



---

# SUBMITTAL DATA

For: Approval

Order #:

Date: 03/23/2016

Project: Bowl NE - Airtemp - revised

Project #:

Location:

**Date**

03/23/2016

**Project Name**

Bowl NE - Airtemp - revised

**Project Number****Client / Purchaser**

### Submittal Summary Page

Qty	Tag #	Model #	Description
1		ZF180N40D2C5LAA4A1	15 Ton, York Large Sunline Single Packaged R-410A Air Conditioner, 11 EER / 12.1 IEER (CV) / 13 IEER (Intellispeed) / 12.1 IEER (VAV), Two Stage Cooling, 400 MBH Input Aluminized Steel, Two Stage Gas Heat, 208/230-3-60, Single Wall Construction <ul style="list-style-type: none"> <li>• Dry Bulb Low Leak Economizer with Hood (No Barometric Relief Damper or Hood)</li> <li>• 5 HP High Static Belt Drive Blower</li> <li>• Return &amp; Supply Air Smoke Detectors</li> <li>• Non Powered Convenience Outlet (110 VAC)</li> <li>• Non Fused Disconnect Switch</li> <li>• 2" Throwaway Filters</li> <li>• Coil Guard</li> <li>• Galvanized Steel Drain Pan</li> <li>• Standard Condenser Coil</li> <li>• Standard Evaporator Coil</li> <li>• Standard Access Doors</li> <li>• Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors</li> </ul>
1		IFK0402	Side Duct Flange Kit
1		1LD0416	High Speed Drive Kit
1		1RD0412	Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted)
1		1WS0403	Wood Skid - Allows unit to be handled with 90 inch forks
1		2EC0403	Kit - Single Enthalpy Field Installed
1		2PE04703525	Power Exhaust Kit- 208/230-1-60 with Barometric Relief and Exhaust Hood (Downflow Unit or Horizontal Duct Mounted)
1		S1-YK-MAP1810-0P	MAP (Multiple Access Portal) Gateway- For use with SimplicitySE Control
1		YCJD36S43S3	York Brand, Air Conditioner, 3 Ton, R-410A, Deluxe Jacket, Single Stage Compressor, 208/230-3-60, Sweat Connections
1		MC43B3XC1	3.5 Ton Nominal, Multiposition Cased Coil, 17 1/2" Wide Cabinet, Flex Coil, Orifice or TXV to be field installed, Horizontal Drain Pan (Factory Installed)
1		S1-1TVM4G1	5/8 M x 5/8 F R-410A Bolt-On TXV Kit

Qty	Tag #	Model #	Description
1		RGF19060BP12MP11	1-Stage Gas Furnace, 95% AFUE, 60 MBH, 17.5" Width Cabinet, PSC Motor, 4 Position, 1200 CFM, Multi-position, 115-1-60

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



# Large Sunline (15-25 Ton Package) N540

Single Package R-410A Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

### Cooling Performance

Total capacity	189.5 MBH
Sensible capacity	138.1 MBH
Efficiency (at ARI)	11.00 EER
Integrated eff. (at ARI)	12.10 IEER
Ambient DB temp.	86.8 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	58.7 °F
Leaving WB temp.	57.0 °F
Power input (w/o blower)	12.43 kW
Sound power	92 dB(A)

### Refrigerant

Refrigerant type	R-410A
------------------	--------

### Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	300 MBH
Supply air	6000 CFM
Heating input capacity (Max)	375 MBH
Leaving DB temp.	106.3 °F
Air temp. rise	46.3 °F
SSE	80.0 %
Stages	2

### Supply Air Blower Performance

Supply air	6000 CFM
Ext. static pressure	1.0 IWG
Addl. Unit Losses (Options/Accessories)	0.1 IWG
Blower speed	1039 RPM
Max BHP of Motor (Including service factor)	5.75 HP
Duct location	Side
Motor rating	5.00 HP
Actual required BHP	4.45 HP
Power input	4.00 kW
Elevation	62 ft.
Drive type	BELT

### Electrical Data

Power supply	230-3-60
Unit min circuit ampacity	77.1 Amps
Unit max over-current protection	100 Amps

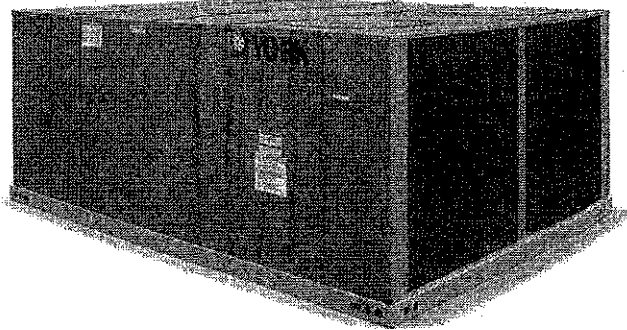
### Dimensions & Weight

Hgt	49 in.	Len	126 in.	Wth	92 in.
Weight with factory installed options					2285 lbs.

### Clearances

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

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



### 15 Ton

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

### Unit Features

- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards).
- Through-the-Curb and Through-The-Base Utility Connections
- 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
- Standard Access Doors
- Galvanized Steel Drain Pan
- Dual Refrigerant Circuits for Efficient Part Load Operation with Scroll Compressors
- Two Stage Cooling
- Solid Core Liquid Line Filter Driers
- Standard Condenser Coil
- Standard Evaporator Coil
- 400 MBH Input Aluminized Steel, Two Stage Gas Heat
- 5 HP High Static Belt Drive Blower
- Unit Ships with 2" Throwaway Filters with a Standard Filter Rack That Will Accept up to 4" Filters
- Replacement Filters: 5 - (18" x 24" x 2" or 4"). Unit accepts 2" or 4" wide filters.
- Single Point Power Connection
- Non Fused Disconnect Switch
- HACR Circuit Breaker/Disconnect (Sized for 208 Volts)
- Non Powered Convenience Outlet (110 VAC)
- Return & Supply Air Smoke Detectors
- Dry Bulb Low Leak Economizer with Hood (No Barometric Relief Damper or Hood)
- Coil Guard
- Short Circuit Current: 5kA RMS Symmetrical
- Crane Required to Unload Unit

