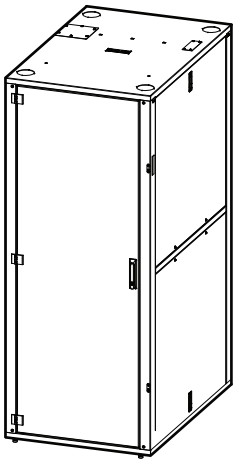
NetShelter™ RX Medium Density Enclosures

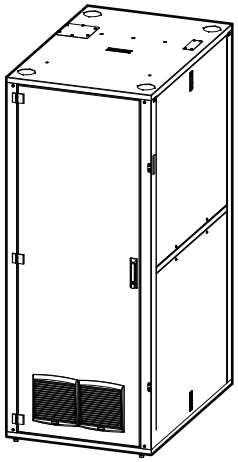
42U

Installation

AR5340, AR5340F

Release date: 11/2023





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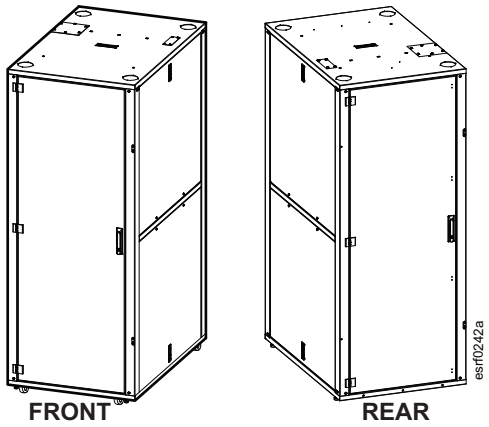
Introduction

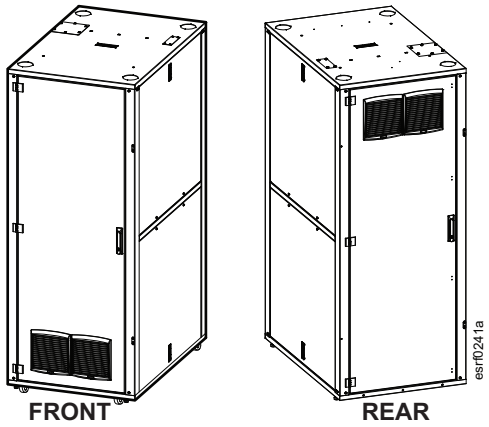
APC NetShelter™ RX Medium Density Enclosures are high-quality, IP54-rated, IT enclosures for storage of industry-standard (EIA/ECA-310), 19 in (483 mm) rack-mount hardware, including servers and voice, data, networking, internetworking, and power protection equipment.

- Two models: AR5340 and AR5340F
- 42U
- IP54-rated

AR5340: Enclosure only



AR5340F: Enclosure equipped with a fan ventilation system. Louvered grille covers with filters are installed on the front and rear doors. A 208/230V, 50/60Hz fan uses a temperature sensor (provided) to control fan speed. The fan is designed to run full time once power is applied. A power cord is included in the hardware bag. A C14 outlet is located on the right side of the fan box (the hinge side of the door when open). A dedicated door switch on the fan box and rear of the enclosure frame will cause the fan to shut down when the rear door is opened.



Safety

SAVE THESE INSTRUCTIONS

Read these instructions carefully and look at the equipment to become familiar with it before trying to install, operate, service or maintain it. The following safety 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 product safety label indicates that an electrical hazard exists that 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 a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

WARNING

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

Failure to follow these instructions can result in death, serious injury or equipment damage.

CAUTION

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

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol is not used with this type of safety message.

Failure to follow these instructions can result in equipment damage.

Qualified Personnel

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel.

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.

Enclosure Safety

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Once the enclosure is in place, ensure that it is properly grounded before installing your equipment or connecting to mains power.
- Mains power must be brought to the enclosure only by qualified personnel.
- Wear appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E and follow all local codes and regulations.
- Equipment must be installed in accordance with the National Electrical Code and all applicable local codes.
- Do not insert anything into the fan grill.

Failure to follow these instructions will result in death or serious injury.

WARNING

TIP/HEAVY EQUIPMENT HAZARD

- At least two people are required to move the enclosure.
- Load at least 158 kg (350 lb) in the bottom of the enclosure before moving the enclosure on its casters.
- When moving the enclosure on its casters, ensure the path of the enclosure is free of obstacles and debris.
- When moving the enclosure on its casters, make sure the leveling feet are raised and push the enclosure from the front or rear. Never push the enclosure from the sides.

Failure to follow these instructions can result in death, serious injury or equipment damage.

CAUTION

IMPACT HAZARD

The fan box location may interfere with your working space when the rear door is open. Sharp corners exist on the fan box. Exercise care to avoid impact.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

IMPROPER AIRFLOW

- Improper airflow can damage installed components. Verify that the system provides airflow needed by your equipment.
- Check the air filters regularly. Replace the filters when needed to prevent reduced airflow.
- Do not obstruct airflow by covering or blocking the ventilation grilles.

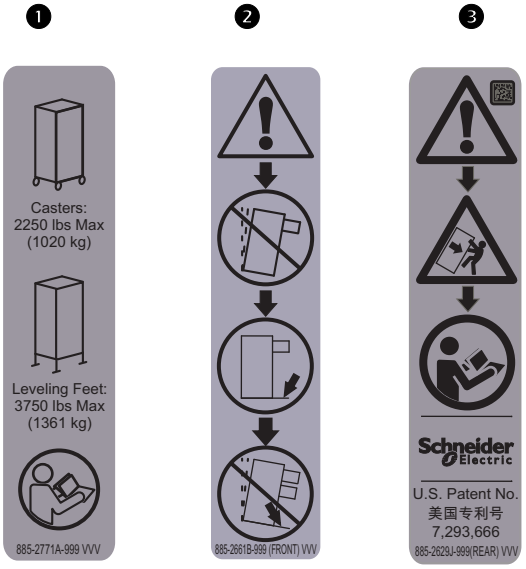
Failure to follow these instructions can result in equipment damage.

Labels

Safety and informational labels are affixed to the enclosure. Read and follow the instructions on the labels.

Tip Hazard and Weight limit labels are attached to the frame of the enclosure.

1. Observe the load restrictions for the enclosure. The Dynamic load is limited to 1020 kg (2250 lb). This is the maximum load for moving the enclosure on its casters.
   The Static load is limited to 1361 kg (3750 lb). This is the maximum load for the enclosure while the unit is resting on its leveling feet.
   Read the manual.
2. Tip Hazards. Only one shelf or piece of equipment on sliding rails should be extended at a time.
3. Observe tip hazards. Be sure to read all of the instructions for the equipment.

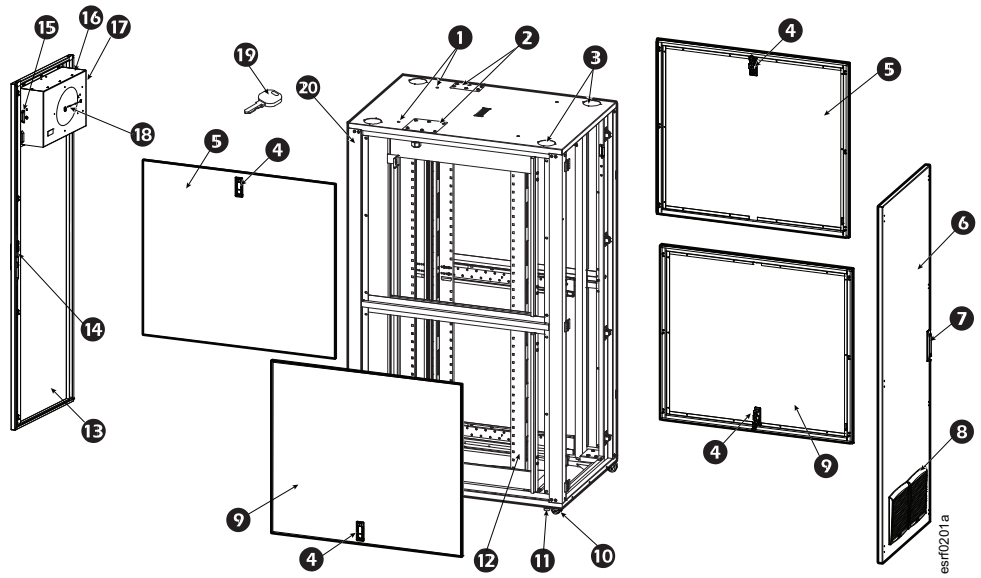


Inventory

Upon receipt of the NetShelter RX Medium Density Enclosure, inspect for damage and notify the shipping carrier and APC at **apc.com/support** immediately if any damage is found.

Component Identification

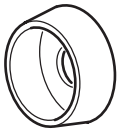
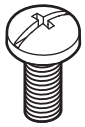
AR5340F shown in the illustration below.



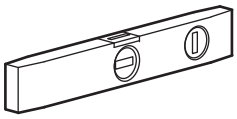
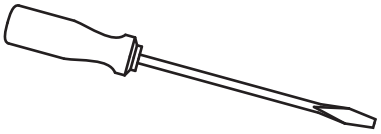
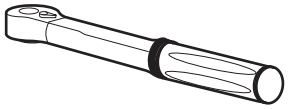
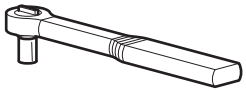
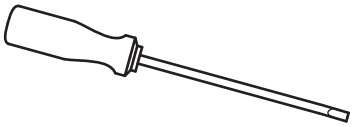
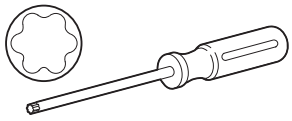
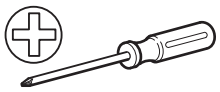
Item	Description	Item	Description
❶	Lifting eye holes/plugs	⓫	Leveling foot
❷	Cable entry cover plates	⓬	Vertical mounting rail
❸	Knockouts	⓭	Rear door
❹	Side panel lock	⓮	Locking rear door handle
❺	Top side panel	⓯	Fan Door sensor*
❻	Front door	⓰	Fan Box*
❼	Locking front door handle	⓱	C14 outlet for fan power*
❽	Ventilation louvers and filters*	⓲	Temperature sensor*
❾	Bottom side panel	⓳	Keys (located in the literature bag)
❿	Caster	⓴	Enclosure frame

* Components of AR5340F only. All remaining components listed in the table above are also components of AR5340.

Hardware Bag Contents

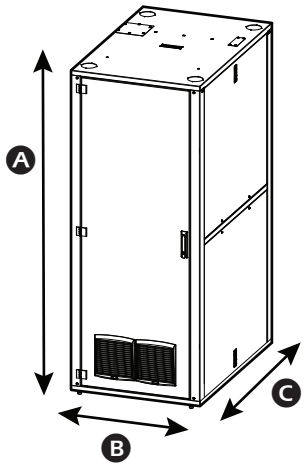
		
Plastic cup washer (60)	M6 x 16 Phillips head screw (60)	M6 Cage nut (60)
Cage nut tool (1)	Torx T30 / #2 Phillips tool (1)	

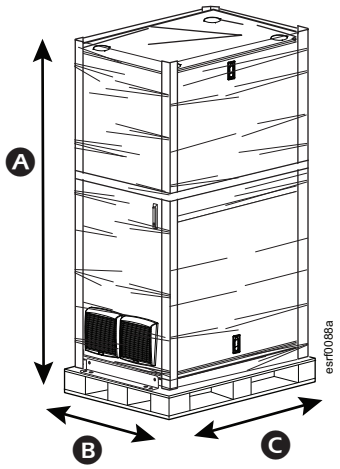
Tools Required (not provided)

		
13-mm, open-ended wrench	Level	Flat tipped screwdriver
		
Torque wrench	Ratchet wrench with 10mm socket	Small (6mm) flat tipped screwdriver
		
