

## 48500 SERIES

### Field Configured Interlock Controller User Programmable PLC Interlock



#### Features:

##### **48501 PLC Controller Powered:**

Mounted in an enclosure with  294 power supply. Controls 2 – 5 Doors in Any Combination Locked or Unlocked

##### **#48500 PLC Standalone Controller:**

Controller only PCB Controls 2 – 5 Doors in Any Combination Locked or Unlocked. No enclosure or Power Supply

#### **Field Selectable Door Sequence & Functions**

The 48500 PLC interlock controller is a cost-effective method for operating door interlock and mantrap systems of up to five 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 five doors that are locked or unlocked. This controller has outputs for traffic lights and door alarm. It provides adjustable timed delays for a Propped Door, Panic Release & door Unlock Time. There are also optional AUX outputs available to control automatic door with locks.

#### **Access Control Compatible**

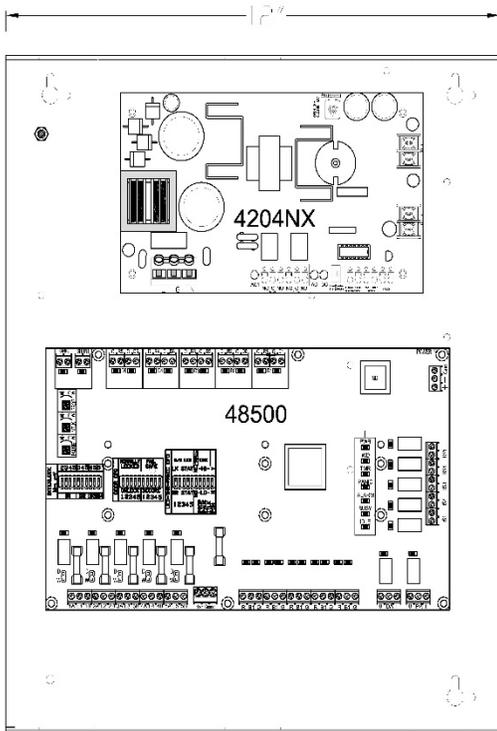
Any access control system can be used with the 48500 series controllers. The request for access input recognizes any normally open dry contact. Each door has a normally open dry contact output to mirror door status back to an access control panel or remote console

#### **Available with Power Supply & Enclosure**

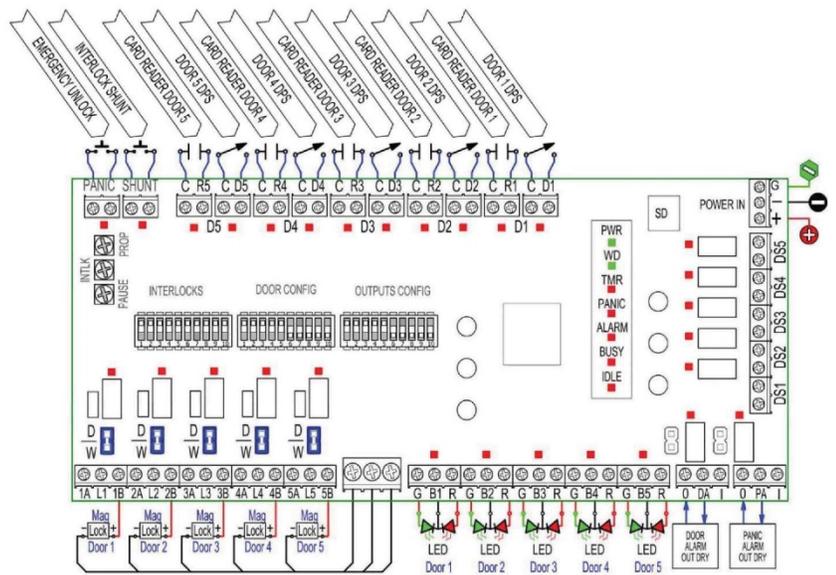
The 48500 PLC controller can be paired with a 4-Amp UL 294 Class 2 power supply (*only the 4 amp includes a Fire Alarm connection*) and all can provide power to operate maglocks, electric strikes and traffic lights. The controller is also available without the power supply & enclosure for connection to an existing 12-24VDC power source.



# Product Specifications



## FIVE DOOR LOCKED EXAMPLE



### Physical Data:

#### #48501 Powered in Enclosure

Enclosure- 12" x 15-1/2" x 4-1/2" deep NEMA enclosure accommodates PLC controller and Power supply.

#48500 PLC Module 6" H x 10" L Din Rail Mount

xAUX Optional output wiring harness for Auto doors with locks

### Electrical: #4204NX

4 Amp Class 2 UL 294 Listed power supply.  
AC Input - Fused 110 VAC  
DC Output - 4 amp @ 12/24 VDC selectable

Optional 6 or 10 Amp Power supply available

### Inputs:

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

### Outputs:

Five Door Control Relays rated 2 Amps @ 28 VDC  
Five Door Status Outputs  
Ten LED traffic indicators (2) for each door.  
One Door Alarm Output, One panic Release output

**Timers:** Three Onboard Adjustable Timers for:

*Propped Door Time, Panic Release Unlock Time & Unlock Pause Time for Rex unlock delay.*

### Operation –

Only designated doors may be unlocked or open at any time. Unlocking or opening one door automatically secures other designated doors within the Interlock. A normally locked door will inhibit all interlocked doors when it is either open or unlocked; normally unlocked doors will lock, and access requests at a normally locked door are ignored. #

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

Optional auxiliary outputs are available for auto-doors with locks. For user feedback designated red/green LED outputs may be selected for either lock status or door availability status, 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. Other customized operations may be selected to allow adjustable timed sequences for inflating door seals, purging air or timing washdowns.



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