

WC13 Series Restroom Control

INSTALLATION INSTRUCTIONS



1. GENERAL DESCRIPTION

The Restroom Control Kit allows access in and out of a restroom, with the ability to secure the door so patrons are aware that the location is either occupied or vacant.

The CX-WC13 Series of Restroom Control Kits are controlled by Camden's advanced relay logic controller, part number CX-33. CX-33 currently has 15 pre-set modes that will accommodate most Restroom, Vestibule and Card Access related applications. The kits are available with many different switch/button configurations including a wireless solution. When used to control a Restroom application, the modes most often used will be Mode 7 (normally unlocked) or Mode 8 (normally locked). Each Restroom Control Kit will have the ability to physically open the door then allow the patron to lock the door once inside. When locked the CX-33 will change the color of the inside PUSH TO LOCK and outside PUSH TO OPEN buttons from green to red, displaying that the Restroom is in use. When the inside PUSH TO OPEN is pressed, it will unlock the door, then physically open the door and change the color of the outside PUSH TO OPEN and inside PUSH TO LOCK buttons back to green displaying that the Restroom is now vacant.. The locked Restroom can be unlocked by either pressing the inside PUSH TO OPEN which will reset the system back to unlocked, or by using the crash bar, paddle or turning the knob set to open the door contact circuit and resetting the CX-33.

The CX-WC13 Series of Restroom Control Kits kit uses Camden's trademark Aura boards. The Aura circuit board is installed behind the outside PUSH TO OPEN and inside PUSH TO LOCK push buttons on either side of the door and can be seen easily seen by patrons at a distance.

The coloring of the Auras can be configured in different ways to suit the application. Its color choices are red, green and blue.

2. INSTALLATION

Operation at a Glance

When the exterior PUSH TO OPEN button is pressed, it will trigger the PBTN input on its Aura board, causing its N.O. relay contact to send a momentary closure to DRY 1 on the CX-33, allowing the door to swing open. When the interior PUSH TO

LOCK button is pressed, it will trigger the PBTN input on its Aura board, causing its N.O. relay contact to send a momentary closure to DRY 3, causing the CX-33 to lock the Restroom and switch the Aura colors from green to red. The inside PUSH TO OPEN button is wired directly to DRY 2 on the CX-33. When pressed, the Restroom will unlock and the door will swing open. The Restroom can also be unlocked by opening the door from the inside, which will break the door contact circuit, causing the CX-33 to reset and unlock the door. The Aura's will switch back to green signalling the Restroom is now vacant.

Mounting

IMPORTANT: Do not apply power until you have read the instructions fully and made the required adjustments.

The CX-33 should be mounted in a clean dry location out of direct contact with the elements. Suitable locations include inside a metal enclosure, operator header, or above a false ceiling. The Display & LED's are visible through the clear plastic case, which also has cut-outs for the programming buttons and terminal strips. Once the unit has been wired and adjusted, it may be tucked up into the operator header or affixed using the supplied Velcro or 2 sheet metal screws.

Note: Some Door Operators provide excessive voltage levels above their posted values. Always measure voltages provided on both the VDC & VAC scales sources first before applying power to any part of the Restroom Control Kit.

Wiring of this unit is dependent on the mode selected, however the following commonalities apply: The unit will operate on 12 or 24 volts, AC or DC. Connect to Terminals 1 & 2, which are non-polarity sensitive. NOTE: We highly recommend the use of a regulated power supply when powering equipment in certain modes such as the barrier-free restroom application, where the strike power may be maintained from a few minutes to many hours. We offer a low-cost board-only regulated power supply - CX-PS13 V3, which will supply clean, filtered & regulated 12 or 24VDC power for the strike and CX-33.

Wiring the CX-WC13 Series Restroom Control Kit is as follows:

Inputs:

Dry 1 & Input: The exterior PUSH TO OPEN button is wired to the PBTN input on its Aura board. The Aura's common

and normally open relay contacts are then wired to DRY 1 & Input on the CX-33.

The REM inputs are wired in parallel with all other Aura board REM inputs being used in the application. Then the paralleled Aura's are wired to Relay 3 (N.O.) on the CX-33.

DRY 2 & Input: The interior PUSH TO OPEN is wired directly to the CX-33's DRY 2 & Input.

DRY 3 & Input: The interior PUSH TO LOCK is wired to the Aura boards PBTN input. The Aura's common and normally open relay contacts are then wired to DRY 3 & Input on the CX-33.

DRY 4 & Input: The door contact (normally closed when the door is closed) is wired to DRY 4 & Input.

Power is then run to the power inputs of the Aura boards.

Outputs

Relay 1: Used for lock control. Wire the strike and provide power (N.O.- Mode 7, & Mode 8).

Relay 2: Used for Door Operator control. Wire the Operator (N.O.).

Relay 3: Used for Aura color switching. All Aura's get wired in parallel and wired to Relay 3 (N.O.).

Note: ensure correct polarity when wiring Aura's in parallel.

Programming the CX-33

The CX-33 has two Restroom applications (Mode 7 & 8). Determining which one is correct for you will be based on

whether the Restroom will be normally unlocked (Mode 7) or normally locked (Mode 8).

Selecting a Mode

To select a mode, press and release the "MENU" button on the CX-33. Then use the "UP" or "DOWN" buttons to get to Mode 7 or 8. When the screen displays only the Mode number, it is ready to use.

Editing the Settings for a Mode

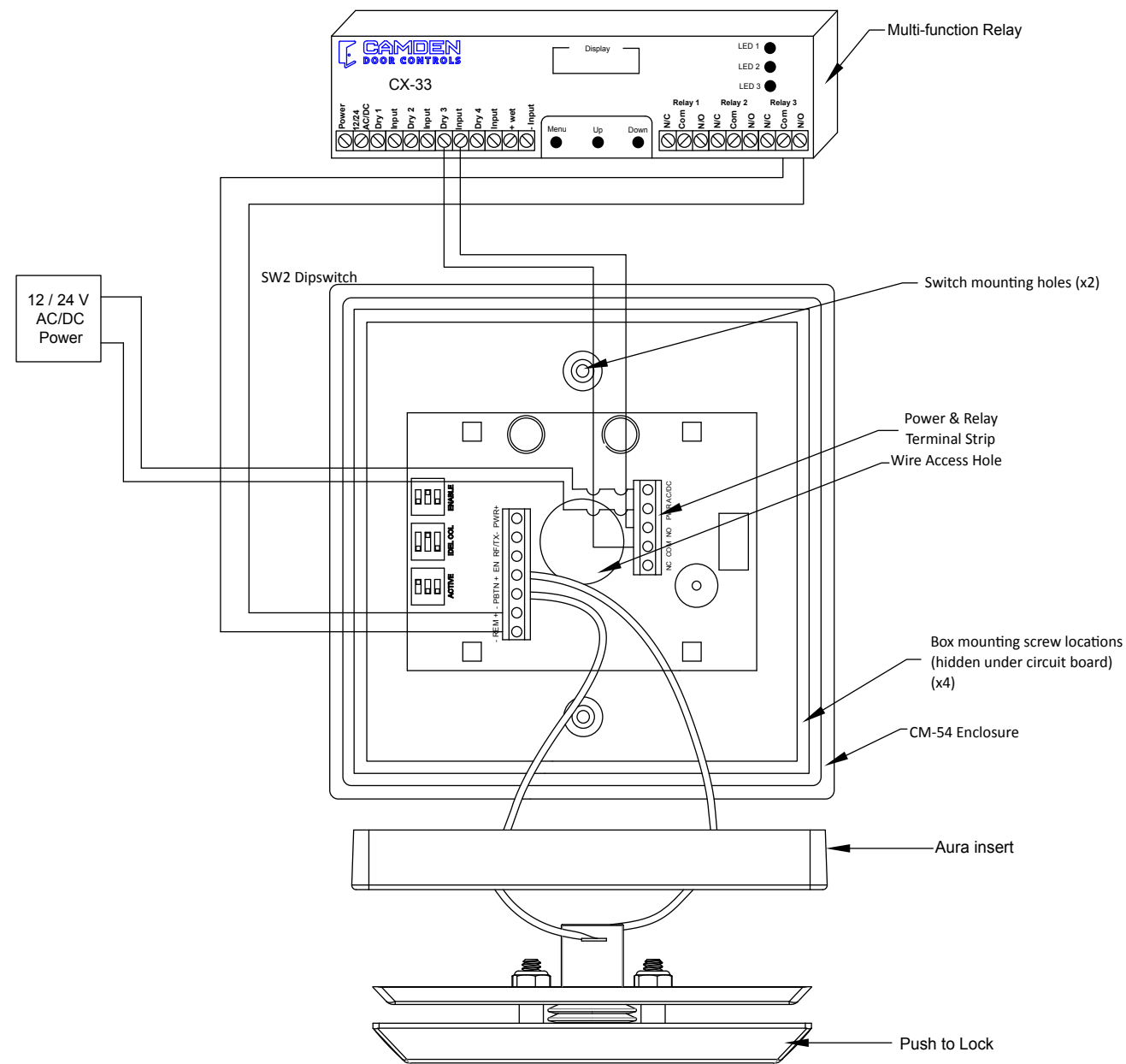
Camden builds in typical times for lock release and door operator activation and is ready to use without changing any parameters. If you need to change the timing or delay for an output, it can be done by pressing the "MENU" button within the mode you selected. Once the option is selected you can use the "UP or DOWN" buttons to select the timing needed. The first option (H & 1 flashing) will be how long relay 1 will be activated for (0-50 seconds). The second option (d & 1 flashing) will be how long to wait before activating relay 2 (0-15 seconds). The third option (H & 2 flashing) will be how long relay 2 will be activated for (0-50 seconds). The fourth option (d & 2 flashing) will be how long to wait before activating relay 3 (0-15 seconds).