### Standard Unit Controller: Simplicity 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.

### 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



**Large Sunline (15-25 Ton  
Package) N540**

**Single Package R-410A Air Conditioner**

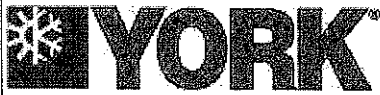
Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Ten (10) Year Warranty - Aluminized Steel Tubular Heat Exchangers



# Large Sunline (15-25 Ton Package) N540

Single Package R-410A Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

## Factory Installed Options

### ZF180N40D2C5LAA4A1

Product Category:	ZF	York Large Sunline Single Packaged R-410A Air Conditioner 11 EER / 12.1 IEER (CV) / 13 IEER (Intellispeed) / 12.1 IEER (VAV)
Nominal Cooling Capacity:	180	15 Ton Two Stage Cooling
Heat Type and Nominal Heat Capacity:	N40	400 MBH Input Aluminized Steel, Two Stage Gas Heat
Airflow:	D	Dry Bulb Low Leak Economizer with Hood (No Barometric Relief Damper or Hood) 5 HP High Static Belt Drive Blower
Voltage:	2	208/230-3-60
Service Options:	5	Non Powered Convenience Outlet (110 VAC) Non Fused Disconnect Switch
Sensor Options:	L	Return & Supply Air Smoke Detectors
Controls:	A	Simplicity® SE Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors
Refrigeration:	A	Standard Condenser Coil Standard Evaporator Coil
Additional Options:	4	2" Throwaway Filters Coil Guard
Cabinet Options:	A	Galvanized Steel Drain Pan Single Wall Construction Standard Access Doors
Product Generation:	1	

## Field Installed Accessories

- 1FK0402 - Side Duct Flange Kit (21.0 lbs)
- 1LD0416 - High Speed Drive Kit (5.0 lbs)
- 1RD0412 - Barometric Relief Damper with Hood Kit (Downflow Unit or Duct Mounted) (47.0 lbs)
- 1WS0403 - Wood Skid - Allows unit to be handled with 90 inch forks (200.0 lbs)
- 2EC0403 - Kit, Single Enthalpy Field Installed (1.0 lbs)
- 2PE04703525 - Power Exhaust Kit- 208/230-1-60 with Barometric Relief and Exhaust Hood (Downflow Unit or Horizontal Duct Mounted) (245.0 lbs)
- S1-YK-MAP1810-0P - MAP (Multiple Access Portal) Gateway- For use with SimplicitySE Control. (0.3 lbs)



# Large Sunline (15-20 Ton Package) N540

Single Package R-410A Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

## Consolidated Drawing

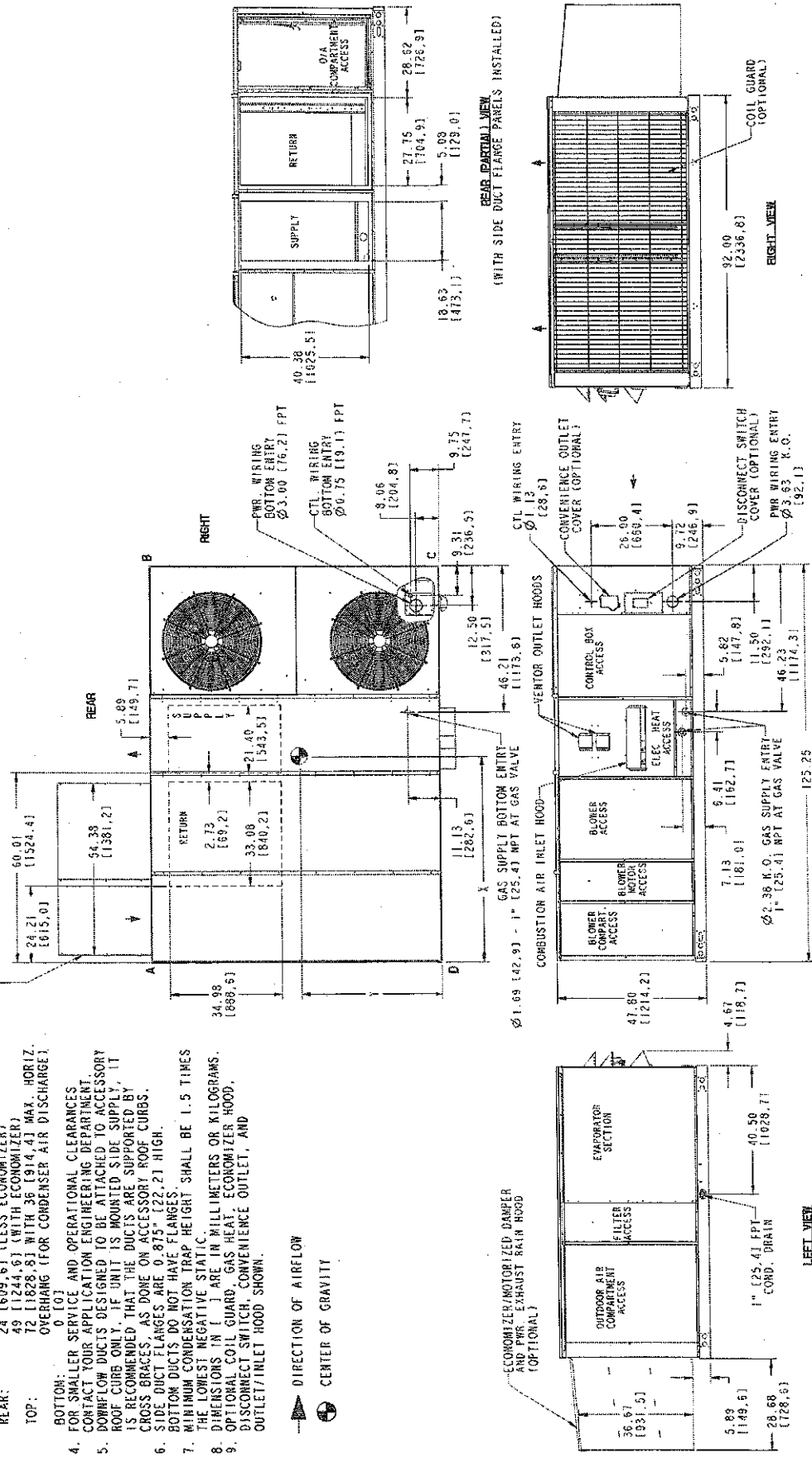
TONNAGE	U 15	N ZF	OPERATING WEIGHT (LBS) (BASE UNIT)	4 POINT CORNER LOADS (LBS) (BASE UNIT)					
				X	Y	A	B	C	D
			1870 (848)	65.26 (1657.6)	45 (1143)	438 (199)	477 (216)	498 (226)	458 (208)

