

Installation Manual

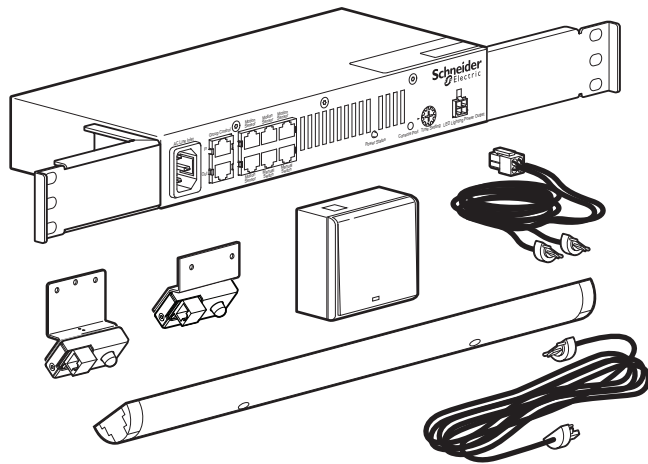
Aisle Containment System

Lighting Control Kit

ACDC2018, ACDC2019

990-5561A-001

Publication Date: May, 2020



APC by Schneider Electric Legal Disclaimer

The information presented in this manual is not warranted by the APC by Schneider Electric to be authoritative, error free, or complete. This publication is not meant to be a substitute for a detailed operational and site specific development plan. Therefore, APC by Schneider Electric assumes no liability for damages, violations of codes, improper installation, system failures, or any other problems that could arise based on the use of this Publication.

The information contained in this Publication is provided as is and has been prepared solely for the purpose of evaluating data center design and construction. This Publication has been compiled in good faith by APC by Schneider Electric. However, no representation is made or warranty given, either express or implied, as to the completeness or accuracy of the information this Publication contains.

IN NO EVENT SHALL APC BY SCHNEIDER ELECTRIC, OR ANY PARENT, AFFILIATE OR SUBSIDIARY COMPANY OF APC BY SCHNEIDER ELECTRIC OR THEIR RESPECTIVE OFFICERS, DIRECTORS, OR EMPLOYEES BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL, OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS, CONTRACT, REVENUE, DATA, INFORMATION, OR BUSINESS INTERRUPTION) RESULTING FROM, ARISING OUT, OR IN CONNECTION WITH THE USE OF, OR INABILITY TO USE THIS PUBLICATION OR THE CONTENT, EVEN IF APC BY SCHNEIDER ELECTRIC HAS BEEN EXPRESSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. APC BY SCHNEIDER ELECTRIC RESERVES THE RIGHT TO MAKE CHANGES OR UPDATES WITH RESPECT TO OR IN THE CONTENT OF THE PUBLICATION OR THE FORMAT THEREOF AT ANY TIME WITHOUT NOTICE.

Copyright, intellectual, and all other proprietary rights in the content (including but not limited to software, audio, video, text, and photographs) rests with APC by Schneider Electric or its licensors. All rights in the content not expressly granted herein are reserved. No rights of any kind are licensed or assigned or shall otherwise pass to persons accessing this information.

This Publication shall not be for resale in whole or in part.

Contents

- Overview 1
 - Parts Inventory—ACDC2018 1
 - Parts Inventory—ACDC2019 2

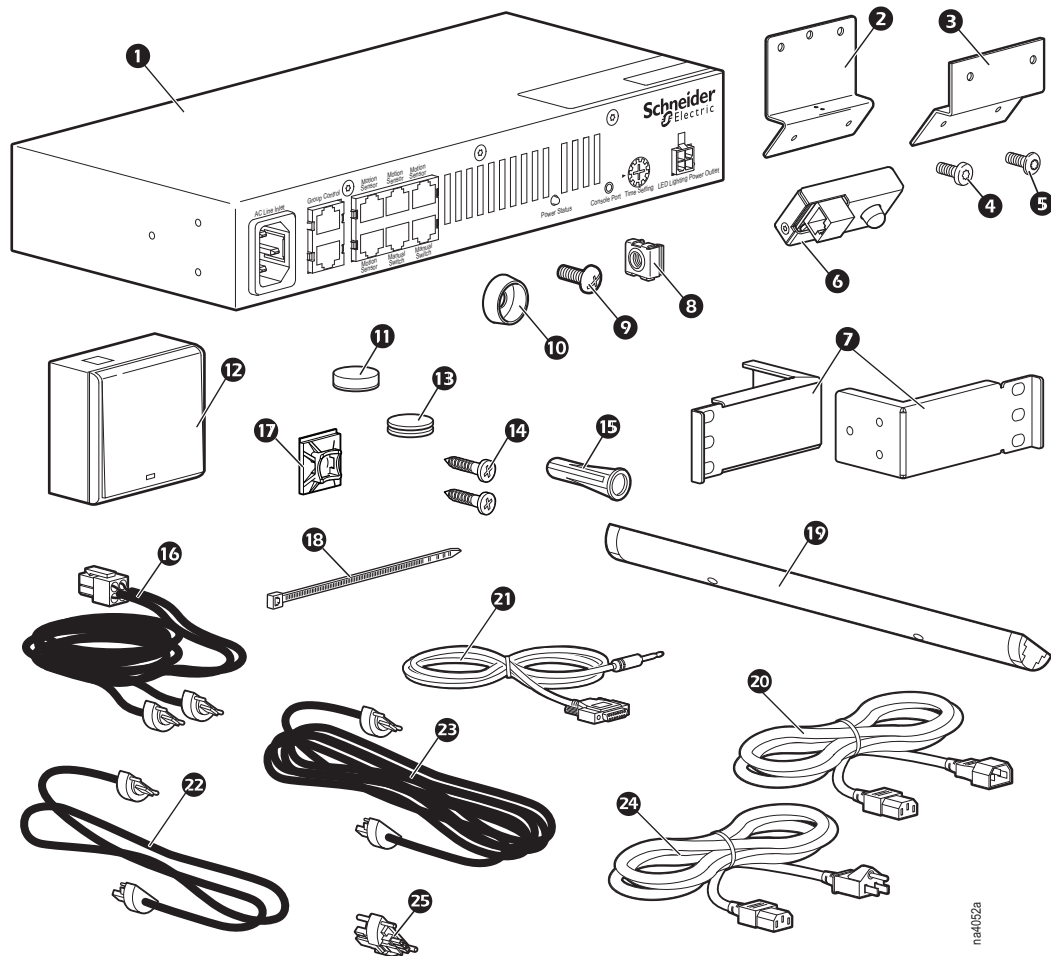
- Important Safety Information..... 3
 - Please Note. 3
 - Schematic Overview 4

