4900 PLC DOOR INTERLOCK CONTROL

Secure Interlock Door Control
The #4900 series door interlock controller can provide power and control for up to 128 doors. The PLC logic allows only one door, in any defined area, to be unsecured at a time. Simultaneous requests for access or requests for access while another door is unsecured are denied to maintain the highest level of control.

Environmental or Security Control
Suitable for air locks or security mantraps, this door interlock system will effectively control normally unlocked doors, normally locked doors or any combination of both. The controller may also be customized to control automatic door openers and provide timing and logic sequences for biological wash-down and air purging controls.

Fail-safe or Fail-secure Locks
Lock control relays with DPDT outputs allow use of 12 or 24 volt DC fail-safe maglocks and fail-secure electric strikes. Both types can be used simultaneously on the same doors.

Access Control Compatible
Any access control system can be used with the 4900 series controllers. The request for access input recognizes any normally open dry contact.

Optional 12/24 VDC Lock Power
While the PLC controller requires regulated 12 or 24 VDC input, the integral 4204 power supply also provides ample 12 or 24 VDC output to operate maglocks and/or strikes for each of the doors. The heavy-duty power supply is ready for hook-up to the fire alarm system. An alarm output is also provided for monitoring the control system.

Traffic Control Indicators
The DPDT relay outputs can also be used to control lighted door status indicators; which provide users with visual feedback as to when a door may be accessed. For user convenience, a green light is typically used to signify that a door is ready for access and a red light to indicate that a door is un-accessible. Dortronics #7201xL2-H hi-intensity LEDs are ideal for use with this system.
**Description**

#4900-PLC - Programmable controller capable of interfacing with up to sixteen I/O modules for a total capacity of 128-Inputs and 128-Outputs.

#4900-I/O Module - Eight digital Optically isolated inputs accept dry contact signals from door status switches and request-for-access devices. The #4900-I/O module has additional capability providing Digital outputs which may be utilized for up to four more relays controlled by the PLC.

**Model Numbers**
- 49211-U (2 Door 1 Room Unlocked)
- 49211-L (2 Door 1 Room Locked)
- 49311-U (3 Door 1 Room Unlocked)
- 49311-L (3 Door 1 Room Locked)

*Over 4 doors & up to 120 door configurations available.*

**Specifications**

Enclosure - 12" x 16" x 4" deep NEMA enclosure will accommodate PLC controller & one I/O module with power supply. Additional modules require larger enclosures.

PLC Module - 6-1/8" x 3-3/8" overall
I/O Module - 10' x 3" overall

Electrical - AC Input - Fused 110 VAC
DC Output - 4 amp field selectable 12 or 24 VDC

Inputs - Door Status (Dry contact closed when door secure)
Request for Access (Dry contact normally open)

Relay Outputs - DPDT Contacts rated 3 Amps @ 28 VDC for each door (Magnetic lock or strike & LED traffic indicators for each door. One common on each relay is fused.

**Operation**

Only one door may be unlocked or open at one time. Unlocking or opening one door automatically secures all other doors within the designated area. A request for access at any normally locked door will inhibit the REX inputs for all other doors in the area.

Lock relay contacts will allow low voltage red and green LEDs to be utilized for user feedback. Typically a green light indicates that access is permitted, while a red light signals that another door is open and access is denied at this door.

Other customized operations may be factory programmed to allow timed sequences, etc. **XDSP option** allows user selectable timing operations. Call for additional information and pricing.

**Auxiliary Digital Outputs**

Outputs may be used to control 4 additional relays.

**LEDs on each Input and output indicate status to make installation and troubleshooting quick and simple.**