U.S. Department of Energy Efficiency Standards (DOE)

ENERGY CONSERVATION STANDARDS FOR COMMERCIAL AND INDUSTRIAL ELECTRIC MOTORS

FAQ's

RULES: Small Motor Rule (effective March 1, 2015) and Integral Motor Rule (effective June 1, 2016)

Why is the DOE requiring Commercial and Industrial Electric Motors to meet efficiency standards?

For more than three decades the efficiency of new motors has been regulated by federal law.

Nearly half of the electricity consumed in the manufacturing sector is used for powering motors and about two thirds of this machine-drive consumption occurs in the bulk chemicals, food, petroleum and coal products, primary metals, and paper industries.

The two rules that have most recently been established by the U.S. Department of Energy (DOE) are the Small Motor Rule and the Integral Motor Rule. These changes impact electric motors and will once again increase the minimum efficiency of new motors.

The updated electric motor standards apply the standards currently in place to a wider scope of electric motors, generating significant estimated energy savings. DOE's analyses estimate lifetime savings for electric motors purchased over the 30-year period that begins in the year of compliance with new and amended standards (2016-45). The annualized energy is equivalent to 1% of the total U.S. industrial primary electricity consumption in 2013.

1. **Are NEMA Premium Efficient DUAL voltage motors usable at 208V +/-10%?**

   No, NEMA Premium Efficient dual volt motors are not recommended at +/- 10% voltage.

2. **Are NEMA Premium Efficient TRI voltage motors usable at 208V +/-10%?**

   If the motor is tri voltage rated then it has a +/- 10% voltage tolerance for the stated voltages.

3. **If my standard efficiency motor was tri-voltage, why are many of the premium efficiency only dual-voltage?**

   DOE considers 208V on a 208-230V motor an unusual condition and does not require the motor meet the efficiency over the broad voltage range.

   Must meet table 12-12(NEMA Premium) at 230V and 460V.

   208V requiring NEMA Premium should be 200V motor per NEMA MG1.

4. **Pre-loaded part numbers: If my standard efficient motor was tri-voltage, how do I know if it converted to dual or tri-voltage during the crossover?**

   Commercial / End-Suction: In most instances, these products converted to dual voltage as standard for premium efficiency.

   Multistage: In the case of the e-SV, we have a large offering of custom premium efficient tri-voltage motors already available, for motor part numbers and voltage descriptions, please check the price book for accurate descriptions of voltage offering.

   For any motor not listed, or for special requests, please work with our Applications / Tech Support team.

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5. Where can I find the updated nomenclature?

All commercial literature has been updated and can be found online at www.goulds.com (does not include eCOM price books).

6. Do the same rules apply for Canada and Latin America?

At this time, the rules impacting the United States are not applicable to our Latin America and Canadian customers.

Efficiency rules apply but no confirmation of planned legislation to match the United States DOE regulations.

Motors built and/or imported into the U.S. must comply with DOE rules. Product built in Auburn is required to meet regulations.

7. What is my new price?

Finished goods / complete pump unit pricing was determined using our price adders published in our price books (PWSCENT & PGLESP).

All pricing can currently be determined utilizing the price adders in the commercial price books.

Price books are currently being updated to reflect U.S. Department of Energy changes and are expected to be available in the coming months.

8. How was new motor pricing determined?

Marketing took this opportunity to analyze and realign our price structure, as well as, set pricing to be more competitive in the marketplace.

9. What is my new part number?

Many of the new part numbers have been loaded in our system. Utilize the updated nomenclature found in the literature on www.goulds.com to configure your part number.

Part numbers that are no longer available will be marked obsolete. Obsolete part numbers will have a referenced part number available by end of July.

Technical Support / Applications team is also available to help you with obtaining new part numbers.

10. Why am I experiencing longer lead-times?

Motor conversions began with our vendors several months ago however, it takes time to align hundreds of SKUs with several years worth of history quickly. We have over 90% of our highest volume product converted to premium efficiency, and we are working daily to build our outlying inventory levels.

Today, we are now limited to the premium efficient range (where applicable) which significantly reduces our available options to satisfy customer requirements. For example, if you had an urgent order calling for standard efficiency where the motor was not readily available, we could work with our vendor to try and satisfy your requirement with variations of enclosure, voltage combinations, and/or checking premium efficient stock.

11. Are special voltages still available?

Yes, we work daily with our motor vendors to offer you special voltages.

12. Are there changes to the dimensions?

In general there were no significant changes to the vast majority of the motors however, if you have specific dimensional needs, please reach out to Technical / Applications team for a dimensional drawing if you have specific sizing requirements.

Our dimensional information in our technical brochures and online are intended as guidelines only and are not motor specific.

13. Any changes to frame size?

No, we converted frame size to frame size. If you experience a change in frame size, please contact customer service with your part number information.

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