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Summary of the interview published at Tesisat (Installation) Magazine with Mr. Volkan Arslan Product Manager, Alarko Carrier Commercial Air Conditioners >>>

“WE PRODUCE DEVICES IN ACCORDANCE WITH EUROPEAN STANDARDS”

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Volkan Arslan, Product Manager, Alarko Carrier Commercial Air Conditioners, speaks assertively about the new series Carrier roof type air conditioners; “As currently what comes to people’s mind when you call Carrier in chiller group, in three years from now, with new investments in roof type air conditioners the same perception shall be provoked in their minds. Roof type air conditioners will be much more prominent with new investments.” Mr. Volkan Arslan gave the following information about Alarko Carrier and the roof air conditioners.

“As Alarko Carrier, we are the only production base of Carrier for roof type air conditioners in the EMEA (Europe, Middle East and Africa) Region. In other words, Carrier roof air conditioners produced here are exported to Europe, the Middle East and Africa. That’s why we’re at an important point. We already have air conditioner plant production under Carrier brand. Since 2004, Carrier slid the production of roof air conditioning in Spain to Turkey. Since 2004, some revisions have been made to the needs of the market in roof type air conditioners. At the beginning of 2012, we launched new generation roof type air conditioners into the market.

The most important feature of our new generation devices is the point we achieved in efficiency. Our new devices are 20% more efficient than the current series on average. This device is more efficient than the old device in terms of efficiency in both cooling (EER) and heating (COP). Our old device had a Eurovent certificate. The new device also has Eurovent certification. One of the most important changes is the refrigerant used, we use R410A refrigerant. In this way, our 50UA / UH series roof type air conditioners are more environmentally friendly devices thanks to the refrigerant that consumes both less electricity and releases less carbon footprint. Another important innovation is the heat recovery option. We are helping to reduce the electricity bills of our users by recovering some of cold air in summer and hot air in the winter with the heat exchanger without losing the processed air. The efficiency of the drum type heat recovery devices can be up to 80%. Natural gas heating property also available in our new devices is provided in our new devices. With all these achievements, we think that our new device will be more preferred by our customers and we aim to increase our sales..

Energy and efficient use of energy is one of the most important issues today. Many improvements are now being made to the products to produce more output with the energy needed to operate the device.

With the new regulation, it has become obligatory to show the energy efficiency class in the labels of the individual air conditioners used in the houses. Currently, there is no such requirement for commercial air conditioners such as chillers, air handling units, roof type air conditioners and fancoils. However, there is no doubt that it will be mandatory to show the energy efficiency classes in the labels for central air-conditioning devices in the upcoming years. Our newly developed roof type air conditioners are class A efficiency, one of the most efficient devices in the industry. The Eurovent certificate is not a mandatory certificate. Companies that want to receive Eurovent certification apply to Eurovent. This certificate is a very important document to prevent unfair competition. For this reason, as Alarko Carrier, we attach great importance to this type of documentation given by independent organizations. As we produce all the products in accordance with international standards, we test them in independent laboratories and certify our quality with proper documents. We used our enthalpy laboratory, perhaps being the only one in Turkey, in both the development and certification of the roof type air conditioner. In this way, we have tested the accuracy of our product data. Our laboratory that we allocated significant budget in the amount of \$ 1 million, is in compliance with international standards. Thanks to this laboratory, we are able to produce devices that meet all European standards..

For launching any product, it is necessary to start studies therefore minimum 3 years ago. This project was completed by joint operation of with R & D departments of Carrier in our country and in France. We have quality standards and tests that are applied very strictly in the production line here. Each device is subjected to various tests before sending it to the customer. In addition to our standard test room, our factory has also completed the Psychrometric Test Laboratory which was completed in 2009. This laboratory played a very important role in the development of new generation devices. Our laboratory constructed in 1 year with the cost about 1 million dollars, has 2 floors and 300 m² area. We can place the device on the upper floor and condition the ambient conditions between 15 and +55°C. We prepare the lower floor as the place to be conditioned, simulating the operating conditions of the device exactly. In addition, R&D department utilizes this laboratory in all new device design phase. None of the roof type air conditioner producers in Turkey has a lab with this capacity.

Turkey is becoming a production center for air conditioners gradually. There are many domestic manufacturers in the air handling units and fancoil devices sector; however, the number of producers of roof type air conditioners and chillers being



Volkan Arslan

Product Manager, Alarko Carrier Commercial Air Conditioners

Psychrometric Test Laboratory



Test Device capacity (Cooling and Heating)	25 — 250 kW*
Indoor Ambient Room Air Flow Range	5.000-35.000 m ³ /h
Outdoor Ambient Room Temperature Range	-15°C - 55°C
Indoor Ambient Room Temperature Range	8°C - 50°C
Test Standards	EN 14511-2:2004, ASHRAE 37:1988, ASHRAE41.1:1986, ASHRAE 41.2:1987

*At standard rating conditions stipulated in EN 14511-2:2007

more technologic devices is fewer. We contribute to Turkey’s exports with roof air conditioning we produce in Turkey. Our production is not only intended for the domestic market, but significant portion thereof is for exporting. We have a strategy in Carrier. We do not produce every product in all factories. For example, chiller groups are produced in France, and in EMEA region, Carrier brand chillers are only supplied from France. Italy is the production base for fan coils; and roof type air conditioner production base of Carrier is Turkey. That’s why we export 80% of the devices we produce here.