

Variable speed drives
Altivar 71
Make way for *evolution!*



For the applications of industry



For 3-phase synchronous or asynchronous motors from 0.37 to 630 kW.

Simply Smart !

Leverage **ingenuity**
and intelligence
for **ease** of use

Altivar 71

The *leading edge*!

Increasing competitiveness, protecting installations while reducing energy expenditure, and decreasing maintenance costs are just some of the demands industrial enterprises are faced with every day. With this new generation of drives, the expertise and know-how of Schneider Electric within the variable speed drive domain is truly highlighted.

Exceptional performance, advanced functions...whilst always keeping the emphasis on **simplicity**. **Open** to all communication networks, applications, users.... The **Altivar 71** constant torque offer provides **ingenious solutions** for all your particular requirements.

A *powerful* fleet

■ IP20, UL Type 1, 3-phase 200 to 240 V:
Altivar 71 from 0.37 to 75 kW

■ IP20, UL Type 1, 3-phase
380 to 480 V:
Altivar 71 from 0.75 to 500 kW

■ IP20, UL Type 1, 3-phase
500 to 690 V:
Altivar 71 from 1.5 to 630 kW

■ IP54, UL Type 12, 3-phase
380 to 480 V:
Altivar 71 from 0.75 to 75 kW

■ EMC filters integrated class A or B.

■ Worldwide offer:
UL, CSA, CE, C-Tick, GOST, ATEX ...

(1) Add "383" at the end of the reference for an
Altivar 71 for synchronous or asynchronous motors

Remarkable performance

- Up to **220% overtorque** for the **Altivar 71** constant torque offer.
- Flux vector control with or without sensor for asynchronous motors.
- On-line auto-tuning (FVC).
- Speed or torque control.
- Output frequency up to 1,600 Hz.
- Synchronous motor control without sensor.



Expandable capabilities

Basic equipment with a wealth of features: application functions, inputs/outputs, communication networks... that can be further extended by:

- input/output extension cards.
- encoder interface cards.
- communication cards.
- Controller Inside programmable card.



Closely related *safety*

Protection at all levels

- **of the motor:** thermal protection - PTC probe or integrated electronic thermal relay, surge limitation,
- **of the machine:** Power Removal safety function (no unintended motor starting), alarm management, external fault management,
- **of the environment:** drive developed in accordance with the Eco-Design principle,
- **of the drive:** protection in the event of overheating, current limitation using hardware and software.

Easy to control...

- Graphic screen with customisable display.
- Plain text with 6 available languages (English, Chinese, German, Spanish, French and Italian) with possibility of adding other languages.
- Navigation button for easily “surfing” through the menus.
- «**Simply Start**» menu for quick start-up and immediate benefit of the full performance of the **Altivar 71**.
- Function keys for short-cuts, on-line help or configurable for some applications.
- Continuous display of the operating parameters of the motor.



Altivar 71

Evolutionary equipment

Unrivalled basic equipment

With the many functions already integrated in the **Altivar 71**, you **reduce the cost of solutions** for your machine. The most economical solution is offered without compromise!

With more than 150 functions available, you benefit from:

- considerably increased flexibility,
- possibilities for reducing the machine cycle time,
- improved performance by processing as close as possible to the control motor,
- a high level of integration.

Integrated Modbus and CANopen

With these two standard networks, you achieve:

- savings in cabling,
- a high data exchange transfer rate,
- direct connection to industrial automation systems.

Dialogue

The graphic terminal can be multipoint connected to several drives. Economical, the **Altivar 71** is also available with a 7-segment display for ratings up to 75 kW.

