

Easy UPS 3L and Galaxy 3L

IP31 Kit for UPS

Installation

E3LOPT003, E3LOPT004, E3LOPT005

2/2023

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Important Safety Instructions — 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” safety message 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 with 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 shall not be used with this type of safety message.

Failure to follow these instructions can result in equipment damage.

Please Note

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed 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.

Safety Precautions

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

All safety instructions in this document must be read, understood and followed.

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

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Read all instructions in the installation manual before installing or working on this UPS system.

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

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not install the UPS system until all construction work has been completed and the installation room has been cleaned. If additional construction work is needed in the installation room after the UPS has been installed, turn off the UPS and cover the UPS with the protective packaging bag the UPS was delivered in.

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

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- The product must be installed according to the specifications and requirements as defined by Schneider Electric. It concerns in particular the external and internal protections (upstream breakers, battery breakers, cabling, etc.) and environmental requirements. No responsibility is assumed by Schneider Electric if these requirements are not respected.
- After the UPS system has been electrically wired, do not start up the system. Start-up must only be performed by Schneider Electric.

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

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS system must be installed according to local and national regulations. Install the UPS according to:

- IEC 60364 (including 60364-4-41 – protection against electric shock, 60364-4-42 – protection against thermal effect, and 60364-4-43 – protection against overcurrent), **or**
- NEC NFPA 70, **or**
- Canadian Electrical Code (C22.1, Part 1)

depending on which one of the standards apply in your local area.

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

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Install the UPS system in a temperature controlled indoor environment free of conductive contaminants and humidity.
- Install the UPS system on a non-flammable, level and solid surface (e.g. concrete) that can support the weight of the system.

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

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS is not designed for and must therefore not be installed in the following unusual operating environments:

- Damaging fumes
- Explosive mixtures of dust or gases, corrosive gases, or conductive or radiant heat from other sources
- Moisture, abrasive dust, steam or in an excessively damp environment
- Fungus, insects, vermin
- Salt-laden air or contaminated cooling refrigerant
- Pollution degree higher than 2 according to IEC 60664-1
- Exposure to abnormal vibrations, shocks, and tilting
- Exposure to direct sunlight, heat sources, or strong electromagnetic fields

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

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not drill or cut holes for cables or conduits with the gland plates installed and do not drill or cut holes in close proximity to the UPS.

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

⚠ ⚠ WARNING

HAZARD OF ARC FLASH

Do not make mechanical changes to the product (including removal of cabinet parts or drilling/cutting of holes) that are not described in the installation manual.

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

NOTICE

RISK OF OVERHEATING

Respect the space requirements around the UPS system and do not cover the UPS ventilation openings when the UPS system is in operation.

Failure to follow these instructions can result in equipment damage.

NOTICE**RISK OF EQUIPMENT DAMAGE**

Do not connect the UPS output to regenerative load systems including photovoltaic systems and speed drives.

Failure to follow these instructions can result in equipment damage.

Electrical Safety**⚡⚠ DANGER****HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices.
- Turn off all power supplying the UPS system before working on or inside the equipment.
- Before working on the UPS system, check for hazardous voltage between all terminals including the protective earth.
- The UPS contains an internal energy source. Hazardous voltage can be present even when disconnected from the utility/mains supply. Before installing or servicing the UPS system, ensure that the units are OFF and that utility/mains and batteries are disconnected. Wait five minutes before opening the UPS to allow the capacitors to discharge.
- A disconnection device (e.g. disconnection circuit breaker or switch) must be installed to enable isolation of the system from upstream power sources in accordance with local regulations. This disconnection device must be easily accessible and visible.
- The UPS must be properly earthed/grounded and due to a high leakage current, the earthing/grounding conductor must be connected first.

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

Battery Safety**⚡⚠ DANGER****HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

- Battery circuit breakers must be installed according to the specifications and requirements as defined by Schneider Electric.
- Servicing of batteries must only be performed or supervised by qualified personnel knowledgeable of batteries and the required precautions. Keep unqualified personnel away from batteries.
- Disconnect charging source prior to connecting or disconnecting battery terminals.
- Do not dispose of batteries in a fire as they can explode.
- Do not open, alter, or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.

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

⚠️⚠️ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Batteries can present a risk of electric shock and high short-circuit current. The following precautions must be observed when working on batteries

- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.
- Wear protective glasses, gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect the charging source prior to connecting or disconnecting battery terminals.
- Determine if the battery is inadvertently grounded. If inadvertently grounded, remove source from ground. Contact with any part of a grounded battery can result in electric shock. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance (applicable to equipment and remote battery supplies not having a grounded supply circuit).

