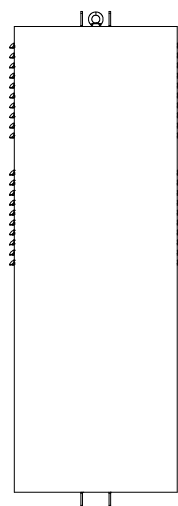
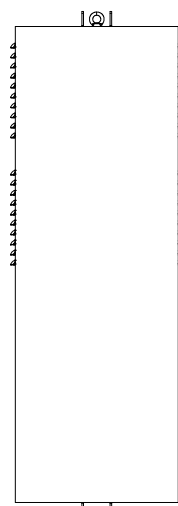


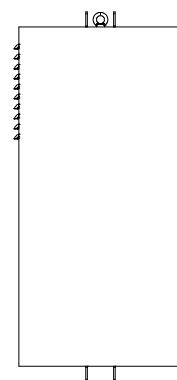
RPX-SP-3-Y



RPX-SP-9-Y

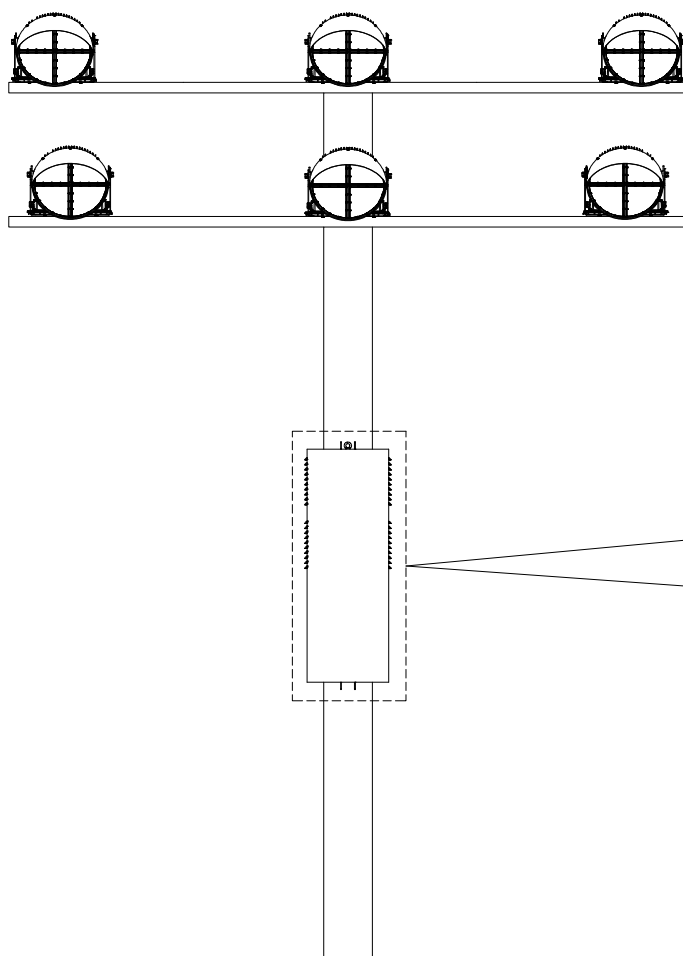


RDX-SP-6-Y

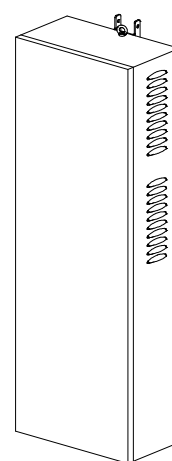


RDX-SP-3-Y

Installation mode

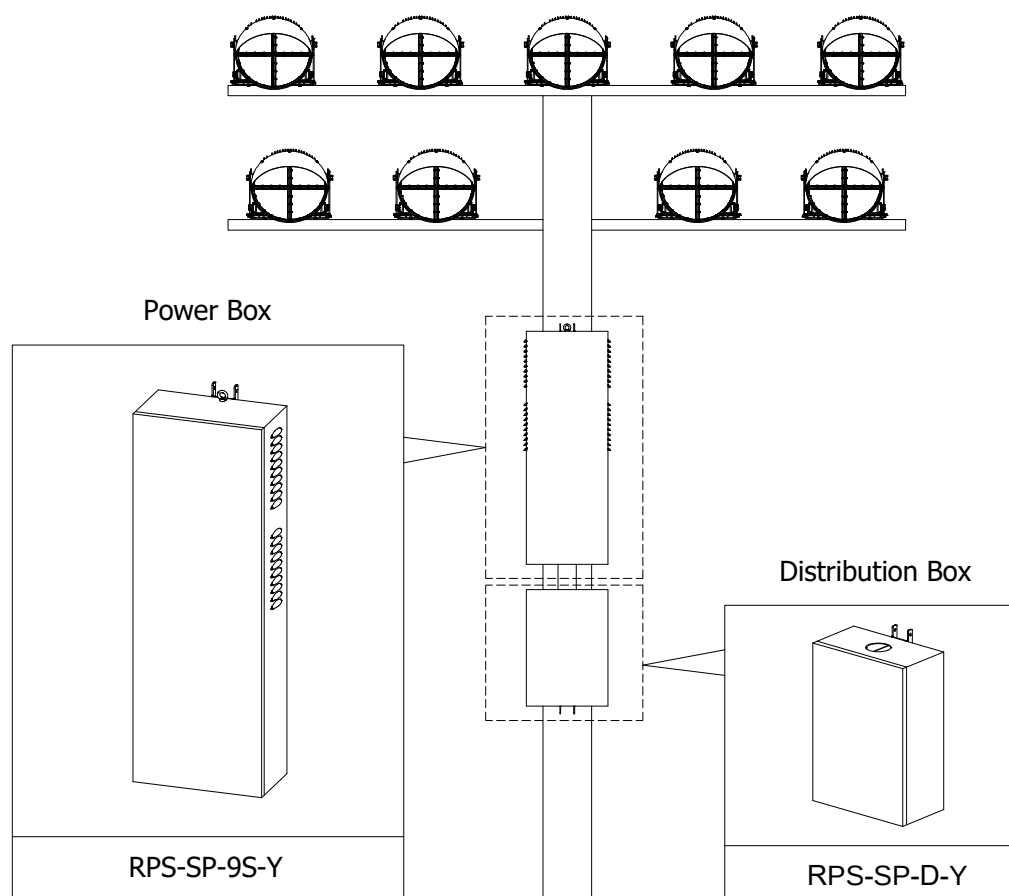


Power box & Distribution Box



RPS-SP-3D-Y

RPS-SP-6D-Y



CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI

CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT

AINSI QUE LES RISQUES INHÉRENTS

*THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

System Overview

The AIKO Remote Power System delivers full turn-key sports lighting solutions for both new and retrofit applications.

- New Applications - A streamlined full turn-key system solution backed with industry leading reliability and performance.
- Retrofit Applications - The minimally invasive retrofit kit enables the opportunity to keep existing remote power infrastructure (poles, cross arm, & wiring) providing the lowest total cost of ownership.

Typical Applications
Outdoor Stadiums • Outdoor Ball Fields • Outdoor Multi-Event Spaces

* DISTRIBUTION BOX VOLTAGE RATING MUST MATCH THE VOLTAGE RATING ON THE POWER AND CONTROLS BOX



WARNINGS AND CAUTIONS

Failure to strictly adhere to the warnings and cautions as well as the installation instructions may result in serious personal injury or property damage.

Before You Begin

Read and understand this entire manual and any additional site-specific installation documents before attempting to assemble, install, or operate the luminaire. Follow all warning and cautions outlined here as well as any local safety procedures.

1. All electrical work must conform to National Electrical Code (NFPA 70), IEEE Emerald book, and all applicable local codes and ordinances.
2. Ensure the capacity of the existing power distribution system meets the load requirements for the new installation, including inspection of wiring integrity and confirm the branch circuit voltage matches the voltage of the lighting equipment.
3. See fixture specification sheet for weight and wind loading (EPA) data. Supporting and mounting structures must comply to industry standard capacity requirements and comply with applicable regulatory and safety codes.
