# Why Turbo Air? Value

Every customer has the right to choose the best product



September. 2018

#### Revolutionary Self-Cleaning Condenser

Dust can accrue rapidly in areas where refrigeration is installed and used. Dust is drawn through the fan and accumulated, preventing the condenser from properly releasing heat. This causes the compressor to increase its pressure on refrigerants, increasing the possibility of the compressor breaking down.

The 'Self-Cleaning Condenser' cleans the condenser with a rotating brush that moves up and down 2-3 times a day, preventing any dust build-up and making it possible to always maintain the highest efficiency while saving additional energy.

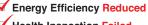
"Dirty condenser coils are the main reason for service calls"



Must clean condenser every 30~90 days **Competitors** 



- Compressor Life Decreased
- Health Inspection Failed



#### SOLUTION



Maintenance Free, **Self-Cleaning Condenser** Only at Turbo air

800-627-0032 www.turboairinc.com

#### Condenser Coil Maintenance Pays Off

('Energy Manager Today')

Richard Fennelly, the Director of Product Development for CoilPod LLC says that there is not a lot of research on how much money can be saved, but all signs point to a significant amount. It also is a distasteful job that often gets pushed aside.

The condensers coils that are at the heart of cooling equipment need to be cooled. This cooling is provided by a fan that draws in air. That air carriers minute pieces of debris along for the ride. The vents get clogged and the fan must work harder to do its job. This causes three problems: The fans use more electricity and therefore are costlier to run, they require more service calls and, ultimately, many fail. Often, these failures result in ruined inventory.

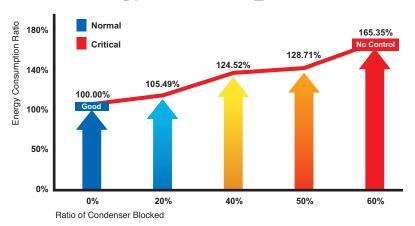
Addressing this problem leads relatively easy gains. The greatest are "grab and go" type refrigerator units common in delicatessens and convenience stores since they are in high trafficked public areas. Fennelly, whose company offers a new approach to condenser coil cleaning, pointed to statistics compiled by the Food Service Technology Center (FSTC) and presented at the Restaurant Facility Managers Association and Commercial Food Equipment Service Association conferences last year.

The estimates, which presumably are based on refrigeration devices the FSTC found in the field, are predicated on an electric rate of \$0.11 per kWh. A six-year-old double door merchandiser costs \$1,325 per year when dirty. Operating expense is cut to \$625 – a reduction of 47 percent – when the coils are cleaned. A large double door fridge (age unspecified) cost \$950 per year to run. That cost is shaved by 46 percent, to \$433, when the coils are cleaned. The other examples are in the same range.

Fennelly said that food service technicians often say that the most common cause of service calls are problems that arise from clogged condenser coil housings. Typically, the approach to cleaning debris is to use a brush, vacuum or wetvac. These steps are a good start but, ultimately ineffective because the problems often are deeper in the apparatus and can't be dislodged in this way.

October 18, 2016 by Carl Weinschenk (https://www.energymanagertoday.com/condenser-coil-maintenance-pays-off-0127798)

#### **Energy Consumption Ratio**



Tested Model: TSF-23SD. Ambient Temperature: 92°F



## We are creating energy, by reducing energy consumption.

We have the most models registered with the Department of Energy & Energy Star in the entire Commercial Refrigeration Industry

· Energy star : 73 models

• DOE: 294 models (Reflects 03/19/2018 data)

Every Turbo Air is engineered with the principles of efficiency in mind for greater energy saving without sacrificing performance. It includes innovations like digital temperature controllers, energy saving fan controls, Self-Cleaning Condenser systems and more.

All temperature information provided is obtained through NSF standard testing environment.











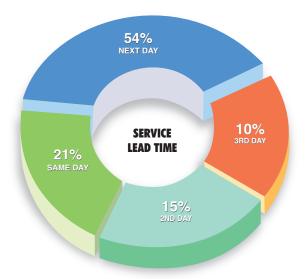






#### **FASTEST SERVICE IN THE INDUSTRY**

We understand the frustration and disappointment customers feel when their refrigerators are not promptly fixed. Our in-house technicians fulfill 95% of all service calls within three days and deliver two-day service parts throughout the United States.



