

Starters and drives

Altistart / Altivar

The best *solution* for
each application...



Soft starters and variable speed drives
for asynchronous motors from 0.18 to 1200 kW.

For *each application* ...



Simple machines



Complex, high power machines



Pumping and ventilation machines



... a solution
in *variable speed*
and *soft starting*

>>> compact

0,37 to 75 kW

0,18 to 2,2 kW

0,18 to 15 kW



Starter
Altistart 01



Drive
Altivar 11



Drive
Altivar 31

>>> high performance

0,37 to 55 kW

75 to 630 kW



Drive
Altivar 58/58F



Drive
Altivar 68/68F

>>> tailor-made

0,75 to 315 kW

4 to 1200 kW



Starter
Altistart 48



Drive
Altivar 38

The *simplicity* of a complete offer



Welcome to the **Simply Smart*** world compliments of **Telemecanique...**

Altistart starters and **Altivar** variable speed drives open the doors to this world by offering you more **simplicity, compactness, open access** and **flexibility**.

Ready to use versions, the same software for the complete offer, choice of communication networks...

so many evolutions and new items to aid your productivity.

Ready to use versions



■ Forget the costs and design times with the **ready-assembled versions**.

Integrated EMC standards

EMC filter



■ Installation pollution cure and heat dissipation benefits assured using models with **integrated EMC filter**.

Unique software: *PowerSuite*

A single piece of software enables configuration of all the Altivar drives and Altistart 48 soft starters in all simplicity.

Customise your settings with the minimum of effort!

PowerSuite enables you to easily define your parameters, prepare, print out configurations, compare files, etc. Configurations can be saved, enabling you to very quickly recall them for any similar applications.



Graphical display of settings



Additional ergonomics with the pocket PC



Setting-up and maintenance simplified

***Simply Smart** : more ingenuity and simplicity for continually improving ease of use

Total *access*

With a broad range of access to bus and communication networks, the Altivar variable speed drives and Altistart 48 soft starters easily integrate in all your architectures.

■ Integrated Modbus.

- FIPIO.
- Modbus Plus.
- Ethernet.
- CANopen.
- AS-Interfaces.
- Unitelway.
- Profibus DP.
- Interbus S.
- DeviceNet.
- N2.
- Lonworks.



Using the Ethernet card and a simple Web browser, you can manage your installations from anywhere, at any time... with complete efficiency.



**Transparent
Factory™**
Web serving
industrial
process



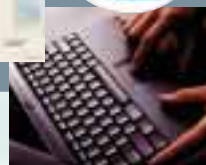
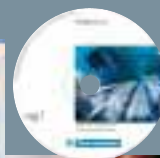
**Transparent
Building™**
Web serving
building
management
efficiency

With Ethernet,

monitor your installations 24 hours a day!

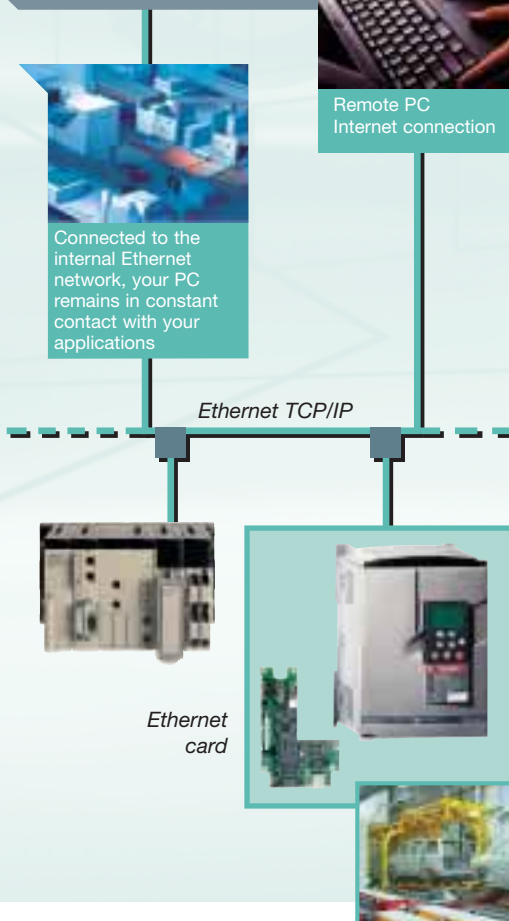
From a remote location you benefit, in real time, of having precise information to simplify operation of your machines (thermal state of the motor, motor torque, active power in kW/h, etc.)

