Service Bulletin [1997-3]

SLC-500 Programmable Controller

Overview

The SLC-500 family of small logic controllers surpasses simple machine control. A powerful instruction set, advanced programming tools, and expanded product capabilities give you all of the right reasons to apply the SLC-500 solution to your next control application. There are two hardware styles to choose from: (1) the fixed hardware style and (2) the modular hardware style.

Fixed Hardware Style

The SLC-500 fixed style includes a processor with 1K instruction capacity, a power supply and a fixed number of I/O in one complete package. The 20, 30, and 40 I/O versions accept a 2-slot expansion chassis. All fixed I/O units are panel mountable.

Modular Hardware Style

For applications requiring more flexibility, the modular style offers a wide variety of I/O options. Modular style chassis are available in 4, 7, 10 and 13 slot versions.

SLC 5/01™

Modular I/O systems that include a SLC 5/01 processor can be configured with a maximum of three chassis (30 total slots) from 4 I/O points to a maximum of 256 I/O points.

Two SLC 5/01 processors (CPU's) are available for the modular I/O system.

➢ 1K instruction capacity version with capacitor-backed RAM memory. An optional battery can be used to retain RAM memory contents for a longer period of time when power is removed from the processor.

➢ 4K instruction capacity version with battery-backed RAM as standard.

Optional EEPROM and UVPROM memory modules are available for use with the 5/01 processor.

SLC 5/02™

The SLC 5.02 processor provides enhanced communications, faster scan times, advanced instructions, and extensive diagnostics that allow it to work in more complex applications. It has 4K instruction capacity with battery-backed RAM included.

Modular I/O systems, which include an SLC 5/02 processor, can be configured with a maximum of 3 chassis (30 total slots) from 4 I/O points to a maximum of 480 I/O points.

Optional EEPROM and UVPROM memory modules are available for use with the SLC 5/02 processor.

SLC 5/03™
The SLC 5.03 processor introduces 32-bit technology. It has a 3-position keyswitch on the front panel of the module that allows you to select the mode of operation. It also provides built-in RS-232 and DH-485 communications for SCADA and direct programming as well as on-line program editing and improved system throughput. The SLC 5/03 had battery-backed RAM included and accommodates real-time applications. The SLC 5/03 had 12K instruction capacity.

Modular I/O systems that include an SLC 5/03 processor can be configured with a maximum of three chassis (30 total slots) from 4 I/O points to a maximum of 960 I/O points.

An optional memory module is available for use with the 5/03 processor. It provides UVPROM and EEPROM functionality.

SLC 5/04™ processors have the same features as the SLC 5/03 processors, except instead of a DH-485 port, the SLC 5/04 has a built-in DH+ port for communication with other SLC 5/04 and PLC processors and programming terminals. Communication via the DH+ network takes place three times faster than DH-485 communication. The built-in serial port is capable of DF1, ASCII or DH-485 communication. A SLC 5/04 processor has a maximum 20-K instruction memory capacity for growing applications. Added to the features of the SLC 5/03, these features make this processor ideal for most small distributed or stand-alone applications.

SLC 500 I/O modules are available with 4, 8, 16, or 32 points. Combination modules with 2 inputs/2 outputs, 4 inputs/4 outputs, and 6 inputs/6 outputs are also available.

A wide variety of I/O voltages (including AC, DC, and TTL), analog I/O, and specialty modules are available to help you create a close fit for your application.

Programming
Familiar ladder diagram programming makes the SLC 500 family easy to program. Both the fixed and modular controllers are programmed in the same manner using either a hand-held terminal (SLC 5/01 and SLC 5/02 only) or a personal computer (all processors).

The SLC 500 controllers provide a powerful set of instructions for control of complex systems.

Tested Design
All SLC 500 devices are UL Listed and CSA Certified. Discrete I/O modules (except for relay cards, 32 point I/O, and the 1746-OBP16 enhanced DC output) are also certified for Class I Division 2 Groups A, B, C, and D Hazardous locations.

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BESSER EQUIPMENT

Vibrapac	SLC-5/02
Bescopac	SLC-5/02
Dynapac	SLC-5/03
Ultrapac	SLC-5/03
Superpac	SLC-5/03
Multi-Spade Besser-Matic	SLC-5/02
LSC-40/100 car	SLC-5/02
LSC-40/100 Crawler	SLC-500 Fixed
PTS-3/4 Car	SLC-5/03
PTS-3/4 Crawler	SLC-5/03
Splitter	SLC-5/02
Cuber	SLC-5/03
Curetrol VI	SLC-5/03
Machines with Plant Integration	SLC-5/04