9000DE Series

Delayed Egress Exit Device

Installation instructions

95011817 - 01-2020

| EN |

dormakaba

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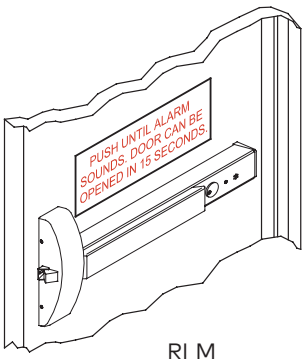
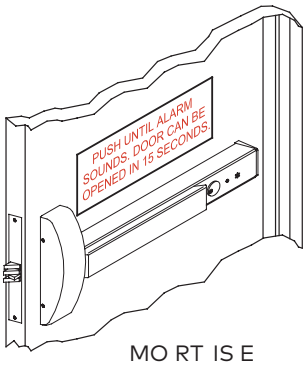
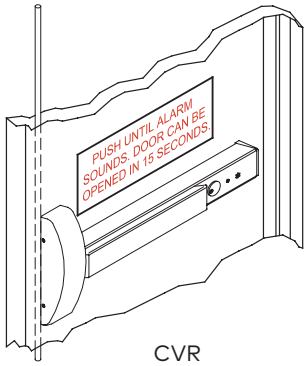
Note: Refer to individual series installation instructions for templating and installation of device; @ www.dormakaba.com
These are additional instructions for installation and operation of the "Delayed Egress" unit.



RIM
9300DE/9700DE



MORTISE
9500DE



CVR
9100DE/9600DE

1.1 Specifications

REQUIRES dormakaba ES-100 or AD100 POWER SUPPLY.

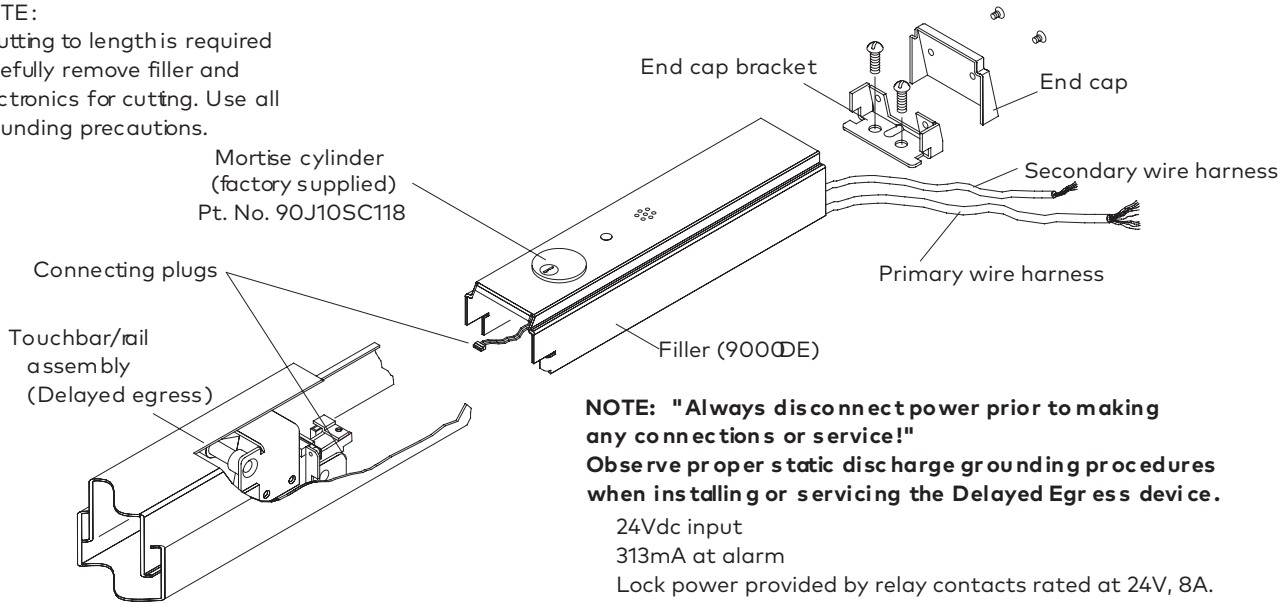
85 Decibel Alarm - Standard
LED Status Indicator - Standard
Nuisance Alarm - Standard, DIP Switch Settable
Key Switch Control - Standard
Remote Authorized Egress - Standard, DIP Switch Settable
Remote Re-Arm - Standard
Remote Bypass - Standard
Door Position Input - Standard, DIP Switch Settable
Auto Reset or Manual Reset, DIP Switch Settable
Auto - Stanadard (Manual - in CA)
Additional Form "C" Relays For Optional Horn etc.
(Rated 1 amp @ 30 vdc)
Fire Alarm Connection
Paired Doors Connection

Easily accessible slide in and out electronics.
Meets UL, ANSI/BHMA & CBC requirements.