*Current
status,
Diagnostics,
Adjustment,
using
PowerSuite*



Remote PC
Internet connection

Connected to the
internal Ethernet
network, your PC
remains in constant
contact with your
applications



Ethernet
card



**For simple machines,
opt for the compact**

Starter Altistart 01

The starting solution ...!



Extremely compact, the **Altistart 01** combines **simplicity** and **efficiency**; it reduces machine wear, minimises maintenance time, etc.

With TeSys®, Model U, the first motor starter-controller, control and communication functions are added to those of the Altistart.

Applications from 0.37 to 75 kW

- Small compressors, pumps, fans,
- Conveyors, automatic doors,
- Washing gantries...



Main characteristics

- Adjustable starting and deceleration times: 5 seconds or 10 seconds.
- Adjustable unjamming torque.
- Integrated bypass contactor.
- Simple dialogue by 2 LEDs.
- Signalling on completion of starting.
- 24 V integrated power supply*.
- "Boost" function for difficult starting conditions*.
- Possibility to connect the starter in the delta connection of the motor to reduce the rating of the starter*.
- Compact.
- Safety guaranteed with combined Telemecanique components (circuit-breakers, contactors...).
- Control and communication functions with **TeSys®, model U**.

* ATS 01N2 models

**Extremely
compact**



Voltage ranges

- 110... 480 V single-phase
- 110... 690 V 3-phase
- 50/60 Hz



L'Altistart 01 for your applications...

Small compressors, fans, conveyors, etc.

(ATS 01N1 model)

- Reduction of surges on starting:
 - Suppression of mechanical wear,
 - Increase in service life of machines.

Pumps, fans, conveyors, washing gantries, etc.

(ATS 01N2 model)

- Controlled deceleration:
 - Pressure surges eliminated,
 - Soft stopping.
 - Limitation of current peaks on starting.
- (ATS U01N2 model)
- Open to all communication protocols.
 - Information of the various machine states (overload, underload, etc.).

Standards and certifications

IEC/EN 60947-4-2, C-TICK



LISTED 4507
IND. CONT. EQ

A012723

**For pumping and ventilation machines,
choose the tailor-made**

Starter **Altistart 48**

Taming energy ...



With its patented TCS* torque control system, **the Altistart 48** is the ideal solution for machines requiring **perfectly controlled starting and stopping**, particularly those for pumps and fans. It limits energy loss and reduces temperature rise. In addition, it very easily integrates in enclosures and automation systems.

Applications from 4 to 1200 kW

- Pumps.
- Fans and high inertia machines.
- Compressors.
- Conveyors.



Main characteristics

- Starting and stopping of the machine by the Altistart 48 torque control system (TCS* patent).
- Thermal protection of the motor.
- Protection of the machine: underload and overload with adjustable threshold and times, locked rotor, control of the direction of rotation.
- Factory set for immediate start-up.
- Simplified customisation of settings using built-in display or the PowerSuite software.
- Through connection
- Control of starter bypass contactor to prevent heat dissipation.
- Dual configuration (2 motors).
- Numerous configurable inputs/outputs.
- Cascaded starting and deceleration of a number of motors.
- **Modbus integrated**, FIPIO, Profibus DP, DeviceNet, Ethernet.

*TCS : Torque Control System



Exclusive
TCS*
concept

Voltage ranges

- 230...415 V
- 208...690 V
- 50/60 Hz.

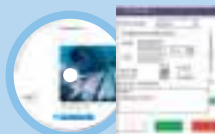
Altistart 48 *for your applications...*

Pumps

- Suppression of pressure surges and valve surges.
- Protection against running dry, loss or inversion of phases and in the event of a locked rotor.
- Reduction of motor temperature rise: automatic changing of the motor to freewheel mode on stopping when the flow rate of the pump drops to a low level.