T-25 Torx driver	Phillips head screwdriver	T25 Torx socket

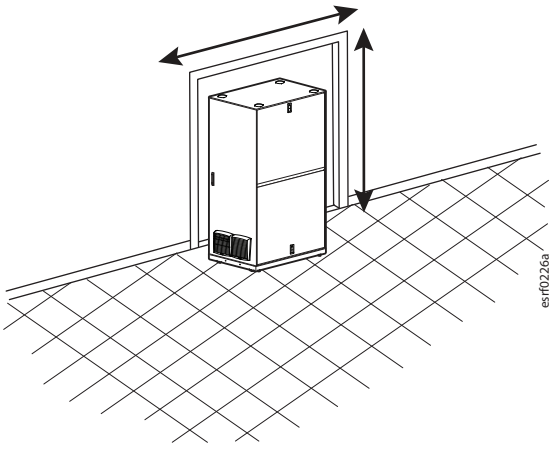
Installation

Enclosure Dimensions





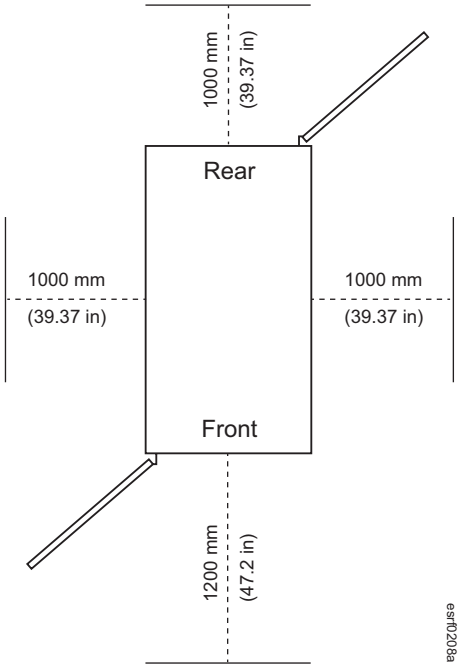
	AR5340	AR5340F
A **Height - mm (in)** Enclosure only Enclosure With Packaging	2006 (79) 2130 (83.9)	
B **Width - mm (in)** Enclosure only Enclosure With Packaging	800 (31.5) 946 (37.2)	
C **Depth - mm (in)** Enclosure only Enclosure With Packaging	1212 (47.7) 1321 (52)	1220 (48) 1321 (52)
Weight - kg (lb) Enclosure only Enclosure With Packaging	258 (568) 286 (631)	260 (575) 289 (638)



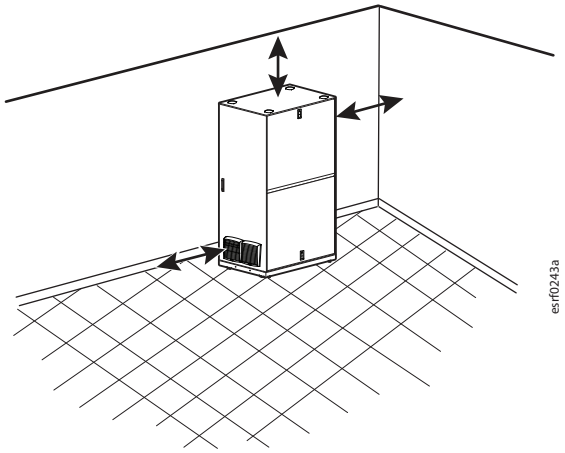
Note the dimensions of any doorways or hallways in your path to reach the final location for your enclosure. Ensure you can move the enclosure through any doorways or other obstacles.

Location Requirements

The final location for your enclosure should include sufficient space around and above to perform everyday tasks and occasional maintenance.

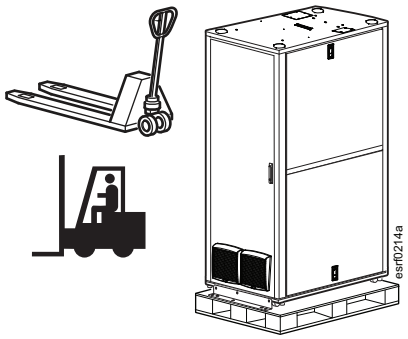


Your location should include at least 305mm (12 in) of space above the enclosure. Do not position the AR5340F enclosure in a way that will block the ventilation grilles.



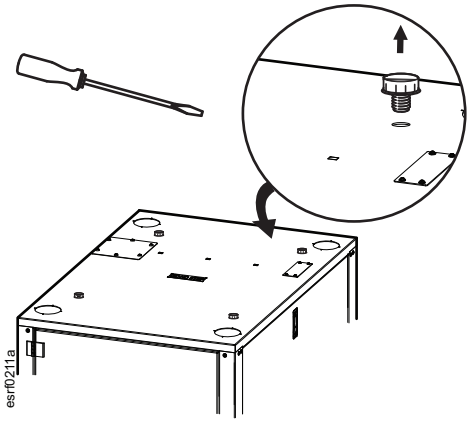
Move the Enclosure

Use a forklift or a pallet jack to move the enclosure while it is still on the pallet, if possible. Follow the instructions in the Unpacking Sheet to complete the removal of the enclosure from its pallet once it is at its final location.



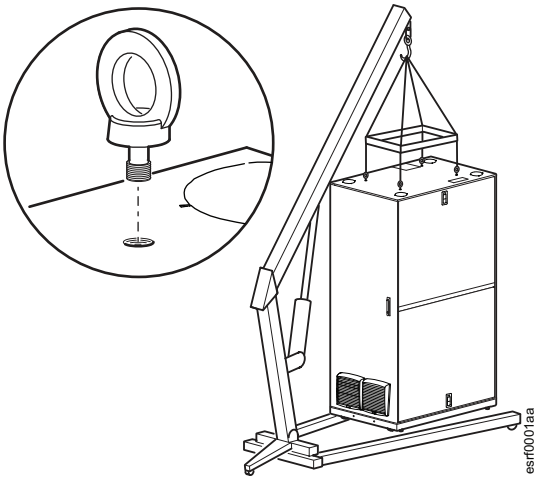
You can move an unpacked enclosure using eye bolts and a lifting device. Remove the brackets securing the enclosure to the pallet. See the Unpacking Sheet for complete instructions.

Use a flat tipped screwdriver to remove the hole plugs. Save the hole plugs for re-installation following the lifting task.



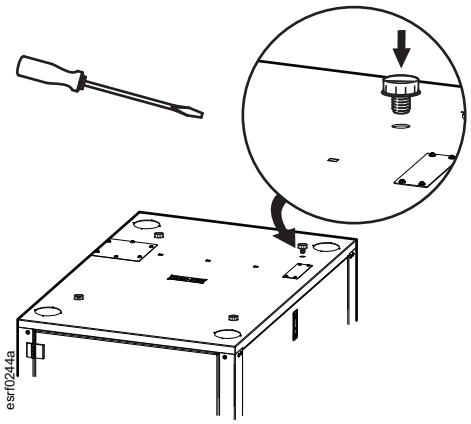
Use M10 x 20 mm shoulder eye bolts with a vertical lift rating of at least 181 kg (400 lb).

NOTE: Use appropriate lifting hardware to ensure a straight-line pull on the eye bolts.



CAUTION
EQUIPMENT DAMAGE HAZARD Avoid compromising the IP54 rating and possible equipment damage. Ensure the hole plugs are installed . **Failure to follow these instructions can result in injury or equipment damage.**

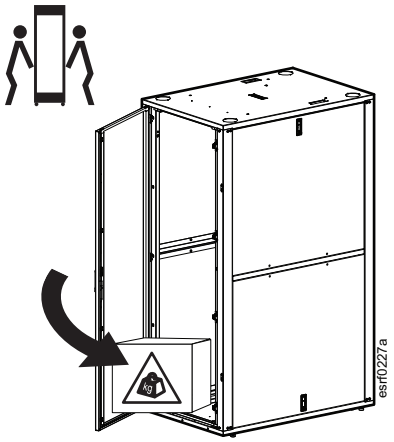
Remove the eye bolts when the lifting task is complete. Re-install the hole plugs.



Move the Enclosure on its Casters

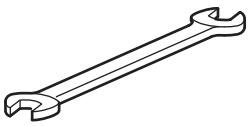
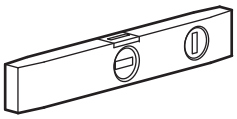
WARNING
TIP/HEAVY EQUIPMENT HAZARD • At least two people are required to move the enclosure. • Load at least 158 kg (350 lb) in the bottom of the enclosure before moving the enclosure on its casters. • When moving the enclosure on its casters, ensure the path of the enclosure is free of obstacles and debris. • When moving the enclosure on its casters, make sure the leveling feet are raised and push the enclosure from the front or rear. Never push the enclosure from the sides. **Failure to follow these instructions can result in death, serious injury or equipment damage.**

When moving the enclosure on its casters, place at least 158 kg (350 lb) in the bottom of the enclosure. Do not move a loaded enclosure on its casters if the weight exceeds the Maximum Dynamic Load of 1020 kg (2250 lb). At least two people should move the enclosure.

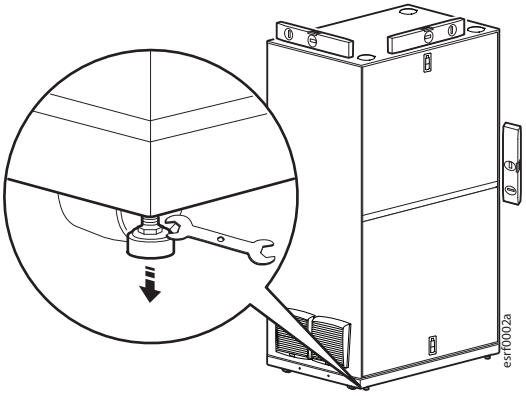


Leveling Feet

Tools Required (not provided)

	
13-mm, open-ended wrench	Level

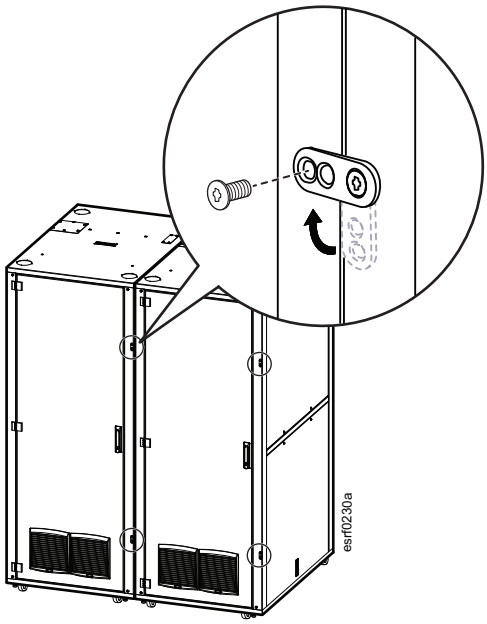
When the enclosure is in its final location, lower the leveling feet. Use a 13-mm, open-ended wrench (not provided) to lower the leveling feet. Use a level (not provided) to ensure the enclosure is level and plumb while lowering the leveling feet.



Join the Enclosures

NOTICE
• Joining the enclosures is intended for stability purposes only. • Side panels are NOT removed when joining enclosures.

Two or more enclosures may be joined using the brackets attached to the front and rear as shown.



Ground the Enclosure

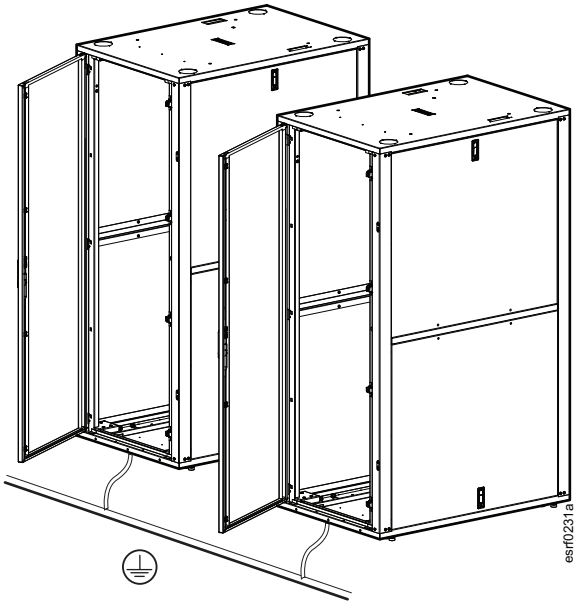
The NetShelter RX Medium Density Enclosure does not include a common grounding point. A common ground using a discrete bonding jumper must be connected directly to each enclosure. Follow all local and national codes.

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Connection of the enclosure to the building Common Bonding Network (CBN) is required.

Failure to follow these instructions will result in death or serious injury.



Side Panels

It may be easier to install some of your equipment and cables if one or more side panels are removed to improve access. Since the enclosure is a sealed unit, care must be used when removing and installing the side panels in order to ensure the gasket material will not be damaged.

⚠ CAUTION

HEAVY EQUIPMENT HAZARD

The side panels are heavy. At least two people should remove or install the side panels.

Failure to follow these instructions can result in injury or equipment damage.

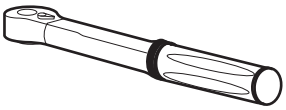
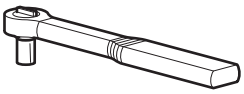
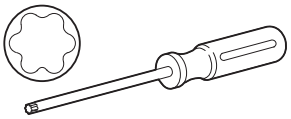
NOTICE

DAMAGE HAZARD

Use care when removing or installing the side panels. Avoid crushing or tearing the gasket material.