4. Electrical distribution systems must comply with all applicable regulatory and safety codes.
5. In harsh settings where the system is subjected to factors such as extreme temperatures, high corrosion, hurricanes, or lightning, always follow local codes and additional protocols to ensure the cabling and other system components can withstand the environmental stress for the life of the system.
6. DO NOT make or alter any open holes in the luminaire. Do not modify the luminaire, internal wiring, or fixture mounting features. Opening or modifying the luminaire or bracket will void the warranty.
7. Use Personal Protective Equipment including hardhats, safety glasses, reflective vests, electrical safety gloves, fall protection equipment, and safety toe boots during installation, operation, and maintenance of luminaire.
8. Verify compliance with local standards to prevent access to the area below where installation activities are occurring to prevent injury from accidental drops of fixtures, tools or hardware.

Storage

Store luminaires in a clean, dry place, protected from dirt, water, and sunlight prior to installation. See Table 1 for required storage and operating conditions:

Storage Temperature	Operating Temperature	Humidity
40°C to +75°C (104°F to 167°F)	-40°C to +55°C (-40°F to 131°F)	5% to 95% non-condensing

Risk of Fire, Electrical Shock, Cuts or other Casualty Hazards - Installation and maintenance of this product must be performed by a qualified electrician. This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and hazards involved.

Risk of Fire and Electric Shock - Make certain power is OFF before starting installation or attempting any maintenance. Disconnect power at fuse or circuit breaker.

Risk of Fire - Refer to product label for specific minimum supply conductor requirements.

Risk of Burn - Disconnect power and allow fixture to cool before handling or servicing.

Risk of Personal Injury - Fixture may become damaged and/or unstable if not installed properly.

DISCLAIMER OF LIABILITY: AIKO Lighting Solutions assumes no liability for damages or losses of any kind that may arise from the improper, careless, or negligent installation, handling or use of this product.

