



Change'Air™

PRODUCTS AND SERVICES LTD.

Engineered Excellence for Greener Classrooms

Air Source Heat Pump Unit

The Sophomore Series raised condenser intake design achieves maximum efficiency through its many unique features. This self contained cooling system can easily be upgraded to an air source heat pump so that it can be used effectively in the heating season by reversing the refrigerant flow. If required additional supplementary heat can be added with electric or hot water making the Sophomore extremely flexible. Available with staged compressors and optional features such as an energy recovery wheel (ERW) or hot gas reheat coil for dehumidification.

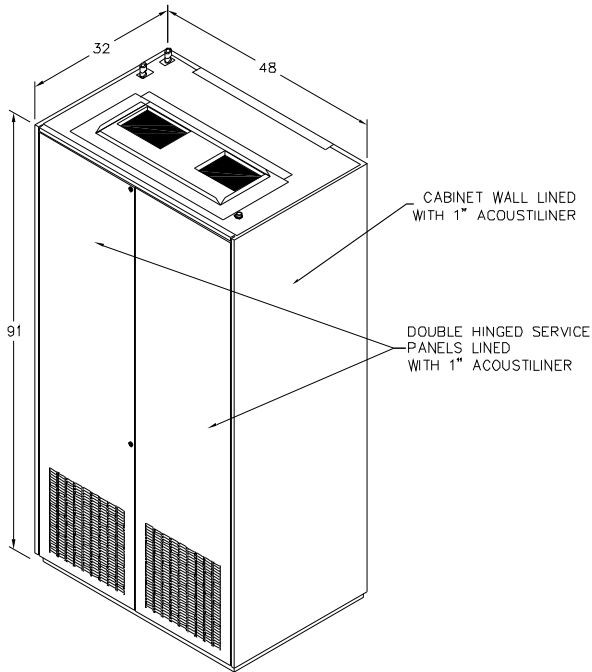
- ✓ Capacities from 2 to 5 ton
- ✓ R410A refrigerant
- ✓ Dual stage Scroll compressors
- ✓ Hot Gas Reheat capability
- ✓ Energy Recovery Wheel (optional)
- ✓ Internal power relief using condensing fans
- ✓ Hot water or electric
- ✓ LonMark or BACnet Controllers

Sophomore Series - Air Source Heat Pump

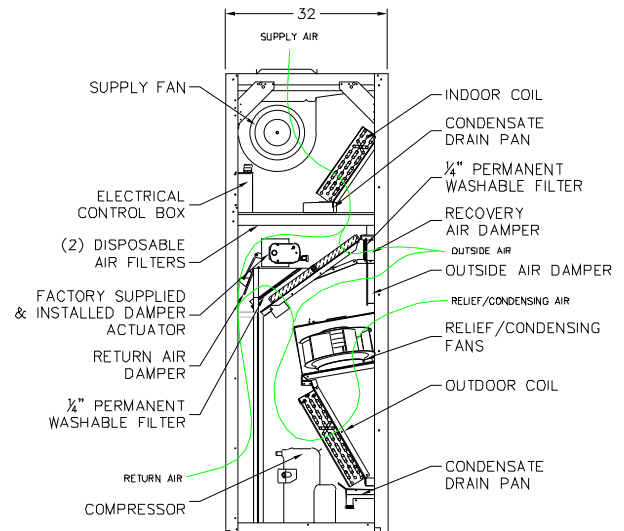
Option	Details							
Cabinet Sizes	"O" (91"h x 44"w x 32"d)				"P" (91"h x 48"w x 32"d)			
Supplementary Heating	Hot water Coil 1 row up to 75 MBTU		Hot water Coil 2 rows up to 110 MBTU		Electric Resistance Up to 15 KW		None	
Heating/Cooling	Free Cooling Economizer Dampers		Two Stage Packaged Air Conditioning (R410A refrigerant)					
			2 Ton	2.5 Ton	3 Ton	3.5 Ton	4 Ton	5 Ton
Cooling Options	Stainless Steel Drain Pan		Insulated Drain Pan		Hot Gas Reheat Coil			
Ventilation	Standard Damper Assembly (Outdoor/Return Air Damper)		Energy Recovery Desiccant wheel (450 CFM Capacity)			Energy Recovery Desiccant wheel w/ Economizer Damper (450 CFM Capacity)		
Supply Fan Motor	½ hp LC-D ECM 2 fan bodies (1100 cfm max.)		½ hp SC-D ECM 2 fan bodies (1400 cfm max.)		¾ hp HC-D ECM 2 fan bodies (1600 cfm max.)		1 hp XHC-D ECM 2 fan bodies (2200 cfm max.)	
Power Relief	No Power Relief				Standard built-in condenser/relief fans(250-1700 cfm)			
Fan Speed Control	ECM (3 speed 24 VAC or 0-10 VDC signal)				ERM (single or dual fully adjustable speed board)			
Electrical Supply	"B" 208/3/60		"C" 208-230/1/60		"D" 277/1/60		"E" 460/3/60	
Controls	Factory Preprogrammed LonMark Compatible Controller			Factory Preprogrammed BACnet Compatible Controller		Supplied by Others Factory Installed		
Insulation	Standard Fibreglass Ductliner (airside coated)			Closed Cell		Perforated Steel Liner		
Filters	1" Pleated Disposable		2" Pleated Disposable		Permanent Washable		Metal Filter Rack with Replaceable Media	
	MERV 8 (Standard)			MERV 11		MERV 13		

