ENGLISH

Quick Start Guide - ATV32

S1A4171503

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Only appropriately trained persons who are familiar with and understand the contents of this manual and all other pertinent product documentation and who have received safety training to recognize and avoid hazards involved are authorized to work on and with this drive system. Installation, adjustment, repair and maintenance must be performed by qualified personnel.
- The system integrator is responsible for compliance with all local and national electrical code requirements as well as all other applicable regulations with respect to grounding of all equipment.
- Many components of the product, including the printed circuit boards, operate with mains voltage. Do not touch. Use only electrically insulated tools.
- Do not touch unshielded components or terminals with voltage present.
- Motors can generate voltage when the shaft is rotated. Prior to performing any type of work on the drive system, block the motor shaft to prevent rotation.
- AC voltage can couple voltage to unused conductors in the motor cable. Insulate both ends of unused conductors of the motor cable.
- Do not short across the DC bus terminals or the DC bus capacitors or the braking resistor terminals.
- Before performing work on the drive system:
  - Disconnect all power, including external control power that may be present.
  - Place a "Do Not Turn On" label on all power switches.
  - Lock all power switches in the open position.
  - Wait 15 minutes to allow the DC bus capacitors to discharge. The DC bus LED is not an indicator of the absence of DC bus voltage that can exceed 800 Vdc.
  - Measure the voltage on the DC bus between the DC bus terminals using a properly rated voltmeter to verify that the voltage is < 42 Vdc.
  - If the DC bus capacitors do not discharge properly, contact your local Schneider Electric representative.
- Install and close all covers before applying voltage.

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).** Check your cables before connecting the drive with motor (length, power, shielded or unshielded).

In any other case, consult the ATV32 installation manual (S1A28686) and programming manual (S1A28692) on www.schneider-electric.com.

1 Check the delivery of the drive

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

⚠ WARNING

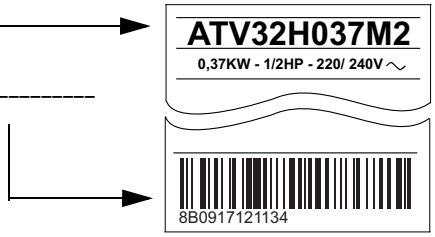
DAMAGED DRIVE EQUIPMENT

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 matches the delivery note and corresponding purchase order.

Write the drive Model Reference: _____ _____and Serial Number: _____



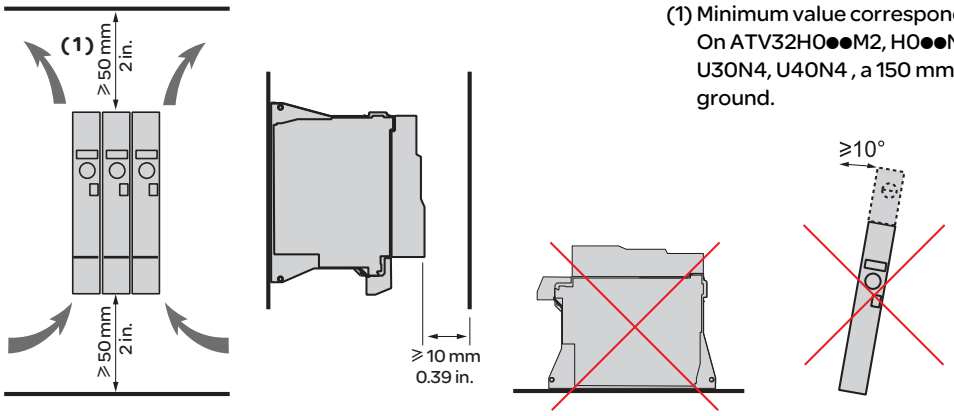
- For ATV32H0●●M2, H0●●N4, HU1●N4 , ATV32HU●●M2, ATV32HU22N4, U30N4, U40N4, remove the output connector from the packaging and check that it has not been damaged.

2 Check the line voltage compatibility

- Check that the **line voltage** is compatible with the supply range of the drive.
  Line voltage _____ Volts Drive voltage range _____ Volts
  Drive range: ATV32●●●●M2 = 200/240 V single phase - ATV32●●●●N4 = 380/500V three-phase

