

## BLUEPRINT

# MARCEL'S SUPERMARKET HOUMA, LA

### PROJECT INFORMATION

**Building Type:** Retail - Grocery

**Owner:** Jeryl Marcel

**Square Feet:** 20,000 sq. ft.

**General Contractor:**  
John O'Brian  
All-Temp Refrigeration  
Madisonville, LA

**Distributor:**  
Jose M. Arias  
Baker Distributing Co.  
Metairie, LA



### 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:*

- 2 12 ton Air-Cooled Heat Pump Outdoor Units
- 1 8 ton Air Cooled Heat Pump Outdoor Unit
- 5 Indoor Round Flow Sensing Cassettes
- 3 Indoor DC-Ducted Concealed Ceiling Units

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 Daikin VRV.



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### DAIKIN EQUIPMENT

- VRVIII Heat Pump
  - 2 RXYQ144PBJU
  - 1 RXYQ96PBJU
- Ceiling Mounted Cassettes
  - 5 FXFQ36PVJU
- Ceiling Ducted Units
  - 3 FXMQ96MVJU
- Controllers
  - 3 BRC1E71

### FIND OUT MORE ABOUT DAIKIN VRV.

Contact your local dealer or manufacturer's representative.

#### Additional information

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

Actual savings and costs will vary. Cost and savings statements are applicable solely to the installation indicated. For additional information please contact the installing contractor, distributor or factory representatives.

