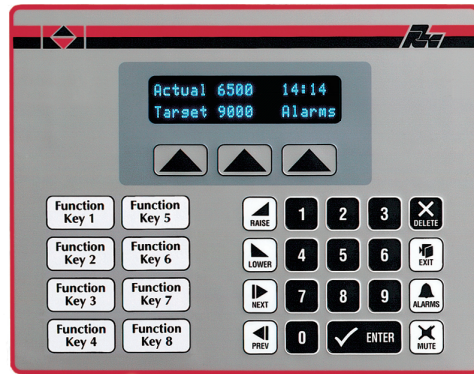## MODEL CX100 - PARADIGM 2 X 20 VFD O.I.

- 2 LINE X 20 CHARACTER VACUUM FLUORESCENT DISPLAY
- 500 ALARM POINT LOGGER
- RECIPE HANDLING
- COMPREHENSIVE REPORT GENERATION
- UNLIMITED PASSWORD PROTECTION
- REAL TIME CLOCK, BATTERY BACKED
- EXPRESSION EVALUATION
- 32 BIT / FLOATING POINT MATH
- DIRECT, NETWORK (Including Multiple protocol) OR MODEM LINK TO PLC

| EMC COMPLIANT | NEMA 4 / IP65 | PARAMETER LOCKOUT | ALARMS | COMMUNICATIONS CAPABILITY |

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FAX/WEB DOC# 07007

Product Features

Model CX100 Operator Terminal combines unique capabilities normally expected only from expensive SCADA packages, with dramatic ease of use. The CX100 is configured using the same powerful EDICT97 Software as all Red Lion Paradigm Operator Interfaces. The result is savings in time to get challenging applications up and running, and frequent savings in hardware costs due to replacing many functions usually performed in separate expensive devices.

POWERFUL DATA MANIPULATION

Model CX100 can perform 32-bit and floating point math functions. Values can be scaled, averaged, and signal linearization can be performed on inputs from non-linear sensors.

Math expression evaluation can be used in any context throughout the Panel Configuration software, and the Alarm Scanner can trigger outputs to display, or pass derived outputs back to external serial devices.

User Programs can be run utilizing 'C'-type language syntax for an infinite number of applications.

MEMORY

A large amount of data can be stored in memory. Event logs can maintain date and time-stamped records of plant activity, as well as complete alarm histories.

Large numbers of complex recipes can be stored in the panel much more economically than within a PLC.

COMMUNICATIONS

As well as a clear, easily read display, permanent records can be sent to an attached printer, using the full-page report generator facility on board.

Model CX100 can be connected to a wide variety of serial devices. Each of the multiple serial ports provided can be connected to devices utilizing different communications drivers. This enables information to pass back and forth concurrently between different brands of PLC, drives, bar-code readers, or Red Lion intelligent devices. Paradigm database structure uses Named Data, rather than Tag Names to enable changes of connected PLC type without the common need, with competitor's products, to re-write the application.

Unlimited Password protection facilities allows user access to be precisely controlled.

Modem support enables systems to communicate with the world through the Operator Interface.

A unique database feature makes it simple to provide user-selectable language options for all display pages.

Interface Program downloads are fast. When developing applications, only changes are downloaded saving valuable time.
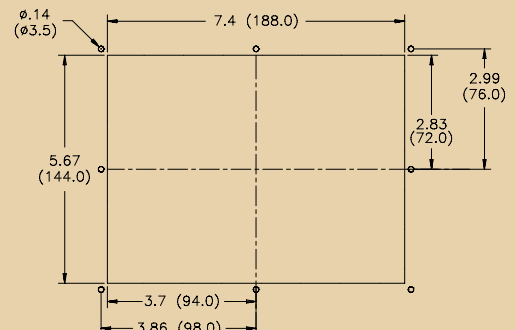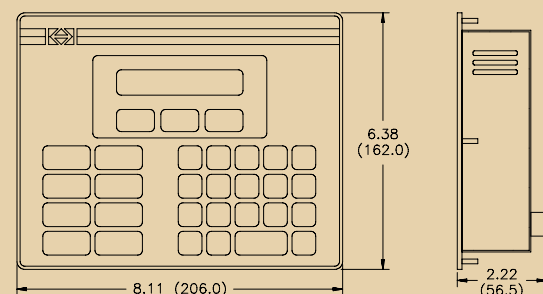
FUNCTION KEYS

The panel incorporates a number of software programmable function keys. Some of the keys may be uniquely legended by applying supplied user printable labels into a slot behind the NEMA 4 rated front panel.

