

So slim, So smart!



Altivar 32

Variable speed drives for asynchronous and synchronous motors in speed control mode from 0.18 to 15 kW

Schneider
Electric



- Elevator for the manufacturing sector: conveyors, storage and retrieval systems, handling equipment
- Simple packaging
- Metal processing machinery: bending, welding, cutting, etc.
- Wood-working machines
- Textiles
- Machines with simple control systems: scrolling advertising panels, automatic doors, etc.

+ over 150 application-specific functions

Altivar 32 range

Optimise your industrial machines

More innovations

- Slim shape product (45 mm wide)
- Circuit-breaker connected directly to the product
- Mounting can be vertical or on the side
- Integrated safety functions
- Integrated programmable logic functions
- Built-in Bluetooth®: remote adjustment and parameter setting via mobile phone or PC
- Configuration with the power off in its original packaging

More openness

- Application-oriented: predefined settings and combinations of functions
- Modbus and CANopen integrated as standard
- Access to the majority of industrial communication networks
- Tools adapted to each stage in the product lifecycle

More energy savings

- New control profile for synchronous motors in speed control mode
- Control profiles to optimise energy

+ 10% energy efficiency due to the use of synchronous motors in speed control mode:

- New control profile for optimised performance
- Simplification of the speed reducer stage for:
 - Applications requiring significant torque at low speed (bending presses, extruders, etc.)
 - Direct mounting on applications requiring low speeds (metering pumps, small machine fans)

Altivar 32, packed with innovations

Remote adjustment and configuration

On-board Bluetooth® for configuration via mobile phone or PC

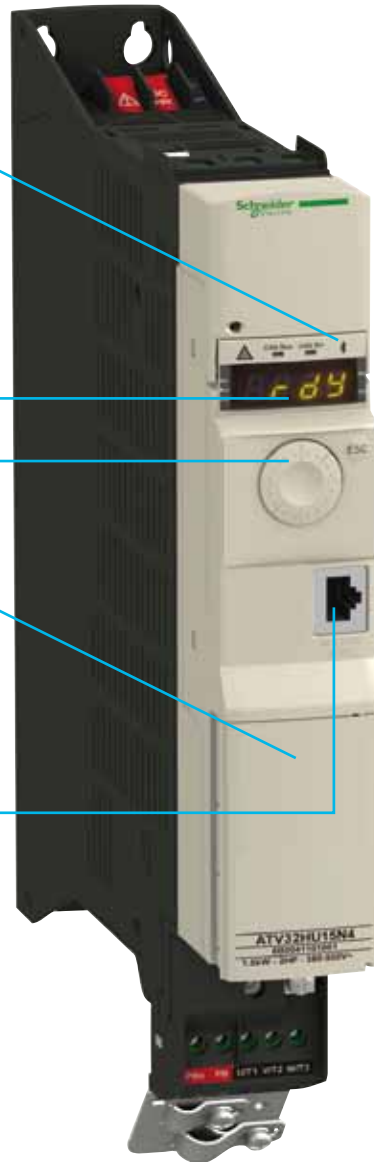


Simplified user interface for greater efficiency

- 7-segment display: better visibility from a distance
- Navigation button: faster setting
- Ease of identification: product identification on a hinged door on the front panel

Standard connector for

- Modbus or CANopen networks
- Dialogue with tools common to the Altivar and Lexium ranges



10 drives
configured
in less than
5 minutes
with the
Multi-Loader!



**Easily
integrated**

- 45 mm wide
(up to 1.5 kW in
400 V version)
- 60 mm wide
(up to 4 kW in
400 V version)



Practical, recyclable packaging

You can configure your Altivar 32 in its packaging, with the power off.

