• Features robust PC architecture, providing system-level control for robotic workcells.
  • Built-in ladder logic processing; 4,096 I/O addresses
  • Variety of fieldbus network connections
  • High-speed E-server connection
  • I/F panels (10) shows HMI on pendant
• Often eliminates need for separate PLC and human machine interface (HMI). Delivers significant cost savings at system level, while decreasing workcell complexity and improving overall reliability.
• Patented multiple robot control, as well as I/O devices and communication protocols. Dynamic interference zones protect robot arm and provide advanced collision avoidance.
• Advanced Robot Motion (ARM) control provides high performance, best-in-class path planning and dramatically reduces teaching time. Supports coordinated motion for multiple robots and auxiliary/external axes.
• Small, lightweight Windows® CE programming pendant features color touch screen with multiple window display capability. Programming features are designed to use minimum number of keystrokes.
• Conserves power consumption from 38% - 70% depending on application and robot size.
• Compliant to ANSI/RIA R15.06-2012 and other relevant ISO and CSA safety standards.
• Available with Category 3 Performance Level d (PLd) Functional Safety Unit (FSU).
  • Multiple zones with inside and outside position monitoring
  • Speed limiting and stand-still monitoring
  • Multiple tool interference and angle checking
• DX200 control cabinet allows for up to three auxiliary/external axes and can be remote-mounted. Top- or side-mount expansion options available.
### STANDARD I/O - NPN

Forty optically isolated inputs, 32 transistor outputs, 8 relay contact outputs (configured to optimize each application), and four break-out cards are provided as standard. PNP I/O available.

### I/O EXPANSION - DX200

The DX200 supports I/O expansion via:

- EtherNet/IP
- DeviceNet
- Profibus-DP
- Mechatrolink II
- CC-Link

### SAFETY FEATURES

- **Controller Safety**
  - Emergency Stop & Safety Gate inputs
  - Programming Pendant includes: Safety-Rated Emergency Stop Pushbutton, 3-Position Enable Switch with key-lock and Manual Brake Release built into programming pendant. Meets ANSI/RIA R15.06-2012 and CSA Z434-03

- **Standard Software Features**
  - Arm interference, collision detection, machine lock, and safety interlock

- **Functional Safety Unit**
  - Position monitoring (32 zones), speed limiting, tool monitoring, graphic pendant set-up

### PENDANT

- **Pendant Dimensions**
  - 169 (w) x 314.5 (h) x 50 (d) (6.6” x 12.4” x 2”)

- **Pendant Display**
  - 5.7-inch full-color touch screen, 640 x 480 (VGA)

- **Pendant Languages**
  - English, German, Japanese, Spanish, Chinese

- **Pendant Weight**
  - .998 kg (2.2 lbs)

- **Coordinate System**
  - Joint, rectangular, cylindrical, tool, 63 user-coordinate frames

- **Windows® Menu-Driven Interface**
  - User-selectable touch-screen menu, multiple windows supported; one Compact Flash slot; one USB port (1.1)

- **Pendant O/S**
  - Windows® CE

- **Protection Rating**
  - IP65

### PROGRAMMING

- **Programming Language**
  - INFORM III, menu-driven programming

- **Robot Motion Control**
  - Joint motion, linear, circular, spline interpolation

- **Multiple Device Control**
  - Parallel Start, Twin Synchronous, Multiple Group Combinations, Station Coordinated Moves (positioners), Bases (tracks and gantries)

- **Programmable Logic Control**
  - Ladder monitor, ladder programming, I/F pendant display, address naming, expanded logic operands

- **Device Instructions**
  - Application specific (arc and spot welding, handling, general purpose)

- **I/O Instructions**
  - Discrete I/O, 4-bit and 8-bit manipulation, analog output, analog input, analog scaling, sloping

### MAINTENANCE

- **Maintenance Functions**
  - System monitor, internal maintenance clocks

- **Self-Diagnostics**
  - Classifies errors and major/minor alarms and displays data; monitors reducers for predictive wear; alerts when major power components reach design life

- **User Alarm Display**
  - Displays alarm messages for peripheral devices

- **Alarm Display**
  - Alarm messages, alarm history provides instruction of how to repair fault

- **I/O Diagnosis**
  - Permits simulated enabled/disabled input/output