Failure to follow these instructions can result in equipment damage.

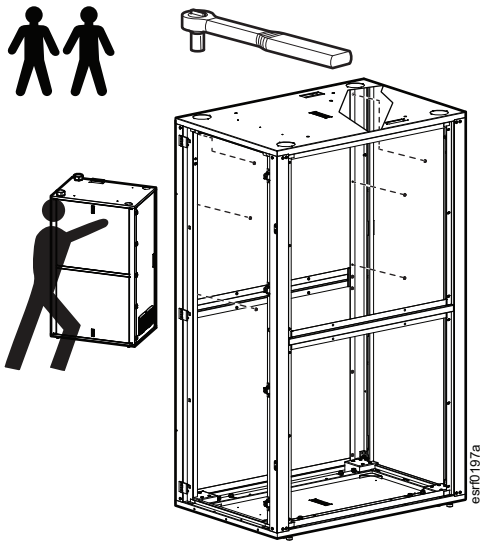
Tools Required (not provided)

	
Torque wrench	Ratchet wrench with 10mm socket
	
T-25 Torx driver	T25 Torx socket

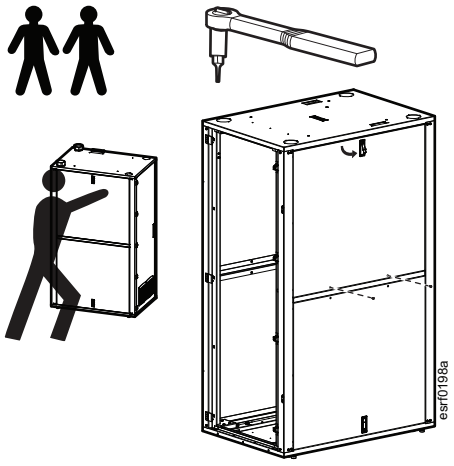
Remove the Side Panels

The side panels are secured to the frame with three (3) M6 nuts at the front and three (3) M6 nuts at the rear of the frame on the interior of the unit.

1. Use a socket wrench to remove the M6 nuts while at least one person holds the panel in place.



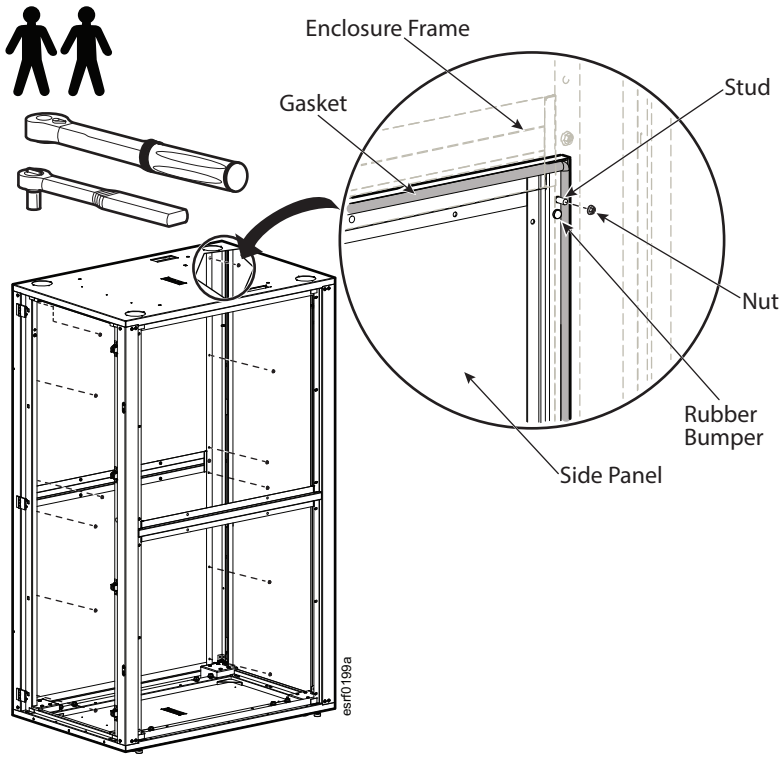
2. Remove the two (2) T25 screws and rubber washers securing the panels to the cross brace support while at least one person holds the panel in place. Lift the latch to release the side panel. Use care when removing the side panels.



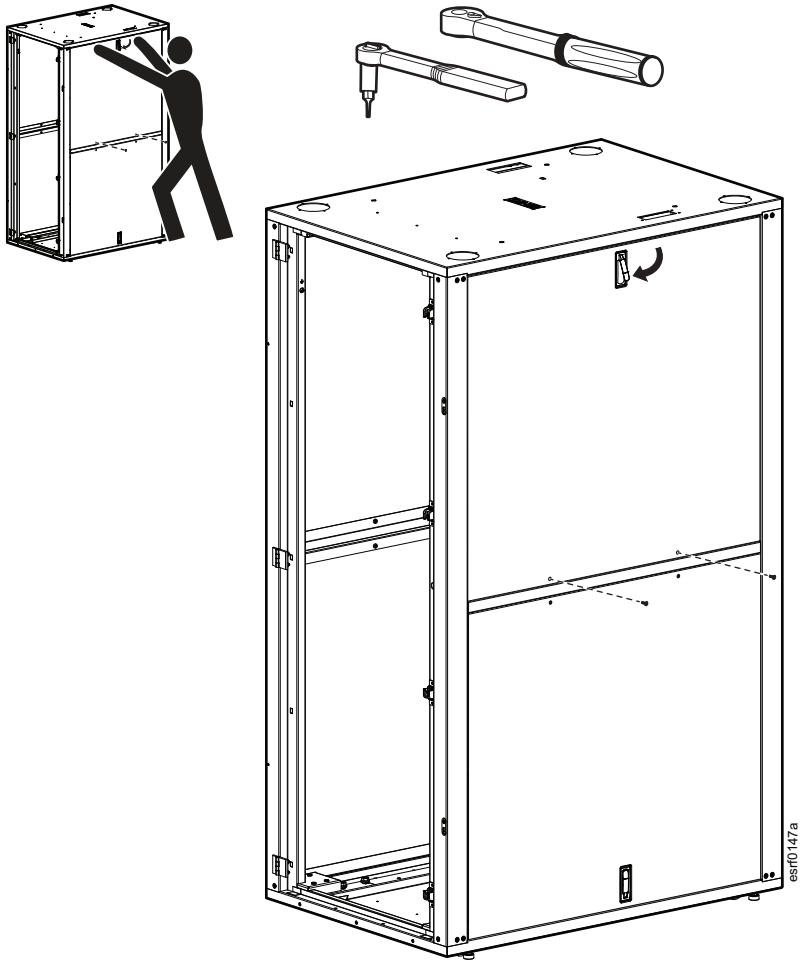
Install the Side Panels

NOTICE
DAMAGE HAZARD • To avoid damaging the gasket, do not use an electric screwdriver or drill to secure the hardware. • Refer to the torque specifications to avoid overtightening the fasteners. Overtightening the fasteners may permanently damage the gasket and compromise the seal. **Failure to follow these instructions can result in equipment damage.**

1. Fit the six (6) threaded studs on the side panel through the holes in the frame. Have at least one person hold the side panel in position while a second person secures the six (6) M6 nuts with a socket wrench.
   Torque: 8 - 12 in lbs (0.9 - 1.4 Nm).
   Rubber bumpers installed near the studs on the side panels help prevent over-compression of the gasket. Observe the torque requirements and use care to prevent damage to the gaskets.



2. Use a socket wrench to install the two (2) T25 screws and rubber washers to the support.
   Torque: 8 - 12 in lbs (0.9 - 1.4 Nm).
   Press the side panel at the top to compress the gasket while securing the latch. Use care not to damage the gasket. Ensure the latch is secured in the locked position.

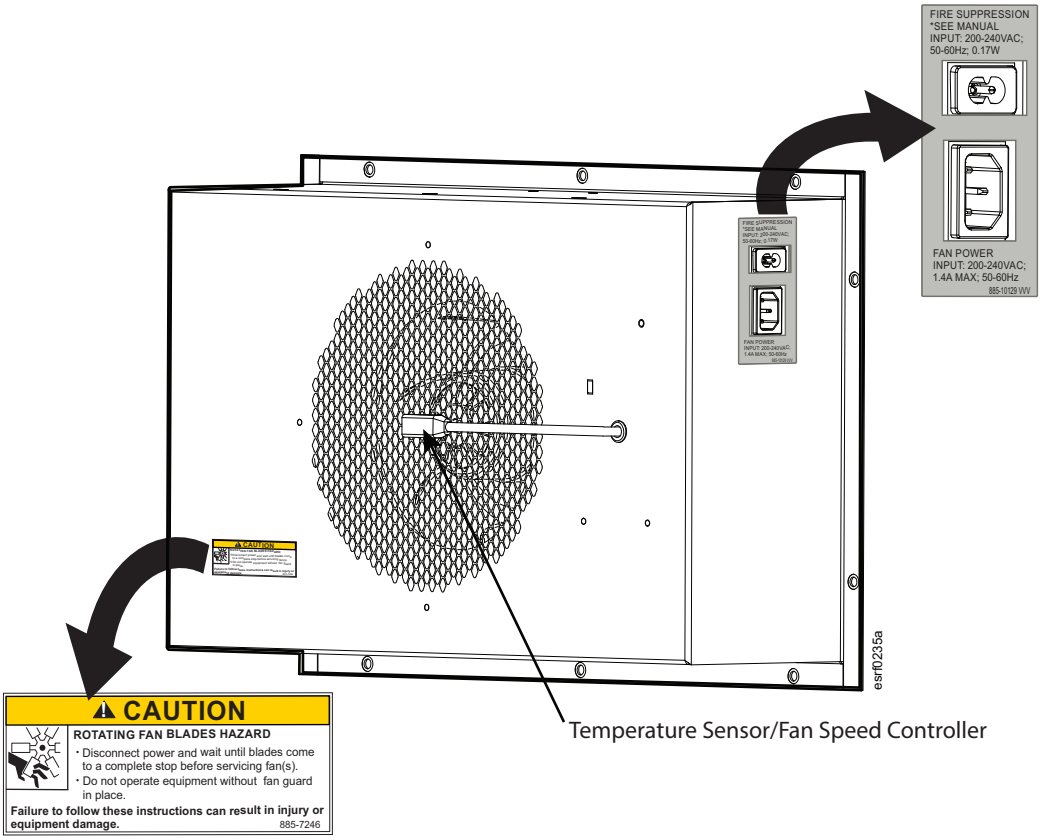


Fan Operation

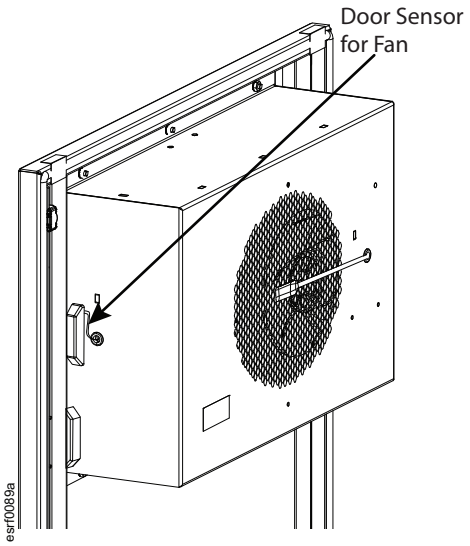
Under normal conditions, the fan will operate when power is applied to the C14 inlet and the door is closed. The fan speed will increase as the temperature inside the enclosure increases.

The fan box includes an IEC C8 inlet, relay, and terminal blocks to support the fan interlock for fire suppression.

By default, the interlock is bypassed and not used due to the use of the temperature-driven fan speed controller. The door sensor stops the fan when the door is opened.

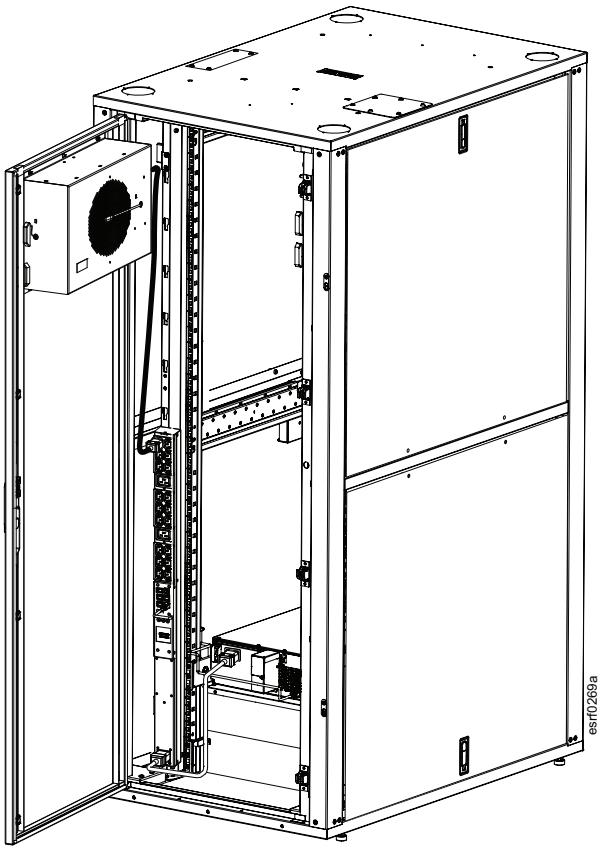


The fan box includes a door sensor connected to the fan that will cause the fan to stop when the rear door is opened.