- Installation 5
 - Lighting control unit. 5
 - Motion sensor installation for sliding doors 6
 - Motion Sensor Installation for Door. 7
 - Manual switch installation 8
 - LED lighting assembly installation—ceiling containment 9
 - LED lighting assembly installation—ducted 12
 - Power and communication connections 13

- Lighting System Setup and Operation 14
 - Motion detection 14
 - Time setting. 14
 - Manual switch 14
 - Power status indicator. 14

Overview

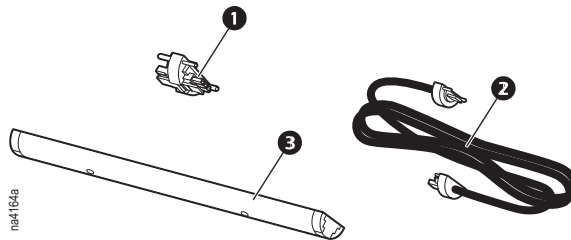
Parts Inventory—ACDC2018



Item	Description	Quantity
1	Lighting control unit	1
2	Motion sensor mounting bracket,	2
3	Motion sensor mounting bracket, sliding door	2
4	M4 × 8mm TORX screw, thread forming	6
5	M4 × 8 mm TORX screw	8
6	Motion sensor	2
7	Lighting control unit mounting brackets	2
8	M6 cage nut	4
9	M6 × 16 screw, Phillips	4
10	Cup washers	4
11	Magnets, manual switch	8

Item	Description	Quantity
12	Manual switch	2
13	Hook and loop fastener, manual switch	8
14	Wood screw - #6 × 3/4 - Phillips	4
15	Wall anchor	4
16	Wire assembly, 24 V power	1
17	Wire tie cable holder	45
18	Wire tie	45
19	LED light assembly module, 6W	6
20	Power cord, 15A 250V, C13 to C14	1
21	2.5mm to DB9F cable, console port	1
22	Light-to-light wire assembly	5
23	Light-to-light wire assembly, across aisle	1
24	Power Cord, 15A 125V, C13 to 5-15P	1
25	Light-to-light connector, end-to-end	5

Parts Inventory—ACDC2019



Item	Description	Quantity
1	Light-to-light connector, end-to-end	4
2	Light-to-light wire assembly	4
3	6W LED light assembly	4

Important Safety Information

Read the instructions carefully to become familiar with the equipment before trying to install, operate, service or maintain it. The following messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a Danger or Warning safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **can result in** death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **can result in** minor or moderate injury.

NOTICE

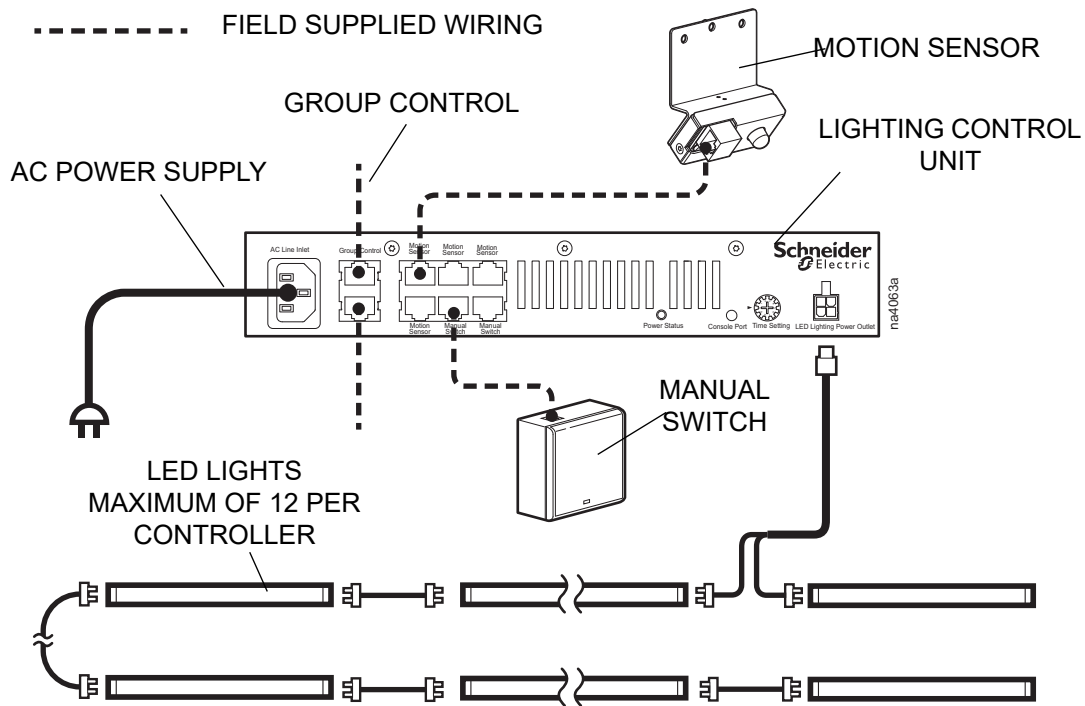
NOTICE addresses practices not related to physical injury including certain environmental hazards, potential damage or loss of data.