SIZE A: (9300DE/9500DE/9100DE)
Will fit 48" door opening without cutting.
Can be cut to fit a 40 1/2" minimum door opening.
SIZE B: (9300DE/9500DE/9100DE)
Will fit 36" door opening without cutting.
Can be cut to fit a 34 1/2" minimum door opening.
SIZE AA: (9600DE/9700DE Series)
Will fit 48" (1219 mm) door opening without cutting.
Can be cut to fit a 39 1/2" minimum door opening.
SIZE BB: (9600/9700DE)
Will fit 36" door opening without cutting.
Can be cut to fit a 32" minimum door opening.

1.2 Assembly

NOTE:
If cutting to length is required carefully remove filler and electronics for cutting. Use all grounding precautions.

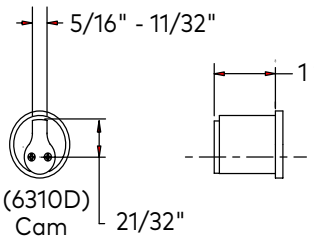


NOTE: "Always disconnect power prior to making any connections or service!"
Observe proper static discharge grounding procedures when installing or servicing the Delayed Egress device.

24Vdc input
313mA at alarm
Lock power provided by relay contacts rated at 24V, 8A.

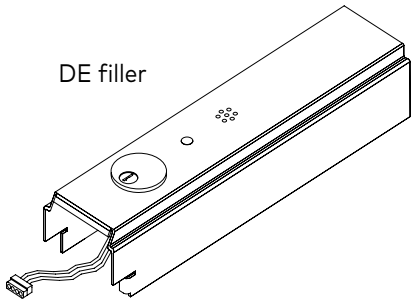
1.3 Cylinder specifications

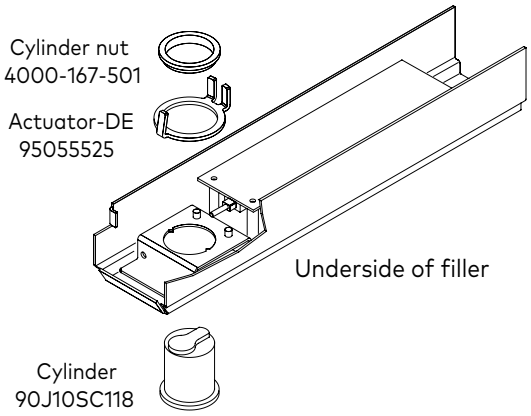
Standard 1 1/8" mortise cylinder, randomly keyed supplied by factory. Spacer required for longer cylinder such as when using an IC core.



To Change Cylinder: Carefully remove filler from rail. Unscrew cylinder nut, remove actuator and replace cylinder. Spacer required for cylinders over 1 1/8". Insert cylinder as shown, re-install actuator & secure with cylinder nut. Do not over tighten. Re-install filler in rail and reconnect the small pigtail connectors. Use caution not to pinch or bind wires.

Note: If **DIP** switch settings are required to be changed, do it now prior to re-installing filler in rail. (See Section below.)





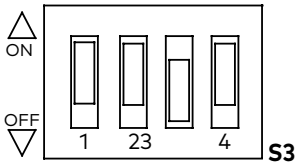
1.4 DIP switch setting

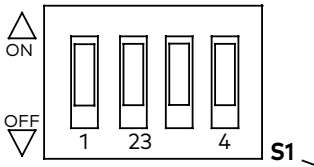
DIP switch settings should be completed at time of initial installation; check local building code. Factory settings are as follows:

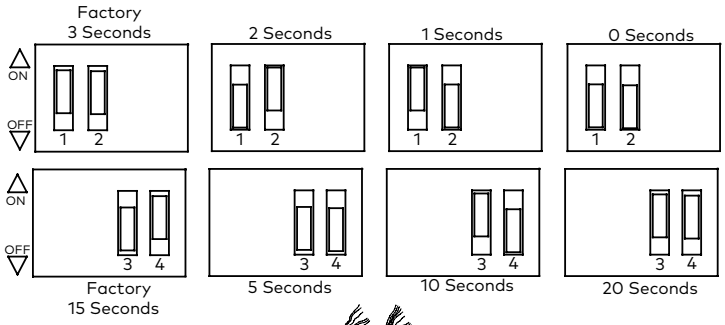
S1
(1) Audible fire alarm: **(On) Active** ; (Off) Not active
(2) For future use.
(3) Power up state: **(On) Locked** ; (Off) Un-locked
(4) Door position switch: **(On) In-Active** ; (Off) Active

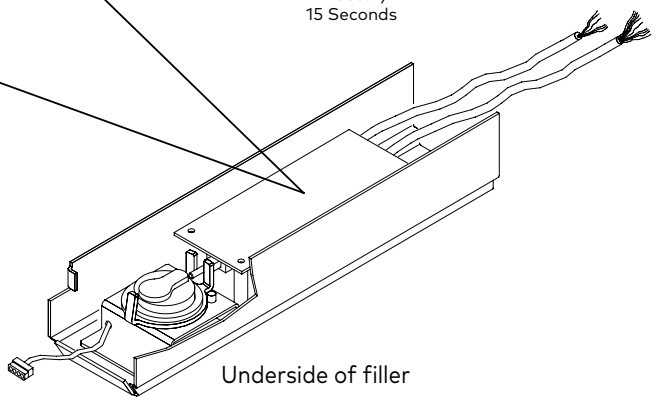
S3
(1) Nuisance alarm time: (See chart below.)
(2) Nuisance alarm time: (See chart below.)
(3) Authorized egress time: (See chart below.)
(4) Authorized egress time: (See chart below.)

