

Variable speed drive for elevators

Altivar 71

Comfort and safety
at every level



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Part of the latest generation of variable speed drives developed by Telemecanique, the Altivar 71 is designed for new or retrofitted elevators.

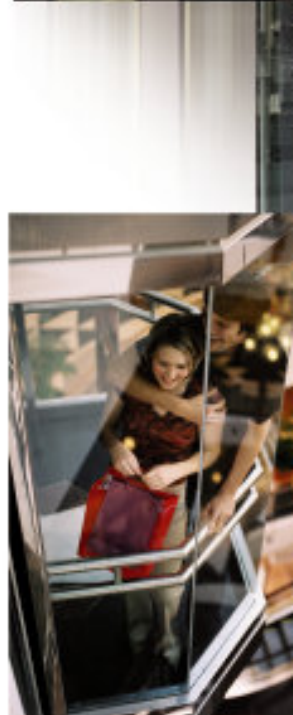
The Altivar 71 is an “all-in-one” product, offering exceptional elevator **performance**, **comfort** and **safety** for users as well as **ease** of installation and **maintenance** for OEMs and elevator mechanics.

A single Altivar 71 for all your applications

Its innovative design means the Altivar 71 can manage all types of encoders - incremental, resolver and absolute - by means of its option cards. It offers total flexibility to control both synchronous and asynchronous motors. The Altivar 71 can be adapted for all types of elevators, in particular gearless and machine-roomless models, and is easy to integrate in all environments. Its drive quality and application-specific functions, together with its excellent technical and economic performance levels, will enhance your offers and your know-how. The Altivar 71 is ideal both for retrofit and new installations.

Interface cards for incremental or absolute encoders:

- RS422, open collector, push-pull
- RS422 with encoder emulation
- Resolver
- SinCos, SinCosHiperface, EnDat, SSI





A new standard of quality

The Altivar 71 is designed to meet the requirements of your most complex specifications. It offers the ultimate in technical performance and, consequently, has become a new reference in its field.

Enhanced safety

- Emergency power supply via inverter for easy evacuation.
- Power Removal safety input.
- Output contactor control.
- Open-loop operation possible in the event of encoder failure.
- Deferred thermal stop enabling the elevator car to go to the next floor if the Altivar 71 overheats (due to an overload or motor failure, for example).
- Protection of the drive configuration by access code.
- Alarms, fault modes, etc.
- Motor protection (thermal, overvoltage, short-circuit, etc.)

Improved accuracy

- Schneider Electric patent on the motionless, encoderless alignment of synchronous motors.
- Exceptional accuracy on stopping and repeat accuracy (speed accuracy = 0.01%).
- Door opening command as the elevator car arrives at a floor level: a logic output can be assigned to the speed threshold.
- Possibility of alignment without encoder for synchronous motors.
- "Half-floor" function for optimizing travel time whatever the distance between floors.

Easy to use

- Fast startup using PowerSuite software and the Bluetooth connection.
- Inspection function allowing the elevator car to be moved totally safely at low speed (by management of the output contactor).
- Automatic restart in the event of a stop if the fault disappears and conditions allow.
- Fault log with record of the last 8 faults and their contexts.
- Maintenance by remote diagnostics.
- CANOpen communication bus.
- Email function for immediate maintenance alert (with the Ethernet card option).

Smooth startup

- Custom ramp for gradual acceleration.
- Automatic adaptation of torque on starting according to the load measurement.
- No rollback effect.

Silent operation

- Reduced motor noise, with a switching frequency of up to 16 kHz.
- The fan only operates when necessary.

Economical

- All-in-one product (for synchronous and asynchronous machines) that is interchangeable between different elevators.
- Integrated EMC filter.
- Significant energy savings.
- Installation and maintenance-related savings.
- Compatibility with all types of encoders.
- Flexibility of operation and current limiting avoid premature wear of the drive components, such as sheaves and hoisting cables.

Card Selection Guide

PowerSuite software workshop

PowerSuite for PC CD-ROM
(English, French, German
Italian and Spanish) _____ VW3 A8104

PowerSuite for PC update CD-ROM
(English, French, German,
Italian and Spanish) _____ VW3 A8105

PC connection kit _____ VW3 A8106

Adapter for Modbus-Bluetooth®
wireless link _____ VW3 A8114

I/O cards

Logic I/O

1 x 24 V voltage output
1 x 10 V voltage output
1 relay logic output
4 programmable logic inputs
2 open collector assignable logic outputs
1 input for up to 6 PTC probes
_____ VW3 A3201

Extended I/O

Same as logic I/O card +
2 analog inputs
2 analog outputs
1 frequency control input _____ VW3 A3202

Encoder interface cards

Incremental:

