

ELC2 Modular PLCs**Features**

- **PB Base Model—**
 - 14 I/O (8I+6O)
 - Over 130 instructions
 - RS-485 master port with the ability to communicate to 31 other devices
 - The master port can also be configured to communicate to devices such as ASCII, bar code readers, and so on
 - Retentive flash memory
- **PC Clock/Calendar Model**
 - 12 I/O (8I+4O)
 - Same features as the basic model plus clock/calendar
 - Distributed I/O capability with up to 14 devices
 - File area for data storage and retrieval
 - Two digital potentiometers that vary the data in internal registers
 - Compatible with left side Ethernet and DeviceNet master communication modules
- **PE Ethernet Model**
 - 12 I/O (8I+4O)
 - All the features of the PC model
 - Built-in Ethernet client/server
 - EtherNet/IP server
- **PA20 Analog Model**
 - 20 I/O (12I+8O)
 - Same features as PC model with analog I/O
 - Analog channels can be set up for either voltage or current
- **PV Advanced Model**
 - 28 I/O (16I+12O)
 - The PV model has the most extensive features
 - Programs written for the other controllers can be migrated to a PV model controller where greater speed or more I/O is required
 - Flash ROM and SRAM program storage and backed using a rechargeable lithium-ion battery that charges with normal use
 - Includes 2-axis motion control
 - Additional expansion bus to the left of the controller
 - Add high-speed and specialty modules to the left
 - Compatible with left side Ethernet and DeviceNet master communication modules

ELC Modular PLCs**Features**

- **PA10 Analog Model**
 - 10 I/O (6I+4O)
 - Same features as PC model with a different I/O mix
 - Four digital inputs, two digital outputs, two analog inputs, and two analog outputs
 - Analog channels can be set up for either voltage or current
 - Two 7-segment LEDs that can be used to display unit ID, error codes, process steps, and so on