### 95% of service calls fulfilled within 3 business days.

- Part Distribution
  - 13 warehouses
  - 15 major part distributors
  - 2 Day delivery throughout the United States
- In-house Technicians available in 17 locations
  - 2,000 Technician Network

#### We understand what best service means!

For your convenience, Turbo Air call centers are located in two time zones (Pacific & Central) to provide the fastest response. **In-house Technicians work in thirteen major cities** and a network of 2,000 technicians work throughout the 50 states, conveniently providing parts within 2-3 days from our branch location.



#### **SUPER DELUXE SERIES REACH-IN**



- 1 Digital Temperature Controller
  - High Tech Monitor
  - Early Warning
  - Real-time Online Communicating System
  - Door Opening Alarm
  - Turbo Cooling & Freeze
- Patented Door Pressure Release Device
- 5 Stainless Steel **Exterior & Interior** 
  - Stainless Steel Shelves

3 Ergonomically

**Designed Handles** 

6 LED Interior Lighting

8 Patented Self-Cleaning Condenser

- \* Only at Turbo Air

- 4 Rounded Corners
- **7** Bottom Mount **Compressor Unit**

#### PRODUCTS TOTAL 11 MODELS











† ENERGY STAR rated models

#### **M3 SERIES REACH-IN**



- Digital Temperature Controller
  - High Tech Monitor
  - Early Warning
  - Real-time Online Communicating System
  - Door Opening Alarm
  - Turbo Cooling & Freeze
- Patented Door **Pressure Release** Device

3 Ergonomically

**Designed Handles** 

6 LED Interior Lighting

- 6 Heavy Duty PE **Coated Wire** 
  - **Sheleves**
- 8 Patented Self-Cleaning Condenser

- \* Only at Turbo Air
- 4 Rounded Corners
- 7 Hot Gas Condensate Device

#### PRODUCTS TOTAL 16 MODELS





#### **PRO SERIES REACH-IN**



Model / PRO-50R-N

3 Easy Grip Recessed Door Handles

6 LED Interior Lighting

- 1 Digital Temperature Controller
  - High Tech Monitor
  - Early Warning
  - Real-time Online Communicating System
  - Door Opening Alarm
  - Turbo Cooling & Freeze
- 2 Cold Air Distribution System
- 5 Heavy Duty Stainless Steel Shelve & Life Time Warranty Rust-Resistant Self Clips
- 8 Expansion Valves

- \* Only at Turbo Air
- Only at Turbo Air
- 4 34" Deep Model (Exterior Dimension)
- 7 Patented Self-Cleaning Condenser

#### PRODUCTS TOTAL 25 MODELS





PRO-26R-N† PRO-26F-N



PRO-26R-GSH-PT-N



PRO-50-4R-N† PRO-50-4F-N†



PRO-50R-N† PRO-50F-N†

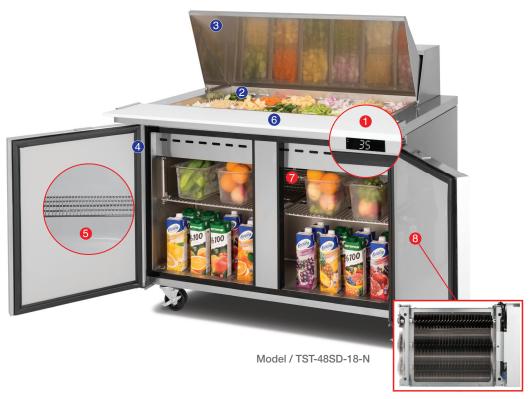


PRO-77R-N† PRO-77F-N

† ENERGY STAR rated models

#### **SUPER DELUXE SERIES PREP TABLE**

#### Hello **Brightness**, My New Friend



Patented Self-Cleaning Condenser

\* Only at Turbo Air

- 1 Digital Temperature Control & Monitor System
- 5 Stainless Steel
  Exterior & Interior
   Stainless Steel Shelves
- Cold Bunker System
- 3 Insulated Pan Cover
- 4 Rounded Corners

- 6 High Density Polyurethane Cutting Board
- LED Interior Lighting & Fan Control
- 8 Bottom Mount Compressor Unit

#### PRODUCTS TOTAL 34 MODELS





#### **M3 SERIES PREP TABLE**



\* ● Only at Turbo Air

- 1 Digital Temperature Control & Monitor System
- 2 Cold Bunker System
- 3 Insulated Pan Cover
- 4 Rounded Corners

