

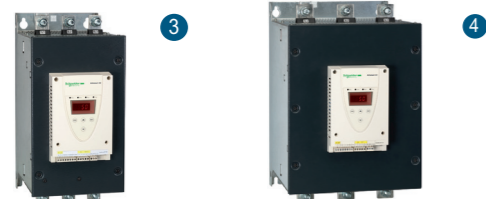
## Altistart 01 soft starters for 0.37 to 15 kW/0.5 to 20 HP motors



1 Altistart 01 soft starters for 0.37 to 11 kW motors and single or 3-phase supply voltage 110...480 V 50/60 Hz (1)								
Power for single-phase motor (2)	Under 230 V (kW)	0.37	0.75	1.1	1.5	2.2		
	Under 110 V (HP)	–	–	1	1.5	2	3	
Power for 3-phase motor (2)	Under 230 V (kW)	0.37	0.55	0.75	1.1	1.5	2.2	3
	Under 230 V (HP)	0.5	–	1	1.5	2	3	5
	Under 400 V (kW)	1.1	–	2.2	3	4	5.5	7.5
	Under 460 V (HP)	0.5	1.5	2	3	5	7.5	10
Nominal current I <sub>L</sub> (A) (3)		3	6	9	12	25		
Dimensions: W x D x H (mm)		22.5 x 100.4 x 100			45 x 130.7 x 124			
Reference		ATS01N103FT	ATS01N106FT	ATS01N109FT	ATS01N112FT	ATS01N125FT		
2 Altistart 01 soft start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 220...240 V 50/60 Hz (5)								
Power for 3-phase motor 220...240 V 50/60 Hz (kW) (2)		0.75/1.1	1.5	2.2/3	4/5.5	7.5		
Power in HP (2)		1/1.5	2	3/-	5/7.5	10		
Nominal current I <sub>L</sub> (A) (3)		6	9	12	22	32		
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154			
Reference		ATS01N206LU	ATS01N209LU	ATS01N212LU	ATS01N222LU	ATS01N232LU		
Altistart 01 soft start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 380...415 V 50/60 Hz (5)								
Power for 3-phase motor 380...415 V 50/60 Hz (kW) (2)		1.5/2.2/3	4	5.5	7.5/11	15		
Power in HP (2)		–	–	–	–	–		
Nominal current I <sub>L</sub> (A) (3)		6	9	12	22	32		
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154			
Reference		ATS01N206QN	ATS01N209QN	ATS01N212QN	ATS01N222QN	ATS01N232QN		
Altistart 01 start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 440...480 V 50/60 Hz (5)								
Power for 3-phase motor 440...480 V 50/60 Hz (kW) (2)		–	–	–	–	–		
Power in HP (2)		2/3	5	7.5	10/15	20		
Nominal current I <sub>L</sub> (A) (3)		6	9	12	22	32		
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154			
Reference		ATS01N206RT	ATS01N209RT	ATS01N212RT	ATS01N222RT	ATS01N232RT		

(1) Number of possible start-stops/hour: 100 for starting time of 1 s maximum, 20 for starting time of 5 s maximum.  
 (2) Standard motor power ratings. HP power ratings indicated according to standard UL508. (3) I<sub>L</sub> corresponds to the starter rating. (4) Control power supply built into the starter.  
 (5) Number of possible start-stops/hour: 100 for starting time of 1 s maximum, 20 for starting time of 5 s maximum, 10 for starting time of 10 s maximum.

