

The Energy Independence and Security Act of 2007

June 10, 2010

To our Customers:

The Energy Independence and Security Act of 2007 (EISA), which will become effective December 19, 2010, mandates higher efficiency standards for electric motors sold in the United States. In general, EISA expands and increases the efficiency standards set by the Energy Policy Act of 1992 (EPACT)

S.T. Johnson completed a review of motors used on our burners and will implement changes to our motor selections to insure full compliance with EISA well in advance of the effective date.

In summary, air fan motors, 230-460 volt, 60 Hz, sizes 1 HP and larger will meet Premium efficiency ratings per Table 12-12 in NEMA standard MG 1. Close-coupled oil pump motors 1 HP and larger will meet EPACT efficiency ratings per Table 12-11 in NEMA Standard MG 1. Standard efficiency motors will no longer be used for the above on burners sold for installation in the US.

Our preferred motor suppliers (Leeson/Lincoln, Baldor) already have a full selection of motors that meet the requirements of EISA and have announced further expansions to their product offerings to add new EISA-compliant models.

Although there will be a slight increase in our costs for electric motors, our goal is to minimize the impact of these on our prices.

Please notice that EISA does not affect motor HP selections, only motor efficiency requirements. Also, EISA requirements are not applicable to motors exported outside the US. We will continue to offer pre-EISA motor configurations to our many customers outside the United States.

We appreciate your business and are working to insure that, when it comes to your Johnson burners, your compliance with EISA is simple and painless.

Enclosures

EISA Fact sheet

NEMA Standard MG-1 Table 12-12 - Premium efficiency motors

NEMA Standard MG-1 Table 12-11 - Subtype II motors

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EISA Fact Sheet

- Subtype I motors. General purpose motors from 1 to 200 horsepower, 230 or 460 volt, 60 Hz, must meet Premium efficiencies per Table 12-12 in NEMA Standard MG 1.
- Subtype II motors. General purpose motors in the following categories must meet EPACT efficiencies per Table 12-11 in NEMA MG 1:
 - U-Frame Motor
 - Design C Motor
 - Close-coupled pump motor
 - Footless motor
 - Vertical solid shaft normal thrust motor
 - 8-pole motor (900 rpm)
 - Poly-phase motor with voltage other than 230 or 460 volts
 - 201 – 500 horsepower motors
- Exempt motors. The following motors **are not** covered by the new efficiency requirements.
 - Design D with high slip
 - Adjustable speed with optimized windings
 - Customized OEM mounting
 - Intermittent duty
 - Integral with gearing or brake where motor cannot be used separately
 - Submersible motors
 - Single Phase motors
 - DC motors
 - Two-digit frames (48-56)
 - Multi-speed motors
 - Medium voltage motors
 - TENV and TEAO enclosures
 - 50 Hz motors
- Fractional HP motors. Motors smaller than 1 HP **are not** covered by EISA requirements. Only triple digit frame motors sized 1-500 HP are covered.
- Imports. EISA requirements **do** apply to motors manufactured outside of the US and imported for sale in the US.
- Exports. EISA requirements **do not** apply to motors for export outside of the United States. Standard efficiency motors can be sold outside the US, provided these motors are specifically marked “For Export”.
- Existing motors. EISA **does not** apply to electric motors currently in operation. Existing motors need not be replaced.
- Motors in inventory. EISA **does not** affect any electric motors currently in inventory, only to motors manufactured after December 19, 2010. Motors in inventory on that date can be sold or used as is.