Please Note

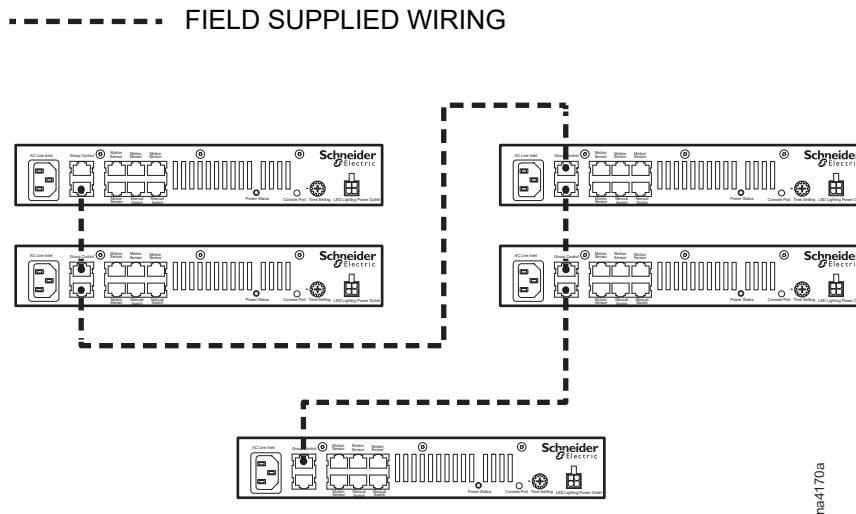
Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by APC by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Schematic Overview



A maximum of five controllers can be connected together via the Group Control connection ports.

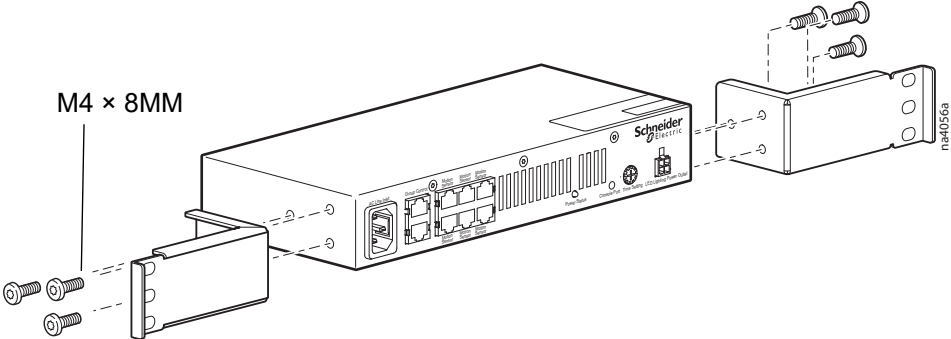


Installation

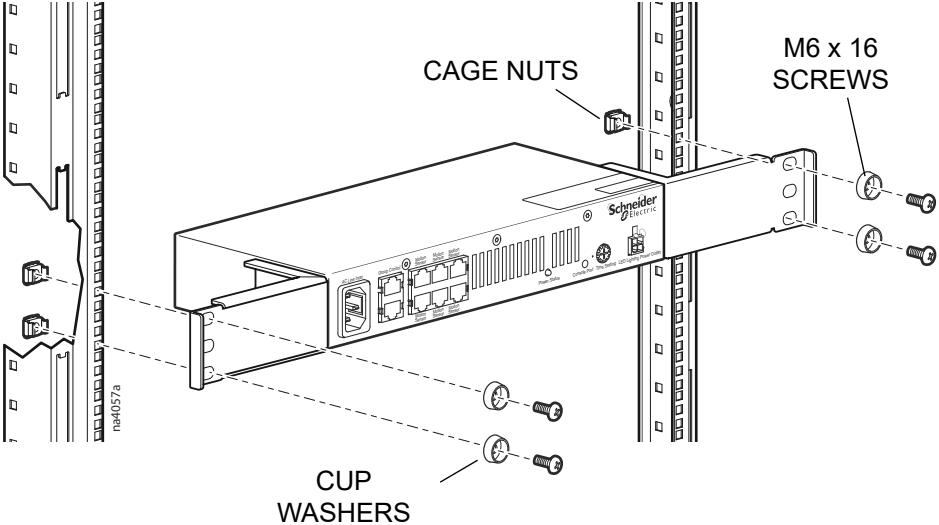
Lighting control unit

Refer to the Aisle Containment configuration report for more information for locating components.