ELC Series Programmable Logic Controllers

ELC2



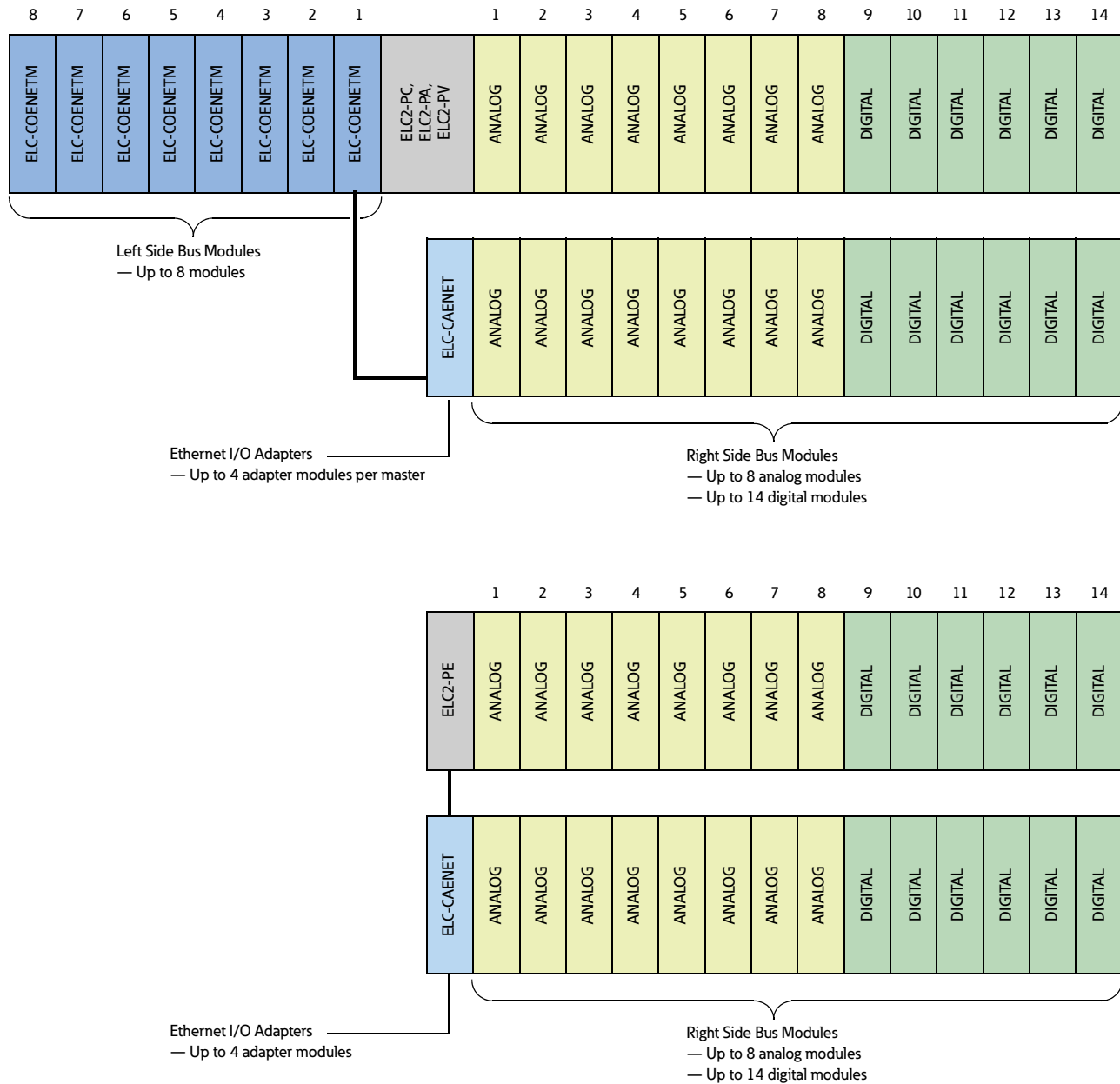
ELC



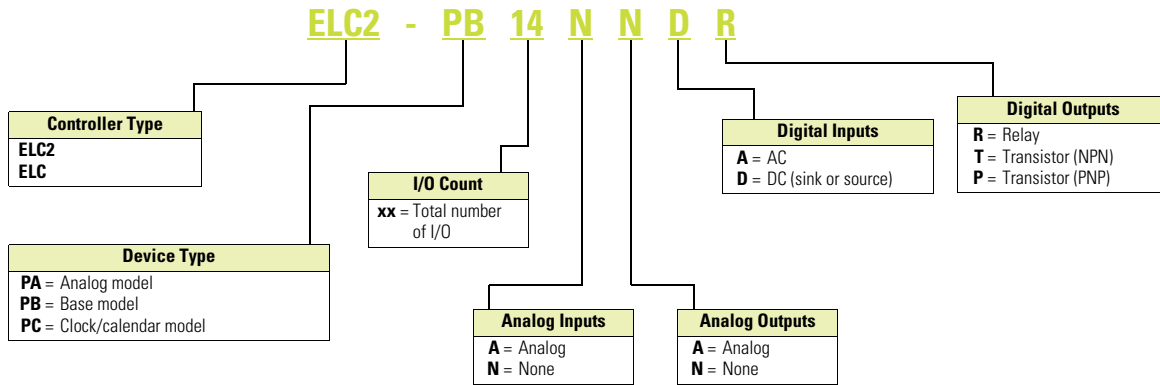
Model	PB-Basic	PC-Clock/calendar	PA-Analog	PE-Ethernet	PV-Advanced function	PA-Analog
	Page V7-T4-11	Page V7-T4-11	Page V7-T4-10	Page V7-T4-10	Page V7-T4-10	Page V7-T4-10
Product Description	• Most popular, best value PLC • Smallest footprint • Relay, NPN or PNP outputs • No clock/calendar function • No battery required	• Clock/calendar functions • Built-in potentiometers • Relay or NPN outputs • No battery required	• Analog I/O for voltage or current • Clock/calendar functions • Built-in potentiometers • Relay, NPN or PNP outputs • No battery required	• Built-in Ethernet • EtherNet/IP server • Clock/calendar functions • Relay or NPN outputs • No battery required	• Fastest CPU • Clock/calendar functions • Built-in potentiometers • Relay, NPN or PNP outputs • Battery backup	• Built-in LED displays • Analog I/O for voltage or current • Clock/calendar functions • Relay or NPN outputs • Replaceable battery
Features						
On-board I/O	12/14	12	20	12	28	10
Analog I/O	—	—	4I + 2O	—	—	2I + 2O
CPU	32-bit	32-bit	32-bit	32-bit	32-bit	16-bit
Program capacity	8 k	16 k	16 k	16 k	30 k	8 k
RS-232	1	1	1	1	1	1
RS-485	1	2	1	1	1	1
USB	—	—	1	1	—	—
Clock/calendar	No	Yes	Yes	Yes	Yes	Yes
Battery	No	No	No	No	Yes	Yes
Right side bus	Yes	Yes	Yes	Yes	Yes	Yes
Left side bus	No	Yes	Yes	Yes	Yes	No
Potentiometers	—	2	2	—	2	—
LED displays	—	—	—	—	—	2

