48900 Series

Field Configured Nine Door Interlock

User Programmable PLC Interlock

Field Selectable Door Sequence & Functions

The 48900 PLC interlock controller is a cost-effective method for operating door interlock and mantrap systems of up to nine doors. The fully integrated controller is a one board solution that allows the installer complete control of all operating and configuration options without complex software.

Environmental or Security Applications

Suitable for air locks or security mantraps with two to nine doors that are locked or unlocked. This controller has outputs for traffic lights, door violation alarm and provides three individual timing sequences for, *Propped Door Time*, *Emergency Overide Unlock Time* & *Rex Unlock Time.*

Access Control Compatible

Any access control system can be used with the 48900 series controllers. The request for access input utilizes a dry contact. Each door has a form-C SPDT dry contact output to mirror door status back to an access control panel or remote console.
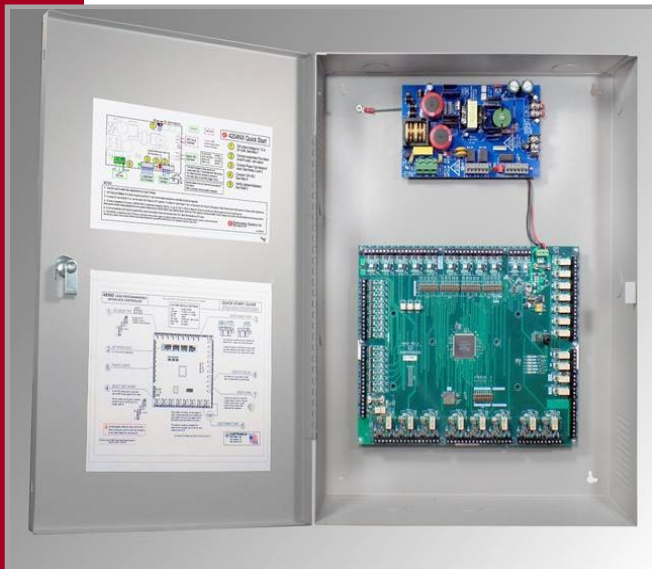
Available with Power Supply & Enclosure

The 48900 controller can be paired with a 4, 6 or 10 Amp UL 294 power supply that includes a Fire Alarm connection for emergency egress and can provide power to operate maglocks, electric strikes and traffic lights. The controller is also available without the power supply & enclosure for connection to an existing 12-24VDC power source.

Standard Configurations:

48901 DC Powered PLC Controller:
Mounted in an enclosure with (UL)294 power supply. Controls 2 – 9 Doors in Any Combination Locked or Unlocked
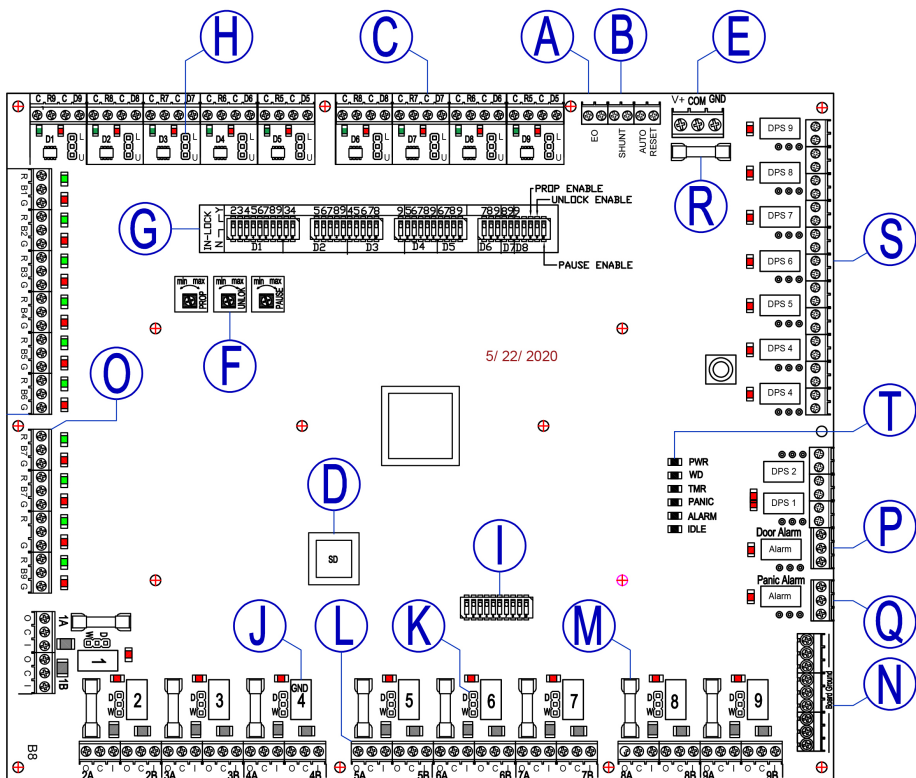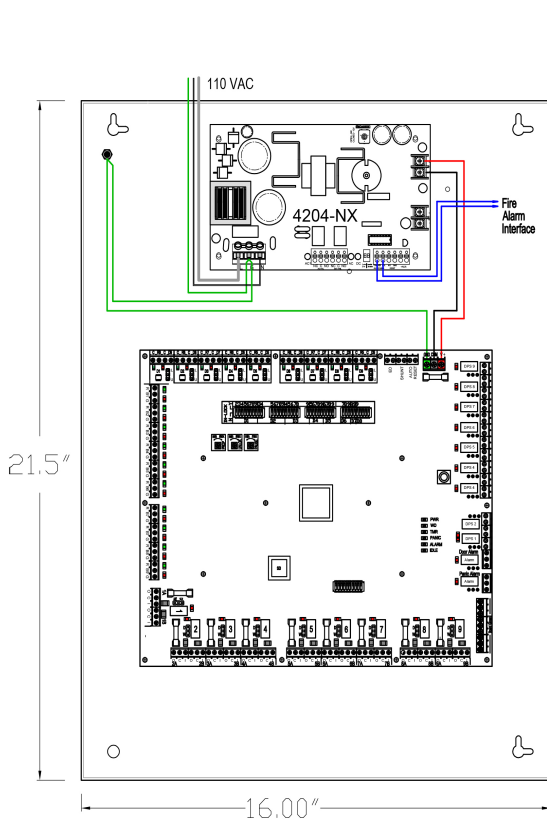
48900XPA Panel mounted Controller:
PLC mounted on a panel with Stand-offs for field mounting in existing Enclosure.

