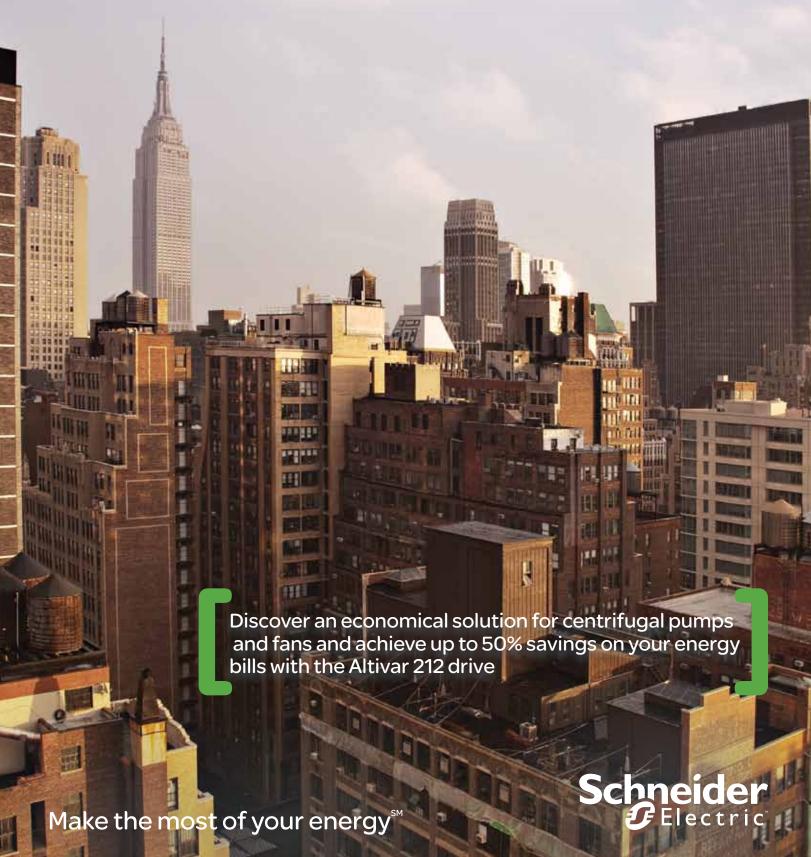
### Altivar<sup>™</sup> 212 Drive

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



# A perfect solution fo air conditioning and

#### 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



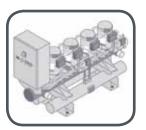
Air-cooled condenser unit



Air handling unit (AHU)

#### Pumping applications

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



**Pumping applications** 

#### Air conditioning applications

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

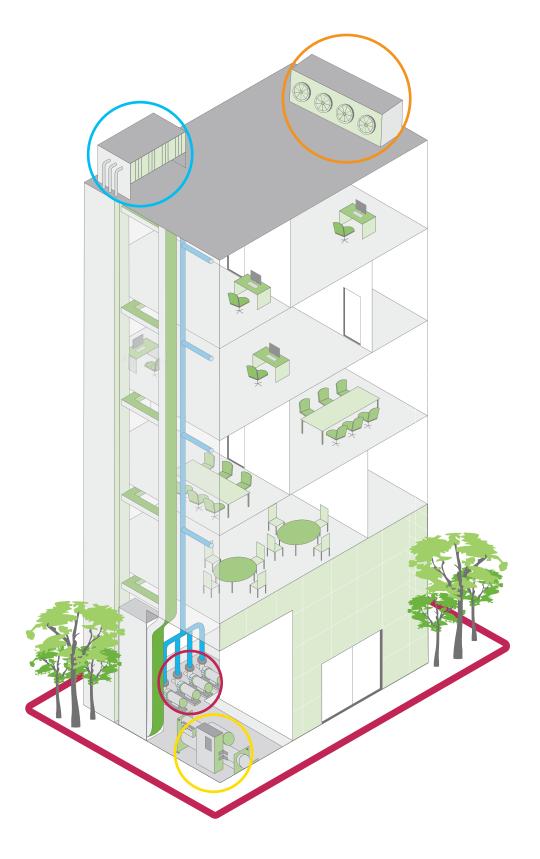


Air-cooled chiller unit



Packaged rooftop unit

## r all your ventilation, pumping equipment





## Save an average of \$1,700 on energy savings for a typical 20 HP motor each year by applying an Altivar 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% 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 and 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% in many installations

### Save up to 30% 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 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% flow rate, the energy consumption drops 50%. Using the Altivar 212 drive, energy consumption is reduced on average by 30% 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's variable speed drives, this terminal is very user-friendly when performing startup and maintenance operations thanks to its full-text screen, local control buttons, and easy instructions available in 6 languages.

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

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

#### 3. Multi-Loader configuration tool

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

#### 4. PCSoft<sup>™</sup> 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™, METASYS N2, APOGEE FLN P1 and BACnet protocols are software selectable options that allow daisy chain connection via the 4 screw removable terminal block. A LonWorks® communication card is optional.



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

The Altivar 212 drive is compatible with the Schneider Electric's "TVDA" control system architectures (tested, validated and documented). 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 using ready-to-use solutions



Save up to **50**% of design and installation time



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



Save up to **30**% on your machine energy consumption



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



Stay **one** step ahead



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