

	Preface	
Overview	Who Should Use this Manual	7
	Summary of Changes	7
	Additional Resources	8
	Manual Conventions	8
	Drive Frame Sizes	9
	Product Environmental Information.....	9
	General Precautions	10
	Catalog Number Explanation	11
	Chapter 1	
Installation/Wiring	Mounting Considerations.....	13
	AC Supply Source Considerations	17
	General Grounding Requirements	18
	Fuses and Circuit Breakers	20
	Power and Control Module	25
	Control Module Cover	28
	Power Module Terminal Guard	28
	Power Wiring.....	29
	Power Terminal Block.....	32
	I/O Wiring.....	32
	Control I/O Terminal Block.....	34
	CE Conformity	36
	Chapter 2	
Start Up	Prepare for Drive Startup	43
	Understanding the PowerFlex 527 Display and Indicators	44
	Drive Programming Tools	50
	Language Support	50
	Using the Ethernet Port	51
	Chapter 3	
Configuring the PowerFlex 527 Drive with Integrated Motion	Configure the Drive	53
	Configure the Logix Designer Application Project	54
	Add a PowerFlex 527 Drive	59
	Configure the PowerFlex 527 Drive.....	61
	Apply Power to the PowerFlex 527 Drive	84
	Test and Tune the Axes – Velocity and Position Control Modes	85

	Chapter 4	
PowerFlex 527 Integrated Safe Torque-Off	Certification	89
	Description of Operation	90
	Probability of Dangerous Failure Per Hour (PFH)	91
	Safe Torque-Off (STO) Feature	91
	Out-of-Box (OOB) Safety State	93
	Safe Torque-Off Status	95
	Explicit Messages	96
	Chapter 5	
Hardwired Control of Safe Torque-Off	Description of Operation	99
	Safe Torque-Off Connector Data	102
	Wire the Safe Torque-Off Circuit	102
	Safe Torque-Off Specifications	103
	Chapter 6	
Network Control of Safe Torque-Off	Understanding Integrated Safety Drive Replacement	109
	Replacing an Integrated Safety Drive in a GuardLogix System	110
	Motion Direct Commands in Motion Control Systems	116
	Functional Safety Considerations	122
	Chapter 7	
Troubleshooting	Safety Precautions	123
	Interpret Status Indicators	123
	General Troubleshooting	130
	Logix5000 Controller and Drive Behavior	131
	Appendix A	
Supplemental Drive Information	Certifications	135
	Environmental Specifications	136
	Technical Specifications	137
	Power Specifications	140
	Appendix B	
Accessories and Dimensions	Product Selection	143
	Product Dimensions	151
	Appendix C	
Out-of-Box Configuration	Recommended Out-of-Box Settings	165
	Setting the ACO/AVO Attribute	168