Factory Reset (Defaulting the CX-33)

To return the CX-33 back to its factory default settings you will need to remove power, then hold down the "MENU" button while powering up the CX-33. Once started, you will see the firmware version listed, then a number "1" will be displayed. Reconnect your power and press the "MENU" button once then

1. Restroom Control Models	2. Wiring Drawing Reference
3. CX-WC13XFM	4. DRG-CX-WC-13-7 Or DRG-CX-WC-13-8
5. CX-WC13AXFM	6. CX-WC13AXFM-7 Or CX-WC13AXFM-8
7. CX-WC13FM&WEC-10	8. DRG-CX-WC-13-8 Or DRG-CX-WC-13-7
9. CX-WC13AXFM&WEC-10	10. CX-WC13AXFM&WEC-10-7 Or CX-WC13AXFM&WEC-10-7
11. CX-WC13AXFM&WEC-10K2	12. CX-WC13AXFM&WEC-10-8 Or CX-WC13AXFM&WEC-10-8

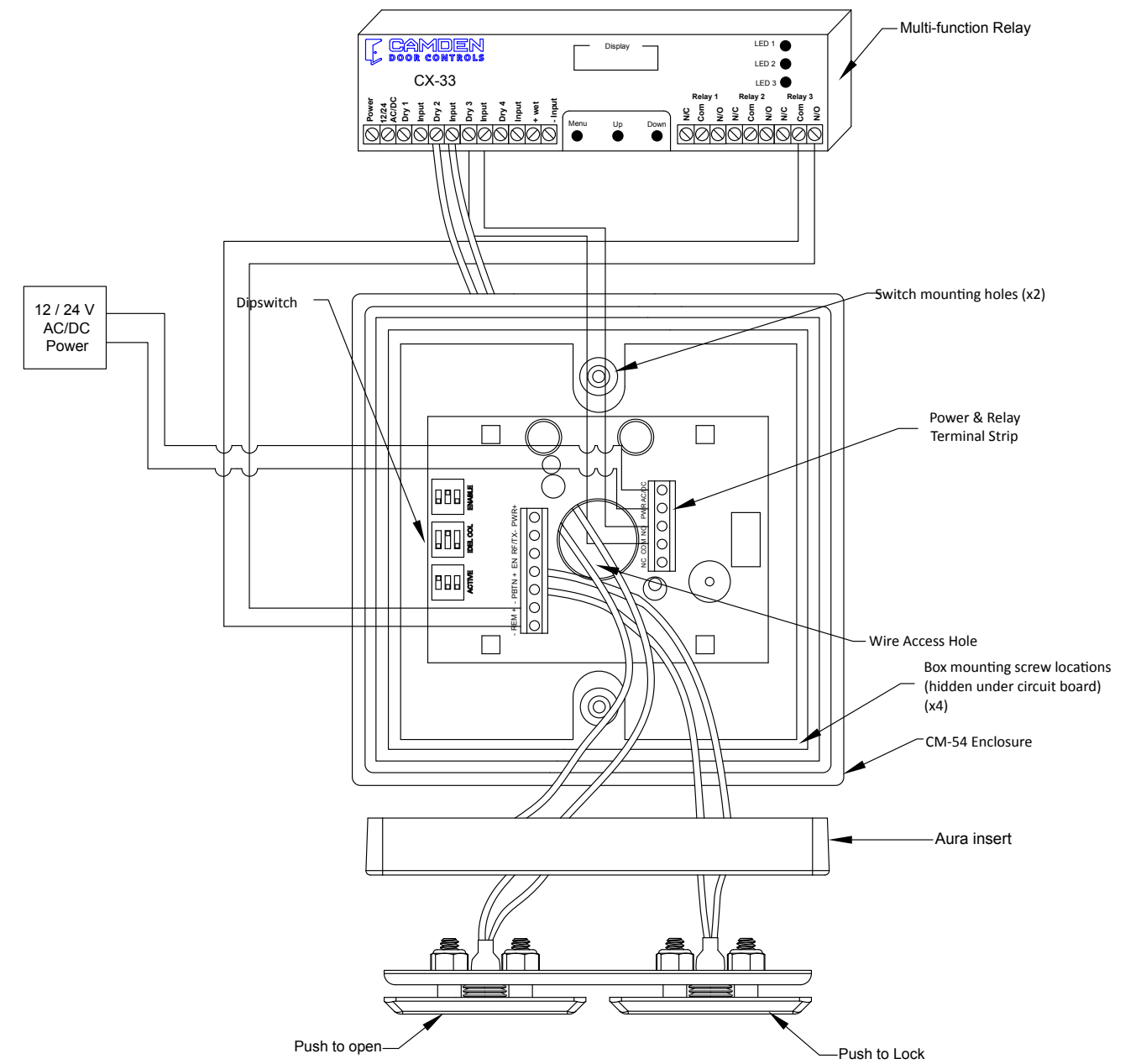
CM-55GR WIRING DIAGRAM (TYPICAL) - PUSH TO LOCK



Note:

1. Power terminals are not polarity sensitive.
2. Typical installation shown, where remote device changes LED colour. If it's desired to have switch activation change LED colour, then set REMote/LOCal dip on SW1 to local, and do not wire to the REMOTE terminals.

CM-55GR WIRING DIAGRAM & CM-2520 COMBO SWITCH



Note:

1. Power terminals are not polarity sensitive.
2. Typical installation shown, where remote device changes LED colour. If it's desired to have switch activation change LED colour, then set REMote/LOCal dip on SW1 to local, and do not wire to the REMOTE terminals.

SURFACE MOUNT RESTROOM INSTALLATION

1. Place the white vinyl behind the surface aura enclosure and place them against the mounting wall.
2. Use the #10 x 1" pan head screws with the green pvc anchors provided to hold the white vinyl and the aura enclosure against the wall .

Note: White vinyl does not come with the CM-45/4 - 4 1/2" 'Push To Open'.

3. Place all the square rubber pads inside the flush aura enclosure. Insert the aura board inside the flush aura enclosure, making sure the screw holes on the aura board align with the screw holes inside the surface aura enclosure. Use the #6 x 3/8" self-tapping screws to tighten Aura board in place.
4. Place the Aura insert inside the surface aura enclosure, making sure the mounting screw holes on the aura insert and the surface aura enclosure align.

Note:
Use this drawing for the follow Restroom Control Models:

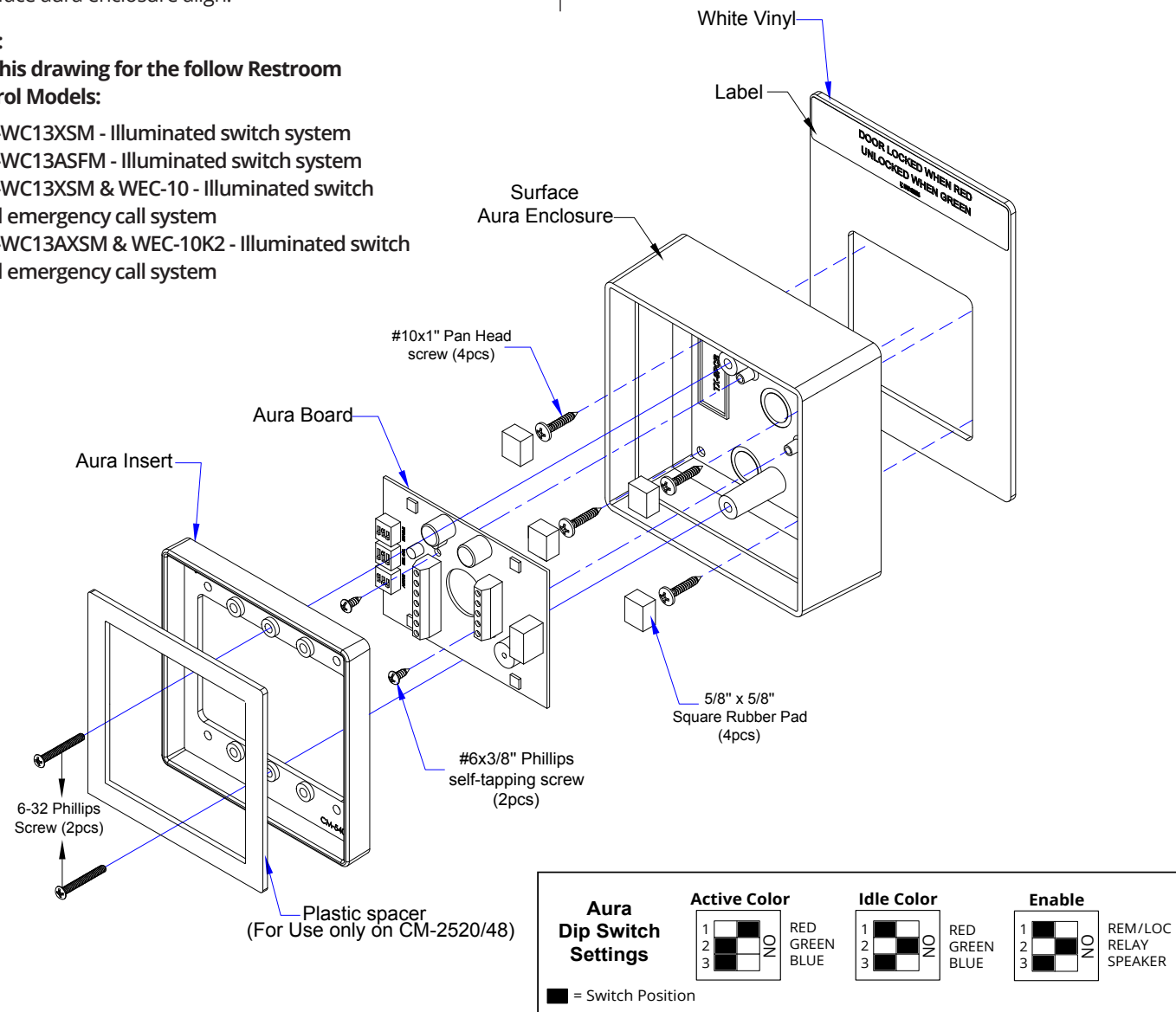
1. CX-WC13XSM - Illuminated switch system
2. CX-WC13AFM - Illuminated switch system
3. CX-WC13XSM & WEC-10 - Illuminated switch and emergency call system
4. CX-WC13AXSM & WEC-10K2 - Illuminated switch and emergency call system

FOR CM-45/454SE1, CM-45/854SE1 & CM-45/4 SWITCHES

- a. Use the 6-32 hex head screws to tighten the aura insert slightly.
- b. Fit in the assembled CM-45/4 by locating the screws with the holes on the backplate.
- c. Fit the hex key through the hole on the face plate and completely tighten the 6-32 screws in place.

