



# Altivar Soft Starter ATS01

Soft Starters for simple machines from  
0.37 to 15kW

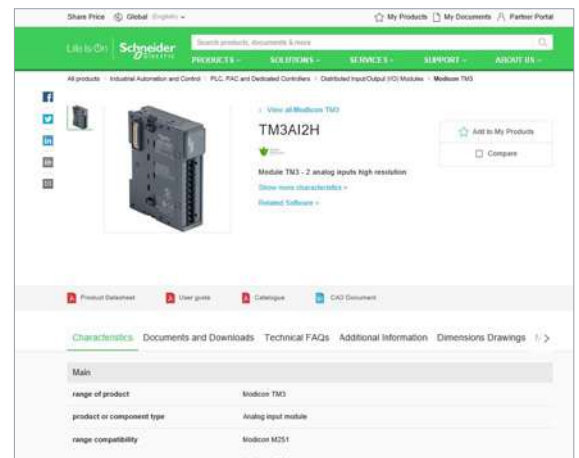
# Quick access to product information

## Get technical information about your product

References

**Modicon TM3**  
I/O expansion modules for Modicon controllers  
Analog I/O modules

Reference	Input range	Output range	Resolution	Reference	Price
2 analog input modules	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58421	€ 110
4 analog input modules	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58422	€ 130
4 analog input modules	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58423	€ 130
4 analog input modules	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58424	€ 130
4 differential temperature inputs	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58425	€ 130
4 differential temperature inputs	0...+10VDC 0...20mA	0...10VDC 0...20mA	10 bits	58426	€ 130



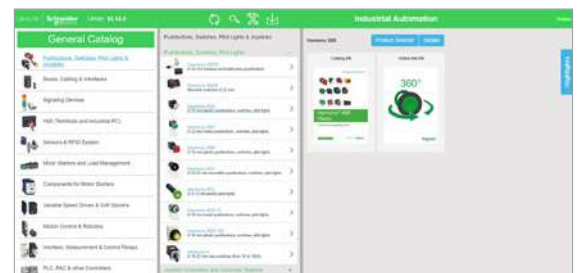
Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

## Find your catalog



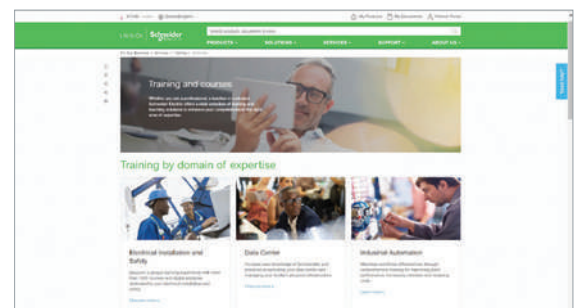
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# Altivar

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# Soft starters for asynchronous motors

## Applications

### Starting simple machines

### Controlled starting and deceleration of simple machines



Power range for 50...60 Hz line supply (kW/HP) (connection to the motor power supply line)	
Single-phase 110...230 V (kW)	
Three-phase 200...240 V (kW/HP)	
Three-phase 200...480 V (kW/HP)	
Three-phase 208...600 V (kW/HP)	
Three-phase 208...690 V (kW/HP)	
Three-phase 230...415 V (kW)	
Three-phase 230...440 V (kW)	
Three-phase 380...415 V (kW)	
Three-phase 440...480 V (HP)	

0.37...11/0.5...15	0.75...15/1...20
0.37...2.2	–
–	0.75...7.5/1...10
0.37...11/0.5...15	–
–	–
–	–
–	–
–	–
–	1.5...15
–	2...20

Drive	Number of controlled phases
	1
	2
Type of control	–
Operating cycle	–

1	2
–	–
–	–

Functions	Integrated
Bypass	–
Number of I/Os	–
Analog inputs	–
Logic inputs	–
Analog outputs	–
Logic outputs	–
Relay outputs	–