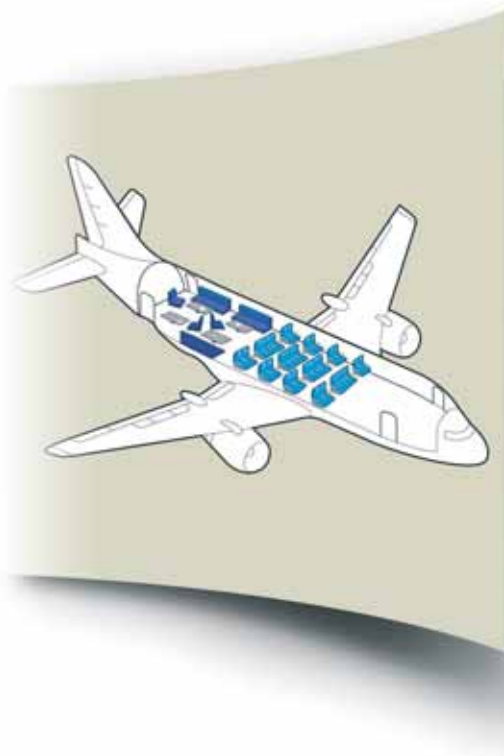
EMC mastered

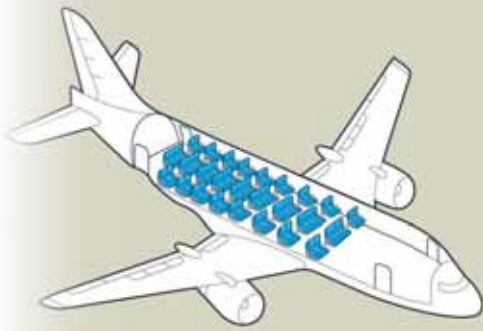
Incorporating level A conducted and radiated EMC filters, the **Altivar 71** simplifies installation and establishes conformity of the machines for CE marking, without additional costs.

“Power Removal” safety function

Conforming to the machine standard EN 954-1 category 3 and the standard for electrical installations IEC/EN 61508 SIL2, and certified by a competent body (INERIS), it enables:

- machine certification without difficulty,
- elimination of electromechanical redundancies,
- reduced cabling and installation times,
- savings in space in enclosures.
- the use of the Altivar 71 drive with ATEX motor.





Modular configuration

You require additional inputs/outputs, a particular communication network....

All you have to do is select up to 3 cards from those available. By sizing the **Altivar 71** yourself, you benefit from both [simplified integration](#) in your automation system and [optimised costs](#).



■ [Input/output extension](#) cards:

logic inputs, open collector outputs, relays, PTC probe input, analogue inputs, analogue outputs, pulse input.

■ [Communication](#) cards:

Modbus TCP, Fipio, Modbus/Uni-Telway, Modbus Plus, EtherNet/IP, DeviceNet, PROFIBUS DP, InterBus, CC-Link for connection to the main communication networks available on the market.



■ [Controller Inside](#) programmable card:

Integration of programmes in the drive for decentralisation of the machine automation systems.



■ [Interface](#) cards for incremental or absolute [encoders](#):

- ☐ RS422, open collector, push-pull ⁽¹⁾
- ☐ RS422 with encoder emulation ⁽²⁾
- ☐ Resolver ⁽²⁾
- ☐ * SinCos, SinCosHiperface, EnDat, SSI ⁽²⁾

To

- ☐ Achieve [full torque](#) even at zero speed
- ☐ Increase [speed and torque accuracy](#)
- ☐ Improve dynamic [performance](#)

⁽¹⁾ Compatible with all Altivar 71, included the "383" product specification

⁽²⁾ Compatible only with Altivar 71 with "383" product specification for asynchronous and synchronous motor

Altivar 71

The *Ace* at piloting

The **Altivar 71**, easily adapts its drive performance...

Whatever your choice of automation system solution, it always provides excellent efficiency for **improved productivity...**

Access to the means of command, information or to actuators is direct, with complete **transparency**.

Automatic piloting

The **Controller Inside** programmable card transforms the **Altivar** into a true **automation island**.

- It incorporates **automation functions** appropriate to your profession.
- With its processing as close as possible to the control motor, the movements gain in **speed**.
- Its CANopen master network enables **control of other drives** (Altivar 31, Altivar 61 or Altivar 71) and the exchange of any data.
- This card has **its own inputs/outputs** and access to those of the Altivar.
- The display functions of the graphic terminal are kept for **information and configuration**.
- **Supervision** is available via Ethernet, Modbus (or an alternative communication network).

Semi-automatic piloting

One group of commands is issued by a **programmable controller**, the other by the **operator**.

- The source of commands such as start/stop instructions, references, etc. can be separated. You benefit from **quick reaction times** due to direct processing of information by the drive.
- The switching of these channels enables **adaptation of the piloting to the operating phase**: setting-up, operation or maintenance.
- The control of the drive conforms to the protocol standards in use.
- Using the I/O mode, the networks are accessible to all: the **Altivar** is controlled in the same way as cabled logic.
- The possibility to supply the control with an external 24 V DC makes **diagnostics always available**.

Manual piloting

Commands are issued directly by the **operator** via a joystick, pushbuttons, switches or using the graphic terminal.