FOR CM-2520-4854SE1 COMBO SWITCH

- a. Fit the plastic spacer inside the aura insert
 - b. Place the combo switch Inside the aura insert, making sure the mounting holes on the aura and on the back plate align
 - c. Use the 6-32 Phillips screws to tighten in place.
5. Apply the label to the black vinyl as required.



FLUSH MOUNT RESTROOM INSTALLATION

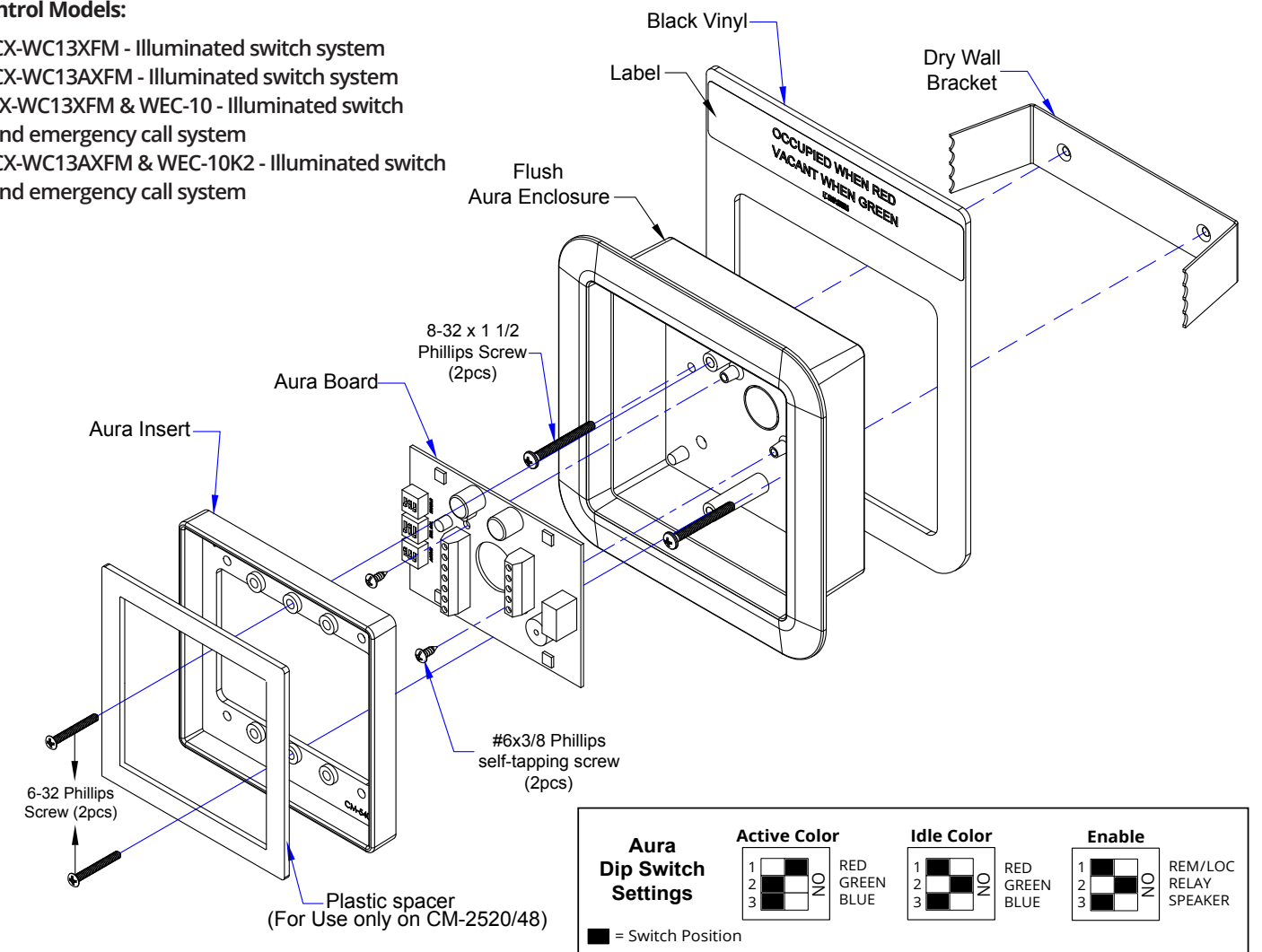
1. Prepare the cut-out for the unit and fit in the dry wall bracket.
2. Slide in the black vinyl behind the flush aura enclosure and fit them inside the dry wall bracket.

Note: Black vinyl does not come with the CM-45/4 - 4 1/2" 'Push To Open'.

3. Ensure the two mounting holes on the bracket and the Flush aura enclosure align. Use the 8-32 phillips screws to completely tighten in place.
4. Place the aura board inside the flush aura enclosure, making sure the screw holes on the aura board align with the screw holes inside the Flush aura enclosure. Use the #6 x 3/8" self-tapping screws to tighten Aura board in place.
5. Place the Aura insert inside the Flush aura enclosure, making sure the mounting screw holes on the aura insert and the flush aura enclosure align.

Note:
Use this drawing for the follow Restroom Control Models:

1. CX-WC13XFM - Illuminated switch system
2. CX-WC13AXFM - Illuminated switch system
3. CX-WC13XFM & WEC-10 - Illuminated switch and emergency call system
4. CX-WC13AXFM & WEC-10K2 - Illuminated switch and emergency call system



ORDERING INFORMATION FOR REPLACEMENT PARTS

Item	Part Number	Description
	60-31A037	Red/Green Aura PC Board
	60-42C012	Square Aura Insert
	CX-33	Advance Logic Relay Control
	CX-MDA	Magnetic Door Contact
	60-42C019	Mounting Box, Flush Aura Enclosure. Flame/Impact Resistant Black Polymer (ABS) 6-1/2"W X 6-1/2"H X 2"D
	60-42C010	Mounting Box, Surface Aura Enclosure. Flame/Impact Resistant Black Polymer (ABS) 5-1/4"W X 5-1/4"H X 2"D
Black Vinyl & Sign for Flush Aura Enclosure		
	CM-SFE1	Black Vinyl & English Label "DOOR LOCKED WHEN RED/OCCUPIED WHEN GREEN"
	CM-SFF1	Black Vinyl & French Label "LIBRE/OCCUPÉ"
	CM-SFFE1	Black Vinyl & English Label "DOOR LOCKED WHEN RED/OCCUPIED WHEN GREEN" Black Vinyl & 2-sided French Label "LIBRE/OCCUPÉ"
White Vinyl & Sign for Surface Aura Enclosure		
	CM-SE1	White Vinyl & English Label "DOOR LOCKED WHEN RED/ OCCUPIED WHEN GREEN"
	CM-SF1	White Vinyl & French Label "LIBRE/OCCUPÉ"
	CM-SEFE1	White Vinyl & English Label "DOOR LOCKED WHEN RED/OCCUPIED WHEN GREEN" White Vinyl & 2-sided French Label "LIBRE/OCCUPÉ"

Notes:

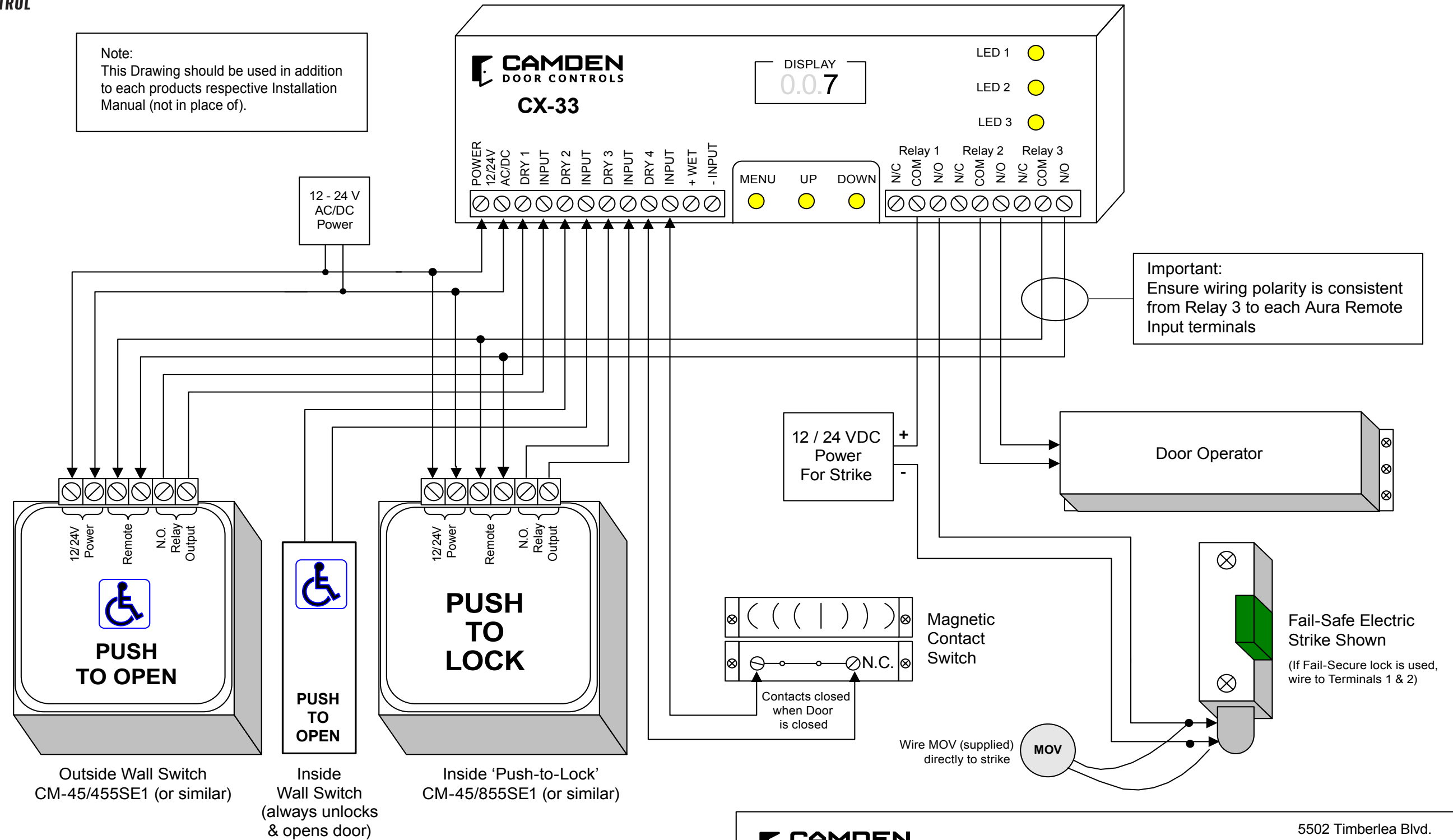
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____