Standard Factory Setting









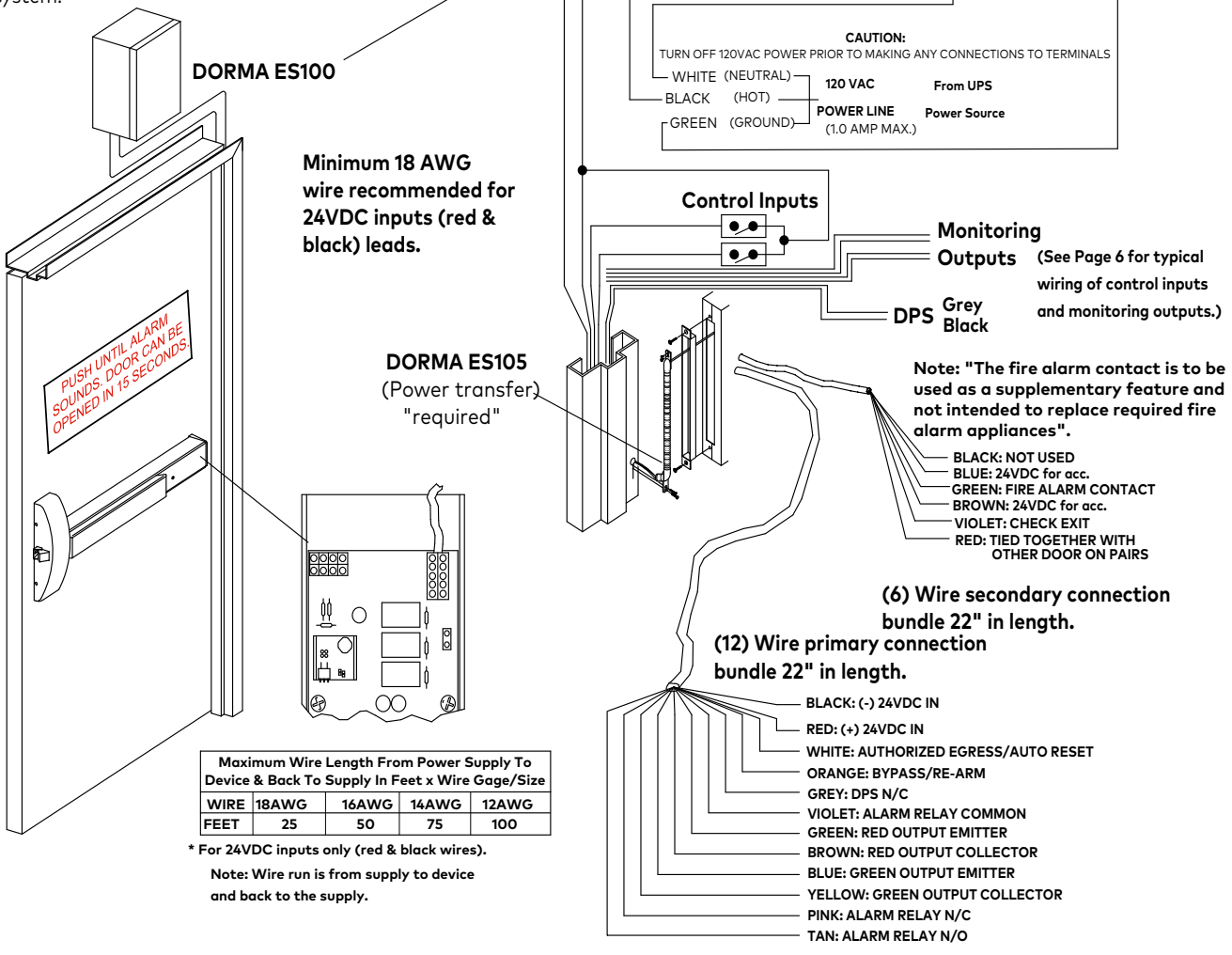
1.5 Basic wire connection

Specific project or custom wiring diagrams available on request, consult the **dormakaba** techinical service department.

"Product intended for indoor use."

NOTE: Always disconnect power prior to making any connections or service.
It is recommended that the 120VAC power be supplied from an Uninterrupted Power Supply (UPS) to ensure proper operation during a power failure.
Always observe proper static discharge grounding procedure's when installing or servicing the DE device.
Wires that interconnect (+) 24Vdc, (-) 24Vdc, authorized egress/auto reset, and all other secondary connections must be located within the same room as the panic hardware per **UL294**.