- The numerous **inputs/outputs** enable all the commands and information to be received.
- Commands can also be issued via the **graphic terminal**: start/stop instruction, speed reference, torque reference, PID reference, etc.
- The function keys of the terminal can be **assigned** to the preset speeds or PID references, +speed / -speed, channel switching, etc.
- On a channel switching, the instructions can be duplicated so as not to disturb the operation of the Altivar.



The 3 piloting modes can be combined



All locations

In enclosure

- Savings in space assured, with an IP20 degree of protection: reduced width of drive, side by side mounting...
- Reduction of heat dissipation inside the enclosure by installing the heatsink outside (degree of protection IP54).

On a wall

- Simple installation using mounting kit (protection degree IP21 or UL Type 1).
- **Altivar 71** in IP54 version

In severe environments

- Resistance assured with **Altivar 71** reinforced version, conforming to category 3C2 of IEC 721-3-3.



Altivar 71

Messages *received 10/10...*

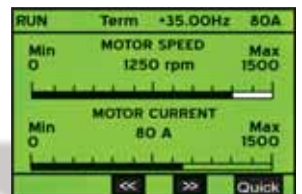
The **Altivar 71** is professional of the communication. its messages are clear, precise, illustrated... and the dialogue is also performed according to the requirements of the interlocutor.

Clarity

of the display comprising 8 lines of text and graphics.

Legibility from 5 m.

6 languages available: English, Chinese, German, French, Spanish and Italian... with the possibility of simply downloading other languages.



Flexibility

with its remote mounting alternatives:

- on the door of an enclosure, with an IP54 or IP65 degree of protection.
- for multipoint connection to several drives.
- storage of 4 configurations for transfer to other drives.



Simplicity

using the function keys for short-cuts, direct access and on-line help, display of the minimum and maximum values of the parameters

Protection

of parameters, control of their display, password protected, for simplified access to configurations with complete security.

Ergonomic

with its navigation button. With just one finger freely and quickly "surf" the drop-down menu.

Customisation

of parameters, display screens, monitoring line, creation of "user" menu, etc.

RUN	Term	+50.00Hz	5.4A
L1-SIMPLY START			
2/3 wire control	:	2 wire	
Macro-configuration	:	M.handling	
Standard mot. freq.	:	50Hz IEC	
Rated motor power	:	2.2kW	
Rated motor volt.	:	400V	
Code	<<	>>	Quick

The “Simply Start” menu provides you with assistance for obtaining the best from the **Altivar 71** for protecting your motor.

Configure without being aware of it!

- Many **macro-configurations** are already integrated that are designed for a wide variety of applications and uses: materials handling, hoisting, general use, connection to communication networks, PID regulation, master / slave, etc. They can easily be modified.
- The architecture of the menus, hierarchical parameter system and short-cut functions enable **simple and quick programming**, even for the most sophisticated functions.

RDY	Term	+0.00Hz	0.0A
1 DRIVE MENU			
1.1 SIMPLY START			
1.2. MONITORING			
1.3. SETTINGS			
1.4. MOTOR CONTROL			
1.5. INPUTS / OUTPUTS CFG			
Code	<<	>>	Quick

RDY	Term	+0.00Hz	0.0A
QUICK NAVIGATION			
RETURN TO MAIN MENU			
DIRECT ACCESS TO...			
10 LAST MODIFICATIONS			
Code			

More on board *services*

Ample and varied, the services available via the graphic terminal **simplify setting-up** and **diagnostics of your machines**.



With **PowerSuite** software workshop **stay in control, even from a distance!**

For configuring, adjusting and setting-up your Altivar drive... by always keeping an eye on your installations via Modbus, Ethernet, a modem, Bluetooth®, etc.

Oscilloscope function integrated in the **Altivar 71**: display of channels using **PowerSuite**

RUN	Mod.	+50.00Hz	5.4A
COMMUNICATION MAP			
Cmd channel	:	Modbus	
Cmd value	:	ABCD Hex	
Active ref. channel	:	CANopen	
Frequency re	:		
ETA status w	:		
Code			

RUN	Term	+50.00Hz	5.4A
LOGIC INPUT MAP			
PR	LI1	LI2	LI3
LI4	LI5	LI6	
LI7	LI8	LI9	LI10
MOT LI: 0101010101010101			
	<<	>>	Quick

Display of inputs/outputs, communication, etc.

