

# AS7 & AS100 Variable Frequency Drives



# **Complete AC Drive Solutions**

- High Performance Drives for Municipal, Oil/Gas and HVAC
- 6-Pulse and IEEE 519 Clean Power Drives.
- Fractional to 800HP

- Indoor / Outdoor Enclosures
- Application Engineering & Design
- 24/7 Customer Support.

ISO 9001 Certified Quality Management System

# A World Class Business Partner for any Industry

Over the past 40 years Five Star Electric (FSE) has grown from a small motor distributor to become a world leader in the application of Solid State Motor Control & Automation Systems.



Our systems focus on utilizing the most advanced technologies available for the control and monitoring of the industry's most demanding applications. FSE has over 90 years of combined expertise in the application of low and medium voltage variable speed drives, VFDs, reduce voltage solid state starters, switchgear, liquid filled power transformers, Static VAR Systems, DCS / PLC's systems, Control Panels, and Integrated Power Control Rooms. Five Star has earned a strong reputation in the industry for providing well engineered, reliable, cost-effective systems and service.

Many in the industry have come to know Five Star through our expertise with low and medium voltage solid state motor control, however Five Star also provides a wide range of products, services and systems related to the Oil and Gas, Power, Municipal, Irrigation, Aggregate & Cement industries.

We design our products for durability, and we test them rigorously to ensure the highest degree of reliability. Parts and materials are inspected, tracked and kitted per ISO 9001 protocols to ensure timely, accurate processing of orders.

FIVE STAR ELECTRIC

# Variable Frequency Drives



AS7 & AS100 6-Pulse PWM VFD Packages



**NEMA 3R Rated Outdoor VFD Packages** 



NEMA 4X Stainless Steel VFD Packages - Corrosive Environments

Five Star Electric is a world leader in the application and installation of Variable Speed Drive technology.

Our AS7 & AS100 low voltage variable frequency drive packages are designed for variable and constant torque applications. They provide maximum versatility and efficiency with intuitive communications. Our FASTRAX AC drive program have the shortest delivery time in the industry while offering an impressive combination of benefits.

- & Lower operating costs
- 瘶 Precise process control
- 🕏 🛛 Lower maintenance cost
- Relation efficiency
- Receptional reliability
- 🖉 Intuitive HMI

Our engineering expertise has made our drive packages the choice for demanding applications that require the highest levels of reliability, precision, and longevity. Our VFD's are utilized in applications ranging from power generation to oil and gas, water, marine, pulp and paper production, metals, steel, & HVAC. The VFD packages are designed to help you significantly increase productivity, enhance energy efficiency, and reduce operating costs.

- 🕏 Fractional HP to 800Hp, 480V.
- REMA 1, 12, 3R & 4X Enclosures
- Fused or Circuit Breaker Disconnects
- Input & Output Reactors
- ★ 2-3 Bypass Contactors
- Read & Sine Wave Filters
- 😿 Integrated PLC Control
- 😿 HMI'S
- 🛷 🛛 UL Listed

#### Standard Options - FASTRAX Program:

- 🗞 Variable or Constant Torque VFD
- 🕏 35kA main circuit breaker
- 😿 Standard 3% input line reactor
- 120V fused control power XFMR
- Door mounted keypad
- 🕏 Door mounted HOA switch
- Relighting/Surge protection device
- Output power block for motor leads

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# **Custom VFD Packages**

### Duplex/Triplex VFD Systems for Pump Stations, Lift Stations, Irrigation & Injection Wells.

- 🛷 Main Circuit Breaker
- 🖉 Branch Circuit Breaker Protection
- 🗞 Input & Output Reactors
- Representation Integrated PLC Control
- 🕏 HMI's
- 🖉 UL Listed 508A and 698A
- ✗ 120V fused control power XFMR
- 🕏 Door mounted keypad
- 🖉 Door mounted HOA switch
- Eighting/Surge protection device
- Output power block for motor leads