For ULC installations: Some **"Authorities Having Jurisdiction"** also require an illumination level of 100' feet at the door, to be provided by the emergency power supply system.



Maximum Wire Length From Power Supply To Device & Back To Supply In Feet x Wire Gage/Size				
WIRE	18AWG	16AWG	14AWG	12AWG
FEET	25	50	75	100

* For 24VDC inputs only (red & black wires).

Note: Wire run is from supply to device and back to the supply.

1.6 Key switch operation for device

Delayed Egress Mode: Unit is armed and touch bar will not activate the latchbolt. **(LED is solid green, audible alarm is off)** . Initiated after power up, (DIP switch #2 in OFF position) authorized egress mode or re-arm mode.

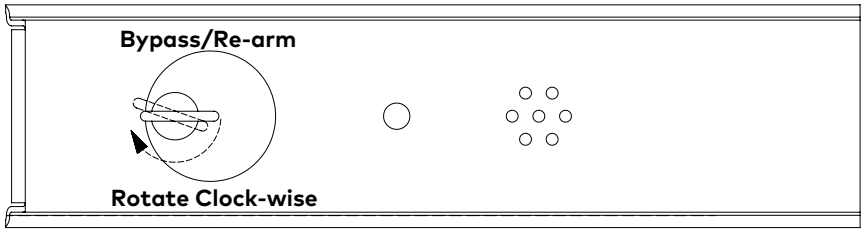
Nuisance Alarm Mode: Unit is armed and touch bar will not activate the latch bolt. **(LED is solid green, audible alarm sounds a short tone)** DIP switch selectable for 0, 1, 2 or 3 seconds. (See page 2) Initiated by depressing touch bar.

Delay Mode: Unit is armed and touch bar will not activate the latch bolt. **(LED is solid yellow, audible alarm sounds intermittent tone)** . Unit remains in the delay mode for 15 seconds (including nuisance time). Initiated by holding the touch bar depressed past the nuidance alarm time (30 second delay mode option available.) Once started, the delay mode is irreversible and automatically initiates the alarm mode.

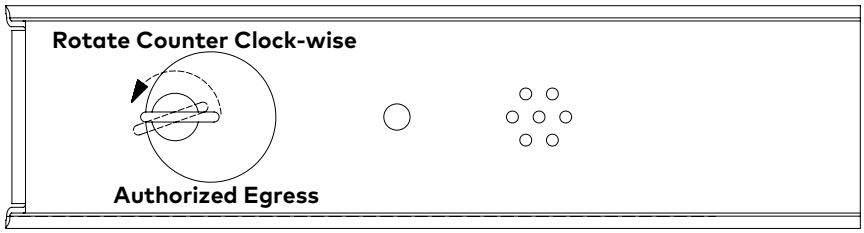
Alarm Mode: Unit is disarmed and touch bar will activate the latch bolt **(LED is solid red, audible alarm sounds continous tone)** . Initiated automatically from the delay mode and is irreversible. Unit remains in the alarm mode until manually reset with key.

By-Pass Mode: From the delayed egress mode; unit is continuously disarmed and touch bar will activate the latch bolt **(LED slowly flashes green, audible alarm is off). Initiated by rotating the key clockwise (approximately 180 degrees), until switch engages, hold key until mode is activated.** DPS input is disabled.

Re-arm Mode: From alarm mode; unit goes to the delayed egress mode. Initiated by rotating the key clockwise (approximately 180 degrees) until switch engages, hold key until mode is activated. From the bypass mode; unit goes to the delayed egress mode. Initiated by rotating the key clockwise (approximately 180 degrees.) until switch engages, hold key until mode is activated. **The LED will return to solid green** .