Fans and high inertia machines

- Smooth starting, preventing stress on the drive chain and slipping of belts.
- Smoke extraction function.
- Limitation of current and voltage drops on starting.
- Catching on the fly of a fan rotating in reverse.
- Braking torque when stopping.
- ...



Settings simplified
using the PowerSuite
software

Standards and certifications

UL / CSA / IEC 60947-4-2
CEM : classes A and B - DNV
C-TICK / GOST / CCIB / NOM.



LISTED 170M
IND. CONT. EQ





For simple machines...

Drive **Altivar 11**

Real efficiency at a reduced size



The **Altivar 11** will make you forget mechanical and electromechanical solutions.

Its flux vector control and numerous protective functions assure **performance and continuous service**. Ideal for domestic type applications, it integrates the specifications (EMC...).

Applications from 0.18 to 2.2 kW

- Conveyors, garage doors, lift doors, automatic parking barriers, check-out counters, etc...
- Grinders, saws, drills, exercise equipment, scrolling displays, retractable hoods, dough mixers, etc...



Main characteristics

- Speed regulation by flux vector control.
- Speed range from 1 to 20.
- Protection of drive and of motor.
- Robustness even in severe environments from -10 to +50°C.
- Through wiring and connection using captive screws: simple replacement of electromechanical solutions.
- Compact, side by side mounting.
- DIN rail mounting possible.
- Integrated class B EMC filter or available as an option. Very low leakage current of drive compatible with 30 mA differential circuit-breaker for assured protection of personnel.
- Baseplate mounted version available.



Voltage ranges

- 100... 120 V / 200... 240 V single-phase.
- 200... 230 V 3-phase.
- 50/60 Hz

Altivar 11 *for your applications...*

Automatic parking barriers

- Excellent dynamics: use of an advanced algorithmic vector motor control minimises cycle times.

Garage doors, lift doors, etc.

- Customisation of «Open / Close» cycles due to the assignment of several functions on the same logic input:
 - different ramps,
 - opening priority if obstructed on closing.
- Silent operation due to high switching frequency

Dough mixers, saws, etc.

- Perfect mastery of this motor drive application: no tripping in the event of torque surges.

...



Back-up of each configuration and recall for all similar applications

Standards and certifications

CSA, EN 50178, EN 61800-3, EN 55011, EN 55022, class B and class A gr. 1, NOM 117,C-TICK



LISTED 170M
IND. CONT. EQ



>>> ...opt for the compact

Drive **Altivar 31**

High performance instinctively!



With its high performance and numerous functions, the **Altivar 31** still remains simple...
“**Plug and drive**” for immediate start-up, **compact** and **open access** to automation systems using integrated Modbus and CANopen, it complies with local specifications (voltage ranges, positive and negative logic, etc).

Applications from 0.18 to 15 kW

- Pumps, fans,
- Conveyors, materials handling, packaging/packing machines.
- Special machines...



Main characteristics

- Speed regulation by flux vector control.
- Speed range from 1 to 50.
- 2 Tn to 3 Hz without adjustment.
- Auto-tuning.
- Protection of motor and of drive
- Operation up to 50°C without derating.
- Brake sequence.
- Regulator and preset PI.
- +/- speed, 16 preset speeds.
- Limit switch management.
- Traverse control (textile machines).
- Compact, side by side mounting.
- Integrated class A EMC filter, class B optional
- Integrated Modbus and CANopen, Fipio, Profibus DP, DeviceNet, Ethernet..
- Enclosed drive version available (in IP 55 enclosure) or kit drive version (drive on a metal fixing support with EMC filter).

Follow your instincts...



Voltage ranges

- 200... 240 V single-phase
- 200... 240 V, 380... 500 V 3-phase
- 525... 600 V 3-phase
- 50/60 Hz

L'Altivar 31 for your applications...

Conveyors, materials handling, packaging machines, etc....

■ High performance and reliability guaranteed:

- Operation on line at -50% without derating,
- Linear ramps, S, U or customised,
- Brake sequence, etc.

