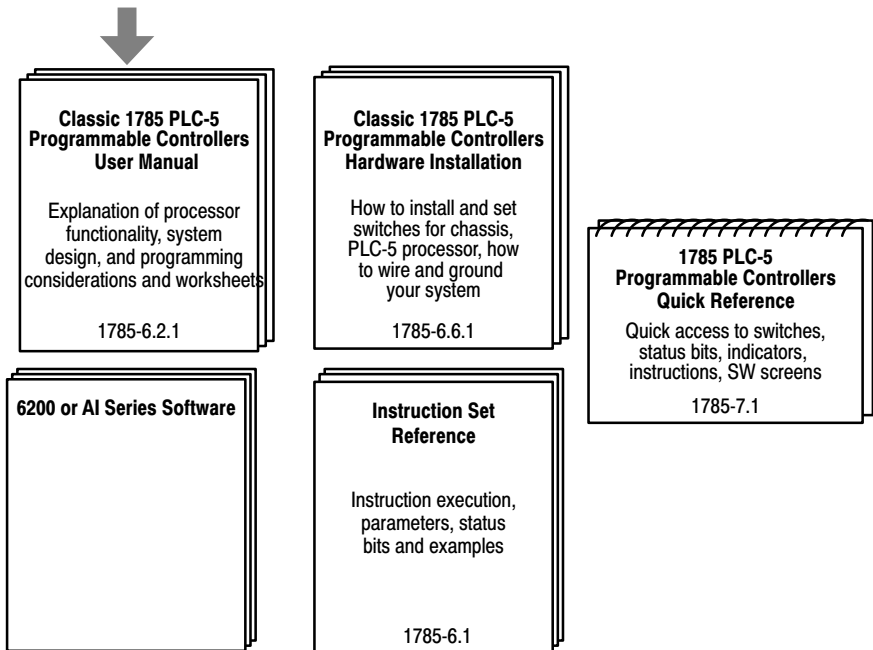


Classic PLC-5 Programmable Controllers

How to Use Your Documentation

Your Classic PLC-5 Programmable Controllers documentation is organized into manuals according to the tasks you perform. This organization lets you easily find the information you want without reading through information that is not related to your current task. The arrow in Figure 1 points to the book you are currently using.

Figure 1
Classic PLC-5 Programmable Controllers Documentation Library



For more information on 1785 PLC-5 programmable controllers or the above publications, contact your local Allen-Bradley sales office, distributor, or system integrator.

Purpose of this Manual

This manual is intended to help you design a Classic PLC-5 programmable controller system. Use this manual to assist you in:

- selecting the proper hardware components for your system
- determining the important features of classic PLC-5 processors and how to use those features
- planning your classic PLC-5 system layout

Manual Organization

This manual has ten chapters and two appendices. The following table lists each chapter or appendix with its corresponding title and a brief overview of the topics covered in it.

Chapter / Appendix	Title	Topics Covered
1	Understanding Your System	Provides an overview of Classic PLC-5 processors in different system configurations. Provides an introduction to Classic PLC-5 processors and their primary features and configurations. Also provides information on using a Classic PLC-5 processor as a remote I/O scanner or a remote I/O adapter.
2	Choosing Hardware	Provides information on your hardware choices when you design a Classic PLC-5 processor system.
3	Placing System Hardware	Describes proper environment, Classic PLC-5 processor protection, and prevention of electrostatic damage for your Classic PLC-5 programmable controller system. Also covers raceway and cable layout, backpanel spacing, and grounding configurations.
4	Assigning Addressing Mode, Rack, and Groups	Describes the I/O addressing modes that you can choose for your chassis. Explains how you assign group and rack numbers to your I/O chassis. Also covers how you configure complementary I/O by assigning rack and group addresses.
5	Choosing Communication	Identifies each Classic -5 processor channel/connector, and explains how to configure your Classic PLC-5 processor. Provides additional information about the Data Highway Plus™ (DH+™) link, programming software, and programming-terminal connections.
6	Planning Your System Programs	Explains the use of sequential function charts (SFCs). Provides guidelines and examples for preparing system programs. Provides a map of data table files and methods to address the data table files. Explains how to use the processor status file.
7	Selecting Interrupt Routines	Summarizes the conditions for which you would choose fault routines for your application. Provides a definition of fault routines.
8	Transferring Discrete and Block-Transfer Data	Explains how your Classic PLC-5 processor transfers discrete and block-transfer data in both scanner and adapter modes.
9	Calculating Program Timing	Provides an overview of processor scan timing. Lists execution times and memory requirements for bit and word instructions as well as file instructions.
10	Maximizing System Performance	Explains how to calculate throughput, and provides methods for optimizing I/O scan time.
A	Selecting Switch Settings	Describes the switch settings for configuring a Classic PLC-5 programmable controller system.
B	Design Worksheets	Provides worksheets to help the designer plan the system and the installer to install the system.

How to Use this Manual

The following flow chart demonstrates a thought process that you can use when you plan your Classic PLC-5 programmable controller system.