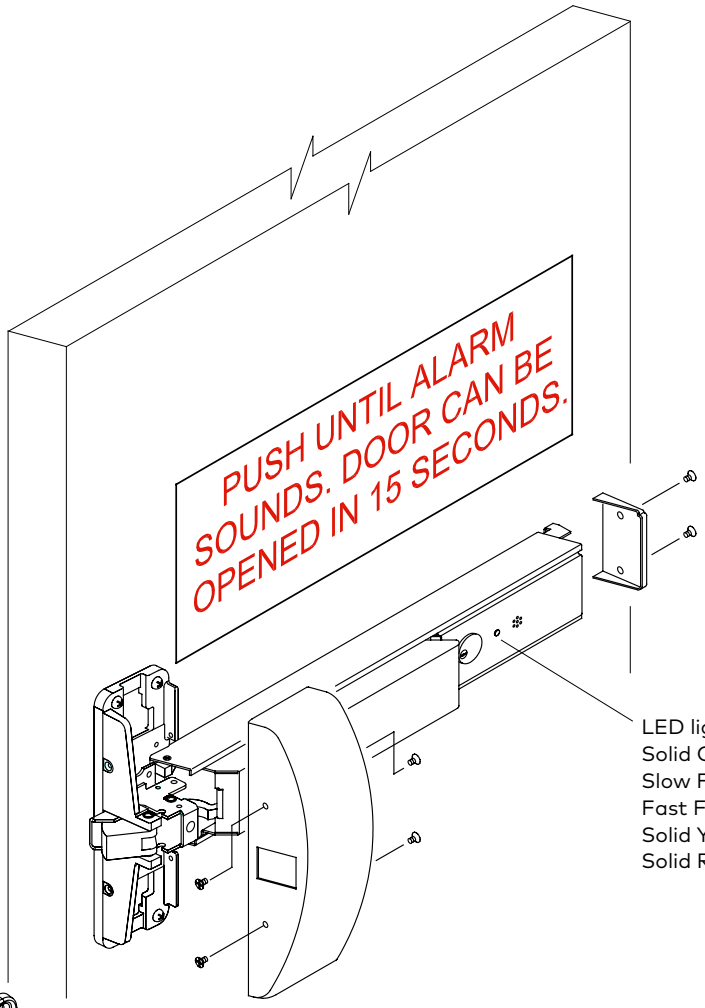
Authorized Egress Mode: Unit is disarmed for 5, 10, 15 or 20 seconds (DIP switch selectible) and touch bar will activate the latch bolt **(LED quickly flashes green, audible alarm is off)** . After the authorized egress time unit returns to the delayed egress mode automatically. **The authorized egress mode is initiated by rotating the key counter-clockwise (approximately 180 degrees) until switch engages, hold key until mode is activated.** DPS input will not initiate during the initial egress time, but will terminate the egress time if the DPS closes before the end of egress time. DPS input will initiate an alarm after the egress time if the DPS is opened.



NOTE: The **By-pass mode** and **Re-arm mode** (orange wire) may be intiated externally from the terminal connector. (Normally open dry contact to ground.) The **Authorized Egress mode** (white wire) may be initiated externally from the terminal connector (Normally open dry contact to ground). See page 6 for addtional details.

1.7 Cover, end cap and label

After all wire connections are made and device checked for operation, install the chassis cover, end cap and label as shown below.



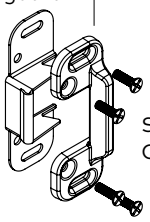
NOTE: Compliance with the California Building Code (CBC) requires different label then supplied. The CBC label is shown below. If required, order through Service Parts, model number CBCLBL. Consult with local code & "authority's having jurisdiction". See CBC Secton 1003.1.10 Paragraph 6.

KEEP PUSHING. THIS DOOR WILL OPEN IN 15 SECONDS. ALARM WILL SOUND.

NOTE: To enable the device to power up in the unarmed mode, set Dip switch #3 in the "OFF" position on S1 block. A green blinking light will appear. Device will required to be manually armed with a key at the device or from the remote console. **(See page 4 under rearm mode, for key operation.)**

LED light codes:
Solid Green - Delayed Egress Mode
Slow Flashing Green - Bypass Mode
Fast Flashing Green - Authorized Egress Mode
Solid Yellow - Delay Mode
Solid Red - Alarm Mode

Latch guard



Strike & Latch Guard Installation.

#463 strike

For added security a latch guard is supplied with the **9300DE/9700DE** delayed egress device. Install along with the standard #463 strike as shown. Correct reference dimension of 2 3/8" from edge of stop or mullion must be maintained.

It is recommended that the following routine maintenance checks be performed at intervals of not less than once a month, and as a requirement by the local authority having jurisdiction, by the occupant or his approved representative:

a) Inspect and operate the panic device to ensure that all components are in satisfactory working conditon.
b) Ensure that all strikes are free from obstruction.
c) Ensure that the fire alarm system and electronic function of device are in working order.

This product meets or exceeds the following standards:
ANSI/BHMA 156.3, CBC Section 1003.1.10, California State Fire Marshal, NFPA 80 &101 and UL Listed FWAX, FWAX7

