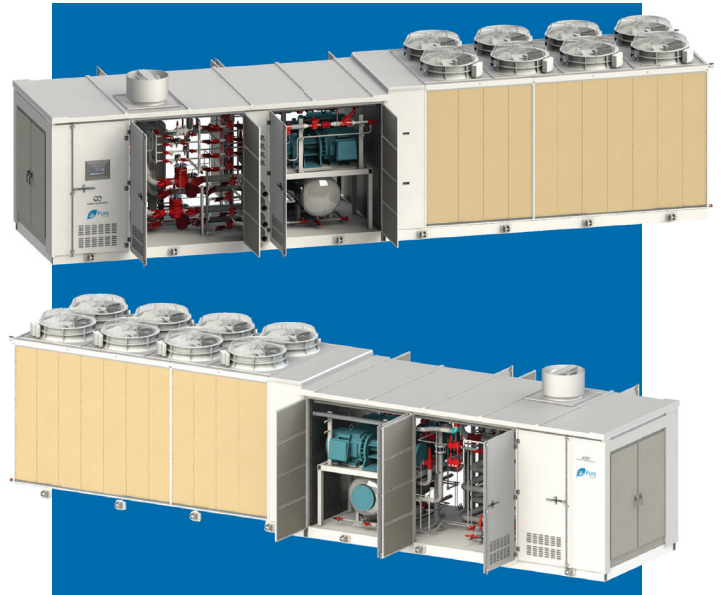




# Low-Charge, Ammonia Condensing Unit

A natural refrigerant-based refrigeration system that is safe, sustainable, and energy efficient in all climates.



## Design Features:

- Industrial grade direct drive screw compressors
- Adiabatic air cooled condenser with modulating fan control
- PLC-based control system with supervisory HMI and cloud-based IoT access
- High efficiency oil management system
- Sound attenuated enclosure
- Ammonia leak detection
- Built-in ventilation
- Direct expansion ammonia with motorized control or low recirc pumped liquid
- Cooling capacities ranging from 30 to 160 Tons at -20F to 50F room temps

## Controls:



## Benefits:

### Contractor:

- Single point power connection
- Power distribution to evaporators
- Standard package sizes from 30 to 160 tons for freezer, dock, and cooler loads
- Design flexibility
  - Pipe from Pure Cold installed on the dock roof to hung evaporators
  - Pipe to penthouse evaporators installed on the freezer or dock roofs
- Field piping only required to evaporators as all control and isolation valves are integrated into the Pure Cold package
- Insulated cold piping and vessels
- Full access doors for commissioning, start-up

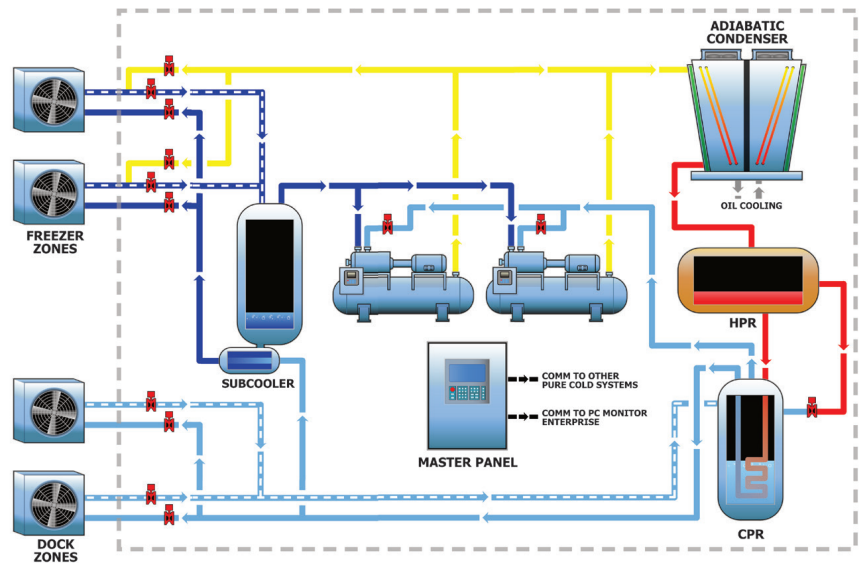
### End User:

- Reduced regulatory burden with low charge ammonia solution
- Lower operating cost
  - VFD driven, economized compressors
  - Modulating fan capacity on evaporators and condensers
  - No water treatment or sewer cost
- Low installed cost
  - Plug and play design
  - Single point power connection
- Lower Maintenance Cost
  - Fully serviceable industrial compressors
- Increase revenue generating square footage by eliminating engine room
- Environmentally friendly, future proof, natural refrigerant

## Standard Package Includes:

- Dual screw compressor package with direct driven TEFC motors
- Integrated adiabatic condenser with modulating fan control
- Sound attenuated enclosure
- High pressure receiver
- Controlled pressure receiver with subcooling coil
- Two to four evaporator valve stations
- Liquid injection oil cooling
- NEMA 4 VFD and solid state starters for compressor motors in 460 V or 575 V
- Ammonia detection horn and strobe
- Emergency /temperature exhaust fan
- PLC-based control system with PC enterprise HMI and Pulse

## System Diagram



## Technical Data: Low Temp

Model	Capacity TR	Power Consumption (BHP)	Motor (HP)	Number of Compressors	COP	R717 Charge (lbs.)	Dry Weight (lbs.)	Dimensions (ft.)
PC-30-LT-RC	28.2	119	150	2	1.1	361	33,500	32 x 8.5 x 11
PC-40-LT-RC	43.8	173	200	2	1.2	432	35,800	36 x 8.5 x 11
PC-60-LT-RC	62.4	249.6	300	2	1.2	477	41,900	41 x 8.5 x 11
PC-75-LT-RC	79.8	300.2	400	2	1.3	487	43,100	41 x 8.5 x 11
PC-95-LT-RC	97.2	356.6	400	2	1.3	533	45,100	45 x 8.5 x 11

Note: Based on -20°F evaporating, 95 °F condensing

## Technical Data: Medium Temp

Model	Capacity TR	Power Consumption (BHP)	Motor (HP)	Number of Compressors	COP	R717 Charge (lbs.)	Dry Weight (lbs.)	Dimensions (ft.)
PC-50-MT-DX	51.5	60.6	75	1&1 Backup	4.0	190	29,400	32 x 8.5 x 11
PC-75-MT-DX	77.2	88	100	1&1 Backup	4.1	224	33,300	36 x 8.5 x 11
PC-100-MT-DX	111.5	127.3	100	1&1 Backup	4.1	259	35,400	41 x 8.5 x 11
PC-135-MT-DX	139.8	153	200	1&1 Backup	4.3	294	41,800	41 x 8.5 x 11
PC-160-MT-DX	168.2	181.7	200	1&1 Backup	4.4	295	41,900	45 x 8.5 x 11

Note: Based on 25°F evaporating, 95 °F condensing

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