## Altistart 22 soft starters for 3 to 500 HP motors



Altistart 22 soft start/soft stop units for 3-phase power supply voltage 208...600 V and 110 V control power supply Connection in the motor power supply line									
Motor power in HP	208 V	3	7.5	–	15	20	25	30	40
	230 V	5	10	15	20	25	30	40	50
	460 V	10	10	30	40	50	60	75	100
	575 V	15	25	40	50	60	75	100	125
	575 V	15	25	40	50	60	75	100	125
Nominal current I <sub>L</sub> (A) (3)		17	32	47	62	75	88	110	140
		6	6	6	6	6	6	4	4
Number of starts/hour	Without fan	6	6	6	6	6	6	4	4
	With fan (6)	10	10	10	10	10	10	10	10
Dimensions: W x D x H (mm)		130 x 265 x 169			145 x 295 x 207			150 x 356 x 229	
Reference		ATS22D17S6U	ATS22D32S6U	ATS22D47S6U	ATS22D62S6U	ATS22D75S6U	ATS22D88S6U	ATS22C11S6U	ATS22C14S6U
Motor power in HP	208 V	50	60	75	100	125	150	–	–
	230 V	60	75	100	125	150	–	200	–
	460 V	125	150	200	250	300	350	400	–
	575 V	150	200	250	300	350	400	500	–
	575 V	150	200	250	300	350	400	500	–
Nominal current I <sub>L</sub> (A) (3)		170	210	250	320	410	480	590	–
		4	–	–	–	–	–	–	–
Number of starts/hour	Without fan	4	–	–	–	–	–	–	–
	With fan (6)	10	4	4	4	4	4	4	–
Dimensions: W x D x H (mm)		206 X 425 X 299		206 X 425 X 299			304 x 455 x 340		304 x 455 x 340
Reference		ATS22C17S6U	ATS22C21S6U	ATS22C25S6U	ATS22C32S6U	ATS22C41S6U	ATS22C48S6U	ATS22C59S6U	

Note: All values given for Altistart 22 starters are defined for 3.5 s In and 20s starting time, with motors with thermal protection class 10. These values are for an ambient temperature of 40 °C.  
 (3) I<sub>L</sub> corresponds to the starter rating. (6) All soft starters from motor power 75 HP to 200 HP (ATS22C21.. to ATS22C59..) are equipped with a fan as standard.

## Altistart 22 soft starters for 4 to 500 kW motors



1 Altistart 22 soft start/soft stop units for 3-phase power supply voltage 230...440 V and 220 V 50-60 Hz control power supply Connection in the motor power supply line or in the motor delta connection (1)									
Motor power in kW (motor power supply line)	230 V	4	7.5	11	15	18.5	22	30	37
	400 V	7.5	15	22	30	37	45	55	75
	440 V	7.5	15	22	30	37	45	55	75
Motor power in kW (motor delta connection) (1)	230 V	5.5	11	18.5	22	30	37	45	55
	400 V	11	22	45	55	75	90	110	140
	440 V	15	22	45	55	75	90	110	140
Nominal current I <sub>L</sub> (A) (2)		17	32	47	62	75	88	110	140
Number of starts/hour	Without fan	6	6	6	6	6	6	4	4
	With fan (3)	10	10	10	10	10	10	10	10
Dimensions: W x D x H (mm)		130 x 265 x 169			145 x 295 x 207			150 x 356 x 229	
Reference		ATS22D17Q	ATS22D32Q	ATS22D47Q	ATS22D62Q	ATS22D75Q	ATS22D88Q	ATS22C11Q	ATS22C14Q
Motor power in kW (motor power supply line)	230 V	45	55	75	90	110	132	160	
	400 V	90	110	132	160	220	250	315	
	440 V	90	110	132	160	220	250	355	
Motor power in kW (motor delta connection) (1)	230 V	75	90	110	132	160	220	250	
	400 V	132	160	220	250	315	355	400	
	440 V	132	160	220	250	355	400	500	
Nominal current I <sub>L</sub> (A) (2)		170	210	250	320	410	480	590	
Number of starts/hour	Without fan	4	–	–	–	–	–	–	–
	With fan (3)	10	4	4	4	4	4	4	–
Dimensions: W x D x H (mm)		150 x 356 x 229		206 X 425 X 299			304 x 455 x 340		
Reference		ATS22C17Q	ATS22C21Q	ATS22C25Q	ATS22C32Q	ATS22C41Q	ATS22C48Q	ATS22C59Q	