Questions? Call us toll-free at 1-877-226-3369 or technical support 905-366-3377 (ext. 505)

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Outside Wall Switch
CM-45/455SE1 (or similar)

Inside
Wall Switch
(always unlocks
& opens door)

Inside 'Push-to-Lock'
CM-45/855SE1 (or similar)

Aura Dip Switch Settings

■ = Switch Position

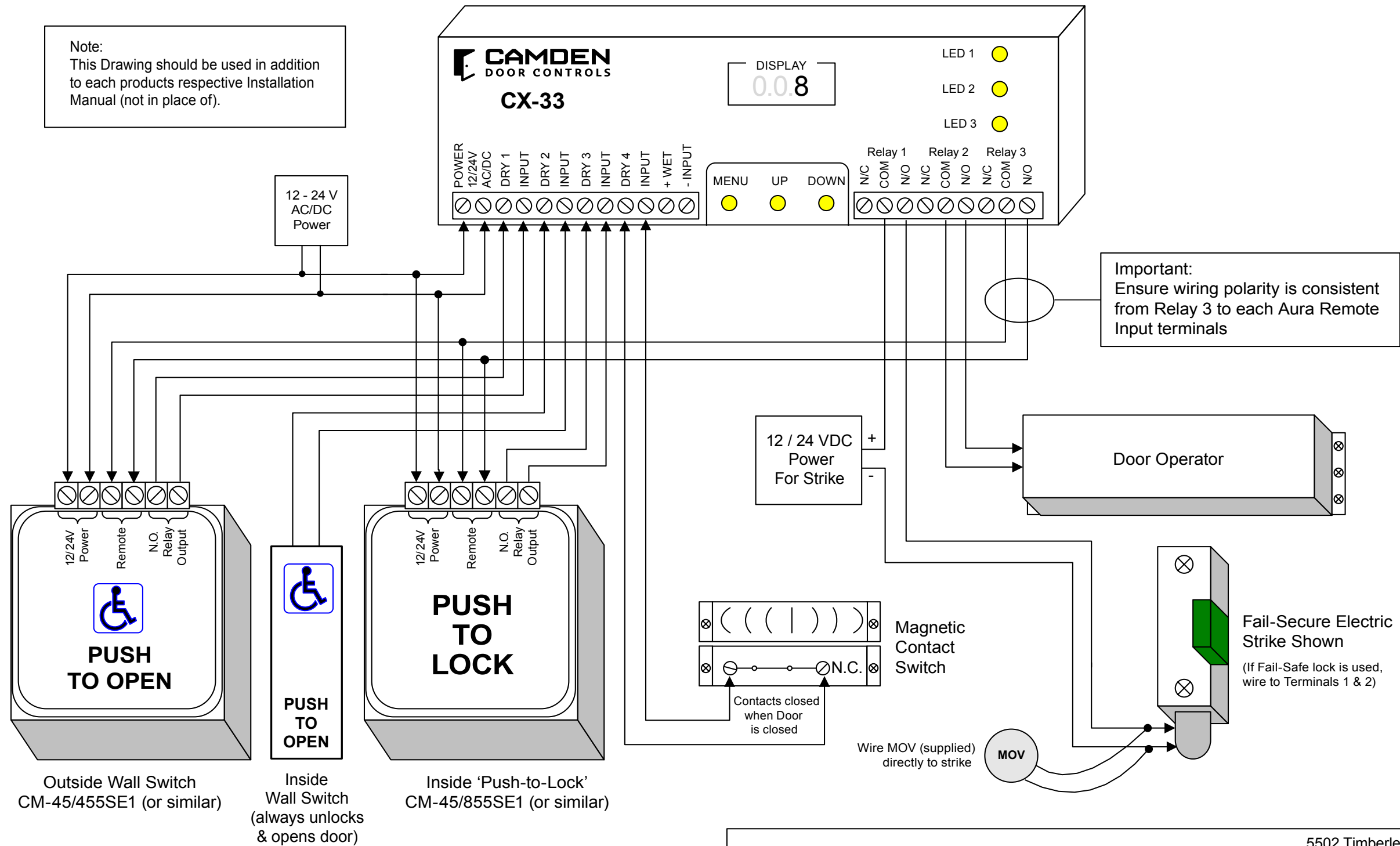
Active Color	Idle Color	Enable
 RED GREEN BLUE	 RED GREEN BLUE	 REM/LOC RELAY SPEAKER

		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: DGW	DATE: 03/07/17	REV: 2
WC-13 Washroom Package <i>Wiring Diagram (normally unlocked)</i>			
DRAWING No: DRG-CX - WC-13-7		FILENAME: WC-13-7 wiring diagram_R2	

WC13 SERIES RESTROOM CONTROL

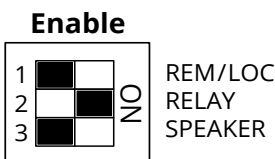
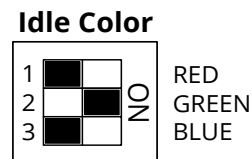
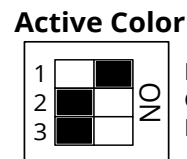
INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Aura Dip Switch Settings

■ = Switch Position



CAMDEN DOOR CONTROLS

5502 Timberlea Blvd.
Mississauga, Ontario
L4W 2T7

SCALE: NONE

DRAWN BY: DGW

DATE: 03/0717

REV: 2

WC-13 Washroom Package Wiring Diagram (normally locked)