Integrated	–
–	–
–	–
–	–
–	–

Communication	Integrated
	–
	Available as an option

–	–
–	–

Standards and certifications
IEC/EN 60947-4-2 CE, UL, CSA, C-Tick, and CCC

IEC/EN 60947-4-2 CE, UL, CSA, C-Tick, and CCC
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References
<b>ATS01N1●●●●</b>   <b>ATS01N2●●●●</b>

<b>ATS01N1●●●●</b>   <b>ATS01N2●●●●</b>
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## Controlled starting and deceleration of simple and complex machines



4...400/3...500	3...630	3...900/3...1,200
–	–	–
–	–	–
–	–	–
4...400/3...500	–	–
–	–	3...900/3...1,200
–	3...630	–
4...355	–	–
–	–	–
–	–	–

3	Configurable voltage ramp	TCS (Torque Control System)
Standard	Standard and severe	
Integrated	Available as an option	
1 PTC probe		
3	4	
–	1	
–	2	
2 (CO)	3	

Modbus	–	Fipio, PROFIBUS DP, DeviceNet, Modbus TCP
–	–	–

IEC/EN 60947-4-2, EMC class A CE, UL, CSA, C-Tick, GOST, CCC	IEC/EN 60947-4-2, EMC class A and B CE, UL, CSA, DNV, C-Tick, GOST, CCC, NOM, SEPRO, and TCF
IEC/EN 60947-4-2, EMC class A CE, UL, CSA, C-Tick, GOST, CCC	IEC/EN 60947-4-2, EMC class A and B CE, UL, CSA, DNV, C-Tick, GOST, CCC, NOM, SEPRO, and TCF

ATS22●●●●	ATS48●●●Q	ATS48●●●Y
ATS22●●●●	ATS48●●●Q	ATS48●●●Y

Please refer to the "Altistart 22" catalog.	Please refer to the "Altistart 48" catalog.
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# Soft starters for asynchronous motors

## Altivar Soft Starter ATS01

PF 140052A



ATS01N1●●●

PF 140051A



ATS01N2●●●

### Presentation

The Altivar Soft Starter ATS01 operates as a soft start/soft stop unit for asynchronous motors.

The Altivar Soft Starter ATS01 enhances the starting performance of asynchronous motors by allowing them to start gradually, smoothly, and in a controlled manner. It helps to prevent mechanical shocks, which cause wear and tear, and subsequent maintenance work and production downtime.

The Altivar Soft Starter ATS01 limit the starting torque without torque control system and current peaks on starting on machines that do not require a high starting torque. It is designed for the following simple applications:

- conveyors
- conveyor belts
- pumps
- fans
- compressors
- automatic doors and gates
- Overhead Traveling Cranes (Horizontal Loads)
- belt-driven machinery, etc.

The Altivar Soft Starter ATS01 is compact, easy to install, and can be mounted side-by-side (1).

It complies with standards IEC/EN 60947-4-2, and carries UL, CSA, C-Tick, and CCC certifications, and CE marking.

The Altivar Soft Starter ATS01 soft start/soft stop unit offer comprises 3 ranges:

■ **ATS01N1●●●** soft starters

- These control one phase of the motor power supply (single-phase or three-phase) to limit the starting torque.
- They feature an internal bypass relay except N103 (smallest one).
- For IE2 motors power ratings range from 0.37 kW to 11 kW.
- Motor supply voltages range from 110 V to 480 V, 50/60 Hz. For 110 V, 230 V applications there is no need for extra power supply, the line voltage can be used. 400 V and 480 V applications an external power supply is necessary.

■ **ATS01N2●●●** soft start/soft stop units

- These control two phases of the motor power supply to limit the starting current and for deceleration.
- They feature an internal bypass relay.
- Motor power ratings range from 0.75 kW to 15 kW (2).
- The motor supply voltages are as follows: 230 V, 400 V, and 480 V, 50/60 Hz. The use of a line contactor is not necessary on machines where electrical isolation is not required.

■ **ATSU01N2●●●** soft start/soft stop units

See [page 10](#).