- **5** Heavy Duty PE Coated Wire Shelves
- 6 High Density Polyurethane Cutting Board
- 7 LED Interior Lighting & Fan Control
- 8 Patented Self-Cleaning Condenser

#### PRODUCTS TOTAL 10 MODELS





#### J SERIES UNDERCOUNTER



\* ● Only at Turbo Air

- 1 Digital Temperature Control & Monitor System
- 2 Ergonomically Designed Doors
- 3 Heavy Duty PE Coated Wire Shelves
- 4 Rounded Corners

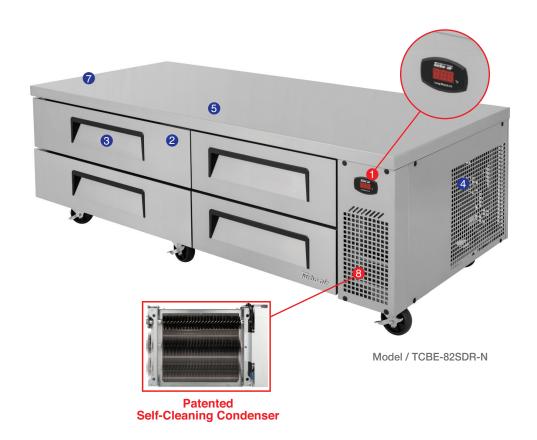
- 5 Easy open front Grille with Condenser-Cleaning Brush Kit
- 6 LED Interior Lighting & Fan Control
- 7 Hot Gas Condensate System

#### PRODUCTS TOTAL 20 MODELS





#### **SUPER DELUXE SERIES CHEF BASE**



- Digital Temperature
   Display
- 5 High-density Polyurethane Insulation
- 2 Stainless Steel & Durable Construction
- 6 Patented Self-Cleaning Condenser
- 3 Ergonomically Designed Door Handles
- 7 Extended Top Available
- \* Only at Turbo Air
- 4 Side Mount Compressor Unit

#### PRODUCTS TOTAL 11 MODELS





#### **SUPER DELUXE GLASS DOOR FREEZER**

#### Unbelievably, operated by 115 volt



Glass Door

6 Individual Two Cycle

(TGF-72SD\*-N only)

Refrigeration System

Digital Temperature

Controller

- High Tech Monitor
- Early Warning
- Real-time Online Communicating System
- Door Opening Alarm
- Turbo Cooling & Freeze
- Heat Prevent Door Frame
- Hot Gas Line: No Electrical Frame Heater is Needed
- 8 Patented Self-Cleaning Condenser

- \* Only at Turbo Air
- 3 Triple Pane Heated 4 Shadow Free LED **Advertising Panel** 
  - Patented Self-**Contained Device** (No Plumbing Required)

#### PRODUCTS TOTAL 50 MODELS







TGM-35SDB-N



#### STANDARD GLASS DOORS REF. TOTAL 14 MODELS







TGM-48RB-N



TGM-50RSB-N†



TGM-72RS-N

† ENERGY STAR rated models

#### STANDARD GLASS DOOR FREEZERS TOTAL 5 MODELS







TGF-49FB-N TGF-23F-N







TGIM-49W-N

#### **OPEN DISPLAY CASES - VERTICAL**



Model / TOM-48DXB-N

\* ● Only at Turbo Air

- 1 Shadow Free LED Advertising Panel
- **2** LED Interior Lighting
- 3 Rounded Front with Bumper
- 4 Stainless Steel Interior & Stainless Steel Flat Shelves

- 5 Patented Self-Contained Device (No Plumbing Required)
- 6 Patented Self-Cleaning Condenser

#### PRODUCTS TOTAL 40 MODELS









TOM-50W-N



TOM-50B-SP-A-N



TOM-36DXB-SP-A-N



TOM-48EB-N



TOM-50B-SF-N

#### **OPEN DISPLAY CASES - HORIZONTAL**



**Patented Self-Cleaning Condenser** 

\* ● Only at Turbo Air

- 1 LED Interior Lighting 2 Energy Saving Gaurd 3 Stainless Steel Solid
- Shelves Standard
- 4 Patented Self-**Contained Device** (No Plumbing Required)

