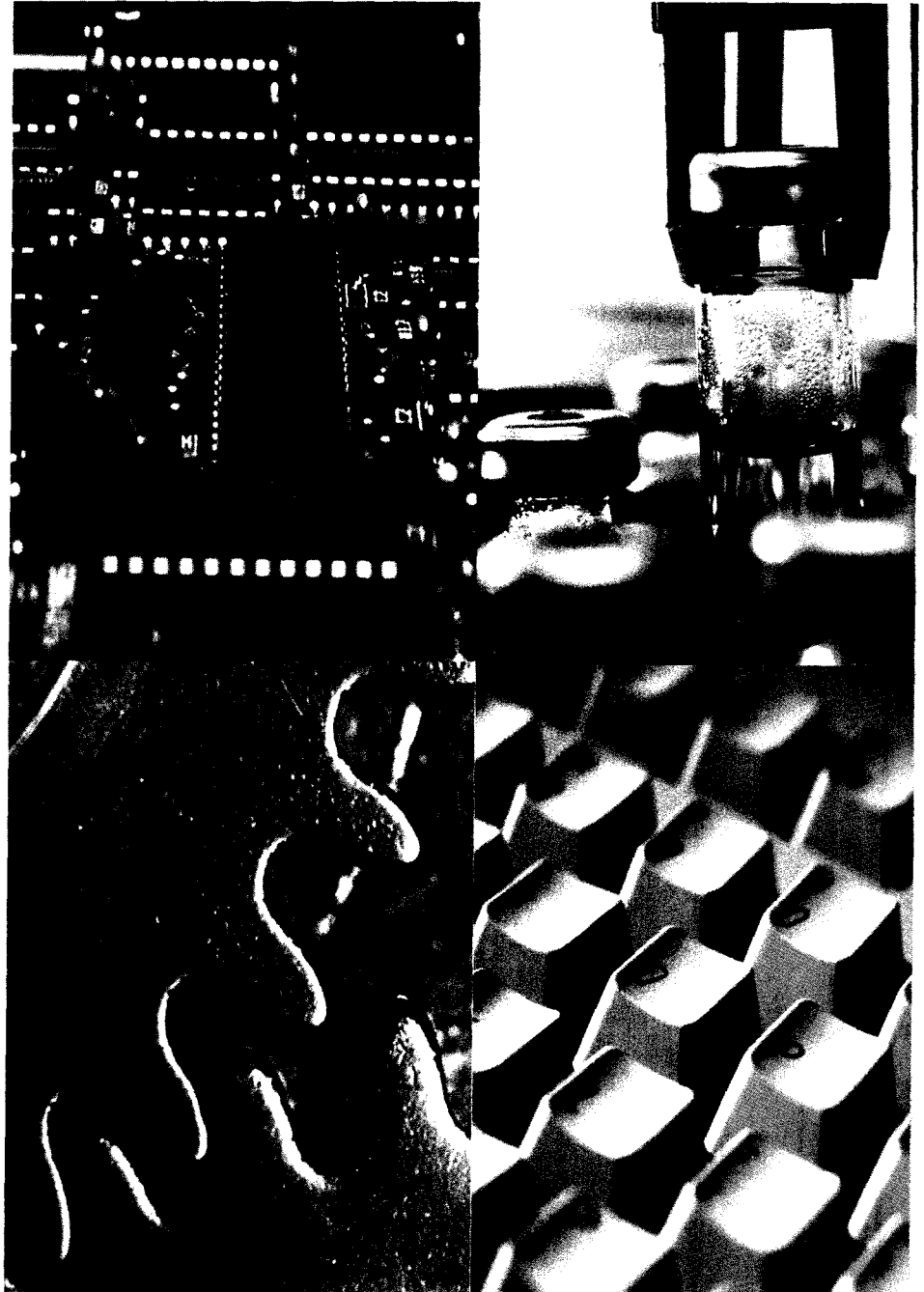



# Modicon 584L Programmable Controller System Planning and Installation Guide

PI-584L-001

Rev. C



■	Merlin Gerin
■	Modicon
■	Square D
■	Telemecanique

**Schneider**  
 **Electric**



# **Modicon 584L Programmable Controller System Planning and Installation Guide**

PI-584L-001 Rev. C

**Subject:**

Description of the procedures and logic elements required to configure and program a 584L Programmable Controller.

