# User-friendly and communicative!
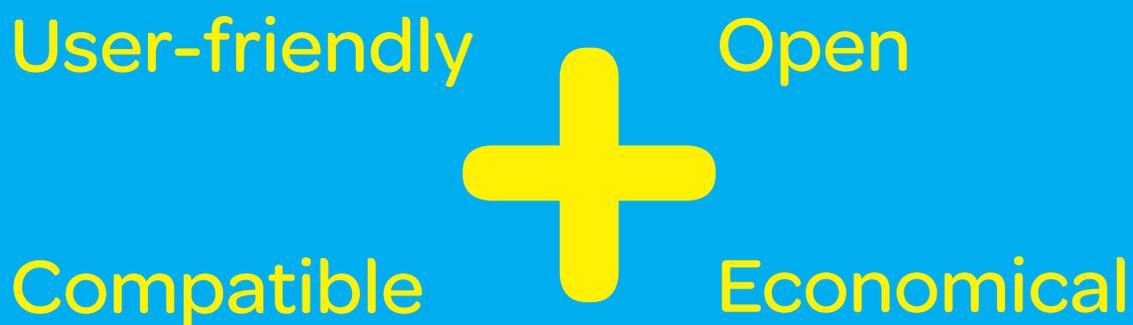


## Altivar 312

Variable speed drives for
three-phase asynchronous motors,
0.18 to 15 kW at up to 600 V

**Schneider Electric**

# Altivar 312 range
# Designed for robustness and compatibility with the control system architectures of your machines

**User-friendly** ➕ **Open**

**Compatible** **Economical**

**Enhanced communication:**
- CANopen Daisy Chain, DeviceNet, Profibus DP

**Simplified user interface:**
- Setup via mobile phone (Bluetooth®)
- Intuitive navigation
- Local control on the front panel

**Numerous application-specific functions**

**Auto-tuning for maximum performance**

**Integrated EMC filter**

**Rugged for use in all environments**

# Increased performance
# for industrial machines



- Materials handling and packaging
- Packing
- Textile machines
- Special machines
- Pumps and fans

> **Up to 30 % more performance**
> compared to the market average
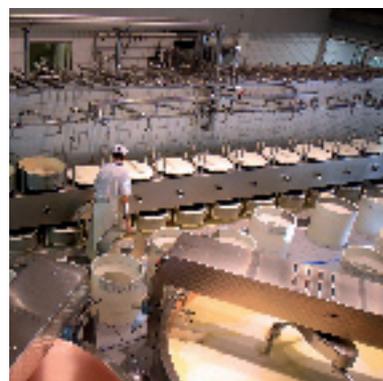
# Special functions for each type of machine



**Materials handling**
- +/- speed
- Brake sequence
- Motor switching
- Management of limit switches
- Switching frequency up to 16 kHz
- Current limitation
- Linear ramps, S, U or customised
- Second ramp



**Packaging and packing**
- Brake sequence
- Output contactor control
- Accessible DC bus



**Special machines**
- Current limitation
- Catch on the fly
- Controlled stop on loss of line supply
- Derated operation



**Textile machines**
- 16 preset speeds
- +/-10V bipolar input reference
- PI regulator



**Pumps, ventilation**
- PI regulator and reference, automatic/manual
- Automatic restart
- Stop modes in the event of a fault
- Limitation of low speed operating time
- Detection of current, torque and thermal state thresholds of drive and motor

**Other options**
- Protection of machine by locking parameters
- Multiple assignment of logic inputs
- Saving a set of parameters
- Management of external faults
- Display of parameters: current, power, torque, speed, frequency, etc.

> **50 application-specific functions listed in the catalogue**

# Simplicity to boost
# the performance of your machines

**Local control
on the front panel**

Ergonomically designed
button for simple navigation

Run/Stop commands
on the device

Snap-lock seal

Customisable
marking plate

**Increased productivity**
- Reduced design and installation costs thanks to the SoMove software workshop
- Auto-tuning saves setup time and optimises performance
- Full mechanical and software compatibility with the Altivar 31 in event of replacement
- The compact size means smaller enclosures (integrated EMC filter and side-by-side mounting without derating)