(1) Side-By-Side Conditions:

The maximum starts per hour are 2 under following worst case conditions:

Ramp-up time: 10 s

Motor current 5x rated softstarter current

Ambient temperature 40°C

Applications with shorter ramp-up times and/or lower motor current and/or lower ambient temperature the cycle time can be increased.

E.g. ramp-up time 5 s -> starts per hour are 4 or motor current 3x Ie -> starts per hour are 4 For stronger conditions 15 mm distance are necessary.

(2) Please pay attention and consider for the operation of IE3 motors while dimensioning of softstarters the resulting higher starting currents.

For the use of IE3 motors it is needed to dimension and design the softstarters one size higher.

# Soft starters for asynchronous motors

## Altivar Soft Starter ATS01

### Description

- Altivar Soft Starter ATS01 (ATS01N1●●●) are equipped with:
  - a potentiometer **1** for setting the starting time
  - a potentiometer **2** for adjusting the starting voltage threshold according to the motor load
  - 2 inputs **3**:
    - 1 x 24 V  $\overline{\text{DC}}$  input or 1 x 110...240 V  $\sim$  input for powering the control part that controls the motor
  
- Altivar Soft Starter ATS01 soft start/soft stop units (ATS01N2●●●) are equipped with:
  - a potentiometer **6** for setting the starting time
  - a potentiometer **8** for setting the deceleration time
  - a potentiometer **7** for adjusting the starting voltage threshold according to the motor load
  - 1 green LED **4** to indicate that the unit is powered up
  - 1 yellow LED **5** to indicate that the motor is powered at nominal voltage, if it is connected to the starter
  - a connector **9** for:
    - 2 logic inputs for Run/Stop commands
    - 1 logic input for the BOOST function
    - 1 logic output to indicate the end of starting
    - 1 relay output to indicate the motor has reached a standstill at the end of the deceleration stage

### Equivalence table for contact references

Functions	ATS01N2●●●LU/QN/RT
Relay outputs	R1A
	R1C
External power supply 0 V	C0M
Stop command	LI1
Run command	LI2
Control section power supply	LI + (+ 24 V positive logic)
BOOST	BOOST
End of starting	LO1
115 V external power supply	–

# Soft starters for asynchronous motors

## Altivar Soft Starter ATS01

### Cycle time calculation

Start/Stop per hour:

Determining the permissible starting frequency

The starting frequency depends on the:

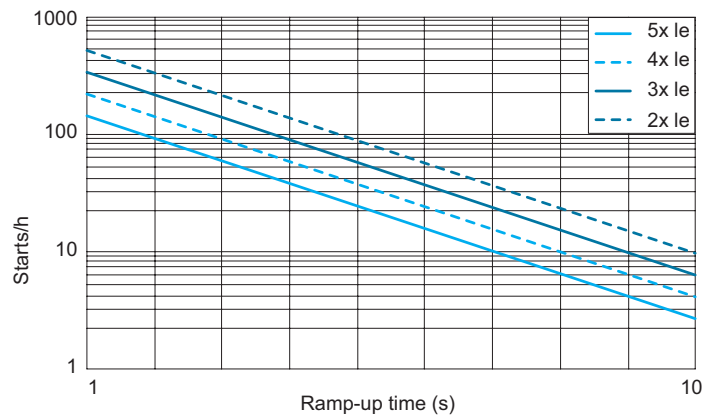
- starting current or the heat loss across the power semiconductors
- current carrying capacity and the temperature increase of the power semiconductors.
- heat sink's capability of absorbing the heat loss and passing the temperature increase on to the environment

The following diagrams are to assist you in determining the maximum starting frequency per hour, i.e., on the basis of the given maximum starting current and for various starting times. Should the requested starting frequency not be reached, a different device series has to be chosen.

Example: In a drive, a 15 kW-motor is to be started. A maximum starting current of 120 A has been measured. This approximately corresponds to the 4-times nominal current. The device employed is a ATS01N232. From the applicable chart it is now possible to read off a max. starting frequency per hour lying between 280 (starting time = 1 s) and 28 (starting time = 10 s).

