

# YASKAWA AC Drive GA800 Supplemental Manual

### Introduction

Thank you for purchasing YASKAWA AC Drive GA800.

This supplemental manual describes the functions added with a GA800 software upgrade (PRG: 09013), and should be read to ensure proper usage. Read this manual together with the manual (TOEP C710617 37) included with the product and the GA800 Technical Reference (SIEP C710617 37) that can be found on our documentation website. Always observe the safety messages and precautions to ensure correct application of the product.

### **Applicable Software Version**

This manual applies to GA800 for software versions PRG: 09013 or later.

The software version is indicated on the nameplate affixed to the side of the product, and also can be viewed by using monitor parameter *U1-25*.

### **Modified Contents**

This supplemental manual explains about specification change and corrections for the status of digital input/output terminals during Auto-Tuning.

- 1. Specification change: Status of the digital output during Z-Pulse Offset Tuning
- 2. Correction: Status of the digital output during PM Motor Parameter Settings and Motor Parameter Setting

## 1. Specification Change for the Status of the Digital Output during Z-Pulse Offset Tuning

The status of the output terminal during Z-Pulse Offset Tuning is changed as follows.

- $\cdot$  Software version PRG: 09012 or earlier models: Keeps the status at the start of Auto-Tuning.
- $\cdot$  Software version PRG: 09013 or later models: Functions the same as during usual operation.

Refer to Table 1 for more information.

### 2. Corrections for the Status of the Digital Outputs during PM Motor Parameter Settings and Motor Parameter Setting

PM Motor Parameter Settings and Motor Parameter Setting

Wrong: Disabled

Correct: Keeps the status at the start of Auto-Tuning.

Refer to Table 1 for more information.

#### Table 1. Modified Contents (Specification Change and Error Corrections)

#### Underlined texts show modifications.

			of Input/Output Termi		
Before Modifications	Auto-Tuning Type		Mode	Digital Input	Digital Output
	Induction Motor Auto- Tuning	Rotational	Rotational Auto-Tuning	Disabled	Functions the same as during normal operation.
		Stationary	Stationary Auto-Tuning	Disabled	Maintains the status at the start of Auto-Tuning.
			Stationary Auto-Tuning for Line-to-Line Resistance	Disabled	Maintains the status at the start of Auto-Tuning.
		Rotational	Z-Pulse Offset Tuning	Disabled	Maintains the status at the start of Auto-Tuning.
	PM Motor Auto-Tuning		PM Rotational Auto- Tuning	Disabled	Functions the same as during normal operation.
		Stationary	PM Motor Parameter Settings	Disabled	Disabled
			PM Stationary Auto- Tuning	Disabled	Maintains the status at the start of Auto-Tuning.
			PM Stationary Auto- Tuning for Stator Resistance	Disabled	Maintains the status at the start of Auto-Tuning.
		Stationary	Motor Parameter Setting	Disabled	Disabled
	EZ Tuning		Stationary Auto-Tuning for Line-to-Line Resistance	Disabled	Maintains the status at the start of Auto-Tuning.
		Rotational	Inertia Tuning	Disabled	Functions the same as during normal operation.
	ASR and Inertia Tuning		ASR Tuning	Disabled	Functions the same as during normal operation.
			Deceleration Rate Tuning	Disabled	Functions the same as during normal operation.
			KEB Tuning	Disabled	Functions the same as during normal operation.
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	Tabl	e 4.16 Status	of Input/Output Termi	nals during Auto-	
	Tabl Auto-Tuning Type	e 4.16 Status	of Input/Output Termi Mode	nals during Auto-	
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			Mode	Digital Input	Tuning Digital Output Functions the same as
	Auto-Tuning Type		Mode Rotational Auto-Tuning	Digital Input Disabled	Tuning Digital Output Functions the same as during normal operation. Keeps the status at the
	Auto-Tuning Type	Rotational	Mode Rotational Auto-Tuning Stationary Auto-Tuning Stationary Auto-Tuning for Line-to-Line	Digital Input Disabled Disabled	Digital Output           Functions the same as during normal operation.           Keeps the status at the start of Auto-Tuning.           Keeps the status at the start of Auto-Tuning.
	Auto-Tuning Type	Rotational Stationary	Mode Rotational Auto-Tuning Stationary Auto-Tuning Stationary Auto-Tuning for Line-to-Line Resistance	Digital Input Disabled Disabled Disabled	Digital Output         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal
	Auto-Tuning Type	Rotational Stationary	Mode         Rotational Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning for Line-to-Line         Resistance         Z-Pulse Offset Tuning         PM Rotational Auto-	Digital Input Disabled Disabled Disabled Disabled	Digital Output         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Keeps the status at the start of Auto-Tuning.         Keeps the status at the start of Auto-Tuning.         Keeps the same as during normal operation.         Keeps the same as
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	Auto-Tuning Type         Induction Motor Auto-Tuning         PM Motor Auto-Tuning	Rotational Stationary Rotational Stationary	Mode         Rotational Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Z-Pulse Offset Tuning         PM Rotational Auto-Tuning         PM Notor Parameter         Settings         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning for Stator         Resistance         Motor Parameter Setting         Stationary Auto-Tuning for Line-to-Line	Digital Input Disabled	Tuning         Digital Output         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Keeps the status at the start of Auto-Tuning.
	Auto-Tuning Type         Induction Motor Auto-Tuning         PM Motor Auto-Tuning         EZ Tuning	Rotational         Stationary         Rotational         Stationary         Stationary         Stationary         Stationary	Mode         Rotational Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         for Line-to-Line         Resistance         Z-Pulse Offset Tuning         PM Rotational Auto-Tuning         PM Rotational Auto-Tuning         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning for Stator Resistance         Motor Parameter Setting         Stationary Auto-Tuning for Line-to-Line Resistance	Digital Input Disabled	Tuning         Digital Output         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as
	Auto-Tuning Type         Induction Motor Auto-Tuning         PM Motor Auto-Tuning	Rotational Stationary Rotational Stationary	Mode         Rotational Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         Stationary Auto-Tuning         PM Stational Auto-Tuning         PM Motor Parameter         Settings         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning         PM Stationary Auto-Tuning for Stator         Resistance         Motor Parameter Setting         Stationary Auto-Tuning for Line-to-Line         Resistance         Inertia Tuning	Digital Input Disabled	Tuning         Digital Output         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Keeps the status at the start of Auto-Tuning.         Functions the same as during normal operation.         Functions the same as during normal operation.         Functions the same as during normal operation.

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