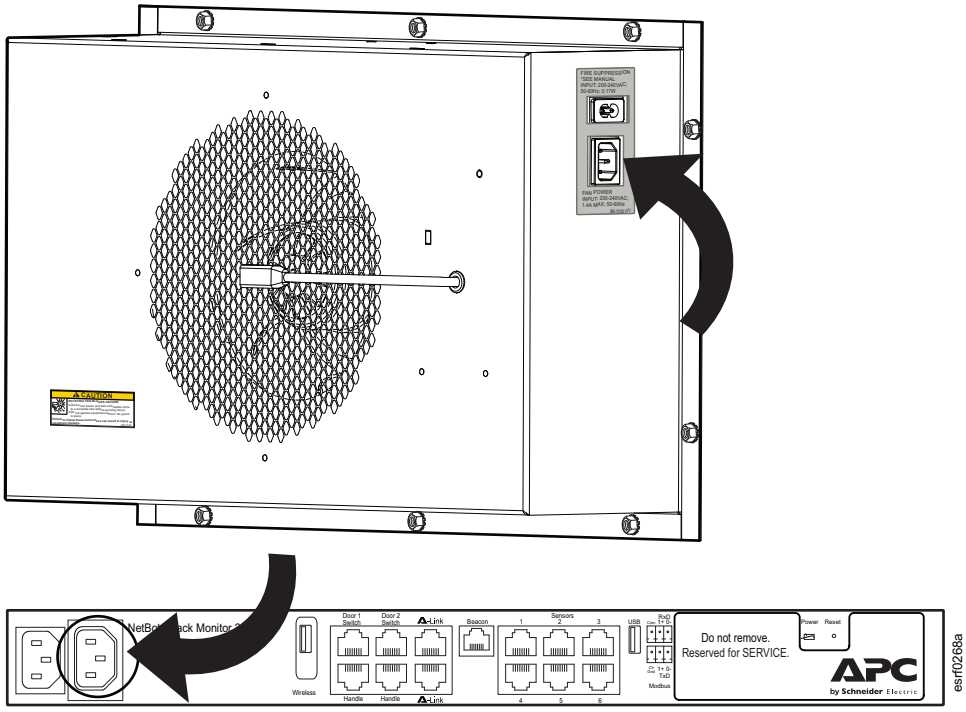


Fan Power

For fan ventilation only: Connect the fan power cord to the C14 inlet on the fan box and a Rack PDU or UPS.



If you install a cooling unit and use the fan for emergency cooling, the fan power cord is connected to the C14 inlet on the fan box and to the Switched Outlet on your NetBotz appliance.



To Use the C8 Inlet as an Interlock

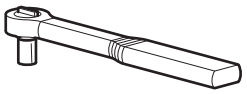
⚠ ⚠ DANGER

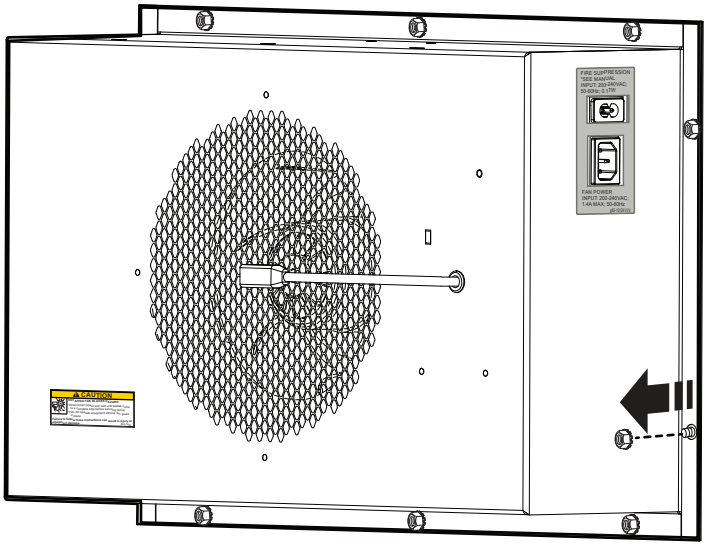
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Unplug power cord(s) from the fan box before performing any work on the fan box.

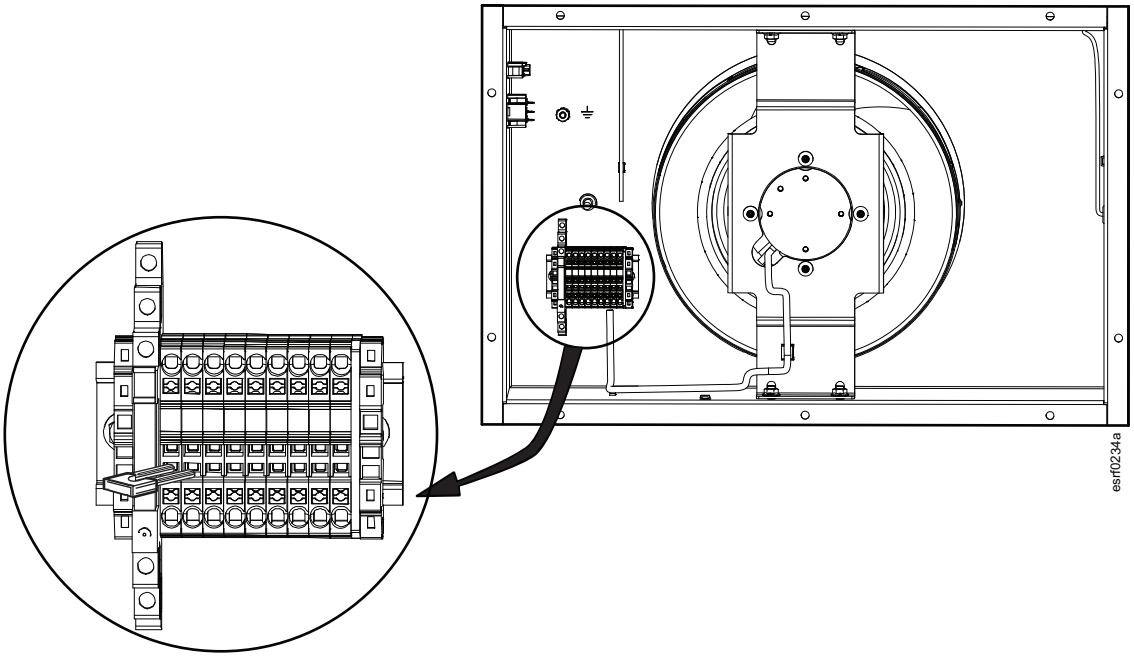
Failure to follow these instructions will result in death or serious injury.

1. Open the rear door.
2. Disconnect the power cord(s) from the fan box.
3. Remove the ten (10) M5 Hex Nuts with lock washers with a socket wrench and 10mm socket to release the fan box from the rear door.



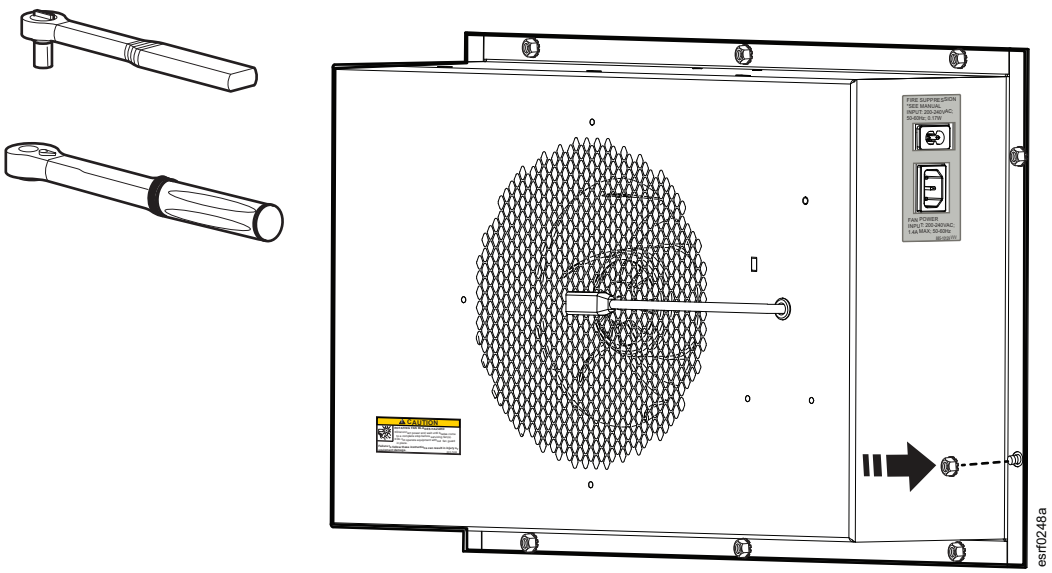


4. To use the relay, remove the jumper between the Q214 and Q211 terminals that is used to bypass the relay contacts.

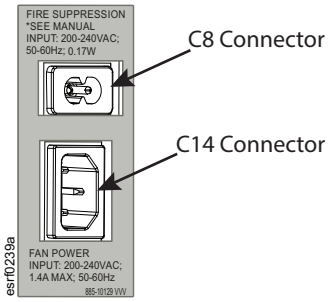


NOTE: Consider saving the jumper. If you want to return the fan operation to its original default design, you will need it.

4. Install the fan box to the rear door using the ten (10) 5m Hex Nuts with lock washers.
Torque: 32 - 40 in-lbs (3.6 - 4.5 Nm).



5. Apply power to the C8 inlet and the C14 connector in order for the fan to function.



Fan Specifications

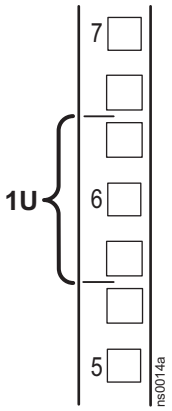
Electrical	
Input Voltage	200-240V
Input Frequency	50/60Hz
Input Power	160W
Input Current	1.4A
Input Connections	(1) C14, (1) C8
Environmental	
Operating Temperature	-25 to 60°C (-13 to 140°F)
Ingress Protection Rating	IP54
Compliance	
Safety Verification	UL

Equipment Installation

Cage Nuts

Proper location in the rack for the cage nuts:

1. Locate the top and bottom U-Space on the vertical mounting rails. Every third hole on the mounting rails is numbered to indicate the middle of a U-Space.
2. Install the cage nuts on the interior of the vertical mounting rail; then install the shelf or equipment.



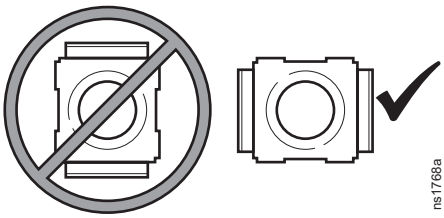
CAUTION

FALLING EQUIPMENT HAZARD

Do not install cage nuts vertically with the tabs engaging the top and bottom of the square hole.

Failure to follow these instructions can result in injury or equipment damage.

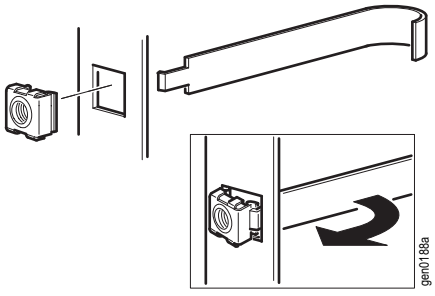
- Install cage nuts horizontally, with the tabs engaging the sides of the square hole.
- Install the cage nuts on the interior of the vertical mounting rail.



Install the cage nut:

1. From the inside of the rack, insert the cage nut into the square hole.
2. Hook one tab of the cage nut assemble through the far side of the hole.

Place the cage nut tool on the other side of the cage nut and pull to snap the cage nut into position.