Important Note: This is not a compatibility table. Each option shows the available for the Series or model. For compatibilities on a specific design configuration please call your Change'Air sales representative.
 :Shaded areas show options available but not reflected in the drawings on reverse side.

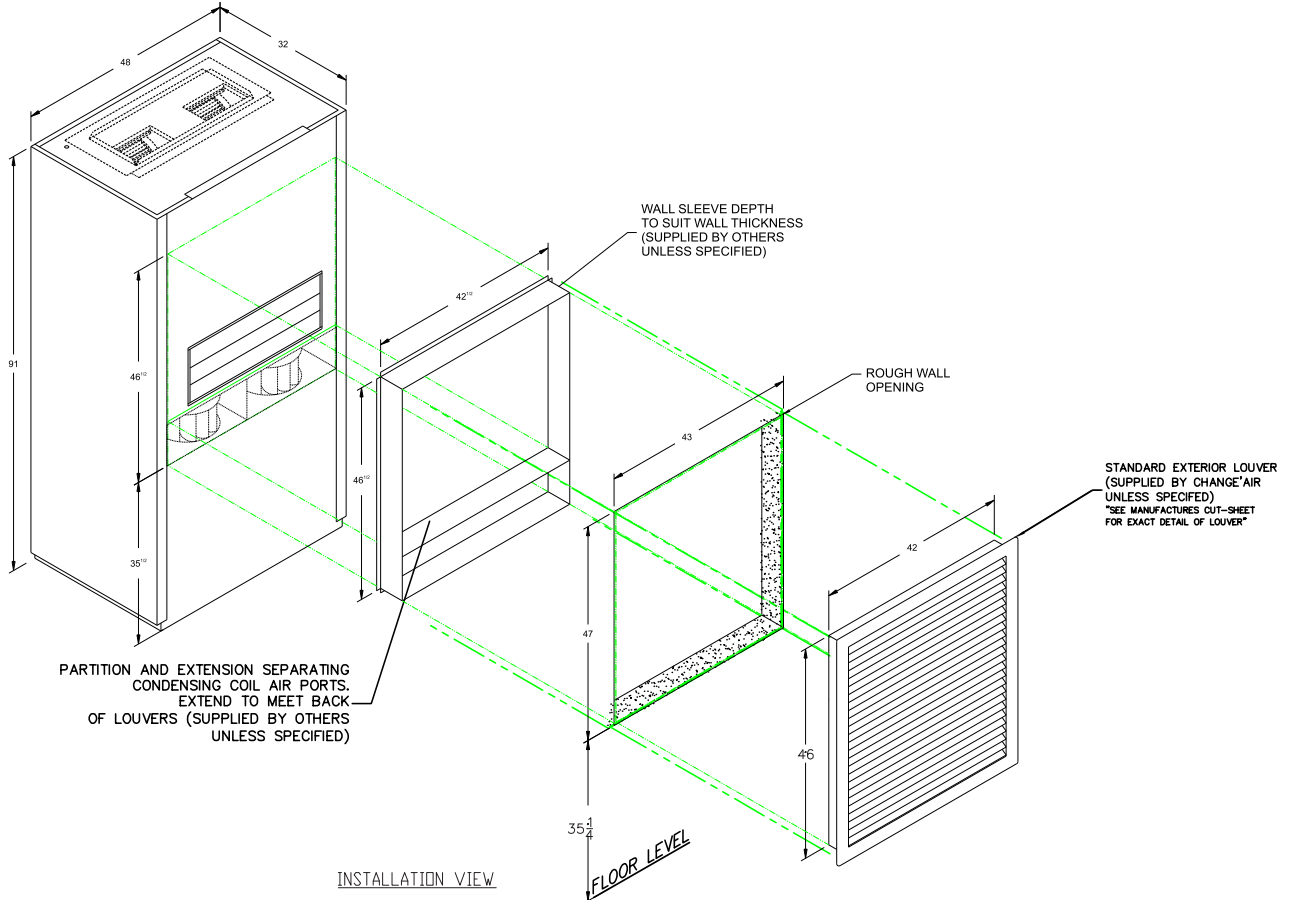
SOPHOMORE NAHP 60 2000 P C



ISOMETRIC VIEW



RIGHT SIDE VIEW



INSTALLATION VIEW

SOPHPA12-01