### Cycle time: ATS01N103...222

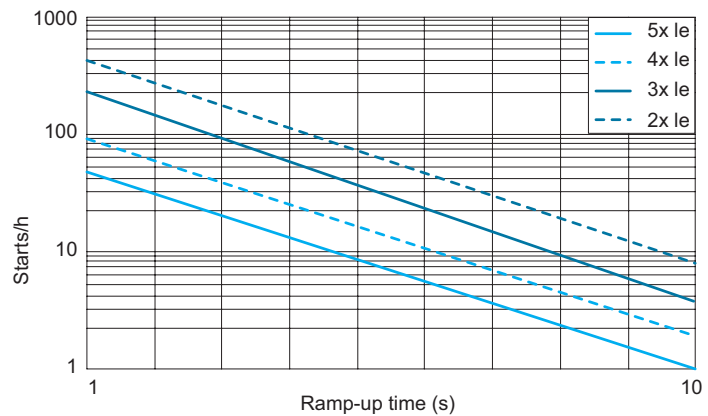
Motor ramp-up current relating rated softstarter current



**Note:** Over 40 °C ambient temperature, oversize the starter by 1 is mandatory for ATS01N103...222 ranges.

### Cycle time: ATS01N232

Motor ramp-up current relating rated softstarter current





# Soft starters for asynchronous motors

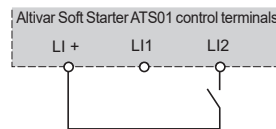
## Altivar Soft Starter ATS01

### Functions

#### ■ 2-wire control

The run and stop commands are controlled by a single logic input. State 1 of logic input LI2 controls starting and state 0 controls stopping.

#### ATS01N2●●LU/QN/RT



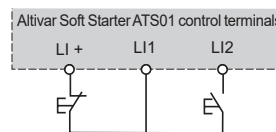
Wiring diagram for 2-wire control

#### ■ 3-wire control

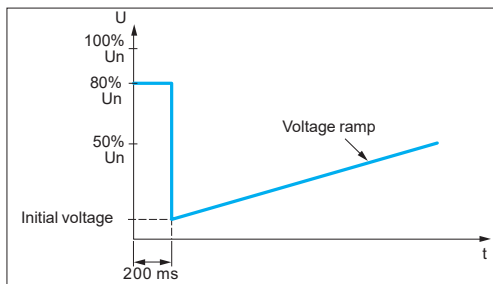
The run and stop commands are controlled by 2 different logic inputs.

Stopping is achieved when logic input LI1 opens (state 0).

The pulse on input LI2 is stored until input LI1 opens.



Wiring diagram for 3-wire control



Application of a voltage boost equal to 100% of the nominal motor voltage

#### ■ Starting time

Controlling the starting time means that the time of the voltage ramp applied to the motor can be adjusted to obtain a gradual starting time, dependent on the motor load.

#### ■ Voltage boost function via logic input

Activating the BOOST logic input enables the function for supplying a starting overtorque capable of overcoming any mechanical friction.

When the input is at state 1, the function is active (input connected to the + 24 V) and the starter applies a fixed voltage to the motor for a limited time before starting.

#### ■ End of starting

□ Application function via logic output LO1

ATS01N206●● to ATS01N232●● soft start/soft stop units are equipped with an open collector logic output LO, which indicates the end of starting when the motor has reached nominal speed.

# Soft starters for asynchronous motors

## Altivar Soft Starter ATS01



ATS01N103FT



ATS01N212QN

Soft starters for 0.37 to 11 kW motors										
Motor		Starter								
Motor power (1)		Nominal current	Dimensions W x D x H	Reference (2)	Weight					
Single-phase	Three-phase									
230 V	110 V 230 V 230 V 400 V 460 V									
kW	HP kW HP kW HP	A	mm/ in.							
<b>Single-phase 110...230 V or three-phase 110...480 V supply voltage, 50/60 Hz</b>										
0.37	– 0.37 0.5 1.1 0.5	3	22.5 x 100.4 x 100/ 0.89 x 3.95 x 3.94	ATS01N103FT	0.160/ 0.353					
0.75	– 0.5 1 1.1 1.5 2.2 2	6	22.5 x 100.4 x 100/ 0.89 x 3.95 x 3.94	ATS01N106FT	0.160/ 0.353					
1.1	1 1.5 2 4 5	9	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N109FT	0.280/ 0.617					
1.5	1.5 2.2 3 5.5 7.5	12	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N112FT	0.280/ 0.617					
2.2	2 3 5 7.5 10	25	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N125FT	0.350/ 0.772					
	3 4 5.5 7.5 11									

