ENGLISH

Quick Start Guide - ATV32



A A DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- · Read and understand this quick start guide before performing any procedure with this drive.
- The user is responsible for compliance with all international and national electrical code requirements with respect to grounding of all equipment.
- Many parts of this drive, including the printed circuit boards, operate at the line voltage. DO NOT TOUCH. Use only electrically insulated tools.
- DO NOT touch unshielded components or terminal strip screw connections with voltage present.
- DO NOT short across terminals PA/+ and PC/- or across the DC bus capacitors.
- Before servicing the drive:
 - Disconnect all power, including external control power that may be present.
 - Place a "DO NOT TURN ON" label on all power disconnects.
 - Lock all power disconnects in the open position.
 - WAIT 15 MINUTES to allow the DC bus capacitors to discharge.
 - Measure the voltage of the DC bus between the PA/+ and PC/- terminals to ensure that the voltage is less than 42 Vdc.
 - If the DC bus capacitors do not discharge completely, contact your local Schneider Electric representative. Do not repair or operate the drive
- Install and close all covers before applying power or starting and stopping the drive.

Failure to follow these instructions will result in death or serious injury.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this product.

Information below is designed to use single drive connected to single asynchronous motor with a motor cable length less than 50 meters (164 ft).

In any other case, consult the ATV32 installation and programming manuals on www.schneider-electric.com.

 $Check your cables before connecting the drive with motor (length, power, shielded or unshielded). Motor cable length is _____(<50 \, meters, 164 \, ft)$

1 Check the delivery of the drive

Remove ATV32 from the packaging and check that it has not been damaged

A WARNING

DAMAGED DRIVE EQUIPMENT

Do not operate or install any drive or drive accessory that appears damaged.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

• Check that the drive reference printed on the label is the same as that on the delivery note corresponding to the purchase order.

Write the drive Model Reference: ______ and Serial Number: ______

• For ATV32H0••M2, H0••N4, HU1•N4, ATV32HU••M2, ATV32HU22N4, U30N4, U40N4, remove the output connector from the packaging and check that it has not been damaged.

ATV32H037M2 0,37KW - 1/2HP - 220/ 240V ~

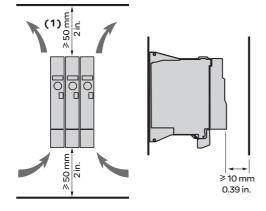
2 Check the line voltage compatibility

• Check that the line voltage is compatible with the supply range of the drive.

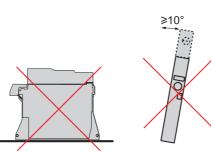
Drive range: ATV32 $\bullet \bullet \bullet \bullet$ M2 = 200 ... 240 V single phase - ATV32 $\bullet \bullet \bullet \bullet$ N4 = 380 ... 500 V three-phase

Mount the drive vertically

For a surrounding air temperature up to 50 °C (122°F), see installation manual on www.schneider-electric.com for other thermal conditions.



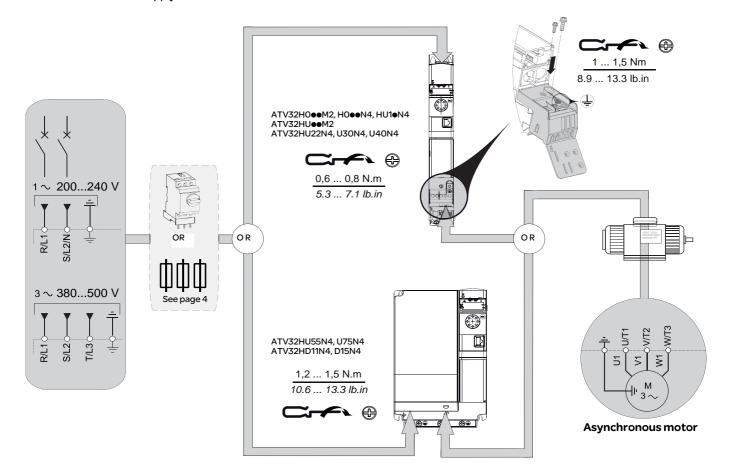
(1) Minimum value corresponding to thermal contrainst. On ATV32H0●●M2, H0●●N4, HU1●N4, ATV32HU●●M2, ATV32HU22N4, U30N4, U40N4, a 150 mm (5.9 in) clearance may help to connect the ground.





4 Connect the drive: Power

- Wire the drive to the ground.
- Check circuit breaker rating or fuse rating (see recommended branch circuit protection page 4).
- Check that the motor voltage is compatible with the drive voltage. Motor voltage _____Volts.
- Wire the drive to the motor.
- Wire the drive to the line supply.



AA DANGER

HAZARD OF FIRE OR ELECTRIC SHOCK

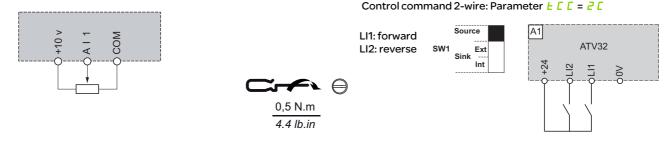
- To avoid overheating or loss of contact, connections must be carried out according to the cable sizes and tightening torques visible on the label stuck on the ATV32.
- The use of multi-wire cable without a lug is forbidden for the mains connection.
- For ATV32H0••M2, H0••N4, HU1•N4, ATV32HU••M2, ATV32HU22N4, U30N4, U40N4, the stripping length of the output power and braking resistor cables must be shorter than 10 mm (0.39 in.)
- Carry-out a pull out test to check that terminal screws are correctly tighten.