❸ Mount the drive vertically

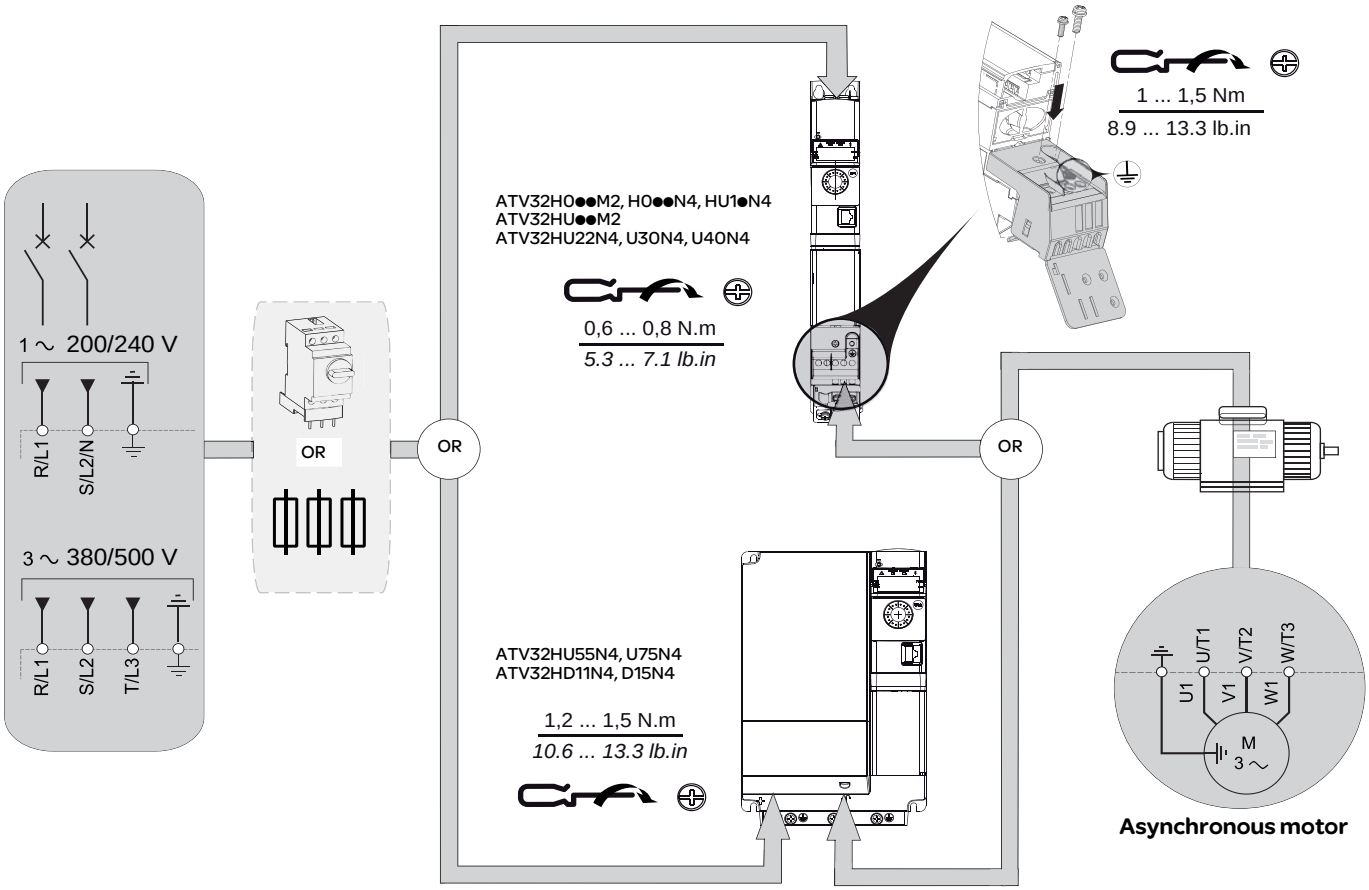
For a surrounding air temperature up to 50 °C (122°F). See installation manual (S1A28686) on www.schneider-electric.com for other mounting and thermal conditions.



(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.

❹ Connect the drive: Power

- Wire the drive to the ground.
- Check circuit breaker rating or fuse rating. (See SCCR annex)
- 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.



⚠⚠ DANGER

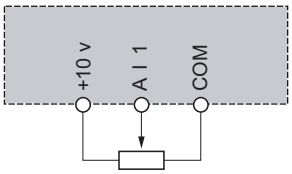
HAZARD OF FIRE OR ELECTRIC SHOCK

- 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.

❺ Connect the drive: Control by external reference (Fr 1 = AI1)

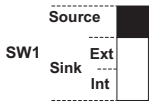
- Wire the speed reference:

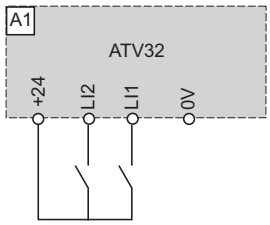


- Wire the command:

Control command 2-wire: Parameter tCC = 2C

LI1: forward
LI2: reverse







0,5 N.m
4.4 lb.in

❻ Apply power to the drive

- Ensure that used Logic Inputs are not active (LI1, LI2 see drawing ❺).
- Apply power to the drive.
- At first power up, the drive displays bFr, in the menu SIM- [SIMPLY START]

❼ Set motor parameters for asynchronous motor (2).

- Refer to the motor Nameplate for the following parameters settings .

