panel ga & panel ga & Diffuser,Side Discharge,18RD (55.0 lbs) O 1CV0419 - Concentric O 1LN0406 -	is Suppl nal Shut is pipe, i iskets) ( - Hail G Low No o reduct oxides	y Connection -Off (includes: fittings, gas cock 5.0 lbs) uard Kit (51.0  Ox Kit - e the emission below 40  Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (86.0 lbs)  O 1RC0442 - Roof Curb - 12" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (78.0 lbs)  O 1RC0465 - Roof Curb - 8" High, Flat, Uninsulated, Full Perimeter		

Propane Conversion Kit (1-Stage)

O 1NP0440 - Natural Gas to

(1.0 lbs)

lbs)

● 1RD0410 - Barometric Relief Damper with Hood Kit (Downflow

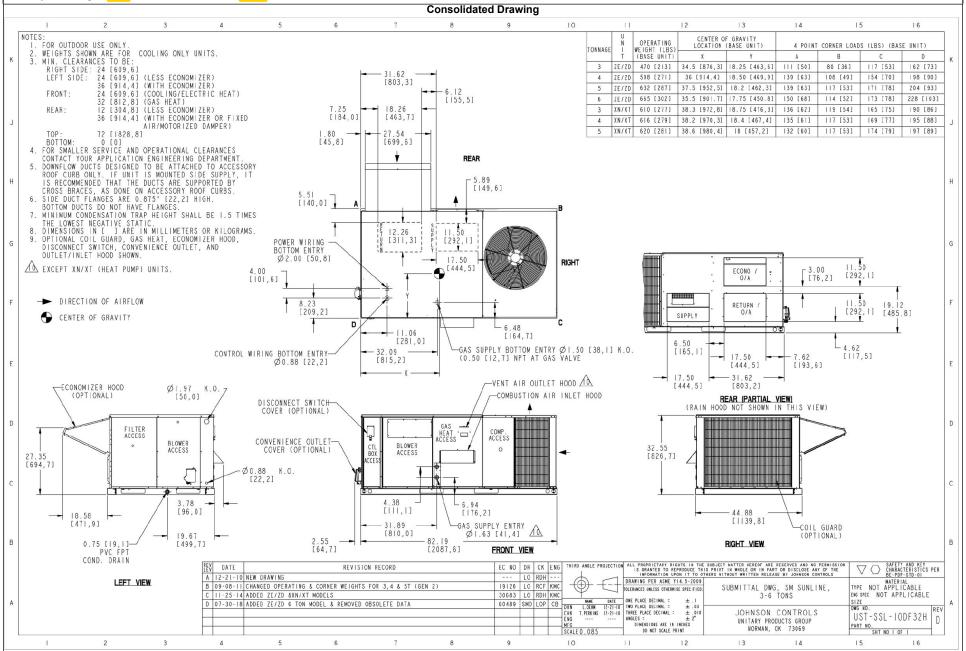
Unit or Duct Mo

lbs)



Project Name: Pleasant Hill Phase 2 Unit Model #: ZE048J07B4C1ACA2B2

Quantity: 10 Tag #: RTU-8,9,10,15,18,21,22,23,27,28





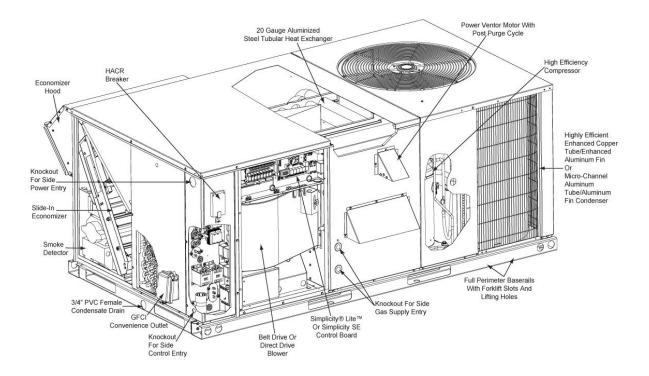
Project Name: Pleasant Hill Phase 2 Unit Model #: ZE048J07B4C1ACA2B2

Quantity: 10 Tag #: RTU-8,9,10,15,18,21,22,23,27,28

**Component Location** 

### **Component Location**

### Gas/Electric





Project Name: Pleasant Hill Phase 2 Unit Model #: ZE060J10B4C1ACA2B2

Quantity: 5 Tag #:<mark>RTU-1</mark>4,16,24,25<mark>,29</mark> System: **ZE060J10B4C1ACA2B2** 