DRAWING No: DRG- CX - WC - 13-8

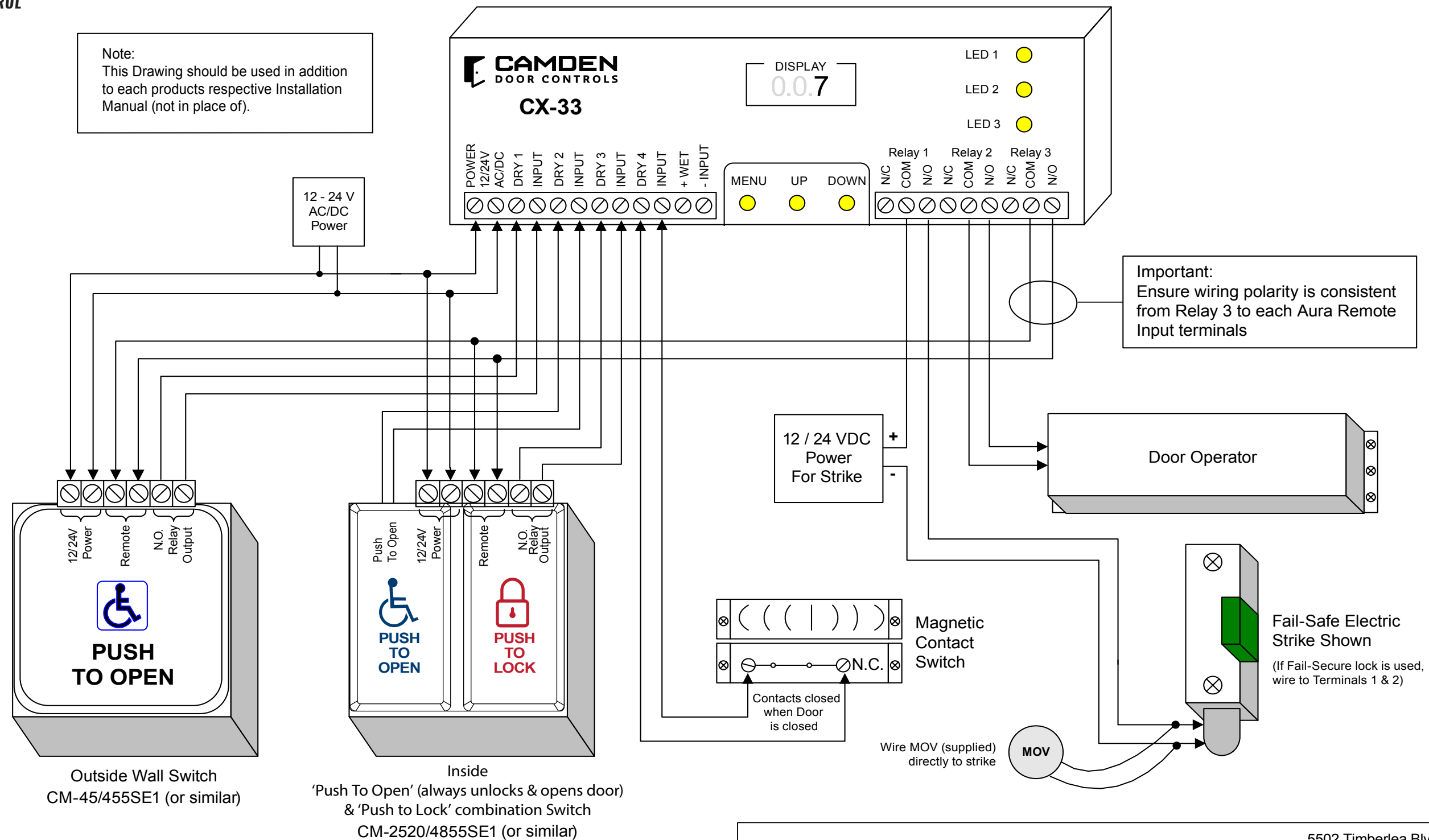
FILENAME: WC-13-8 wiring diagram_R2

Part# 40-82D003

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Aura Dip Switch Settings

■ = Switch Position

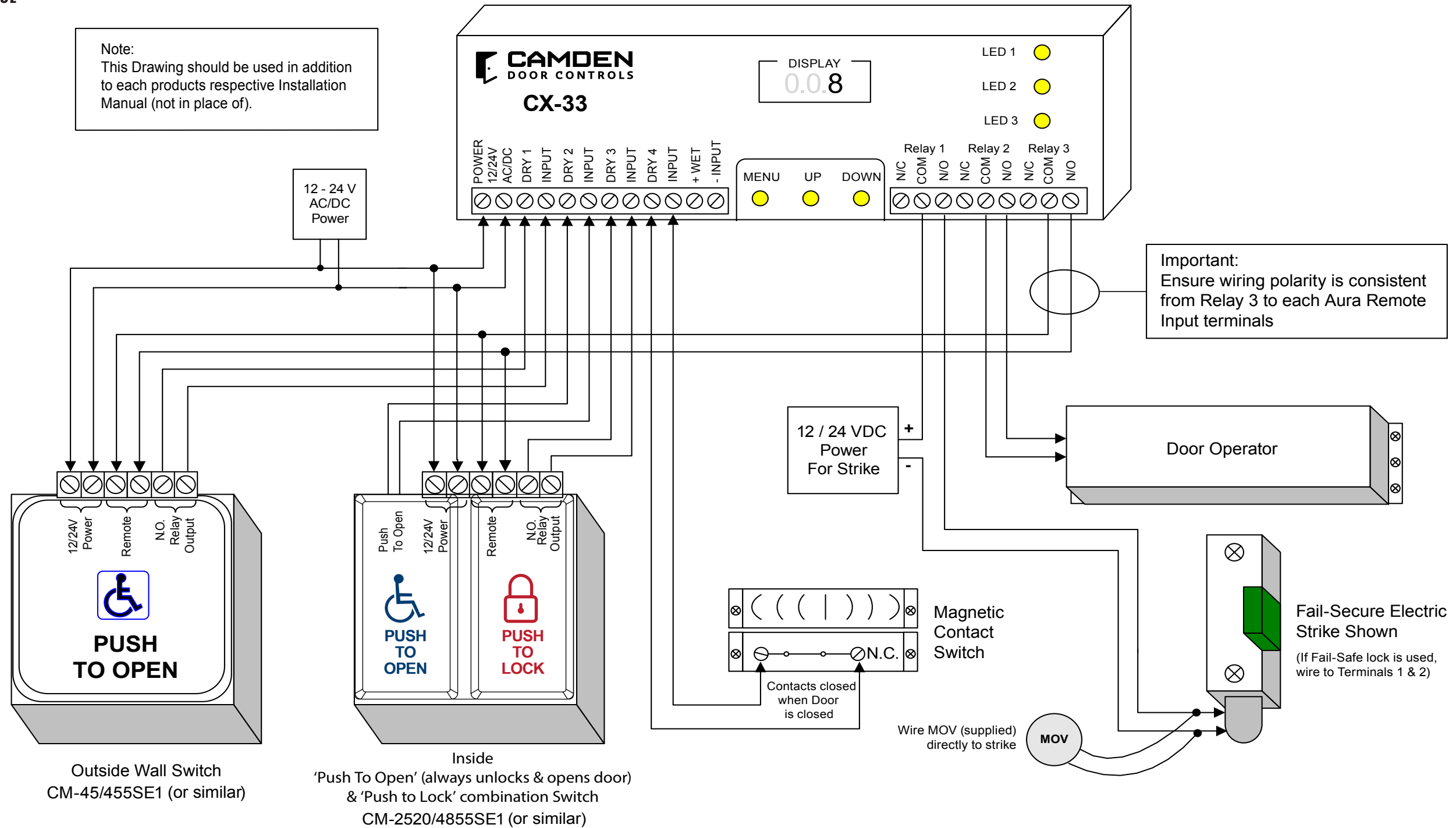
Active Color	Idle Color	Enable
1 [] NO 2 [] NO 3 [] NO RED GREEN BLUE	1 [] NO 2 [] NO 3 [] NO RED GREEN BLUE	1 [] NO 2 [] NO 3 [] NO REM/LOC RELAY SPEAKER

CAMDEN DOOR CONTROLS		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: JML	DATE: May 14, 2018	REVISED :
WC13AXFM/SM Washroom Package Wiring Diagram (normally unlocked)			
DRAWING No CX-WC13AXFM-7		FILENAME: CX-WC13AXFM-7.AI	

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Outside Wall Switch
CM-45/455SE1 (or similar)

Inside
'Push To Open' (always unlocks & opens door)
& 'Push to Lock' combination Switch
CM-2520/4855SE1 (or similar)

Aura Dip Switch Settings

■ = Switch Position

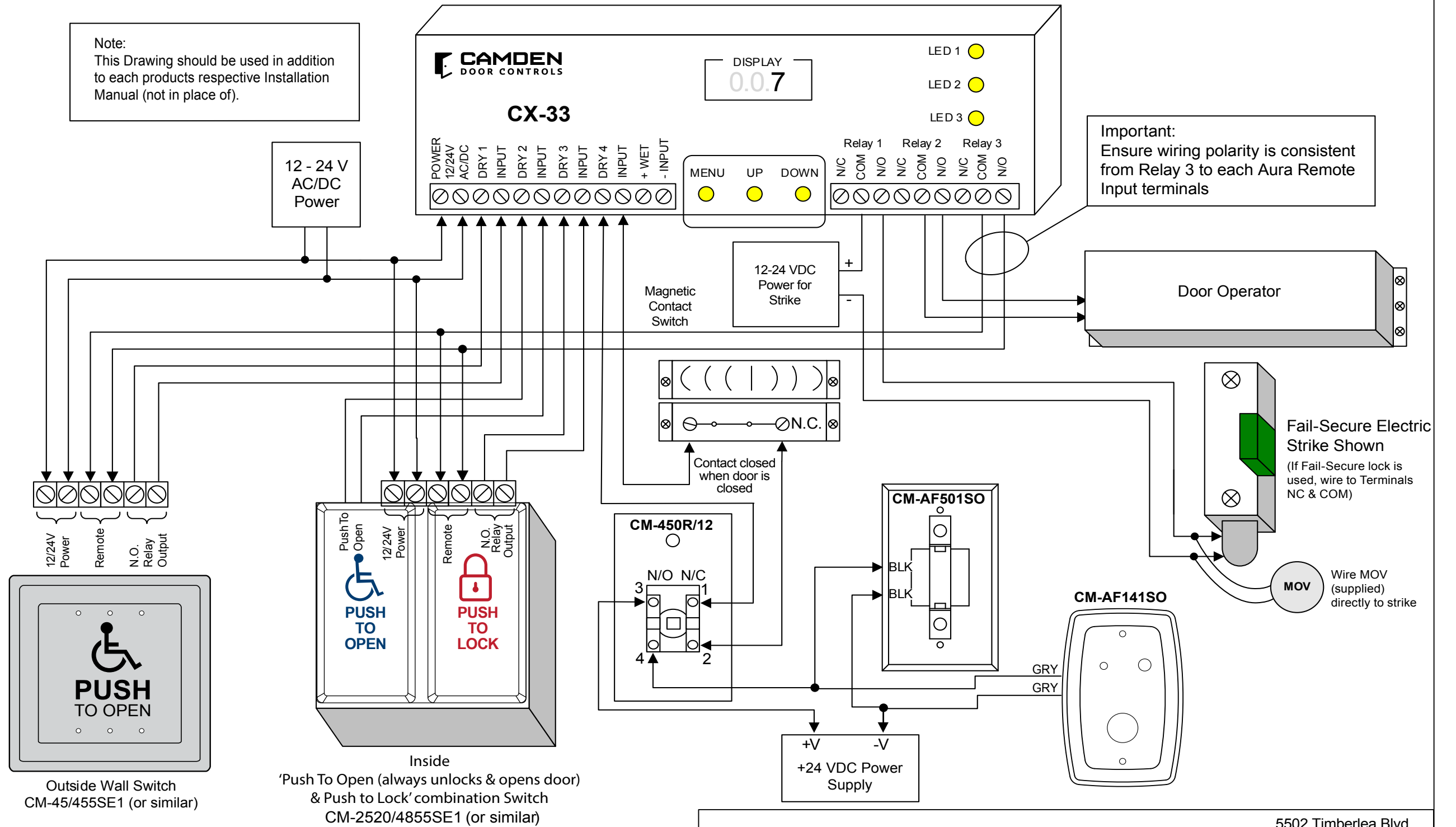
Active Color	Idle Color	Enable
 RED GREEN BLUE	 RED GREEN BLUE	 REM/LOC RELAY SPEAKER

		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: JML	DATE: May 14, 2018	REVISED:
WC13AXFM/SM Washroom Package Wiring Diagram (normally locked)			
DRAWING No: CX-WC13AXFM-8		FILENAME: CX-WC13AXFM-8.AI	

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Aura Dip Switch Settings

■ = Switch Position

Active Color	Idle Color	Enable
 1: ON, 2: OFF, 3: OFF	 1: ON, 2: ON, 3: OFF	 1: ON, 2: ON, 3: ON
RED GREEN BLUE	RED GREEN BLUE	REM/LOC RELAY SPEAKER