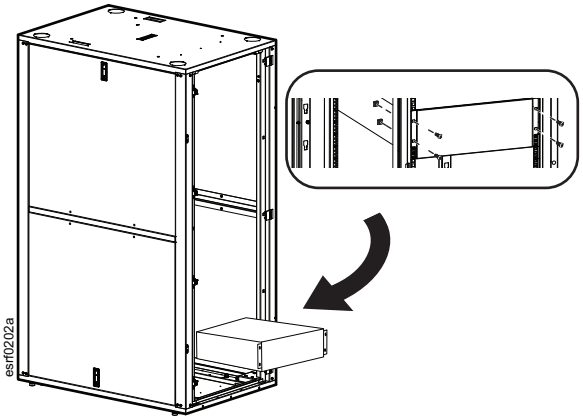


Remove the cage nut:

1. Remove any attached screw.
2. Grasp the cage nut, squeeze the tabs on the sides, and push to release it from the square hole.

Install Your Equipment (not provided)

If possible, install your equipment starting from the bottom of the enclosure and working your way up. Use the M6 cage nuts and M6 Phillips head screws supplied in the hardware bag to secure the equipment in the enclosure.



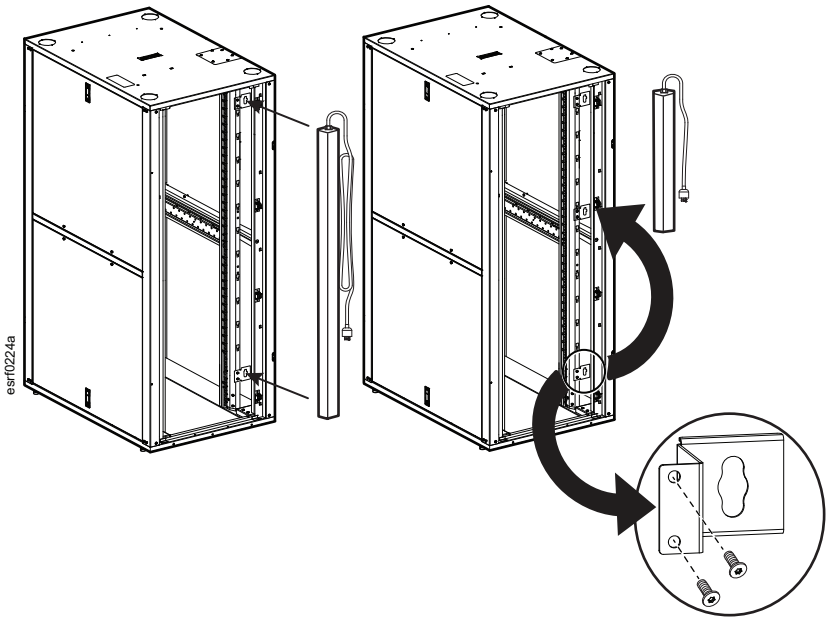
Install a Rack PDU (not provided)

Brackets are installed with two (2) flat head Torx screws and cage nuts on the vertical mounting rails at the rear of the enclosure. The brackets are installed to accommodate a full size Rack PDU.

If you are using half-height Rack PDUs:

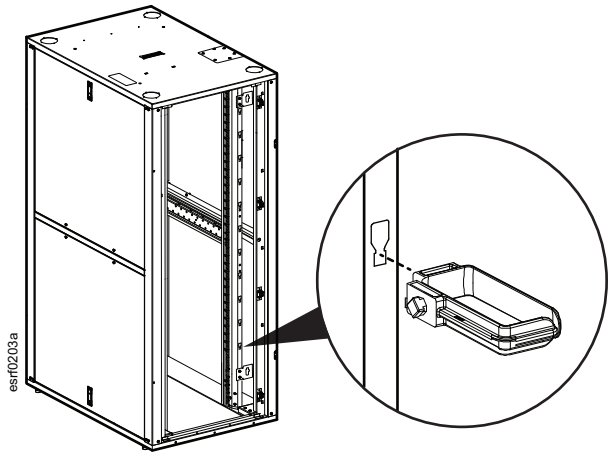
1. Remove the two (2) flat head Torx screws and cage nuts securing the bracket to the vertical mounting rail.

2. Move the bracket to a position on the vertical mounting rail that will accommodate your Rack PDU and install the bracket with the two (2) flat head Torx screws.



Install Cable Managers (not provided)

Cable managers can be installed on the vertical mounting rails.



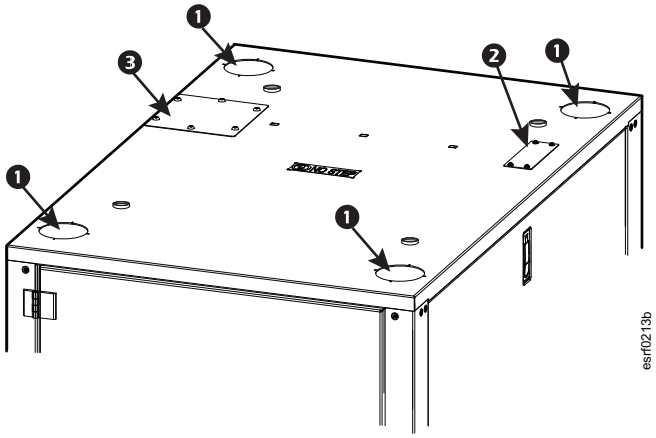
NOTE: Cable manager shown as example only.

Route Cables and Pipes

Power and communication cables and cooling unit refrigerant piping can be routed through one of the four (4) 90mm (3.5 in) knockouts ❶ on the roof panel or through either of two (2) removable cover plates ❷ and ❸.

Any openings used to route cables or pipes should be prepared with appropriate IP54-rated sealing solutions (not provided).

NOTE: Cover plate (2) can be removed and replaced with a Roxtec cable gland EZ Entry 10/10 (not provided). The Roxtec cable gland can be used as the pass-through for the ACRM cooling pipes.



Subsystem Integration

Safety

In addition to the Safety requirements for the enclosure itself, be aware that the components installed to the enclosure also have Safety provisions.

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel.
- The enclosure is intended to be installed and operated by a skilled person in a controlled location with restricted access.
- The enclosure and components must be installed in accordance with the National Electrical Code and all applicable local codes.
- Perform appropriate Lock Out/Tag Out procedures during equipment installation and maintenance.
- Remove incoming power before performing any work. If a UPS is installed, live power exists within the equipment when power is turned off. Always use a properly rated voltage sensing device to confirm there is no voltage in the system.
- Wear appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E and follow all local codes and regulations.
- Do not insert anything into the fan grill.

Failure to follow these instructions will result in death or serious injury.

NOTICE

EQUIPMENT DAMAGE HAZARD

- Connect only approved devices to ports on the NetBotz appliance as directed in this manual and in the NetBotz manual. Plugging in other devices may result in equipment damage.
- Do not use crossover cables.

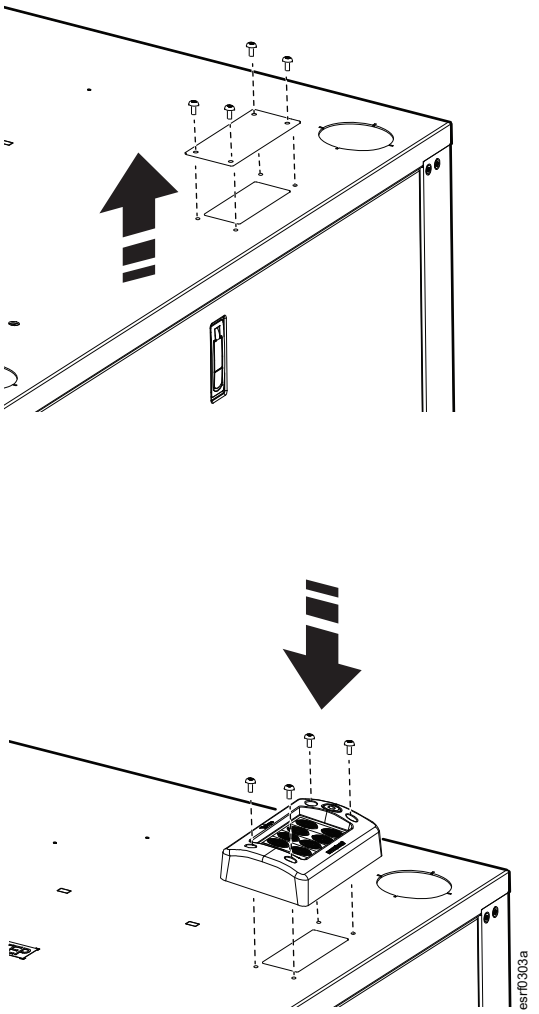
Failure to follow these instructions can result in equipment damage.

Recommended Components

Enclosure	NetShelter RX 42U AR5340 • 800W x 1200D • 19 in. Rails (905kg/2000 lb Load) • Heavy Duty Casters	NetShelter RX 42U AR5340F • 800W x 1200D • 19 in. Rails (905kg/2000 lb Load) • Heavy Duty Casters • Ventilation Fan, Louvers, and Filters
UPS	APC Smart-UPS SRT 5000VA RM 230V (SRT5KRMXLI)	
Rack PDU	AP8858, Metered, 2G, 0U, 16A, 230V, (18) C13 and (2) C19 outlets, IEC309 Cord (Qty 2)	
Cooling	3.5 kW Uniflair Rack mount Air Conditioning, ACRMD4KI-1, Split system, Indoor unit with gravity drain, 50Hz 3.5 kW Uniflair Rack mount Air Conditioning, ACRMD4KI-3, Split system, Outdoor unit without pre-charged refrigerant • Refrigerant Top Entry Piping (ACAC10054) • Cooling Unit User Display (ACAC10045) • Mounting Rails (SRTGRK2) • Cable/Piping Entry Gland (Roxtec EZ Entry 10/10/ SE 870-66318) • Power Cable (follow installation instructions in cooling unit manual, 990-6186-001)) • Low Ambient Kit ACAC10040 Low Temp Kit (-35C°) Condensate pump (Blue Diamond Mini Blue X87-512 / SE 870-66049) • Condensate pump constant-run plug (Blue Diamond P02-048 / SE 493-0724) • Pump drain line, adapters, clamps • Pump has 1/4” OD connections • Cooling unit includes drain line with 1/2” ID reinforced tubing • Reinforced PVC tubing is required from cooling unit through roof penetration at Roxtec gland.	
Security	NetBotz 250A NBRK0250A • Standard Keylock • Temperature and Humidity Sensor AP9335TH • NetBotz Door Contacts NBES0303 • NetBotz Spot Fluid Sensor NBES0301 or NetBotz 750 NBRK0750 • Standard Keylock • Temperature and Humidity Sensor AP9335TH • NetBotz Door Contacts NBES0303 • NetBotz Spot Fluid Sensor NBES0301 • NetBotz Camera Pod NBPD0165	
Accessories	• Interior Lighting Kit • Toolless Cable Management Rings AP7540 • Redetec Fire Suppression System ARFS600 • Smoke Detection Sensors	
Networking	Micro DC Switch	

Roxtec Gasket (not provided)

Remove the sealing plate on the roof and install the Cable/Piping Entry Gland Roxtec EZ Entry 10/10, using the four (4) hex head screws included.



Cooling System (not provided) Installation

The following component and accessories are recommended (not provided) if you plan to add one of the cooling systems recommended for this solution to your enclosure. Contact Customer Support at **www.apc.com** for assistance.

Rack Mounted Cooling Unit

Required Components:

Uniflair Rack Mount Air Conditioner (ACRMD4K-1, ACRMD4K-3)

Refrigerant Top Entry Piping (ACAC10054)

Cooling Unit User Display (ACAC10045)

Mounting Rails (SRTGRK2)

Cable/Piping Entry Gland (Roxtec EZ Entry 10/10)

Condensate Pump

Required components:

Condensate pump (ACAC10039)

Monitoring Appliance

A NetBotz appliance is required if using Rack Mounted Cooling with the fan. If using cooling without the fan, a NetBotz appliance in not required.