### NOTES:

1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:  
RIGHT SIDE: 36 (914.4)  
LEFT SIDE: 24 (609.6) (LESS ECONOMIZER)  
36 (914.4) (WITH ECONOMIZER)  
FRONT: 36 (914.4) (LESS ECONOMIZER)  
36 (914.4) (WITH ECONOMIZER)  
REAR: 24 (609.6) (LESS ECONOMIZER)  
24 (609.6) (WITH ECONOMIZER)  
TOP: 49 (1244.6) (MAX. HORIZ. OVERHANG (FOR COMPENSER AIR DISCHARGE))  
0 (0)  
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.
7. 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 GUARD - GAS HEAT ECONOMIZER HOOD, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND OUTLET/INLET HOOD SHOWN.

ECONOMIZER/  
MOTORIZED DAMPER  
& PWR EXHAUST  
RAIN HOOD (OPTIONAL)

REAR  
A 34.98 (888.5)  
B 60.91 (1524.4)  
C 24.21 (615.0)  
D 54.33 (1381.2)  
E 2.73 (69.2)  
F 33.08 (840.2)  
G 21.40 (543.5)  
H 11.13 (282.6)  
I 46.21 (1178.8)  
J 12.50 (317.5)  
K 9.31 (236.5)  
L 9.75 (247.7)  
M 9.06 (229.8)  
N 9.72 (246.9)  
O 5.82 (147.8)  
P 11.50 (292.1)  
Q 46.23 (1174.3)  
R 125.25 (3181.4)





# Large Sunline (15-25 Ton Package) N540

## Single Package R-410A Air Conditioner

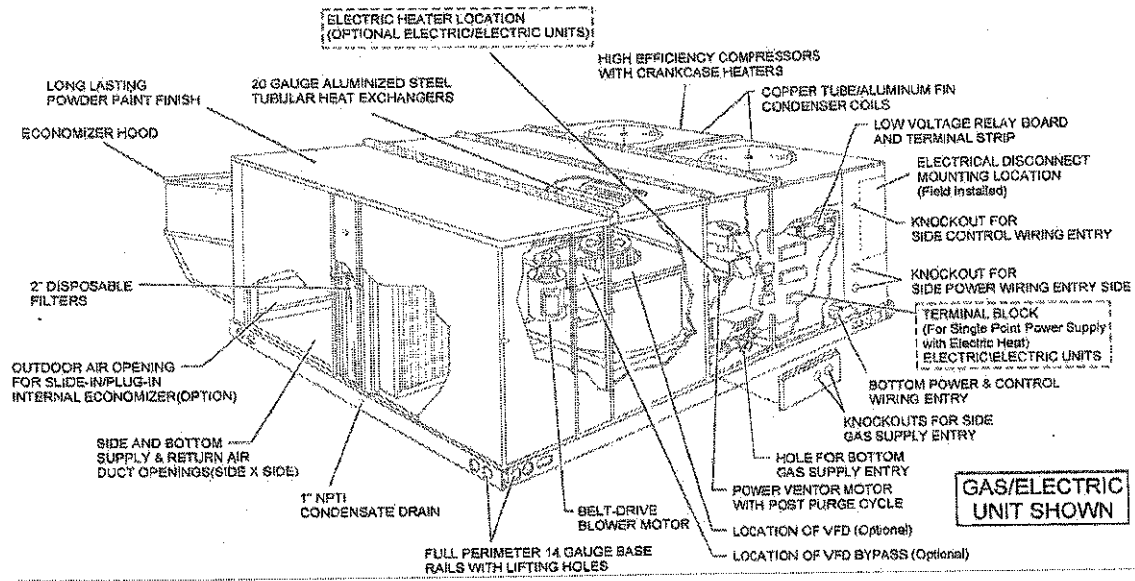
Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

