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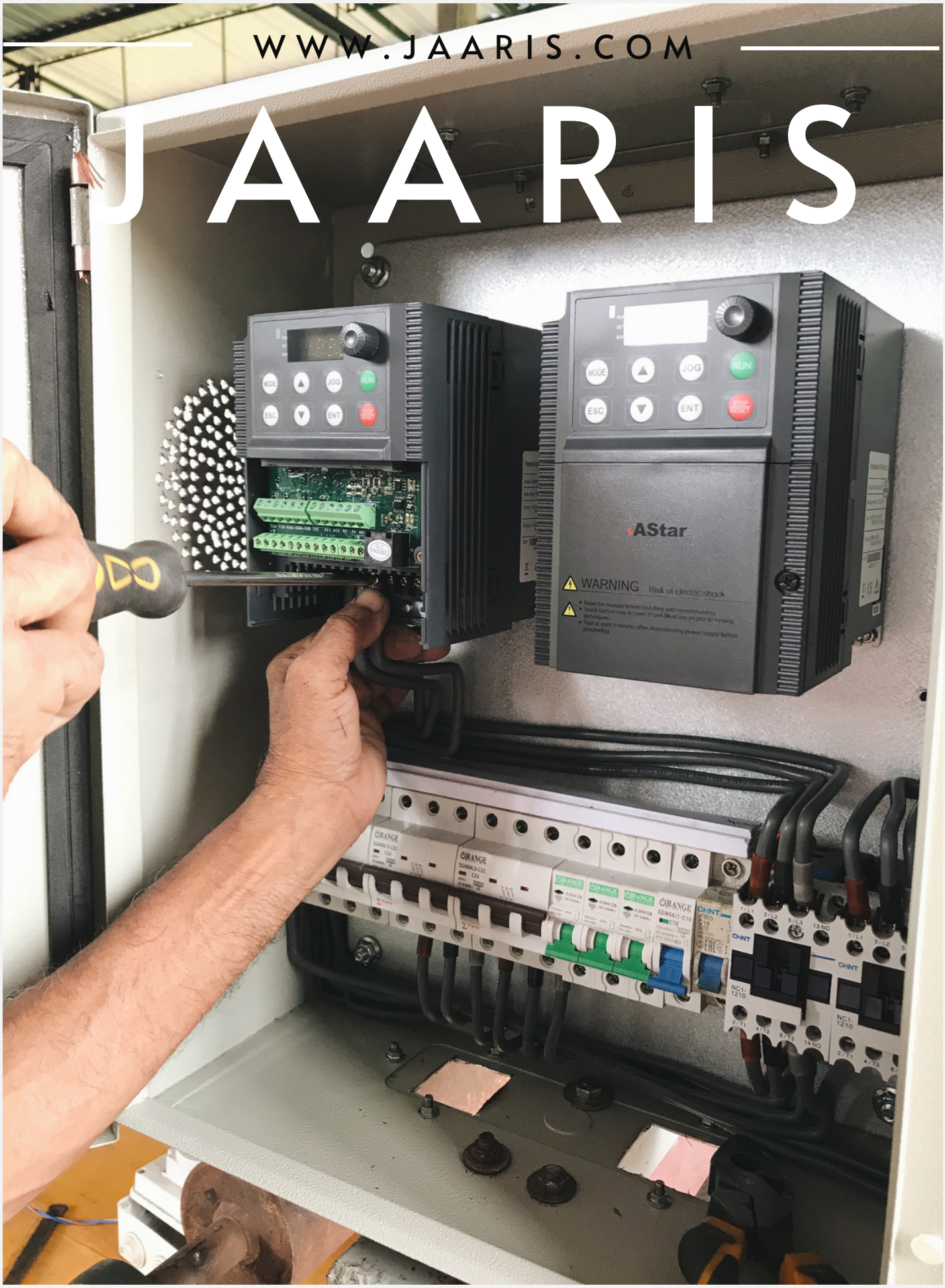

VARIABLE FREQUENCY DRIVES

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ES450 GENERAL SINGLE/THREE PHASE VFD FOR THREE PHASE MOTOR

ES450 SINGLE-PHASE INPUT, THREE-PHASE OUTPUT VFD

Introducing the ES450 Single-Phase Input, Three-Phase Output VFD from JAARIS Drives, the perfect solution for driving three-phase motors from a single-phase power supply. With a compact design and advanced control features, the ES450 VFD offers efficient and reliable motor control for a wide range of applications.