Function blocks integrated with ATV Logic

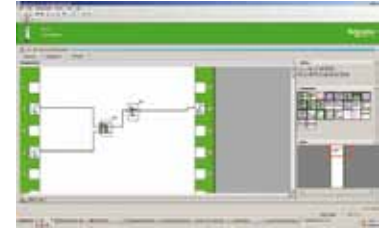
- The drive is at the heart of the control system and replaces the simple functions performed by a PLC.
- The software function blocks integrated in the product can be used to:
 - Perform simple control system functions (Boolean, arithmetical operations, timers, counters, comparators, etc.)
 - Write small automated sequences
 - Customise the drive to the machine application
- The ATV Logic function is programmed with the SoMove software.

SoMove is setup software for the TeSys, Altistart, Altivar and Lexium motor control ranges.

For the Altivar 32 range:

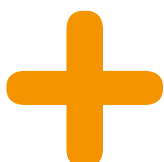
- Menu customisation
- Creation of configuration files for Multi-Loader and SoMove Mobile
- Maintenance function (oscilloscope, etc.)
- Programming of logic functions
- Configuration of safety functions

SoMove Mobile can be used to load and adjust drive configurations via mobile phone.



Typical sequence for a scrolling advertising panel application

1. Turn on
2. Select the parameters:
 - Number of displays
 - Display time
 - Scroll speed
 - Length of display
3. Start-up
4. Homing
5. Display positioning
6. Viewing time
7. Presentation of the next poster
8. Return to sequence 5 for each poster
9. Change scroll direction when the last poster has been shown



- autonomy
- savings



- equipment
- wiring

Tools that focus on your applications

Calling all designers, installers, distributors, after-sales technicians, etc: minimise your installation and programming times and cut your costs, with the common platform of tools for the Altivar and Lexium ranges.



Graphic display terminal: user-friendly programming with more than 23 languages



Simple-Loader: duplicates a configuration on two identical drives



Built-in Bluetooth® connection: simplified communication between products equipped with Bluetooth®



Multi-Loader : configures and stores the configuration files for several drives on an SD card



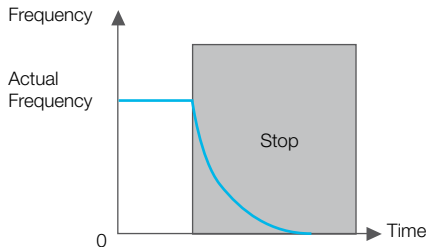
SoMove : setup software

Safety incorporated as standard

Safety functions for more protection in the machine environment

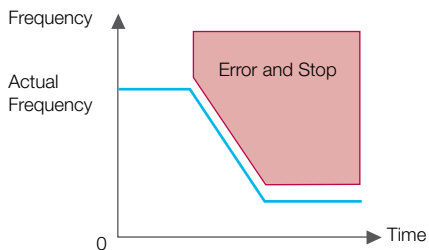
STO: Safe Torque Off

Freewheel stop by eliminating the torque on the motor shaft.



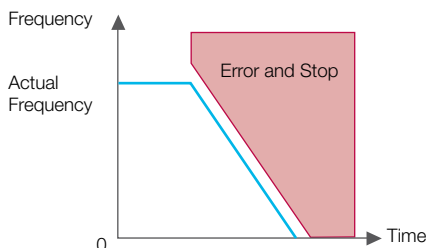
SLS: Safely Limited Speed

- Slows down then holds the motor at a predefined speed, causes STO stopping if this speed is exceeded.
- The SDI function (Safe Direction) is integrated in SLS.



SS1: Safe Stop 1

- Motor stops according to a predefined speed ramp.
- Checks that the motor has actually stopped or has reached a minimum predefined speed then activates the STO function.



Safe wiring

Wiring made simple with the terminal diagram on the inside cover



The safety functions can be used in any combination.

Two logic inputs provide redundancy on most of them, hence avoiding the need to use an external safety module.

