

Steps for Setting-Up the Drive

1

INSTALLATION

Refer to the installation manual.

2

Switch On the drive without active run command.

3

Configure:

- The nominal frequency of the motor **[Motor Standard]** *b F r* if this is not 50 Hz.
- The motor parameters including **[Motor Th Current]** *, L H* in the **[Motor parameters]** *Π P R* - menu, only if the factory configuration of the drive is not suitable.
- The application functions in the **[Complete settings]** *ε s ε* - menu, only if the factory configuration of the drive is not suitable.

4

In the [Pump start stop] *P S ε* - menu, adjust the following parameters:

- [Acceleration]** *A C C* and **[Deceleration]** *d E C*
- [Low speed]** *L S P* and **[High Speed]** *H S P*

5

Start the drive.

Drive systems may perform unexpected movements because of incorrect wiring, incorrect settings, incorrect data or other errors.

⚠ WARNING**UNANTICIPATED EQUIPMENT OPERATION**

- Carefully install the wiring in accordance with the EMC requirements.
- Do not operate the product with unknown or unsuitable settings or data.
- Perform a comprehensive commissioning test.

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

Tips

Use the **[Config. Source] F C 5** , parameter (*see page 598*) to restore the factory settings at any time.

NOTE: The following operations must be performed for optimum drive performance in terms of accuracy and response time:

- Enter the values indicated on the motor nameplate in the **[Motor parameters] P P R** - menu.
- Perform autotuning with the motor cold and connected using the **[Autotuning] E u n** parameter.

Software Enhancements

Overview

Since the Altivar Process was first launched, it has benefited from the addition of several new functions. The software version has been updated to V2.5.

Although this documentation relates to version V2.5, it can still be used with earlier versions.

Enhancements Made to Version V2.5 in Comparison to V2.4

In the **[Motor parameters]** $\Pi P A$ - menu, the **[DC Bus Ripple]** $d C r$ - menu is available, including its related parameters.

Enhancements Made to Version V2.4 in Comparison to V2.3

Improvement of the function **[Stop and go]** $S E G$ - with a time parameter.

[Output Contactor Cmd] $\partial C C$ - function is now available.

Improvement of the password protection to limit the access to the menus.

Enhancements Made to Version V2.3 in Comparison to V2.2

Reluctant motor control law is added. See in the **[Complete Settings]** $C S E$ - , **[Motor Parameters]** $\Pi P A$ - menu.

The virtual analog input type is now settable with **[AIVx type]** $A V X E$ parameters.

Support of bidirectional scaled analog inputs, see **[Aix range]** $A , X L$ parameters.

[Input phase loss] $P H F$ is cleared as soon as its cause has been removed.

Enhancements Made to Version V2.2 in Comparison to V1.9

Support of VW3A3619 POWERLINK fieldbus module.

In the **[Motor control]** $d r C$ - menu, "Output Voltage Management and Overmodulation" function is added.

A new possible behavior is added for the STOP/RESET key, see **[Stop Key Enable]** $P S E$ parameter.

Enhancements Made to Version V1.9 in Comparison to V1.8

Firmware evolution to support Altivar Process Modular offer.

In the **[Catch on Fly]** $F L r$ - menu, a new selection has been added to allow the function to be active after stop types different than freewheel.

Enhancements Made to Version V1.8 in Comparison to V1.7

Firmware evolution to support ATV.....S6• and ATV.....Y6 (600 Vac and 500/690 Vac) catalog numbers.

In the **[Catch on the fly]** $F L r$ - Menu, a new method to estimate the speed has been added. The selection can be done through the parameter **[Catch On Fly Mode]** $C \partial F \Pi$. In factory setting, the speed estimation is same as previous software versions.

In the Error detection disable $\iota n H$ - menu, **[Forced Run]** $\iota n H 5$ and **[Forced Run Ref]** $\iota n H r$ parameter have been added.

