

Home Energy Efficiency Fact Sheet

## Hidden Energy Drain Furnace Fan Motors



## High Efficiency Fan Motor Upgrade

If you're like most people, you've never even thought about the fan that moves air through your central heating or cooling system. As long as hot or cold air comes out when you want it, you probably don't give a second thought to what's blowing the air or what it's costing you.

It may be costing more than you realize.

### Did you know that standard furnace fan motors draw more electrical power than six 100 watt light bulbs?

A recent survey of homes in California found that the typical furnace fan uses 632 watts on average, which can really add up on your heating and cooling bill. If you run the fan all the time, as many people do, it may add up to over \$700 per year.

# High efficiency motors do the same job while using much less energy

The fan motors in most systems are 34% to 67% efficient, which means that about half of the energy they consume is actually used to turn the fan. The other half is wasted.

A higher efficiency motor technology called Brushless Permanent Magnet, or BPM, is now available. BPM motors are up to 85% efficient, which means they use less energy to move the same amount of air. Some



BPM motors, like the high efficiency Concept 3, are also variable speed. When only the fan is running they can slow to a lower speed and draw as little as 60 watts, 90% less than the standard motor.



#### Incentives are available to help upgrade your system

Pacific Gas and Electric Company (PG&E) has contracted with Proctor Engineering Group, Ltd. to offer the Cooling Optimizer Program. Instant rebates are available to residential customers upgrading central air conditioning systems to the Concept 3 high efficiency motor.

The Concept 3<sup>™</sup> fan motor replaces lower efficiency motors in central heating/cooling systems, cutting fan energy use up to 50%.

#### **Proven results**

A survey of 110 homes upgrading to the high efficiency Concept 3 fan motor found fan energy savings of 35% to 55% during cooling for most homes. Some homes experienced very large savings of as much as 700 Watts.



#### Measure the improvement in your home

Your CheckMe!<sup>®</sup> certified contractor will measure the performance of your system before and after installing Concept 3. Ask your contractor to show you the improvement in your home.



#### LER humidity-adaptive controls for energy savings and comfort

Concept 3 is the only furnace fan motor with integrated Latent Energy Recovery (LER) humidity-adaptive controls that adjust fan timing and speed to match your dehumidification needs.

Air conditioners both cool and dehumidify the air. In climates like California, where the air is already dry, dehumidification (known as Latent capacity) is wasted cooling. LER recovers the wasted cooling, **saving up to 20% on your cooling bill.** 

When installed with a thermostat with humidity control capability, LER automatically adjusts to help your air conditioner maintain indoor humidity at your desired setting while saving you energy and money.

Concept 3 with Latent Energy Recovery (LER) is available exclusively in the Fieldpiece On Site LER product line



## Cooling Optimizer Program rebates for Concept 3 with LER are available through participating heating and cooling contractors

For more information or to find out about rebates in your area visit www.proctoreng.com or call 1-877-422-2432.



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