RDY	Term	+0.00Hz	0.0A
TEST IGBT			
IGBT 1		OK	
Diode 1		OK	
IGBT 2		Open	
Diode 2		Short circuit	
IGBT 3		OK	

Test functions for drive, motor, components, inputs/outputs, etc.

RUN	Term	+50.00Hz	5.4A
SERVICE MESSAGE			
For technical support, dial 123-45			
	<<	>>	Quick

Service messages all types of information on the display: a telephone number, a specific instruction... stored in the drive.

RUN	Term	+50.00Hz	5.4A
L11 IDENTIFICATION			
ATV71HU22N4			
2.2kW / 3HP			
380 / 480 V			
Appl. Software V1.0 IE 01			
MC Software V1.0 IE 01			
	<<	>>	Quick

Identity card incorporated in the drive simplifies **installed base management**.

Altivar 71

Performances on tap!



Solution *produit* IP54

Altivar 71: from 0.75 to 75 kW, 380 V to 480 V

Product offer with or without Class A Vario switch

■ **Without switch**

Simple integration in installations subject to difficult environments using the Altivar 71 UL Type 12/IP54:

- Remedial mechanisms for installation pollution
- EN 55011 integrated EMC filters
- **With switch** disconnecter integrated



Solution in IP23/IP54 *ready-assembled enclosure*

Altivar 71: from 90 to 630 kW, 380 V to 690 V

Product offer in Sarel Spacial 6000 enclosure

Fast-acting fuses and switch

The enclosed drives offer comes in IP23 or IP54 compact versions and IP54 with separate air flow, recommended for dusty environments.

- A wide range of catalog options can be added to the standard offer according to specific requirements.
- In addition to the range of add-on options, equipment can be customized to your exact specifications – just speak to our specialist teams.
 - Water-cooled solution.
 - Integration of specific options.



IP54 enclosed solution *in a pre-assembled kit*

Altivar 71: from 90 to 500 kW, 380 V to 480 V

Kit on a Sarel Spacial 6000 enclosure base

With the IP54 kit offer, you can realize, with only one reference, a complete IP54 equipment including all the mechanic parts.

- Saves time (thermal tests completed and IP54 certified)
- Responsiveness
- Easy to assemble



Altivar 71

Excellent freedom of movement

The **Altivar 71** incorporates a wide range of functions, from very simple to very sophisticated. Its performance is perfectly coordinated for very many applications.
With **Altivar 71**, the performance of your machines will soar!



Material handling:

- Reaction time on logic command: 2 ms 0.5 ms.
- Positioning on limit switches with optimisation of low speed operating time.



Hoisting:

- Weight measurement processing.
- High speed hoisting.
- Brake feedback control.
- Management of limit switches.



Wood machines:

- Operation up to 10 1,600 Hz.
- Fast controlled stop on supply failure.



Process machines:

- PID regulator dedicated to process.
- High resolution of the reference (1/32000).
- Speed or torque control. Connection to main communication networks.
- Connection to common DC bus.



Textile machines:

- Precision of speed whatever the load by using synchronous motor.
- Up to 50Hz bandwidth.
- Traverse control function.



Packaging:

- Control via integrated CANopen network.



Elevators:

- Improved safety and accuracy
- Easy to use
- Smooth startup
- Silent operation

Selection guide

IP20 solution

Line supply: three-phase, 220 to 240 V

⁽²⁾ For single-phase operation, choose the next rating up and add a line choke.

⁽³⁾ Without EMC filter

⁽⁴⁾ Add "383" at the end of the reference for an Altivar 71 for synchronous or asynchronous motors

Motor power		Drive	Dimensions W X H X D (mm)
kW	HP	References	
0.37	0,5	ATV 71H037M3 ⁽⁴⁾	130 x 230 x 175
0.75	1	ATV 71H075M3 ⁽⁴⁾	130 x 230 x 175
1.5	2	ATV 71HU15M3 ⁽⁴⁾	130 x 230 x 175
2.2	3	ATV 71HU22M3 ⁽⁴⁾	155 x 260 x 187
3	-	ATV 71HU30M3 ⁽⁴⁾	155 x 260 x 187
4	5	ATV 71HU40M3 ^{(2) (4)}	155 x 260 x 187
5.5	7,5	ATV 71HU55M3 ^{(2) (4)}	175 x 295 x 187
7.5	10	ATV 71HU75M3 ^{(2) (4)}	210 x 295 x 213
11	15	ATV 71HD11M3X ^{(3) (4)}	230 x 400 x 213
15	20	ATV 71HD15M3X ^{(3) (4)}	230 x 400 x 213
18.5	25	ATV 71HD18M3X ^{(3) (4)}	240 x 420 x 236
22	30	ATV 71HD22M3X ^{(3) (4)}	240 x 420 x 236
30	40	ATV 71HD30M3X ^{(3) (4)}	320 x 550 x 266
37	50	ATV 71HD37M3X ^{(3) (4)}	320 x 550 x 266
45	60	ATV 71HD45M3X ^{(3) (4)}	320 x 550 x 266
55	75	ATV 71HD55M3X ^{(3) (4)}	320 x 920 x 377
75	100	ATV 71HD75M3X ^{(3) (4)}	350 x 1022 x 377

