BAHWAN PLAZA | DUBAI, UAE

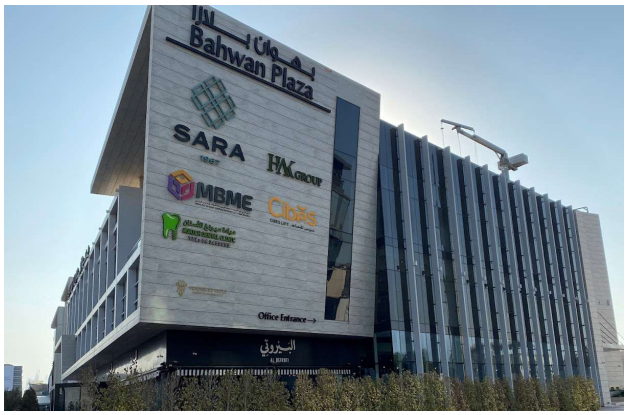
Bahwan Plaza

DAIKIN air-cooled chillers

Chiller electricity use fell XX% with GACS adiabatic cooling system

Measured performance from Two DAIKIN chillers upgraded with the GACS adiabatic cooling system

15%	8°C	2
MEASURED ENERGY REDUCTION	TEMPERATURE DROP BELOW AMBIENT	DAIKIN CHILLERS UPGRADED



CUSTOMER

Bahwan Plaza, a residential building operates DAIKIN chillers at Sheikh Zayed Road, Dubai, UAE

CHALLENGE

Reduce condenser inlet-air temperature and chiller electricity use during hot-weather operation.

GACS DESCRIPTION

Designed and manufactured in the UAE, GACS combines condenser protection with high-pressure evaporative pre-cooling, multi-stage water treatment, water recirculation and intelligent PLC control. It cools air entering the condenser coils to approximately 2°C above the ambient wet-bulb temperature.

TEST INSTRUMENTS USED DURING THE TEST

BTU Meter	Temperature & Humidity Reader	Eniscope (Energy Meter)
		

MEASURED PERFORMANCE

TWO Daikin chillers upgraded with GACS used 15% less electricity.

During GACS operation, average condenser inlet air was 27.32°C compared with 35.32°C average ambient air, a 8°C difference.

TEST CONDITIONS Average ambient: 34.13°C OFF / 34.24°C ON | Relative humidity: 56.58% OFF / 53.34% ON

Energy and environmental conditions were monitored in both operating modes.