Accessories			
Description	For use with starter	Reference	Weight kg/ lb
Adapter for mounting on C-DZ5 MB rail	ATS01N103FT, ATS01N106FT	RHZ66	0.005/ 0.011

Soft start/soft stop units for 0.75 to 15 kW motors (3)					
Motor		Starter			
Motor power (1)		Nominal current	Dimensions W x D x H	Reference (2)	Weight
kW	HP				
<b>Three-phase supply voltage: 200...240 V 50/60 Hz</b>					
0.75/1.1	1/1.5	6	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N206LU	0.420/ 0.926
1.5	2	9	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N209LU	0.420/ 0.926
2.2/3	3/–	12	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N212LU	0.420/ 0.926
4/5.5	5/7.5	22	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N222LU	0.560/ 1.235
7.5	10	32	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N232LU	0.560/ 1.235
<b>Three-phase supply voltage: 380...415 V 50/60 Hz</b>					
1.5/2.2/3	–	6	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N206QN	0.420/ 0.926
4	–	9	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N209QN	0.420/ 0.926
5.5	–	12	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N212QN	0.420/ 0.926
7.5/11	–	22	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N222QN	0.560/ 1.235
15	–	32	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N232QN	0.560/ 1.235
<b>Three-phase supply voltage: 440...480 V 50/60 Hz</b>					
–	2/3	6	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N206RT	0.420/ 0.926
–	5	9	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N209RT	0.420/ 0.926
–	7.5	12	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	ATS01N212RT	0.420/ 0.926
–	10/15	22	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N222RT	0.560/ 1.235
–	20	32	45 x 130.7 x 154/ 1.77 x 5.15 x 6.06	ATS01N232RT	0.560/ 1.235

(1) Standard motor power ratings, HP power ratings indicated according to standard UL 508.

(2) For motor thermal protection, use a GVME thermal-magnetic motor circuit breaker (see combinations page 9).

(3) Control power supply built into the starter.

# Soft starters for asynchronous motors

Altivar Soft Starter ATS01

400 V power supply, type 1 coordination

## Compatible components according to IEC 60947-4-1 and IEC 60947-4-2

Combine either circuit breaker (light green columns), contactor, and starter, or switch/fuse (dark green columns), contactor, and starter

