ENGLISH

Quick Start Guide - ATV303

S1B4488701

1 Introduction

This document guides the customer to realize a basic installation, wiring and functional debugging. If you need more information, please refer to instructions sheets and ATV303 user manual (S1B39938) on www.schneider-electric.com.

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Read and understand this quick start guide before performing any procedure with this drive. Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.
- 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 PB.
- 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. LED indicator on the inverter panel is not the accurate indicator for the absence of DC bus voltage.
- Install and close all covers before applying power.

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

2 Check the delivery of the drive

- Remove ATV303 from the packaging and check that it has not been damaged..

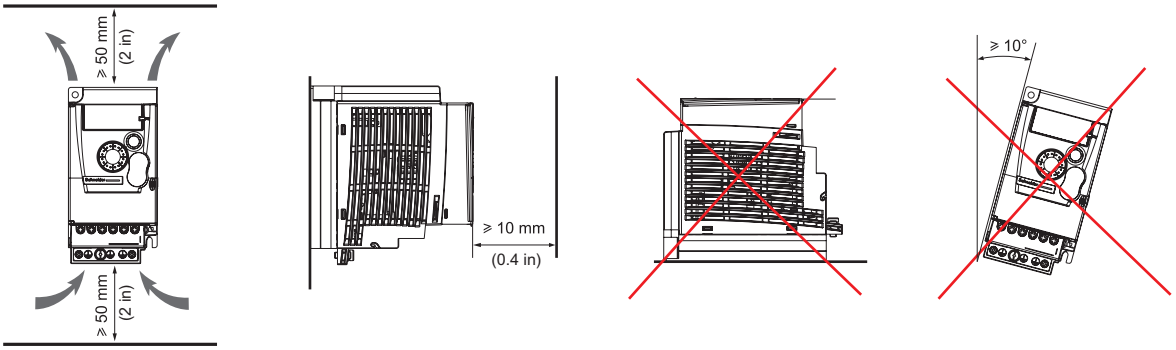
⚠ WARNING

DAMAGED DRIVE EQUIPMENT

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

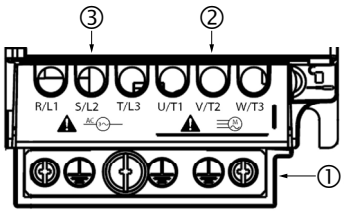
Failure to follow these instructions can result in death, serious injury, or equipment damage.

3 Mount the drive vertically



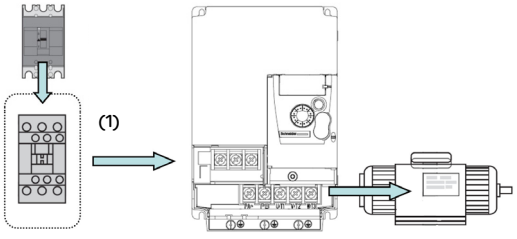
4 Connect the drive: Power

- Wire the drive to the ground. The grounding screw is shown in ①
- Wire the drive to the motor. The motor terminals are shown in ②
- Wire the drive to the main power supply, the power supply terminals are shown in ③



- Wire size and circuit breaker selection according to the drive

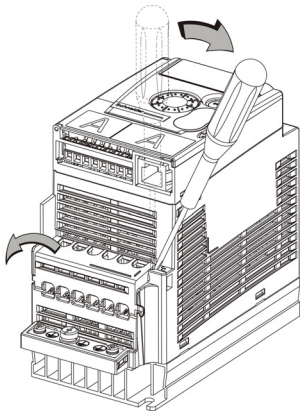
circuit-breaker



(1) TeSys contactor may be choosen if needed.

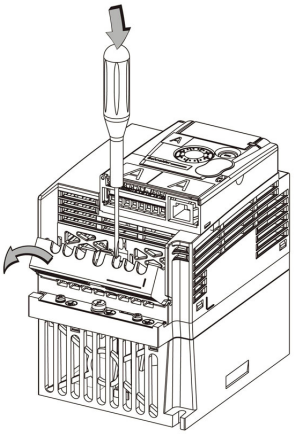
Drive	Circuit-breaker	Contactor	Rated current	Wire size	Mounting torque
ATV303H037N4●	GV2ME07C	LC1-D09●●●●N	2.5 A	2.5 mm² (14 AWG)	0.8 - 1.0 N·m (7 to 8.8 lb.in)
ATV303H075N4●	GV2ME08C	LC1-D09●●●●N	4 A		
ATV303HU15N4●	GV2ME14C	LC1-D09●●●●N	10 A		
ATV303HU22N4●	GV2ME14C	LC1-D09●●●●N	10 A		
ATV303HU30N4●	GV2ME16C	LC1-D09●●●●N	14 A		1.2 - 1.4 N·m (10.6 - 12.4 lb.in)
ATV303HU40N4●	GV2ME16C	LC1-D09●●●●N	14 A	4 mm² (12 AWG)	
ATV303HU55N4●	GV2ME22C	LC1-D09●●●●N	25 A		
ATV303HU75N4●	GV2ME32C	LC1-D18●●●●N	32 A	10 mm² (6 AWG)	2.2 - 2.4 N·m (19.5 - 21.2 lb.in)
ATV303HD11N4●	NCS100S340MA	LC1-D25●●●●N	40 A		

- Power terminal cover opening method



For drives 0.37 kW to 0.75 kW

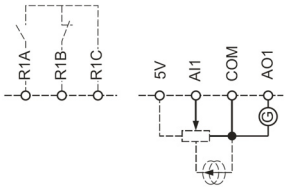
1. Put the screwdriver into the buckle and stand up (don't be too forceful).
2. Turn the screwdriver to the right, at the same time pull the cover outward (see arrow).
3. Remove the cover.



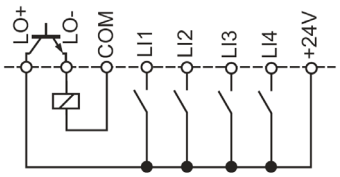
For drives 1.5 kW to 11 kW

1. Put the screwdriver into the buckle and stand up (don't be too forceful).
2. Pull the cover outward (see arrow).
3. Remove the cover.

5 Connect the drive: Control choice



Factory setting channel:
controlled by terminal 401 = 1



LI1 = Forward / LI2 = Undefined

Logic input type is positive logic:
203 = 00

Control type is 2-wire control :
201 = 00

Logic input type is positive logic:
100 = 00

NOTICE

DEGRADED PERFORMANCE

- Keep the power wire isolation with the weak-signal circuits devices (sensors, PLCs, measuring devices, video, telephone). Try to cross control wires and power wires at 90°.
- To reduce the impact of EMC, shielded cable is recommended. Ensure that the cable shield and the metal cabinet have a reliable connection.
- To reduce motor noise and leakage current:
  - shorten the motor cable length, unshielded cable < 50 m (164 ft) or shielded cable < 25 m (82 ft),
  - install Motor choke.

Failure to follow these instructions can result in equipment damage.

6 Apply power to the drive

- Check that used Logic Inputs are not active.
- Apply power to the drive.
- Drive displays (see On next start-ups)

7 Start the motor

8 Set basic parameters

A dash appears after menu codes to differentiate them from parameter codes. Example, (501 -) represents [Ramp menu], (501.0) represents [acceleration time] parameters.