

Epta Installs First TC CO₂ System in Gulf

Italian manufacturer Epta has been chosen to install a transcritical CO₂ refrigeration system incorporating its Full Transcritical Efficiency (FTE) technology at a 7,000-m² (75,347-ft²) supermarket in the brand new My City Centre Masdar shopping mall in Masdar City, Abu Dhabi (United Arab Emirates).

This is the first installation using transcritical CO₂ in an Arabian Gulf country, according to EPTA.

The FTE solution, launched at the Euroshop trade show in March 2017, helps to improve the efficiency of CO₂ refrigeration systems and overcome the challenge of an installation in a desert climate like Abu Dhabi, where temperatures reach up to 51°C (123.8°F).

According to Epta, its FTE technology will allow for up to 25% energy savings compared to a R404a system.

My City Centre Masdar is one of the most eco-friendly regional shopping malls, so sustainability and energy efficiency played a big role in the selection of a CO₂ system. The mall has set a goal of recycling 80% of waste, and also employs a photovoltaic system and LED lighting.

Masdar City as a whole is one of the world's most sustainable urban communities. Each building in Masdar City is constructed with low-carbon cement, utilizes 90% recycled aluminum, and is designed to reduce energy and water consumption by at least 40% compared with ASHRAE standards.

■ PA