NOTICE: Green ground wire provided in proper location. Do not relocate.

ATTENTION Receiving Department: Note actual fixture description of any shortage or noticeable damage on delivery receipt. File claim for common carrier (LTL) directly with carrier. Claims for concealed damage must be filed within 15 days of delivery. All damaged material; complete with original packing must be retained.

APPLICATIONS: This lighting fixture should not be used in area of limited ventilation or inside high ambient temperature enclosures. It must be stored in a dry location before installation. Do not expose lighting fixture to rain, dust or other environmental conditions prior to installation. Best results will be obtained if installed and maintained according to the following recommendations.



Power Supply

AIKO LED light heads are not traditional metal halide lights; they are high-tech, new-generation solid-state devices. To protect your valuable investment, ensure the supply of electrical power is clean and stable with no spikes or sags. The power transformer feeding the site electrical distribution system must be a three-phase, four-wire wye configuration or a single-phase configuration. An ungrounded delta configuration is NOT an approved power supply. If any other supply transformer configuration is present, notify AIKO Lighting before proceeding with installation. All issues with supply power must be corrected before light heads are installed. Failure to use an approved supply power configuration may result in equipment damage.

The combination of electrical cabinets required for different numbers of lamps

Maximum support power	(Max) Quantity of drive	Combination mode
3600W	3	RPS-SP-3D-Y
7200W	6	RPS-SP-6D-Y
10800W	9	RPS-SP-9S-Y RPS-SP-D-Y



Power Quality

Follow proper grounding methods. The electrical system must be properly grounded for power electronics in accordance with IEEE Emerald Book, including using equipment grounding conductors. Metallic conduits are NOT an acceptable grounding method for AIKO Lighting LED lighting systems. Power must also be phase balanced. If you are not sure if your power system is grounded or load balanced, DO NOT install the luminaire and contact a licensed electrician for information on proper grounding and balancing methods as required by the National Electrical Code and IEEE standards.



Surge Protection

Installation of surge protection is recommended in power distribution systems that feed LED sports lighting. Failure to protect electrical circuits from surges may result in damage to fixtures.



Branch Circuits

Branch power circuits feeding luminaires shall have a measured voltage of within 3% of nominal voltage with no sags, swells, or transients. When circuiting power to luminaires, load balance all circuits. See fixture specification sheet for power characteristic data.

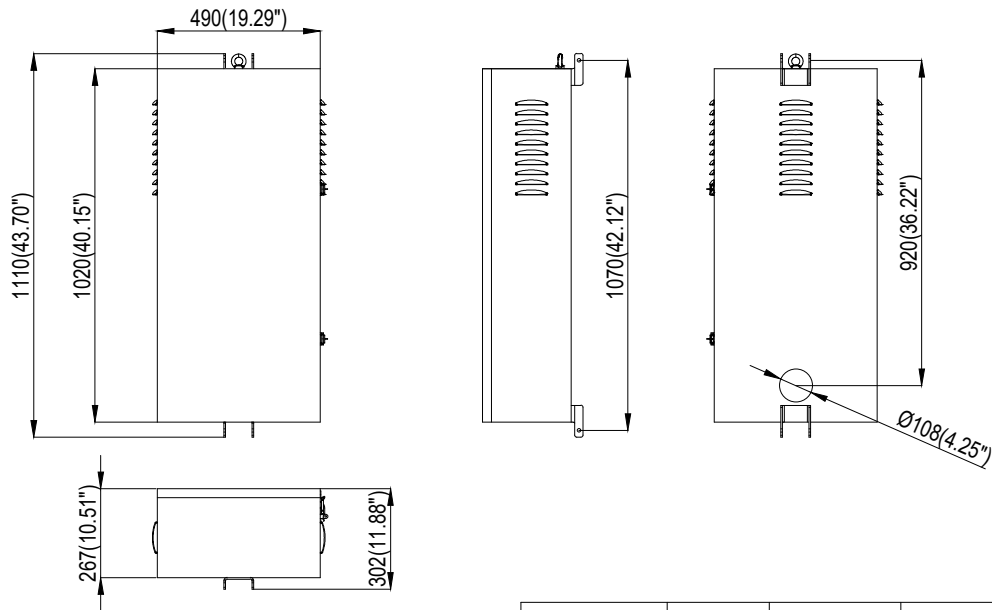


Voltage Configuration

Before installing luminaires, verify that the fixture model number has the correct voltage configuration for your application. See fixture specification sheet for acceptable branch circuit voltage. Failure to confirm proper configuration may result in injury damage to fixtures.

