



Frost & Sullivan Innovation Award 2008



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Designed and created by: Gavrinis  
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# The essential partner for your pumping, heating and ventilation applications



## Altivar 21

Variable speed drive for 3-phase asynchronous motors from 0.75 to 75 kW

Make the most  
of your energy



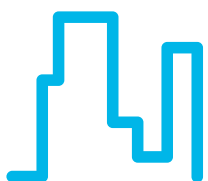




# Altivar 21, the solution for your building applications

A range specifically for controlling pumps, fans and compressors with:

- A product specially designed for buildings
- Simple to use
- Immediate setup
- Direct integration in the line supply
- No costly accessories needed
- High performance and energy savings



30% of the energy of buildings  
is consumed by motors

# A single product for all pumping and ventilation applications

The Altivar 21 range has been specially designed to be integrated in your installations



## Ventilation

- Comfort:
  - Reduces noise pollution (noise caused by air flow, motors, etc.)
- Safety:
  - Detection of transmission component breakage
  - Smoke extraction: forced operation with fault inhibition
- Simplicity:
  - Automatic restart
  - Does away with the need for paddle valves



## Heating and air conditioning

- Performance:
  - Optimizes control when processing fluids
  - Use of the PID regulator (temperature, flow rate, pressure, etc.)
- Economy:
  - Adjustment of flow rates for better energy management
- Ruggedness:
  - Elimination of mechanical resonance
- Building Management System:
  - Connection to the building's supervision network



## Pumping

- Safety:
  - Detection of under/overloads and loss of pump priming
  - Motor switching
- Economy:
  - Limitation of low speed operating time
  - Sleep/wake-up function
- Simplicity:
  - Reference calibration and limitation
  - Preset speeds



Up to  
**70%**

less energy  
consumption



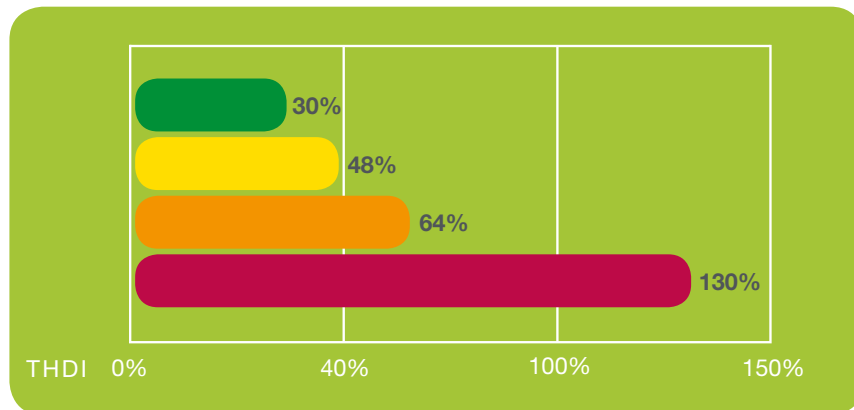
**Plug  
& Play**

Operational  
as soon as it is  
switched on



# Altivar 21, for easy, disturbance-free operation

The reduced capacitor technology complies with standard IEC61000-3-12 (THDI<48%).



**Reduction of the total harmonic distortion THDI 30%**

- Altivar 21 drive with reduced capacitor technology
- Standard drive with 5% line choke or DC choke
- Standard drive with 3% line choke
- Standard drive without choke

- Open communication: building communication cards (Modbus as standard)
- Fixed bracket integrated as standard for greater safety and availability
- Compact: side-by-side mounting
- Sleep/wake-up
- Smoke extraction (fault inhibiting)
- Installation made easier by local or remote control
- Integrated EMC
- Control loop provided by integrated PID regulator



Switch kit can be integrated in the drive with no need for an additional external unit



# More communication, closer to you

## Priority given to communication

- Option cards for the main communication buses: LonWorks, BACnet, METASYS, N2 and APOGEE FLN
- Complies with international standards and certifications: CE, UL, CSA, C-Tick, etc.



## PC soft: the management and maintenance tool for all your drives

- Downloading: send and receive
- Oscilloscope, 8 channels
- Modes: online and offline
- Configuration storage
- Calls Schneider-Electric service

## Eco2: your management tool

- An estimate of your potential energy savings (pumps, fans and compressors)



## The safety and reliability of a world leader

- Presence in more than 100 countries, with 114,000 staff
- A broad range of mutually compatible products
- Solutions specific to your requirements, complying with international standards



With Eco2, calculate the energy savings that can be made in your installations  
Download free of charge from [www.schneider-electric.com](http://www.schneider-electric.com)