RS 422 outputs, 5 V _____ VW3 A3401

RS 422 outputs, 15 V _____ VW3 A3402

Open collector outputs, 12 V _____ VW3 A3403

Open collector outputs, 15 V _____ VW3 A3404

Push-pull outputs, 12 V _____ VW3 A3405

Push-pull outputs, 15 V _____ VW3 A3406

Push-pull outputs, 24 V _____ VW3 A3407

Resolver _____ VW3 A3408 ⁽¹⁾

SinCos, SinCosHiperface,

EnDat, SSI _____ VW3 A3409 ⁽¹⁾

Incremental with emulation:

RS422 outputs, 5 V or 15 V,
with emulation _____ VW3 A3411 ⁽¹⁾

⁽¹⁾ Only available with the ATV71 "383" product specification
for asynchronous or synchronous motors

Controller Inside

Programmable card _____ VW3 A3501

Communication cards

Fipio _____ VW3 A3311

Ethernet _____ VW3 A3310

Modbus Plus _____ VW3 A3302

Profibus DP _____ VW3 A3307

DeviceNet _____ VW3 A3309

Uni-Telway _____ VW3 A3303

InterBus _____ VW3 A3304

For full, detailed information on the Altivar 71
offer, please refer to the catalog.

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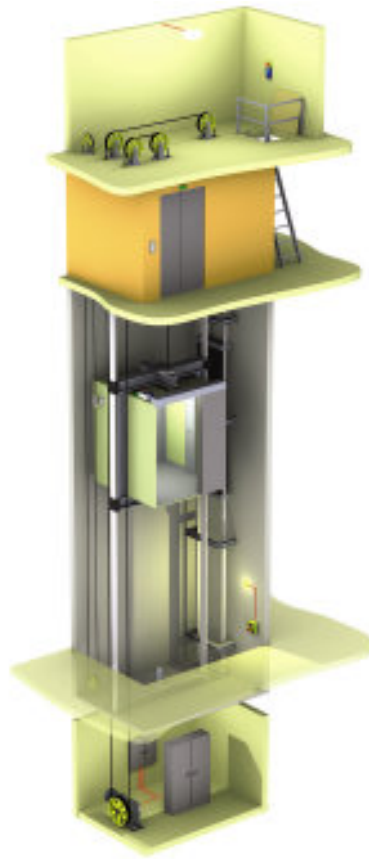
Motor Power 3-Phase
From 200V to 280V Encombremments

kW	HP	UL Type 1 / IP20	L	H	P
2,2	3	ATV71HU22M3383	155	260	187
3	3	ATV71HU30M3383	155	260	187
4	5	ATV71HU40M3383	155	260	187
5,5	7.5	ATV71HU55M3383	175	295	187
7,5	10	ATV71HD75M3X383	210	295	213
11	15	ATV71HD11M3X383	230	400	213
15	20	ATV71HD15M3X383	230	400	213
18,5	25	ATV71HD18M3X383	240	420	236
22	30	ATV71HD22M3X383	240	420	236
30	40	ATV71HD30M3X383	320	550	266
37	50	ATV71HD37M3X383	320	550	266
45	60	ATV71HD45M3X383	320	550	266

Motor Power From 380V to 480V Encombremments

kW	HP	UL Type 1 / IP20	L	H	P
2,2	3	ATV71HU22N4383	130	230	175
3	3	ATV71HU30N4383	155	260	187
4	5	ATV71HU40N4383	155	260	187
5,5	7.5	ATV71HU55N4383	175	295	187
7,5	10	ATV71HU75N4383	175	295	187
11	15	ATV71HD11N4383	210	295	213
15	20	ATV71HD15N4383	230	400	213
18,5	25	ATV71HD18N4383	230	400	213
22	30	ATV71HD22N4383	240	420	236
30	40	ATV71HD30N4383	240	550	266
37	50	ATV71HD37N4383	240	550	266
45	60	ATV71HD45N4383	320	630	290
55	75	ATV71HD55N4383	320	630	290
75	100	ATV71HD75N4383	320	630	2690





A user-friendly graphic interface

The Altivar 71's HMI terminal enables rapid setup of the various drive functions, making it easy to use:

- specific elevator macroconfiguration,
- customizable graphic display,
- 6 standard languages,
- navigation button for easy navigation through the menus,

■ function keys

for shortcuts,

■ back-up of the configurations.



Ready for any destination

Whether your application is local or destined for export, the Altivar 71 can be adapted for any situation:

- integrated EMC filters,
- Power Removal safety function,
- compliance with international standards, including UL, CSA, CE, C-Tick, Gost, and DNV.

The efficiency of Telemecanique branded *solutions*

Used in combination, Telemecanique products provide quality solutions, meeting all your **Automation & Control** applications requirements.



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