

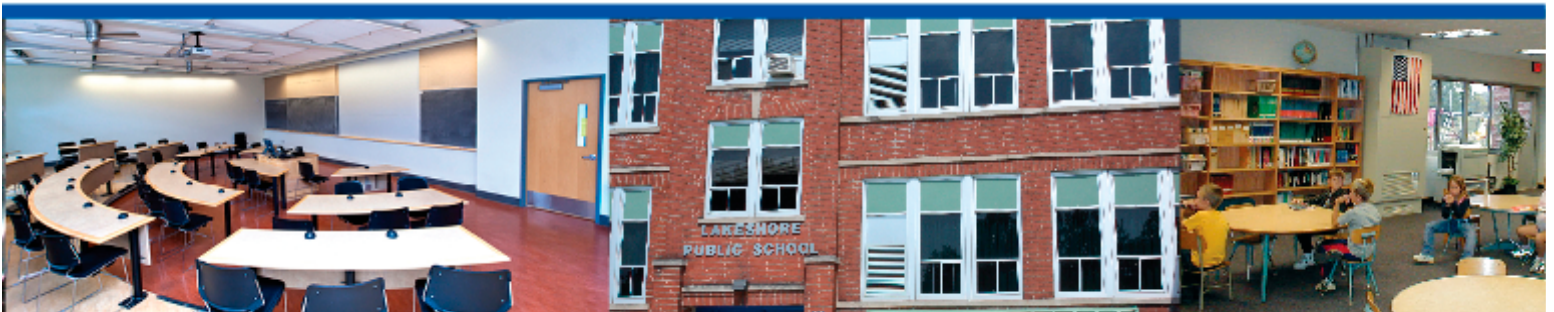
Change'Air Product Catalog Version 1.10

Junior Series

For a complete catalog
contact your local representative.



Engineered Excellence for Greener Classrooms



NOTE: Change'Air reserves the right to make changes to Unit specifications without prior notice. The performance of each Unit may vary based on site conditions and installation.

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Junior Series

Self Contained A/C - Low Condenser Intake

4.1 Features

The Change'Air Junior Series classroom air handler has a wide range of features. It is available in two of our cabinet sizes (B & C) with supply air capacities ranging from 900 to 2200 cfm.

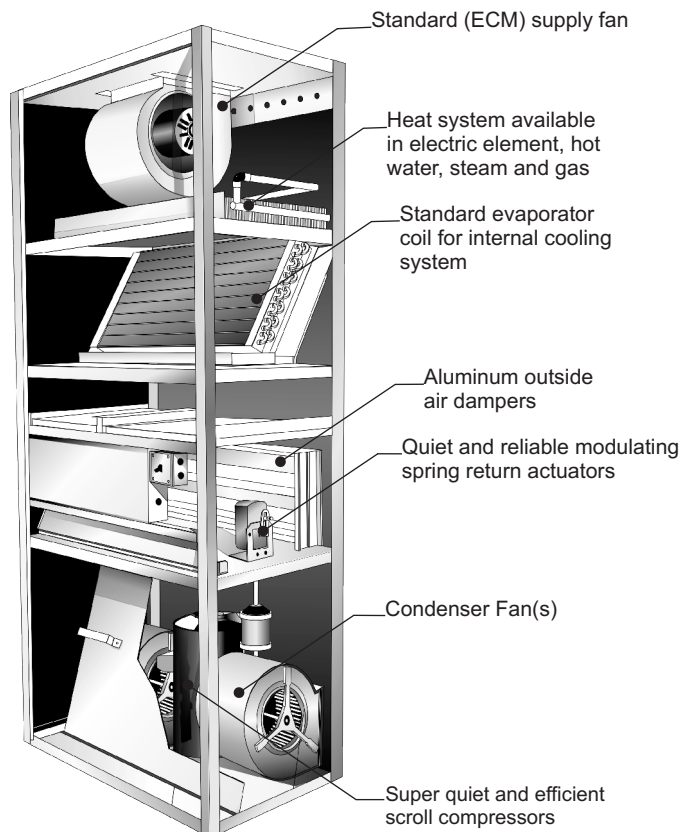
In addition to the standard features the Junior Series includes:

- Self-contained, packaged cooling
- Scroll compressors
- 2.5 ton to 4 ton capacities available with efficient R410a refrigerant
- 5 ton to 7 ton capacities available with R407c refrigerant

The list of optional features contain such upgrades as an automatic pressure regulating device to modulate the cooling capacity to as low as 25% of the rated design and a modulating gas furnace integral to the unit for efficient heating.

