

**SINGLE SOURCE SUPPLIER**

# Energy Savings for the Water/Wastewater Industry

Optimized Motor Driven Systems



# A Single Source Helping to Optimize Your Efficiency and Reliability

## LOW VOLTAGE: The widest range of Motors, Drives and Soft Starts



**Partner your efficient motor with the compatible Low Voltage Drive or Soft Starter**

### Drives

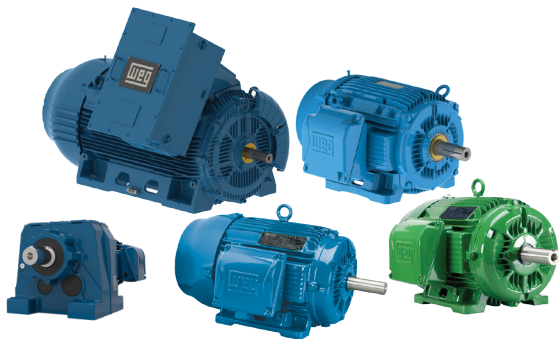
- 0.25 HP - 2500 HP
- 230V - 690V
- Component and Package Systems

### Soft Starters

- 3HP - 1200 HP
- 230V - 575V
- Component and Package Systems

### Pump Genius

- VFD Pumping System



## NEMA Premium SUPER Premium GEAR Motors

**Much more than your typical cast iron motor: Severe Duty is standard with WEG W22 motors.**

### LV Motors

- 1HP - 700HP in stock
- 230V - 575V
- Inverter Rated
- 1000:1 Variable Torque
- 20:1 Constant Torque
- IEEE841 Vibration Levels
- Class 1 Div 2
- 1.25 sf

## MEDIUM VOLTAGE: The most reliable Motors, Drives and Soft Starters



**Multiple options when pairing your MV motor with a MV Soft Starter or Drive**

### MV Soft Starters

- up to 12,000 HP
- Motor voltage: 2.3kV, 4.16kV
- NEMA12, IP41
- Operating interface (HMI) with graphic LCD
- In Stock Solutions

### MV Drives

- 500 to 22,500 HP (400 to 16,000 kW)
- 2.3 kV to 6.9 kV
- up to 120 Hz



## MEDIUM Voltage

### Induction Motors

- 200HP - 5,700 HP
- 2,300V - 10,000V
- Horizontal Mounting
- IC01, IC611 and IC81W (TEFC, WP11, TEAAC and TEWAC)