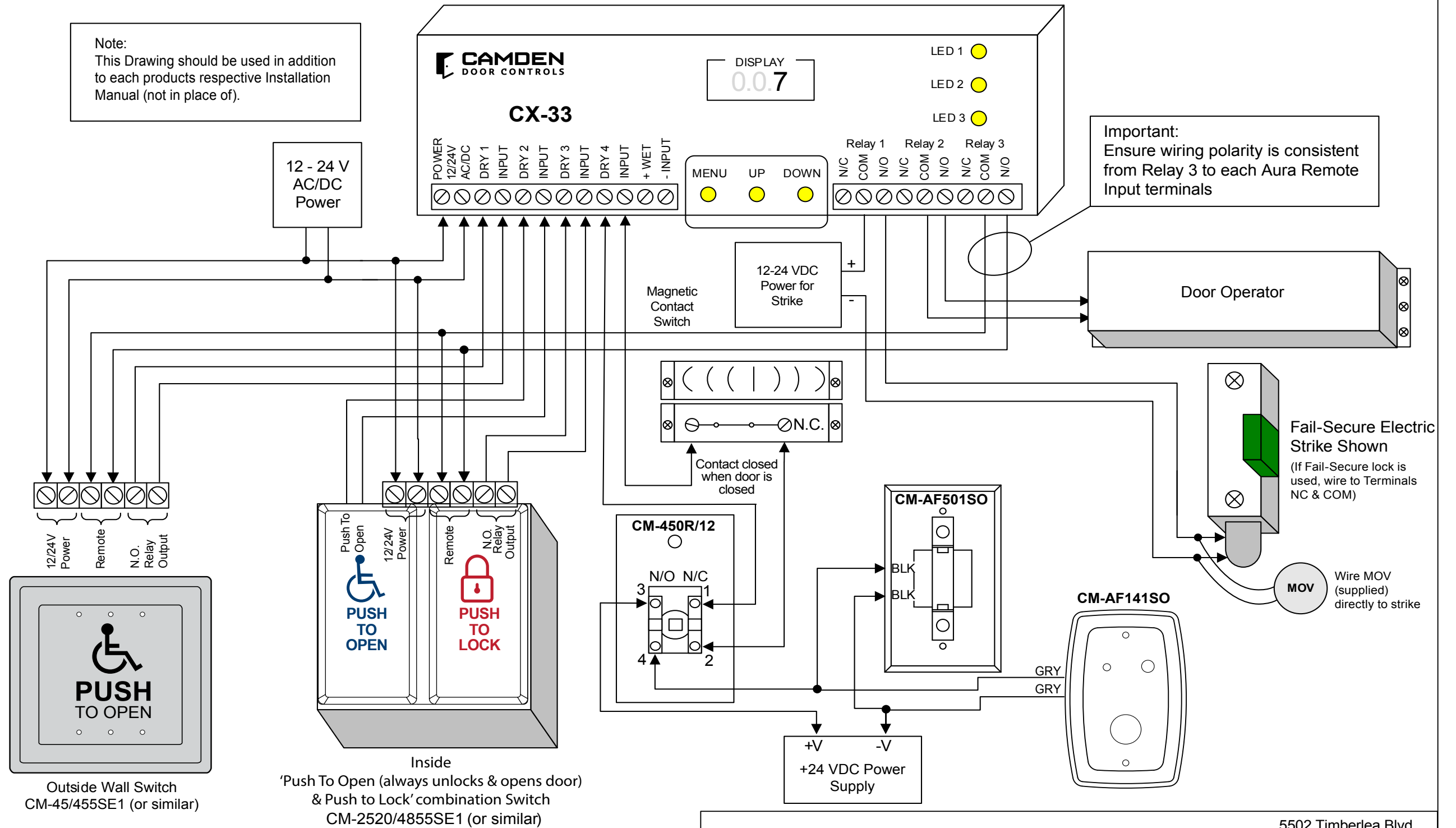
		CAMDEN DOOR CONTROLS		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7
SCALE: NONE	DRAWN BY: JML	DATE: 05-18-2018	REV: 2	
CX-WC13AXFM/SM & WEC10 Single Door Restroom (Normally unlocked)				
DRAWING No: CX-WC13AXFM-WEC10-7			FILE NAME: WC-13AXFM-7-WEC10 wiring diagram_R1	

Part# 40-82D017

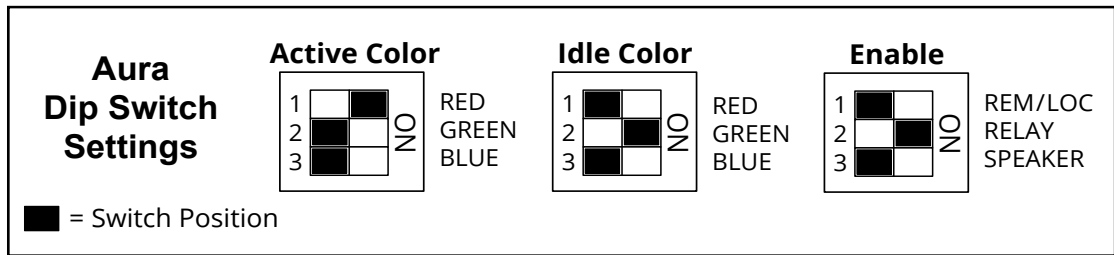
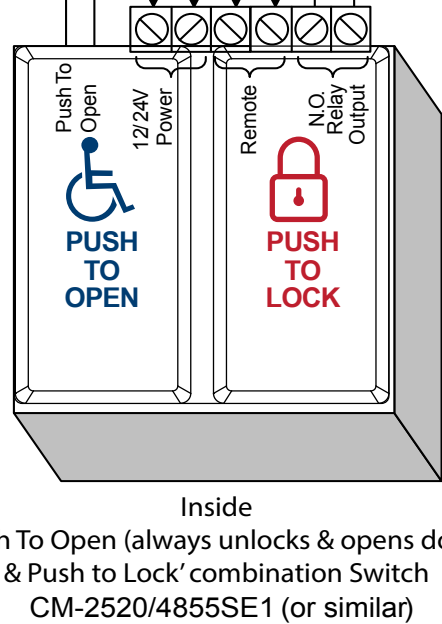
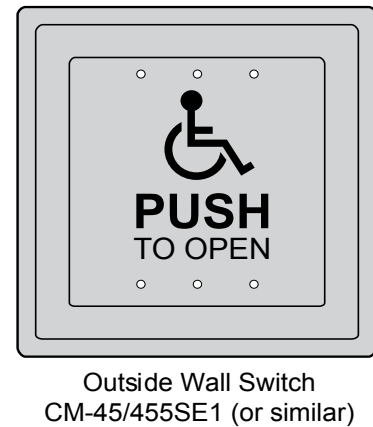
WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Important:
Ensure wiring polarity is consistent from Relay 3 to each Aura Remote Input terminals



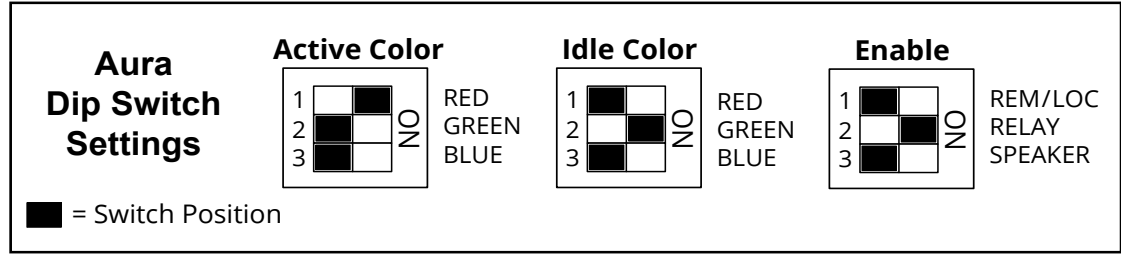
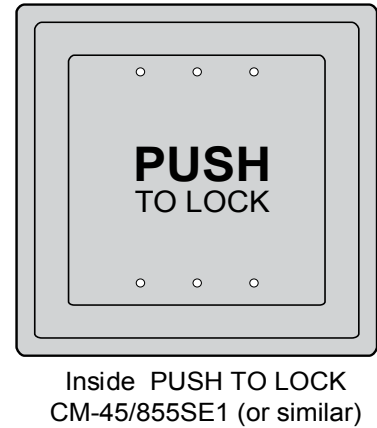
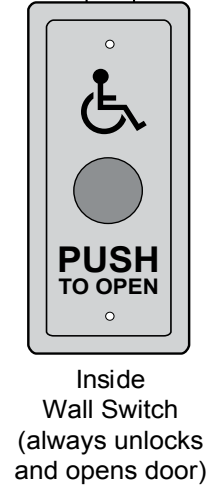
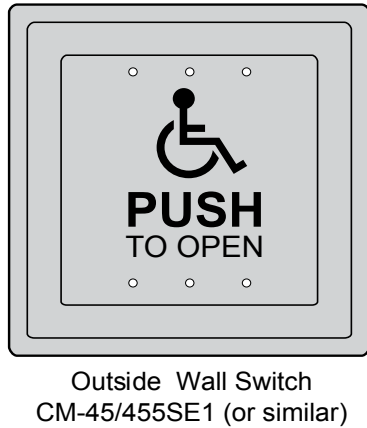
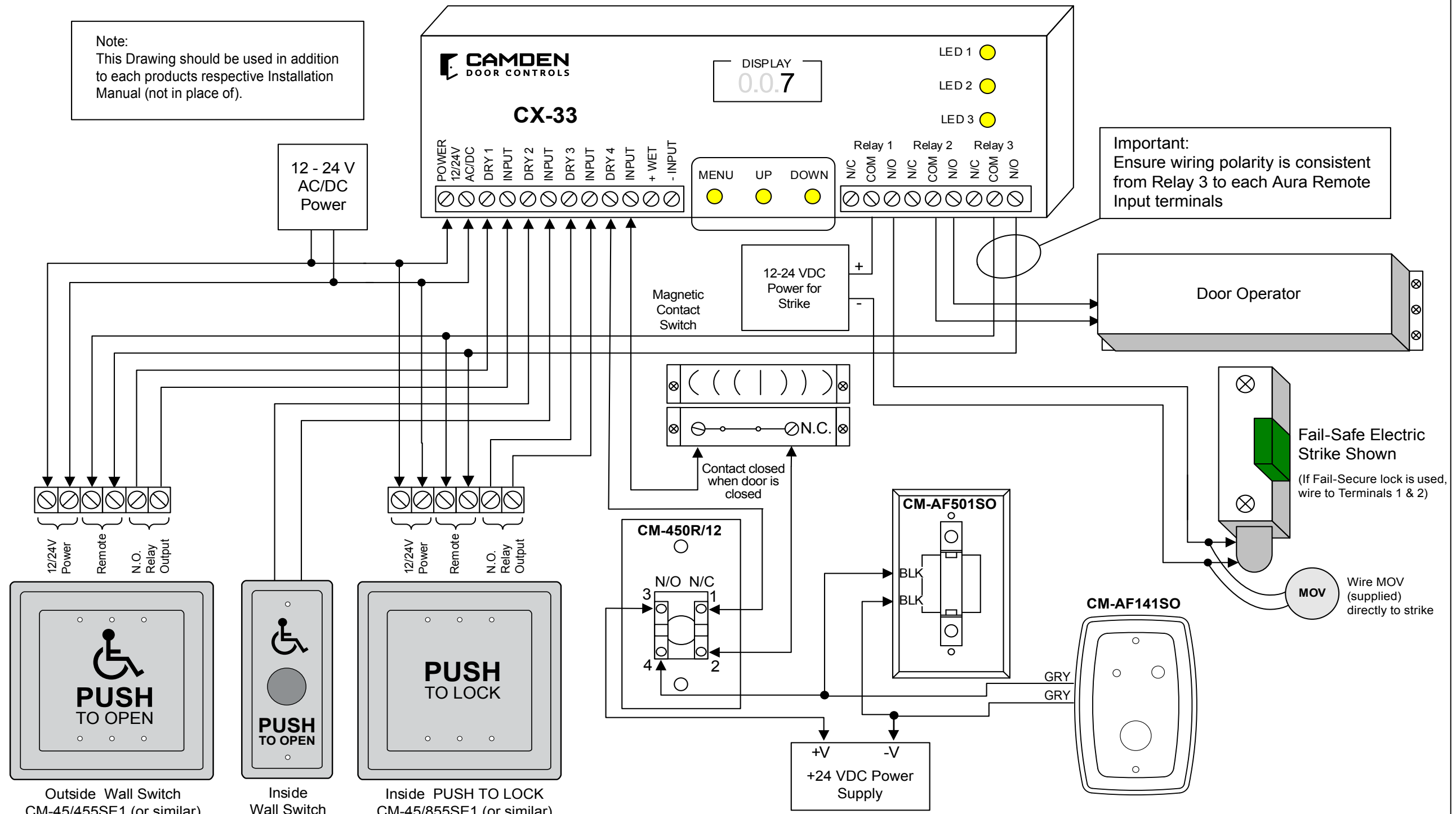
		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: JML	DATE: 05-18-2018	REV: 2
CX-WC13AXFM/SM & WEC10 Single Door Restroom (Normally unlocked)			
DRAWING No: CX-WC13AXFM-WEC10-7		FILE NAME: WC-13AXFM-7-WEC10 wiring diagram_R1	