Cooling Performance				
Total gross capacity	61.1			
Sensible gross capacity	45.4			
Total net capacity	57.1			
Sensible net capacity	41.4			
Seasonal Efficiency (at ARI)	14.00			
Efficiency (at ARI)	11.80	EER		
Ambient DB temp.	95.0	°F		
Entering DB temp.	80.0			
Entering WB temp.	67.0	°F		
Leaving DB temp.	59.0	°F		
Leaving WB temp.	57.3	°F		
Leaving air temp dew point	56.20			
Power input (w/o blower)	4.28			
Sound power	82	dB(A)		
Refrigerant				
Refrigerant type	R-410A			
Sys1	6 lbs	4 oz		
Gas Heating Performance				
Entering DB temp.	65	°F		
Heating output capacity (Max)	80	MBH		
Supply air	2000	CFM		
Heating input capacity (Max)		MBH		
Leaving DB temp.	102.0	°F		
Air temp. rise	37.0	°F		
SSE	80.0	%		
Stages	1			
Supply Air Blower Performan	ce			
Supply air	2000	CFM		
Ext. static pressure	0.75	IWG		
Addl. Unit Losses (Options/Accessories)	0.15			
Blower speed	1212			
Max BHP of Motor (including service factor)	1.73	HP		
Duct location	Bottom			
Motor rating	1.50			
Actual required BHP	1.26			
Power input	1.17			
Elevation	0	π.		
Drive type	BELT			
Electrical Data				
Power supply	460-3-60			
Unit min circuit ampacity		Amps		
Unit max over-current protection		Amps		
Dimensions & Weight				
Hgt 33 in. Len 83 in. Wth		in.		
Weight with factory installed options 752 lbs.				
Clearances				

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

32 in.

0 in.

Rear

Left

12 in.

24 in



Front

**Bottom** 

24 in.

72 in.

Right

Top



#### 5 Tor

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

#### **Unit Features**

- · Single Stage Cooling
- · Single Stage Gas Stainless Steel
- 100 MBH Input
- Either Supply and/or Return can be Field Converted from Vertical to Horizontal Configuration without Cutting Panels.
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards)
- Scroll Compressor
- 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
- Solid Core Liquid Line Filter Driers
- 2" Pleated Filters (MERV 8)
- 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.
- · Short Circuit Current: 5kA RMS Symmetrical
- Through-the-Curb and Through-The-Base Utility Connections
- Single Point Power Connection
- Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil
- Galvanized Steel Drain Pan
- Hinged & Tool Free Filter, Motor, and Electrical Access Panels

#### 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.

#### **BAS Controller**

 Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 communication card.

#### Warranty

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



Project Name: Pleasant Hill Phase 2 Unit Model #: ZE060J10B4C1ACA2B2

Quantity: 5 Tag #: RTU-14,16,24,25,29 System: ZE060J10B4C1ACA2B2

Additional Electrical Data				
Power supply	460-3-60			
Unit min circuit ampacity	14.1 Amps			
Unit max over-current protection	20 Amps			
Min Voltage	432 V			
Max Voltage	504 V			
Comp #1 ŘLA	7.8			
Comp #1 LRA	52			
Indoor Mtr Voltage	460-3-60			
Indoor Mtr FLA	2.1			
Outdoor Mtr Qty	1			
OD Fan Mtr FLA (ea.)	4.4			
Combustion Mtr Qty	1			
Combustion Motor Voltage	208/230-1-60			
Combustion Mtr FLA (ea)	0.8			

# FRASER-JOHNSTON. Heating Air Conditioning

### 3-6 Ton ReliaCore™ 100

Project Name: Pleasant Hill Phase 2 Unit Model #: ZE060J10B4C1ACA2B2

Quantity: 5 Tag #: RTU-14,16,24,25<mark>,29</mark> System: ZE060J10B4C1ACA2B2

### **Factory Installed Options**

### ZE060J10B4C1ACA2B2

Equipment Options		Option(s) Selected		
		<u> </u>		
Product Category:	ZE	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:	J10	Single Stage Gas Stainless Steel 100 MBH Input		
Blower Option:	В	1.5 HP Standard Static Belt Drive Blower		
Voltage:	4	460-3-60		
Outside Air Option:	С	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)		
Service Options:	1			
Sensor Options:	Α	7		
Controls:	С	Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 Communication Card.		
Refrigeration:	Α	Microchannel All Aluminum Condenser Coil, Copper tube/Aluminum fin Evaporator Coil		
Additional Options:	2	2" Pleated Filters (MERV 8)		
Cabinet Options:	В	Galvanized Steel Drain Pan Hinged & Tool Free Filter, Motor, and Electrical Access Panels		
Field Installed Accessories				