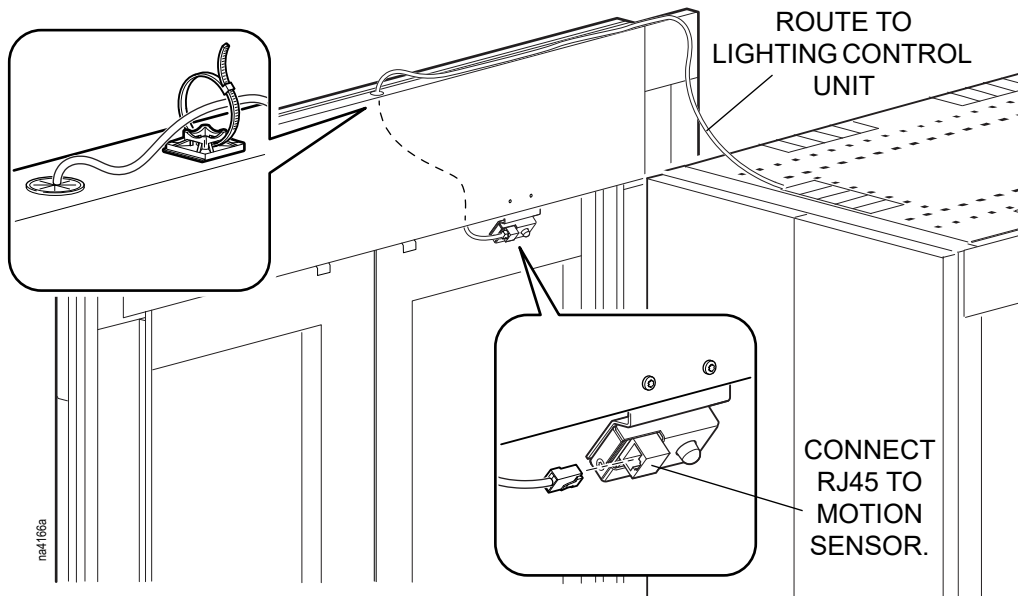
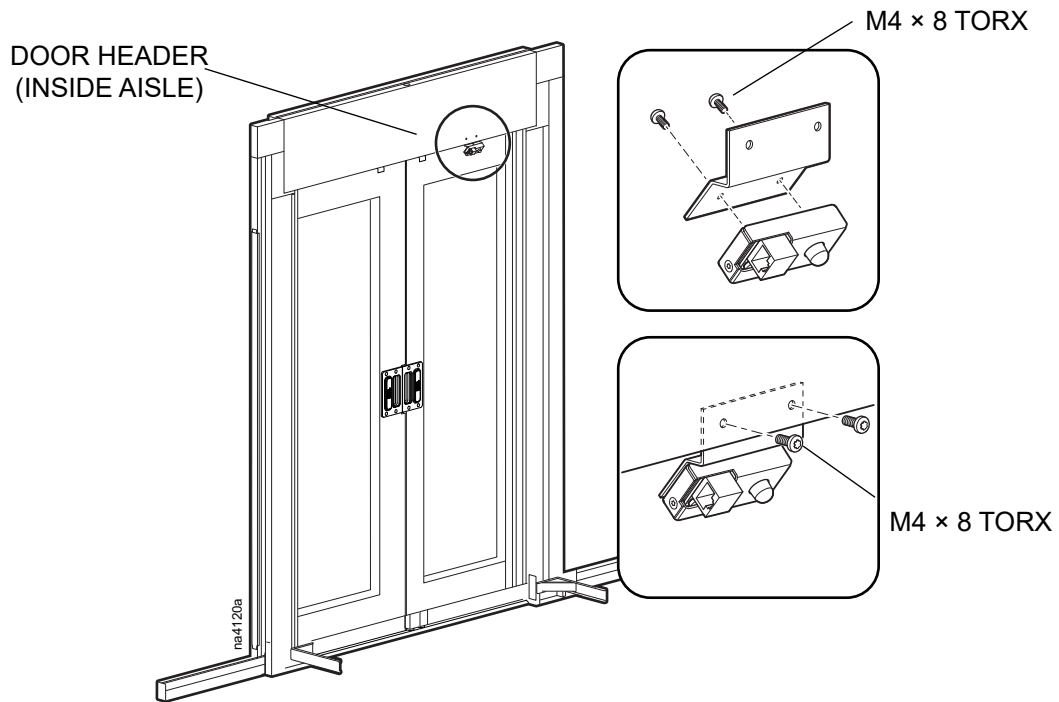
- 1. Install the mounting brackets onto the lighting control unit.



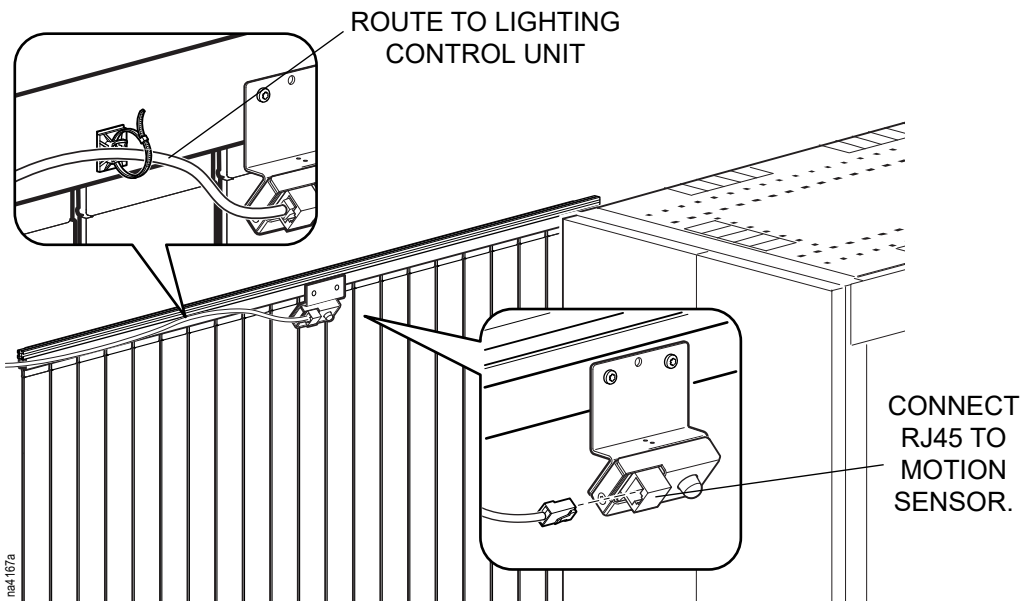
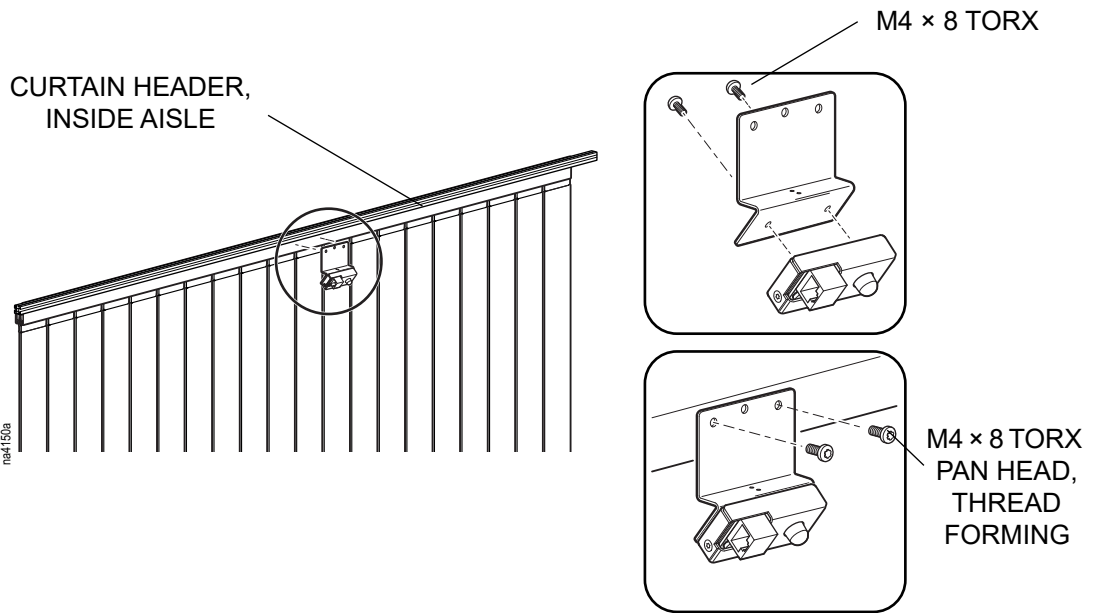
- 2. Install the controller onto the mounting rails of the enclosure. Use four cage nuts, cup washers, and M6 x 16 screws.