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

⚠️⚠️ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

When replacing batteries, always replace with the same type and number of batteries or battery packs.

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

⚠️ CAUTION

RISK OF EQUIPMENT DAMAGE

- Mount the batteries in the UPS system, but do not connect the batteries until the UPS system is ready to be powered up. The time duration from battery connection until the UPS system is powered up must not exceed 72 hours or 3 days.
- Batteries must not be stored more than six months due to the requirement of recharging. If the UPS system remains de-energized for a long period, we recommend that you energize the UPS system for a period of 24 hours at least once every month. This charges the batteries, thus avoiding irreversible damage.

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

Specifications

Model List

- E3LOPT003: Easy UPS 3L IP31 Kit for 250/300kVA 400V 3:3 UPS
- E3LOPT004: Easy UPS 3L IP31 Kit for 400kVA 400V 3:3 UPS
- E3LOPT005: Easy UPS 3L IP31 Kit for 500/600kVA 400V 3:3 UPS

Torque Specifications

Bolt size	Torque
M5	2.3 Nm
M6	4.5 Nm

Load Derating for UPS with IP31 Kit Installed

NOTICE
<p>RISK OF OVERHEATING</p> <ul style="list-style-type: none"> UPS with IP31 kit may have load deratings/temperature deratings/ overload deratings. Read all instructions in the installation manual before installing or working on this UPS. <p>Failure to follow these instructions can result in equipment damage.</p>

UPS rating	Maximum continuous load at 30 °C at power factor=1	Maximum continuous load at 35 °C at power factor=0.9	Maximum continuous load at 40 °C at power factor=0.9
250 kVA	200 kVA	212.5 kVA	200 kVA
300 kVA	240 kVA	255 kVA	240 kVA
400 kVA	320 kVA	340 kVA	320 kVA
500 kVA	400 kVA	425 kVA	400 kVA
600 kVA	480 kVA	510 kVA	480 kVA

Overload Derating for UPS with IP31 Kit Installed

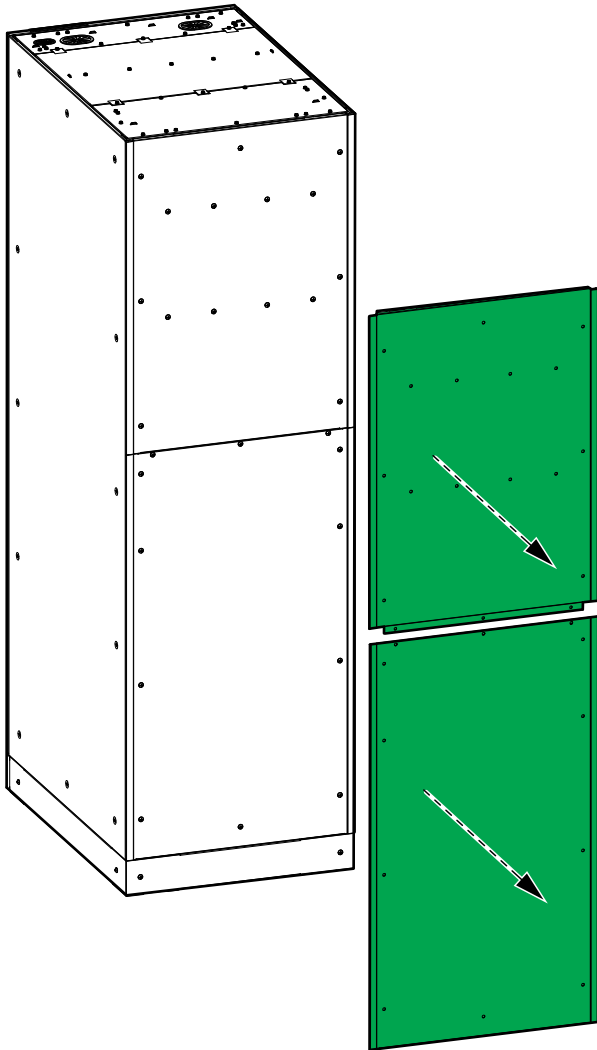
UPS rating	Maximum overload at 30 °C at power factor=1	Maximum overload at 35 °C at power factor=0.9	Maximum overload at 40 °C at power factor=0.9
250 kVA	210 kVA, continuous	223 kVA, continuous	210 kVA, continuous
	250 kVA, for 10 minutes	265 kVA, for 10 minutes	250 kVA, for 10 minutes
	300 kVA, for 1 minute	318 kVA, for 1 minute	300 kVA, for 1 minute
300 kVA	252 kVA, continuous	267 kVA, continuous	252 kVA, continuous
	300 kVA, for 10 minutes	318 kVA, for 10 minutes	300 kVA, for 10 minutes
	360 kVA, for 1 minute	382 kVA, for 1 minute	360 kVA, for 1 minute
400 kVA	336 kVA, continuous	357 kVA, continuous	336 kVA, continuous
	400 kVA, for 10 minutes	425 kVA, for 10 minutes	400 kVA, for 10 minutes
	480 kVA, for 1 minute	510 kVA, for 1 minute	480 kVA, for 1 minute
500 kVA	420 kVA, continuous	446 kVA, continuous	420 kVA, continuous
	500 kVA, for 10 minutes	531 kVA, for 10 minutes	500 kVA, for 10 minutes
	600 kVA, for 1 minute	637 kVA, for 1 minute	600 kVA, for 1 minute
600 kVA	504 kVA, continuous	535 kVA, continuous	504 kVA, continuous
	600 kVA, for 10 minutes	637 kVA, for 10 minutes	600 kVA, for 10 minutes
	720 kVA, for 1 minute	765 kVA, for 1 minute	720 kVA, for 1 minute