Enhancements Made to Version V1.7 in Comparison to V1.6

Support of VW3A3725 BACnet MS/TP fieldbus module.

Enhancements Made to Version V1.6 in Comparison to V1.5

MultiDrive Link feature is available on ATV600 drives using a VW3A3721 EthernetIP/ModbusTCP fieldbus module.

Support of Multi Drives (1 Master drive and up to 5 slaves) and Multi Masters (1 Master only drive and up to 5 Masters or Slaves drives) architectures in **[Booster Control]** $b 5 E$ - and **[Level Control]** $L V L$ - functions.

Improvements and new functionalities on **[Booster Control]** $b 5 E$ - and **[Level Control]** $L V L$ - functions can be found in their related menus.

An output of the drive can be affected to value **[HMI cmd.] b n P**. This output is active when the Local/Remote key of Graphic Display Terminal is pressed and command and reference values comes from Graphic Display Terminal.

Enhancements Made to Version V1.5 in Comparison to V1.4

Support of VW3A3720 EthernetIP/ModbusTCP fieldbus module.

Two virtual analog inputs has been added in **[Input/Output] i o -**, **[Sensor Assignment] 5 5 C -** menu.

Enhancements Made to Version V1.4 in Comparison to V1.3

Unification of Altivar Process ATV600 software version for all the product catalogue numbers.

Enhancements Made to Version V1.3 in Comparison to V1.2

In the **[Dashboard] d 5 H -** menu, the content of the tabs is improved for pumps and fan applications.

In the **[Complete settings] C 5 E -** menu, the **[Macro Configuration] n C r -** submenu is added with the **[Application Selection] A P P E** parameter. It allows to hide unnecessary parameters according to the selected application type.

In the **[Pump functions] P F E -** menu, **[Booster Control] b 5 E -** and **[Level Control] L u L -** functions are available, including their related parameters and the settings for multi-pump architecture.

A new possible setting **[Rotational Current Injection] r C i** is added for synchronous motor **[Angle setting type] A 5 E .**

Up to 4 QR codes customizable with the commissioning software are displayed in **[QR code] q r C -** menu.

Enhancements Made to Version V1.2 in Comparison to V1.1

Factory setting	Enhancements
[Output Short Circuit Test] 5 E r E	This function is now enabled in factory configuration and is accessible in the [Motor monitoring] n o P - menu

Menu	Parameter	Enhancements
[Motor parameters] n P A -	[Motor Control Type] C E E	[SYN_U VC] 5 Y n u : motor control type specific for permanent magnet synchronous motors
[Sleep/Wakeup] 5 P W -	[Sleep Detect Mode] 5 L P n	Replacement of [Sensor] 5 n S r : system enters in sleep mode on sensor condition by: <ul style="list-style-type: none"> • [Flow] L F: system enters in sleep mode on low flow • [Pressure] H P: system enters in sleep mode on high pressure • [Multiple] o r: system enters in sleep mode on multiple-OR condition Addition of possible pressure sensor assignment and configuration for sleep function: <ul style="list-style-type: none"> • [Alx Sensor config.] 5 o A X - • [AIV1 Sensor Config.] 5 o V l - • [Sleep Pressure Level] 5 L P L
	[Wake Up Mode] W u P n	Addition of [Pressure] L P : wake up on low-pressure condition Addition of possible pressure sensor assignment and configuration for wake-up function: <ul style="list-style-type: none"> • [Alx Sensor config.] W o A X - • [AIV1 Sensor Config.] W o V l - • [Wake Up Press Level] W u P L
[Pipe fill] P F i -	[Pipe Fill on Wake Up] P F W u	New parameter
[Counter Management] E L E -	[Fan operation Time] F c P E	Replacement by [Fan operation Time] F P b E (32 bits)
[Data] n E d -	[% error EMF sync] r d A E	This parameter is now accessible with the Graphic Display Terminal