Motion sensor installation for sliding doors



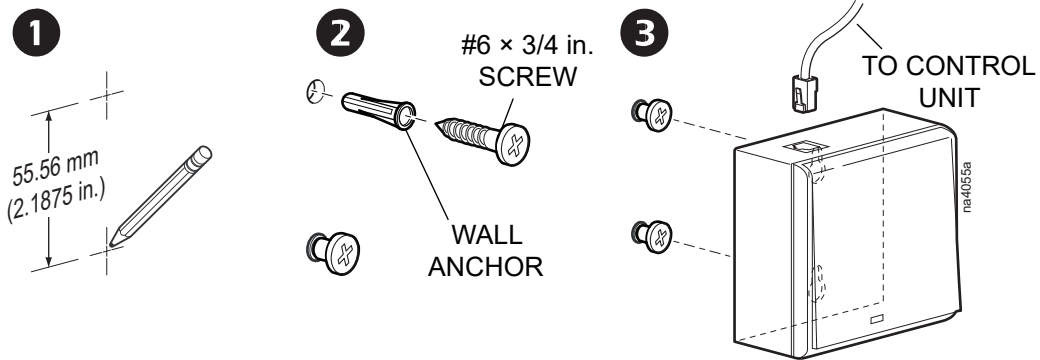
Motion Sensor Installation for Door



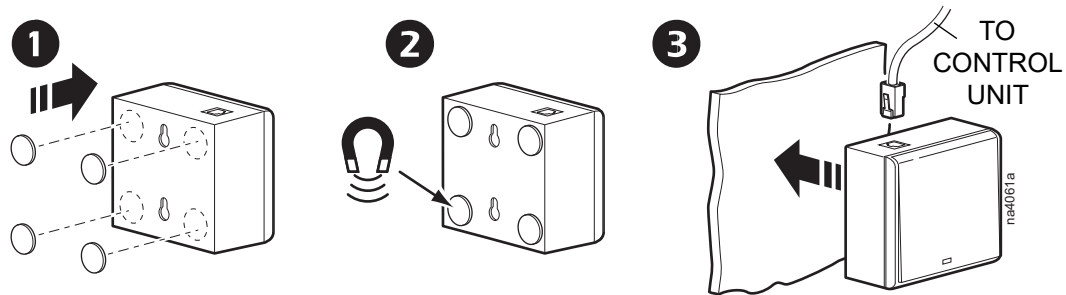
Manual switch installation

The manual switch can be located inside or outside of the containment area and should be attached to a surface using one of the three methods shown below.