Install the IP31 Kit on a 250-400 kVA UPS

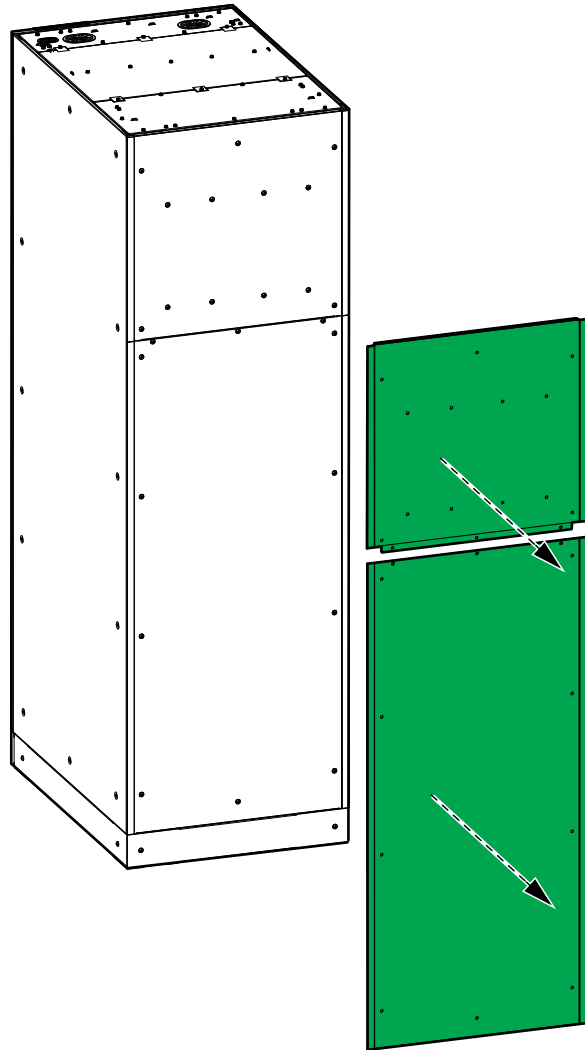
NOTE: This procedure describes installing the IP31 kit **after** power cabling and signal cabling is completed. Rear access is required to install the IP31 kit on the UPS.

