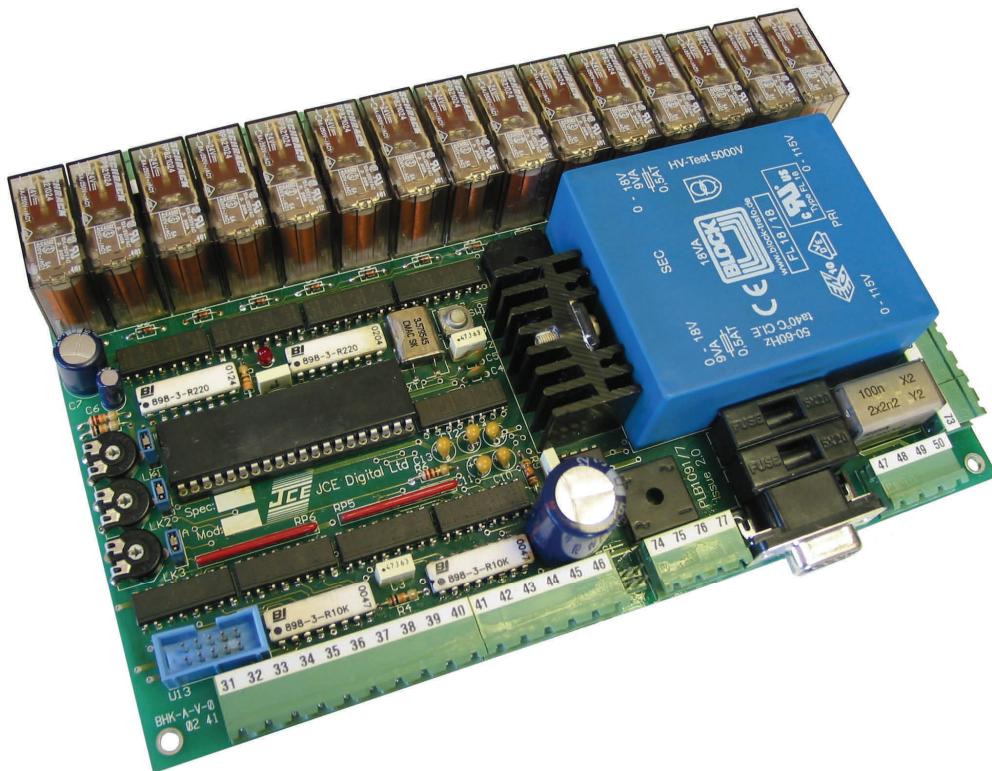




## PLB-1091/7 Programmable Logic Board



The PLB-1091/7 is a microprocessor based process control PCB. Fifteen digital inputs and fifteen digital outputs, allow the processor on the PLB to achieve sophisticated monitoring and control of its environment. A board to board serial communications data highway allows several PLBs to be combined, or integrated with other devices in the range. Specifically designed to withstand electrically harsh industrial environments, the PLB is capable of delivering flexible digital control, while maintaining overall system integrity and reliability.

### Programming

Software design is achieved through the use of a PC based integrated development and simulation environment. The language used is a derivative of ANSI standard 'C', which allows a great deal of flexibility.

### Communications

RS485 serial communications capabilities on board the PLB allow it to be an interactive part of a larger system constructed using other PLBs, or other PCBs in the range ( e.g. ADIBs).

### Digital Inputs

Fifteen optically isolated digital inputs are available for monitoring two-state variables. 24 Volt DC signaling is used for this purpose.

### Digital Outputs

Fifteen normally open relay outputs are available to allow the PLB to control process actuators (e.g. contactors, solenoid valves, alarms, lamps, relays). Each of the relay contacts are rated at 8 amps (see Specification section for details).

### Power Supply

The PLB operates on supply voltages of either 240 Volts or 110 Volts AC (see Specification section for details). Special attention has been paid to the provision of power supply circuits fully capable of dealing with an electrically hostile industrial environment. All field wiring is galvanically isolated from the on-board circuits.