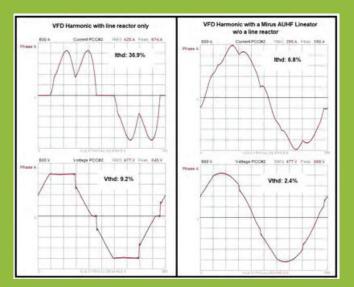
### **Stainless Steel Enclosed VFD Systems for corrosive environments.**

- Dead Front Enclosure designs with door gaskets to protect HMi's, programming displays and inner door controls.
- 🕏 UL Listed
- 🕏 Fractional HP to 600HP, 480V
- A/C Units for Extreme Conditions
- 🕏 50 Degree C Rated
- 6 Pulse and Clean Power Packages



# AS7CP & AS100CP Low Voltage Clean Power Variable Frequency Drives

FSE's AS7CP & AS100CP drives are designed to deliver clean power process control for applications and systems requiring near zero harmonic distortion regardless of the drive's location. These packaged systems meet IEEE519 2022. Our clean power drives can handle 12% or greater background Vthd and 3% source voltage imbalance. This provides maximum versatility for all utility systems including remote locations



The AS7CP & AS100CP utilizes a purely passive device consisting of a unique inductor combined with a relatively small capacitor bank. Its innovative design achieves reduction of all the major harmonic currents generated by VFD's and other similar 3-phase, 6-pulse rectifier loads. Guaranteed to meet IEEE Std 519 for both current and voltage distortion at the input terminals of the drive.

- ✤ Fractional HP to 800Hp, 480V.
- REMA 1, 12, 3R & 4X Enclosures
- Fused or Circuit Breaker Disconnects
- 🛷 Long Lead Sine Wave Filters
- Integrated PLC Control & HMI's
- 🛷 UL Listed





**Standard & Extreme Duty Passive Filters** 

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Page 4

# AS7CP & AS100CP Low Voltage Clean Power Variable Frequency Drives

## Oil & Gas Drive Packages The AS7CP or AS100CP VFD's

are ideal for remote locations for well sites, pump stations, pipelines and injection wells that demand reliable clean power VFD's. The unique design of the Passive Filter not only mitigates line harmonics below IEEE519 standards it allows the VFD to operate with high background voltage and line imbalance commonly found in these remote locations.



400HP & 150HP AS100CP Clean Power VFD's





Large Inventory of Passive Filters



**150HP Clean Power VFD with 3-Contactor Bypass** 

### Municipal Drive Packages The UL Listed AS7CP or AS100CP VFD's

are ideal for local municipalities.

The clean power variable frequency drive meets IEEE519 standards while eliminating maintenance problems inherent in older drive designs. It improves drive reliability by significantly reducing power module part counts. This simple design approach allows each drive unit to be custom-tailored to your specification. These packages are perfect for all types of pump systems, blowers, filters and flocculators commonly found at water purification or wastewater facilities. Stainless Steel packages available for corrosive environments.



# **Five Star Service Group**

### **Providing Service since 1983**

Five Star Service Group has been serving the Texas area with qualified Electrical and Mechanical Engineers and Field Service Technicians for over 40 years.

### We Offer:

- 瘶 24 Hour Field Service
- 🛷 Inside Technical Support
- 😿 Free In-house Estimates
- 😿 Commissioning
- Field Service & Repair of AC & DC VFD's
- Rev Custom Control Panels
- 😿 Soft Starts
- Reference of the second second
- 🛷 SCADA System Evaluation
- System Retrofit & Replacements

- Rev Turnkey Installation
- 🖉 Power Analysis
- Real Harmonic Testing
- 🕏 Board Level Repair
- Complete Integrated
  Solutions
- Reventative Maintenance
- Revice Contract

### **Industries Served:**

- 🛷 Municipal
- 😿 Oil & Gas
- ℰ Power Generation
- 🗞 HVAC
- 😿 Commercial Properties
- 🛷 Aggregate & Mining
- 🕏 Agriculture



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Page 6



# FIVE STAR ELECTRIC POWERED BY INNOVATION

# Offices & Manufacturing Locations

#### San Antonio

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 ∞ sales@vfd.com

#### Lubbock

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