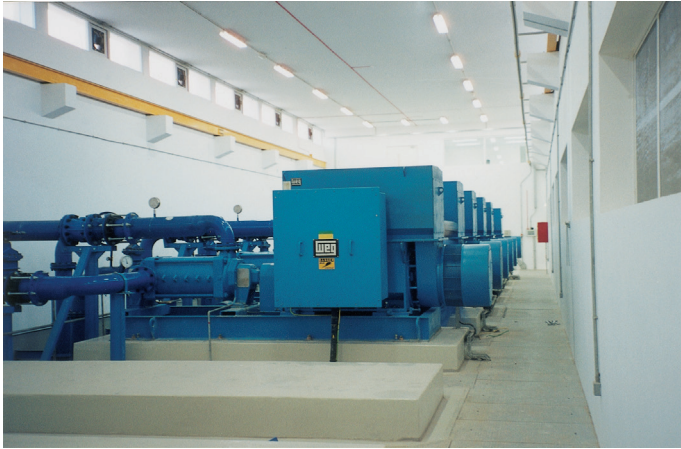


### Synchronous Motors

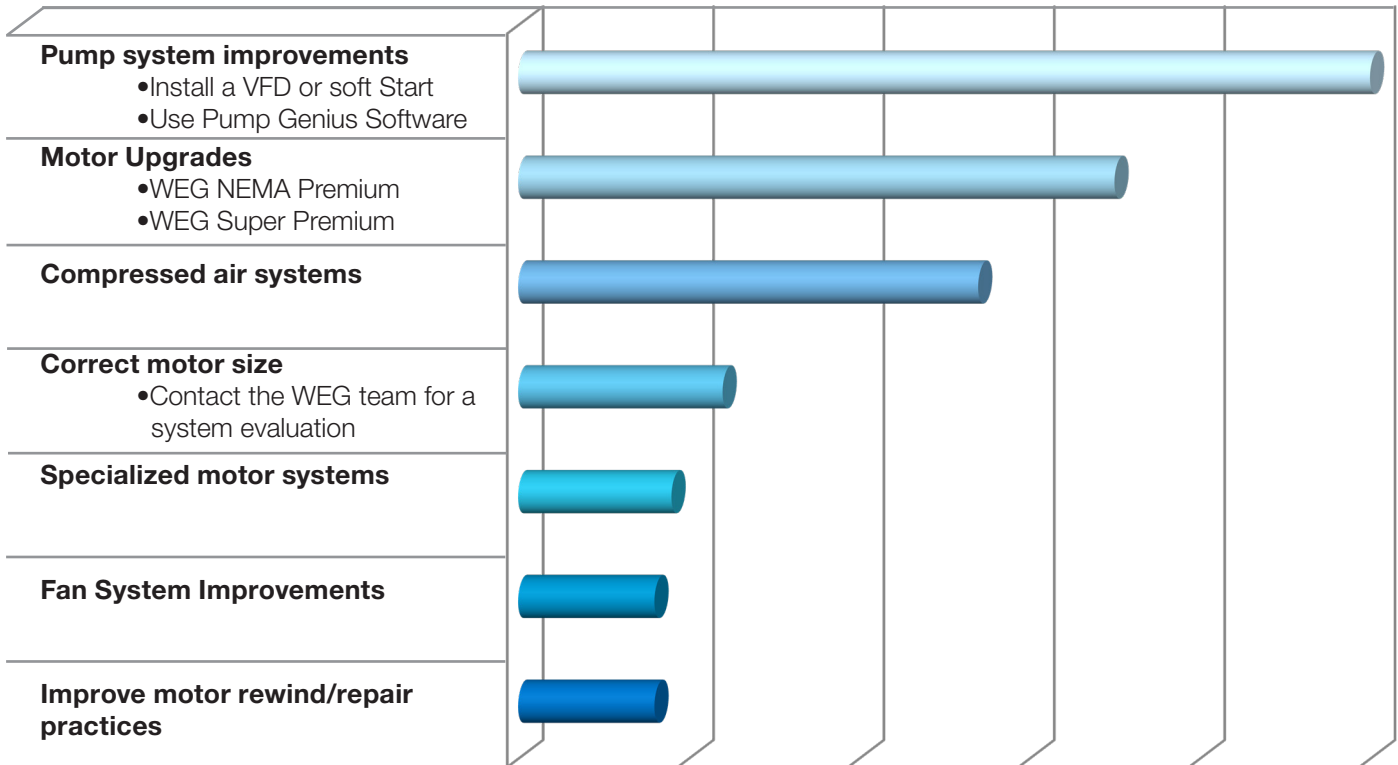
- 400HP - 150,000HP
- 2,300V - 14,440V
- Horizontal & Vertical
- NEMA, IEEE, IEC, API 546, ISO 9001-2008
- DP, DPG, WPI, WP11, PMDP™, TEWAC, TEAAC, TEFV

# Opportunities to Save On Your Motor Driven Systems

Motors consume the vast majority of the electricity used in municipal water systems, with most used for pumping (46%) and aeration (40%).



## Savings Opportunities (Relative Savings)



Savings could be **MORE** if you have the **Most Reliable Motors: WEG W22 and Super Premium Motors**



**Water / Wastewater** facilities account for **up to 35%** of municipal **energy usage**.



# Motor Specifications

## Specify Reliability

Download our Motor Specification Guide

[www.weg.net/us/motorspec](http://www.weg.net/us/motorspec)



### NEMA Premium® General Purpose Motor Specification TEFC - Totally Enclosed Fan Cooled Motor 1 - 700 HP

#### 1.0 Purpose

The intent of this specification is to work in partnership with Electric Motor suppliers to supply quality motors that consistently perform with the highest efficiency, improved life cycle and lowest maintenance cost. The motors shall be built to provide: (1) safe operation; (2) reliability in an application which may be corrosive and wet; (3) minimum maintenance requirements due to the design and quality of materials and workmanship; (4) lowest noise figure.