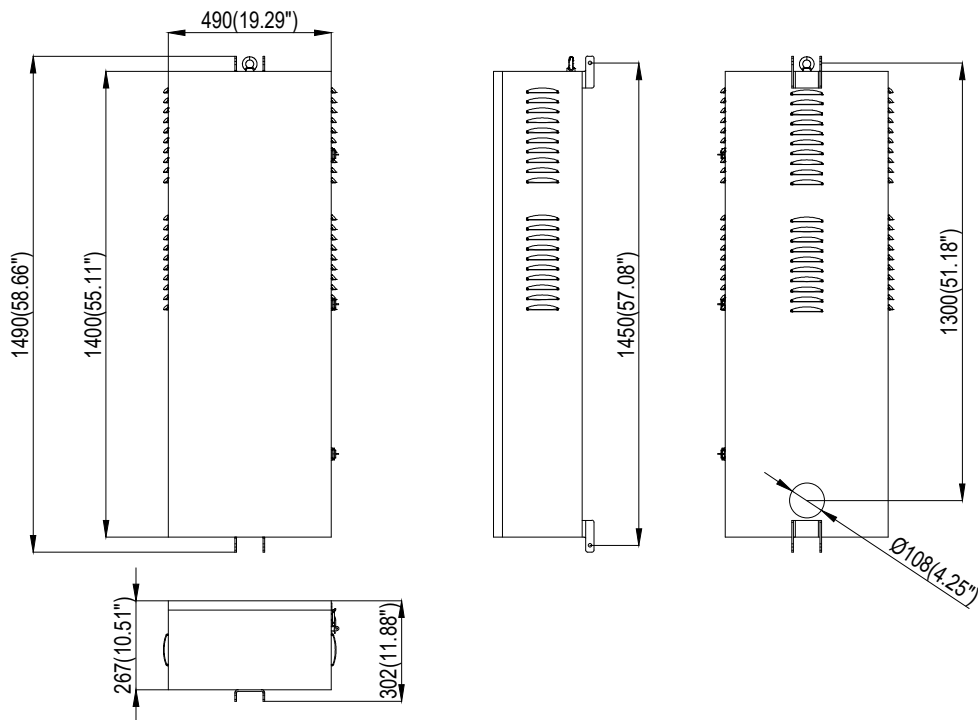


Failure to confirm proper configuration may result in injury or fixture damage



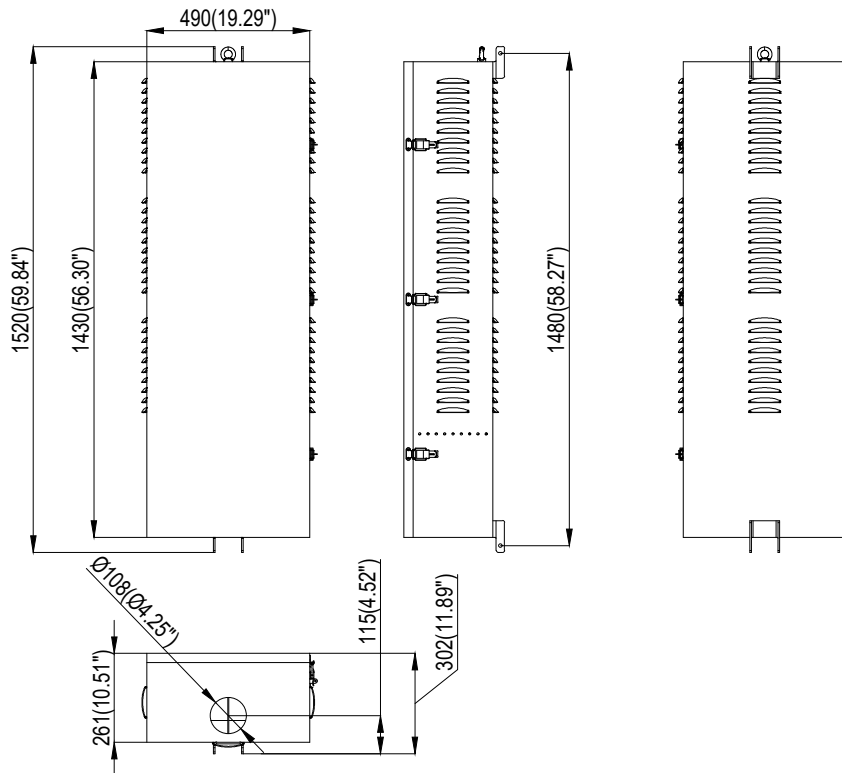
AK-PD-3-D-E-F-A	
Usage	Indoor / Outdoor
Enclosure Type	Weatherproof
Environmental Certifications	IP65
Effective Projected Area (EPA)	0.60m ² (6.44ft ²)
Weight(without driver)	21KG (46.29lb)

Driver type	Power	(max) current	weight
Inventronics (277V-480V)	680W	2.3A	3.1KG(6.8lb)
	880W	2.9A	3.5KG(7.7lb)
	1200W	4.6A	3.8KG(8.4lb)
SOSEN (200V-480V)	680W	3.0A	3.0KG(6.8lb)
	880W	3.8A	3.8KG(7.7lb)
	1200W	5.9A	5.9KG(8.4lb)