5 Patented Self-Cleaning Condenser

#### PRODUCTS TOTAL 66 MODELS







TOM-50LW-N TOMD-50-LW



TOM-50SB-N TOMD-50HB



TOM-40LB-SF-N





TOM-W-50SB-UF-N



TOM-50SB-SP(-A)-N

#### **ISLAND DISPLAY CASE**



\* Only at Turbo Air

- 1 LED Interior Lighting
- 2 Price Tag Rails Standard
- 3 ABS Bump Guard Liners
- 4 5mm Thick Polycarbonate Product Stopper

- 5 Patented Self-Contained Device (No Plumbing Required)
- 6 Patented Self-Cleaning Condenser

#### PRODUCTS TOTAL 6 MODELS









TIOM-48RSB-N



TIOM-48RRB-N

#### **BAKERY / DELI CASE**



Patented Self-Cleaning Condenser

- 1 LED Interior Lighting
- 5 Patented Self-Contained Device (No Plumbing Required)
- 2 Low-E Coated Double Pane Glass
- 6 Patented Self-Cleaning Condenser
- 3 Tempered Glass Shelves with Stainless Steel Front and Back Edges
- \* Only at Turbo Air
- 4 Stainless Steel Floor & Airflow Grille

#### PRODUCTS TOTAL 24 MODELS





#### **ICE CREAM MERCHANDISER**



\* ● Only at Turbo Air

- 1 LED Interior Lighting
- Locked-in Temperature Equal from Top to Bottom
- 3 No Electrical Frame Heater is Needed
- 4 Easy Grip Rack Handles

- 5 Contemporary Design Curved Glass Front & Top
- 6 Extra Storage Space (Except TIDC-26-N)
- Patented Air Circulation & No Need to Clean Condenser for 5 Years

#### PRODUCTS TOTAL 11 MODELS





#### **UNDERBAR EQUIPMENT**



**Patented Self-Cleaning Condenser** 

\* ● Only at Turbo Air

- 1 Forced Air Cooling System
- 5 Four-way Tapper Manifold Standard (TBD-1SD/SB-N6:

Two-way)

- 2 Stainless Steel Cabinet Construction
  - (Except Galvanized Back & Bottom)
- 6 Patented Self-Cleaning Condenser
- 3" Diameter Stainless Steel **Insulated Beer Towers**
- 7 Triple Faucet Available (Optional)

4 Double Faucet

Standard

#### PRODUCTS TOTAL 39 MODELS











TBC-36SD-GF-N

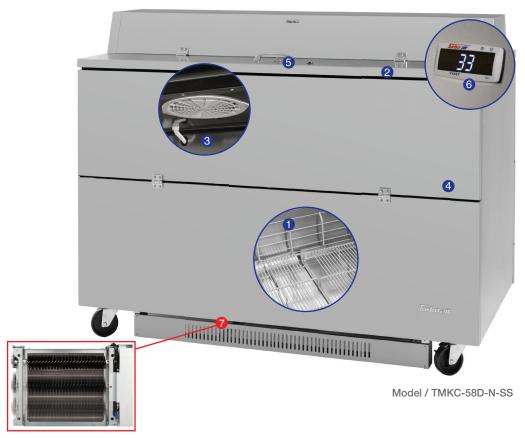






† ENERGY STAR rated models

#### **MILK COOLER**



Patented Self-Cleaning Condenser

- 1 Heavy Duty Floor Racks
- 5 Hold-Open Flip-Up Top Lid with Door Lock
- 2 Stainless Steel Self-Service Door
- 6 Digital Temperature Control & Monitor
- 3 Efficient Cooling System
- Patented Self-Cleaning Condenser
- \* Only at Turbo Air
- 4 Sturdy and Clean Stainless Steel Construction

## PRODUCTS TOTAL 24 MODELS





### SUPERMARKET SERIES TOTAL 72 MODELS

# Open Multi Deck Merchandisers Dairy & Deli / Meat / Produce



### SUPERMARKET SERIES TOTAL 96 MODELS

## Reach-in Glass Door Merchandisers Freezers / Coolers



## SUPERMARKET SERIES TOTAL 8 MODELS

Service Cases
Self-serve / Service-cover



### **REFRIGERATION SYSTEM**

#### **CONDENSING UNIT**



- Blue anti-corrosion fin increases the life span of the coil.
- Seamless inner groove copper tube is used to increase the heat exchange rate by reducing the space between the fin and the copper tube.



■ Highest quality compressor in the world.