Contains the instructions required to plan and install a 584L Programmable Controller System.

September, 1984

**Modicon, Inc. Industrial Automation Systems  
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## PREFACE

The purpose of this document is to instruct the user in the installation and planning of a Modicon 584L Programmable Controller.

### List of Related Documents:

PI-584L-002	584L	Programming Guide
ML-P190-USE	P190	CRT Programmer User's Manual
ML-584P-USE	584	PID User's manual
PI-584B-001	584	Remote I/O Installation and Troubleshooting
ML-A584-USE	584	ASCII Programming Guide
ML-584G-USE	584	Register Access Panel User's Guide
ML-J211-USE	J211	Redundancy System User's Guide

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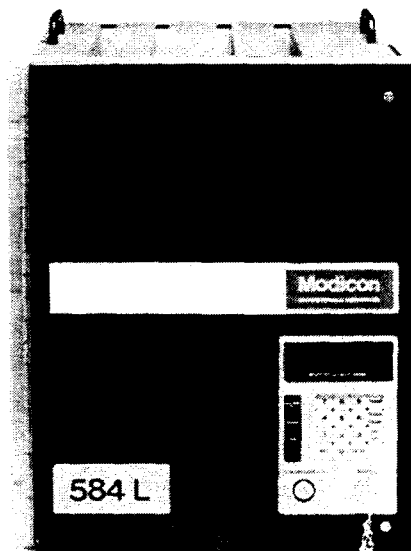
## SECTION 1 INTRODUCTION

The Modicon 584L Programmable Controller represents the most powerful controller currently available. As a replacement for relays and solid-state electronics, the controller offers an extensive array of control functions applicable for a variety of industries. Programs, timing, sequencing, and calculations use simple, easily-learned relay ladder logic. All functions are efficiently performed for numerous industrial control applications.

The 584L Programmable Controller is general purpose. Flexibility is unsurpassed; the controller's capability easily expands from the equivalence of 50 to over 8000 relays. The 584L Programmable Control System can provide basic relay replacement, diagnostic monitoring, data collection/storage, and report generation. The system's configuration is defined by the needs of its user.

The J211 Fault-Tolerant High-Availability Programmable Controller System combines the J211 Redundancy Supervisor with two 584L Programmable Controllers. This configuration is a system designed for use in PC applications where downtime cannot be tolerated. It is ideally suited for applications that require the ruggedness, reliability, and speed of a PC, the uninterrupted control necessary for critical processes, and a minimum of human intervention.

The two 584L PC's share a common remote I/O network. One of the PC's (called the Active PC) performs all the logic solving (processing) required to operate the equipment attached to the remote I/O network. The other PC (called the Standby PC) is standing by to assume control of the processing if anything happens to the Active PC. The J211 Redundancy Supervisor monitors the two PC's and provides the necessary intelligence to maintain uninterrupted operation of the process being controlled.



*Figure 1-1. Modicon 584L Programmable Controller*

## INTRODUCTION

The 584L's benefits include:

- Lower cost than most relay systems.
- Operates faster than most minicomputers.
- Installs easier than all minicomputers and programmable controllers in its class.
- Expandable memory from 12 to 32K words.
- Fast scan rates between 8 and 50 ms.
- Easy installation of field wiring, intermixing a variety of I/O.
- Retentive memory for logic and data storage.
- Peripherals which can connect directly to the controller.
- Real-time programming, providing maximum flexibility.
- Easily programmed to meet the user's needs.

The Modicon 584L Programmable Controller is easy to install and maintain and can operate in the harshest industrial environments without the use of fans, air conditioning, or electrical filtering. Its modular design ensures minimum downtime and maximum productivity. The controller is equipped to handle almost any process or industrial control application.

This manual provides the information necessary to install the 584L Controller, as well as provides guidance in planning the 584L Programmable Control System. Requirements for the system's I/O, register/reference configuration, and cold start up procedures are described in detail. Several topic areas are supported by additional Modicon documents. References to these documents are indicated where appropriate.