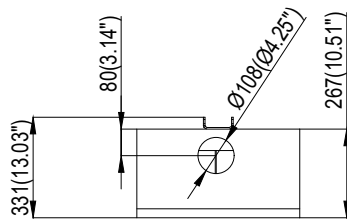
RPS-SP-6D-Y	
Usage	Indoor / Outdoor
Enclosure Type	Weatherproof
Environmental Certifications	IP65
Effective Projected Area (EPA)	0.82m ² (8.85ft ²)
Weight(without driver)	25KG (55.12lb)

Driver type	Power	(max) current	weight
Inventronics (277V-480V)	680W	2.3A	3.1KG(6.8lb)
	880W	2.9A	3.5KG(7.7lb)
	1200W	4.6A	3.8KG(8.4lb)
SOSEN (200V-480V)	680W	3.0A	3.0KG(6.8lb)
	880W	3.8A	3.8KG(7.7lb)
	1200W	5.9A	5.9KG(8.4lb)

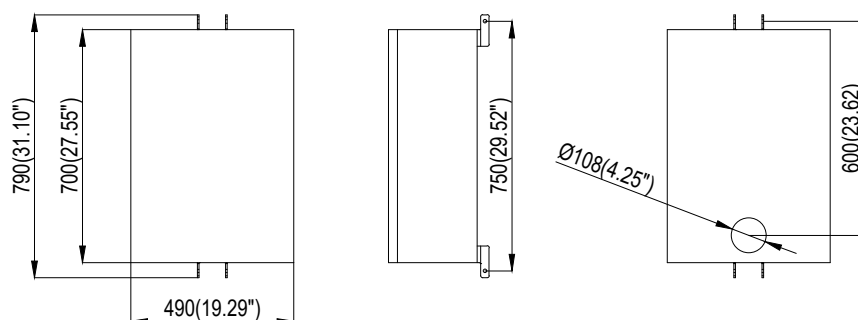


RPS-SP-9S-Y	
Usage	Indoor / Outdoor
Enclosure Type	Weatherproof
Environmental Certifications	IP65
Effective Projected Area (EPA)	0.82m ² (8.85ft ²)
Weight(without driver)	26KG(57.32lb)

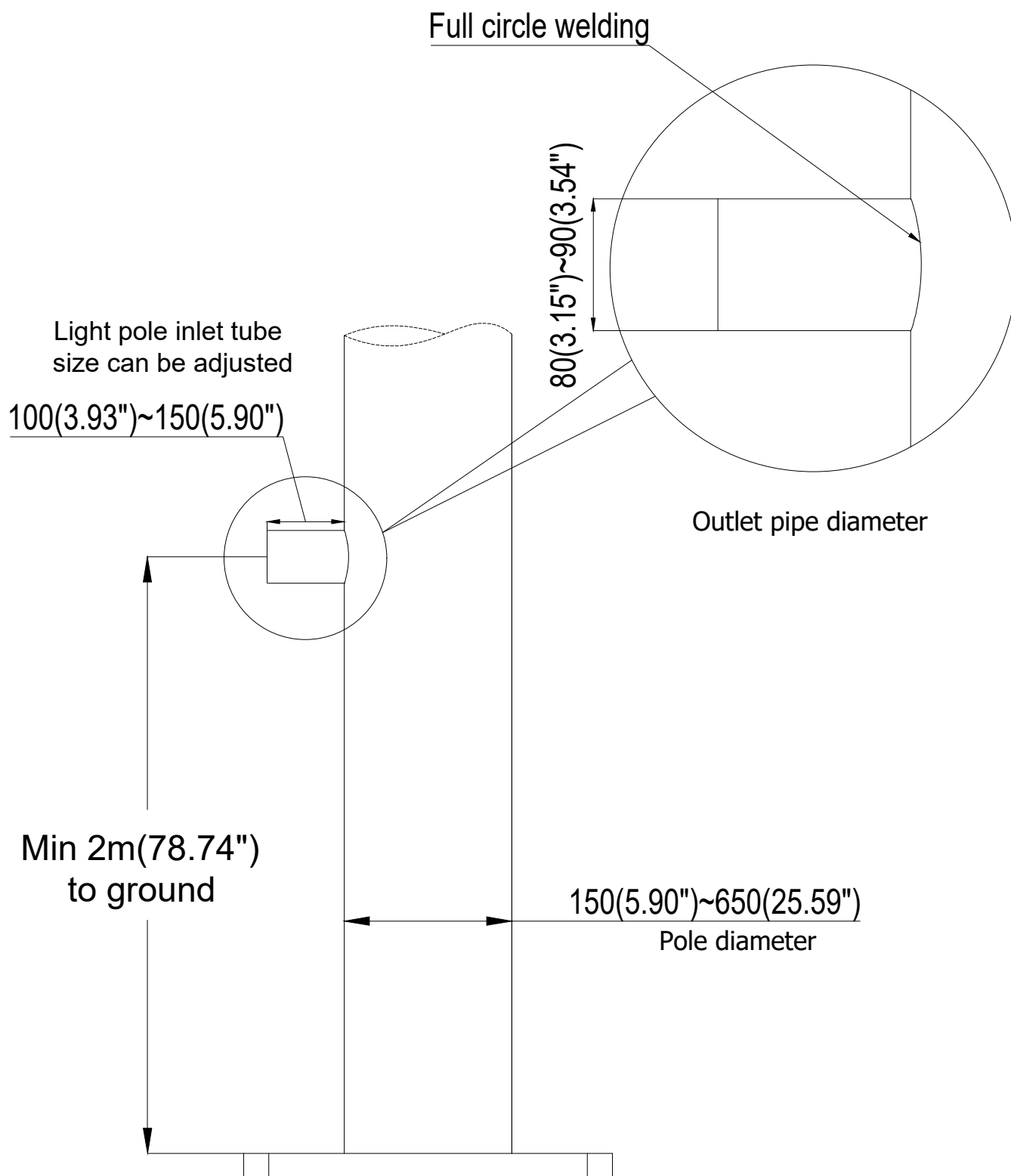
Driver type	Power	(max) current	weight
Inventronics (277V-480V)	680W	2.3A	3.1KG(6.8lb)
	880W	2.9A	3.5KG(7.7lb)
	1200W	4.6A	3.8KG(8.4lb)
SOSEN (200V-480V)	680W	3.0A	3.0KG(6.8lb)
	880W	3.8A	3.8KG(7.7lb)
	1200W	5.9A	5.9KG(8.4lb)



