

# ConvenienceWorks®

By **HUSSMANN®**

Working with you to create total convenience store solutions to maximize your sales and profits.

**Proto-Aire XP**

**Protocol Distributed System**

**Engineered for Efficiency and Performance.  
Designed for Convenience. Built to Last.**

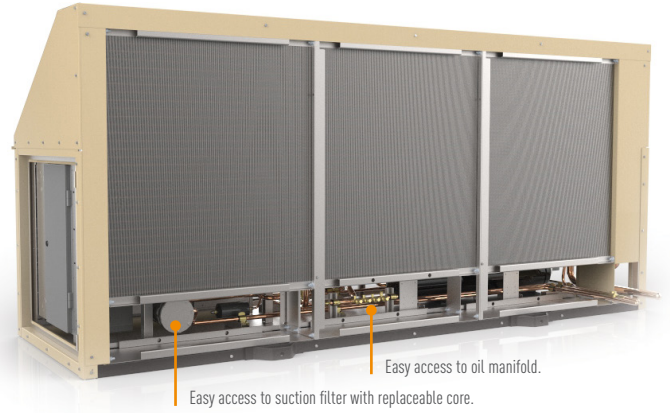
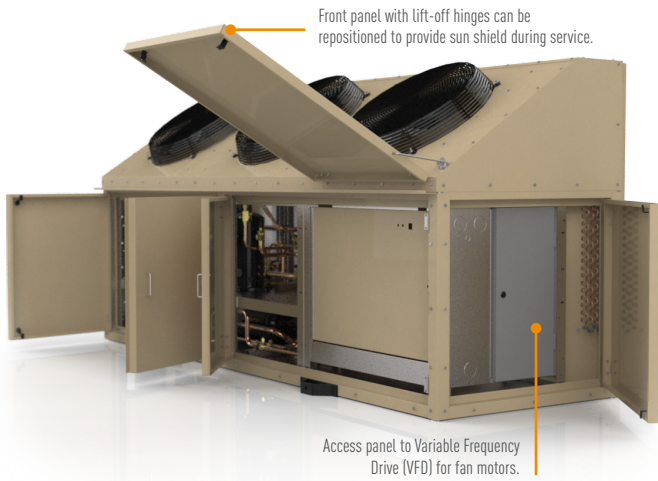


**Proto-Aire XP is the latest innovation in Protocol distributed systems.**

This new product was designed specifically for small format stores. It is engineered for efficiency and performance, designed for convenience, and built to last.

**Proto-Aire XP is a parallel refrigeration system consisting of six preconfigured models with varying capacity.**

The units consist of 3 to 4 scroll compressors and 3 to 4 variable speed condenser fans for improved energy efficiency. The medium temp suction group is controlled by a lead variable capacity digital scroll and the low temp suction group consist of liquid injected scroll compressors, all controlled with patent pending control logic by Hussmann. This new design uses an electronic CDS valve to provide improved load-matching performance between the low and medium temp suction groups. Structural and piping enhancements are part of the new design, resulting in improved access to internal components.



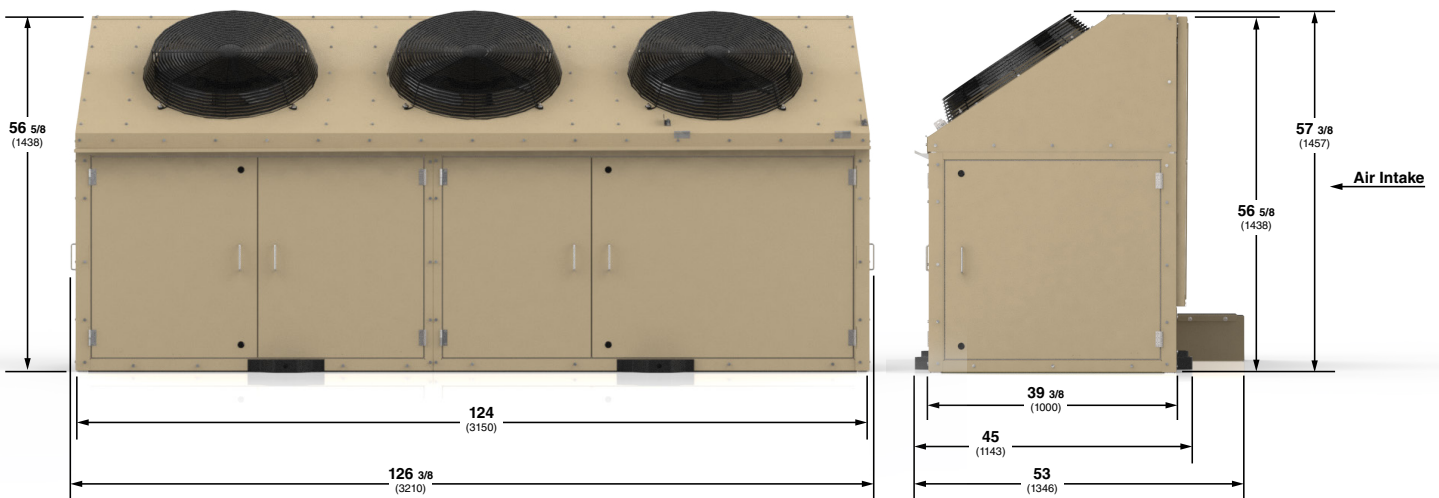
### Efficiency and Performance.