Motor		Starter Class 10	Circuit breaker	Rating	Contactor	Switch or disconnect switch (base unit)	aM fuses Reference	Rating	I <sup>2</sup> t A <sup>2</sup> s	Thermal overload relay
kW	A			A				A		
M1		A1	Q1		KM1, KM2, KM3	Q2				F4
0.37	0.98	ATS01N103FT	GV2ME05	1	LC1K06 or LC1D09	LS1D2531	DF2CA02	2	265	LR2K0306 LRD05
0.55	1.5	ATS01N103FT	GV2ME06	1.6	LC1K06 or LC1D09	LS1D2531	DF2CA02	2	265	LR2K0307 LRD06
0.75	2	ATS01N103FT	GV2ME07	2.5	LC1K06 or LC1D09	LS1D2531	DF2CA02	2	265	LR2K0308 LRD07
1.1	2.5	ATS01N103FT	GV2ME08	4	LC1K06 or LC1D09	LS1D2531	DF2CA04	4	265	LR2K0308 LRD08
		ATS01N206QN	GV2ME08	4	LC1K06 or LC1D09	LS1D2531	DF2CA04	4	265	LR2K0308 LRD08
1.5	3.5	ATS01N106FT	GV2ME08	4	LC1K06 or LC1D09	LS1D2531	DF2CA06	6	265	LR2K0310 LRD08
		ATS01N206QN	GV2ME08	4	LC1K06 or LC1D09	LS1D2531	DF2CA06	6	265	LR2K0310 LRD08
2.2	5	ATS01N106FT	GV2ME10	6.3	LC1K06 or LC1D09	LS1D2531	DF2CA08	8	265	LR2K0312 LRD10
		ATS01N206QN	GV2ME10	6.3	LC1K09 or LC1D09	LS1D2531	DF2CA08	8	265	LR2K0312 LRD10
3	6.5	ATS01N106FT	GV2ME14	9	LC1K09 or LC1D09	LS1D2531	DF2CA12	12	265	LR2K0314 LRD12
		ATS01N206QN	GV2ME14	9	LC1K09 or LC1D09	LS1D2531	DF2CA12	12	265	LR2K0314 LRD12
4	8.4	ATS01N109FT	GV2ME14	9	LC1K09 or LC1D09	LS1D2531	DF2CA12	12	610	LR2K0316 LRD14
		ATS01N209QN	GV2ME14	9	LC1K09 or LC1D09	LS1D2531	DF2CA12	12	610	LR2K0316 LRD14
5.5	11	ATS01N112FT	GV2ME16	13	LC1K12 or LC1D12	LS1D2531	DF2CA16	16	610	LR2K0321 LRD16
		ATS01N212QN	GV2ME16	13	LC1K12 or LC1D12	LS1D2531	DF2CA16	16	610	LR2K0321 LRD16
7.5	14.8	ATS01N125FT	GV2ME20	17	LC1D18	LS1D2531	DF2CA20	20	6050	LRD21
		ATS01N222QN	GV2ME20	17	LC1D18	LS1D2531	DF2CA20	20	6050	LRD21
9	18.1	ATS01N125FT	GV2ME21	21	LC1D25	LS1D2531	DF2CA25	25	6050	LRD21
		ATS01N222QN	GV2ME21	21	LC1D25	LS1D2531	DF2CA25	25	6050	LRD21
11	21	ATS01N125FT	GV2ME22	23	LC1D25	LS1D2531	DF2CA25	25	6050	LRD22
		ATS01N222QN	GV2ME22	23	LC1D25	LS1D2531	DF2CA25	25	6050	LRD22
15	28.5	ATS01N232QN	GV2ME32	32	LC1D32	GK1EM	DF2EA40	40	7200	LRD3353

# Soft starters for asynchronous motors

## Altivar Soft Starter ATSU01 and TeSys U



### Presentation

The Altivar Soft Starter ATSU01 is a soft start/soft stop unit for asynchronous motors. It is designed primarily for combinations with **TeSys U** starter-controllers.

When used in combination with a **TeSys U 1** controller by means of a connector **2**, the Altivar Soft Starter ATSU01 **3** is a power option that provides the “soft start/soft stop” function. The result is a unique, innovative motor starter.

Using the Altivar Soft Starter ATSU01 enhances the starting performance of asynchronous motors by allowing them to start gradually, smoothly, and in a controlled manner. It helps to prevent mechanical shocks, which cause wear and tear, and subsequently limits the amount of maintenance work and production downtime.

The Altivar Soft Starter ATSU01 limits the starting torque and current peaks on starting on machines that do not require a high starting torque.

The Altivar Soft Starter ATSU01 is designed for the following simple applications:

- conveyors
- conveyor belts
- pumps
- fans
- compressors
- automatic doors and gates
- small cranes
- belt-driven machinery

The Altivar Soft Starter ATSU01 is compact and easy to install. It complies with standards IEC/EN 60947-4-2, and carries UL, CSA, C-Tick, and CCC certifications, and CE marking.

#### ■ ATSU01N2●●LT soft start/soft stop units

- These control two phases of the motor power supply to limit the starting current and for deceleration.
  - They feature an internal bypass relay.
  - Motor power ratings range from 0.75 kW to 15 kW.
  - Motor supply voltages range from 200 V to 480 V, 50/60 Hz.
- An external power supply is required for controlling the starter.

