

# Table of Contents

## Safety Messages

Hazardous High Voltage .....	i
General Precautions - Read These First! .....	ii
Index to Warnings and Cautions in This Manual .....	iv
General Warnings and Cautions .....	ix
UL® Cautions, Warnings, and Instructions .....	xii

## Table of Contents

Revisions .....	xvii
Contact Information .....	xviii

## Chapter 1: Getting Started

Introduction .....	1-2
SJ300 Inverter Specifications .....	1-6
Introduction to Variable-Frequency Drives .....	1-13
Frequently Asked Questions .....	1-17

## Chapter 2: Inverter Mounting and Installation

Orientation to Inverter Features .....	2-2
Basic System Description .....	2-5
Step-by-Step Basic Installation .....	2-6
Powerup Test .....	2-21
Using the Front Panel Keypad .....	2-23

## Chapter 3: Configuring Drive Parameters

Choosing a Programming Device .....	3-2
Using Keypad Devices .....	3-3
“D” Group: Monitoring Functions .....	3-6
“F” Group: Main Profile Parameters .....	3-8
“A” Group: Standard Functions .....	3-9
“B” Group: Fine-Tuning Functions .....	3-29
“C” Group: Intelligent Terminal Functions .....	3-47
“H” Group: Motor Constants Functions .....	3-62
“P” Group: Expansion Card Functions .....	3-65
“U” Group: User-selectable Menu Functions .....	3-67
Programming Error Codes .....	3-68

## Chapter 4: Operations and Monitoring

Introduction .....	4-2
Optional Controlled Decel and Alarm at Power Loss .....	4-4
Connecting to PLCs and Other Devices .....	4-7
Using Intelligent Input Terminals .....	4-11
Using Intelligent Output Terminals .....	4-42
Analog Input Operation .....	4-59
Analog Output Operation .....	4-62
Setting Motor Constants for Vector Control .....	4-65
PID Loop Operation .....	4-71
Configuring the Inverter for Multiple Motors .....	4-72

---

## Chapter 5: Inverter System Accessories

Introduction .....	5-2
Component Descriptions .....	5-3
Dynamic Braking .....	5-6

## Chapter 6: Troubleshooting and Maintenance

Troubleshooting .....	6-2
Monitoring Trip Events, History, & Conditions .....	6-5
Restoring Factory Default Settings .....	6-9
Maintenance and Inspection .....	6-10
Warranty .....	6-18

## Appendix A: Glossary and Bibliography

Glossary .....	A-2
Bibliography .....	A-6

## Appendix B: Serial Communications

Introduction .....	B-2
Communications Protocol .....	B-5
Communications Reference Information .....	B-17

## Appendix C: Drive Parameter Settings Tables

Introduction .....	C-2
Parameter Settings for Keypad Entry .....	C-2

## Appendix D: CE–EMC Installation Guidelines

CE–EMC Installation Guidelines .....	D-2
Hitachi EMC Recommendations .....	D-4

## Index

---