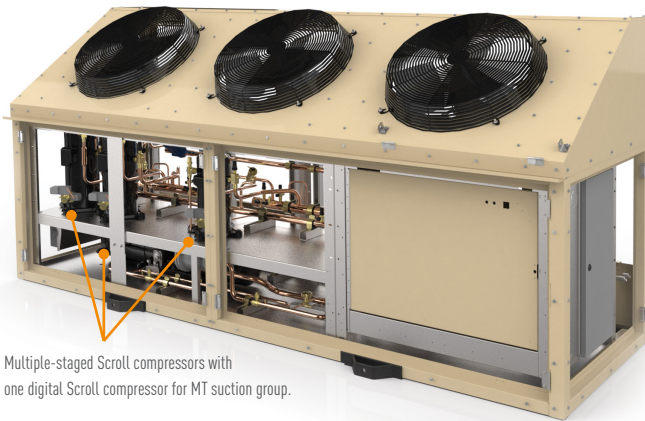
**Proto-Aire XP was designed specifically for the unique refrigeration needs of small format stores.** The Hussmann, patent pending control logic algorithm quickly adjust to the large load shifts commonly associated with small format store applications. The result is a more efficient matching between compressor cycling and store load demands. A variable frequency drive (VFD) and variable speed fans come standard to further increase energy efficiency.

### Designed for Convenience.

**Proto-Aire XP was designed with serviceability in mind.** The placement of service components are located near the outer parameter of the unit with easy-open access panels to make service as convenient as possible. But we didn't stop there. Proto-Aire XP comes in six preconfigured units to make product selection and ordering quick and simple. The QR code facilitates easy access to install and service documentation.

Dimensions apply to 3 and 4 condenser fan units.





Multiple-staged Scroll compressors with one digital Scroll compressor for MT suction group.

### Quality and Value.

**Proto-Aire XP delivers exceptional value and quality for years of reliable refrigeration.** The patent pending control logic algorithm and electronic CDS valve are synchronized to provide optimum load distribution between the low and medium temp suction groups. And the new piping design reduces potential system leak points by 7% compared to the original Proto-Aire design. It all adds up to quality and value that you can trust.



### Proto-Aire XP Specs.

Model	NOM LT HP	NOM MT HP	Number of Fans	Receiver Capacity (lbs)	Est. Operating Weight (lbs)	Mechanical Connections			Electrical		
						LT Suction	MT Suction	Liquid	Voltage	MCA	MOPD
PAEL03.0M12.0	3.0	12.0	3	72	2708	7/8"	1-5/8"	7/8"	208/230	76.6	100
PAEL04.0M14.0	4.0	14.0	3	72	2708	1-1/8"	2-1/8"	7/8"	208/230	97.0	125
PAEL06.0M12.0	6.0	12.0	3	145	2933	1-1/8"	2-1/8"	7/8"	208/230	87.5	125
PAEL07.0M15.0	7.0	15.0	3	145	2933	1-3/8"	2-1/8"	1-1/8"	208/230	114.8	150
PAEL06.0M18.0	6.0	18.0	4	145	3024	1-3/8"	2-1/8"	1-1/8"	208/230	121.6	150
PAEL07.5M15.0	7.5	15.0	4	145	3024	1-3/8"	2-1/8"	1-1/8"	208/230	119.8	150

See additional information on back page.

# Proto-Aire XP

## Protocol Distributed System

### Standard Configuration.

#### Mechanical Components (Factory Installed)

- Copeland scroll compressors
- Electro-mechanical high pressure safety for compressors
- CDS stepper crossover valve
- 72/145 lb. heated and insulated receiver
- Liquid drier with bypass
- Turbashed oil separator with oil filter
- Suction filters on LT and MT suction groups
- Adjustable drop leg pressure regulator (winter flooding valve)
- Fixed receiver pressure regulator
- Hot gas stub with SOV for ice machine defrost
- Full port isolation and service valves

#### Electrical Components (Factory Installed)

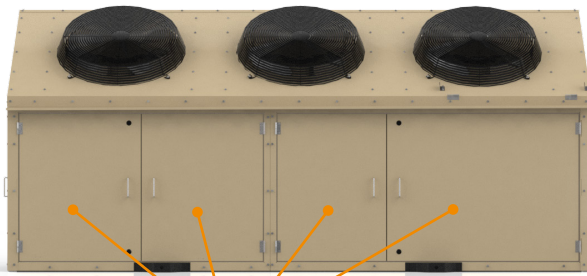
- Electronic controller with Hussmann patent pending control logic
- JCI system 450 back-up pressure controls for compressor low pressure control and condenser fan cycling
- OMC electronic oil level control
- Variable frequency drive (VFD) for condenser fans
- Replaceable core filter/drier and sight glass
- Replaceable suction filter per suction group
- 208/230V/3ph/60Hz main unit power
- 120V/1ph/60Hz controller power

#### Cabinet Features

- Pre-painted galvanized steel cabinet
- Hinged, lift-off doors (one door can be reattached over control panel section to provide sun shield)

#### Refrigerant Options

- R448A, R449A, R407A/F, and R404A



Hinged, lift-off doors for ultimate versatility.



Use your QR reader to reference additional documentation:

- Wire Diagrams
- Piping Diagrams
- Installation/Operations Manual
- Parts List

### Available Options.

#### Options (Factory Installed)

- Hail guard (easy on/off)
- Electrofin condenser coating

#### Options (Ship Loose)

- Remote panel
- Protective weather hood (allows piping circuits to be elbowed down 90° where piping exits the unit)
- Remote disconnect
- Remote header for circuits with or without EPR installed

NOTE: We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions, or replacements for equipment previously sold or shipped.

For additional resources, contact your representative or visit [www.hussmann.com](http://www.hussmann.com).

  
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877.543.6034