Certifications:

- Safety Integrity Level (SIL1, 2 or 3) according to IEC 61508 standard (parts 1 and 2)
- Performance level (PL"d") according to ISO 13849-1/-2 Category 3



- 30% savings compared to a solution with external safety modules
- Altivar 32 is compatible with ATEX environment

Mounting designed to ensure maximum integration

Its extra-slim format and removable front panel optimise Altivar 32's integration into the tiniest spaces (300 mm or less!).



Flexible mounting, vertical or on the side.
Above, mounted at the back of the enclosure with control unit at 90° for ease of access.



Ease of side-by-side mounting.



Easy-fit communication modules in cassette format.



Safe, simple maintenance thanks to the terminal block that can be removed (with the power off) from the motor power section.



Power supply and protection for several drives by means of a busbar and circuitbreakers.



Power supply on DC bus: connection between the DC bus products for balanced loads and optimised energy management.



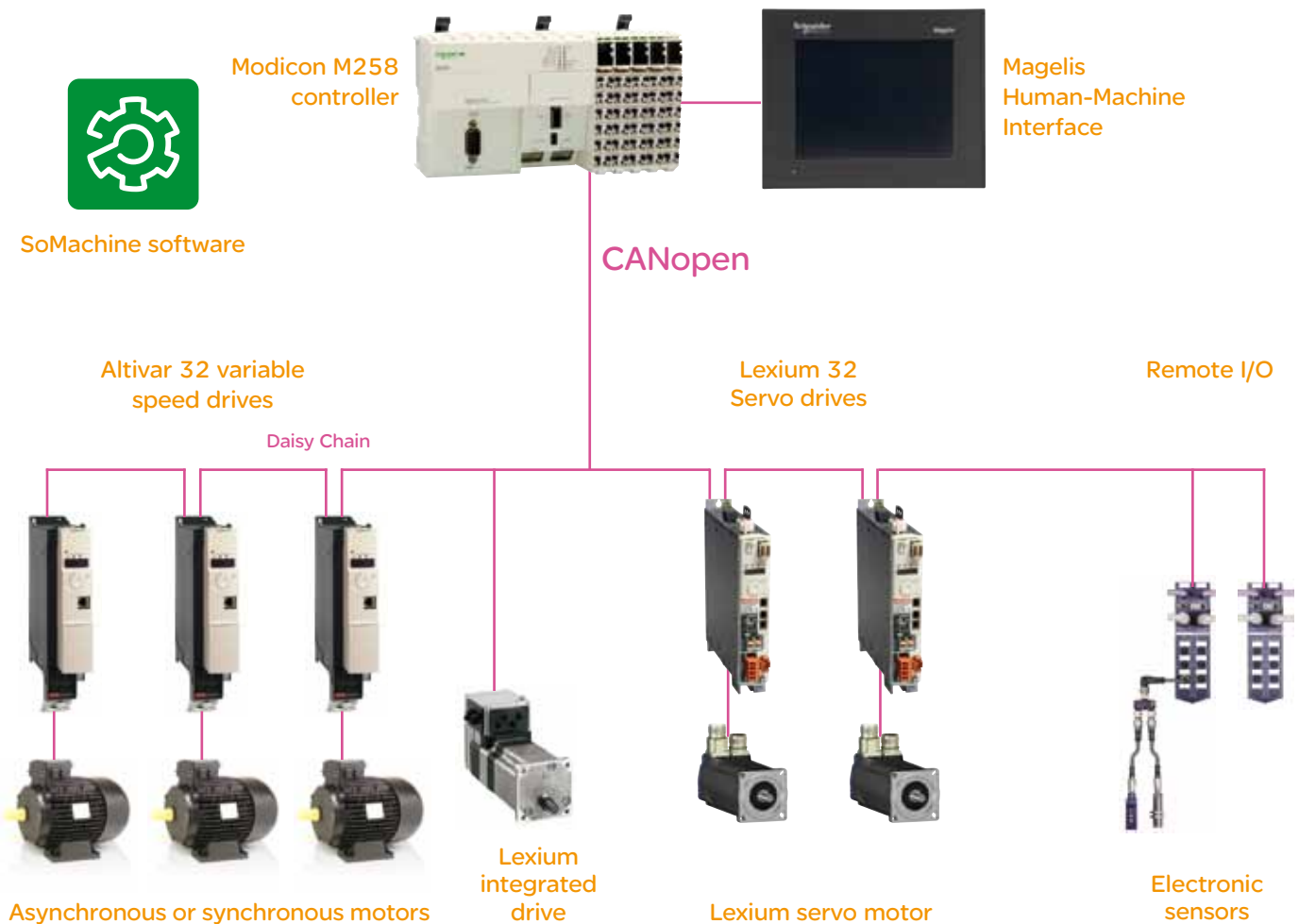
- 40% more space freed up in enclosures
- Up to 14 products side by side instead of 6 fitted widthways!