IP20 solution

Line supply: three-phase, 380 to 480 V

Up to 75 kW, add a "Z" at the end of the reference for an Altivar 71 with a 7-segment display terminal

⁽⁴⁾ Add "383" at the end of the reference for an Altivar 71 for synchronous/asynchronous motors

0.75	1	ATV 71H075N4 ⁽⁴⁾	130 x 230 x 175
1.5	2	ATV 71HU15N4 ⁽⁴⁾	130 x 230 x 175
2.2	3	ATV 71HU22N4 ⁽⁴⁾	130 x 230 x 175
3	-	ATV 71HU30N4 ⁽⁴⁾	155 x 260 x 187
4	5	ATV 71HU40N4 ⁽⁴⁾	155 x 260 x 187
5.5	7,5	ATV 71HU55N4 ⁽⁴⁾	175 x 295 x 187
7.5	10	ATV 71HU75N4 ⁽⁴⁾	175 x 295 x 187
11	15	ATV 71HD11N4 ⁽⁴⁾	210 x 295 x 213
15	20	ATV 71HD15N4 ⁽⁴⁾	230 x 400 x 213
18.5	25	ATV 71HD18N4 ⁽⁴⁾	230 x 400 x 213
22	30	ATV 71HD22N4 ⁽⁴⁾	240 x 420 x 236
30	40	ATV 71HD30N4 ⁽⁴⁾	240 x 550 x 266
37	50	ATV 71HD37N4 ⁽⁴⁾	240 x 550 x 266
45	60	ATV 71HD45N4 ⁽⁴⁾	320 x 630 x 290
55	75	ATV 71HD55N4 ⁽⁴⁾	320 x 630 x 290
75	100	ATV 71HD75N4 ⁽⁴⁾	320 x 630 x 290
90	125	ATV 71HD90N4 ⁽⁴⁾	320 x 920 x 377
110	150	ATV 71HC11N4 ⁽⁴⁾	360 x 1 022 x 377
132	200	ATV 71HC13N4 ⁽⁴⁾	340 x 1 190 x 377
160	250	ATV 71HC16N4 ⁽⁴⁾	440 x 1 190 x 377
200	300	ATV 71HC20N4 ⁽⁴⁾	595 x 1 190 x 377
220	350	ATV 71HC25N4 ⁽⁴⁾	595 x 1 190 x 377
250	400	ATV 71HC25N4 ⁽⁴⁾	595 x 1 190 x 377
280	450	ATV 71HC28N4 ⁽⁴⁾	595 x 1 190 x 377
315	500	ATV 71HC31N4 ⁽⁴⁾	890 x 1 390 x 377
355	-	ATV 71HC40N4 ⁽⁴⁾	890 x 1 390 x 377
400	600	ATV 71HC40N4 ⁽⁴⁾	890 x 1 390 x 377
500	700	ATV 71HC50N4 ⁽⁴⁾	1 110 x 1 390 x 377

IP20 solution

Line supply: three-phase, 500 to 690 V

⁽⁵⁾ Line choke mandatory for ATV 71HC11Y...HC63Y drives, unless a special transformer is used (12-pulse).

The line choke must be ordered separately.