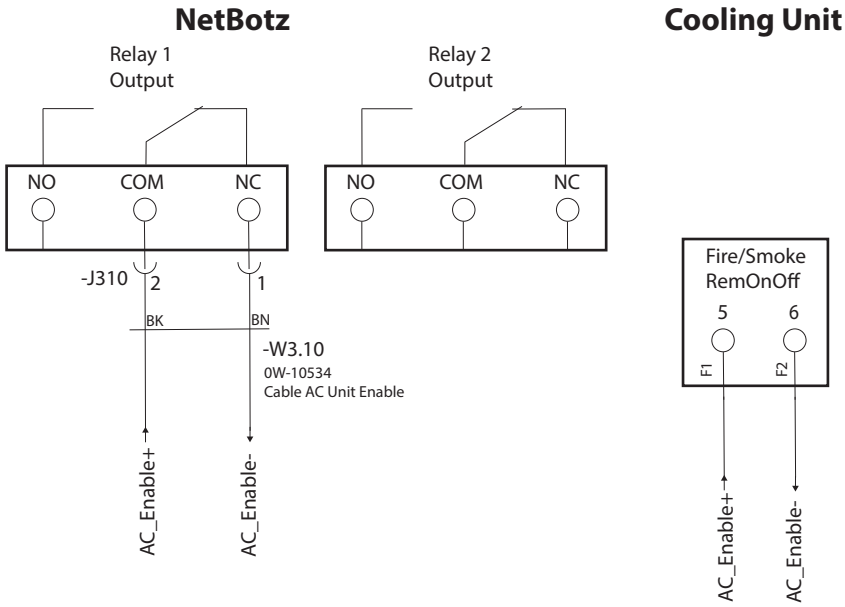
Required components when using Rack Mounted Cooling with the fan:

NetBotz 250A or NetBotz 750

Configure Cooling

Disable the Cooling Unit

To allow the NetBotz to disable the cooling unit if loss of cooling occurs, a communication cable (AC_Enable Cable, Type PLTC, 2x20AWG) is connected to the cooling unit and to the NetBotz appliance. The cable is connected to the **Relay Output** port on NetBotz 250A. The cable is connected to the **Relay 1** port on NetBotz 750.



Cooling Unit Communications for EcoStruxure IT

For your cooling unit to be discoverable by EcoStruxure IT you will need the following equipment:

- IIoT Secure Interface Gateway (TM172SIG)
- 24V (AC or DC) Power Supply
- Modbus cable (2-wire), installed between the cooling unit and the Gateway appliance (TM172SIG)

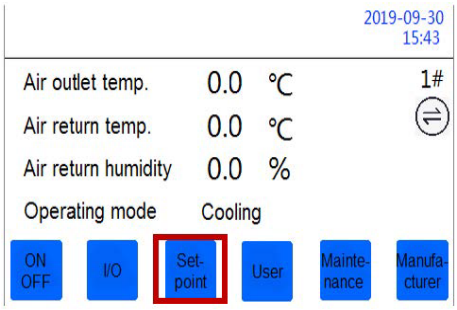
Check that the cooling unit default Modbus connection settings are:

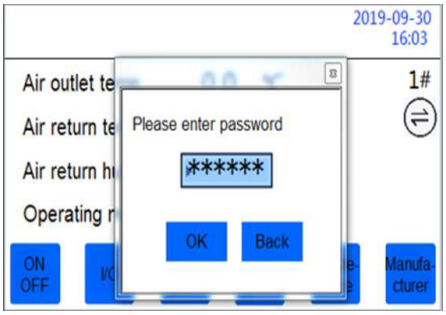
Baud: 9600

Parity: None

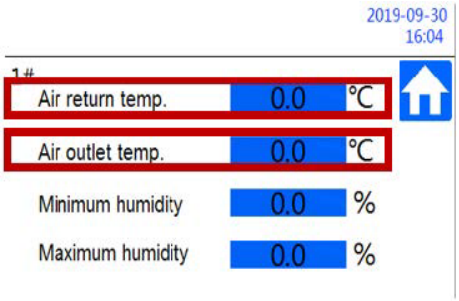
Configure the Cooling Unit from the Display

To Change the Air Return Temp and Air Outlet Temp Setpoints:
Press the Setpoint button
Enter the Password: 1000

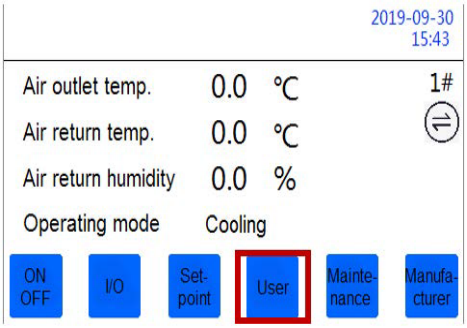


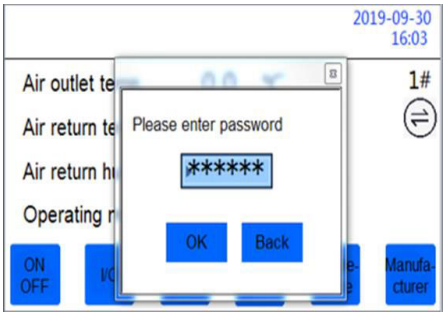


Change the Air Return Temp setpoint to 30°C, The factory default setting is 35°C.
Change the Air Outlet Temp setpoint to 20°C, The factory default setting is 22°C.
Press the Home button.

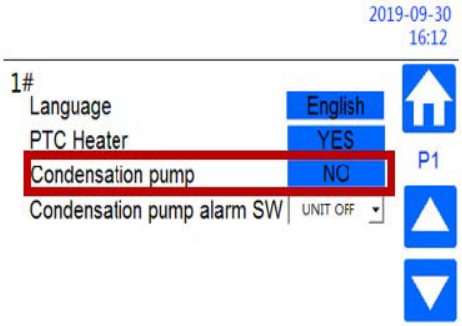


To enable the Condensate Pump:
Press the User button
Enter the Password: 1000

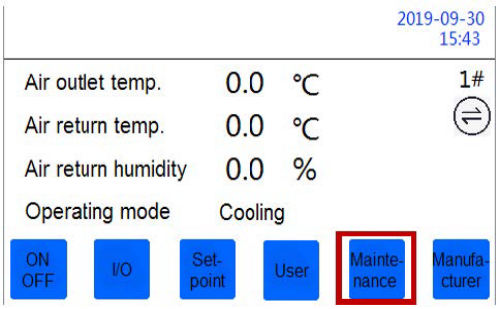


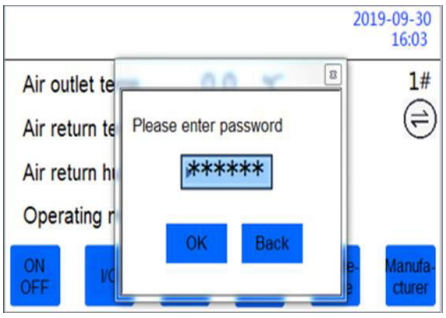


Change the Condensation pump setpoint to YES. The factory default is NO.
Press the Home button.

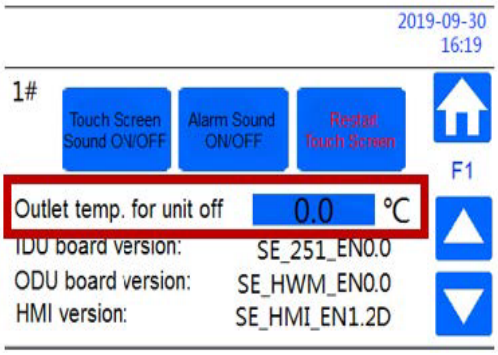


To change the Outlet temp. for unit off setpoint
Press the Maintenance button
Enter the Password: 1963

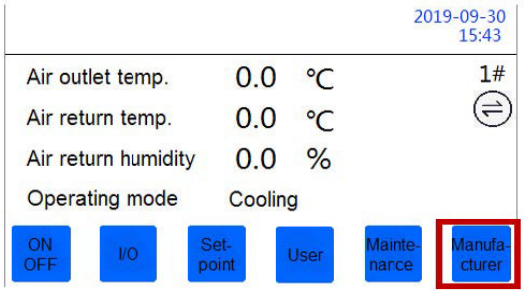


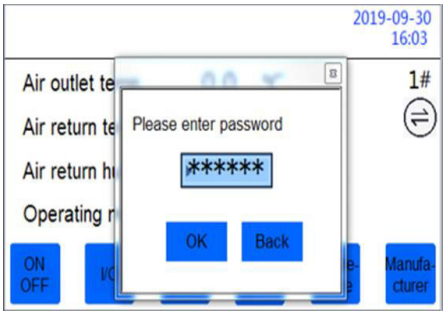


Change the Outlet temp. for unit off setpoint to 14°C. The factory default is 19°C.
Press the Home button.



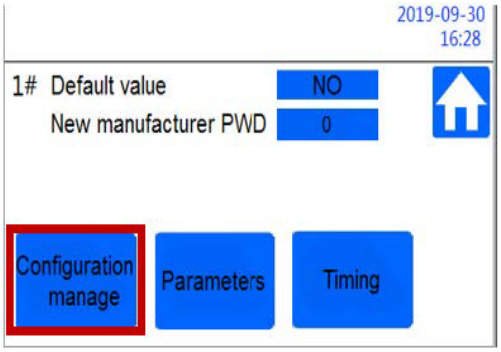
Change the DI1 Function select Configuration and Min speed of EC/DC Fan Setpoint
Press the Manufacturer button.
Enter the Password: 1963

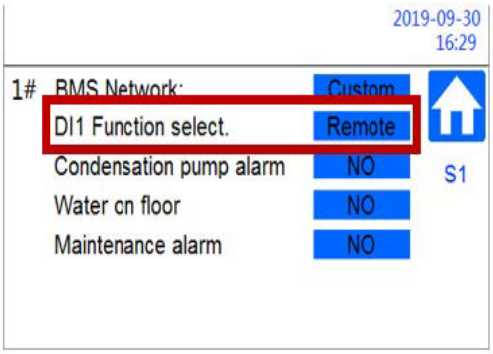




Press the Configuration manage button.

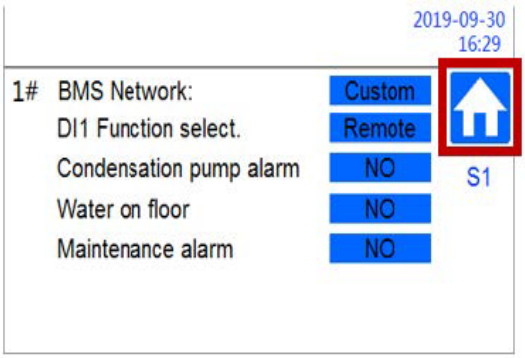
Change the DI1 Function select. configuration to Remote. The factory default is Fire/Smoke.

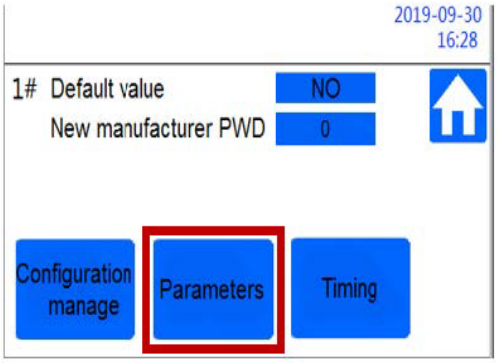




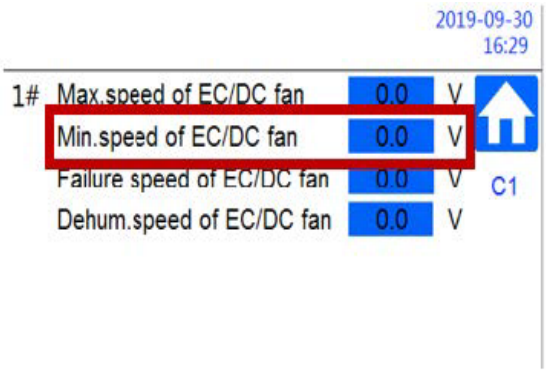
Press the Home button.

Press the Parameters button.





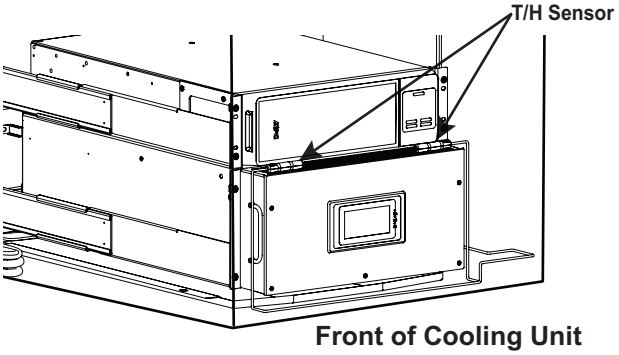
Change Min. speed of EC/DC fan setpoint to 7.0V. The factory default is 4.0V.



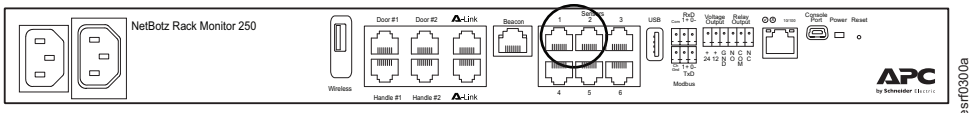
NetBotz 250A Configuration

The following instructions cover configuring your NetBotz 250A if you choose to have a Uniflair Cooling Unit (ACRMD4K1) installed in your AR5340F MDC enclosure and set up the fan unit for Emergency Ventilation. Refer to the NetBotz 250A User Guide for complete instructions on NetBotz 250A configuration.