*Universal communication tools and networks for your control system architectures via the RJ45 port.*
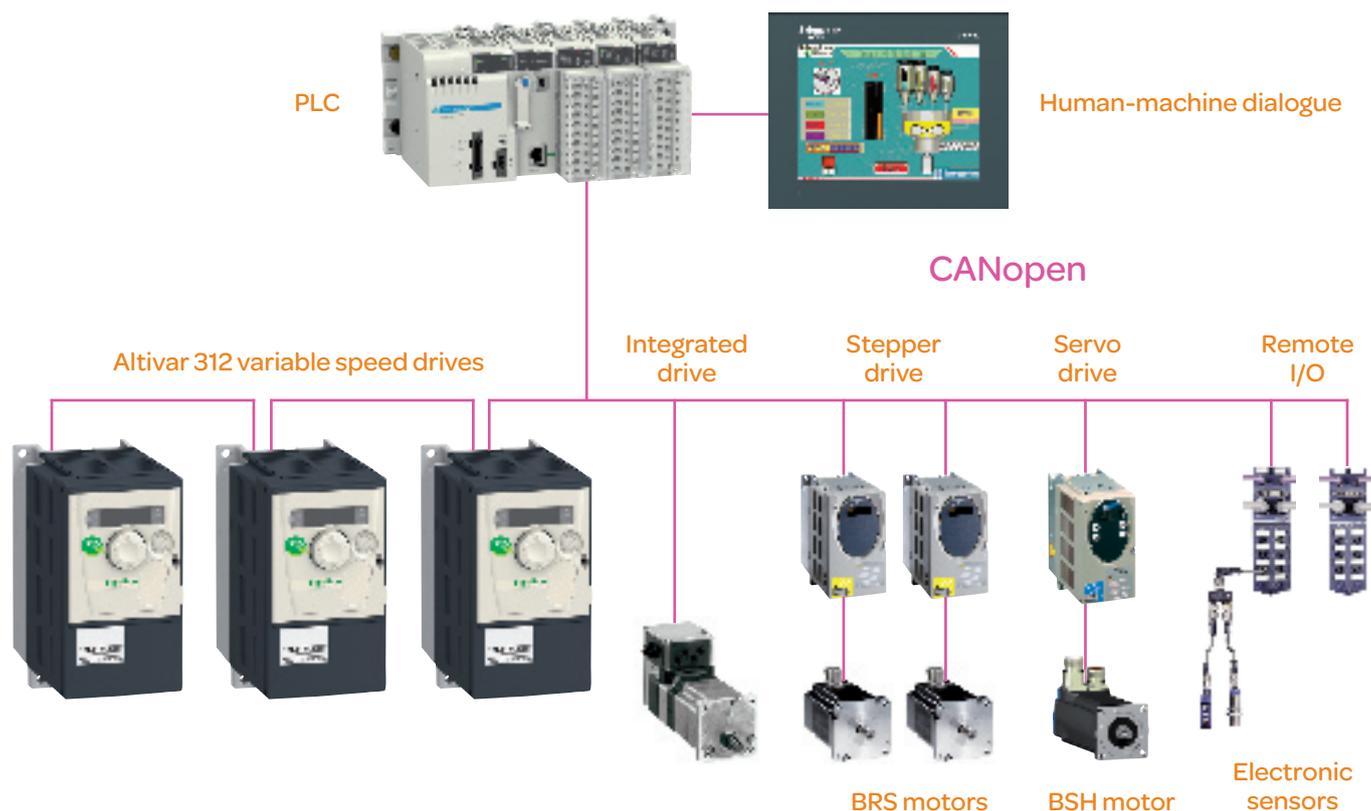
**Remote HMI terminals**

- Same as Altivar 61 and 71
- Plain text in your language

- Same as Altivar 12
- LED display

# Communication with your control system architectures

One connection, one software tool to programme the PLC and configure the drives

PLC

Human-machine dialogue

CANopen

Altivar 312 variable speed drives

Integrated drive

Stepper drive

Servo drive

Remote I/O

BRS motors

BSH motor

Electronic sensors

Altivar 312 integrates transparently into your architectures and communicates with all control system products:
• Modbus and CANopen are integrated as standard
• Option cards: CANopen Daisy Chain, DeviceNet, Profibus DP
• Gateways for Ethernet/Modbus and Fipio/Modbus

> **A global range with universal product references:**
Altivar 312 accompanies your machines wherever they travel in the world.

# User-friendliness expressed through dialogue

**A common platform**
Duplicate the configuration using the many common tools available for Altivar and Lexium series 2: Simple Loader, Multi-Loader, graphic interface, SoMove software workshop, Bluetooth interface and mobile phone software.

**Preparation of files**
The SoMove software workshop enables the design office to prepare the files for drive configuration.
2 methods for loading the configuration:
- Direct from PC to drive using a USB/RJ45 cable
- Without a PC, via an SD memory card using Multi-Loader

**Equipment testing**
The SoMove software workshop serves as a dynamic debugging tool for your machine. The oscilloscope function is extremely useful when making adjustments.

**Multi-Loader configuration tool**
The configurations of several drives are stored on a standard SD memory card. Simply load it directly into your PC or insert into the Multi-Loader, which can be used as a card reader.

**Simple Loader duplication tool**
Copy the settings from a configured drive and duplicate on all your machines.

SoMove
Software workshop

> 

**Save Time**
when setting up the device: using Multi-Loader, you can select and transfer the required file in a matter of seconds.

# Use your mobile
# to configure your Altivar 312

## Efficiency
### with an all-in-one solution

- Download and transfer configurations
- Drive adjustment and maintenance
- Send and receive configuration files locally or remotely in a matter of seconds

## Safety
### and confidentiality

- Monitor and adjust your machine from a secure location
- Bypass all the usual physical and security constraints to access your machines via the Bluetooth wireless connection. You don't even need to open the enclosure!
- Save changes or reinstall saved configurations whenever you want

## Simplicity
### and comfort

- Work in comfort using Bluetooth wireless communication Take advantage of the user-friendly SoMove Mobile™ dialogue functions
- You know which menu you are in at any time
- Share configuration files via MMS or email

## Altivar Innovation
Remote configuration to update settings by mobile or PC via Bluetooth.

# A wide range of products meeting safety and international standards

### A robust legacy
- All the advantages of Altivar 31
- Excellent resistance to harsh environments (50°)
- Coated cards as standard (IEC 60721-3-3 Classes 3C2 and 3S2)
- Excellent resistance to power supply and motor interference

### Large voltage range
- Single-phase 200 to 240 V with an integrated C2 EMC filter
  and optional C1 filter
- Three-phase 200 to 240 V
- Three-phase 380 to 500 V with integrated C2 EMC filter
- Three-phase 525 to 600 V

### Compliance with specific requirements
- Integrated Class 2 EMC filter for radiated and conducted emissions
- Local control integrated in the drive (programmable)
- Positive and negative logic
- DIN rail mounting
- UL Type 1 kit

### Standards and certifications
EC/EN 61800-5-1, IEC/EN 61800-3 (environments 1 and 2,
C1 to C3), CE, UL, CSA, C-Tick, NOM, GOST

# Make the most of your energy!

up to
**30%**
energy saving

**Schneider Electric Industries S.A.S.**