



# Universal Door Controller

UDC

## Won-Door Universal Door Controller



### RELIABLE OPERATION

Won-Door's Universal Door Controller (UDC) is a microprocessor-based automatic closing system designed for fire and access control applications. It complies with stringent safety and performance standards, including UL 864, UL 294 and NFPA 80.



"The Smoke & Fire Containment People"  
www.doorsysinc.com

Distributed by: Door Systems, Inc.



### OPERATION FEATURES

#### Closing Triggers:

- Fire Signal
- Access Control Signal
- Low Battery Voltage
- Low AC Voltage (optional)
- Local Panic
- Remote "Lock" Control (optional)

#### Obstruction Detection:

- Door stops (reverse upon contact, programmable)
- Pauses & re-closes in alarm mode
- Manual override enabled when not powered

#### Remote Control & Monitoring:

- Integrate w/ Building Management Systems
- MODBUS capable communications

### POWER SPECIFICATIONS

- Input Voltage: 120-240 VAC
- Dual-sourced: DC power supply & backup battery
- Backup Power: 12V/24V sealed, lead-acid battery

### REGULATORY REFERENCES

- NFPA 80: Standard for Fire Doors and Other Opening Protectives
- UL 864: Standard for Control Units and Accessories for Fire Alarm Systems
- UL 294: Standard for Access Control System Units

### SAFETY FEATURES

#### Pressure-Sensitive Leading Edge:

- Door stops and pauses, for not less than three and up to 30 seconds, upon obstruction
- Re-closes in alarm and security modes

### MOTOR OPERATOR ASSEMBLY

- 12- or 24-volt DC gear-motor
- Drive Sprocket
- Clutch
- Brake (optional)
- Position Sensors
- Chain-driven drive mechanism
- 6-18" per second operation speed

### ELECTRONIC CONTROL BOX

#### Microprocessor-Based Monitoring:

- Dual power source health
- Battery status - missing, bad, low
- Charging circuit integrity
- Fuse failure detection
- AC voltage anomalies

#### Drive Train Health Monitoring

#### Input Fault Detection:

- Door block
- Exit Device
- Secure Access Input
- Key switches

#### Watchdog Circuit:

- Software reset on hang
- Reset tracking for diagnostics

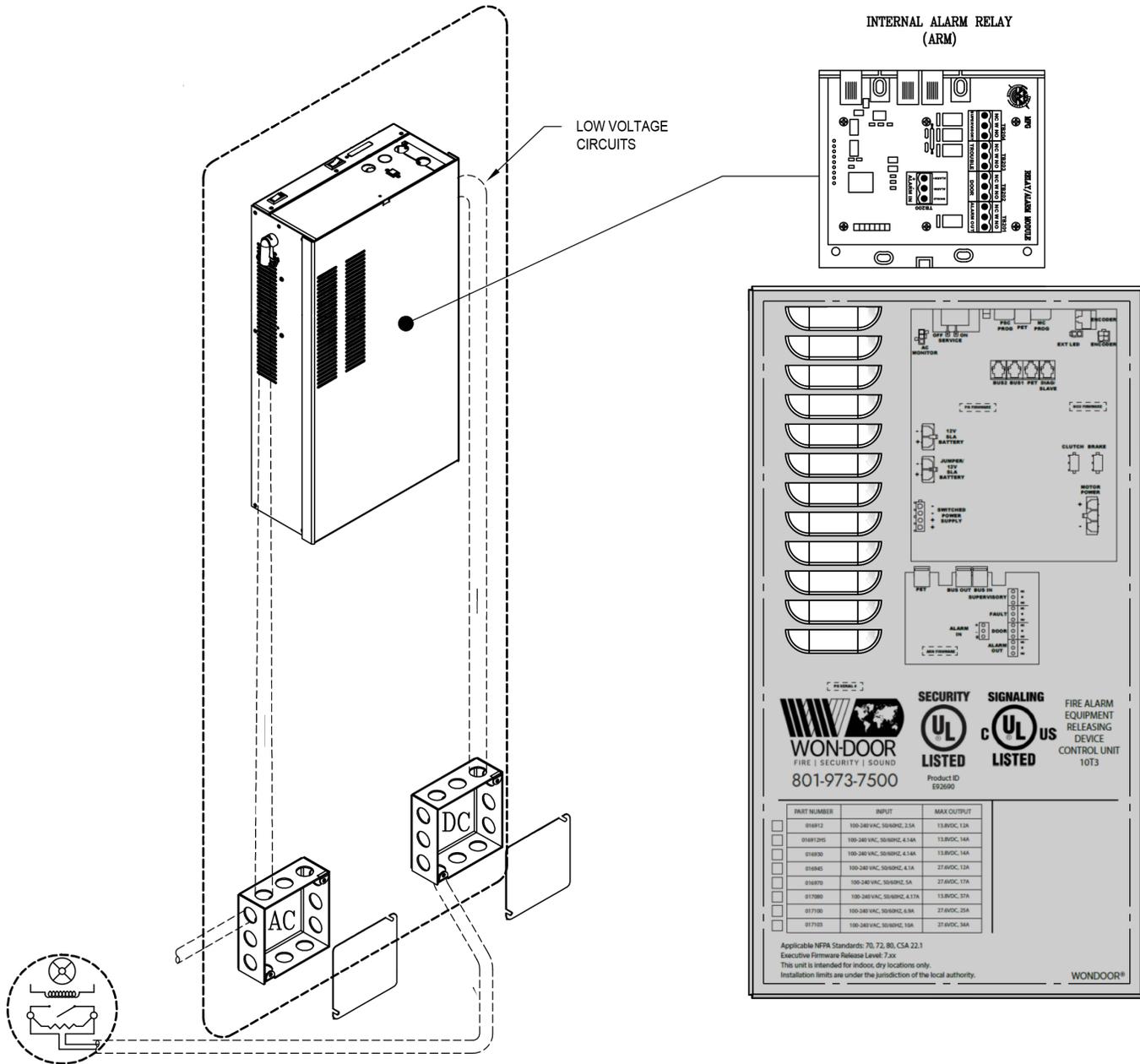
#### Fire Alarm Input Protection:

- Withstands up to 120 VAC
- Detects improper wiring (non-dry contact)

#### System Communications:

- Internal bus communication
- Local & remote fault indication

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### UDC ELECTRICAL DIAGRAM

Indicates how the AC power and low voltage alarm wiring are run to the Won-Door Universal Door Controller.

### UDC CONTROL BOX LID

The Universal Door Controller box lid indicates UL & NFPA standards, schematic design of the UDC circuit board, and required input/output electrical measurements.