### Description

- Altivar Soft Starter ATSU01 soft start/soft stop units are equipped with:
  - a potentiometer for setting the starting time **6**
  - a potentiometer for setting the deceleration time **8**
  - a potentiometer for adjusting the starting voltage threshold according to the motor load **7**
  - 1 green LED **4** to indicate that the unit is powered up
  - 1 yellow LED **5** to indicate that the motor is powered at nominal voltage, if it is connected to the starter
  - a connector **9** for:
    - 2 logic inputs for Run/Stop commands
    - 1 logic input for the BOOST function
    - 1 logic output to indicate the end of starting
    - 1 relay output to indicate that an error has been detected on the starter power supply or that the motor has reached a standstill at the end of the deceleration stage

# Soft starters for asynchronous motors

## Altivar Soft Starter ATSU01 and TeSys U

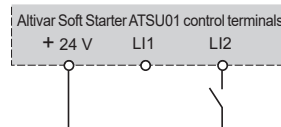
### Description of a TeSys U starter-controller

Please refer to the “TeSys U starters - open version” catalog.

### ATSU01N2●●LT soft start unit functions

#### ■ 2-wire control

The run and stop commands are controlled by a single logic input. State 1 of logic input LI2 controls starting and state 0 controls stopping.



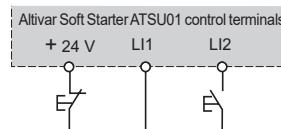
Wiring diagram for 2-wire control

#### ■ 3-wire control

The run and stop commands are controlled by 2 different logic inputs.

Stopping is achieved when logic input LI1 opens (state 0).

The pulse on input LI2 is stored until input LI1 opens.



Wiring diagram for 3-wire control

#### ■ Starting time:

Controlling the starting time means that the time of the voltage ramp applied to the motor can be adjusted to obtain a gradual starting time, dependent on the motor load.

#### ■ Voltage boost function via logic input

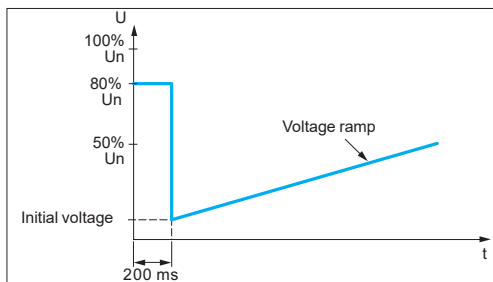
Activating the BOOST logic input enables the function for supplying a starting overtorque capable of overcoming any mechanical friction.

When the input is at state 1, the function is active (input connected to the + 24 V) and the starter applies a fixed voltage to the motor for a limited time before starting.

#### ■ End of starting

□ Application function for logic output LO1

ATSU01N2●●LT soft start/soft stop units are equipped with an open collector logic output LO, which indicates the end of starting when the motor has reached nominal speed.



Application of a voltage boost equal to 100% of the nominal motor voltage

# Soft starters for asynchronous motors

## Altivar Soft Starter ATSU01 and TeSys U

DF504015



ATSU01N222LT

### Soft start/soft stop units for 0.75 to 15 kW motors (can be combined with TeSys U starter)

Motor				Starter		Reference	Weight
Motor power (1)		Nominal current		Dimensions W x D x H			
230 V	230 V	400 V	460 V	A	mm/ in.		kg/ lb
kW	HP	kW	HP				
<b>Three-phase supply voltage: 200...480 V 50/60 Hz</b>							
0.75	1	1.5	2	6	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	<a href="#">ATSU01N206LT</a>	0.340/ 0.750
1.1	1.5	2.2	3				
		3					
1.5	2	–	5	9	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	<a href="#">ATSU01N209LT</a>	0.340/ 0.750
–	–	4	–				
2.2	3	5.5	7.5	12	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	<a href="#">ATSU01N212LT</a>	0.340/ 0.750
3	–	–	–				
4	5	7.5	10	22	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	<a href="#">ATSU01N222LT</a>	0.490/ 1.080
5.5	7.5	11	15				
7.5	10	15	20	32	45 x 130.7 x 124/ 1.77 x 5.15 x 4.88	<a href="#">ATSU01N232LT</a>	0.490/ 1.080