Part# 40-82D017

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



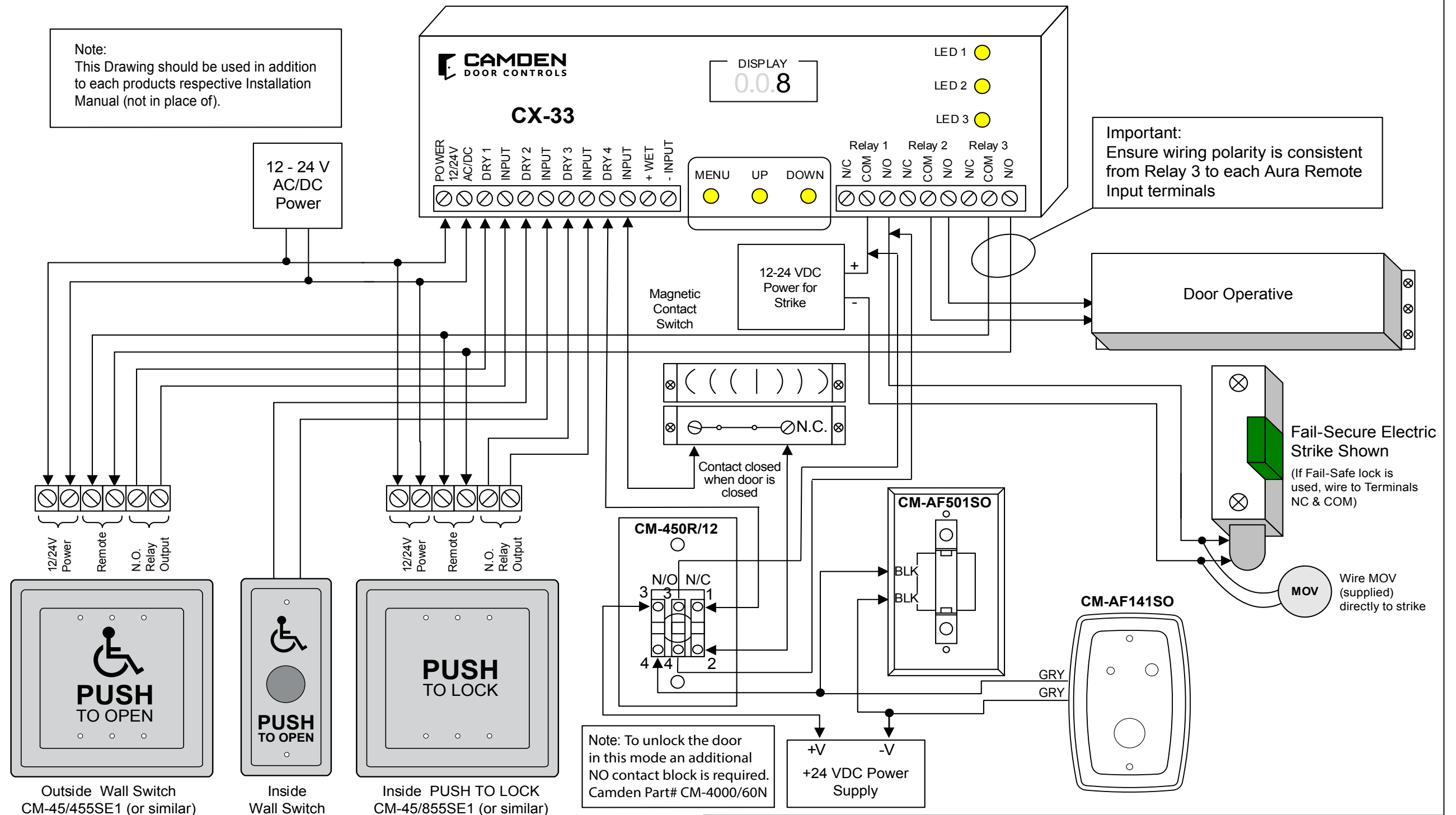
		CAMDEN DOOR CONTROLS		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7
SCALE: NONE	DRAWN BY: DGW	DATE: 03/08/17	REV: 2	
CX-WC13FM & WEC10 Single Door Restroom (Normally unlocked)				
DRAWING No: DRG-CX-WC-13-7		FILE NAME: WC-13FM-7-WEC10 wiring diagram_R2		

Part# 40-82D003

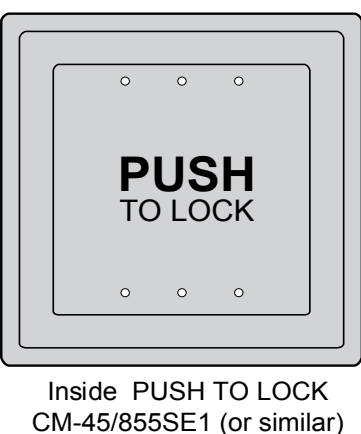
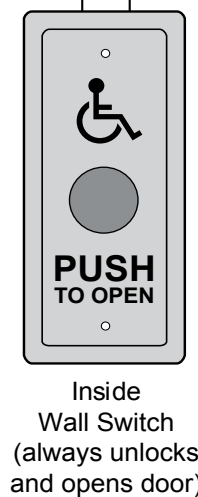
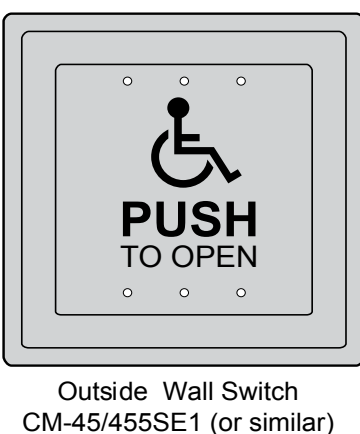
WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

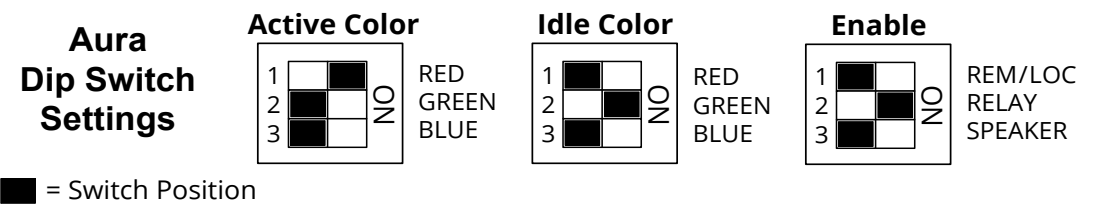
Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Important:
Ensure wiring polarity is consistent from Relay 3 to each Aura Remote Input terminals



Note: To unlock the door in this mode an additional NO contact block is required. Camden Part# CM-4000/60N