⁽⁶⁾ Drive supplied without EMC mounting plate. This is included in the UL Type 1 or IP 31 kit, to be ordered separately.

kW 690 V	HP 575 V		
2.2	2	ATV71HU22Y	130 x 230 x 175
3	3	ATV71HU30Y	240 x 420 x 236
4	—	ATV71HU40Y	240 x 420 x 236
5.5	5	ATV71HU55Y	240 x 420 x 236
7.5	7,5	ATV71HU75Y	240 x 420 x 236
11	10	ATV71HD11Y	240 x 420 x 236
15	15	ATV71HD15Y	240 x 420 x 236
18.5	20	ATV71HD18Y	240 x 420 x 236
22	25	ATV71HD22Y	240 x 420 x 236
30	30	ATV71HD30Y	240 x 420 x 236
37	40	ATV71HD37Y	320 x 630 x 290
45	50	ATV71HD45Y	320 x 630 x 290
55	60	ATV71HD55Y	320 x 630 x 290
75	75	ATV71HD75Y	320 x 630 x 290
90	100	ATV71HD90Y	320 x 630 x 290
110	125	ATV71HC11Y ^{(5) (6)}	340 x 1 190 x 377
132	150	ATV71HC13Y ^{(5) (6)}	340 x 1 190 x 377
160	—	ATV71HC16Y ^{(5) (6)}	340 x 1 190 x 377
200	200	ATV71HC20Y ^{(5) (6)}	595 x 1 190 x 377
250	250	ATV71HC25Y ^{(5) (6)}	595 x 1 190 x 377
315	350	ATV71HC31Y ^{(5) (6)}	595 x 1 190 x 377
400	450	ATV71HC40Y ^{(5) (6)}	1 110 x 1 390 x 377
500	550	ATV71HC50Y ^{(5) (6)}	1 110 x 1 390 x 377
630	700	ATV71HC63Y ^{(5) (6)}	1 110 x 1 390 x 377

Selection guide

IP54 solution for power levels up to 75 kW Line supply: three-phase, 380 to 480 V

* For products without switch: replace "E5" with "W" in the reference. The dimensions are identical.
* For products with additional 24 V power supply and inductance, add A24 to the "W" in the reference

Motor power		Product without switch*	
kW	HP	References	Dimensions W X H X D (mm)
0.75	1	ATV71E5075N4	240 x 490 x 296
1.5	2	ATV71E5U15N4	240 x 490 x 296
2.2	3	ATV71E5U22N4	240 x 490 x 296
3	—	ATV71E5U30N4	240 x 490 x 310
4	5	ATV71E5U40N4	240 x 490 x 310
5.5	7,5	ATV71E5U55N4	260 x 525 x 310
7.5	10	ATV71E5U75N4	260 x 525 x 310
11	15	ATV71E5D11N4	295 x 560 x 339
15	20	ATV71E5D15N4	315 x 665 x 340
18.5	25	ATV71E5D18N4	315 x 665 x 340
22	30	ATV71E5D22N4	285 x 720 x 335
30	40	ATV71E5D30N4	285 x 800 x 383
37	50	ATV71E5D37N4	285 x 800 x 383
45	60	ATV71E5D45N4	362 x 1000 x 404
55	75	ATV71E5D55N4	362 x 1000 x 404
75	100	ATV71E5D75N4	362 x 1000 x 404

IP54 solution in compact enclosure Line supply: three-phase, 380 to 690 V

At the end of the reference, add
- N4 for 415 V,
- N for 500 V
- Y for 690 V
(¹⁾ Reference does not exist for N4 and N.

Motor power		Drive	Dimensions
kW	HP	References	W X H X D (mm)
90	90	ATV71EXC5D90••	2260 x 600 x 600
110	110	ATV71EXC5C11••	2260 x 600 x 600
132	132	ATV71EXC5C13••	2260 x 600 x 600
160	160	ATV71EXC5C16••	2260 x 600 x 600
200	200	ATV71EXC5C20••	2260 x 800 x 600
250	250	ATV71EXC5C25••	2260 x 800 x 600
280	280	ATV71EXC5C28••	2260 x 800 x 600
315	315	ATV71EXC5C31••	2260 x 1000 x 600
400	400	ATV71EXC5C40••	2260 x 1000 x 600
500	500	ATV71EXC5C50••	2260 x 1200 x 600
630	500	ATV71EXC5C63 (¹⁾	2260 x 1200 x 600

IP54 solution in enclosure with separate air flow Line supply: three-phase, 380 to 690 V

At the end of the reference, add
- N4 for 415 V,
- N for 500 V
- Y for 690 V
(¹⁾ Reference does not exist for N4 and N.