### Component Locations



**GAS/ELECTRIC UNIT SHOWN**





# Large Sunline (15-25 Ton Package) N540

Single Package R-410A Air Conditioner

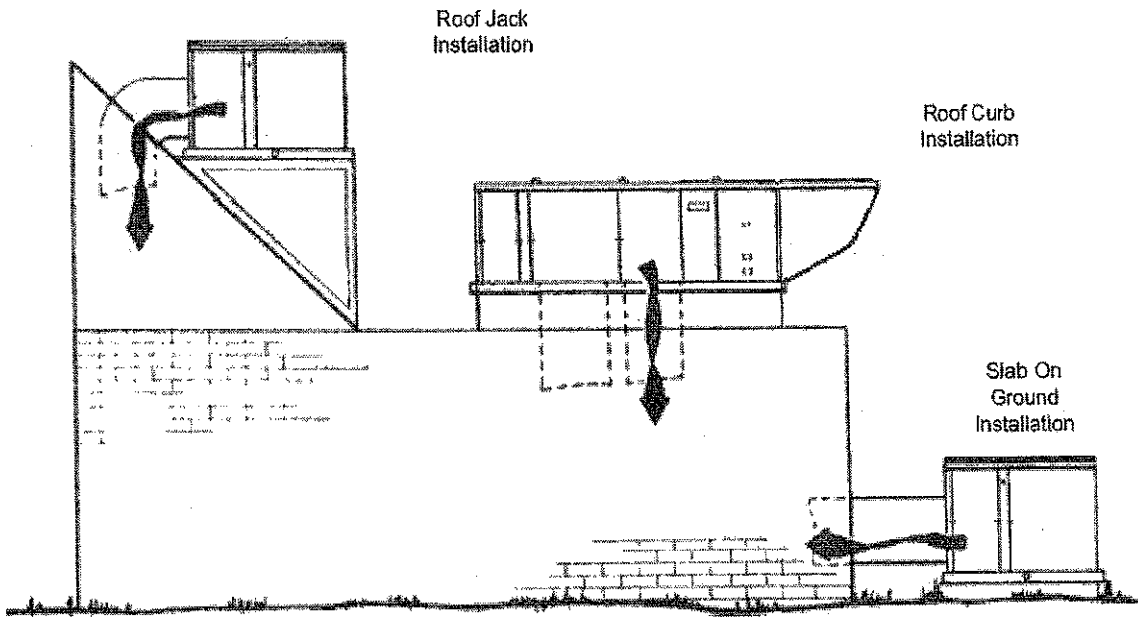
Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

## Typical Application





# Large Sunline (15-25 Ton Package) N540

## Single Package R-410A Air Conditioner

Project Name: Bowl NE - Airtmp - revised

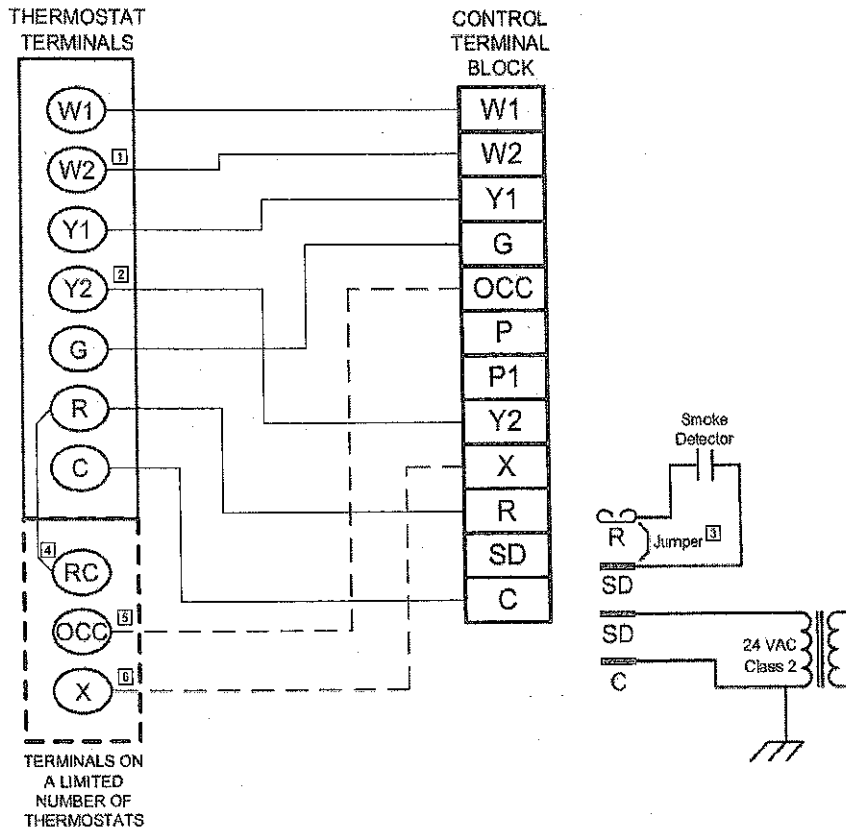
Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

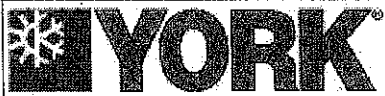
System: ZF180N40D2C5LAA4A1

### Typical Control Diagram

### Typical Control Diagram



- ① 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.
- 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.



**Large Sunline (15-25 Ton Package) N540**  
Single Package R-410A Air Conditioner

Project Name: **Bowl NE - Airtemp - revised**  
Quantity: 1

Unit Model #: **ZF180N40D2C5LAA4A1**  
System: **ZF180N40D2C5LAA4A1**

**Seismic Certification**

835356-UAD-A-0112



**SPECIAL SEISMIC CERTIFICATION OF NON STRUCTURAL COMPONENTS AND SYSTEMS**



**CERTIFICATE OF COMPLIANCE**

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

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

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

**Unitary Product Group Packaged Rooftop Units (UPG)**

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

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

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

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



# Large Sunline (15-25 Ton Package) N540

## Single Package R-410A Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: ZF180N40D2C5LAA4A1

Quantity: 1

System: ZF180N40D2C5LAA4A1

### Seismic Certification

((●)) DCL Dynamic Certification Laboratories

SPECIAL SEISMIC CERTIFICATION  
OF NON-STRUCTURAL  
COMPONENTS AND SYSTEMS



## CERTIFICATE OF COMPLIANCE

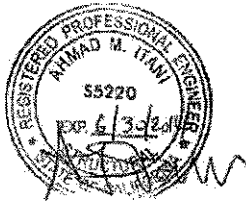
Table of Seismic Design Parameters					
Site Class	$F_a$	$I_p$	$a_p$	$R_p$	$z/h$
D	1.0	1.5	2.5	6.0	1.0