- Input Voltage: 200V-240V single-phase (±10%), 50/60Hz
- Output Voltage: 220V three-phase (±10%)
- Output Frequency: 0-400Hz
- Rated Output Power: 0.75kW to 4kW
- Control Method: V/F control, Vector control (optional)
- Overload Capacity: 150% for 1 minute, 180% for 10 seconds
- Efficiency: >90%
- Cooling Method: Forced air cooling
- Operating Temperature: -10°C to 40°C
- Protection: Overload protection, overvoltage protection, undervoltage protection, overcurrent protection, short circuit protection, phase loss protection, overheat protection, etc.

Product Features:

- Compact size and easy installation
- Built-in EMC filter for reduced electromagnetic interference
- Digital and analog input/output options for control and monitoring
- Parameter lock and password protection for enhanced security
- Built-in braking chopper for dynamic braking
- Modbus RTU communication protocol support for remote control and monitoring

ES450 THREE-PHASE INPUT, THREE-PHASE OUTPUT VFD

Our general purpose vector Variable Frequency Drive (VFD) is the ultimate solution for high-performance motor control. Designed with advanced features and robust construction, the ES450 VFD delivers precise and efficient control for a wide range of three-phase motor applications.

- Input Voltage: 380-480V three-phase (±10%),
- Output Voltage: 380-480V three-phase (±10%)
- Output Frequency: 0-400Hz
- Rated Output Power: 0.75kW to 4kW
- Control Method: V/F control, Vector control, Variable torque control, Energy saving mode
- Overload Capacity: 150% for 1 minute, 180% for 10 seconds
- Efficiency: >93%
- Cooling Method: Forced air cooling
- Operating Temperature: -10°C to 50°C
- Protection: Overload protection, overvoltage protection, undervoltage protection, overcurrent protection, short circuit protection, phase loss protection, overheat protection, etc.

Product Features:

- Advanced speed-sensor vector control for precise motor control
- Energy-saving mode that adjusts motor voltage and current based on actual load size
- High torque capabilities using PID control technology
- Flexible input/output terminals with over 60 functions and 15 optional analog outputs
- Current limiting function to prevent overcurrent and damage to the motor and VFD hardware
- Motor overheating protection and protection against mechanical torque limit
- Droop control for balancing multiple motors driving the same load
- Flexible multi-stage V/F control for different load requirements
- Infineon IGBT module for reliability and wide voltage range adaptability
- Compact design with easy-to-install fan and clear terminal layout
- Designed for harsh environments with TUV certification

ES450 GENERAL SINGLE PHASE VFD FOR SINGLE PHASE MOTOR

ES450 SINGLE-PHASE INPUT, SINGLE-PHASE OUTPUT VFD

Designed to operate with single-phase AC power input and produce a variable-frequency, single-phase AC output to control the speed of single-phase AC motors. They are commonly used in applications such as fans, pumps, power tools and other single-phase motor-driven equipment.

- Input Voltage: 200V-240V AC single-phase 50/60Hz
- Output Voltage: 0-240V AC single-phase
- Output Frequency: 0-400Hz
- Rated Output Power: 0.75kW to 2.2kW
- Overload Capacity: Upto 150% of rated output current
- Control Method: Advanced vector control or V/F control
- Protection Features: Overcurrent, overvoltage, undervoltage, overtemperature, short-circuit, etc.
- Communication Interface: RS485 protocol for remote control and monitoring
- Enclosure Rating: IP20
- Certifications: UL, CE, RoHS, etc.

