Need high speed movement and rapid responsiveness?

Utilize the Altivar® 71 drive.





Altivar 71 drive

Make the most of your energy<sup>™</sup>





# When your business is moving products, you need a drive that can move your business.

Featuring the industry's best reactions times (2ms +/- 0.5ms) and operation speeds up to 1,600Hz, Schneider Electric's Altivar 71 drive can move your business without missing a step. This includes a choice of speed or torque regulation, built-in safety functions for emergency stops, overspeed detection, veering and load holding in case of brake failure.

Flexible and efficient, this utilizes the latest in graphical user displays, standard network connectivity and expandable input/output cards, the Altivar 71 drive provides optimum performance while maintaining simplicity. This makes it the ideal drive for critical conveying, hoisting, packaging and other industrial applications.

Exceptional global service and support from the world leader in power, control and automation equipment, enables you to increase your competitiveness, decrease maintenance costs and achieve the optimal machine performance everyday – making the most of your energy.

## The possibilities are endless



#### Machine Processes

- Motor control in either torque or speed regulation
- Monitoring and control with integrated or optional communications
- Dedicated synchronous motor drive and optional encoder cards for increased precision



#### Material Handling

- Fast response time of 2ms using dual processing technology
- Ability to control the drive via multiple communication networks
- Great for gapping applications



#### Hoisting

- External weight measurement for high-speed hoisting
- Built-in hoisting macro for easy commissioning
- Specialized crane card with anti-sway function and 11 additional "controller inside" function blocks to increase productivity



#### High Inertia Machines

- ENA function designed for unbalanced loads without braking resistor
- PID regulator
- Parameter set switching

# Don't just imagine the possibilities

#### The Altivar 71 drive is your foundation for better machine control.

Each feature offers responsiveness, durability and ease-of-use; and each function adds flexibility, performance and control. Wrapped together and available in your choice of configurations, the Altivar 71 drive gives you the resources to create unlimited machine possibilities.

#### Complete offer

Numerous options across a wide horsepower range give you the flexibility to choose the right product for your needs without sacrificing performance or familiarity.

- IP20, UL Type 1, single-phase 200-240V: Altivar 71 from 0.5-10HP
- IP20, UL Type 1, 3-phase 200-240V: Altivar 71 from 0.5-100HP
- IP20, UL Type 1, 3-phase 380-480V: Altivar 71 from 1-700HP
- IP20, UL Type 1, 3-phase 500-690V:
  Altivar 71 from 2-800HP
- Certification for UL, CSA, CE, C-Tick, GOST, ATEX DNV and ABS to simplify worldwide compliance

#### Remarkable performance

- Up to 220% overtorque
- Flux vector control with or without encoder feedback for asynchronous motors
- On-line auto-tuning (FVC)
- Speed or torque control
- Output frequency up to 1,600Hz
- Synchronous motor control with or without encoder feedback
- Response times of 2ms +/- 0.5ms

#### Open, modular design

- Integrated Modbus® and CANopen® ports
  - Simplifies installation
  - Saves on cabling
  - Improves data exchange transfer rates
- A wide range of additional communication cards allowing the Altivar 71 to connect to many available networks available input/ output extension cards
- Controller Inside programmable card handles more advanced machine functions, often eliminating the need for a PLC while also reducing response time, cost and cabinet space
- Interface cards for incremental or absolute encoders allow drive to achieve full torque even at zero speed

#### **Environmentaly friendly**

- Designed to be energy efficient
- RoHS compliant
- Built with 88% recyclable components
- Developed in factories certified for using eco-design principles

220%

The performance of the Alrivar 71 drive is up to 220% overtorque

#### **Easy control**

- Large graphic screen with customizable display
- Plain text with six available languages (English, Chinese, German, Spanish, French and Italian).
- Navigation button for easily "surfing" through the menus.
- Simply Start menu for quick start-up
- Function keys for short cuts or to configure applications
- Continuous display of the operating parameters of the motor
- Portable interface for transferring programs between drives
- Graphic terminal can be connected to multiple drives at once

#### **Advanced protection**

- Incorporates level A conducted and radiated EMC filters
- Establishes conformity of the machines for CE and UL marking, without additional costs
- Offers thermal protection, integrated electronic thermal relay and surge limitation
- Provides "power removal" safety function
- Conforms to the machine standard EN 954-1 category three
- Meets the standard for electrical installations IEC/EN 61508 SIL2
- Eliminates electromechanical redundancies
- Reduces cabling and installation times
- Decreases space requirements within enclosures
- Enables the use of the Altivar 71 drive with ATEX motors





### Look beyond the basics





#### Full torque, zero speed, no worries

The Altivar 71 drive can be used with a synchronous or asynchronous motors to further expand your capabilities by enabling you to use less space and manage loads at full torque even at zero speed. Embedded patented-technology also allows determination of the initial motor angle without movement or encoder. Optional encoders (SinCos, SinCos Hiperface, EnDat, SSI, Resolver) further improve closed-loop performance.

#### Thinking outside the box

The Altivar 71 drive helps you make the most of your energy by simplifying selection, implementation and maintenance. Compare it side-by-side with any other drive and you'll clearly understand the advantages the Altivar 71 drive provides. This includes offering the Controller Inside programmable card that transforms the Altivar 71 drive into a true automation island. This option card allows you to create custom programs to expand your control and performance by:

- Expanding available input/output
- Increasing reaction time by:
  - Moving the processing closer to motor control
  - Allowing the separation of source commands such as start/stop instructions
  - Enabling direct processing of information by the drive
- Enabling control of other drives (Altivar 31 drive, Altivar 61 drive or Altivar 71 drive) and the rapid exchange of data





#### Talk to someone you can trust

With the most complete power, control and automation solution, including the full line of Altivar drives, Schneider Electric is ready to meet your need for better, more effective motor control. As a leader in energy efficient drives and a pioneer in machine automation, we continue to deliver innovative new ways of adding value, efficiency and performance to your machine solutions.

This ability has earned us a reputation for dependability, reliability and trust that is the defining characteristic of Schneider Electric team members from around the world. This includes product specialists, industry experts, distributors, partners and the countless other members of the Schneider Electric family. Each is tasked with continuing our mission to help you make the most of your energy.

# Safety & security. Reliability & productivity. Aesthetics & comfort. Efficiency & sustainability.

Whatever you need Schneider Electric has the solution. Contact your local sales representative today to learn how Schneider Electric can improve operational performance and help your business to achieve a competitive advantage.

www.us.Schneider-Flectric.com/Drives

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