### Accessory

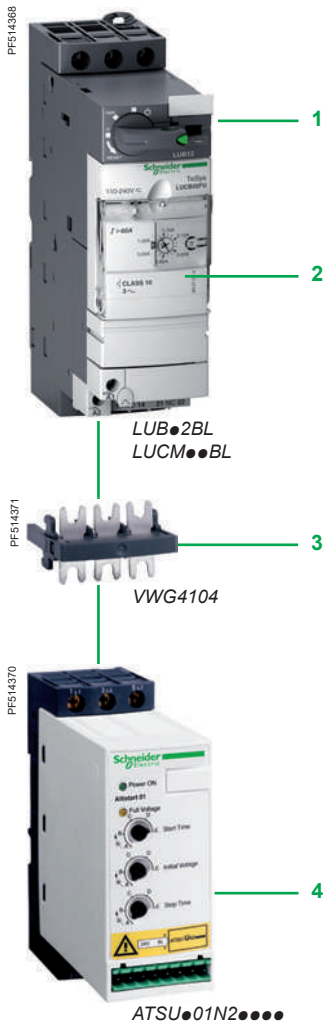
Description	For use with starter	Reference	Weight kg/ lb
Power connector between ATSU01N2●●LT and TeSys U	ATSU01N2●●LT	<a href="#">VW3G4104</a>	0.020/ 0.044

(1) Standard motor power ratings, HP power ratings indicated according to standard UL508.



# Soft starters for asynchronous motors

## Altivar Soft Starter ATSU01 and TeSys U



### TeSys U starter and soft start unit combinations

Numerous possibilities for combinations and options are offered. Please refer to the "TeSys U starters - open version" catalog.

Motor power			Soft start unit	TeSys U	
Voltage				Power base	Control unit (1)
230 V	400 V	460 V			
kW/HP	kW	HP			
0.75/1	1.5	2	ATSU01N206LT	LUB12	LUC●05BL
1.1/1.5	2.2/3	3	ATSU01N206LT	LUB12	LUC●12BL
1.5/2	–	–	ATSU01N209LT	LUB12	LUC●12BL
–	4	5	ATSU01N209LT	LUB12	LUC●12BL
2.2/3	–	–	ATSU01N212LT	LUB12	LUC●12BL
3/–	5.5	7.5	ATSU01N212LT	LUB32	LUC●18BL
4/5	7.5	10	ATSU01N222LT	LUB32	LUC●18BL
5.5/7.5	11	15	ATSU01N222LT	LUB32	LUC●32BL
7.5/10	15	20	ATSU01N232LT	LUB32	LUC●32BL

Example of combining a motor-starter with:

- 1 power base for non-reversing DOL starting (LUB●2BL)
- 2 control unit (LUCM●●BL)
- 3 power connector (VW3G4104)
- 4 Altivar Soft Starter ATSU01 (ATSU01N2●●●LT) soft start/soft stop unit

(1) Depending on the configuration required for the TeSys U starter, replace the ● with A for standard, B for advanced, and M for multifunction.

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A	
ATS01N103FT	8
ATS01N106FT	8
ATS01N109FT	8
ATS01N112FT	8
ATS01N125FT	8
ATS01N206LU	8
ATS01N206QN	8
ATS01N206RT	8
ATS01N209LU	8
ATS01N209QN	8
ATS01N209RT	8
ATS01N212LU	8
ATS01N212QN	8
ATS01N212RT	8
ATS01N222LU	8
ATS01N222QN	8
ATS01N222RT	8
ATS01N232LU	8
ATS01N232QN	8
ATS01N232RT	8
ATSU01N206LT	12
ATSU01N209LT	12
ATSU01N212LT	12
ATSU01N222LT	12
ATSU01N232LT	12

R	
RHZ66	8

V	
VW3G4104	12

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