Quick Start Guide - ATV32

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.

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**1 Check the delivery of the drive**

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

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**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 ATV32H037M2, H037N4, HU1N4, ATV32HU037M2, ATV32HU22N4, U30N4, U40N4, remove the output connector from the packaging and check that it has not been damaged.

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2 Check the line voltage compatibility

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

<table>
<thead>
<tr>
<th>Line voltage</th>
<th>Drive voltage range</th>
</tr>
</thead>
<tbody>
<tr>
<td>___________ Volts</td>
<td>___________ Volts</td>
</tr>
</tbody>
</table>

Drive range: ATV32H037M2 = 200/240 V single phase - ATV32H037N4 = 380/500V three-phase
3 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 constrains.

On ATV32H0•M2, H0•N4, HU0•N4, ATV32H•M2, ATV32HU•N4, 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 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, HU0•N4, ATV32H•M2, ATV32HU•N4, 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.
Connect the drive: Control by external reference ($F_r = A11$)

- Wire the speed reference:
  
  ![Speed Reference Wiring Diagram]

- Wire the command:
  
  ![Command Wiring Diagram]

Apply power to the drive

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

Set motor parameters for asynchronous motor (2).

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

<table>
<thead>
<tr>
<th>Menu</th>
<th>Code</th>
<th>Description</th>
<th>Factory setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>$CONF &gt; FULL &gt; SIM\rightarrow$</td>
<td>$bFr$</td>
<td>[Standard mot. freq.]: Standard motor frequency (Hz)</td>
<td>$50.0$</td>
</tr>
<tr>
<td></td>
<td>$nP_r$</td>
<td>[Nominal motor power]: Nominal motor power on motor nameplate (KW)</td>
<td>drive rating</td>
</tr>
<tr>
<td></td>
<td>$UnS$</td>
<td>[Rated motor volt.]: Nominal motor voltage on motor nameplate (V)</td>
<td>drive rating</td>
</tr>
<tr>
<td></td>
<td>$nCr$</td>
<td>[Rated motor current.]: Nominal motor current on motor nameplate (A)</td>
<td>drive rating</td>
</tr>
<tr>
<td></td>
<td>$FrS$</td>
<td>[Rated motor freq.]: Nominal motor frequency on motor nameplate (Hz)</td>
<td>$50.0$</td>
</tr>
<tr>
<td></td>
<td>$nSP$</td>
<td>[Rated motor speed]: Nominal motor speed on motor nameplate (rpm)</td>
<td>drive rating</td>
</tr>
<tr>
<td></td>
<td>$lTH$</td>
<td>[Mot. therm. current]: Nominal motor current on motor nameplate (A)</td>
<td>drive rating</td>
</tr>
</tbody>
</table>

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

Set basic parameters

<table>
<thead>
<tr>
<th>Menu</th>
<th>Code</th>
<th>Description</th>
<th>Factory setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>$CONF &gt; FULL &gt; SIM\rightarrow$</td>
<td>$ACC$</td>
<td>[Acceleration]: Acceleration time (s)</td>
<td>$3.0$</td>
</tr>
<tr>
<td></td>
<td>$dEC$</td>
<td>[Deceleration]: Deceleration time (s)</td>
<td>$3.0$</td>
</tr>
<tr>
<td></td>
<td>$LSP$</td>
<td>[Low speed]: Motor frequency at minimum reference (Hz)</td>
<td>$0.0$</td>
</tr>
<tr>
<td></td>
<td>$HSP$</td>
<td>[High speed]: Motor frequency at maximum reference (Hz)</td>
<td>$50.0$</td>
</tr>
</tbody>
</table>

Start the motor

- Switch on LI1
Menus structure

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

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