1. Follow the UPS installation manual to install the UPS.
2. Remove the rear panels.

250-300 kVA UPS

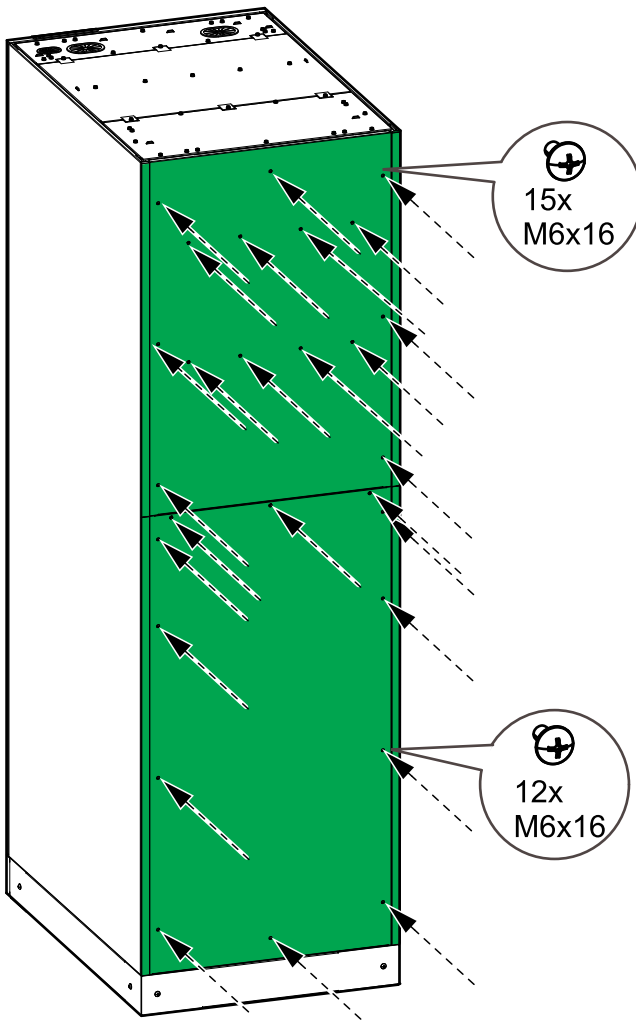


400 kVA UPS

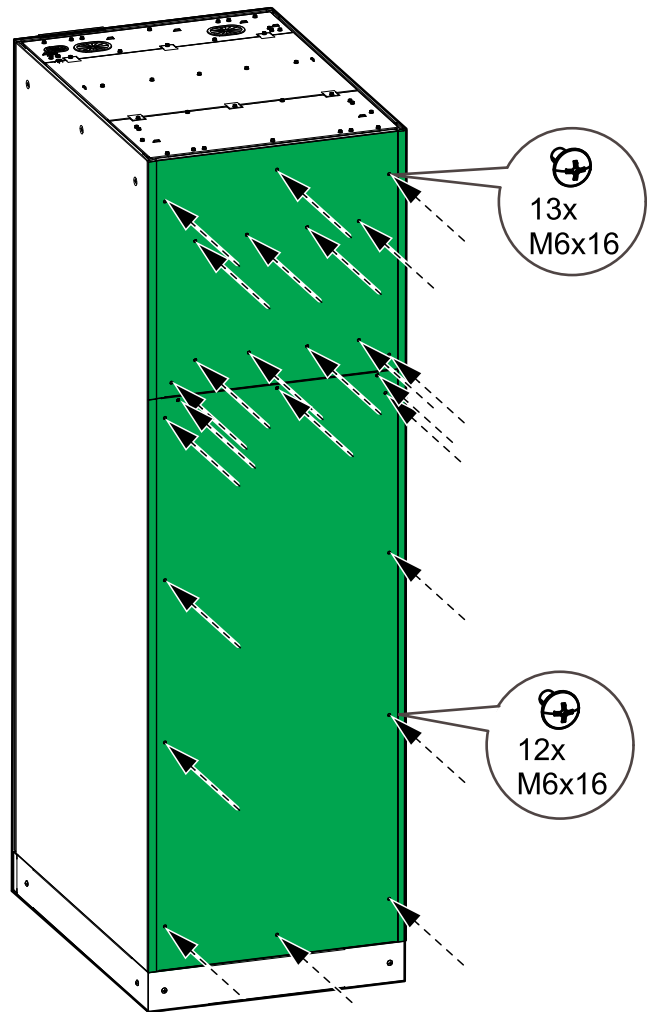


3. Install the provided rear panels from the kit with M6 screws.