2 Altistart 22 soft start/soft stop units for 3-phase power supply voltage 230...500 V and 220 V 50-60 Hz control power supply Connection in the motor power supply line									
Motor power in kW	230 V	4	7.5	11	15	18.5	22	30	37
	400 V	7.5	15	22	30	37	45	55	75
	440 V	7.5	15	22	30	37	45	55	75
	500 V	9	18.5	30	37	45	55	75	90
	500 V	9	18.5	30	37	45	55	75	90
Nominal current I <sub>L</sub> (A) (2)		17	32	47	62	75	88	110	140
		–	–	–	–	–	–	–	–
Number of starts/hour	Without fan	–	–	–	–	–	–	–	–
	With fan (3)	4	4	4	4	4	4	4	–
Dimensions: W x D x H (mm)		130 x 265 x 169			145 x 295 x 207			150 x 356 x 229	
References		ATS22D17S6	ATS22D32S6	ATS22D47S6	ATS22D62S6	ATS22D75S6	ATS22D88S6	ATS22C11S6	ATS22C14S6
Motor power in kW	230 V	45	55	75	90	110	132	160	
	400 V	90	110	132	160	220	250	315	
	440 V	90	110	132	160	220	250	355	
	500 V	110	132	160	220	250	315	400	
	500 V	110	132	160	220	250	315	400	
Nominal current I <sub>L</sub> (A) (2)		170	210	250	320	410	480	590	
Number of starts/hour	Without fan	4	–	–	–	–	–	–	–
	With fan (3)	10	4	4	4	4	4	4	–
Dimensions: W x D x H (mm)		206 X 425 X 299		206 X 425 X 299			304 x 455 x 340		304 x 455 x 340
Reference		ATS22C17S6	ATS22C21S6	ATS22C25S6	ATS22C32S6	ATS22C41S6	ATS22C48S6	ATS22C59S6	

Note: All values given for Altistart 22 starters are defined for 3.5 s In and 20s starting time, with motors with thermal protection class 10. These values are for an ambient temperature of 40 °C.  
 (1) When connected in the delta configuration, starters allow the use of motors of a larger rating relative to that of the starter. In this configuration, the nominal motor current should not exceed 1.5 I<sub>L</sub>.  
 (2) I<sub>L</sub> corresponds to the starter rating.  
 (3) All soft starters from motor power 55 kW to 160 kW (ATS22C21.. to ATS22C59..) are equipped with a fan as standard.  
 For soft starters under 55 kW (ATS22D17.. to ATS22C17..), the number of starts per hour can be increased by adding a fan. For more details, please refer to the product datasheets on our website www.schneider-electric.com

## Altivar 12 ultra-compact variable speed drives for simple machine requirements



Altivar 12 drives with heatsink and single-phase supply voltage: 100...120 V 50/60 Hz (1) (2)				
Motor	Power indicated on plate in kW (3)	0.18	0.37	0.75
	Power indicated on plate in HP (3)	0.25	0.5	1
Altivar 12	Max. continuous output current (3)	1.4	2.4	4.2
	Embedded communication	Modbus Serial Line		
Application intelligence	Embedded functions			
Withstand to harsh environment	Up to 60 °C with derating			
Dimensions: W x H x D (mm) (4)	72 x 143 x 102		72 x 143 x 121	
Reference	ATV12 H018F1 (4)	ATV12 H037F1	ATV12 H075F1	



Altivar 12 drives with heatsink and single-phase supply voltage: 200...240 V 50/60 Hz (1) (2)							
Motor	Power indicated on plate in kW (3)	0.18	0.37	0.55	0.75	1.5	2.2
	Power indicated on plate in HP (3)	0.25	0.55	0.75	1	2	3
Altivar 12	Max. continuous output current (3)	1.4	2.4	3.5	4.2	7.5	10
	Dimensions: W x H x D (mm) (4)	72 x 143 x 102		72 x 143 x 121		72 x 143 x 131	
Reference	ATV12 H018M2 (4) (6)	ATV12 H037M2 (6)	ATV12 H055M2 (6)	ATV12 H075M2 (6)	ATV12 HU15M2 (7)	ATV12 HU22M2 (7)	



Altivar 12 drives with heatsink and three-phase supply voltage: 200...240 V 50/60 Hz (1) (2)								
Motor	Power indicated on plate in kW (3)	0.18	0.37	0.75	1.5	2.2	3	4
	Power indicated on plate in HP (3)	0.25	0.55	1	2	3	–	5
Altivar 12	Max. continuous output current (3)	1.4	2.4	4.2	7.5	10	12.2	16.7
	Dimensions: W x H x D (mm) (4)	72 x 143 x 102		72 x 143 x 121		72 x 143 x 131		105 x 143 x 131
Reference	ATV12 H018M3 (4)	ATV12 H037M3	ATV12 H075M3	ATV12 HU15M3	ATV12 HU22M3	ATV12 HU30M3	ATV12 HU40M3	