Pumps and fans

- Enhanced functionalities
 - Automatic restart,
 - Stopping mode on faults,
 - Catch on the fly, etc.

Special machines

- Current limitation,
- Controlled stop on loss of line supply,
- Traverse control (textile machines), etc.



Adjustment in series with PowerSuite.

Standards and certifications

CSA, EN 50178, EN 61800-3, EN 55011, EN 55022, class A, class B with option





For complex, high power machines...

Drive **Altivar 58**

Programmed performance



With its high performance speed regulation and ease of parametering, the **Altivar 58** is «the» reference up to 55 kW. Its access to all **industrial communication networks** and numerous **automation system options** enables simple adaptation to complex and advanced machines.

Applications from 0.37 to 55 kW

- Mechanical handling.
- Lifting.
- Modular machines.
- Textile machines.
- Transfer machines.
- Lifts.



Main characteristics

- Speed regulation by flux vector control.
- Speed range from 1 to 100.
- Energy savings, PI regulator (flow rate, pressure, etc.).
- Protection of motor and of drive.
- Dynamic braking (integrated transistor).
- Increase speed/decrease speed, S ramp, pre-selectable speeds, jog operation.
- Specific **application cards** for integrating automation system functions.
- Integrated EMC filter.
- **Modbus integrated**, FIPIO, Modbus Plus, Interbus-S, Profibus DP, AS-i, Unitelway, CANopen, DeviceNet, Ethernet.
- Baseplate mounted and ready-assembled version available.

Numerous options available.

Contrôle vectoriel de flux avec capteur

Optimise the **drive performances** of your machines!

The drives **Altivar 58 F** and **Altivar 68 F** provide **exceptional dynamics** and **accurate performance at low speed**.

Even with communication modules, extensions and specific application cards, they are still **economical and compact**.

Exceptional adaptability

Voltage ranges

- 200...240 V single-phase,
- 200...240 V / 380... 500 V 3-phase.
- 50/60 Hz.

Altivar 58 *for your applications...*

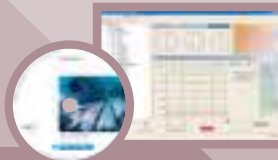
Mechanical handling, lifting

- Assured performance:
 - exceptional overtorque: 2 T_n for 2 seconds.
 - Integrated brake sequence.
 - I/O update time: 2 ms.

Production line

- Precision of control and adjustment.
- Perfect integration in automation systems: access to all industrial communication networks.
- Ready-assembled IP55 version, closest possible mounting to the machine.

...



Graphical display of settings using **PowerSuite**

Standards and certifications

CSA, EN 50178, IEC 1000-4-2 /4-3/4-4/4-5, IEC 1800-3, EN 55011, EN 55022 classe A and B



LISTED 170M
IND.CONT.EQ



>>> ...select the high performance Altivar

Drive **Altivar 68**

Giving you the *power*



Robust and advanced, the **Altivar 68** drive is designed for the most powerful applications found in industry and infrastructures. You will benefit from real **energy savings**.

In addition to **user-friendly control** and **performance** sized for your machines, you benefit from an **efficient monitoring** system.

Applications from 75 to 630 kW

- Lifting,
- Mechanical handling,
- Mixers, crushers,
- Extruders, presses,
- Centrifugal machines,
- Compressors.



Main characteristics

- Speed regulation by flux vector control.
- Speed range from 1 to 100.
- High overtorque on starting.
- 4 levels of energy saving.
- Protection of motor and of drive.
- Dual configuration (2 motors).
- Built-in PID regulator.
- Increase speed/decrease speed, pre-selectable speeds, jog operation.
- Comparator and logic functions.
- Modbus, FIPIO, Modbus Plus, Profibus DP.
- Ready-assembled IP23 or IP54 enclosed versions.

Numerous options available

Performance to meet every challenge



Voltage ranges

- 380...500 V 3-phase.
- 50/60 Hz.

Altivar 68 for your applications...

