

CIA-III

Test Cell PLC Interface



Features

- Utilizes ABB® PLC hardware
- Standard touch-screen interface, capable of:
 - » Test cell function control
 - » Feedback of control process, setpoints and safeties
 - » Viewing of test cell device status and data trending
 - » Viewing alarm history and error codes
- Standard Interface includes:
 - » 7 dedicated push buttons and visual indicators for: Console Power On and Off, Computer or Manual Test System control, Fault Reset, Alarm for faults, Alarm Silence, Computer Watchdog
 - » 1 audible fault alarm
 - » 4 customizable push buttons and visual indicators
 - » 16 solid-state digital inputs
 - » 16 relay outputs
- All I/O channels and user interface screens can be customized based on the application
- Optional Analog I/O and PID control are available
- Units are expandable and flexible
- Customized software available as an option

Testing Applications

- Engine
- Electric Motor / Alternator / Generator
- Transmission / Transaxle / Differential
- Component / Gear Box / Lubricants

The Cell Interface Assistant III (CIA-III) is a PLC based monitoring system (24VDC I/O logic) used to control/monitor devices and functions in a test cell environment. The CIA-III is capable of monitoring cell safeties including temperature, fluid level, pressure, flow rate, etc. ABB PLC Process Control is available when a true closed loop PID system is required (e.g. engine cooling control, flow control, level control, and other ancillary functions). All channels come with the ability to set alarms, with customizable limits on analog channels. The flexibility of the CIA-III allows it to accommodate customer-specific application requirements. Shown with Inter-Loc V OCS.

Dimensions

19" Rack x 7"h x 15"d

Control Power

120 V, 15.0 Amps

Environmental Limits

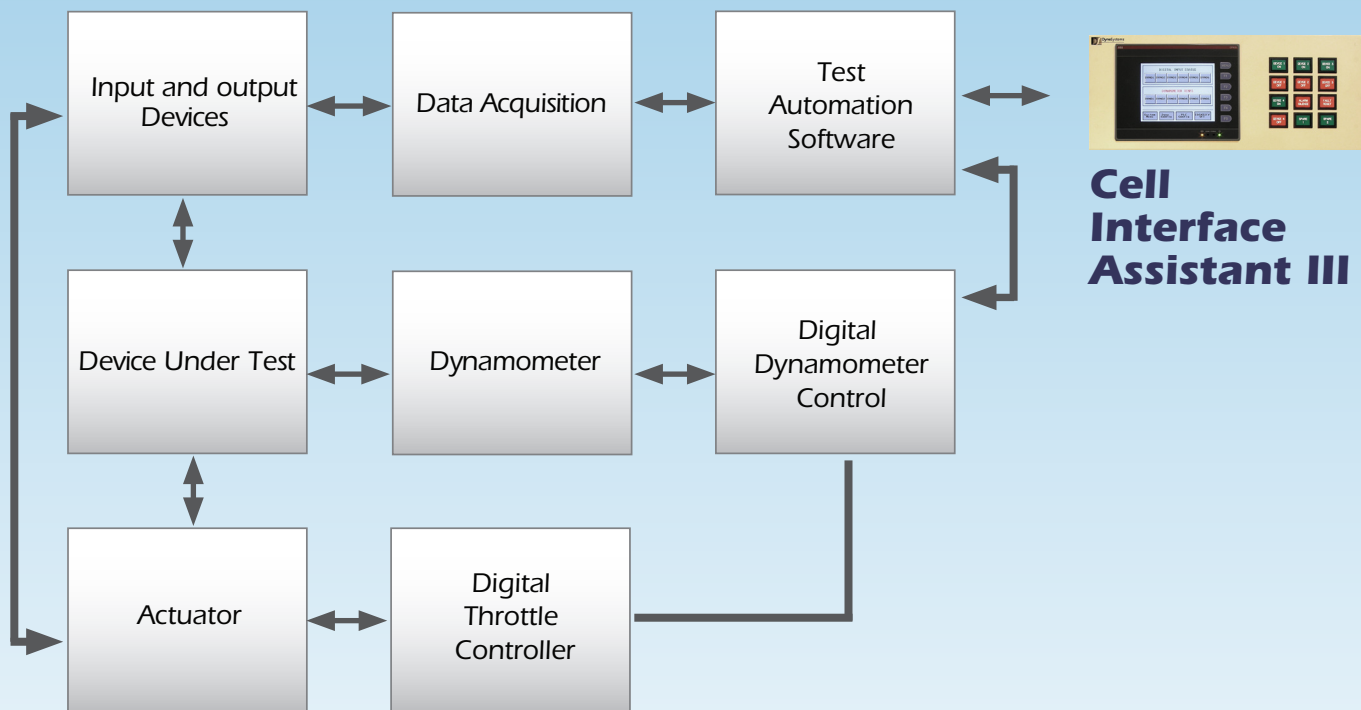
Air Temperature: 0° to 40°C (104°F)

Relative Humidity: 0 to 95%
No condensation allowed

Optional Configurations

**Desktop Console (shown above
with Inter-Loc V OCS)**

Rack Mount



Dyne Systems Product Line

Closed Multi-Loop Dynamometer & Throttle Control

- Inter-Loc V
- DS630 Inter-Loc V Throttle Controller

Closed Single-Loop Dynamometer Control

- Dyn-Loc IV
- Dyn-Loc V

Closed Loop Throttle Control

- DTC-1
- DS830 Stand-Alone Throttle Controller

Open Loop Dynamometer Control

- DS820 Eddy Current PAU

Closed Loop Water Flow Control

- EWC-1

5-Gas Exhaust Analyzer

- XM2000

Data Acquisition

- Companion II: Dyne Systems proprietary
- Companion III: Yokogawa based
- Companion IV: NI cRIO based

Test Automation Software

- Cell Assistant for Windows
- Cell Assistant for LabVIEW™ (VeriStand™)

Test Cell Safety PLC Interface

- CIA I: Automation Direct / Koyo
- CIA II: Horner
- CIA III: ABB
- CIA IV: Allen-Bradley

Throttle Accessories

- Actuator, Remote Pendant, Cables

Eddy Current Dynamometers

- 5–5000 Hp

AC Dynamometers and Drives

- 5–1600 Hp

DC Dynamometers and Drives

- 5–1200 Hp