
Avocent (Emerson) – Shannon

Replacement of seven old R22 roof-top units with more efficient heat-pump models



Old York rooftop units, operating with R22, needed to be replaced at Avocent, Shannon. The seven units were at the end of their useful life cycle, showing operational and performance deficiencies, frequent breakdowns and spiraling repair costs.

It was not just R22 refrigerant that was replaced with this “drop-in” operation. Performances and efficiency have also been improved thanks to built in energy-saving controls of the Carrier’s latest roof-top heat-pump unit.

Sirus was appointed to carry out a survey of the site to establish the equipment requirements

in order to select, commission and install a direct replacement rooftop packaged units. Reversible heat pump technology was selected to increase total heating performances in winter as the existing LPHW coils were not able to cope with recent extreme winter temperatures.

The design brief was also to provide a direct replacement of the existing equipment in order to avoid altering the existing roof curbs and ductwork, and to considerably minimise the “on-site” installation.

Adaptor curbs were designed and fabricated by a local supplier to fit the new rooftop units to the

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existing curbs with little or no loss of factory production time, as the installations were scheduled to take place during weekends.

All these Carrier systems have been specifically designed to operate with the environmentally safer refrigerant R410A and they incorporate latest technology features such as high efficiency fans and compressors and control by the existing building automation system.

Carrier’s rooftop units provide free cooling using enthalpy sensing of outdoor conditions and they are also fitted with LPHW coils to provide additional heating capacity.



As a result, the overall performance and efficiency of the units has improved while Avocent have benefited from time and cost saving services provided by Sirus.

CLIENT

Avocent Products and Services
(Emerson Network Power)

LOCATION

Shannon Free Zone
County Clare, Ireland

SERVICES PROVIDED

Supply, Installation and Commissioning of seven Roof-top Heat Pumps, for a total cooling capacity of 450Kw; “drop-in” replacement of the units during two week-ends; Roof curb adaptors; BMS Integration.

DURATION

November 2012

REFERENCE CONTACT

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HEALTH + SAFETY

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