#### Site and Project Requirements

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

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

Certification Issued by: Dynamic Certification Laboratories  
 Document Control Number: 90300-1108b-1  
 Issue Date: 12/19/11



Dr. Ahmad Itani, SE  
 Dynamic Certification Laboratories

Randy Forristall  
 YORK Unitary Engineering  
 Johnson Controls, Incorporated



**LX Series**  
Split-System Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: YCJD36S43S3

Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

**Cooling Performance**

Total capacity	36.3 MBH
Sensible capacity	25.0 MBH
Seasonal Efficiency (at ARI)	13.00 SEER
Efficiency (at ARI)	11.00 EER
Ambient DB temp.	86.8 °F
Power Input	3.00 KW

**Refrigerant**

Refrigerant type	R-410A
------------------	--------

**Electrical Data**

Power supply	208/230-3-60
Unit min circuit ampacity	12.3 Amps
Unit max over-current protection	20 Amps

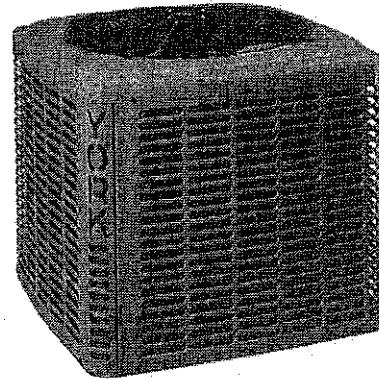
**Dimensions & Weight**

Hgt	28 in.	Len	29 in.	Wth	29 in.
Weight with factory installed options					145 lbs.

**Matchup Information**

ARI Reference Number	
ARI Rated Capacity	35 MBH
ARI Rated Efficiency	13.00 SEER

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



**Unit Features**

- Unit Cabinet Constructed of Pre-Painted Steel
- Fully Exposed Refrigerant Connections and a Single Panel Covering the Electrical Controls Make for Easy Servicing of the Unit
- Single Circuit 1 Stage Cooling with Reciprocating Compressor
- Each Compressor is Protected Against Abnormal Pressures by an Internal Pressure Relief Valve and Factory Installed High Pressure Switch
- Liquid Line Filter Drier
- Microchannel Condenser Coil
- Secured Re-Usable Service Valves are Provided on Both the Liquid and Vapor Sweat Connections for Ease of Evacuating and Charging
- Internally Protected Condenser Fan Motor
- Fully-Louvered Coil Guard

**Warranty**

- One (1) Year Limited Parts Warranty
- Five (5) Year Limited Compressor Warranty



# LX Series

Split-System Air Conditioner

Project Name: Bowl NE - Airtemp - revised

Unit Model #: YCJD36S43S3

Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

### Factory Installed Options

#### YCJD36S43S3

Brand:	<b>Y</b>	York Brand
Type:	<b>C</b>	Air Conditioner
Series Chassis:	<b>J</b>	Deluxe Jacket
SEER:	<b>D</b>	
Tonnage:	<b>36</b>	3 Ton
Compressor:	<b>S</b>	Single Stage Compressor
Refrigerant:	<b>4</b>	R-410A
Voltage:	<b>3</b>	208/230-3-60
Fit:	<b>S</b>	Sweat Connectors
Generation:	<b>3</b>	

### Field Installed Accessories

- S1-1TVM4G1 - 5/8 M x 5/8 F R-410A Bolt-On TXV Kit (1.5 lbs)

Project Name: Bowl NE - Airtemp - revised

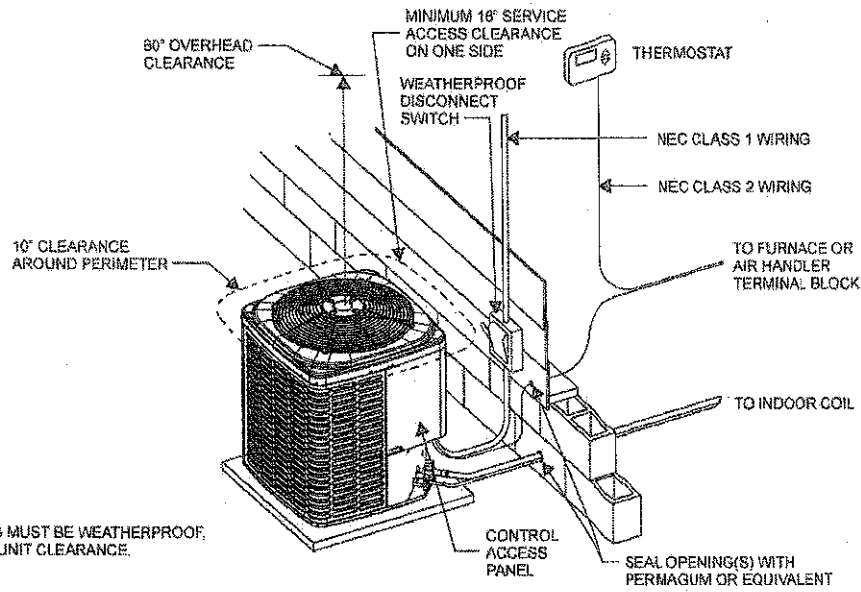
Unit Model #: YCJD36S43S3

Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

### Typical Applications



NOTES:  
ALL OUTDOOR WIRING MUST BE WEATHERPROOF.  
MINIMUM 24" UNIT TO UNIT CLEARANCE.