A single wall penetration accommodates the outside air and condensing air requirements.

When cooling is required and chilled water is not an option, the Change'Air self-contained, packaged air conditioning unit is the answer.



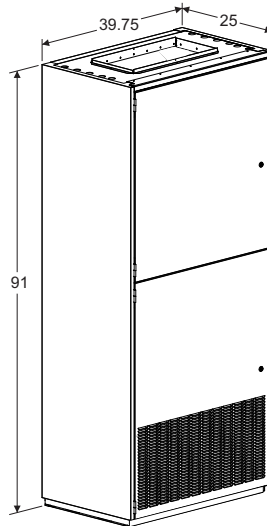
4.0 Junior Series

4.2 Junior Series Cabinet Size Selection

“B” Cabinet

Basic Features, Design Options and Capacities.

- Most popular low condenser intake cabinet (39.75" x 25" x 91")
- Supply air up to 1800 CFM
- Heating capacity (Hot water up to 102 Mbtuh, two stage Electric up to 15KW, Gas up to 90 Mbtuh, Steam up to 101 Mbtuh.)
- Cooling capacity - cooling by self-contained, packaged air conditioning system with capacities up to 48 Mbtuh. (2.5-4 Ton)



Cabinet Construction

Each cabinet is manufactured using galvanized steel with a powder coat baked enamel-textured finish. The internal frame supports all the internal metal pans and components so that the external panels do not carry any of the weight. The external cabinet panels are attached so that there are no visible screws, rivets or fasteners.

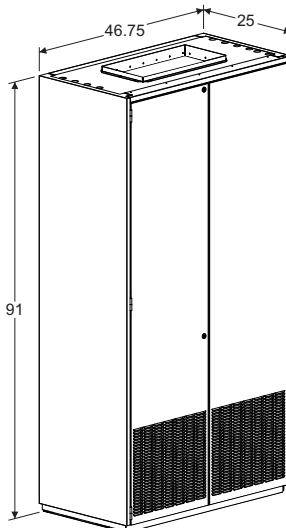
Insulation and Acoustics

The B & C cabinet front incorporates two fully insulated full size service panels. The cabinet panels are thermally and acoustically insulated with 1"(2.54 cm) thick flexible acoustic insulation. This insulation is covered in the air stream with a black coated mat. The flexible, thermal and acoustical liner includes the specification compliance ASTM C1071, HN-1545B, NFPA 90A and NFPA 90B.

“C” Cabinet

Basic Features, Design Options and Capacities.

- Largest of the low condenser intake cabinets (46.75" x 25" x 91")
- Supply air up to 2200 CFM
- Heating capacity (Hot water up to 111 Mbtuh, two stage Electric up to 15KW, Steam up to 162 Mbtuh.)
- Cooling capacity (cooling by self-contained, packaged air conditioning system with capacities from 60 to 84 Mbtuh.) (5-7 Ton)



Enamel Finishes

Each cabinet has the highest quality, powder coat baked enamel finish. For architectural and design purposes, Change'Air provides three standard colors: white, antique white, and gray.