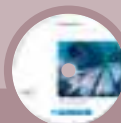
Lifting

- Drive performance and safety:
 - Brake release sequences for lifting.
 - Torque at zero speed (model ATV 68F).
 - Control of several motors.

Centrifugal machines

- Efficient braking via motor losses (0.3 Tn without braking module)

...



Setting-up simplified with **PowerSuite**

Standards and certifications
CSA, EN 50178, IEC 61800-3.



LISTED 170M
IND. CONT. EQ



for your applications...

Fast handling, packaging

- Dynamics compatible with control by axis cards.

Modular machines

- Precision of numerical speed between several sections.

High performance lifting

- Drive performance and reduced cycle times.

Reused energy!

The Altivar 68R enables regeneration of energy on the supply. By combining the Altivar 68R reversible module with one or more Altivar 68 drives, you achieve **significant savings**:

- Energy common to several drives,
- Energy savings in braking phases, no heat dissipation restraints,
- "0" harmonics (reduction of transformer size.) It is particularly suited for **lifting applications**.





For pumping and ventilation machines...

Drive **Altivar 38**

*Mastering elements
for more comfort*



With its **dedicated functions** for the circulation of fluids, the **Altivar 38** offers suitable solutions for industrial and commercial building environments: energy savings, communication networks, remedies for installation pollution, etc.

Applications from 0.75 to 315 kW

- Air conditioning and heating.
- Air treatment systems.
- Fans.
- Pumps.



Main characteristics

- Speed regulation by flux vector control.
- Speed range from 1 to 10.
- Functions for pumps and fans:
 - PI regulator.
 - catch on the fly,
 - smoke extraction function,
 - pump switching card,
 - three jump frequencies.
- Factory set for immediate start-up.
- Simplified customisation of settings using built-in display or the *PowerSuite* software.
- Anti-harmonic solutions: line chokes, complementary filtering offer...
- EMC filter integrated up to 75 kW, additional filters for high power ratings.
- N2, Lonworks, Ethernet.
Modbus integrated, FIPIO, Modbus Plus, Interbus-S, Profibus DP, AS-i, Unitelway, CANopen, DeviceNet.
- Ready-assembled, ready for use version available.



Dedicated functions

Voltage ranges

- 380...460 V 3-phase
- 50/60 Hz

Altivar 38 for your applications...

Air conditioning and heating

- Adjustment of flow rates on the basis of actual need for better energy management: use of integrated PI regulator.
- Suppression of mechanical resonance with jump frequencies.
- Enhanced comfort with reduced noise pollution caused by fan operation: high switching frequency.

Air treatment in clean rooms, water treatment

- Continuity of service assured in the event of loss of measuring signals: fallback position, automatic / manual operation.
- Remote monitoring of the installation with connection of drives to a communication network.

...



With PC or Pocket PC, for use on site or in the office, etc.

Standards and certifications

CSA, EN 50178 / IEC 1800-3
EN 55011 classe A -EN 55022 classe B



LISTED 170M
IND. CONT. EQ.



Selection *guide*

For pumping and ventilation machines

Starter Altistart 48



3-phase 208... 690 V

Standard class 10* applications

230 V		690 V	
kW / HP		kW	A
4 / 5	ATS 48D17Q	15	ATS 48D17Y 17
5,5 / 7,5	ATS 48D22Q	18,5	ATS 48D22Y 22
7,5 / 10	ATS 48D32Q	22	ATS 48D32Y 32
9 / -	ATS 48D38Q	30	ATS 48D38Y 38
11 / 15	ATS 48D47Q	37	ATS 48D47Y 47
15 / 20	ATS 48D62Q	45	ATS 48D62Y 62
18,5 / 25	ATS 48D75Q	55	ATS 48D75Y 75
22 / 30	ATS 48D88Q	75	ATS 48D88Y 88
30 / 40	ATS 48C11Q	90	ATS 48C11Y 110
37 / 50	ATS 48C14Q	110	ATS 48C14Y 140
45 / 60	ATS 48C17Q	160	ATS 48C17Y 170
55 / 75	ATS 48C21Q	200	ATS 48C21Y 210
75 / 100	ATS 48C25Q	250	ATS 48C25Y 250
90 / 125	ATS 48C32Q	315	ATS 48C32Y 320
110 / 150	ATS 48C41Q	400	ATS 48C41Y 410
132 / -	ATS 48C48Q	500	ATS 48C48Y 480
160 / 200	ATS 48C59Q	560	ATS 48C59Y 590
- / 250	ATS 48C66Q	630	ATS 48C66Y 660
220 / 300	ATS 48C79Q	710	ATS 48C79Y 790
250 / 350	ATS 48M10Q	900	ATS 48M10Y 1000
355 / 455	ATS 48M12Q	-	ATS 48M12Y 1200