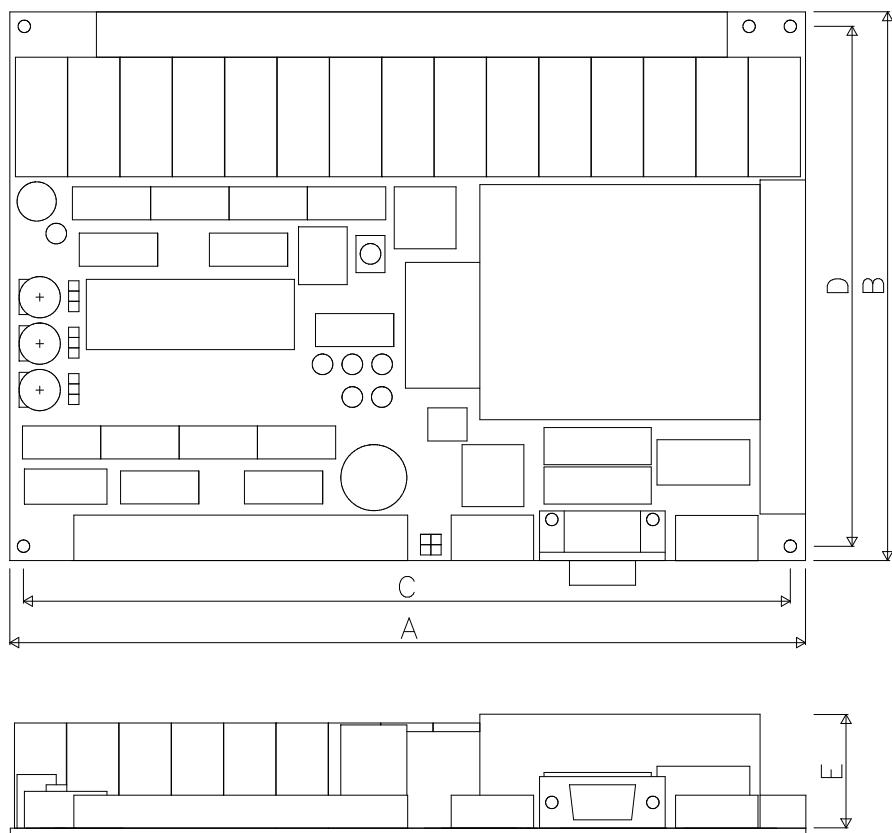
### Analogue Adjustment POTs

Three POTs are provided on the PLB. These are designed to allow analogue process configuration values to be conveyed to the system. The LNKB makes use of these inputs when connected to a PLB via the "PLB-Bus" connector.

### The "PLB Bus" Ribbon Cable

All three analogue process variable inputs, and the RS485 communications facilities, are available on the ten way IDC connector known as the "PLB Bus". This is the primary means by which inter-PCB communication is achieved.

## Dimensions



A	B	C	D	E
194	134	186	126	27.6

Note 1: Field wiring connectors not shown  
 Note 2: PCB thickness 1.6mm  
 Note 3: Mounting hole diameter 3.5mm

All dimensions in millimetres.

## Specification

Nominal Supply Voltage: <sup>1</sup>	110 or 240 Volts AC
Tolerance:	+/- 10%
Max. Power Consumption:	13 Watts
Max. Operational Ambient Temp:	85 Degrees centigrade
Min. Operational Ambient Temp:	0 Degrees centigrade
Communications Standard:	Half duplex RS485
Max. Clock Frequency:	20 Mhz
Typical:	3.579545 Mhz
Programming Language:	Derivative of ANSI 'C'
Digital Input Signaling Voltage:	24 VDC
Relay Contact Type:	Normally open and Normally closed contacts.
Relay Contact Rating:	8A @ 24V DC / 250V AC
Relay Max. Make Current:	14A
Relay Rated Breaking Capacity:	2KVA / 192W

<sup>1</sup> DC supply voltage configurations are available under specific conditions. Contact technical support for details.



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