Product Features:

- Compact size and easy installation
- Built-in EMC filter for reduced electromagnetic interference
- Digital and analog input/output options for control and monitoring
- Parameter lock and password protection for enhanced security
- Built-in braking chopper for dynamic braking
- Modbus RTU communication protocol support for remote control and monitoring

AS-M210 SERIES HIGH PERFORMANCE THREE-PHASE VFD

The AS-M210 drive provides the ultimate combination of power, ease of use, flexibility, and performance. In addition to its exceptional torque production and precise control, you'll enjoy effortless setup with AS-M210's high-resolution display to control anything from simple fans and pumps to complex machines.

Whether you need simple control, functional safety, or a single robust solution look no further than AS-M210 for all your variable speed needs.

- Input Voltage: 380-480V three-phase (±10%),
- Output Voltage: 380-480V three-phase (±10%)
- Output Frequency: 0-120Hz
- Rated Output Power: 0.75kW to 2.2kW
- Control Method: V/F control, Sensorless Vector control, General Vector Control
- Control Mode: Auto-tuning, Manual setting
- Starting Torque: 150% at 1 Hz (Sensorless Vector control), 10% at 0 Hz (V/F control)
- Overload Capacity: 150% for 1 minute, 200% for 0.5 seconds
- Keypad: LED display
- Operating Temperature: -10°C to 50°C

Product Features:

- Vector control for precise motor speed and torque control
- Automatic tuning allows the VFD to adapt to changing load conditions
- High overload capacity of up to 150% for 60 seconds and 200% for 2 seconds
- Built-in EMC filter reduces electromagnetic interference and ensures compliance with international standards
- Support for multiple communication protocols, making them easy to integrate into control systems
- User-friendly interface enables easy programming, monitoring, and troubleshooting

AS180 MEDIUM-DUTY THREE-PHASE V/F VFD

The AS180 series of general-purpose VFDs adopt the world-leading technology of motor control, featuring the same excellent control performance as international high-end frequency inverters as well as enhanced product reliability, environmental adaptability and customized and industrialized design.

Application: With industrial standard load, the VFD holds 1.2 x overload capacity, supports three-phase AC asynchronous motors with a capacity of 2.2-400kW, and are widely applicable to various kinds of light-load devices, such as fans, water pumps and oil pumps.

- Input voltage: 380V-460V (-15% to +10%)
- Input frequency: 45-65Hz
- Permissible voltage variation: Voltage unbalance<3%
- Rated Output Power: 5.5kW to 90kW
- Voltage: 0VAC - input voltage
- Output frequency: 0.00-300.00Hz
- Overload grade: 120%, 1min
- Control Method: V/F control, High performance V/F control
- Starting Torque: 150% at 2.50Hz (V/F control), 120% at 0.5Hz (High performance V/F control)

Product Features:

- Energy-saving operating mode reduces power consumption
- Rapid dynamic response enables quick adjustments to sudden changes in load
- Smooth tracing starting without impact on the motor
- Automatic voltage regulation ensures strong grid adaptability
- Uninterruptible operation in case of power failure
- PID control eliminates the need for an external regulator
- DC braking before operation and multi-speed operation for precision control
- Multiple motor protection features, including over-temperature, overload, and open-phase protection
- Converter protection against overload, temperature, and power failure
- Abnormal communication elimination for reliable operation

AS450 SERIES HEAVY-DUTY THREE PHASE VECTOR VFD

AS450 series VFDs adopt various advanced technologies, including VF control, speed sensorless vector control, closed-loop vector control, and torque control technology. These VFDs are designed to provide enhanced product reliability and adaptability to a wide range of environmental conditions. The customized and industrialized design of the AS450 series VFDs makes them suitable for various industrial applications.

Application: Heavy-duty with 1.5 times overload capacity, supports AC induction motors and permanent magnet synchronous motors with a capacity of 1.1~355kW, and are widely applicable to various kinds of heavy-load devices, such as extruders, compressors, mixers, belt machines and so on.