*Severe class 20 applications: starting time greater than 30 seconds. Upgrade the starter by 1 rating (example: 230 V / 75 kW = ATS48 C32Q)

Drive Altivar 38



3-phase 380... 460 V

Integrated EMC filter

kW / HP	
0,75 / 1	ATV 38HU18N4
1,5 / 2	ATV 38HU29N4
2,2 / 3	ATV 38HU41N4
3 / -	ATV 38HU54N4
4 / 5	ATV 38HU72N4
5,5 / 7,5	ATV 38HU90N4
7,5 / 10	ATV 38HD12N4
11 / 15	ATV 38HD16N4
15 / 20	ATV 38HD23N4
18,5 / 25	ATV 38HD25N4*
22 / 30	ATV 38HD28N4*
30 / 40	ATV 38HD33N4*
37 / 50	ATV 38HD46N4*
45 / 60	ATV 38HD54N4*
55 / 75	ATV 38HD64N4*
75 / 100	ATV 38HD79N4*

Optional external EMC filter

kW / HP	
90 / 125	ATV 38HC10N4X
110 / 150	ATV 38HC13N4X
132 / 200	ATV 38HC15N4X
160 / 250	ATV 38HC19N4X
200 / 300	ATV 38HC23N4X
220 / 350	ATV 38HC25N4X
250 / 400	ATV 38HC28N4X
280 / 450	ATV 38HC31N4X
315 / 500	ATV 38HC33N4X

*Without EMC filter, add the letter "X" to the end of the reference.

Selection *guide*

For simple machines

Starter Altistart 01



** Replace "••" in the reference by:
"LU" for 200...240 V,
"QN" for 380...415 V,
"RT" for 440... 480 V.



*** Replace "•" by
"A" for a standard unit
"M", for a multifunction
unit
"B" for an updateable
unit

Soft start units

3-phase 110... 480 V

230 V	460 V		
kW / HP	HP	A	
0,37 / 0,5	0,5	3	ATS 01N103FT
0,55 / -	1,5	3	ATS 01N103FT
0,75 / 1	2	6	ATS 01N106FT
1,1 / 1,5	3	6	ATS 01N106FT
1,5 / 2	5	9	ATS 01N109FT
2,2 / 3	7,5	12	ATS 01N112FT

Single-phase 110... 480 V : please refer to our catalogue

Soft start - soft stop units*

3-phase 200... 480 V**

230 V	400 V	460 V	
kW / HP	kW	HP	A
0,75 / 1	1,5	2	6
1,1 / 1,5	2,2	3	6
1,5 / 2	3	5	9
-	4	-	9
2,2 / 3	5,5 / 5	7,5	12
3 / -	-	-	12
4 / 5	7,5	10	22
5,5 / 7,5	11	15	22
7,5 / 10	15	20	32

*Available up to 75 kW : please refer to our catalogue

Soft start - soft stop units combined with TeSys® model U

3-phase 200... 480 V

230 V	400 V	460 V		Starter	Motor starter controller
kW / HP	kW	HP	A	Altistart	TeSys® model U
				Power base	Control unit***
0,75 / 1	1,5	2	6	ATSU 01N206LT	LUB12
1,1 / 1,5	2,2	3	6	ATSU 01N206LT	LUB12
1,5 / 2	3	-	9	ATSU 01N209LT	LUB12
-	4	5	9	ATSU 01N209LT	LUB12
2,2 / 3	-	-	12	ATSU 01N212LT	LUB12
3 / -	5,5	7,5	12	ATSU 01N212LT	LUB32
4 / 5	7,5	10	22	ATSU 01N222LT	LUB32
5,5 / 7,5	11	15	22	ATSU 01N222LT	LUB32
7,5 / 10	15	20	32	ATSU 01N232LT	LUB32

Drive Altivar 11



Integrated EMC
class B filter.