#### 2.0 Scope

This specification covers three-phase, TEFC (Totally Enclosed Fan Cooled), 1 to 700 horsepower squirrel-cage induction motors in integral horsepower frames 143T and larger.

#### 3.0 Motor Requirements

##### 3.1 Applicable Codes and Regulations

General Purpose NEMA Premium Efficiency motors shall meet the demanding application requirements. The standard TEFC motors shall be cast iron construction with enclosure rated IP55 to handle both wet and dirty environments. Motor paint shall exceed 200hrs corrosion resistance per ASTM B117 standard for salt spray test. All motors shall meet or exceed NEMA MG1 Table 12-12 levels of efficiency. All motor designs shall be tested according to IEEE 112 test method 'B' and their efficiency values shall be certified by UL or CSA Labs (CSA C390). Motors shall meet NEMA Design 'B'.

##### 3.2 Enclosures

3.2.1 Motor enclosure shall be TEFC with IP55 degree of protection, NEMA T frame, NEMA F1 assembly for horizontal applications and designed for the environment prescribed according to the application specifications. This specification concerns the manufacture of standard NEMA Premium Efficiency General Purpose motors. Where special enclosures or assembly are required, it will be specified on the motor data sheet.

3.2.2 Frames, Endshields and Conduit boxes shall be high strength cast iron construction.

3.2.3 Lifting eyebolts must be furnished for frames 182T and above for handling safety and convenience. Eyebolts shall be forged steel, shouldered, and threaded into blind holes to exclude water entry into the frame.

3.2.4 Motor fans must be designed for bi-directional operation and shall be spark-proof, abrasion and corrosive resistant and made of durable plastic or metal. Frames greater than 50S shall have metal fans. Fans must be keyed or pinned to the shaft on all frames.

## WEG Easy Online Catalog - [www.weg.net](http://www.weg.net)

### Easily create and download

- Data sheets for 50 and 60 Hz
- Dimensional drawings
- Performance curves and connection diagrams.
- Access our CAD library

W22 NEMA Premium Efficiency 5 HP 4P 182/4T 3Ph 230/460//380 V 60 Hz IC411 - TEFC - Foot-mounted

Catalog Number: 00518ET3E184T-W22 | Product: 11416668

| Standard             | NEMA MG-1     | Output rating             | 5 HP          |
|----------------------|---------------|---------------------------|---------------|
| Frequency            | 60 Hz         | Mounting                  | Foot-mounted  |
| Voltage              | 230/460/380 V | Flange                    | Without       |
| Number of poles      | 4             | Mounting                  | F-1           |
| Degree of Protection | IP55          | Terminal box <sup>1</sup> | Left position |
| Synchronous speed    | 1800 rpm      | Enclosure                 | IC411 - TEFC  |

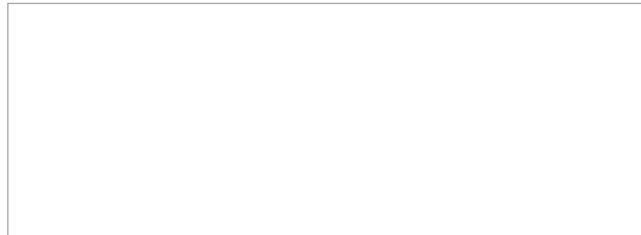
USD\$772.00

PRODUCT DETAILS SEE ALSO DOWNLOAD CENTER RELATED PRODUCTS

PRODUCT DETAILS

TECHNICAL DATA PERFORMANCE CURVES DRAWINGS NAMEPLATE GENERATE DOCUMENTS

Please contact your authorized distributor:



WEG ELECTRIC CORP.  
6655 Sugarloaf Parkway  
Duluth, GA 30097  
1-800-ASK-4WEG  
[www.weg.net](http://www.weg.net)