- Input voltage: 380V-460V (-15% to +10%)
- Input frequency: 45-65Hz
- Rated Output Power: 5.5kW to 90kW
- Voltage: 0VAC - input voltage
- Output frequency: 0.00-300.00Hz
- Overload grade: Heavy-load 150%, 1min
- Control Method: V/F control, Closed loop vector control, Open loop vector control
- Starting Torque: 150% at 2.50Hz (V/F control), 150% at 0.5Hz (Open loop vector control), 150%. at 0.0Hz (Closed loop vector control)

Product Features:

- Motor control system enables smooth and impact-free starting of the motor
- Includes PID control to set parameters and eliminate the need for an external regulator
- Utilizes DC braking to automatically restart the motor after stopping
- Allows for multi-speed operation and low-precision position control via the limit switch with master-slave connection
- Offers flexible or rigid connection options for speed and torque control between main and subordinate drives
- Achieves high-precision master-slave control through Profibus_DP communication or low-speed, low-accuracy control through analog input and output connection.

AS500 SERIES HIGH-PERFORMANCE HEAVY-DUTY VECTOR VFD

The AS500 series high-performance vector VFD is a versatile solution that supports AC induction motors and permanent magnet synchronous motors with a capacity of 1.1~355kW. It boasts enhanced reliability, environmental adaptability, and a customized and industrialized design, making it suitable for heavy industry applications.

This VFD is specifically designed to handle machinery loads with 1.5 times overload capacity, and is particularly well-suited for low-frequency, high-torque loads such as ball mills, bending machines, and mixers.

- Input voltage: 380V-460V (-15% to +10%)
- Input frequency: 45-65Hz
- Rated Output Power: 5.5kW to 132kW
- Voltage: 0VAC - input voltage
- Output frequency: 0.00-300.00Hz
- Overload grade: Heavy-load 150%, 1min
- Control Method: V/F control, Closed loop vector control, Open loop vector control
- Starting Torque: 150% at 2.50Hz (V/F control), 150% at 0.5Hz (Open loop vector control), 150%. at 0.0Hz (Closed loop vector control)

Product Features:

- Powerful control: With a high-performance processor and advanced control algorithms, the AS500 delivers precise and responsive speed and torque control, even in demanding applications.
- Easy setup and operation: The AS500 features a user-friendly interface and intuitive programming tools, so you can get up and running quickly and easily.
- Flexible configuration: With a wide range of inputs and outputs, the AS500 can be configured to meet the needs of a variety of different applications.
- Energy efficient: The AS500's advanced energy-saving features help you minimize your energy usage and reduce your operating costs.

120HP AS180 series VFD installation for a water supply and treatment plant, replacing the original soft-starter system. PID control was programmed for automatic speed regulation, excellent control performance and to make the pump system operate efficiently with minimal manual intervention.

AS450 Drive installation for a water pump control system to provide maximum flow at optimal efficiency. The drives provide extensive diagnostics with regards to maintenance of water pressure and simplifies the complexity of the entire flow control system via the built-in PID controllers.

This installation is for one of our customers in the construction industry to effectively reduce the KVA rating of the existing power system during periods of peak demand using our AS series VFDs. The customer is a leader in Metal Quarrying, Crushing, Manufacturing and Civil engineering constructions.

Jaaris Automation assisted with integrating a 7.5HP drive into an industrial control panel for a blower motor application for one of our customers who was in quite a predicament when his production was halted.

A customer's ABB VFD was down due to a hardware fault - halting production in one of their lines. The JAARIS team quickly reviewed the customer's requirements, engineered a solution with our iAStar drive unit, and had it installed within a day!

A 22KW VFD control panel upgrade for a customer whose previous VFD tripped continuously due to overcurrent faults. Our AS450 heavy-duty drive was programmed for multi-speed operation along with additional functionality such as the activation of relay outputs when the drive frequency reaches a set value and emergency stop controls.

OUR SERVICES

Our store policy is customers come first. We are here to provide you with technical education, product support, and after-sales service.

With over 100's of drives in stock, our team is committed to deliver the VFD you need. You can count on us going out of our way to get you what you need fast!

Hassle-Free Warranty Claims. We Help Process Warranty Replacement & Repair Claims.

SOLE AGENT FOR IASTAR VFD IN SRILANKA

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