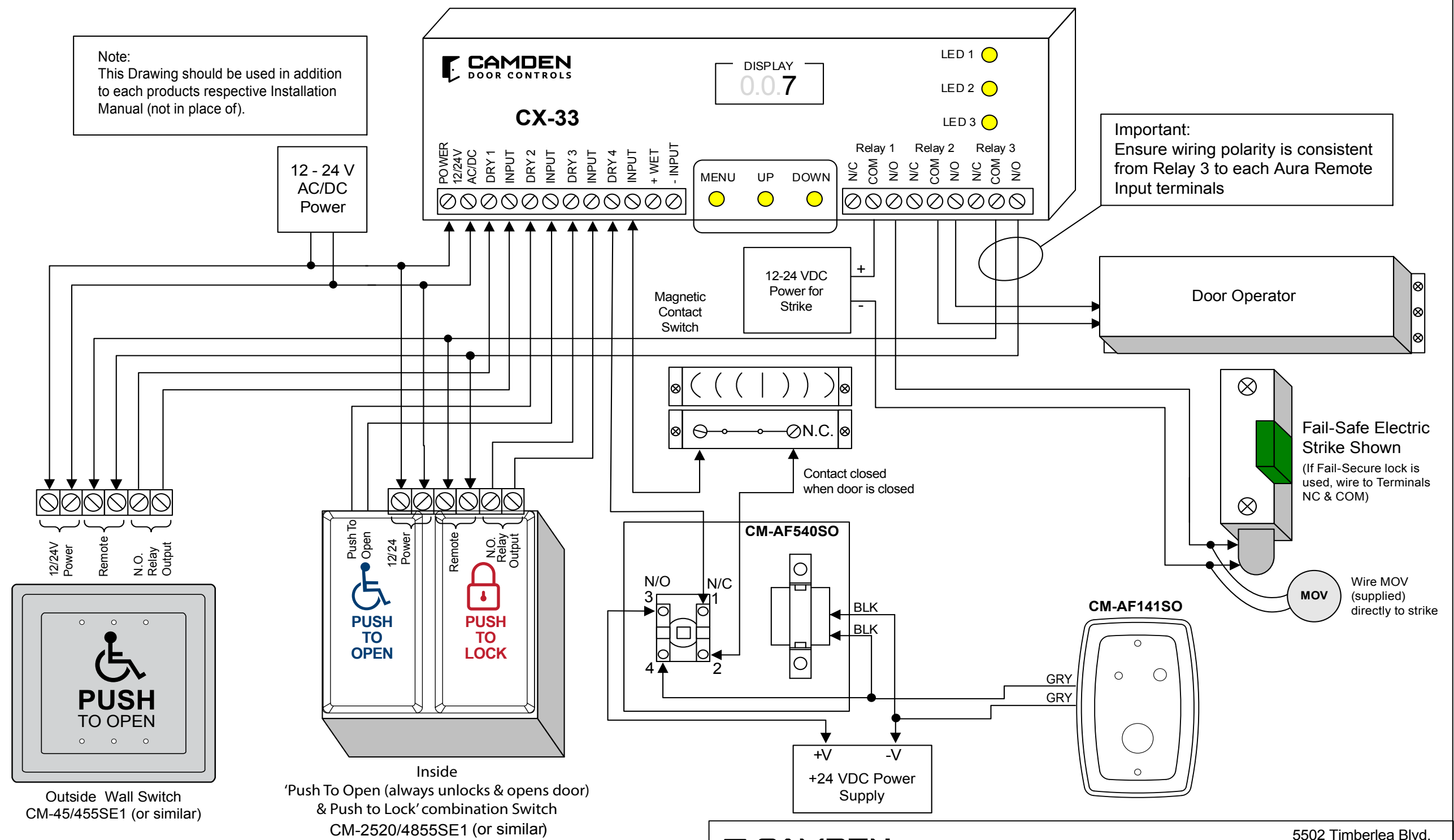
		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: DGW	DATE: 03/08/17	REV: 2
CX-WC13FM & WEC10 Single Door Restroom (Normally locked)			
DRAWING No: DRG-CX-WC-13-8		FILE NAME: WC-13FM-8-WEC10 wiring diagram_R2	

Part# 40-82D003

WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Aura Dip Switch Settings

■ = Switch Position

Active Color	Idle Color	Enable
 RED GREEN BLUE	 RED GREEN BLUE	 REM/LOC RELAY SPEAKER

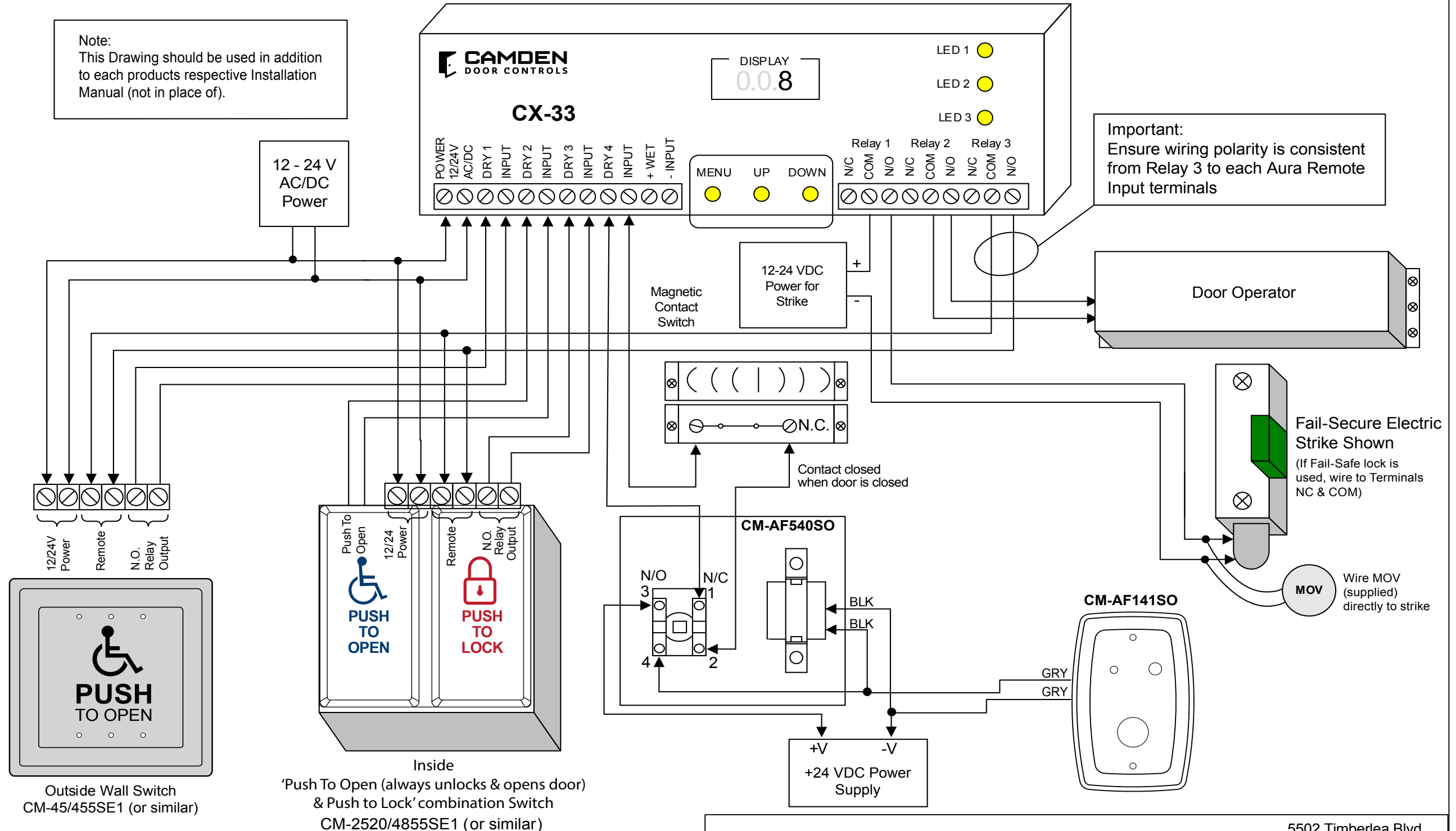
CAMDEN DOOR CONTROLS		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: JML	DATE: 05-22-2018	REV: 2
CX-WC13AXFM/SM & WEC10K2 Single Door Restroom (Normally unlocked)			
DRAWING No: CX-WC13AXFM-WEC10-7		FILE NAME: WC-13AXFM-7-WEC10K2 wiring diagram_R1	

Part# 40-82D018

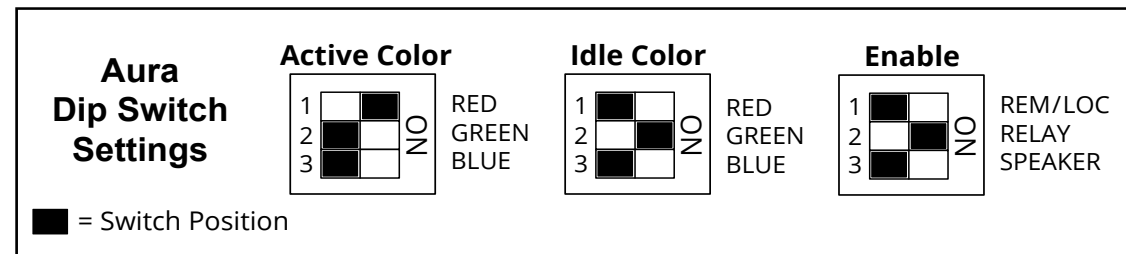
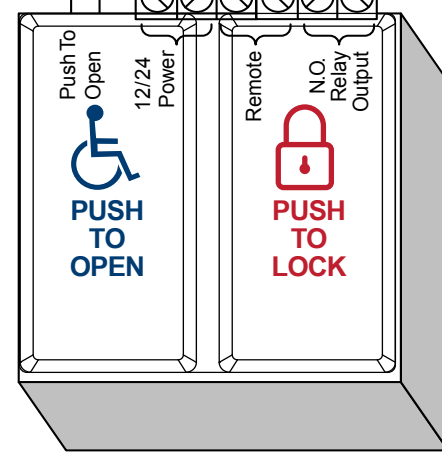
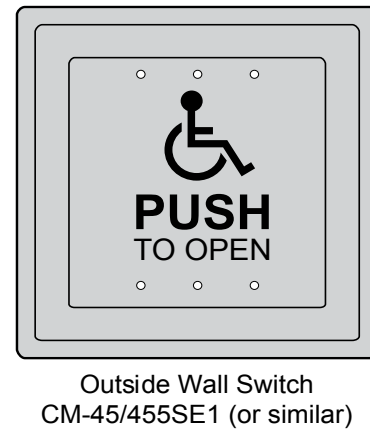
WC13 SERIES RESTROOM CONTROL

INSTALLATION INSTRUCTIONS

Note:
This Drawing should be used in addition to each products respective Installation Manual (not in place of).



Important:
Ensure wiring polarity is consistent from Relay 3 to each Aura Remote Input terminals



		5502 Timberlea Blvd. Mississauga, Ontario L4W 2T7	
SCALE: NONE	DRAWN BY: JML	DATE: 05-22-2018	REV: 2
CX-WC13AXFM/SM & WEC10K2 Single Door Restroom (Normally locked)			
DRAWING No: CX-WC13AXFM-WEC10-8		FILE NAME: WC-13AXFM-8-WEC10K2 wiring diagram_R1	

Part# 40-82D018