NEMA MG-1 Table 12-12 Full-Load Efficiencies for 60 Hz NEMA Premium® Efficient Electric Motors Rated 600 Volts or less (Random Wound)

Motor Horsepower	Nominal Full-Load Efficiency					
	Open Motors			Enclosed Motors		
	2 Pole	4 Pole	6 Pole	2 Pole	4 Pole	6 Pole
1	77.0	85.5	82.5	77.0	85.5	82.5
1.5	84.0	86.5	86.5	84.0	86.5	87.5
2	85.5	86.5	87.5	85.5	86.5	88.5
3	85.5	89.5	88.5	86.5	89.5	89.5
5	86.5	89.5	89.5	88.5	89.5	89.5
7.5	88.5	91.0	90.2	89.5	91.7	91.0
10	89.5	91.7	91.7	90.2	91.7	91.0
15	90.2	93.0	91.7	91.0	92.4	91.7
20	91.0	93.0	92.4	91.0	93.0	91.7
25	91.7	93.6	93.0	91.7	93.6	93.0
30	91.7	94.1	93.6	91.7	93.6	93.0
40	92.4	94.1	94.1	92.4	94.1	94.1
50	93.0	94.5	94.1	93.0	94.5	94.1
60	93.6	95.0	94.5	93.6	95.0	94.5
75	93.6	95.0	94.5	93.6	95.4	94.5
100	93.6	95.4	95.0	94.1	95.4	95.0
125	94.1	95.4	95.0	95.0	95.4	95.0
150	94.1	95.8	95.4	95.0	95.8	95.8
200	95.0	95.8	95.4	95.4	96.2	95.8
250	95.0	95.8	95.4	95.8	96.2	95.8
300	95.4	95.8	95.4	95.8	96.2	95.8
350	95.4	95.8	95.4	95.8	96.2	95.8
400	95.8	95.8	95.8	95.8	96.2	95.8
450	95.8	96.2	96.2	95.8	96.2	95.8
500	95.8	96.2	96.2	95.8	96.2	95.8

NEMA MG-1 Table 12-11 Full-Load Efficiencies of Energy Efficient Motors

Motor Horsepower	Nominal Full-Load Efficiency							
	Open Motors				Enclosed Motors			
	2 Pole	4 Pole	6 Pole	8 Pole	2 Pole	4 Pole	6 Pole	8 Pole
1	-	82.5	80.0	74.0	75.5	82.5	80.0	74.0
1.5	82.5	84.0	84.0	75.5	82.5	84.0	85.5	77.0
2	84.0	84.0	85.5	85.5	84.0	84.0	86.5	82.5
3	84.0	86.5	86.5	86.5	85.5	87.5	87.5	84.0
5	85.5	87.5	87.5	87.5	87.5	87.5	87.5	85.5
7.5	87.5	88.5	88.5	88.5	88.5	89.5	89.5	85.5
10	88.5	89.5	90.2	89.5	89.5	89.5	89.5	88.5
15	89.5	91.0	90.2	89.5	90.2	91.0	90.2	88.5
20	90.2	91.0	91.0	90.2	90.2	91.0	90.2	89.5
25	91.0	91.7	91.7	90.2	91.0	92.4	91.7	89.5
30	91.0	92.4	92.4	91.0	91.0	92.4	91.7	91.0
40	91.7	93.0	93.0	91.0	91.7	93.0	93.0	91.0
50	92.4	93.0	93.0	91.7	92.4	93.0	93.0	91.7
60	93.0	93.6	93.6	92.4	93.0	93.6	93.6	91.7
75	93.0	94.1	93.6	93.6	93.0	94.1	93.6	93.0
100	93.0	94.1	94.1	93.6	93.6	94.5	94.1	93.0
125	93.6	94.5	94.1	93.6	94.5	94.5	94.1	93.6
150	93.6	95.0	94.5	93.6	94.5	95.0	95.0	93.6
200	94.5	95.0	94.5	93.6	95.0	95.0	95.0	94.1
250	94.5	95.4	95.4	94.5	95.4	95.0	95.0	94.5
300	95.0	95.4	95.4	-	95.4	95.4	95.0	-
350	95.0	95.4	95.4	-	95.4	95.4	95.0	-
400	95.4	95.4	-	-	95.4	95.4	-	-
450	95.8	95.8	-	-	95.4	95.4	-	-
500	95.8	95.8	-	-	95.4	95.8	-	-