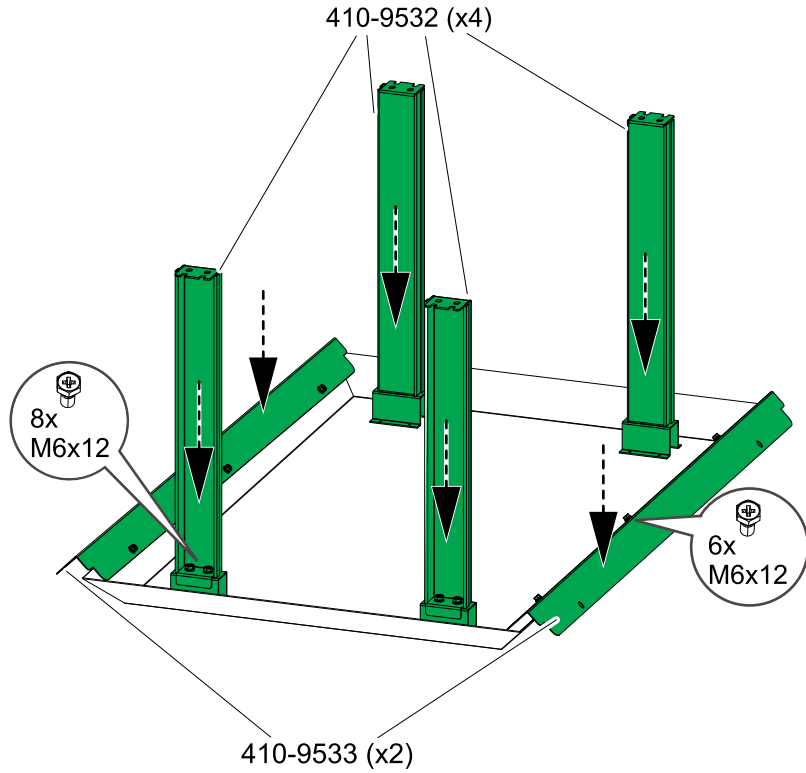
250-300 kVA UPS



400 kVA UPS

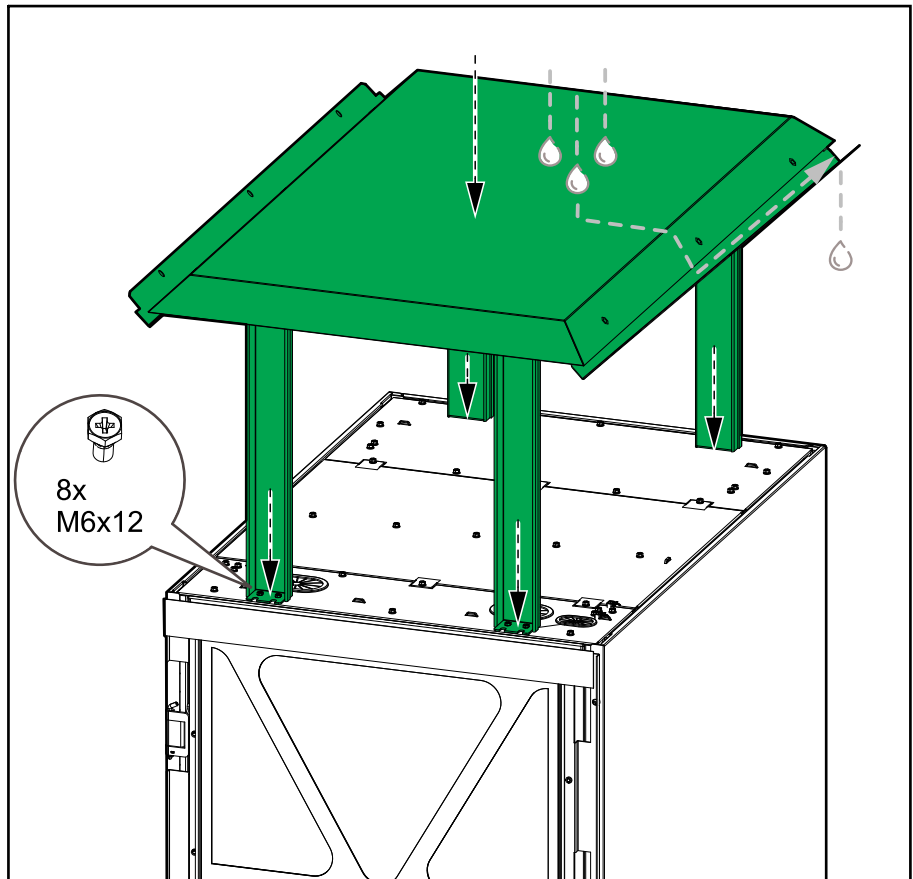


4. Install the gutters 410-9533 (x2) and the supporting pillars 410-9532 (x4) on the top cover with M6 screws. All parts provided in the kit.