RPS-SP-D-Y	
Usage	Indoor / Outdoor
Enclosure Type	Weatherproof
Environmental Certifications	IP65
Effective Projected Area (EPA)	0.41m ² (4.42ft ²)
Weight(without driver)	13KG (28.66lb)



Light pole size

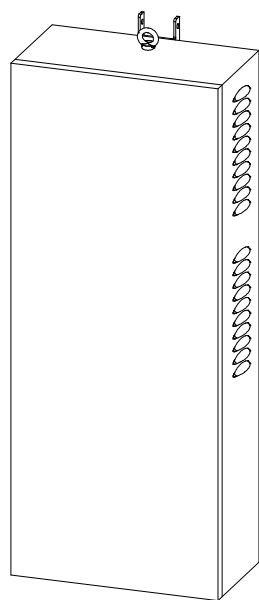


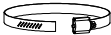
Procedure for installing a single electrical box

RPS-SP-3D-Y

RPS-SP-6D-Y

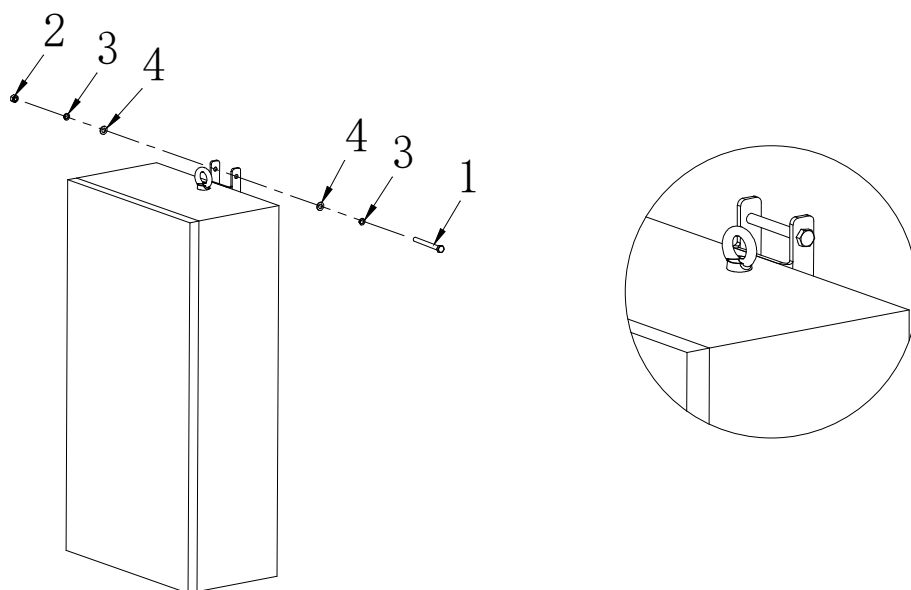
Hook installation method



①		M8 SCREWS	2
②		M8 NUT	2
③		M8 SPRING WASHER	4
④		M8 FLAT WASHER	4
⑤		Top Hook	1
⑥		Bottom hook	1
⑦		Hoop	4
⑧		Sling chain	1