Current NEC
208 V 1999



Local controls
and NPN logic.

*Version on baseplate:
replace the letter «H»
by «P».

"Europe" range

Single-phase 200 V to 240 V

kW	
0,18	ATV 11HU05M2E
0,37	ATV 11HU09M2E *
0,55	ATV 11HU12M2E *
0,75	ATV 11HU18M2E *
1,5	ATV 11HU29M2E
2,2	ATV 11HU41M2E

"America" range

Single-phase 100... 120 V

kW / HP	
0,18 / 0,25	ATV 11HU05F1U
0,37 / 0,5	ATV 11HU09F1U*
0,75 / 1	ATV 11HU18F1U

Single-phase 200... 240 V

kW / HP	
0,18 / 0,25	ATV 11HU05M2U
0,37 / 0,5	ATV 11HU09M2U*
0,75 / 1	ATV 11HU18M2U*
1,5 / 2	ATV 11HU29M2U
2,2 / 3	ATV 11HU41M2U

3-phase 200... 230 V

ATV 11HU05M3U	
ATV 11HU09M3U*	
ATV 11HU18M3U*	
ATV 11HU29M3U	
ATV 11HU41M3U	

"Asia" range

Single-phase 100... 120 V

kW / HP	
0,18 / 0,25	ATV 11HU05F1A
0,37 / 0,5	ATV 11HU09F1A*
0,75 / 1	ATV 11HU18F1A

Single-phase 200... 240 V

kW / HP	
0,18 / 0,25	ATV 11HU05M2A
0,37 / 0,5	ATV 11HU09M2A*
0,75 / 1	ATV 11HU18M2A*
1,5 / 2	ATV 11HU29M2A
2,2 / 3	ATV 11HU41M2A

3-phase 200... 230 V

ATV 11HU05M3A	
ATV 11HU09M3A*	
ATV 11HU18M3A*	
ATV 11HU29M3A	
ATV 11HU41M3A	

Selection *guide*

For simple machines

Drive Altivar 31



* Local controls on the drive, add the letter "A" at the end of the reference

Single-phase 200... 240 V*

kW / HP	
0,18 / 0,25	ATV 31H018M2
0,37 / 0,5	ATV 31H037M2
0,55 / 0,75	ATV 31H055M2
0,75 / 1	ATV 31H075M2
1,1 / 1,5	ATV 31HU11M2
1,5 / 2	ATV 31HU15M2
2,2 / 3	ATV 31HU22M2

3-phase 200... 240 V*

kW / HP		kW / HP	
0,18 / 0,25	ATV 31H018M3X	3 / -	ATV 31HU30M3X
0,37 / 0,5	ATV 31H037M3X	4 / 5	ATV 31HU40M3X
0,55 / 0,75	ATV 31H055M3X	5,5 / 7,5	ATV 31HU55M3X
0,75 / 1	ATV 31H075M3X	7,5 / 10	ATV 31HU75M3X
1,1 / 1,5	ATV 31HU11M3X	11 / 15	ATV 31HD11M3X
1,5 / 2	ATV 31HU15M3X	15 / 20	ATV 31HD15M3X
2,2 / 3	ATV 31HU22M3X		

3-phase 380... 500 V*

kW / HP	
0,37 / 0,5	ATV 31H037N4
0,55 / 0,75	ATV 31H055N4
0,75 / 1	ATV 31H075N4
1,1 / 1,5	ATV 31HU11N4
1,5 / 2	ATV 31HU15N4
2,2 / 3	ATV 31HU22N4

kW / HP

3 / -	ATV 31HU30N4
4 / 5	ATV 31HU40N4
5,5 / 7,5	ATV 31HU55N4
7,5 / 10	ATV 31HU75N4
11 / 15	ATV 31HD11N4
15 / 20	ATV 31HD15N4