ELC System Overview

Configuration and Layout



Controllers—Basic

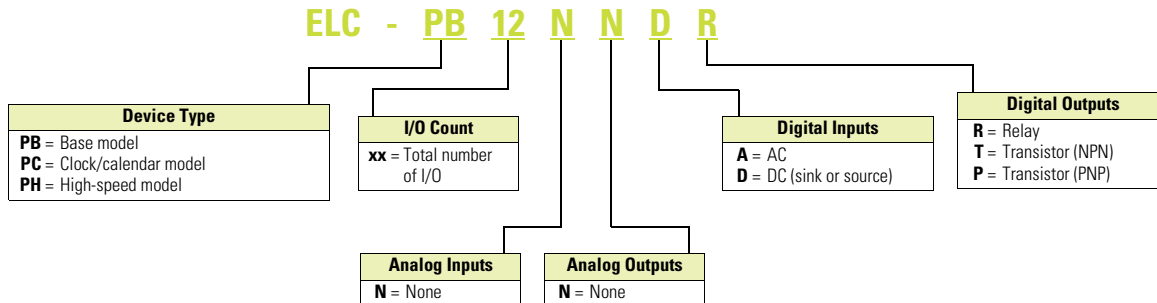


Controllers—Basic

All models include RS-232 and RS-485 programming/communication ports and can be expanded with up to 14 extension modules on the right-hand side bus.

On-Board I/O	Program Memory Steps	Inputs 24 Vdc	Outputs Relay 1.5 A	NPN 0.5 A	PNP 0.5 A	Analog Inputs	Analog Outputs	High Speed Inputs 10 kHz	High Speed Inputs 20 kHz	High Speed Inputs 100 kHz	High Speed Inputs 200 kHz	High Speed Outputs 10 kHz	High Speed Outputs 100 kHz	High Speed Outputs 200 kHz	Catalog Number
ELC2-PB Basic Controllers															
• Smallest size and footprint															
• Retentive flash memory															
14	8 k	8	6	—	—	—	—	4	4	—	—	—	—	—	ELC2-PB14NNDR
14	8 k	8	—	6	—	—	—	4	4	—	—	4	—	—	ELC2-PB14NNDT
12	8 k	8	—	—	4	—	—	4	4	—	—	4	—	—	ELC2-PB12NNDP
ELC2-PC Basic Clock Controllers															
• Suitable for larger capacity and RTC applications															
• Expandable with left side communication modules															
• 2 RS-485 ports															
• 2 built-in potentiometers															
• Retentive flash memory															
12	16 k	8	4	—	—	—	—	4	—	4	—	—	—	—	ELC2-PC12NNDR
12	16 k	8	—	4	—	—	—	4	—	4	—	2	2	—	ELC2-PC12NNDT
ELC-PA Basic Analog Controllers															
• Built-in 2 analog inputs and 2 analog outputs															
• 2-digit, 7-segment display															
• SRAM and replaceable battery															
• Retentive flash memory (style -3 and above)															
10	8 k	4	2	—	—	2	2	2	2	—	—	—	—	—	ELC-PA10AADR
10	8 k	4	—	2	—	2	2	2	2	—	—	2	—	—	ELC-PA10AADT

Controllers—Superseded



ELC2-PB_



Controllers—Superseded

For Replacement Only

Description	Inputs	Outputs	Analog	High Speed I/O	Max. Current Consumption (at 24 Vdc)	Catalog Number
ELC-PB model and 14 I/O built-in	(8) 24 Vdc	(6) Relay, 1.5 A	—	(2) 20 kHz inputs	150 mA	ELC-PB14NNDR
	(8) 24 Vdc	(6) Transistor, 100 mA	—	(2) 20 kHz inputs	150 mA	ELC-PB14NNDT
ELC-PC model and 12 I/O built-in	(8) 24 Vdc	(4) Relay, 1.5 A	—	(1) 30 kHz inputs	150 mA	ELC-PC12NNDR
	(8) 24 Vdc	(4) Transistor, 100 mA	—	(1) 30 kHz inputs	150 mA	ELC-PC12NNDT
	(8) 110 Vac	(4) Relay, 1.5 A	—	(1) 30 kHz inputs	150 mA	ELC-PC12NNAR
ELC-PH model and 12 I/O built-in	(8) 24 Vdc	(4) Transistor, 100 mA	—	(1) 100 kHz inputs	170 mA	ELC-PH12NNDT