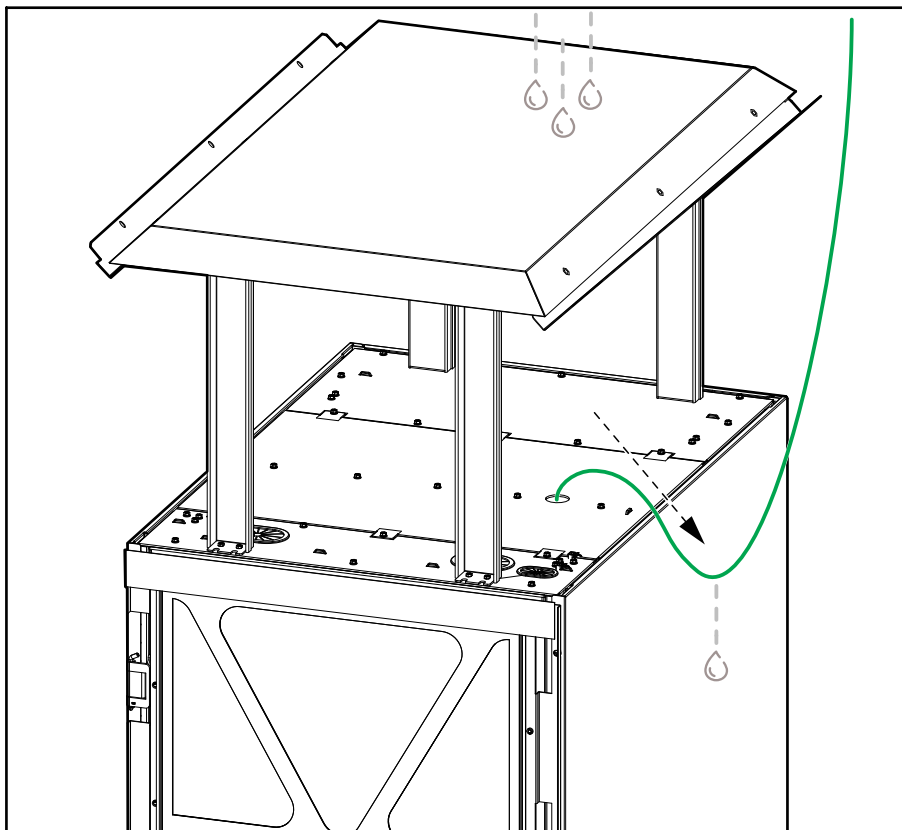


5. Install the top cover assembly with M6 screws.

NOTE: The gutters should be positioned to pitch down from the front of the UPS, diverting water to the rear of the UPS.



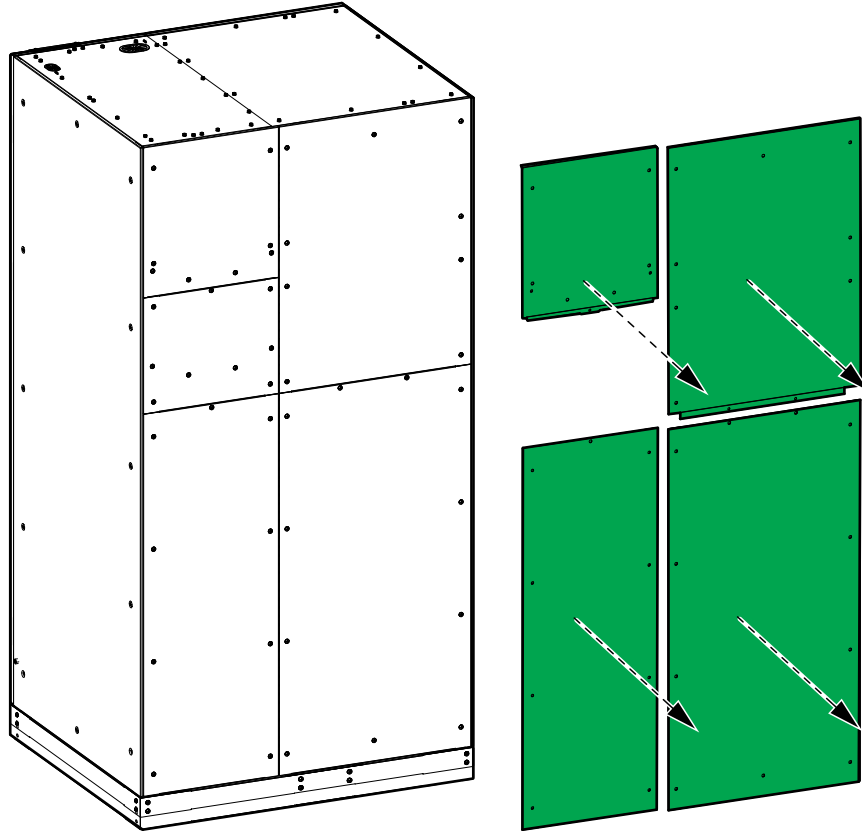
6. Route the cables as shown to avoid water running along the cable into the top opening of the UPS.



