



1336 PLUS Adjustable Frequency AC Drive User Manual

Firmware 4.xx

Read Carefully Before Installation!

This document summarizes the new features of Firmware Version 4.xx as explained in the English manual (dated December, 1996). Updated translations are not currently available. However, most of the material in the supplied translated manual is still valid, with the exception of some programming information.



ATTENTION: This product is either a 1336 PLUS AC Drive equipped with Sensorless Vector firmware, V4.xx or a user installable Language Module, V4.xx.

This firmware provides additional features and significantly different performance than previous firmware versions. Some parameters have been added, moved, changed or eliminated. Thus, operation may be different than previous versions. Resolution on some parameters has been changed to 0.1 units. Values passed to these parameters from a communications device such as a PLC[®] may cause different operation than expected. Users with PLC or other SCANport[™] communications devices must make the appropriate programming changes to provide proper data to the drive. Failure to do so may result in personal injury and/or equipment damage.

To minimize compatibility issues when this product is used to replace a product with older firmware versions, the significant changes, precautions and/or actions are listed below.

Read all precautions and explanations carefully. Make appropriate changes for your application. If you do not understand the impact on performance, contact Rockwell Automation before proceeding to use the equipment.

Sensorless Vector

This mode replaces Volts/Hertz as the factory default motor control method. Out of the box performance is equal to or better than the performance of previous firmware revisions in most applications. Volts/Hertz mode (with Manual Boost Selection) is available by programming parameter 9 [Control Select] to one of the V/Hz selections.

[DC Boost Select] – Parameter 9

This parameter has been renamed **[Control Select]** and modified to remove the auto boost and fan curve selections. Customers previously using auto boost or fan curves must choose either Standard Boost or use Sensorless Vector as an alternative. Selections for all alternatives are made through the [Control Select] parameter and other adjustments in the Motor Control Group. Refer to the User Manual for details.

Resolution Changes

Parameters below have had their resolution changed to 0.1 units. In some cases this will affect the Minimum, Maximum or Default values. Users with PLC or other SCANport communications devices must make the appropriate programming changes to provide proper data to the drive. Failure to do so may result in personal injury and/or equipment damage. Refer to the new User Manual for parameter settings or changes. The parameters affected are:

Minimum Freq	Base Frequency	Accel Time 1	DC Hold Time	Decel Time 1
Maximum Freq	Break Freq	Accel Time 2	S Curve Time	Decel Time 2

Phase Lock Loop

This feature has been eliminated from 4.xx firmware by removing the selection from parameter 77 [Speed Control]. Older firmware versions are still available for applications requiring Phase Lock Loop. Contact Rockwell Automation or your local Allen–Bradley distributor.

Parameter Rename

The following functions have been removed from 4.xx firmware and the parameters reused for new functions. Users with PLC or other SCANport communications devices must make the appropriate programming changes to assure that the data sent to these parameters is appropriate for the new functions.

Parameter 84	[Analog Invert] reused for [Power OL Count]
Parameter 169	[Run/Accel Boost] reused for [Boost Slope]
Parameter 192	[KI Amps] reused for [Flux Amps Ref]
Parameter 194	[KI Volts] reused for [IR Drop Volts]

Slip Compensation

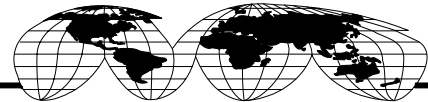
Slip compensation is now the factory default speed control method. Since slip comp is active, output frequency is dependent on both frequency command and motor load.

Refer to 1336 PLUS-5.0 User Manual dated December, 1996 for details on parameter programming.



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