

PLCA4F – Allen Bradley MicroLogix 1000 PLC



Picture is a representation and PLC fitted may vary

Key Features:

- 24V dc digital and Analogue I/O
- Enables students to test and debug control programs
- Colour coded 4mm terminals
- Easy connection to application via 'D' connectors
- Switched input
- 10 DC inputs and 6 relay outputs

The Bytronic PLCA4F is a mounting frame and PLC combination based around an Allen Bradley MicroLogix 1000 PLC. The MicroLogix 1000 family of programmable controllers is designed to meet a variety of applications requiring less than 32 I/O. Positioned as part of the SLC 500 family they offer a small, low-cost programmable controller with a powerful instruction set and fast execution speed for high throughput. Like the SLC 500 family, the MicroLogix controllers are programmed using familiar ladder logic. They also include an RS232 communications channel for connection to a PC, operator interface or modem.

The mounting frame gives easy access to the PLCs I/O capabilities providing an effective means for the student to test and debug their program prior to connecting to the application. All inputs and outputs are accessed via 'D' type connectors or 4mm sockets, this also allows easy connection to other Bytronic products. The mounting frame also includes switched inputs that allow the PLC control programs to be developed 'stand alone' i.e. the process can be simulated using the switched inputs.

Specification

I/O Capabilities	10 x 24V DC inputs 6 x relay outputs
Digital Input Specifications:	
On-state Voltage Range	14..26.4V DC max @ 55°C (131 °F) 14..30.0V DC max @ 30°C (86 °F)
Off-state Voltage Range	0...5V DC
Operating Frequency(1)	Standards inputs: 1.0 kHz. Max High-speed inputs: 6.6 kHz. Max
Signal Delay, max	Standard inputs: selectable from 0.5 to 16ms High-speed inputs: selectable from 0.075 to 16ms
On-state Current, min	2.5 mA at 14V AC
On-state Current, nom	8.0 mA at 24V AC
On-state Current, max	12.0 mA at 30V AC
Off-state Leakage Current, max	1.5 mA
Impedance, nom	3 kΩ

Digital Output Specifications:

Operating Voltage Range	5...125V DC
Continuous Current per common	8.0 A
Continuous current per controller	1440 VA
On-state current, min	10.0 mA
Off-state leakage current max	0 mA
Maximum Off to On Response:	10ms
Maximum On to Off Response:	10ms
Memory	1KB EEPROM (approx. 737 instruction words, 437 data words)
Ambient Temperature Rating	Operating: 0...55°C (32...131°F) Storage: -40 to 85°C (-40°F to 185°F)
Humidity	5 to 95% noncondensing
Vibration	5Hz...2kHz, 0.381mm, 0.015in. Peak-to-peak
Shock	10 and 16 point controllers: 10g peak acceleration
Line Voltage	24V DC
Power Consumption	5W
Power Supply Inrush Current Max	24V DC 30A for 4ms
High Speed Counter	Embedded: one @6.6KHz
Programming Communication	Windows RSLogix 500; RSLogix Micro
Communications Port	RS-232

Mounting Frame (MF1)

Mounting Frame Type	PCB Mounted in a durable plastic box
Connectors	15 pin 'D' socket for outputs, 15 pin 'D' plug for inputs 4mm terminals
Input Switches	8 x toggle 4 x momentary push
Power Supply	24V DC fused
Dimensions	290 x 230 x 90mm

Ordering Information**Model Number:****PLCA4F***Consists of:*

1 x Allen Bradley MicroLogix 1000 PLC on Pre-wired PCB Mounting Frame
1 x Development Plug
1 x User Manual

Notes.

- Specification is subject to change without notice.*
- All dimensions are in mm unless otherwise stated*

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