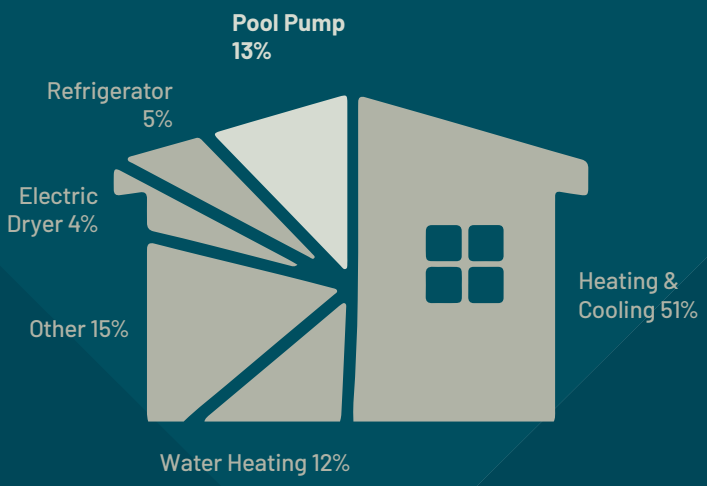
PENTAIR

A SNAPSHOT OF THE UPCOMING DEPARTMENT OF ENERGY DEDICATED PURPOSE POOL PUMP (DPPP) FEDERAL ENERGY EFFICIENCY REGULATIONS

Did you know...

Pool pumps can be the **#2 CONSUMPTION OF ENERGY** in the house?

Home Energy Use



What does this regulation mean for Pool Pumps?

a. Pool pumps manufactured for use in (and imported into) U.S. after July 19, 2021 must meet new minimum efficiency standards.

b. Pump testing must comply with specific test procedures and certain information (e.g., WEF, hydraulic horsepower) must be reported to the DOE.

c. Pumps, packaging and promotional materials must be labeled with WEF to describe their energy efficiency.

Are the new minimum efficiency standards the same for all pumps?

a. No. What we typically call an inground pump will be classified as self-priming. Self-priming pumps will be categorized as large and small. Each have different efficiency requirements.

   i. Large inground filter pumps (self-priming) – these are typically 1HP and greater. A variable speed pump is the only pump that will meet the minimum performance requirement based upon today's current technology

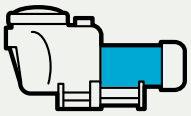
   ii. Small inground filter pumps (self-priming) – these are typically .5HP and .75 HP. Highly efficient single-speed or two-speed pumps should meet the minimum performance requirements Note: the new regulations establish much higher efficiency standards. A majority of existing single-speed pumps will not meet the new minimum requirements

b. What we typically call an aboveground pump will be classified as non-self-priming. While less stringent than inground pumps, they must still meet new minimum efficiency standards.

   i. Above-ground filter pumps (non-self-priming) – A highly efficient, single-speed or two-speed pump should meet the minimum performance requirements. See note aii regarding the higher efficiency standards.

c. Pressure cleaner booster pumps also have minimum performance requirements.

   i. Highly efficient, single-speed booster pumps should meet the new efficiency requirements. See note aii regarding the higher efficiency standards.



What about other pumps?

a. The following pumps do not have minimum performance requirements:

i. Waterfall pumps (1800 rpm max)

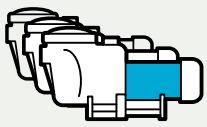
ii. Filter pumps with integrated sand and cartridge filters (i.e. small inflatable pools)

iii. Rigid (permanent) and store-able (inflatable) electric spa pumps, (i.e. pumps for hot tubs)

Are there any exemptions?

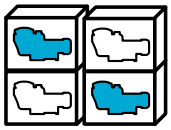
a. No. Products manufactured PRIOR TO July 19, 2021 are allowed to be sold.

b. Yes. 3-phase pumps, electric spa (hot tub) pumps, and pumps greater than 2.5HHP (approximately 5 THP) do not have minimum efficiency requirements.



Do I have to replace the installed base of existing non-compliant pumps?

No, this regulation does not require bringing all existing installed pumps into compliance. However, pump replacements made after July 19, 2021, will require a compliant model.



If my distributor still has remaining inventory of non-compliant pumps, can I purchase and install these pumps?

a. Yes – There is no time limit on how long it takes to purge distribution of non-compliant products.

How will these changes affect HP ratings?

HP ratings will be redefined so that all pumps have a Service Factor of 1.0, and the HP displayed on the pump will be the THP (also referred to as Service Factor Horsepower or SFHP. This new rating methodology will eliminate the full-rate and up-rate existing today.

What happens when an existing singlespeed pump fails – can I replace it with another single-speed pump?

If the replacement is on a non-self-priming pump or a small self-priming, then an energy-efficient, single-speed replacement would be an option

What are the new terms/definitions and labeling requirements?

a. WEF (Weighted Energy Factor)—this is a measure of the pump's energy efficiency... how much water is pumped divided by how much energy it takes - similar to miles per gallon in an automobile. The higher the WEF, the more efficient the pump. Each pump must be labeled with its WEF.

b. HHP (Hydraulic Horse Power)—this is the amount of hydraulic power produced by the pump's wet-end.

c. THP (Total Horse Power) or SFHP (Service Factor Horsepower) — this is the new Pump HP rating and is determined by the total HP created at the motor shaft. Each pump must be labeled with its THP.

Does it impact residential and commercial?

a. Yes, both are impacted. The regulation does not differentiate between a residential or commercial pump. It is based on the pump's physical attributes and not on the pump application.