Project Name: Bowl NE - Airtemp - revised

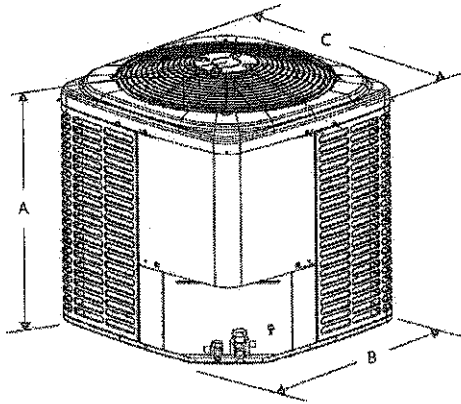
Unit Model #: YCJD36S43S3

Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

### Unit Dimensions



Unit Model	Dimensions (inches)			Refrigerant Connection Service Valve Size	
	A	B	C	Liquid	Vapor
30	28-1/4	24	24	3/8	3/4
36	28-1/4	29-1/2	29-1/2		
42	30-1/4	29-1/2	29-1/2		
48	30-1/4	29-1/2	29-1/2		7/8
60	32-1/4	34	34		
76	40-1/4	34	34	1/2	1-1/8

All dimensions are in inches and are subject to change without notice.  
Overall height is from bottom of base pan to top of fan guard.  
Overall length and width include screw heads.

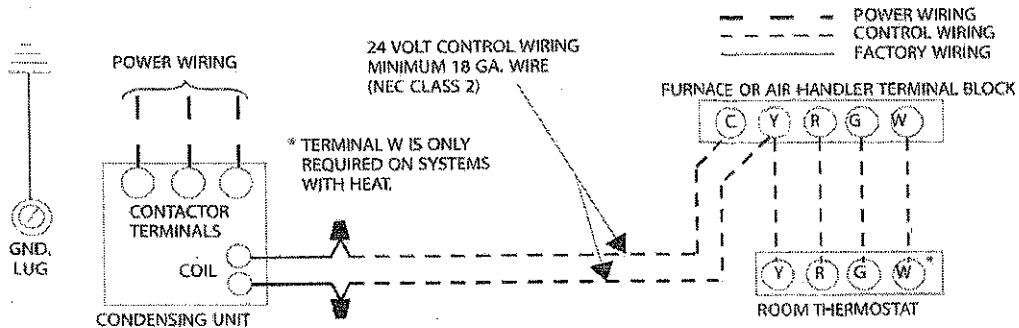
### SOUND POWER RATINGS

	Octave Band Sound Power Level (db re. 1-pW)								dBA
	63	125	250	500	1000	2000	4000	8000	
30S43	72	73	70	68	68	65	60	53	73
30S44	72	74	69	68	68	67	60	54	73
36S43	73	73	69	70	72	68	67	62	76
36S44	73	76	69	70	72	66	65	62	75
42S43	72	78	68	68	71	67	61	59	75
42S44	72	73	69	70	71	68	61	58	75
48S43	73	75	70	69	73	68	60	60	76
48S44	72	78	69	71	72	69	63	60	76
60S43	69	72	71	70	72	66	60	56	74
60S44	68	72	70	68	68	65	61	57	73
76S43	72	75	69	71	74	69	66	65	77
76S44	72	74	68	70	74	69	66	65	77

Rated in accordance with ARI Standard 270.

### TYPICAL FIELD WIRING

ALL FIELD WIRING TO BE IN ACCORDANCE WITH ELECTRIC CODE (NEC) AND/OR LOCAL CODES



ALL OUTDOOR WIRING MUST BE WEATHERPROOF. USE COPPER CONDUCTORS ONLY.





**York**  
York Add-on Coils

Project Name: Bowl NE - Airtemp - revised

Unit Model #: MC43B3XC1

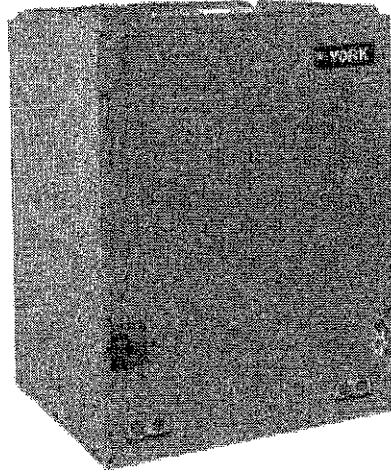
Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

Cooling Performance			
Ambient DB temp.	86.8 °F		
Refrigerant			
Refrigerant type	R-410A		
Coil Dimensions & Weight			
Hgt	26.5 in.	Len	21.5 in.
		Wth	17.5 in.
Weight with factory installed options	73 lbs.		
Matchup Information			
ARI Reference Number	35 MBH		
ARI Rated Capacity	13.00 SEER		
ARI Rated Efficiency	S1-1TVM4G1 (or equiv)		
Metering Device			

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



**1.5-5 Ton**

**Unit Features**

- Durable Finish Inside and Out - Coil Casings are Made of Pre-Painted Steel. The Pre-Treated Flat Galvanized Steel Provides a Better Paint to Steel Bond, which Resists Corrosion and Rust Creep. All Internal Metal Parts are Made of G90 Galvanized.
- Coil may be Installed Upflow, Downflow, or Horizontal Right or Left Applications
- Copper Tube/Aluminum Fin Coil
- Sweat Connect Fittings

**Warranty**

- Five (5) Year Limited Parts Warranty
- Extended Ten (10) Year Limited Parts Warranty when product is registered online within 90 days of purchase for replacement or closing for new homeconstruction. This Warranty does not apply for R-22 or 3-Phase systems.