Accessories for Altivar 12 drives			
Accessory	Simple Loader configuration tool (5)	Multi-Loader configuration tool (5)	USB/RJ45 cable for PC-drive connection
Compatibility	All Altivar 12 variable speed drives		
Reference	VW3A8120	VW3A8121	TSCMCNAM3M002P

Note: Altivar 12 variable speed drives are designed for 3-phase asynchronous motors.  
 (1) Min. (U1) and max. (U2) nominal supply voltage: 100 (U1)...120 V (U2), 200 (U1)...240 V (U2).  
 (2) Altivar 12 variable speed drives are supplied with built-in EMC filters and comply with standard IEC/EN 61800-3. For more information, please refer to the product datasheet on our website www.schneider-electric.com.  
 (3) These values are given for a nominal switching frequency of 4 kHz, for continuous operation. For derated operation, please refer to the product catalog.  
 (4) All dimensions provided are without EMC plate installed.  
 (5) For more information about this tool, please refer to the product datasheet on our website www.schneider-electric.com.

## Altivar Machine ATV320 variable speed drives for simple machine requirements



### ATV320 drives with compact control block and single-phase supply voltage 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
	Power indicated on plate in HP	0.25	0.5	0.75	1	1.5	2	3
<b>Altivar 320</b>	Max. continuous output current (3)	1.5	3.3	3.7	4.8	6.9	8	11
<b>Dimensions: W x H x D (mm) (4)</b>		72 x 143 x 109	72 x 143 x 128	72 x 143 x 138			105 x 142 x 158	
<b>Reference</b>		ATV320 U02M2C	ATV320 U04M2C	ATV320 U06M2C	ATV320 U07M2C	ATV320 U11M2C	ATV320 U15M2C	ATV320 U22M2C

### ATV320 drives with compact control block and three-phase supply voltage 380...500 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.37	0.55	0.75	1.1	1.5	2.2	3	4
	Power indicated on plate in HP	0.5	0.75	1	1.5	2	3	4	5
<b>Altivar 320</b>	Max. continuous output current (3)	1.5	1.9	2.3	3	4.1	5.5	7.1	9.5
<b>Dimensions: W x H x D (mm) (4)</b>		105 x 143 x 158						140 x 184 x 158	
<b>Reference</b>		ATV320 U04N4C	ATV320 U06N4C	ATV320 U07N4C	ATV320 U11N4C	ATV320 U15N4C	ATV320 U22N4C	ATV320 U30N4C	ATV320 U40N4C



### ATV320 drives with book control block and single-phase supply voltage 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
	Power indicated on plate in HP	0.25	0.5	0.75	1	1.5	2	3
<b>Altivar 320</b>	Max. continuous output current (3)	1.5	3.3	3.7	4.8	6.9	8	11
<b>Dimensions: W x H x D (mm) (5)</b>		45 x 325 x 245				60 x 325 x 245		
<b>Reference</b>		ATV320 U02M2B	ATV320 U04M2B	ATV320 U06M2B	ATV320 U07M2B	ATV320 U11M2B	ATV320 U15M2B	ATV320 U22M2B

### ATV320 drives with book control block and three-phase supply voltage 380...500 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.37	0.55	0.75	1.1	1.5	2.2	3	4
	Power indicated on plate in HP	0.5	0.75	1	1.5	2	3	4	5
<b>Altivar 320</b>	Max. continuous output current (3)	1.5	1.9	2.3	3	4.1	5.5	7.1	9.5
<b>Dimensions: W x H x D (mm) (5)</b>		45 x 325 x 245				60 x 325 x 245			
<b>Reference</b>		ATV320 U04N4B	ATV320 U06N4B	ATV320 U07N4B	ATV320 U11N4B	ATV320 U15N4B	ATV320 U22N4B	ATV320 U30N4B	ATV320 U40N4B

Motor	Power indicated on plate in kW	5.5	7.5	11	15
	Power indicated on plate in HP	7.5 <td>10 <td>15 <td>20 </td></td></td>	10 <td>15 <td>20 </td></td>	15 <td>20 </td>	20
<b>Altivar 320</b>	Max. continuous output current (3)	14.3	17	27.7	33
<b>Dimensions: W x H x D (mm) (5)</b>		150 x 232 x 232		180 x 330 x 232	
<b>Reference</b>		ATV320 U55N4B	ATV320 U75N4B	ATV320 D11N4B	ATV320 D15N4B

**Note:** Altivar Machine ATV320 variable speed drives are designed for 3-phase synchronous and asynchronous motors. ATV320 drives are supplied with braking chopper as standard. For braking resistor selection, please refer to the product catalog on our website [www.schneider-electric.com](http://www.schneider-electric.com).