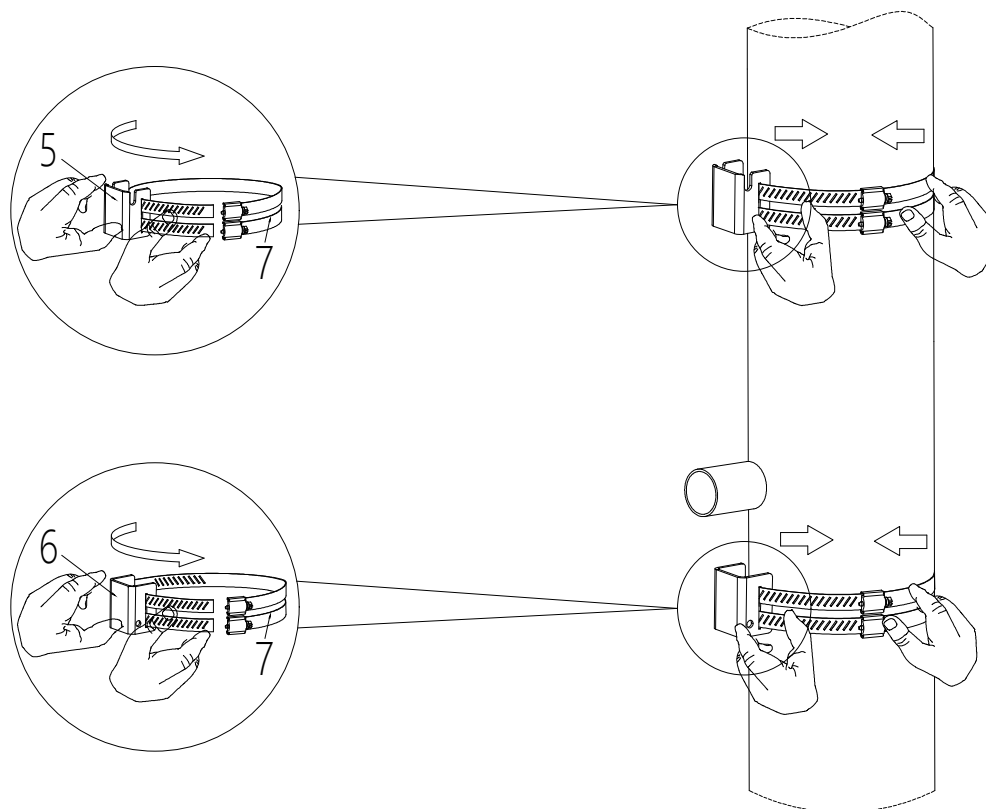
1. Install the hook screw

Tighten the screws by hand to achieve a semi-locked state.