- Sensor NB:2 and Sensor NB:3 are located directly at the Cooling Unit discharge air vent.



- Sensor NB:2 and Sensor NB:3 are connected to Universal Sensor Ports #2 and #3 on the NetBotz 250A. Using different sensor ports or the use of only 1 sensor is also acceptable but the NetBotz 250A configuration must be changed to match.

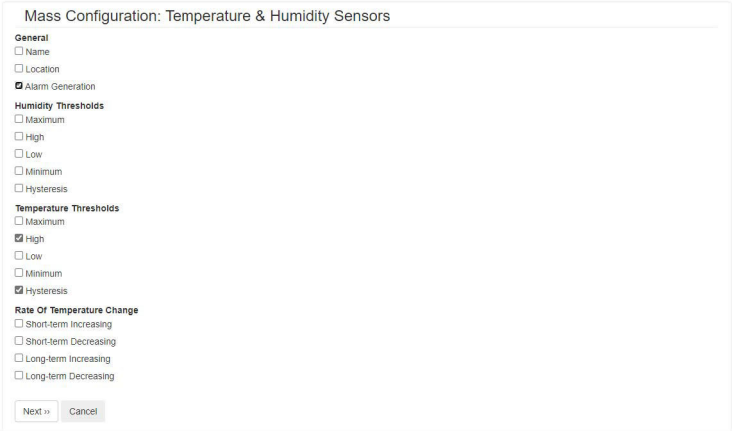


- Set the High Temperature Threshold to 35°C (95°F) to detect the loss of function of the Cooling Unit. The Max Temperature Threshold may be used instead if the customer wants to use the Hight Temp Threshold for equipment monitoring at a lower temperature. The configuration of the NetBotz 250A must be changed to map the Max Temperature Threshold.

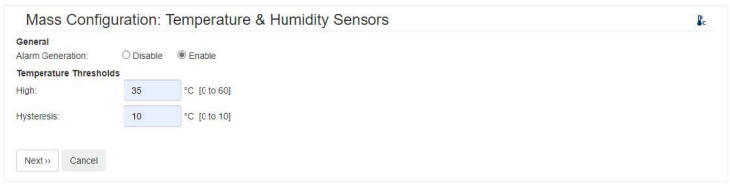
Configuring Multiple Temperature and Humidity Sensors

Log into the NetBotz 250A User Interface and navigate to the Temperature & Humidity Sensors configuration page. Select Mass Configuration.

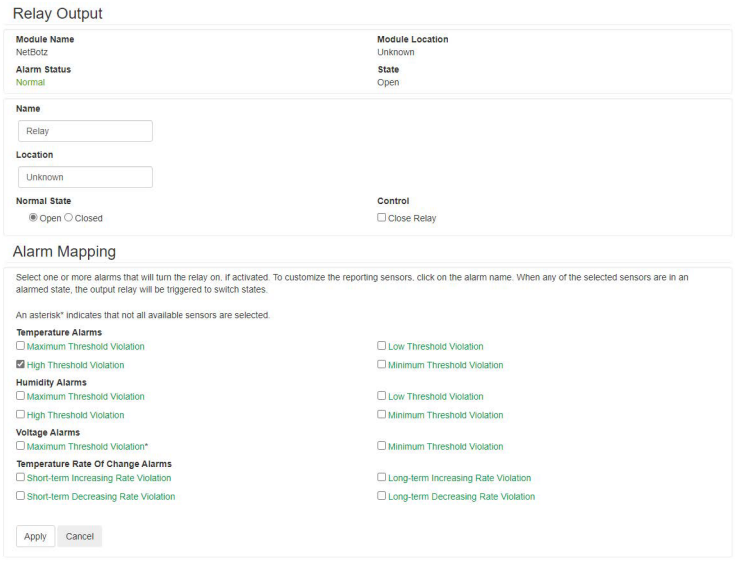
The Mass Configuration page allows you to configure sensors.



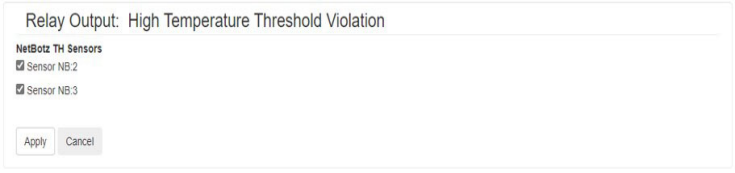
Enable Alarm Generation. Set the Temperature Thresholds. High is set to 35°C and Hysteresis to 10°C. Click on Next.



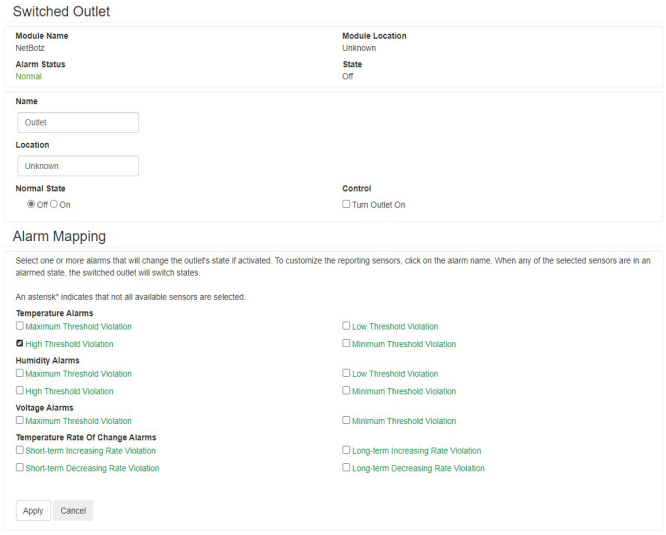
On the Relay Output page, under Alarm Mapping, Temperature Alarms, click the box next to High Threshold Violation to put a check in the box. Click on Apply to save the selection.



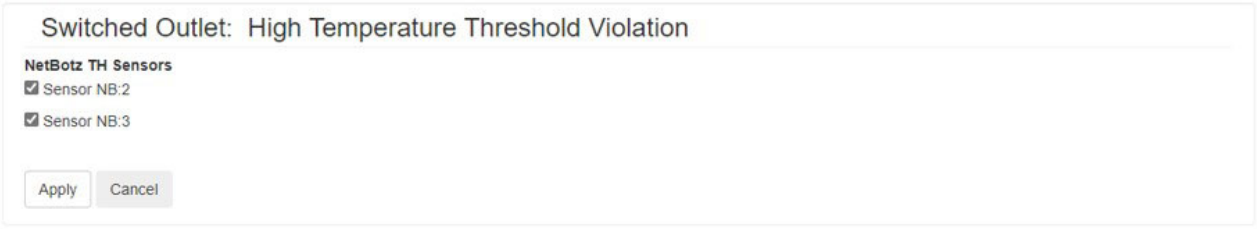
Bind the High Temperature Violation Alarm to Sensor NB:2 and Sensor NB:3 by clicking on the boxes to show a check mark in the box. Click Apply to save your selections.



On the Switched Outlet page, under Alarm Mapping, Temperature Alarms, click the box next to High Threshold Violation to put a check in the box. Click on Apply to save the selection.



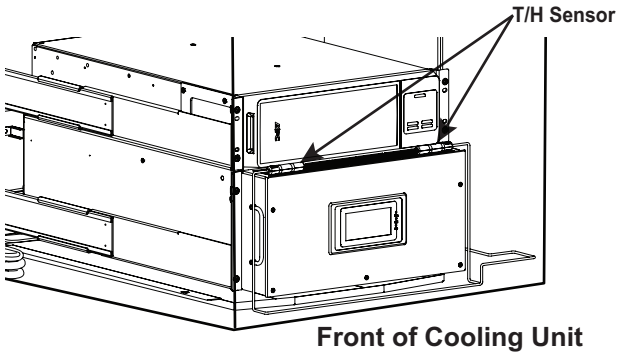
Bind the High Temperature Violation Alarm to Sensor NB:2 and Sensor NB:3 by clicking on the boxes to show a check mark in the box. Click Apply to save your selections.



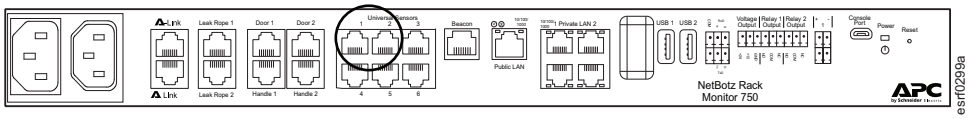
NetBotz 750 Configuration

The following instructions cover configuring your NetBotz 750 if you choose to have a Uniflair Cooling Unit (ACRMD4K1) installed in your AR5340F MDC enclosure and set up the fan unit for Emergency Ventilation. Refer to the NetBotz 750 User Guide for complete instructions on NetBotz 750 configuration.

- The Temperature 2 and Temperature 3 sensors are located directly at the cold air discharge air vent of the cooling unit.



- These sensors are connected to th Universal Sensor Ports #2 and #3 on the rear of the NetBotz 750 appliance. (Different sensor ports may be used or only one sensor may be used depending upon your requirements.)

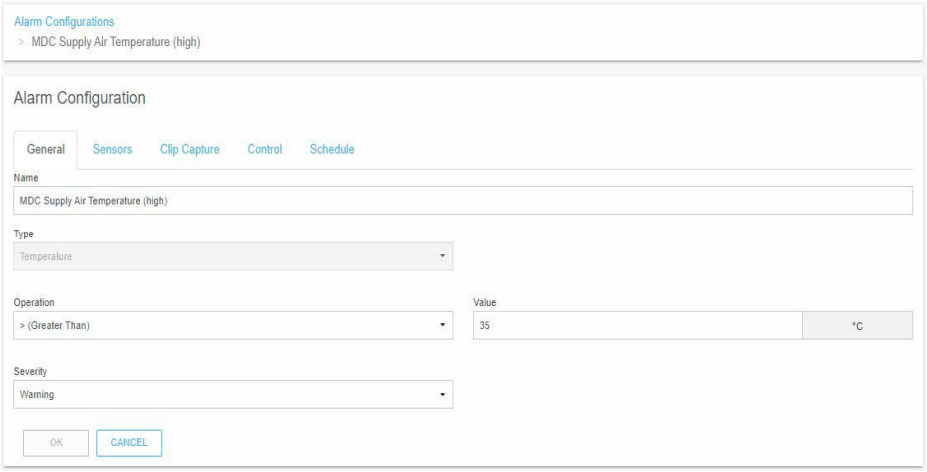


- The NetBotz 750 configuration must be changed to match your sensor configuration.

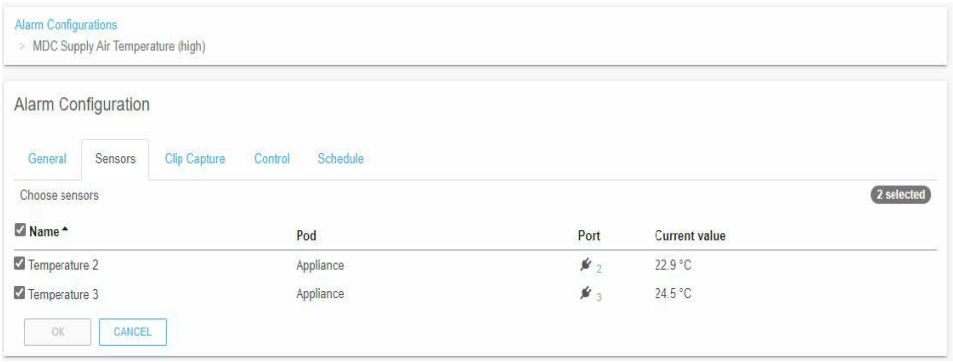
MDC Supply Air Temperature (High) Alarm

From the NetBotz 750 Web User Interface, navigate to Alarm Configurations. Create the alarm for MDC Supply Air Temperature (high) as shown below.

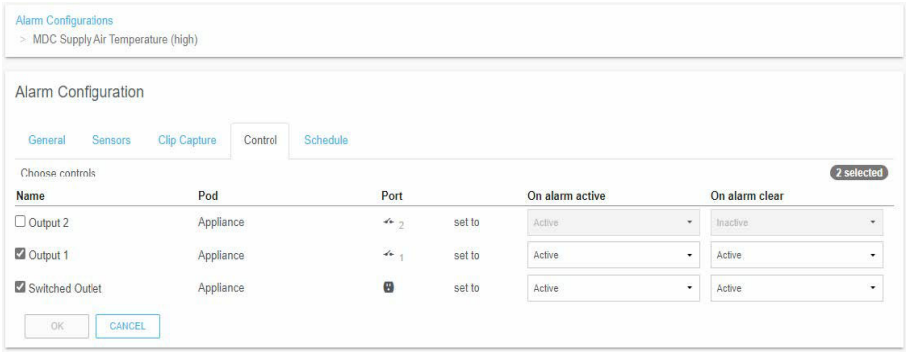
Set the Value to 35°C (95°F) of the MDC Supply Air Temperature (High) Alarm. If the temperature rises above 35°C (95°F), an alarm is generated, indicating the loss of function of the cooing unit.