(1) Altivar Machine ATV320 variable speed drives are compliant with Machinery Directive 2006/42/EC. Compliant safety functions are Safe Torque Off (STO), Safe Stop 1 (SS1), Safe Limited Speed (SLS), Safe Maximum Speed (SMS), and Guard Door Lock (GDL).

(2) Altivar Machine ATV320 variable speed drives are supplied with built-in EMC filters and comply with standard IEC/EN 61800-3. For more information, please refer to the product datasheet on our website [www.schneider-electric.com](http://www.schneider-electric.com).

(3) Altivar Machine ATV320 variable speed drives can supply transient output current of 1.5 x In for 60 s for every 10 min. cycle.

(4) For ATV320 drives with compact control block and ATV320 drives with book control > 5.5 kW, EMC plate (or UL type 1 kit) dimensions are not applicable.

(5) For ATV320 drives with book control ≤ 4kW, EMC plate dimensions are applicable.

For more information, please refer to the "Variable speed drives - Altivar Machine ATV320" catalog on our website [www.schneider-electric.com](http://www.schneider-electric.com).

## Communication modules and accessories for ATV320 variable speed drives



Communication buses and networks			
<b>Type of communication module (1)</b>	CANopen daisy chain (2) (3) (4)	CANopen SUB-D9 (2) (3) (4)	CANopen open style (2) (3) (4)
<b>Compatibility</b>	All Altivar Machine ATV320 variable speed drives		
<b>Type of ports</b>	2 RJ45 connectors	1 x 9-way male SUB-D connector	1 x 5-way screw terminal block
<b>Reference</b>	VW3A3608	VW3A3618	VW3A3628

<b>Type of communication module (1)</b>	Modbus TCP and Ethernet/IP network module (3)	PROFIBUS DP V1 communication module (3)	DeviceNet communication module (3)
<b>Compatibility</b>	All Altivar Machine ATV320 variable speed drives		
<b>Type of ports</b>	2 RJ45 connectors	1 x 9-way female SUB-D connector	1 removable 5-way screw connector
<b>Reference</b>	VW3A3616	VW3A3607	VW3A3609

<b>Type of communication module (1)</b>	EtherCat communication module (3)	ProfiNet communication module (3)
<b>Compatibility</b>	All Altivar Machine ATV320 variable speed drives	
<b>Type of ports</b>	2 RJ45 connectors	
<b>Reference</b>	VW3A3601	VW3A3627



Accessories			
<b>Type of accessory</b>	Communication adapter module (1)		
<b>Compatibility</b>	All Altivar Machine ATV320 variable speed drives with compact control block		
<b>Reference (3)</b>	VW3A3600		
<b>Type of accessory</b>	Simple Loader configuration tool (5)	Multi-Loader configuration tool (5)	USB/RJ45 cable for PC-drive connection
<b>Compatibility</b>	All Altivar Machine ATV320 variable speed drives		
<b>Reference</b>	VW3A8120	VW3A8121	TCSMCNAM3M002P

(1) Altivar Machine ATV320 products with a compact control block require the VW3A3600 option adapter module in order to use any optional communication module.

(2) The Modbus serial link always uses the RJ45 communication port. If simultaneous use of the Modbus serial link and the CANopen machine bus is required, a CANopen communication module is needed.

(3) The Altivar Machine ATV320 drive can only take one communication module.

(4) When one of the CANopen communication modules is inserted in the Altivar Machine ATV320 drive, CANopen communication via the RJ45 communication port is disabled.

(5) For more information about this tool, please refer to the product datasheet on our website [www.schneider-electric.com](http://www.schneider-electric.com).

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# Altistart soft starters Altivar variable speed drives

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