



Department of Energy

Washington, DC 20585

June 6, 2012

Ms. Leslie Jones
ENERGY STAR Program
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Room 62023
Washington, DC 20460

Dear Ms. Jones:

On October 28, 2011, the United States Department of Energy (DOE) notified Friedrich Air Conditioning Company (Friedrich) that DOE had completed testing of Friedrich room air conditioner models WS12C10 and WS13C30 under the ENERGY STAR Testing Pilot Program and confirmed that these models do not meet the ENERGY STAR energy efficiency requirement of 9.4 EER. On November 3, 2011, DOE notified Friedrich that its room air conditioner model US12C30 does not meet the ENERGY STAR energy efficiency requirement of 9.4 EER. In each notice, DOE gave Friedrich twenty days to provide conclusive manufacturing or design evidence or quality assurance information on why DOE testing showed that these models do not meet the ENERGY STAR Program's energy efficiency requirement.

In subsequent letters to DOE, Friedrich stated that DOE did not follow the manufacturing design, installation and operation instructions and test installation requirements when setting up and testing the units. Specifically, Friedrich alleged the following:

1. The pictures from the DOE test-set up for two units (model WS13C30, s/n AKHX01497; model WS12C10, s/n AKMS01268) appear to show that the wall sleeves are missing the bottom weather-strip rubber seal.
2. For model US12C30, the correct seal positioning provided by the set-up procedure is 20 mm from the unit on the left side and 38 mm from the unit on the right side. The pictures from the DOE test set-up appear to show equal distance of sealing on both sides of the unit when positioned in the test sleeve.
3. For model WS12C10, the pictures from the DOE test set-up appear to show that the gray gaskets applied to seal the top and sides of the unit within the sleeve were not installed correctly—the gaskets must be at least 1 inch deep around the entire perimeter.
4. For all three models, the pictures from the DOE test set-up appear to show that the wall sleeves/units were not installed at the proper front-to-back slope as indicated in the corresponding Friedrich set-up procedures.
5. For all three models, the pictures from the DOE test set-up appear to show that the outdoor room air sampling tube apparatus location may inhibit outdoor intake air flow into the condenser.



6. For one unit of model WS13C30 (s/n AKHX01497), the pictures from the DOE test set-up appear to show water pools on the discharge air plenum of the inside room unit, which, according to Friedrich, indicates oil fouling of the evaporator coil, which could be addressed by an additional run-in period or coil cleaning.

In Friedrich's view, based on the above, the test results are compromised and should be deemed defective.

DOE initiated another review of the test data in light of Friedrich's concerns. DOE does not agree with Friedrich's claims regarding set-up and confirmed that the lab specifically followed the installation instructions, including sealing the units prior to testing. As a result of the sampling tube apparatus location concerns, DOE retested one unit of Friedrich room air conditioner model US12C30 (s/n AKFK01138), placing the location of the air sampling tube as requested by Friedrich (i.e., with the main tube in the vertical position). The EER value of the retested unit was substantially identical to the EER value determined by the first test of the unit—the original test resulted in an EER of 8.7 (rounded from 8.74), the re-test resulted in an EER of 8.8 (rounded from 8.76). In DOE's view, Friedrich's allegations of improper test set-up do not account for the failure of Friedrich room air conditioner models WS12C10, US12C30 and WS13C30 to satisfy the ENERGY STAR Program's energy-efficiency specifications.

Regarding issue 6, each room air conditioner unit undergoes a 24-hour run-in period prior to testing. Further, the three WS13C30 units for which Friedrich does not allege oil fouling each tested noncompliant with minimum ENERGY STAR requirements for EER. It is DOE's view that the alleged oil fouling of the condenser unit, if any, does not account for the failure of Friedrich room air conditioner model WS13C30 to satisfy the ENERGY STAR Program's energy-efficiency specifications.

For these reasons, DOE has determined that Friedrich room air conditioner models WS12C10, US12C30 and WS13C30 do not meet the ENERGY STAR requirements. Accordingly, DOE is referring this matter to EPA, the brand manager for ENERGY STAR, for appropriate action. Please feel free to contact David Case of my staff at (202) 287-6998 should you require any further information.

Sincerely,



Laura L. Barhydt
Assistant General Counsel for
Enforcement

cc: Mr. W. Patrick Kendrick, Friedrich Air Conditioning Co.
Mr. John Hodges, Esq., Counsel for Friedrich
Mr. Hampton Newsome, Federal Trade Commission