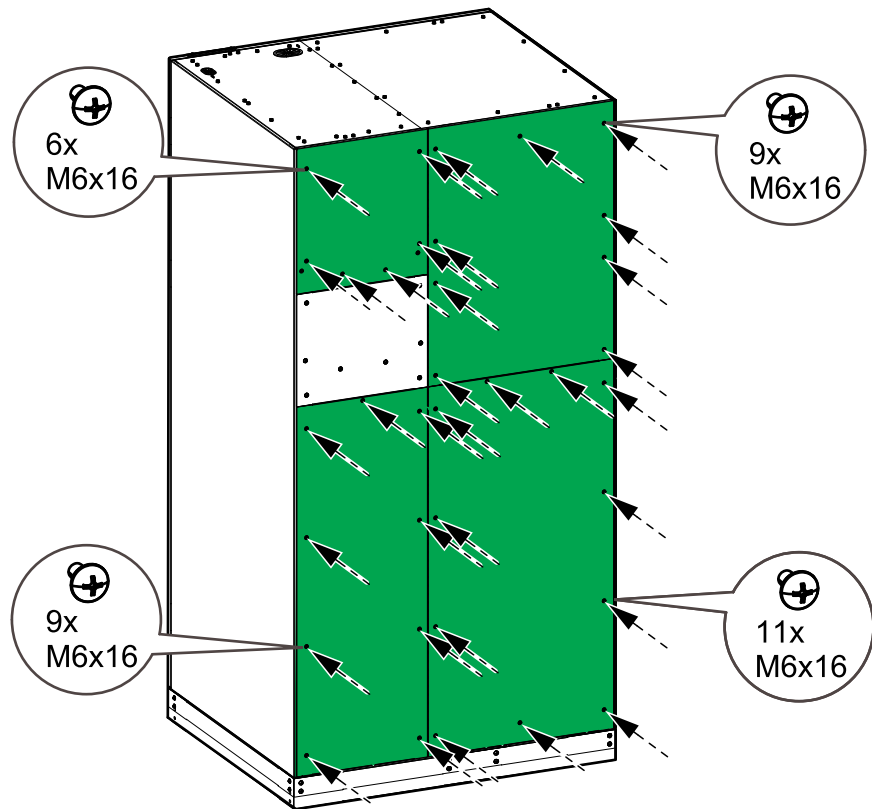
Install the IP31 Kit on a 500-600 kVA UPS

NOTE: This procedure describes installing the IP31 kit **after** power cabling and signal cabling is completed. Rear access is required to install the IP31 kit on the UPS.

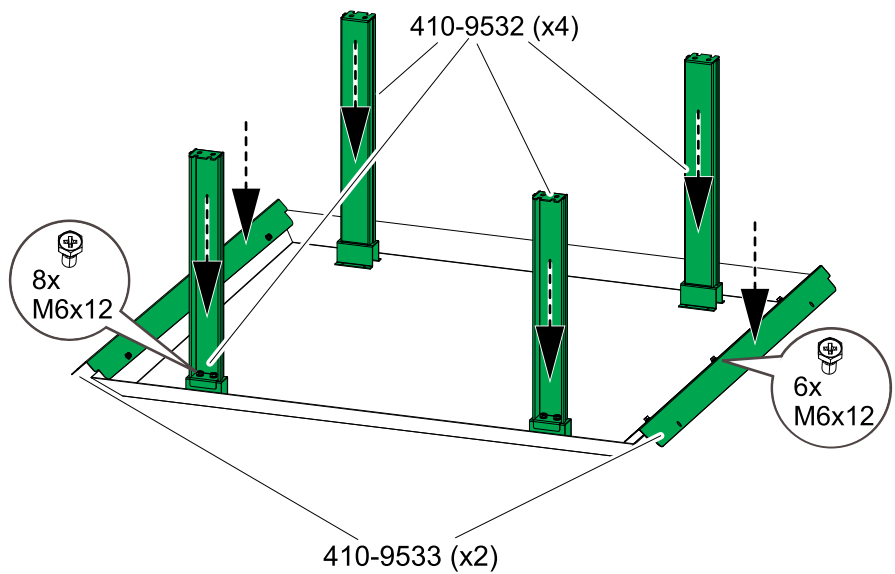
1. Follow the UPS installation manual to install the UPS.
2. Remove the rear panels.