Project Name: **Bowl NE - Airtemp - revised**

Unit Model #: **MC43B3XC1**

Quantity: 1

System: **YCJD36S43S3, MC43B3XC1**

**Factory Installed Options**

**MC43B3XC1**

Case Type:	<b>MC</b>	Multi-position Cased Coil
Product Capacity:	<b>43</b>	3.5 Ton Nominal
Cabinet Width:	<b>E</b>	17 1/2" Wide Cabinet
Refrigerant / Meter:	<b>3</b>	Flex Coil
TXV Size Indicator:	<b>X</b>	Orifice or TXV to be field installed
Options:	<b>C</b>	Horizontal Drain Pan (Factory Installed)
Product Generation:	<b>1</b>	

**Field Installed Accessories**

- S1-1TVM4G1 - 5/8 M x 5/8 F R-410A Bolt-On TXV Kit (1.5 lbs)

Project Name: Bowl NE - Airtemp - revised

Unit Model #: MC43B3XC1

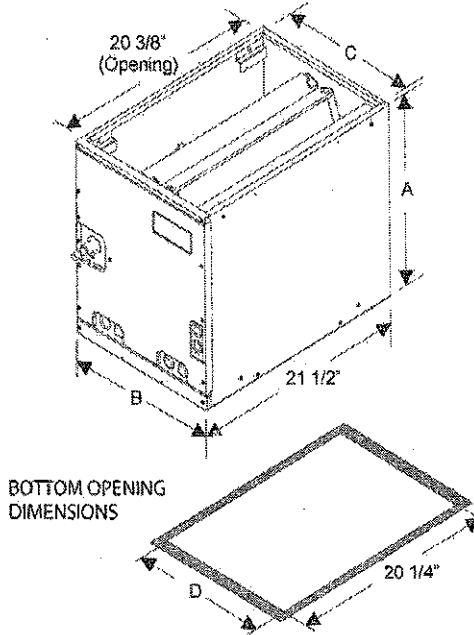
Quantity: 1

System: YCJD36S43S3,

MC43B3XC1

**MC Coil Dimensions**

Models	Dimensions <sup>1</sup>				Refrigerant Connections <sup>2</sup>		
	Height	Width	Opening Widths		Line Size		
			A	B	C	D	Liquid
MC18A	22	14 1/2	13 3/8	13 1/2	3/8	3/4	
MC18B	22	17 1/2	16 3/8	16 1/2			
MC24A	26 1/2	14 1/2	13 3/8	13 1/2			
MC24B	26 1/2	17 1/2	16 3/8	16 1/2			
MC30A	26 1/2	14 1/2	13 3/8	13 1/2			
MC30B	26 1/2	17 1/2	16 3/8	16 1/2			
MC32A	22	14 1/2	13 3/8	13 1/2			
MC35B	22	17 1/2	16 3/8	16 1/2			
MC35C	22	21	19 7/8	20			
MC36A	26 1/2	14 1/2	13 3/8	13 1/2			7/8
MC36B	26 1/2	17 1/2	16 3/8	16 1/2			
MC36C	26 1/2	21	19 7/8	20			3/4
MC37A	26 1/2	14 1/2	13 3/8	13 1/2			
MC42B	32	17 1/2	16 3/8	16 1/2			7/8
MC42C	32	21	19 7/8	20			
MC43B	26 1/2	17 1/2	16 3/8	16 1/2			
MC43C	26 1/2	21	19 7/8	20			
MC48C	32	21	19 7/8	20			
MC48D	32	24 1/2	23 3/8	23 1/2			
MC60D	32	24 1/2	23 3/8	23 1/2			
MC62D	36	24 1/2	23 3/8	23 1/2			



1 All dimensions are in inches.

2 Refrigerant line sizes may require larger lines for extended line lengths. See Application Data part number 247077.



Project Name: Bowl NE - Airtemp - revised

Unit Model #: RGF19060BP12MP11

Quantity: 1

System:

RGF19060BP12MP11,

Cooling Performance

Total capacity	36.3 MBH
Sensible capacity	25.0 MBH
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	80.7 °F
Leaving WB temp.	57.5 °F

Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	57 MBH
Supply air	1200 CFM
Heating input capacity (Max)	60 MBH
Leaving DB temp.	104.0 °F
Air temp. rise	44.0 °F
AFUE	95.5 %

Supply Air Blower Performance

Supply air	1200 CFM
Ext. static pressure	0.56 IWG
Blower speed description	HIGH
Motor rating	0.50 HP
Elevation	62 ft.
Drive type	DIRECT

Indoor Electrical Data

Power supply	115-1-60
Unit min circuit ampacity	10.00 Amps
Unit max over-current protection	15 Amps

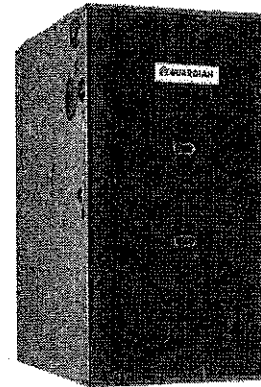
Indoor Dimensions & Weight

Hgt	33 in.	Len	29.5 in.	Wth	17.5 in.
Weight with factory installed options		122 lbs.			

Matchup Information

ARI Rated Capacity	35 MBH
ARI Rated Efficiency	13.00 SEER

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



Unit Features

- Unit Cabinet Constructed of Pre-Painted Galvanized Steel
- Full-Gasket, Rigid Independent Access Doors With View Ports and 1/4 Turn Knobs for easy door removal
- Units are factory shipped for installation in Upflow or Horizontal applications and may be converted for Downflow applications
- Hi-tech Tubular Aluminized Steel Primary Heat Exchanger with Stainless Steel Secondary Heat Exchanger for Outstanding Efficiency
- Propane Convertible
- Single-Stage Gas Valve
- Direct Drive Blower with 4 Speed PSC Motor
- Airflow Leakage Rate of Less Than 1% of Total Airflow @ 1" ESP Under Duct Testing Conditions
- Built-In, High-Level Self-Diagnostic Controls with Fault Codes for Reliable Operation

Warranty

- Five (5) Year Limited Parts Warranty
- Ten (10) Year Warranty on the Heat Exchanger in Commercial Applications
- Twenty (20) Year Limited Warranty on Heat Exchangers in Residential Applications
- Extended Lifetime Heat Exchanger and Ten (10) Year Limited Parts Warranty when Product is Registered Online Within 90 Days of Purchase for Replacement or Closing for New Home Construction