Menu	Code	Description	Factory setting	Customer setting
ConF > FULL > SIM- [SIMPLY START]	bFr	[Standard mot. freq]: Standard motor frequency (Hz)	50.0	
	nPr	[Rated motor power]: Nominal motor power on motor nameplate (KW)	drive rating	
	UnS	[Rated motor volt.]: Nominal motor voltage on motor nameplate (V)	drive rating	
	nCr	[Rated motor current.]: Nominal motor current on motor nameplate (A)	drive rating	
	FrS	[Rated motor freq.]: Nominal motor frequency on motor nameplate (Hz)	50.0	
	nSP	[Rated motor speed]: Nominal motor speed on motor nameplate (rpm)	drive rating	
	ItH	[Mot. therm. current]: Nominal motor current on motor nameplate (A)	drive rating	

(2)for synchronous motor, consult the ATV32 programming manual (S1A28692) on www.schneider-electric.com.

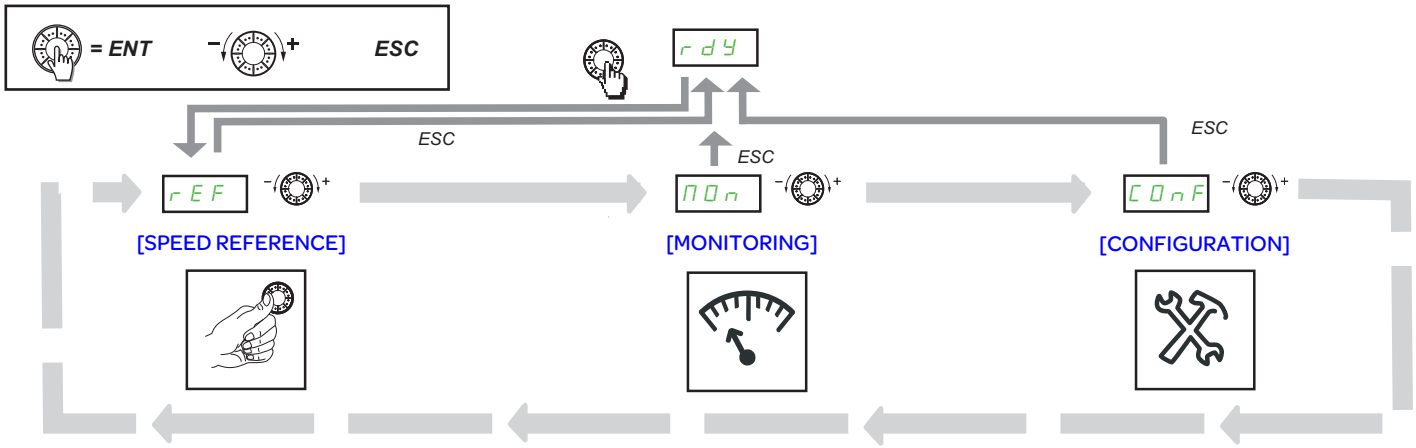
❽ Set basic parameters

Menu	Code	Description	Factory setting	Customer setting
ConF > FULL > SIM- [SIMPLY START]	ACC	[Acceleration]: Acceleration time (s)	3.0	
	dEC	[Deceleration]: Deceleration time (s)	3.0	
	LSP	[Low speed]: Motor frequency at minimum reference (Hz)	0.0	
	HSP	[High speed]: Motor frequency at maximum reference (Hz)	50.0	

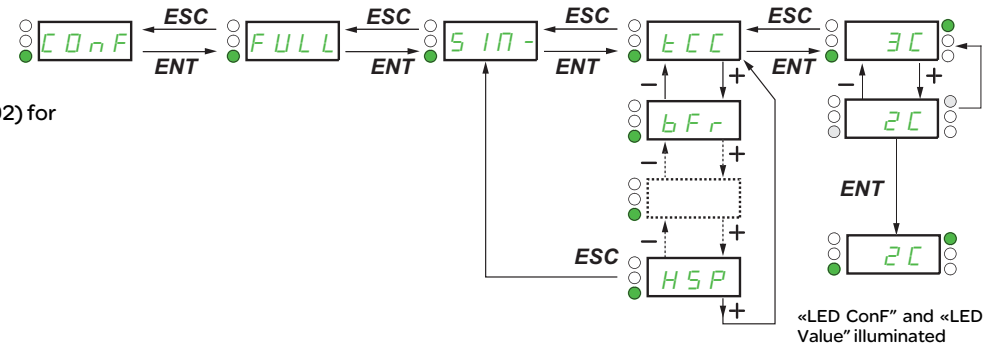
❾ Start the motor

- Switch on LI1

Menus structure



A dash appears after menu codes to differentiate them from parameter codes. Example: [SIMPLY START] SIN-, tCC parameter.



Refer to the programming manual (S1A28692) for comprehensive menu descriptions.