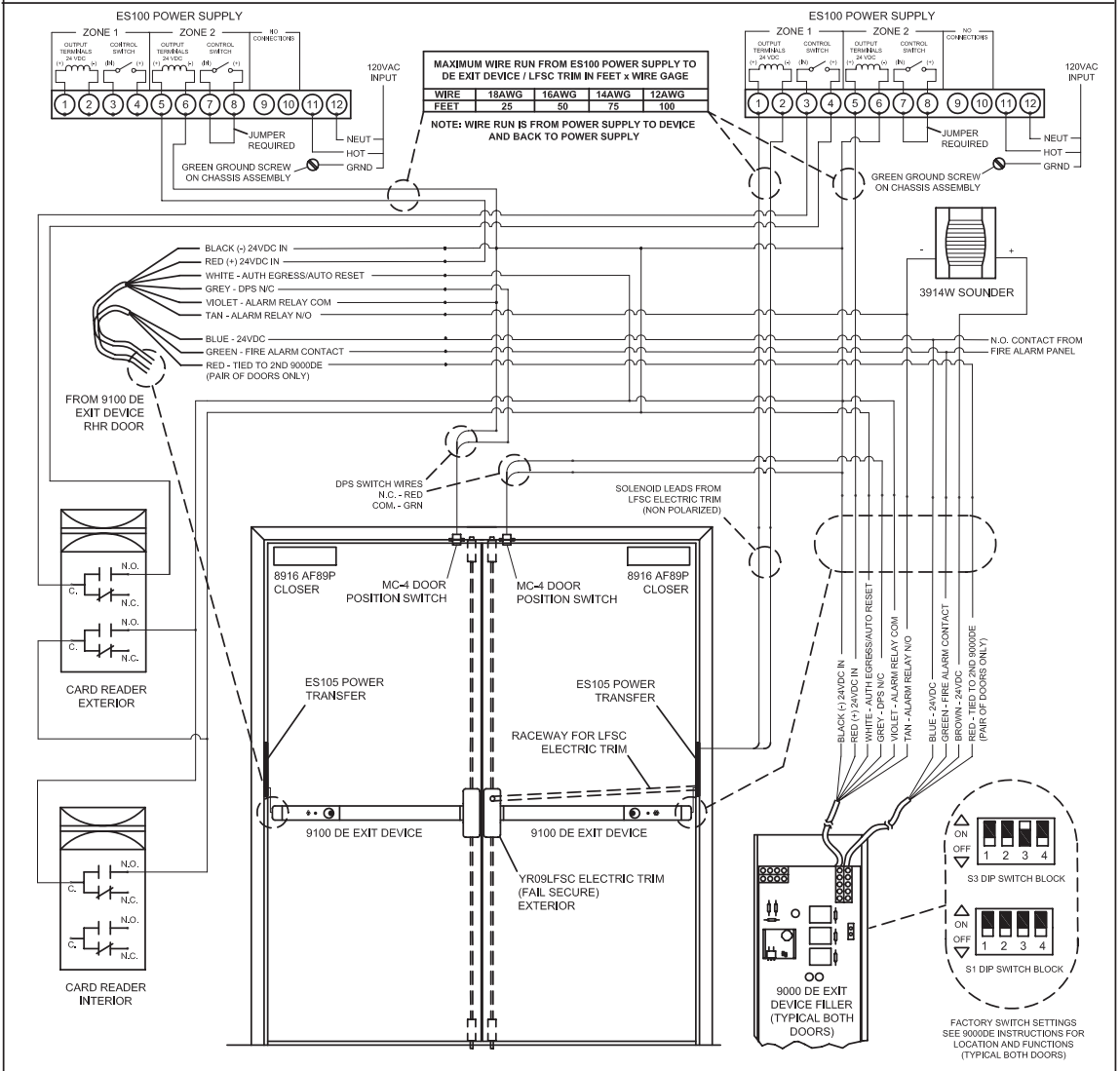
1.8 Pair of doors: 9100 DE Delayed Egress Exit Devices x YR09LFSC Electric Trim (Fair Secure) x ES100 Power Supply x ES105 Power Transfer x 3914W Sounder x MC-4 DPS x Card Readers

OPERATION: Both 9100 DE Exit Devices are armed **(Delayed Egress Mode).** Release of latch bolts by touch bar is prevented. If touch bar is depressed for longer than the Nuisance Delay Time (field selectable) an irreversible alarm sequence is initiated at 9100 DE and remote 3914W Sounder **(Delay Mode).** After the delay mode time has expired (field selectable), both 9100 DE Exit Devices are disarmed and touch bar is enabled to retract the latch bolts **(Alarm Mode).** Audible alarm will sound continuously at 9100 DE and remote 3914W Sounder until both 9100 DE Exit Devices are rearmed locally by key with key switch on either 9100 DE **(Re-Arm Mode).**
Authorized Egress: When a valid card is presented at Interior Card Reader or either 9100 DE key switch is rotated counter-clockwise, both 9100 DE Exit Devices are disarmed for field selectable time enabling the touch bar to retract the latch bolts without initiating the alarm sequence **(Authorized Eggress Mode).** After the authorized egress time has expired both 9100 DE Exit Devices will automatically re-arm. If either door is held open longer than the authorized egress time the MC-4 Door Position Switch will activate the alarm of the 9100 DE Exit Device at that door **(Alarm Mode).**
Authorized Entrance: When a valid card is presented at exterior Card Reader both 9100 DE Exit Devices are disarmed for field selectable time enabling the touch bar to retract the latch bolts without initiating the alarm sequence **(Authorized Egress Mode).** Simultaneously the YR09LFSC Electric Trim is unlocked allowing entrance by depressing lever. After authorized egress time has expired both 9100 DE Exit Devices will automatically re-arm and the YR09LFSC Electric Trim will relock securing door.(FAIL SECURE). If either door is held open longer than the authorized egress time the MC-4 Door Position Switch will activate the alarm of the 9100 DE Exit Device at that door **(Alarm Mode).** Entrance is also possible by key over ride of YR09LFSC Electric Trim however when door is opened MC-4 Door Position Switch will activate alarm of 9100 DE Exit Device and remote 3914W Sounder **(Alarm Mode).**

