



CASE STUDY

Team effort helps an industrial manufacturer of chillers stay competitive

Background

The global retail sector has grown during the last few years, and the United States is leading the pack. Specifically, the demand for ready-to-eat products has increased,

Sawyers Food Supply is a fast-growing food supplier in the Bahamas that supplies its own supermarket, as well as other local markets on the island.

FriconUSA was commissioned in December 2017 to retrofit the entire refrigeration system in Sawyers'



Modular parallel compressor rack units eliminate the need for mechanical rooms.

bringing with it additional demand for commercial refrigeration. This demand for commercial refrigeration systems and equipment can be seen in various places such as supermarkets and cold storage, along with emerging economies, and has become a major growth center for the commercial refrigeration systems market. This commercial equipment includes display cases, industrial ice making machines, walk-in coolers, reach-in coolers and chillers.

refrigerated warehouse with a new energy-efficient system that is projected to reduce energy consumption by 20%. Sawyers Food Supply is also planning to complete a newly constructed refrigerated warehouse, about 20 times the size of the original. This large refrigerated distribution center needs to cost-effectively keep products cool. Electricity in the Bahamas is expensive, so owner Sandy Sawyer sought to make an investment that would have a great return.

Challenge

FriconUSA is an exciting new player in the commercial refrigeration market. They have recently received UL certification and have jumped in to the nascent U.S. market.

Well-established for over 25 years in Venezuela as FRITECH, FriconUSA was launched in 2000 outside of Atlanta, GA, and specializes in aircooled chillers, condensing units and industrial ice-makers amongst others. These products are used in applications such as air conditioning for commercial buildings, food processing plants, slaughterhouses, blast freezers, cold rooms and food storage/distribution facilities.

They manufacture both an industrial and a commercial line of products featuring Bitzer compressors.

FriconUSA engineers are challenged every day to deliver high-end product solutions with demanding requirements through their distributors.

Solution

In late 2016, FriconUSA established a partnership with low-voltage manufacturer NOARK Electric. NOARK is a rather recent player in the U.S. industrial automation market with UL certified components, and an industry



focus on the heating air conditioning and refrigeration equipment market. FriconUSA's equipment designs incorporate many of NOARK's molded case circuit breaker and motor control components, such as contactors, relays, and starters.

After reviewing the project needs, the NOARK Ex9M series UL 489 molded case circuit breakers were selected. A safe, UL508-compliant motor control circuit protection scheme was created, which met all standards and, most importantly, all of the end-user's requirements.



Says Fernando Escuela, president and founder of FriconUSA, "NOARK and FriconUSA work well together. They have a solid, high-performance product line. They also have local support to assist our operation, including application and technical support."

For this particular situation, FriconUSA approached NOARK with their three-headed design challenge of combining product flexibility, cost control, and rapid deployment. By working closely together, FriconUSA's engineering team and NOARK's local and overseas support teams were able to address each of these challenges and deliver a solution for (Sawyers Food Supply).

"NOARK Electric product technology plays has an important role for the electrical control panels to ensure the system operates well and meets all specifications", says Deibys Ruiz, lead sales and engineering project manager at FriconUSA.

Adding additional challenges to this project, the isolation clearance and raceways used for wiring and maintenance required a raised mounting plate and the specifications in accordance to NEC code came into question. However, FriconUSA and NOARK worked closely together to devise an appropriate modification that meets all NEC codes.

NOARK's Ex9C contactors were utilized in the systems motor control and protection scheme, and the B1N miniature circuit breakers were also used in the power circuit control design.

Results

With the new modular refrigeration system by FriconUSA, the project is underway with plans to be in operation by mid-2018. Further expansion will follow, with plans to open 10 more Sawyers Fresh Market supermarkets at the rate of two per year.

FriconUSA's highly efficient solution developed for the old and new refrigerated warehouses and new supermarkets include expanded scope to integrate a photovoltaic solar plant, clean energy system to generate the electricity to further increase Sawyers overall energy savings.

As for NOARK Electric and FriconUSA, they both look forward to many more projects to collaborate on in the future.

Maria Escuela, Supply Chain and Logistics Coordinator adds, "I always enjoy working with NOARK. Whether it is with the field personnel or their headquarter's functional team, there is always a feeling of a team effort."

Maritza Barrios, Marketing Coordinator and Sales Associate at FriconUSA said, "In this evolving HVAC/R market Noark offers high tech products that can fit into our sometimes challenging custom applications, we always appreciate the attention to detail and the resources brought to support us for technical problems that might arise."

Ed Joe, Marketing Director for NOARK Electric North America concurs. "Every customer assumes you have a reliable, quality product offering – that's the baseline. It's the extra effort that it takes to come through during a customer's time of need that counts most. Our greatest asset is our local, knowledgeable field team and the support they can provide."



NOARK UL489 M2N series
Molded Case Circuit Breaker

About FriconUSA

Located just North of Atlanta, FriconUSA manufactures high-quality and efficient icemakers, air-cooled chillers, modular chillers and industrial condensing units for the food retail, commercial and industrial refrigeration and air conditioning sectors. FriconUSA recently entered the U.S. market after over 20 successful years in Venezuela, working hand-in-hand with distributors to ensure the best project development for our clients.

<https://www.friconusa.com/>

About NOARK

NOARK Electric is a global supplier of low-voltage electrical components for specialty manufacturing industries. We strive to provide our customers with high-quality products at an affordable price, backed by a five-year limited warranty. We are committed to becoming a leader in cost-effective components through the development of innovative products and continuous improvements, while demonstrating integrity, trust and honesty.

<http://na.noark-electric.com/>

NOARK



NOARK Electric North America

(626) 330-7007

na.noark-electric.com • nasales@noark-electric.com