3. Install the provided rear panels from the kit with M6 screws.

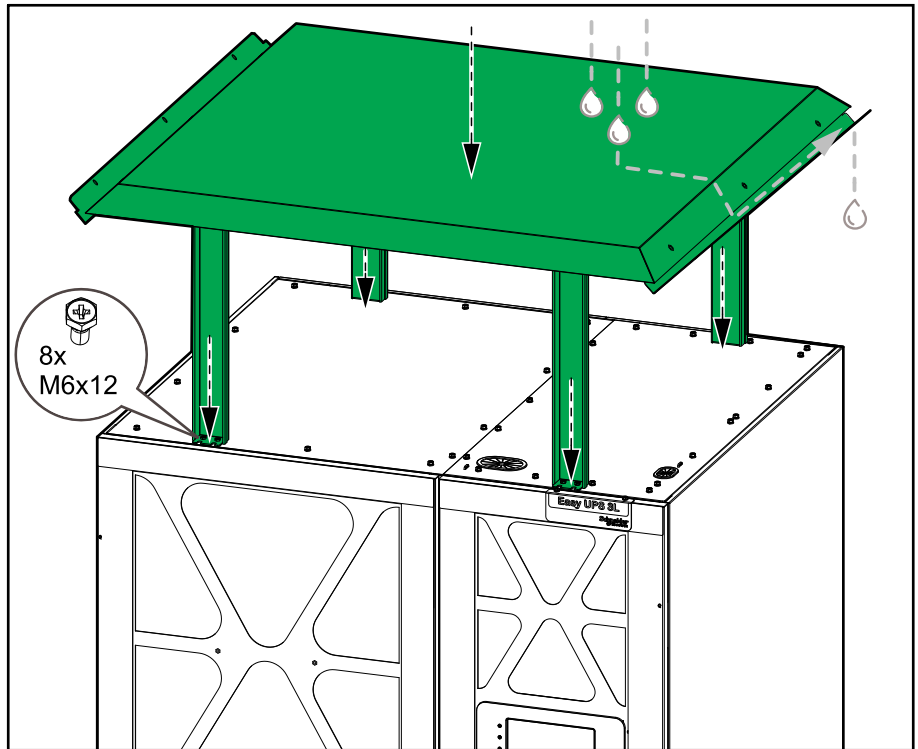


4. Install the gutters 410-9533 (x2) and the supporting pillars 410-9532 (x4) on the top cover with M6 screws. All parts provided in the kit.

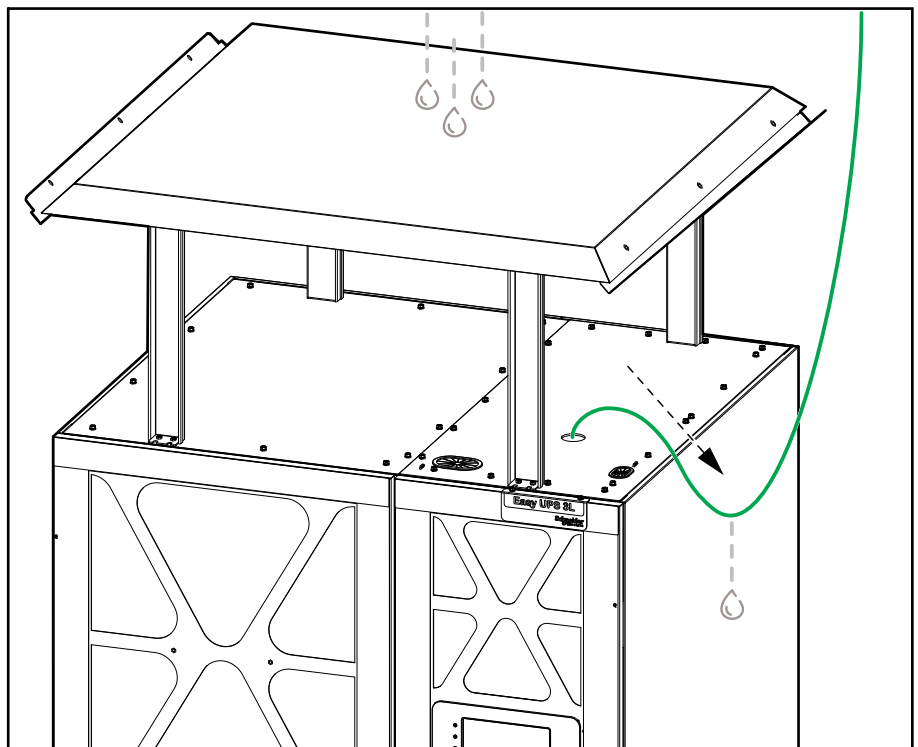


- 5. Install the top cover assembly with M6 screws.

NOTE: The gutters should be positioned to pitch down from the front of the UPS, diverting water to the rear of the UPS.



- 6. Route the cables as shown to avoid water running along the cable into the top opening of the UPS.



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