FIRE ALARM ACTIVATION: Both 9100 DE Exit Devices are unlocked and alarm is activated **(Alarm Mode).** YR09LFSC Electric Trim is locked (FAIL SECURE). Immediate egress is possible by depressing touch bar of either 9100 DE Exit Device. Entrance is possible by key over ride of YR09LFSC Electric Trim. 9100 DE Exit Device alarm and remote 3914W Sounder will sound continuously until rearmed locally by key with key switch on 9100 DE Exit Device **(Re-Arm Mode)..**

NOTES: 1) 9100 DE Exit Devices to be controlled by UL Listed Fire Alarm Panel.
2) N.O. triggers from both Card Readers to initiate 9000 DE Authorized Egress should be set for 1 second.
3) N.O. trigger from exterior Card Reader to unlock YR09LFSC Electric Trim should be set to allow adequate time to depress lever and open door.
4) All wiring and interface between EAC components to be determined and supplied by others.

PARTS LIST:
2 EA. - 9100DE Delayed Egress Exit Device, 24VDC, 5AMP inrush current, .5AMP holding current (DORMA)
1 EA. - YR09LFSC Fail Secure Electric Trim, .140Amp @ 24VDC, (DORMA)
2 EA. - ES100 Power Supply, Input: 120VAC, Output: 24VDC, 6 AMP Inrush .5 seconds, .65 AMP holding current per zone. (DORMA)
2 EA. - ES105 Power Transfer (DORMA)
2 EA. - MC-4 Door Position Switch, SPDT 250mA @ 30VAC/DC (DORMA)
1 EA. - 3914W Sounder, 63mA @ 24VDC (DORMA)
2 EA. - Card Reader (BY OTHERS)
2 EA. - 8916 AF89P Surface Closer (DORMA)



NOTE: This wiring diagram is provided to assist in interfacing DORMA USA products into the system described above. Compatibility and functionality of components not supplied by DORMA are not guaranteed. Component failure resulting from improper wiring is not covered by warranty. Refer to individual device product information sheets and installation instructions for wire guage sizes and additional information.

dormakaba
REAMSTOWN, PENNSYLVANIA 17567
DIAGRAM No. EAC-WD1244

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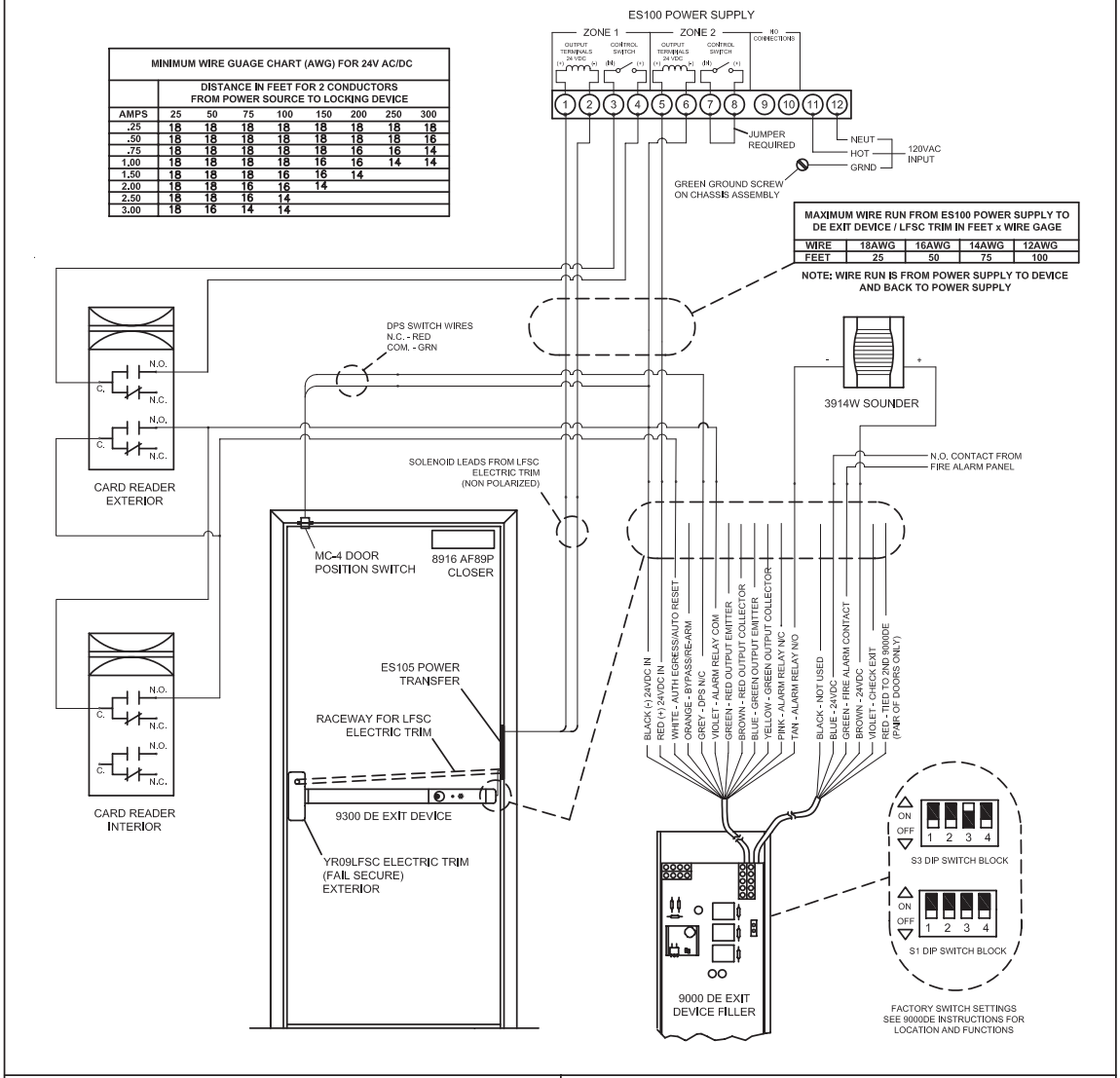
1.9 Single Door: 9300 DE Delayed Egress Exit Device x YR09LFSC Electric Trim (Fail Secure) x ES100 Power Supply x ES105 Power Transfer x 3914W Sounder x MC-4 DPS x Card Readers