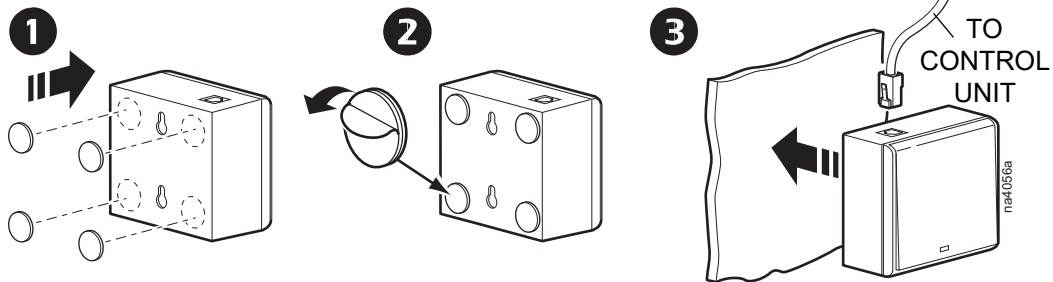
Fastener method



Magnet method



Hook-and-loop method



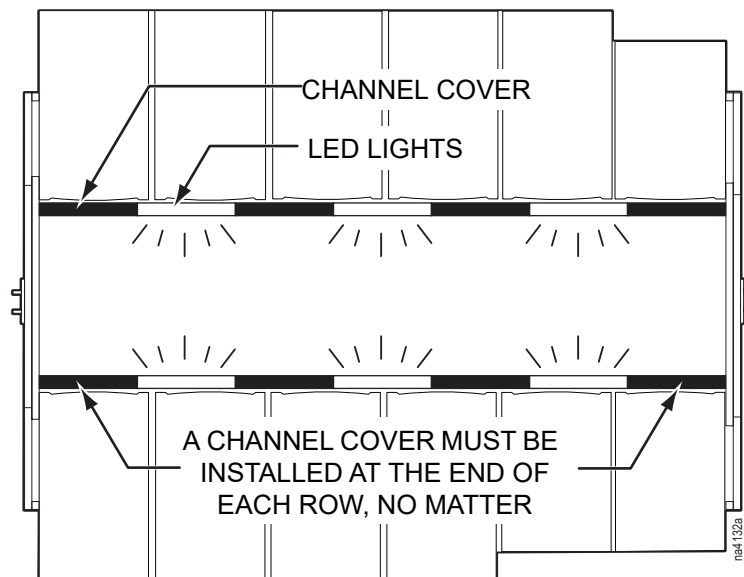
LED lighting assembly installation—ceiling containment

NOTE: A maximum of twelve lights can be installed per lighting control unit.

Arrange LED lights evenly on each side of the row. Install channel covers to fill in space between each light.

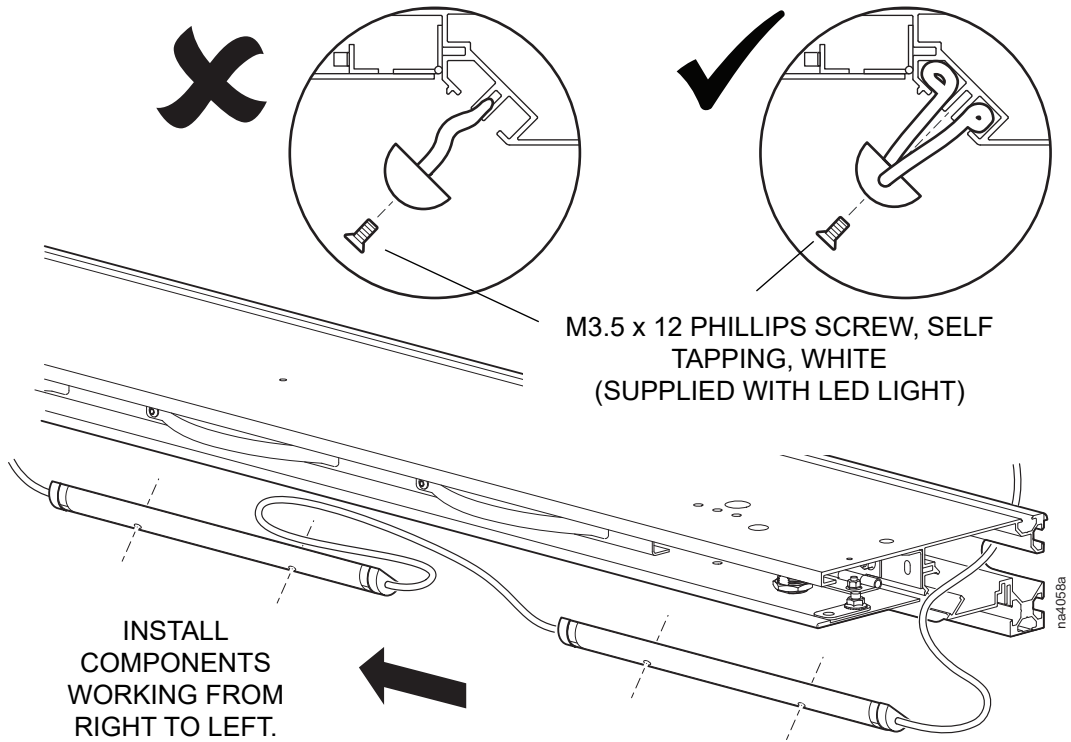
NOTE: The provided cable only supports a maximum length of two channel covers.

Refer to the Aisle Containment configuration report for more information for locating components.

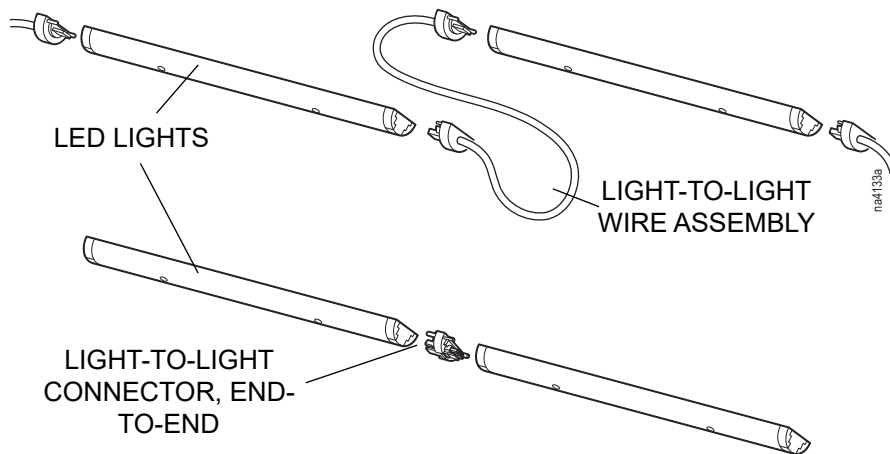


Starting on the right side and working to the left, install the LED lights alternating with channel covers (when appropriate). Place any wires used in the upper and lower channels of the extrusion.