48900 Stand-alone PLC Controller:
PLC circuit board only. No Enclosure or Power Supply.

DORTRONICS SYSTEMS, INC.

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Product Specifications

Legend for diagram:

A	Emergency Unlock Input	**H**	Door Configuration Jumper	**O**	Red Green Traffic Lights
B	Interlock Shunt Input	**I**	Output Configuration Switches	**P**	Door Alarm Output
C	Door & Access Control Inputs	**J**	Lock Control Relays	**Q**	Panic Alarm Output
D	SD Memory Card Slot	**K**	Lock Output Wet Dry Select	**R**	Master Fuse
E	System Power Input	**L**	Lock Control Outputs	**S**	Door Status Out – Dry
F	Timer Adjustment Controls	**M**	Lock Power Fuse	**T**	System Status Lights
G	Interlock Setting Switch Block	**N**	Lock Ground Return Terminals		

Physical & Electrical Data:

48901 Powered with Enclosure
NEMA Enclosure - 16"W x 21-1/2"H x 4-1/2"D
accommodates PLC controller and 4204NX
4 Amp Class 2, UL 294 Listed power supply (UL)
AC Input - Fused 110 VAC
DC Output - 4 amp @ 12/24 VDC
Optional 6 or 10 Amp Power supply available.

48900XPA Panel mounted 13.5" W x 11.5" H
48900 PLC Module 12" W x 10" H x 1.5" D

Inputs:
Nine Inputs for Door Status
Nine Request for Access
One for Panic release, One for Interlock
Shunt/Override

Outputs:
Nine Lock Control Relays rated 2 Amps @ 28 VDC
Nine Door Status Outputs
Powered Red & Green LED outputs for each door
One Door Alarm Output, One panic Alarm output

Timers: Three Onboard Adjustable Timers for:
Propped Door Time, Emergency Overide Unlock Time & *Rex Unlock Time*

Operation –
Unlocking or opening one door automatically secures other designated doors within the Interlock group. A request for access at any normally locked door will inhibit the REX inputs for all other locked doors and secure all designated unlocked doors in the group.

Lock relay contacts will switch low voltage power to maglocks and/or strikes. Lock outputs can be set for either wet or dry contacts and fail-safe or fail-secure operation. For user feedback, designated red/green LED outputs show lock status for unlocked doors or door availability status for locked doors. 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.

There are two designated alarm outputs; one for an interlock door violation alarm and one to indicate emergency unlock for a panic release.