**Guardian**

Guardian Single Stage Gas Furnace

Project Name: Bowl NE - Airtemp - revised

Unit Model #: RGF19060BP12MP11

Quantity: 1

System: RGF19060BP12MP11,

**Factory Installed Options**

**RGF19060BP12MP11**

Model Family:	<b>RGF</b>	Gas Furnace
Heat Type:	<b>1</b>	1-Stage
Options:	<b>9</b>	95% AFUE
Heat Size:	<b>060</b>	60 MBH
Cabinet Options:	<b>B</b>	17.5" Width Cabinet
Type:	<b>P</b>	PSC Motor, 4 Position
Airflow:	<b>12</b>	1200 CFM
Configuration:	<b>MP</b>	Multi-position
Voltage:	<b>1</b>	115-1-60
Product Generation:	<b>1</b>	

**Field Installed Accessories**

- S1-1TVM4G1 - 5/8 M x 5/8 F R-410A Bolt-On TXV Kit (1.5 lbs)

Project Name: Bowl NE - Airtemp - revised

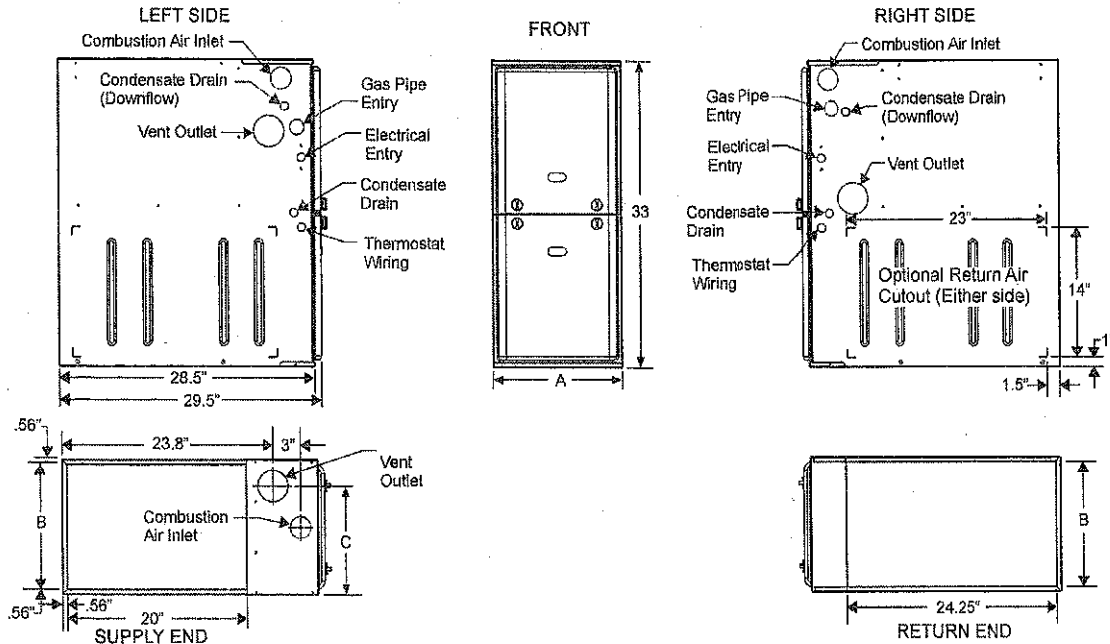
Unit Model #: RGF19060BP12MP11

Quantity: 1

System:

RGF19060BP12MP11,

### Unit Dimensions



### Cabinet & Duct Dimensions

Models	Nominal CFM (m <sup>3</sup> /min)	Cabinet Size	Cabinet Dimensions (Inches)			Approximate Operating Weights
			A	B	C	Lbs
RGF19040AP08MP11	800	A	14 1/2	13 3/8	11 3/4	113
RGF19060BP12MP11	1200	B	17 1/2	16 3/8	13 1/4	122
RGF19080BP12MP11	1200	B	17 1/2	16 3/8	14 3/4	126
RGF19080CP16MP11	1600	C	21	19 7/8	16 1/2	136
RGF19100CP16MP11	1600	C	21	19 7/8	18 1/4	142
RGF19100CP20MP11	2000	C	21	19 7/8	18 1/4	145
RGF19120DP20MP11	2000	D	24 1/2	23 3/8	21 3/4	156

### Ratings & Physical / Electrical Data

Models	Input	Output	AFUE %	Air Temp. Rise	Max. Outlet Air Temp	Blower		Blower Size	Max Over-Current Protect	Total Unit Amps	Min. wire Size (awg) @ 75 ft one way
	MBH	MBH		°F	°F	HP	Amps				
RGF19040AP08MP11	40	38	95.5	30-60	160	1/3	4.8	11x8	15	8.0	14
RGF19060BP12MP11	60	57	95.5	30-60	160	1/2	7.1	11x8	15	10.0	14
RGF19080BP12MP11	80	76	95.5	35-65	165	1/2	7.1	11x8	15	10.0	14
RGF19080CP16MP11	80	76	95.5	35-65	165	3/4	8.8	11x10	15	11.5	14
RGF19100CP16MP11	100	95	95.5	35-65	165	3/4	8.8	11x10	15	11.5	14
RGF19100CP20MP11	100	95	95.5	35-65	165	1	14.5	11x11	20	17.0	12
RGF19120DP20MP11	120	114	95.5	35-65	165	1	14.5	11x11	20	17.0	12

Annual Fuel Utilization Efficiency (AFUE) numbers are determined in accordance with DOE Test procedures.

Wire size and over current protection must comply with the National Electrical Code (NFPA-70-latest edition) and all local codes.

The furnace shall be installed so that the electrical components are protected from water.