- 1 year compressor warranty (4 year extended warranty available).
- 1 year fan motor and parts warranty.



- Head pressure control stabilizes the freezing of liquid line, minimizes formation of flash gas to increase efficiency of the system, and prevents compressor damage by controlling high pressure.
- Experienced engineers have designed the system for maximum efficiency.
- Fan blades: Specifically matched with motors and coil for maximum air movement and cooling.



- Control box is designed for easy installation.
- Low pressure control is adjustable.
- All the parts are compliant with industry standards and interchangeable with readily available parts.
- Wiring: Easily accessible. Compressor comes with a wiring harness that is manufactured with connections that will not come loose with vibration.



- Control box and service valves are located outside for easy service.
- Base: Heavy duty steel. Legs are 2-1/6" tall.
- Cabinet: Prepainted with galvanized body. Protects against corrosion.
- All products carry UL, cUL, ISO 9001 approvals.







### All Replacement Parts are Universal!

### **REFRIGERATION SYSTEM**

#### **UNIT COOLER**



- Blue anti-corrosion-fin increases the life span of the coil.
- Air-pass guard is located at the bottom of the coil to improve heat exchange rate.
- Easy to replace defrost heater (LED model).
- Corrugated fin is used to increase heat exchange rate by expanding the surface area.



- Even in confined space, all parts can be reached easily by opening the front cover.
- Location of power connector makes replacement of motor convenient.
- 1 Year fan motor and parts warranty!



- Seamless inner groove copper tube increases the heat exchange rate by reducing the space between the fin and the copper tube.
- Venturi type distributor and precise orifice hole are used to minimize the pressure drop and maximize the freezing capacity respectively.
- Even in confined space, all parts can be reached easily by opening the front cover.



- Thermostat is installed to prevent over temperature on heater.
- Circuit opens automatically over 50°F.
- Parts available: Expansion Valve (Sporlan) (Fatory pre-mounted) Solenoid Valve (Sporlan) (Fatory pre-mounted) Thermostat (Johnson control)



- The spiral fan guard enables cold air to be delivered efficiently and thoroughly.
- The protruding fan and motor placement substantially reduce vibration and noise.
- PSC fan motor, which prevents oil evaporation, is used for long life expectancy.
- EC motor (optional) for high energy efficiency.



- Unique air flow system (Patent pending) results in improved circulation within crowded walk-in cooler/freezer.
- Anti-oxidizing stainless steel mounting and bolts.











### All Replacement Parts are Universal!

### **REFRIGERATION SYSTEM**

#### **PACKAGE UNIT**













#### SM 1: Blue Anti-corrosion-fin and Coated Copper Tube

Protects aluminum and copper pipes from toxic gases generated from foods, retards refrigerant leakage, and prolongs the cooling capacity.

#### SM 2: Expansion Valve

Allows safe storage of foods with a feature that self-adjusts the circulation of refrigerant as the internal temperature changes, thus recovering the required temperature quickly.

#### SM 3: Compressor Protected Solenoid Valve

Decreases the inflow of refrigerant into the compressor when it is restarted after a stop. This extends compressor life and reduces compressor failure.

#### SM 4: 18% Bigger Condenser than the Standard

The condenser's efficiency affects most of the refrigerator's performance. Particularly, when used in a small compartment under high ambient temperatures or a dusty area, the package unit's condenser needs to be bigger than standard ones in order to achieve the best performance. In consideration of the environments that our products may be subject to, condensers utilized in our products are 18% larger than competitors'.

#### SM 5: Energy Efficient EC Motor

Through the use of highly efficient EC motors, our products reduce energy consumption and lower electricity costs, thus protecting the environment. Our products are designed with easy- to-replace motor and fan blades.

#### SM 6: Leak Free Patented Hot Gas Condensate System

The hot gas condensate system is an ideal system because of its fast evaporation of condensed water and its enhancing refrigeration efficiency. In spite of these advantages, many companies have stopped the application of such a system because of the high risk of discarding the refrigerators due to the rapid corrosion of hot gas lines causing refrigerant leakage and water inflow into the cooling pipes. Such problems are completely resolved in our products, thanks to a patented technology that prevents pipes from corrosion.

#### SM 7: Highly Efficient Air Circulation Enclosure

This system is designed to release hot air to the outside faster than competitors' and to enhance cooling efficiency. At the same time, it retards elevation of compressor temperature and keeps refrigerant pressure from increasing, thus saving energy as a result



All Replacement Parts are Universal!



