

# ROTO ARMOR

## VARIABLE SPEED PROGRESSIVE CAVITY PUMP CONTROLLER

The Roto-Armor drive is easy to use and intuitive. It helps you match production rate to well inflow rate. The drive speaks in oilfield terminology so your field personnel are easily trained to use the system. Built-in production data assists in evaluating wells. The Roto-Armor drive is also available in single phase input, eliminating the need for costly, problematic phase converters and the associated over-sizing of components or motors.

The Roto-Armor drive literally pays for itself through energy savings -- through near unity power factor, by eliminating inrush currents and the associated peak demand charges, and by reducing utility kwh usage.

Our customers see even bigger savings through decreased failure of pump equipment. The Roto-Armor drive eliminates torque overshoot and its associated problems. And it can reduce bolt, rotor and shaft breakage from excess torque, saving service costs and increasing production.

### SAVE ON ENERGY COSTS

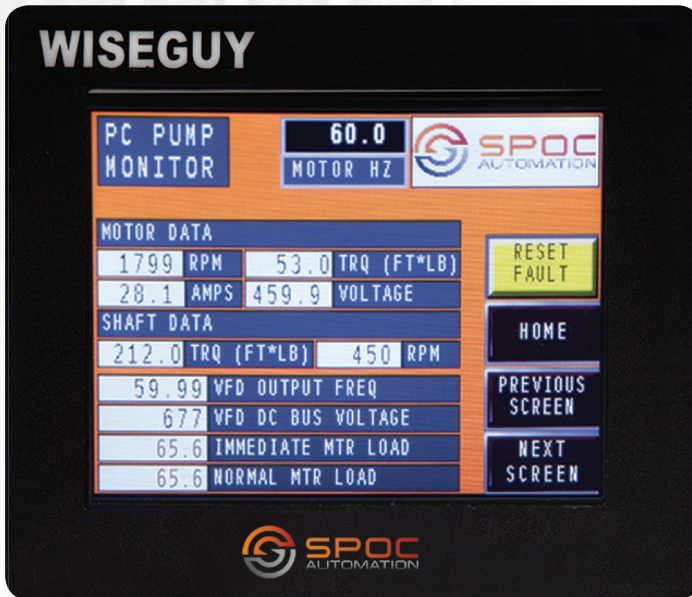
- Eliminates inrush, reducing peak demand charges
- Saves 10-20% power compared to across-the-line starting
- Near unity power factor eliminates utility power factor penalties

### PROTECT YOUR PUMPING SYSTEM

- Adjustable torque limit
- Vibration switch input
- Field kill interlock
- Broken belt/shaft underload protection
- Precise shaft torque control to keep from twisted or broken shafts
- Jammed unit instantaneous overtorque protection
- Built-in flow/pressure analog input for pump protection
- Built-in torque limit; built in back spin timer

### EQUIPMENT PROTECTION BUILT IN

- Transient voltage suppressor
- 3% line reactor protects against line disturbances and reduces harmonics
- Molded case circuit breaker disconnect
- Standard NEMA 4 door for operator interface protection
- Built-in sun shield and cooling plenum reduces dirt contamination and ensures optimal cooling



The WiseGuy interface allows control of a wide range of features all from one easy-to-use touch screen.

## TECHNICAL DATA SPECIFICATIONS

Common I/O platform throughout all HP ranges	Standard
Transient voltage surge protection and 3% input line reactor	Standard
NEMA type 3R outdoor rated enclosures with sun shields, exhaust heat plenum	Standard
Extreme climate rating from Desert to Arctic conditions	-40°F to 122°F Standard
Output Frequency Range: Hz	0 to 320 Hz Standard
WiseGuy data capture, trending, time and date stamp, history, USB port for download	Optional
Interchangeable and expandable I/O cards	Standard
Communications: ModBus RTU, Ethernet and others	Optional
Open Protocols for your SCADA system and telemetry ready	Optional
Proven, tested products with over 10,000 units	Yes
IEEE519 compliant low harmonic options	Optional
Input voltage	208V, 230V, 480V +10/-20%
Well Optix SCADA Interface	Optional

\*\*\* Other voltages available, please consult SPOC.

## OPTIONAL WISEGUY TOUCHSCREEN INTERFACE

- Easy and intuitive
- On-board datalogging
- USB downloads
- Real-time graphical torque trending

## SIMPLE OPTIMIZATION

- Easy installation
- Variable speed operator for fast production rate changes

## AVAILABLE RANGE AND RATINGS

- 3-200HP
- 1 phase or 3 phase service inputs, 3 phase motor outputs
- 208V, 230V or 480V power
- -40F through 122F ambient standard rating
- Low Harmonic Solutions available



30 HP installation shown. The Roto-Armor VFD has highly accurate motor control to carefully regulate applied motor torque, eliminating torque overshoot and its associated problems.

## WELL OPTIX TELEMETRY

- Web-based monitoring of well conditions
- Alarms and notifications
- Trending of any data
- Cellular or satellite