



absolute comfort

BLUEPRINT

Project: AGI Marcel's Supermarket

Location: Houma, LA

VRV III

Challenge:

A system that maintains a proper humidity level throughout the store and keeps a constant temperature utilizing very limited ceiling space.

The Solution:

Three Daikin VRVIII Systems



This 30-year-old grocery store was originally 14,000 sq ft. A recent remodel added 6,000 sq ft, with the result that the original rooftop units (50 tons) weren't keeping up. The rear of the store was cold, the front muggy and warm. The Louisiana Delta presents real comfort challenges because of very high humidity. Customers coming and going in the front of the store keep cooling loads and humidity high, and glass doors on the refrigerated cases can fog up if the HVAC isn't capable of handling the load. Customers won't buy what they can't see!

The owner wanted fresh thinking, and Daikin was on their shopping list.

An analysis done by Daikin, and confirmed by an independent consultant, showed significant energy savings were possible with the efficiencies presented by VRV. The systems were able to take full advantage of shifting loads in the store, including recirculating air from the refrigerated sections to other areas. As a result, 32 total tons of Daikin VRV (a 35% reduction in tonnage) keeps the entire store comfortable front to back.

The indoor humidity averages 55% (even when it's 100% outside), and the glass doors on the refrigerated cases are crystal clear.

Daikin also presented an installation advantage in this retrofit with limited ceiling space, in that ductwork did not have to be added to the store. Energy consumption has been reduced substantially, even with the added square feet. Shoppers are more comfortable, expenses are down, and sales are up, thanks to VRV by DaikinAC.



Project Information

Contractor: John O'Brian
All-Temp Refrigeration
Madisonville, LA
Distributor: Jose M. Arias
Baker Distributing Co.
Metairie, LA
Owner: Jeryl Marcel

Daikin AC Equipment

- 2 (Model # RXYQ144PBJU) Outdoor Unit
- 1 (Model # RXYQ96PBJU) Outdoor Unit
- 5 (Model # FXFQ36PVJU) Indoor Unit
- 3 (Model # FXMQ96MVJU) Indoor Unit
- 3 (Model # BRC1E71) Controller