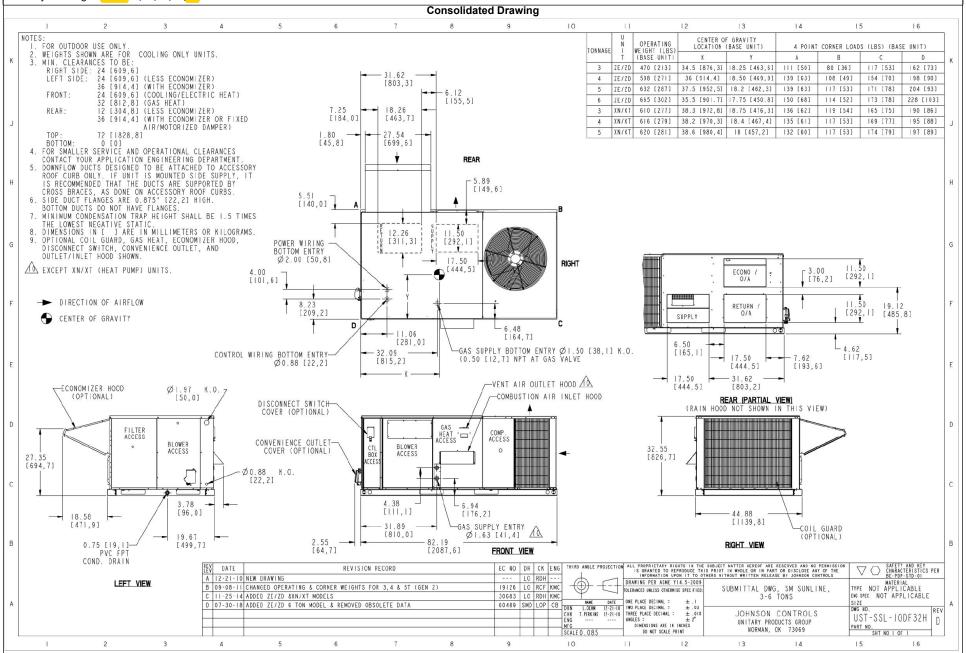
- O 1BD0401 Burglar Bars (25.0 lbs)
- O 1CG0401 Coil Guard (11.0 lbs)
- O 1CV0402 Concentric Diffuser,Flush Mount,18RD
- O 1CV0411 Concentric Diffuser,Side Discharge,18RD (55.0 lbs)
- O 1CV0419 Concentric Diffuser, Specialty, 18X18
- O 1FE0405 Flue Extension Kit (25.0 lbs)
- O 1GP0401 Gas Piping Kit for Bottom Gas Supply Connection with External Shut-Off (includes: Internal gas pipe, fittings, gas cock & panel gaskets) (5.0 lbs)
- O 1HG0413 Hail Guard Kit (51.0 lbs)
- O 1LN0406 Low NOx Kit -Required to reduce the emission of nitrogen oxides below 40 nanograms per joule.
- O 1NP0440 Natural Gas to Propane Conversion Kit (1-Stage) (1.0 lbs)

- O 1RC0434 Roof Curb 14" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (86.0 lbs)
- O 1RC0442 Roof Curb 12" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (78.0 lbs)
- O 1RC0465 Roof Curb 8" High, Flat, Uninsulated, Full Perimeter (Shipped Knocked Down) (67.0 lbs)
- 1RD0410 Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted 6.0 lbs)



Project Name: Pleasant Hill Phase 2 Unit Model #: ZE060J10B4C1ACA2B2

Quantity: 5 Tag #: RTU-14,16,24,25,29





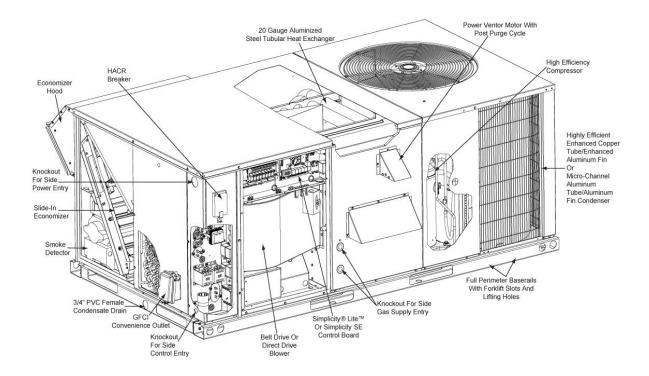
Project Name: Pleasant Hill Phase 2 Unit Model #: ZE060J10B4C1ACA2B2

Quantity: 5 Tag #: RTU-14,16,24,25,29

**Component Location** 

### **Component Location**

### Gas/Electric



### Date

02/10/2022

**Project Name** 

Pleasant Hill Phase 2

Project Number Client / Purchaser



## **Guide Specification Summary Page**

Product Series	Models and Unit Tags	
3-6 Ton ReliaCore™ 100	ZE036J05B4C1ACA2B2	RTU-1,2,3,4,5,6,11,12,13,17,20
	ZE072J10D4C1ACA2B1	RTU-7
	ZE048J07B4C1ACA2B2	RTU-8,9,10,15,18,21,22,23, <mark>27,28</mark>
	ZE060J10B4C1ACA2B2	RTU-14,16,24,25 <mark>,29</mark>