Totally transparent integration

Altivar 32 integrates into any environment and communicates with any control system product:

- Modbus and CANopen are integrated as standard.
- Option cards: CANopen Daisy Chain, Ethernet IP/Modbus TCP Dual Port, Profibus DP V1, DeviceNet, EtherCat, etc.
- Numerous support and design tools (macros for PLCs, mechanical installation software such as AutoCAD, wiring diagram design help software such as ePLAN).

Altivar 32 is compatible with Schneider Electric's "TVDA" control system architectures (tested, validated and documented). These architectures have been designed to optimise machines in terms of cost, size and performance.



 **Openness to communication networks**

A comprehensive offer to suit your application performance and functions

Boost your productivity with equipment designed to work together in harmony (circuit-breakers, motor starters, variable speed drives, etc.).

Altivar 32 in speed control mode



Lexium 32 in position control mode



Optimisation

- of your machines' performance
- of your application functions
- of your enclosure dimensions
- of tool and accessory logistics

Common tools, software and functions



Multi-Loader

Load and store configurations even with the power off



Graphic terminal

Configuration and communication in your country's language



Bluetooth®

Wireless setup and maintenance



SoMove and SoMove Mobile, SoMachine

Software common to both ranges for greater ease of use



Common functions

- Identical human-machine dialogue
- Integrated safety functions (STO, SLS, SS1)

Mounting and wiring principles

- Extra-slim format, same fixings for side-by-side mounting
- Removable motor connection
- Common communication cassettes



Software support

- PLCopen libraries
- Integration files for electrical and mechanical CAD systems (ePLAN and 2D/3D CAD)

Common accessories

- Communication modules (cassettes)
- EMC filters
- Braking resistor
- Line chokes



Dimensions (in mm) width x height x depth

M2: 200 - 240 V single-phase with integrated EMC filter	
N4: 380 - 500 V three-phase with integrated EMC filter	
ATV32H018M2... H075M2, ATV32H037N4... HU15N4	TA: 45 x 317 x 245
ATV32HU11M2... HU22M2, ATV32HU22N4... HU40N4	TB: 60 x 317 x 245
ATV32HU55N4, ATV32HU75N4	TC: 150 x 232 x 232
ATV32HD11N4, ATV32HD15N4	TD: 180 x 330 x 232

A complete range



Standards and certifications

IEC/EN 61800-5-1, IEC/EN 61800-3 (environments 1 and 2, categories C2 and C3), UL508C
EN 954-1 Category 3, ISO/EN 13849-1/- 2 Category 3 (PLd), IEC 61800-5-2,
IEC 61508 (parts 1&2) SIL1 SIL2 SIL3 level, draft standard EN 50495E
CE, UL, CSA, C-Tick, GOST, NOM.

Schneider Electric Industries SAS

Head office:
35 rue Joseph Monier
CS 30323
92506 Rueil-Malmaison Cedex
France

www.schneider-electric.com

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Designed and created by: Gavrinis
Photos: Schneider Electric
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