Motor power		Drive	Dimensions
kW	HP	References	W X H X D (mm)
90	90	ATV71EXS5D90••	2355 x 600 x 600
110	110	ATV71EXS5C11••	2355 x 600 x 600
132	132	ATV71EXS5C13••	2355 x 600 x 600
160	160	ATV71EXS5C16••	2355 x 600 x 600
200	200	ATV71EXS5C20••	2355 x 800 x 600
250	250	ATV71EXS5C25••	2355 x 800 x 600
280	280	ATV71EXS5C28••	2355 x 800 x 600
315	315	ATV71EXS5C31••	2355 x 1400 x 600
400	400	ATV71EXS5C40••	2355 x 1400 x 600
500	500	ATV71EXS5C50••	2355 x 1600 x 600
630	500	ATV71EXS5C63 (¹⁾	2355 x 1600 x 600

IP54 solution in preassembled kit Line supply: three-phase, 380 to 480 V

¹⁾ With braking unit
VW3A 701
* The kit does not include the drive

Drive	Associated kit*		
Altivar 71	Braking unit	References	Dimensions W X H X D (mm)
ATV71HD90N4		VW3A9541	2360 x 605 x 600
ATV71HC11N4		VW3A9542	2360 x 605 x 600
ATV71HC13N4		VW3A9543	2360 x 605 x 600
ATV71HC16N4		VW3A9544	2360 x 605 x 600
ATV71HC20N4, ATV71HC25N4, ATV71HC28N4		VW3A9545	2360 x 605 x 600
ATV71HC20N4, ATV71HC25N4, ATV71HC28N4		VW3A9546 (¹⁾)	2360 x 805 x 600
ATV71HC31N4, ATV71HC40N4		VW3A9547	2360 x 1205 x 600
ATV71HC50N4		VW3A9548	2360 x 1205 x 600
	VW3A 702	VW3A9549	2360 x 605 x 600
Empty additional enclosure 600 mm		VW3A9550	2360 x 605 x 600
Empty additional enclosure 800 mm		VW3A9551	2360 x 805 x 600

Selection guide

IP23 solution

Line supply: three-phase, 380 to 690 V

At the end of the reference, add
- N4 for 415 V,
- N for 500 V
- Y for 690 V
(⁽¹⁾) Reference does not exist for N4 and N.

Motor power		Drive	Dimensions W X H X D (MM)
kW	HP	References	
90	90	ATV71EXC2D90**	2155 x 600 x 600
110	110	ATV71EXC2C11**	2155 x 600 x 600
132	132	ATV71EXC2C13**	2155 x 600 x 600
160	160	ATV71EXC2C16**	2155 x 600 x 600
200	200	ATV71EXC2C20**	2155 x 800 x 600
250	250	ATV71EXC2C25**	2155 x 800 x 600
280	280	ATV71EXC2C28**	2155 x 800 x 600
315	315	ATV71EXC2C31**	2155 x 1000 x 600
400	400	ATV71EXC2C40**	2155 x 1000 x 600
500	500	ATV71EXC2C50**	2155 x 1200 x 600
630	500	ATV71EXC2C63 ⁽¹⁾	2155 x 1200 x 600

Options

PowerSuite software workshop

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

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

Connexion kit
for PC _____ VW3 A8106

Adaptor for wireless link
Modbus-Bluetooth® _____ VW3 A8114
USB-Bluetooth® _____ VW3 A8115

Simple loader _____ VW3 A8120

Input/output cards

Logic inputs/outputs
1 voltage output, 24 V
1 voltage output, 10 V
1 logic output, relay
4 programmable logic inputs
2 assignable logic outputs with open collector
1 input for 6 PTC probes max.
_____ VW3 A3201

Extended inputs/outputs
Same as logic inputs/outputs card +
2 analogue inputs
2 analogue outputs
1 pulse input
_____ VW3 A3202

Interface cards for incremental encoders

with RS 422 outputs, 5 v _____ VW3 A3401
with RS 422 outputs, 15 V _____ VW3 A3402
with open collector outputs, 12 V _____ VW3 A3403
with open collector outputs, 15 V _____ VW3 A3404
with push-pull outputs, 12 V _____ VW3 A3405
with push-pull outputs, 15 V _____ VW3 A3406
with push-pull outputs, 24 V _____ VW3 A3407

Resolver _____ VW3 A3408⁽¹⁾

SinCos, SinCosHiperface, EnDat, SSI
_____ VW3 A3409⁽¹⁾

Incremental encoders with emulation
with RS 422 outputs, 5 V or 10 V and emulation
_____ VW3 A3411⁽¹⁾

(1) Compatible only with Altivar 71 including "383" product specification for synchronous or asynchronous motor

Controller Inside programmable card
_____ VW3 A3501

Communication cards

Modbus TCP _____ VW3 A3310
Fipio _____ VW3 A3311
Modbus/Uni-Telway _____ VW3 A3303
Modbus Plus _____ VW3 A3302
Ethernet/IP _____ VW3 A3316
DeviceNet _____ VW3 A3309
PROFIBUS DP _____ VW3 A3307
INTERBUS _____ VW3 A3304
CC-Link _____ VW3 A3317

For full and detailed information on the
Altivar 71 offer, please refer to our catalogue.

