

## Specialist protection for Isaac Newton Group of telescopes

When the Isaac Newton Group of Telescopes (ING) needed to replace the high performance air conditioning system protecting equipment in the Observatorio del Roque de los Muchachos on the Canary Island of La Palma, they approached Emerson Network Power, knowing that as a 'total solution' provider, Emerson Network Power could take on board the whole project of manufacture, supply and installation of the equipment in such a remote location.

Four Himod 240A Units were supplied complete with HCE29 condensers to be installed in a plant room within a telescope building, to provide dedicated cooling for the control room and computer suite.

Housing among many others the William Herschel Telescope and, of course, the Isaac Newton Telescope, the location of the Observatory is one of the best astrological sites in the world. It was chosen because of the remoteness of the island and its protection from urban development that ensures the night sky at the Observatory is free from artificial light pollution. However, as the site is very exposed and therefore can be subject to excessive weather conditions, the environment within the Observatory must be very closely monitored and controlled.

According to Doug Gray who managed this project for ING, "A small equipment footprint was important because where five units had previously supplied the duty, the increased load now has to be met by four units, as there is no

space for an extended plant room.

Given the location, low maintenance was also a significant factor in the selection of the new units as was the use of 407c refrigerant, the previous units having run only on the old, less environmentally friendly refrigerant."

The Himod units selected are air cooled direct expansion upflow models each having a total cooling capacity of 25.8 kW (23.5kW sensible). They are "full function" with precise temperature and humidity control, humidification being provided by the well-proven electrode boiler system with variable steam output.

Among the features responsible for Himod's high performance are the variable speed backward curved 'plug' fans, which greatly reduce energy consumption, particularly in ducted applications such as this. Compliant scroll compressors with a high COP ensure reliable and efficient operation of the cooling system.

"Finally", says Doug Gray, "the pre and after sales service that was provided lived up to the promise with Emerson personnel, undeterred by distance, visiting site to properly assess requirements, giving attention to detail in tendering with delivery in a relatively short time frame."

READERFAX 177

### **Media Building and Facilities Management**

**Date:** November 2004

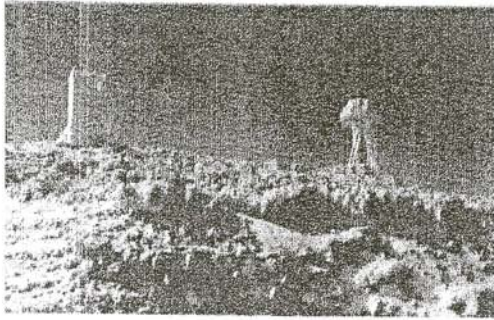
**Type:** Trade and Technical

**Frequency:** 11/Per year

**Circulation:** 12500

**MediaDisk Ref:** 4R-355

**Page:** 27



**Media**  
**Building and Facilities**  
**Management**

Date: November 2004

Type: Trade and Technical

Frequency: 11/Per year

Circulation: 12500

MediaDisk Ref: 4R-355

Page: 27