OPERATION: 9300 DE Exit Device is armed **(Delayed Egress Mode).** Release of latch bolt by touch bar is prevented. If touch bar is depressed for longer than the Nuisance Delay Time (field selectable) an irreversible alarm sequence is initiated at 9300 DE and remote 3914W Sounder **(Delay Mode).** After the delay mode time has expired (field selectable), 9300 DE Exit Device is disarmed and touch bar is enabled to retract the latch bolt **(Alarm Mode).** Audible alarm will sound continuously at 9300 DE and remote 3914W Sounder until 9300 DE Exit Device is rearmed locally by key with key switch on 9300 DE **(Re-Arm Mode).**
Authorized Egress: When a valid card is presented at Interior Card Reader or the 9300 DE key switch is rotated counter-clockwise, the 9300 DE is disarmed for field selectable time enabling the touch bar to retract the latch bolt without initiating the alarm sequence **(Authorized Eggress Mode).** After the authorized egress time has expired the 9300 DE Exit Device will automatically re-arm. If door is held open longer than the authorized egress time the MC-4 Door Position Switch will activate the alarm of the 9300 DE Exit Device **(Alarm Mode).**
Authorized Entrance: When a valid card is presented at exterior Card Reader the 9300 DE is disarmed for field selectable time enabling the touch bar to retract the latch bolt without initiating the alarm sequence **(Authorized Egress Mode).** Simultaneously the YR09LFSC Electric Trim is unlocked allowing entrance by depressing lever. After authorized egress time has expired the 9300 DE device will automatically re-arm and the YR09LFSC Electric Trim will relock securing door.(FAIL SECURE). If door is held open longer than the authorized egress time the MC-4 Door Position Switch will activate the alarm of the 9300 DE Exit Device **(Alarm Mode).** Entrance is also possible by key over ride of YR09LFSC Electric Trim however when door is opened MC-4 Door Position Switch will activate alarm of 9300 DE Exit Device and remote 3914W Sounder **(Alarm Mode).**

FIRE ALARM ACTIVATION: 9300 DE Exit Device is unlocked and alarm is activated **(Alarm Mode).** YR09LFSC Electric Trim is locked (FAIL SECURE). Immediate egress is possible by depressing touch bar of 9300 DE Exit Device. Entrance is possible by key over ride of YR09LFSC Electric Trim. 9300 DE Exit Device alarm and remote 3914W Sounder will sound continuously until rearmed locally by key with key switch on 9300 DE Exit Device **(Re-Arm Mode).**

NOTES: 1) 9300 DE Exit Device to be controlled by UL Listed Fire Alarm Panel.
2) N.O. triggers from both Card Readers to initiate 9000 DE Authorized Egress should be set for 1 second.
3) N.O. trigger from exterior Card Reader to unlock YR09LFSC Electric Trim should be set to allow adequate time to depress lever and open door.
4) All wiring and interface between EAC components to be determined and supplied by others.

PARTS LIST:
1 EA. - 9300DE Delayed Egress Exit Device, 24VDC, 5AMP inrush current, .5AMP holding current (DORMA)
1 EA. - YR09LFSC Fail Secure Electric Trim, .140Amp @ 24VDC, (DORMA)
1 EA. - ES100 Power Supply, Input: 120VAC, Output: 24VDC, 6 AMP Inrush .5 seconds, .65 AMP holding current per zone. (DORMA)
1 EA. - ES105 Power Transfer (DORMA)
1 EA. - MC-4 Door Position Switch, SPDT 250mA @ 30VAC/DC (DORMA)
1 EA. - 3914W Sounder, 63mA @ 24VDC (DORMA)
2 EA. - Card Reader (BY OTHERS)
1 EA. - 8916 AF89P Surface Closer (DORMA)



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