To add the cooling unit temperature sensors, open the Sensors tab. Choose the Sensors (Temperature 2, Temperature 3) by clicking on the box to place a check mark in the box.

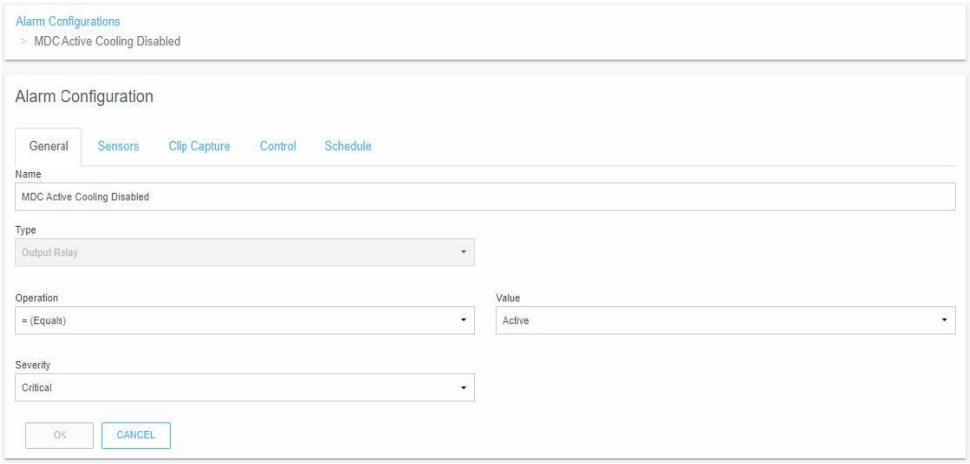


Open the Control tab. Select Switched Outlet and Output 1 clicking on the box to place a check mark in the box. Set the On alarm active and On alarm clear boxes to Active.

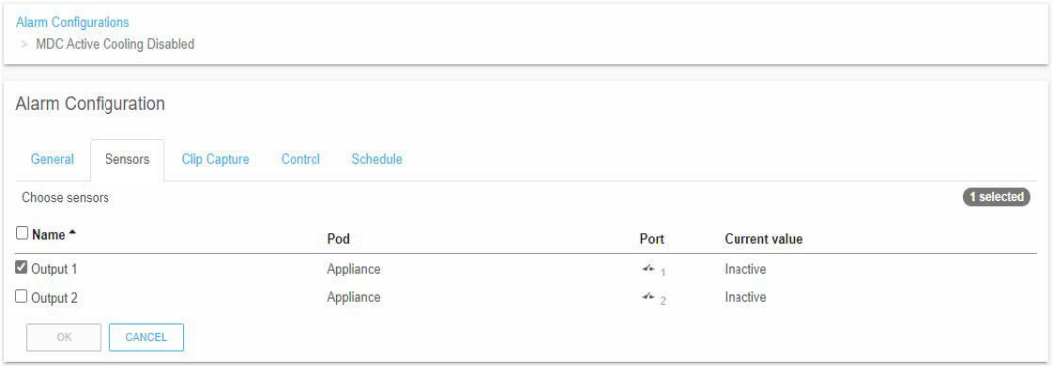


Configure the Active Cooling Disabled Alarm

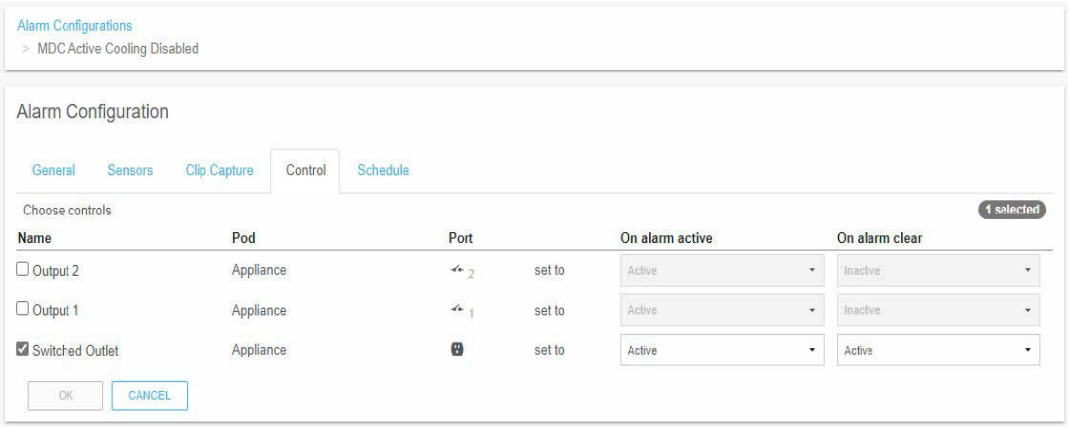
On the General tab, select Output Relay from the menu under Type. Set the Operation to + (Equals), the Value to Active and the Severity to Critical.



Open the Sensors tab. Select Output 1 as the NetBotz port the sensor is using.



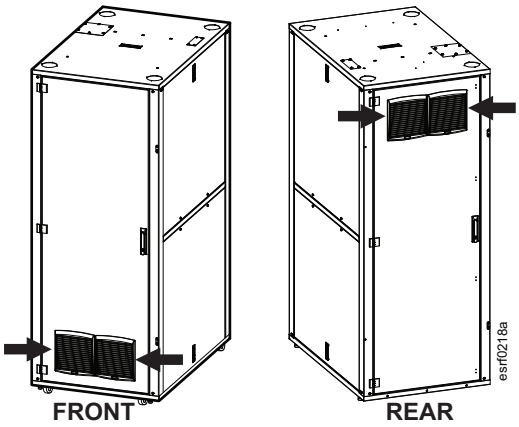
Open the Control tab. Select Switched Outlet by clicking on the box to place a check mark in the box. Set the On alarm active and On alarm clear boxes to Active.



Maintenance

Ventilation Grille Filters

There are four (4) ventilation grilles on the enclosure, two (2) on the bottom of the front door and two (2) at the top of the rear door.



Inspect the filters at regular intervals until you can determine a schedule for filter replacement. The schedule and type of filter needed will depend on your environment.

Replacement Filters (not provided)

Part #	Description
NSYCAF223	G2 M1 Synthetic standard filters
NSYCAF223O	G2 M1 Filters for greasy environments
NSYCAF223T	G3 M1 Synthetic fine filters
NSYCAF223M	Stainless steel anti-insect filters

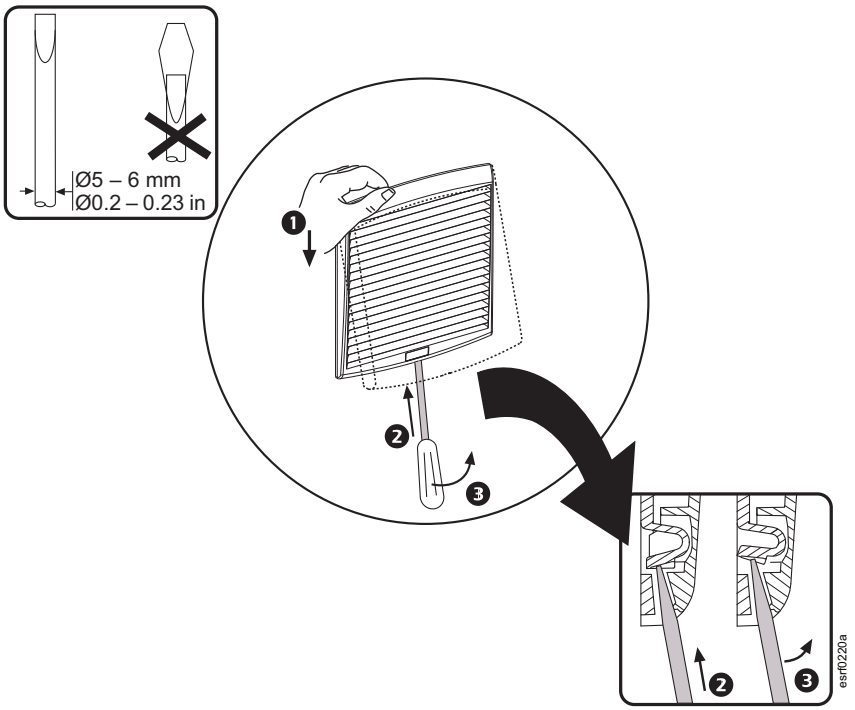
NOTICE
Contact customer service at www.apc.com/support to get help to order the correct filters for your environment.

Replace the filters according to the schedule you have determined. Clean filters maximize the efficiency of the fan.

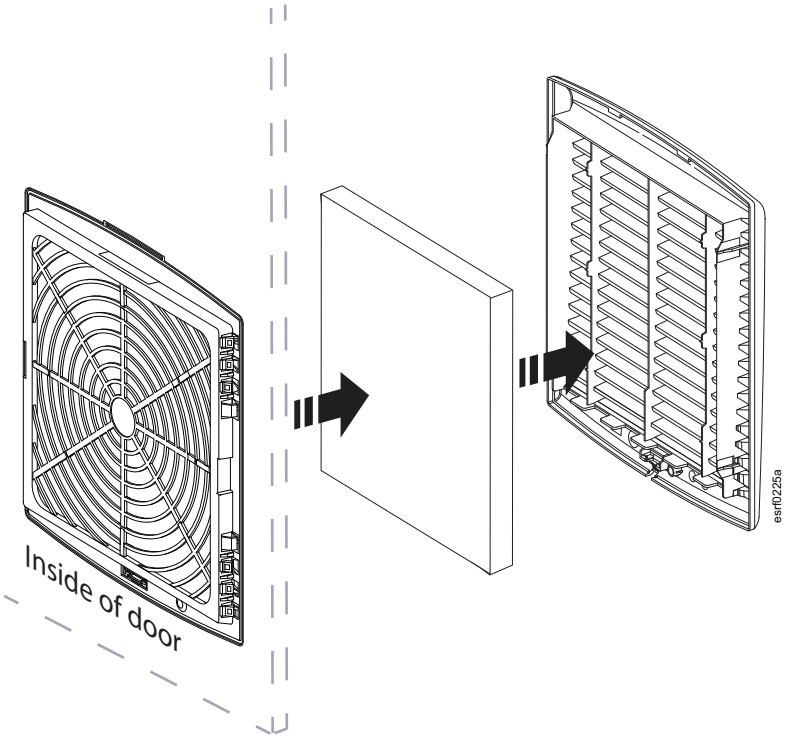
How to Access and Replace the Filters

The filters are located behind the IP54-rated air ventilation grilles.

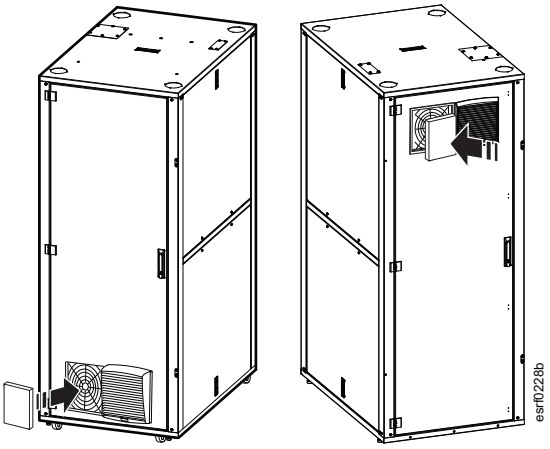
1. Remove the louvered grille covers by releasing the catch with a small screwdriver as shown below.



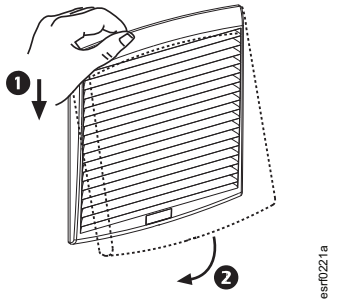
2. Once the grille cover is removed, the filter can be removed from the frame. The plastic grille cover and grille frame should be wiped with a damp cloth if necessary, to remove any dirt, dust, or debris.



3. Install the new filter to the grille frame.



4. Install the grille cover by pressing the tabs at the top of the grille cover into the grille frame (❶), then press the bottom of the grill cover down to secure it in the catch on the frame (❷).



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