Altivar 71

Eco-Design:

thinking of the future

Within its sustainable development policy, Schneider Electric is committed to environmental friendliness:

"Our products safeguard life, make goods safer and optimise the consumption of energy and natural resources.

We are actively involved in design, production, distribution and recycling processes that are environmentally friendly.

Protection of the environment forms an integral part of our strategic decision making".

The new generation of **Altivar 71** drive benefits from an **Eco-Design** approach. The same importance has been given to the "environment" criterion as that for other criteria, such as: performance, quality, ergonomics.... and this applies to each stage of the **life cycle of the product*** (manufacture, distribution, usage and end of life).

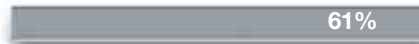
Exemplary end of life recovery ...

88 % of the parts used for the Altivar 71 are recyclable. They enable the recuperation of energy (incineration with energy recuperation) or of material (recycling, composting) conforming to the European directive WEEE (Waste Electrical & Electronic Equipment).

With Eco-Design



Without Eco-Design

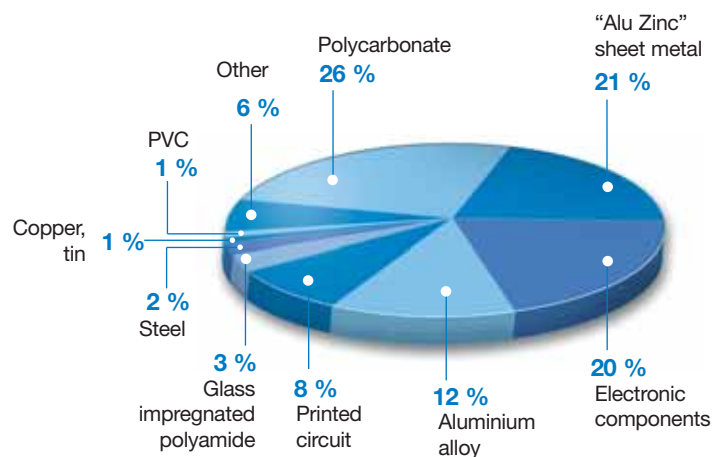


70%

Recovery rate imposed by the European directive WEEE.

... due to a strict selection and ideal combination of materials

Materials used for the Altivar have been selected for their minimal impact on the environment. Conformity to the European directive ROHS (Restriction Of Hazardous Substances) that prohibits the use of materials such as lead, chromium 6...



ISO 14 001 certified sites for their manufacturing operations since 1997:

- Pacy-sur-Eure/France
 - Mie/Japon
- and certified for their Eco-Design cycles since 2002.

*For the complete "Product Environmental Profile" document relating to the entire range, please contact Schneider Electric.

Analysis carried out using EIME (Environmental Information and Management Explorer) software and based on international averages.

The efficiency of Telemecanique branded *solutions*

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



Simple machines

Altistart 01: 0.37 to 75 kW

Altivar 11: 0.18 to 2.2 kW

Altivar 31: 0.18 to 15 kW



Complex, high power machines

Altivar 71: 0.37 to 630 kW



Pumping and ventilation machines

Altistart 48: 4 to 1 200 kW

Altivar 11...347: 0.18 to 2.2 kW

Altivar 21: 0.75 to 75 kW

Altivar 61: 0.75 to 800 kW



A **worldwide** presence

Constantly available

- More than 13 000 points of sale in 190 countries.
- You can be sure to find the range of products that are right for you and which complies fully with the standards in the country where they are used.

Technical assistance wherever you are

- Our technicians are at your disposal to assist you in finding the optimum solution for your particular needs.
- Schneider Electric provides you with all necessary technical assistance, throughout the world.



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Due to evolution of standards and equipment, the characteristics indicated in texts and images of this document do not constitute a commitment on our part without confirmation.

Design: 3000 NR

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Simply Smart !