4..3.1 Physical Data Table - Cabinet “B”

Low Condenser Intake Design

2.5, 3.0, 3.5 & 4.0 Ton

JUNIOR “B” CABINET			COMPATIBILITY TABLE			
OPTIONS		VALUE OR CAPACITY	DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION
HEATING	ELECTRIC HEAT(E)	10KW	Low Capacity (LC)			
		12KW	Standard Capacity (SC)			
		15KW	High Capacity (HC)			
	GAS FURNACE	30 - 90Mbtuh				FNC3
	HOT WATER COIL (H)	17" X 30", 1 row 48 Mbtuh		Low Capacity (LC)		
17" X 30", 2 row 102 Mbtuh			Standard Capacity (SC)			
STEAM COIL (S)	17.5" X 30", 1 row 56 Mbtuh				Low Capacity (LC)	
	17.5" X 30", 2 row 101 Mbtuh				Standard Capacity (SC)	
COOLING	SELF-CONTAINED COOLING CAPACITY	2.5 Ton	30 Mbtuh			
		3.0 Ton	36 Mbtuh			
		3.5 Ton	42 Mbtuh			
		4.0 Ton	48 Mbtuh			
SUPPLY FANS	ECM	1050 cfm	Low Capacity LC-S - 1/3 hp (1 fan body)			
		1100 cfm	Low Capacity LC-D - 1/3 hp (2 fan bodies)			
		1300 cfm	Standard Capacity SC-S - 1/2 hp (1 fan body)			
		1400 cfm	Standard Capacity SC-D - 1/2 hp (2 fan bodies)			
		1600 cfm	High Capacity HC-S - 3/4 hp (1 fan body)			
		1800 cfm	High Capacity HC-D - 3/4 hp (2 fan bodies)			
SUPPLY VOLTAGES		208/3/60 “B”	YES			
		208-230/1/60 “C”	YES			
		277/1/60 “D”	YES			
		460/3/60 “E”	YES			
AIR FLOW DESIGN		Draw Through Heating		YES	YES	
		Blow Through Heating	YES	YES	YES	YES
FILTERS		(2) 1" Disposable	16" x 20"			
		(2) 2" Disposable	16" x 20"			
		(2) Permanent Washable	16" x 20"			
WEIGHT		All Models	750 lb	780 lb	780 lb	815 lb

All weights are calculated on the maximum available options.

NOTE: Change'Air reserves the right to make changes to air handler specifications without prior notice. The performance of each air handler may vary based on site conditions and installation.

4.0 Junior Series

4.3.2 Physical Data Table - Cabinet "C"

Low Condenser Intake Design

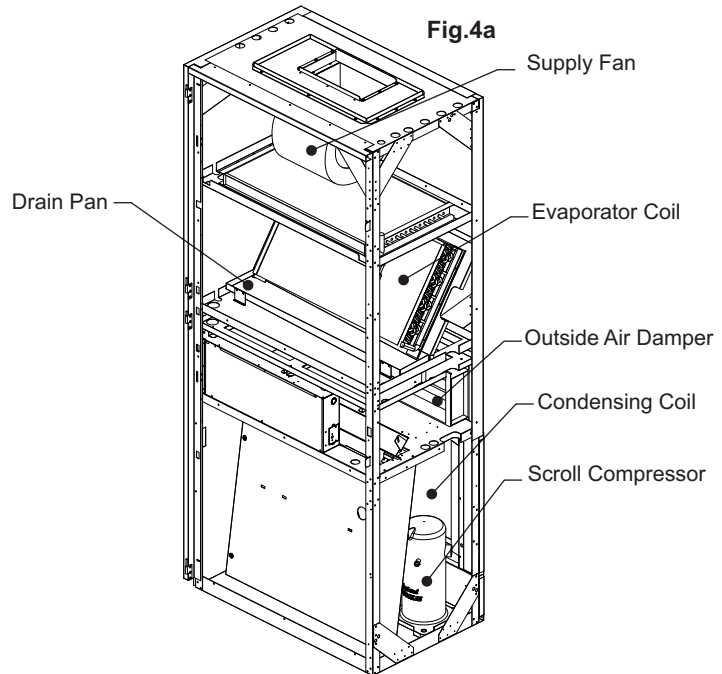
5.0, 6.0 & 7.0 Ton					
JUNIOR "C" CABINET			COMPATIBILITY TABLE		
OPTIONS		VALUE OR CAPACITY	DESIGNATION	DESIGNATION	DESIGNATION
HEATING	ELECTRIC HEAT (E)	10KW	Low Capacity (LC)		
		12KW	Standard Capacity (SC)		
		15KW	High Capacity (HC)		
	HOT WATER COIL (H)	17" X 30", 1 row 65 Mbtuh		Low Capacity (LC)	
		17" X 30", 2 row 111 Mbtuh		Standard Capacity (SC)	
	STEAM COIL (S)	17.5" X 30", 1 row 83 Mbtuh			Low Capacity(LC)
17.5" X 30", 2 row 162 Mbtuh				Standard Capacity (SC)	
COOLING	SELF-CONTAINED COOLING CAPACITY	5.0 Ton	60 Mbtuh		
		6.0 Ton	72 Mbtuh		
		7.0 Ton	84 Mbtuh		
SUPPLY FANS	ECM	1800 cfm	High Capacity HC-D - 3/4 hp (2 fan bodies)		
		2200 cfm	Extra High Capacity XHC-D - 1 hp (2 fan bodies)		
SUPPLY VOLTAGES		208/3/60 "B"	YES		
		208-230/1/60 "C"	YES (5 Ton Only)		
		460/3/60 "E"	YES		
AIR FLOW DESIGN		Draw Through Heating		YES	YES
		Blow Through Heating	YES		
FILTERS		(2) 1" Disposable	20" x 20"		
		(2) 2" Disposable	20" x 20"		
		(2) Permanent Washable	20" x 20"		
WEIGHT		5.0 Ton	950 lb		
		6.0 Ton	980 lb		
		7.0 Ton	980 lb		

