## Altivar 212 Drive

A variable speed AC drive for 1 to 100 HP, three-phase asynchronous motors

Discover an economical solution for centrifugal pumps and fans and achieve up to 50 percent savings on your energy bills.

Make the most of your energy

### Schneider Gelectric

# A perfect solution for all yo air conditioning, and pump

#### Ventilation applications

- Noise reduction due to the switching frequency, which is adjustable up to 16 kHz during operation
- Automatically catch a spinning load with direction detection
- Reference calibration and limitation
- Smoke purge
- Damper control
- Automatic restart configuration

#### Pumping applications

- Protection against overloads and overcurrents in continuous operation (pump jamming)
- Mechanical resonance protection with operating direction control
- Protects the installation with underload and overload detection
- Sleep and wake functions for better energy management
- Multi-motor configuration for switching between
  multi-pump configurations

#### Air conditioning applications

- Energy saving motor control algorithm
- Auto-tuning
- Integrated proportional integral derivative (PID) regulator with preset references and automatic/ manual mode
- Automatic ramp adaptation, ramp switching, and ramp profile
- Preset speeds
- Monitoring and measurement of energy consumption
- Electricity and service hours meter





Air-cooled condenser unit

Air handling unit (AHU)



Multi-stage packaged pump skid





Air-cooled chiller unit

Packaged rooftop unit



# ur ventilation, ing equipment



\$

### Save an average of \$1,700 on energy spending for a typical 20 HP motor each year by utilizing a Altivar<sup>™</sup> 212 drive.

#### Fast payback

 Achieve 12 - 24 month payback for AC drives installed on typical pump or fan applications

#### Lower maintenance costs

• Reduce the mechanical stress on belts, piping, and ductwork, and eliminate valve or inlet guide vane maintenance

#### Reduced harmonics

• Embedded reduced harmonic technology is equivalent to installing a 3 percent line reactor saving panel space, and reducing component and wiring costs

#### Reduce installation costs

• Embedded technology reduces input currents which allows a cost reduction in wire size, short circuit protection devices, and enclosure size

#### Compliance with

#### government regulations

• The Energy Policy Act of 2005 sets energy reduction goals for federal buildings; variable speed drives can be used to help meet these goals

#### Achieve greater sustainability

- ASHRAE 90.1-2004 prescriptive strongly recommends using AC drives in HVAC systems to conserve energy
- AC drives used in HVAC systems improve LEED<sup>®</sup> ratings

#### Improve operating efficiency

• Embedded technology reduces input currents which improves operating efficiency by 10 percent in many installations

# Save up to 30 percent on your energy bill, increase occupant comfort, and cut overall operating costs!

#### Calculate your potential savings with ECO2.

ECO2 is a software utility designed to calculate the energy savings that can be achieved by using any Altivar<sup>™</sup> variable speed drive.

In a few clicks, ECO2 enables you to choose:

- A comparison of the energy consumption with or without a drive
- The calculation of possible savings from a financial and electrical point of view, as well as the contribution to reduced CO<sub>2</sub> emissions
- The calculation of your potential payback time
- Publish a report with relevant job name and referenced proposal

At 80 percent flow rate, the energy consumption drops 50 percent. Using the Altivar 212 drive, energy consumption is reduced on average by 30 percent when using the control mode designed for pumps and fans.



### Get your building management systems up and running with user-friendly integrated functions and communication protocols.





The dual ports enable a keypad or configuration tool and a communication network to be connected at the same time.

#### 1. Remote LCD display terminal

Common for many Schneider Electric<sup>™</sup> variable speed drives, this terminal is very user-friendly thanks to its full-text screen, local control buttons, and easy instructions available in six languages.

#### 2. SoMove<sup>™</sup> Mobile software

This software can be used for viewing and editing the Altivar 212 drive parameters from a compatible mobile phone, saving configurations, and importing/exporting them to and from a PC. It can even be used with the enclosure door closed thanks to optional Bluetooth® technology.

#### 3. Multi-loader configuration tool

Enables configurations to be copied from a PC or a drive and duplicated on another while the Altivar 212 drives are powered-up.

#### 4. PCSoft software

This software integrates configuration, file storage, diagnostic oscilloscope, and other functions to assist you in maintaining your installed drives.

### 5. Embedded building automation protocols

Modbus<sup>®</sup>, Metasys<sup>®</sup> N2, Apogee<sup>®</sup> FLN P1, and BACnet<sup>®</sup> protocols are software selectable options that allow daisy chain connection via the four screw removable terminal block. A LonWorks<sup>®</sup> communication card is optional.



Scan this code to check out the Altivar 212 Selection Guide for ratings, options, and dimensions.



# Easily integrate the Altivar 212 drive into tested, validated, and documented architectures (TVDA).

The Altivar 212 drive is compatible with the Schneider Electric TVDA control system architectures. These architectures have been designed to optimize machines in terms of cost, size, and performance, and make it possible to accelerate the design and development of your machines.



Reduce your machine's **time-to-market** by incorporating ready-to-use solutions

Increase **machine performance** with better control at full and partial loads by integrating variable speed drives, using energy efficient application function blocks, and innovative solutions

Gain a competitive advantage in each stage of your machine and **optimize the global cost of your machine** 



Save up to 50 percent

of design and

installation time



Stay one step ahead

For more information about the Altivar 212 drive, contact your local sales representative or Schneider Electric distributor at **www.schneider-electric.com/us** 

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