⚠ CAUTION
WIRE PINCH HAZARD
Do not use the center channel to route wire. This is reserved for the lighting and wire cover fasteners.
Failure to follow these instructions can result in equipment damage.

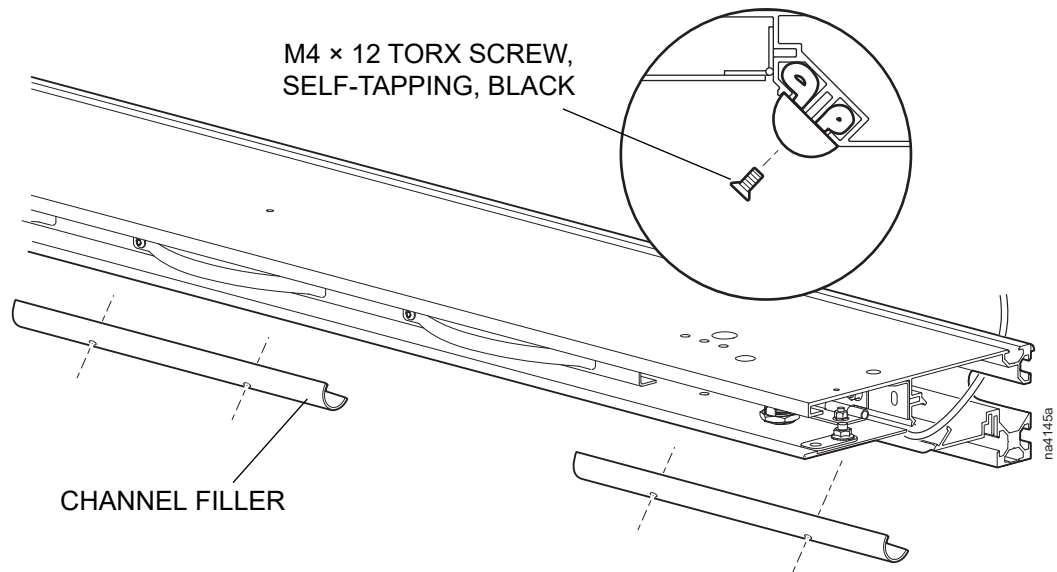


LED lights can be connected together as shown.

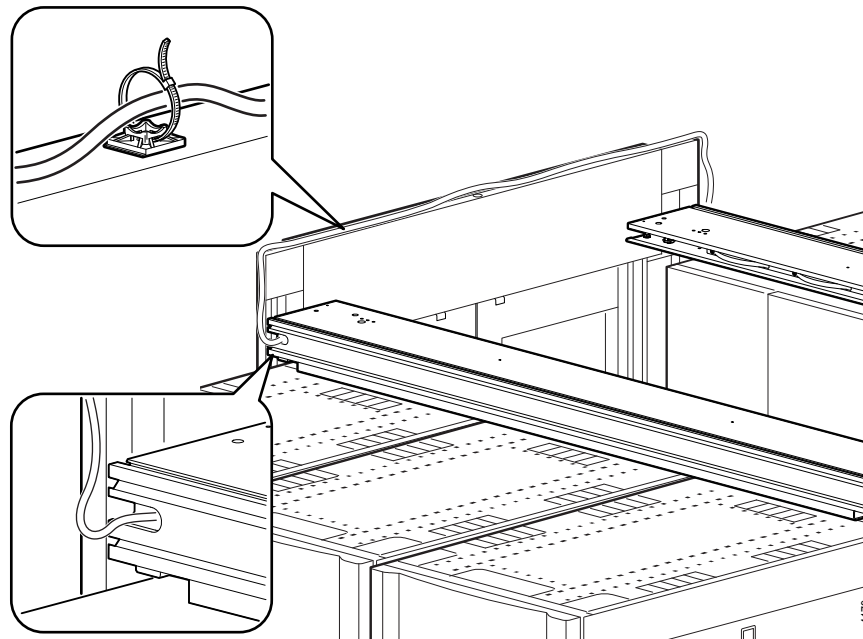


Locate the wire covers in the ceiling panels mounting rail kit. Install the wire covers, filling in the gaps on either side of the LED lights.

Refer to the main installation manual for the Aisle Containment System for more information.