Failure to follow these instructions will result in death or serious injury.

5 Connect the drive: Control by external reference $(F_r \mid = F \mid I \mid)$

• Wire the speed reference:

· Wire the command:



6 Apply power to the drive

- Check that used Logic Inputs are not active (LI1, LI2 see drawing 5).
- Apply power to the drive.
- At first power up, drive displays **b** F r, in the menu **5 I** Π [SIMPLY START]

Set motor parameters for asynchronous motor ②.

See on the motor Nameplate to set the following parameters .

Menu	Code	Description	Factory setting	Customer setting
Conf > FULL > 5 IN - [SIMPLY START]	bFr	[Standard mot. freq]: Standard motor frequency (Hz)	50.0	
	n P r	[Rated motor power]: Nominal motor power on motor nameplate (KW)	drive rating	
	U n 5	[Rated motor volt.]: Nominal motor voltage on motor nameplate (V)	drive rating	
	nΓr	[Rated motor current.]: Nominal motor current on motor nameplate (A)	drive rating	
	Fr5	[Rated motor freq.]: Nominal motor frequency on motor nameplate (Hz)	50.0	
	n 5 P	[Rated motorspeed]: Nominal motor speed on motor nameplate (rpm)	drive rating	

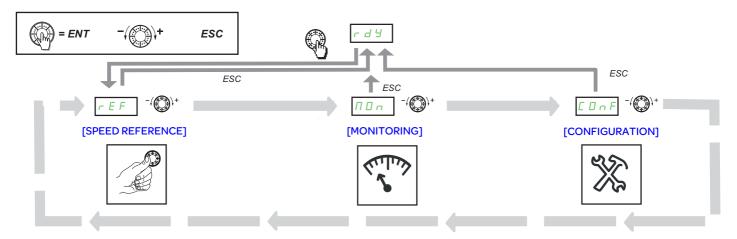
(2) for synchronous motor, consult the ATV32 programming manual on www.schneider-electric.com.

Set basic parameters

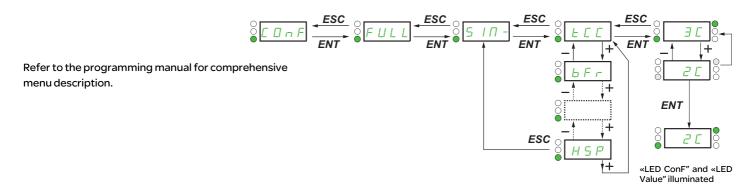
Menu	Code	Description	Factory setting	Customer setting
Conf > FULL > 5 IN- [SIMPLYSTART]	ACC	[Acceleration]: Acceleration time (s)	3. 0	
	d E C	[Deceleration]: Deceleration time (s)	3. 0	
	L 5 P	[Low speed]: Motor frequency at minimum reference (Hz)	0. 0	
	H S P	[High speed]: Motor frequency at maximum reference (Hz)	50.0	

9 Start the motor

n Annex: Menus structure



A dash appears after menu codes to differentiate them from parameter codes. Example: [SIMPLY START] 5 / Π - , E Γ parameter.



Short-circuit rating and branch circuit protection.

Reference	Voltage (Y)	Input withstand rating (1)	Output interrupt rating (X)(2)	Branch Circuit protection (Z1)	Rating (Z2)
	V	KA	KA		Α
ATV32H018M2	200-240	1	5	Fast Acting Class CC Ferraz ATDR	7
ATV32H037M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	15
ATV32H055M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	25
ATV32H075M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	25
ATV32HU11M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	25
ATV32HU15M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	40
ATV32HU22M2	200-240	1	5	Fast Acting Class J Ferraz HSJ	45
ATV32H037N4	380-500	5	5	Fast Acting Class CC Ferraz ATDR	6
ATV32H055N4	380-500	5	5	Fast Acting Class CC Ferraz ATDR	6
ATV32H075N4	380-500	5	5	Fast Acting Class CC Ferraz ATDR	6
ATV32HU11N4	380-500	5	5	Fast Acting Class CC Ferraz ATDR	12
ATV32HU15N4	380-500	5	5	Fast Acting Class CC Ferraz ATDR	12
ATV32HU22N4	380-500	5	5	Fast Acting Class J Ferraz HSJ	15
ATV32HU30N4	380-500	5	5	Fast Acting Class J Ferraz HSJ	17.5
ATV32HU40N4	380-500	5	5	Fast Acting Class J Ferraz HSJ	25
ATV32HU55N4	380-500	22	22	Fast Acting Class J Ferraz HSJ	40
ATV32HU75N4	380-500	22	22	Fast Acting Class J Ferraz HSJ	40
ATV32HD11N4	380-500	22	22	Fast Acting Class J Ferraz HSJ	60
ATV32HD15N4	380-500	22	22	Fast Acting Class J Ferraz HSJ	70

Recommended fuse ratings for UL and CSA requirements. Components for use together in accordance with standard UL508

Suitable For Use On A Circuit Capable Of Delivering Not More Than $_X__rms$ Symmetrical Amperes, $_Y__$ Volts Maximum, When Protected by $_Z1__$ with a Maximum rating of $_Z2__$.

- (1) Input withstand rating is that for which the product has been designed thermally. Installation on a supply greater than this level will require additional inductance to satisfy this level.
- (2) Output interrupt rating relies on Integral solid state short circuit protection. This does not provide branch circuit protection. Branch circuit protection must be provided in accordance with the National Electrical Code and any additional local codes. This is dependant on the type of installation.