September 18, 2013

Subject: Blower motor horsepower rating

ClimateMaster builds water source heat pumps for world wide applications in various 50 Hz and 60 Hz voltages. We primarily use US Motors (a Nidec company), Fasco, and GE as our motor vendors.

For a given ClimateMaster water source heat pump model we use the same blower motor (just in a different voltage) for the 50 Hz and 60 Hz versions. The method of rating motor horsepower for CE (50 Hz motors) is newer and different than that of 60 Hz motors. Because of those differences, the same motor may have a different horsepower rating using the 50 Hz rating method than if it were only rated according to 60 Hz requirements. In the past our motors were rated based on 60 Hz rating method. The affected motors are now rated to meet the requirements for both 50 Hz and 60 Hz applications.

The result is that US Motor (and eventually other vendors) service replacement motors used in both 50 and 60 Hz products may have a lower horsepower rating than earlier motors, or current Fasco or GE motors, that are used only in 60 Hz water source heat pumps. The attached letter from our motor vendor explains this issue in greater detail including a list of the impacted motors by ClimateMaster part number and by our vendor’s part number. This list will grow as more motors (and vendors) use the motor horsepower rating method required for 50 Hz applications.

On December 19, 2007 President Bush signed the Energy Independence and Security Act of 2007 (EISA) into law. The EISA will require all new motors in the United States to be rated according to the same method used currently for CE approved motors by January 1, 2017. So eventually all motors will use the same method to rate horsepower.

It is important to note that the performance of these motors has not changed. The only change is in the way the horsepower rating is determined.