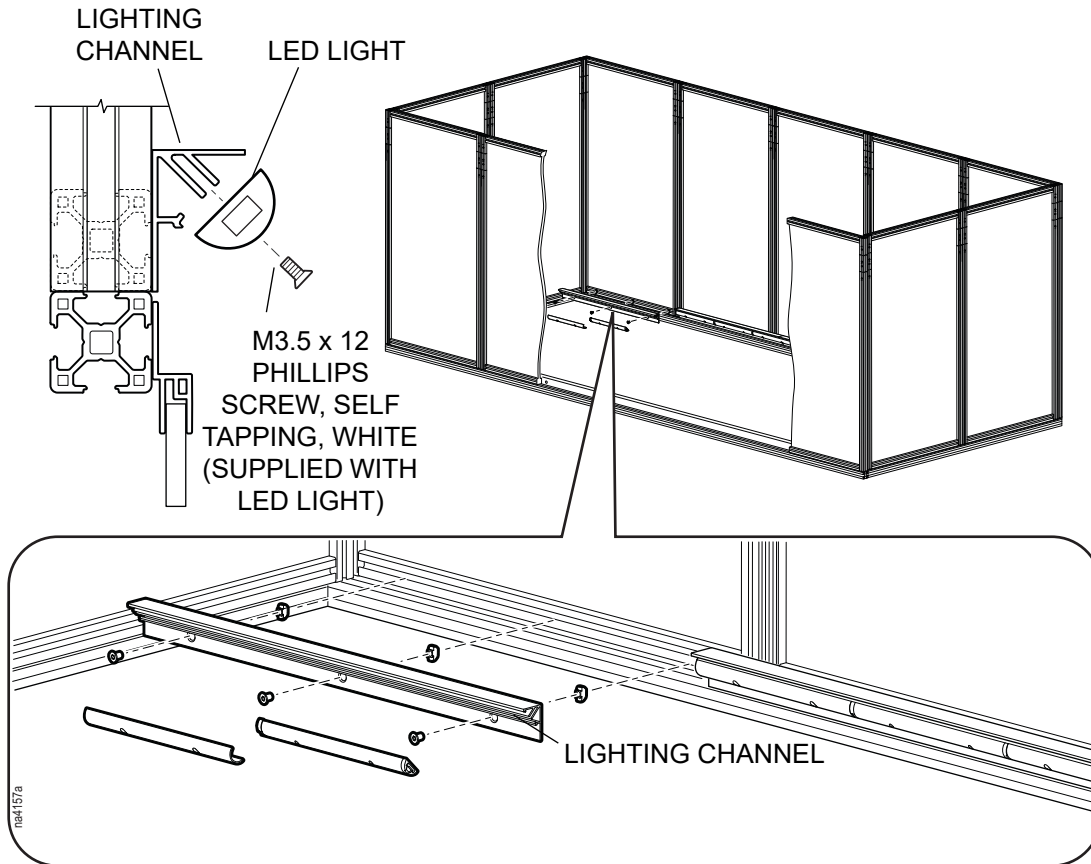
Route the lighting cable over the door frame and across the aisle.



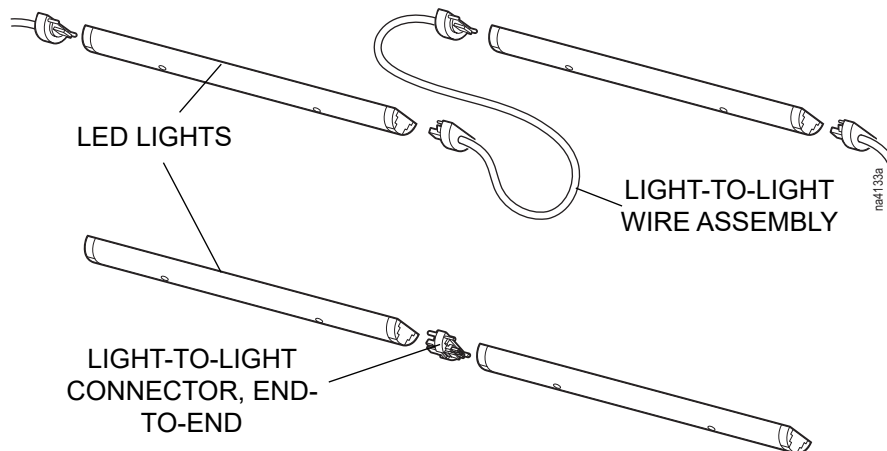
LED lighting assembly installation—ducted

Install the LED lights onto the lighting channel.

Refer to the main installation manual for the Aisle Containment System for more information on installing the light channel in a ducted application.



LED lights can be connected together as shown.



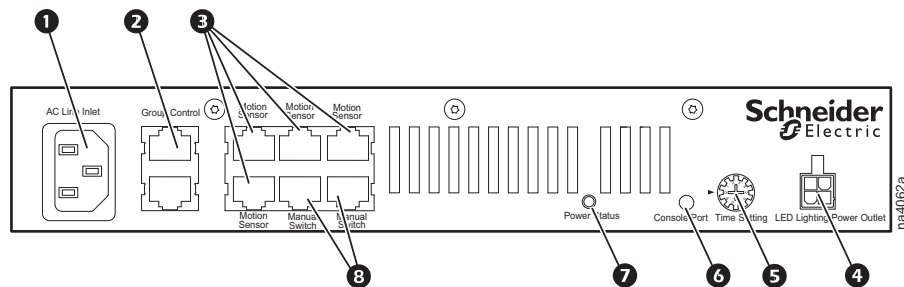
Locate the wire covers in the ceiling panels mounting rail kit. Install the wire covers, filling in the gaps on either side of the LED lights.

Refer to the main installation manual for the Aisle Containment System for more information.

Power and communication connections

⚠ WARNING
ELECTRIC SHOCK HAZARD
Do not use an extension cord with this product.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Lighting control unit component identification



Item	Description	Item	Description
1	AC line inlet	5	Time setting
2	Control group	6	Console port
3	Motion sensor input (4)	7	Power status
4	LED light power outlet	8	Manual switch input (2)

Lighting System Setup and Operation

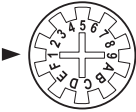
Motion detection

One lighting control unit can support four motion sensors. If any of the sensors detect movement, the lighting control unit will turn on its LED lighting bank.

NOTE: The motion sensors range, or sensitivity, cannot be adjusted

Time setting

The time setting control is used to control the length of time the LED lighting bank will be ON. If the motion sensor is triggered during the ON cycle, the timer will be restarted. The LED lights can be turned OFF using the manual switch.

	Time Setting	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
	LED ON delay (minutes)	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75

Manual switch

Pressing a manual switch will turnoff the lights in its group, and the motion sensor function becomes inactive for 10 seconds. After 10 seconds, the motion sensor function will once again become active and take over the control.

Power status indicator

The power status indicator illuminates when power is supplied to the unit and it is functioning normally.

Worldwide Customer Support

Customer support is available at www.apc.com/support/contact.

© Schneider Electric. APC and the APC logo are trademarks owned by Schneider Electric Industries SE or its subsidiaries. All other brands may be trademarks of their respective owners.