CONSTRUCTION

CX100 is robustly constructed for an industrial environment. With a metal enclosure with a non-corroding NEMA 4/IP65 front panel.

DIMENSIONS "In inches (mm)"

6.38 (162.0)
8.11 (206.0)
2.22 (56.5)
ø.14 (ø3.5)
7.4 (188.0)
2.99 (76.0)
2.83 (72.0)
5.67 (144.0)
3.7 (94.0)
3.86 (98.0)

MODEL CX100 - PARADIGM 2 X 20 VFD O.I.

General Specifications

1. **POWER REQUIREMENTS**: 11 min. to 30 max. VDC @ 3.0 W
   Power Up Current: 2.75 A for 3.5 msec. max.
   Must use a Class 2 or SELV rated power supply.
2. **DISPLAY**: 2 lines of 20 characters, 0.197" (5 mm) high Vacuum Fluorescent display
3. **KEYPAD**: 3 screen legendable soft keys, 8 User re-legendable function keys, numeric pad with raise, lower, next, previous, enter, delete, exit, alarms and mute keys, all embossed with Tactile feedback.
4. **MEMORY**: 128 K (64 K user) battery backed RAM (Battery life expectancy 10 years). Optional factory fit expansion to 256 K (192 K user).
5. **PHYSICAL DIMENSIONS**: L = 8.11" (206 mm), H = 6.38" (162 mm), D = 2.22". (57 mm).
6. **CONSTRUCTION**: Metal enclosure with NEMA 4/IP65 front plate when correctly fitted with the gasket provided. This unit is rated for NEMA 4/IP65 indoor use. Installation Category I, Pollution Degree 2

7. **FIELD CONNECTIONS**: Removable screw terminal blocks.
8. **ENVIRONMENTAL CONDITIONS**:
   Operating Temperature: 0 to 40°C
   Storage Temperature: -20 to 80°C
   Operating and Storage Humidity: 80% max. relative humidity (non-condensing) from 0°C to 40°C.
   Altitude: Up to 2000 meters
9. **CERTIFICATIONS AND COMPLIANCES**:
   SAFETY
      EN 61010-1, IEC 1010-1
   ELECTROMAGNETIC COMPATIBILITY
      Immunity to EN 50082-2
      Emissions to EN 50081-2
10. **WEIGHT**: 2.1 lbs. (0.95 Kg)

Input/Output Communications

1. **SERIAL PORTS**: Data Format and Baud Rates for each port is individually software programmable up to 19200 baud.
   Port 1: Programming Port - RS-232 on an RJ-11 jack.
   Port 2: RS-232 Port on a Plug-In Screw Terminal Block
   Port 3: RS-485 Port on a Plug-In Screw Terminal Block
      (Up to 20 units can be connected and individually addressed.)

   Note: LED Indicators show communications status on Ports 2 & 3

2. **COMMUNICATION MODES**: Any of the three ports can be used to communicate with Serial Devices.
   Model - CX100 may communicate in Master mode with a different device protocol on each port *(See Note)*
   Ports 2 and 3 may be configured as different device protocols in Master mode and Port 1 may be used simultaneously in Slave mode for a third device protocol.
   However, only one of Ports 2 and 3 may be configured, if either is selected as a Slave protocol.

   Note: Except if Allen Bradley DH485 is selected on either Port 2 or 3, In which case only Port 1 will be available for a separate Device Protocol.

Ordering Information

MODEL NO.	DESCRIPTION	PART NUMBERS
CX100	VFD, 2 X 20, 8 Function keys, 128 K memory	CX100000
	VFD, 2 X 20, 8 Function keys, 256 K memory	CX100010