



MOTORWISE®

**The Intelligent
Energy-Saving
Motor Controller**

LOWER
ENERGY COST

REDUCE
WEAR & TEAR

PROVEN
FIELD PERFORMANCE

THE
**TECHNO
WISE**
GROUP®



The **POWER SAVING** choice for the Oil & Gas industry

It is no surprise that oil and gas producers are choosing MOTORWISE® technology for their pumping wells. It works!

MOTORWISE® is delivering millions of dollars in proven, tangible electric bill savings - *without any compromise in artificial lift system performance.*

Add gains in system reliability, cooler, quieter and more efficient motor operations plus extended life for surface and downhole components, and it is quickly apparent that MOTORWISE® is the Oil and Gas Industry's intelligent choice to save power and money.



MOTORWISE[®]

Intelligent Energy-Saving Motor Controller. Manages and Optimizes Power Delivered to AC Electric Motors in Real Time

BENEFITS

- Improves Overall Pumping System Operation.
- Reduces Energy Consumption And Demand Charges By An Average Of 25%.
- Dynamically Adjusts To Motor Loading.
- Extends The Life Of Motors.
- Zero Maintenance And Operating Costs.
- Protects Motor From Phase Losses.

FEATURES

Patented AC induction motor energy savings technology dramatically improves the efficiency of electric motors.

Digital Signal Processing (DSP) energy management technology analyzes a motor's energy usage and adjusts the power for optimal consumption of electrical energy.

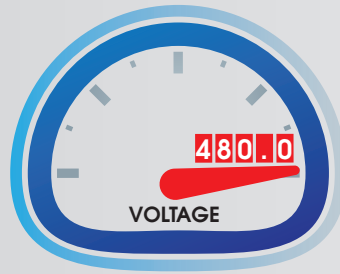
A proprietary algorithm intelligently reduces wear and tear from start/stop motor operations. This feature significantly improves motor life as well as transmission and load handling devices connected to the motor.

We are saving significant amounts of both consumed and demand energy.

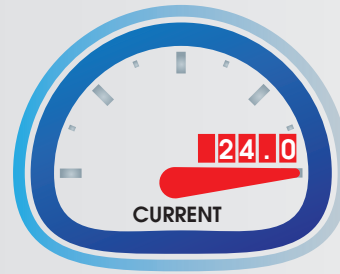
Petroleum Engineer

UNMANAGED POWER CONSUMPTION

3 PHASE 30HP
UNLOADED MOTOR
WITHOUT MOTORWISE®



Per Leg/Phase



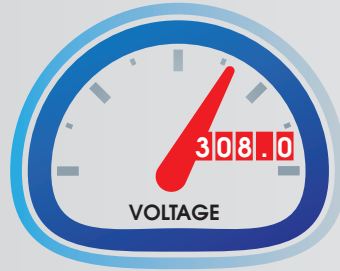
Per Leg/Phase

2000 W

Total Power Consumption

MANAGED POWER CONSUMPTION

3 PHASE 30HP
UNLOADED MOTOR
WITH MOTORWISE®



0900 W

Intelligent Motor Controller

MOTORWISE® identifies partial and intermittent loading conditions and reduces the voltage applied to the motor. Its operation not only reduces energy costs, it also enables AC induction motors to run smoother and cooler decreasing maintenance costs and improving the reliability and longevity of the motor and system components in load bearing applications.

Voltage Management/Modulation

MOTORWISE® uses very sophisticated Digital Signal Processor (DSP) technology to measure the Power Factor phase angle. Once the phase angle is determined, the DSP determines the amount of loading or horsepower that is being drawn by the motor and modulates the voltage or energy going into the motor and dynamically controls energy being used. By lowering the voltage, the operation of the motor is unaffected, but its power consumption is dramatically reduced and the motor's efficiency is considerably increased.

Easy To Install. Zero Maintenance Cost

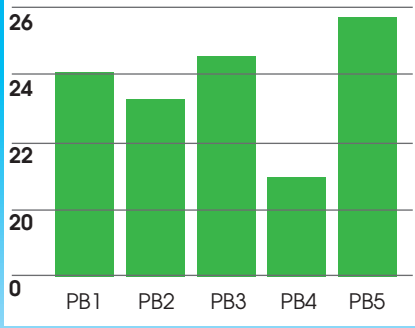
Installation is simple between the power source and the motor – no changes or modifications are required for the motor. Zero-maintenance enables years of trouble free operation. Real world installations report an average of **25% reductions in actual electrical energy costs** while seeing improved reliability and reduced down-time.

*The MOTORWISE®
technology has
allowed us energy
savings of 20%.*

Production Superintendent

Actual Field Tested Annual Savings

SAVINGS PERCENTAGE



PERMIAN BASIN COMPANIES

Savings achieved by Permian Basin companies in one year using MOTORWISE® technology. **These five companies saw a combined savings of over \$1.1 million.**

HOW MOTORWISE® COMPARES

MOTORWISE® SOFT STARTERS CAPACITORS VFD



MOTORWISE®

Saving Energy

Saving Cost

Saving the Planet

If operations require significant AC induction motor electricity consumption, MOTORWISE® is a smart way for you to lower electric utility bills. Not only will you save money, you will be helping save the planet by reducing greenhouse gas emissions.

Designed for Three Phase Motors on pumpjacks using Wye, Delta, and Grounded Delta Power Distribution Schemes.

Confirmed utility bill energy savings of 23.1%

Confirmed utility bill dollar savings of 25.2%
with KWH rate normalized

It takes longer to drive to the next unit than it does to install one.

Electrical Engineer

MOTORWISE® OIL & GAS INDUSTRY



MOTORWISE®



MOTORWISE®
15/3 GEN



MOTORWISE®
30/3 GEN



MOTORWISE®
50/3 GEN



MOTORWISE®
60/3 GEN



MOTORWISE®
100/3 GEN

Horse Power Range	5 - 15 HP Max	15 - 30 HP Max	15 - 50 HP Max	30 - 60 HP Max	60 - 100 HP Max
Operating Voltage	230V, 510V	230V, 510V	230V	440V, 510V	440V, 510V
Phase	Three-Phase	Three-Phase	Three-Phase	Three-Phase	Three-Phase
Maximum Continuous Current	230V, 40A 480V, 19A	230V, 77A 480V, 40A	230V, 124A	- 480V, 77A	- 480V, 124A
Operating Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Generation Compliant	Yes	Yes	Yes	Yes	Yes
Operating Temperature	-40°C to +50°C	-40°C to +50°C	-40°C to +50°C	-40°C to +50°C	-40°C to +50°C
Storage Temperature	-50°C to +60°C	-50°C to +60°C	-50°C to +60°C	-50°C to +60°C	-50°C to +60°C
Design Dimensions (HxWxD)	46x32x16 (cm)	66x34x21 (cm)	66x34x21 (cm)	66x34x21 (cm)	66x34x21 (cm)

MOTORWISE® is ETL approved and conforms to UL 508



MOTORWISE®

For more information please visit www.technowisegroup.com

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DEVELOPING GREEN TECHNOLOGIES FOR A BETTER PLANET™

Worldwide Patented Technology

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