Slicers - Heavy Duty / Light Duty Meat Saws **Meat Grinder** 

## **Radiance**

**Heavy Duty Restaurant Ranges** 

Salamanders

Cheesemelters

Countertop Hot Plates / Broilers / Griddles

**Stock Pot Stoves** 

**Wok Ranges** 

**Steam Tables** 

Food Warmer / Hand Wrapper

Microwave Ovens - Heavy Duty / Medium Duty



# German Knife TOTAL 9 MODELS

#### Slicers / Meat Saws / Meat Grinders



### **HEAVY DUTY RESTAURANT RANGES**



- 1 Reinforced Back Wall
  Strong Enough to Hold
  Salamanders
  Cheese- Melters
- 4 Bakery Depth Oven 24" Range Takes Full Size Pan in Depth
- 2 Thermostat Control on All Combo Model

No Extra Charge No Waiting

5 S/S Oven Interior & Oven Shelf

High Quality Material & Sanitaion

3 Heat Resistant Knobs & Oven Handle

> Warm to Touch Long Life as Metal

# PRODUCTS TOTAL 26 MODELS



### **HEAVY DUTY COOKING EQUIPMENT**





#### **Heat Box**

- Fully welded heat box provides longer life and better heat distribution to surface. (1)
- Powerful 15,000 BTU burners (every 6 inches).
- Welded radiant brackets last much longer than screw type brackets. (2)
- Welded pilot bracket. (3)
- Stainless steel burners will stay clean and provide longer life.
- Reversible 3 bar grate with grease runner is standard. 4 bar grate is
- available for purchase.



### **Ultimate Energy Saving + High Power**

- Rated over 40% energy efficient by CSA.
- 22,000 BTU burner will outperform less efficient 30,000 or 32,000 BTU gas guzzling burners.

30,000 x 26% = 7,800 BTU (Actual energy) vs. 22,000 x 40% = 8,800 BTU (25% less gas, +13% energy)

- Heat shield between burners captures heat escaping to the bottom. (1)
- Heat reflector kicks back escaping heat to Griddle surface. (2)
- Welded metal side skirt prevent heat escaping to the side.
- Manual Control (TAMG-) NOT recommended for low heat application.
- 34" plate for TAMG models, 1" plate for TATG models standard.



### PRODUCTS TOTAL 43 MODELS





# BAKERY EQUIPMENT TOTAL 6 MODELS



RBCO-N1







RBDC-2236



RBDO-33U

# **Eco-Friendly Turbo Air**

# Natural refrigerant is now used in all Turbo Air refrigerators

Turbo Air is ready to meet these changes with innovative and eco-friendly technology!

By utilizing our innovative, eco-friendly technology, Turbo Air has now replaced all previous refrigerants with climate-friendly hydrocarbons R-600A (Isobutane) and R-290 (Propane).

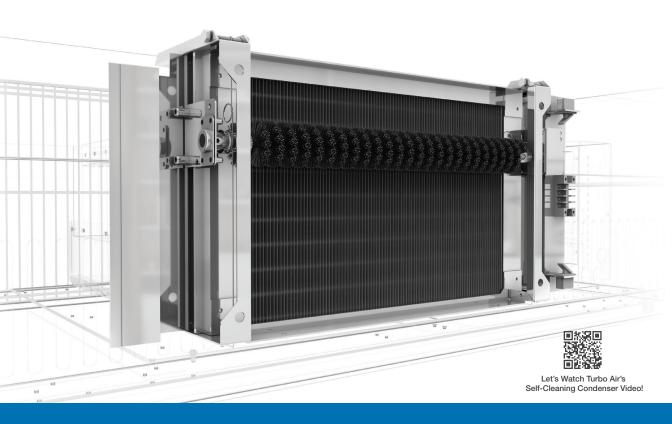
In our continued effort to protect the environment, we have decreased energy consumption by an average of 25%.





# **Elevate your expectation** with Turbo Air

We fulfill your every need and beyond with a wide selection of 500+ refrigeration units.





### Patented, Maintenance free **Self-Cleaning Condenser** only at Turbo Air

The 'Self-Cleaning Condenser' cleans the condenser with a rotating brush that moves up and down 2-3 times a day, preventing any dust build-up and making it possible to always maintain the highest efficiency while saving additional energy.

www.turboairinc.com