3-phase 525... 600 V*

kW / HP	
0,75 / 1	ATV 31H075S6X
1,5 / 2	ATV 31HU15S6X
2,2 / 3	ATV 31HU22S6X
4 / 5	ATV 31HU40S6X
5,5 / 7,5	ATV 31HU55S6X
7,5 / 10	ATV 31HU75S6X
11 / 15	ATV 31HD11S6X
15 / 20	ATV 31HD15S6X

For complex, high power machines

Drive Altivar 58 Altivar 58F*



*Flux vector control with sensor: in the reference, add the letter "F" before the letter "H" (380...500V)

High torque applications (170% T_n)**

Single-phase 200... 240 V

kW / HP	
0,37 / 0,5	ATV 58HU09M2
0,75 / 1	ATV 58HU18M2
1,5 / 2	ATV 58HU29M2
2,2 / 3	ATV 58HU41M2
3 / -	ATV 58HU72M2
4 / 5	ATV 58HU90M2
5,5 / 7,5	ATV 58HD12M2

3-phase 200... 240 V

kW / HP	
1,5 / 2	ATV 58HU29M2
2,2 / 3	ATV 58HU41M2
3 / -	ATV 58HU54M2
4 / 5	ATV 58HU72M2
5,5 / 7,5	ATV 58HU90M2
7,5 / 10	ATV 58HD12M2

3-phase 380... 500 V

kW / HP	
0,75 / 1	ATV 58HU18N4
1,5 / 2	ATV 58HU29N4
2,2 / 3	ATV 58HU41N4
3 / -	ATV 58HU54N4
4 / 5	ATV 58HU72N4
5,5 / 7,5	ATV 58HU90N4
7,5 / 10	ATV 58HD12N4
11 / 15	ATV 58HD16N4

kW / HP

15 / 20	ATV 58HD23N4
18,5 / 25	ATV 58HD28N4
22 / 30	ATV 58HD33N4
30 / 40	ATV 58HD46N4
37 / 50	ATV 58HD54N4
45 / 60	ATV 58HD64N4
55 / 75	ATV 58HD79N4

**ATV 58: standard torque applications (120% T_n) from 22 to 55 kW: downgrade the drive by 1 rating (example: 22 kW = ATV 58HD28N4)

Drive Altivar 68 Altivar 68F*



*Flux vector control with sensor: in the reference, add the letter "F" before the letter "C".

High torque applications (150% T_n)**

3-phase 400 V - 15% ... 500 V + 10%

kW / HP		kW / HP	
75 / 100	ATV 68C10N4	200 / 300	ATV 68C28N4
90 / 125	ATV 68C13N4	250 / 350	ATV 68C33N4
110 / 150	ATV 68C15N4	315 / 500	ATV 68C43N4
132 / 200	ATV 68C19N4	400 / 600	ATV 68C53N4
160 / 250	ATV 68C23N4	500 / 700	ATV 68C63N4

**Standard torque applications (120% T_n): downgrade the drive by 1 rating (example: 132 kW = ATV 68C15N4). On 460 V, only the high torque is available.

A comprehensive range of *Motor Starters*

Increase your performance with the
associated **TeSys** components*



- Circuit-breakers,
- Differential circuit-breakers,
- Contactors,
- Fuses,

...
up to the highest
powers



**For further details
on product
combinations,
please refer to
our catalogue.*

↙ A unique partner, a global presence

Constantly available, worldwide

With more than 5000 points of sale in 130 countries, you can be sure to find the range of products which is right for you and which complies fully with the standards in the country in which they are to be 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 provides you with all necessary technical assistance, throughout the world.

Schneider Electric Industries S.A.S.

Head office

89 boulevard Franklin Roosevelt
92504 Rueil Malmaison Cedex
FRANCE
<http://www.telemecanique.com>

Owing to changes in standards and equipment, the characteristics given in the text and images in this document are not binding until they have been confirmed with us.
Production: 3000 NR
Photos: Schneider Electric - ImageBank