Note: These units are available in R407c refrigerant only.
All weights are calculated on the maximum available options.

NOTE: Change'Air reserves the right to make changes to air handler specifications without prior notice. The performance of each air handler may vary based on site conditions and installation.

4.4 Junior Series Packaged A/C Classroom Air Handler (Low Condenser Intake)

The Change'Air Junior Series self-contained, packaged air conditioning classroom air handler comes standard with an internal packaged air conditioning system. The factory installed air conditioning consists of a direct expansion cooling system, scroll compressor and fan assemblies that are carefully matched to provide peak performance. Efficient cooling can be assured through a Change'Air Control Systems microprocessor controlled economizer circuit board.



4.5 Heating Options

The low intake Junior Series classroom air handler can be equipped with any one of the following heat options.

GAS HEAT SOURCE:

Gas heat source consists of a direct vented, sealed combustion furnace with a stainless steel tubular heat exchanger, and a modulating heat control valve. Our unique gas fired vertical classroom air handler has proven itself in the extreme climates of Western Canada as well as the more temperate regions across North America.

HOT WATER HEAT SOURCE:

The hot water heat source is constructed in an air over water configuration and provides heat by way of a hydronic coil. Built to dependable, design conscious standards, these air handlers are an efficient complement to your existing hot water heating system. Our hydronic heating coils are comprised of corrugated aluminum fins individually bonded to bright copper tubing to prevent electrolytic action. They are then brazed onto headers and are pressure tested to meet industry standards. All our coils have a self closing bleeder to facilitate start-up.

STEAM HEAT SOURCE:

The steam heat source is designed with a steam heating coil for a steam heat source. The steam heating coil is comprised of copper tubing with corrugated aluminum fins bonded to the tubes in order to prevent any electrolytic action.

ELECTRIC HEAT SOURCE:

Electric heat source consists of multi-stage electric resistance elements offered in several voltage/phase and kilowatt configurations.

4.6 Cooling Options

These Junior Series low condenser intake air handlers have self-contained, packaged air conditioning designed for an exterior louver at ground level.

Change'Air offers our standard refrigerant as R410A and R407C.

A full range of capacities have been designed to accommodate a range of spaces from a small classroom to a high load computer lab or cafeteria.

All air handlers include safety features such as high pressure cut outs, evaporator freeze protection and line dryers to ensure a long operating life. Quality single step scroll compressors are standard equipment on all low condenser intake Junior Series classroom air handlers.