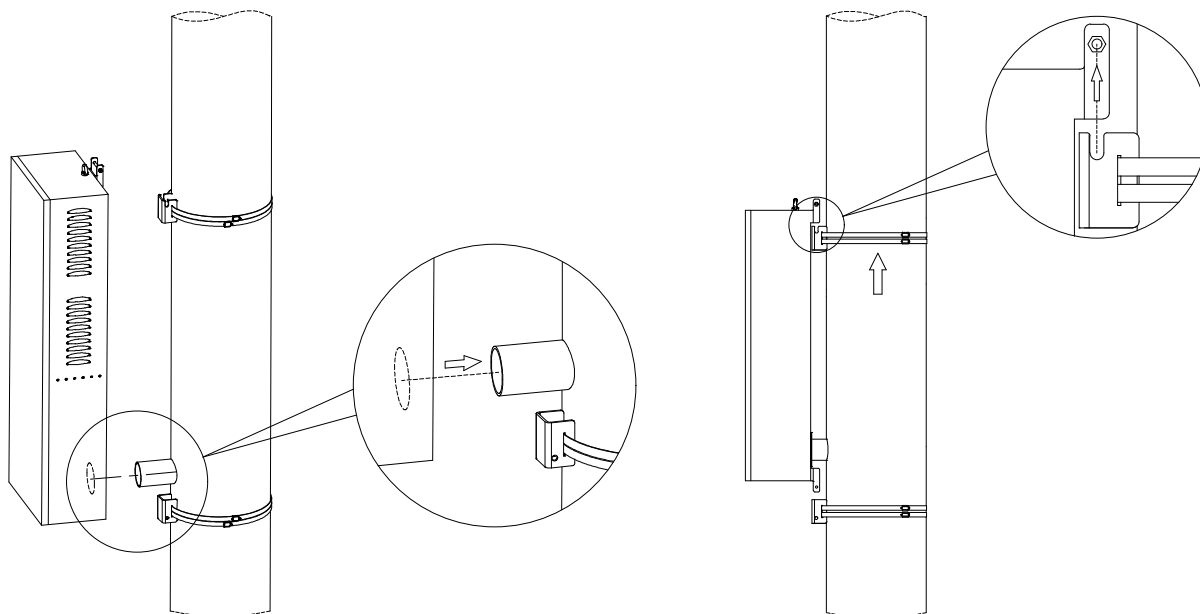


2. Install the straps

Half lock it so the strap can slide

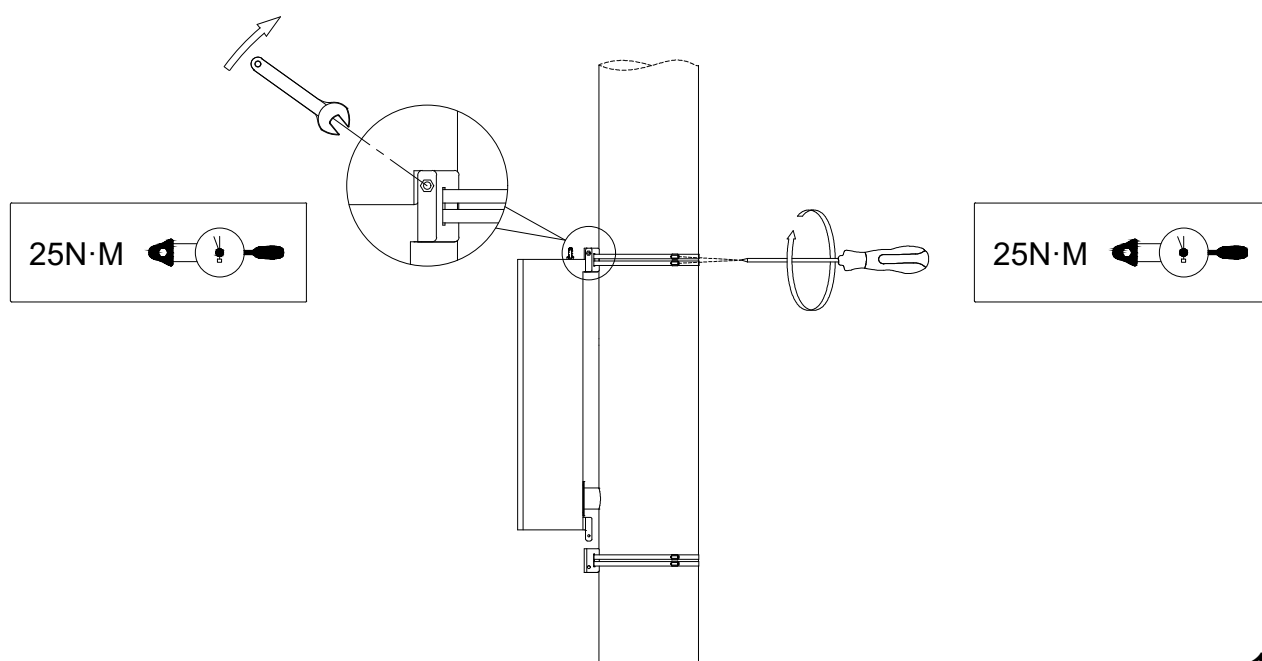


3.Install the electrical box



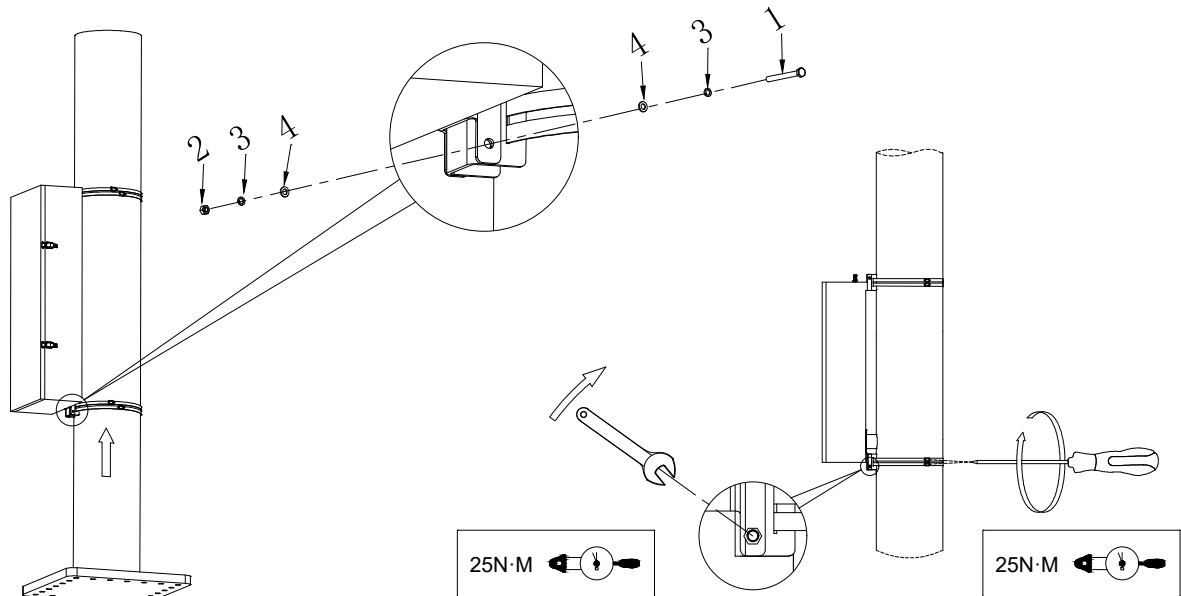
4.Fix the upper strap and hook

Note that the strap hook must be placed on the side or back of the lamp pole so that the hook is close to the lamp pole.



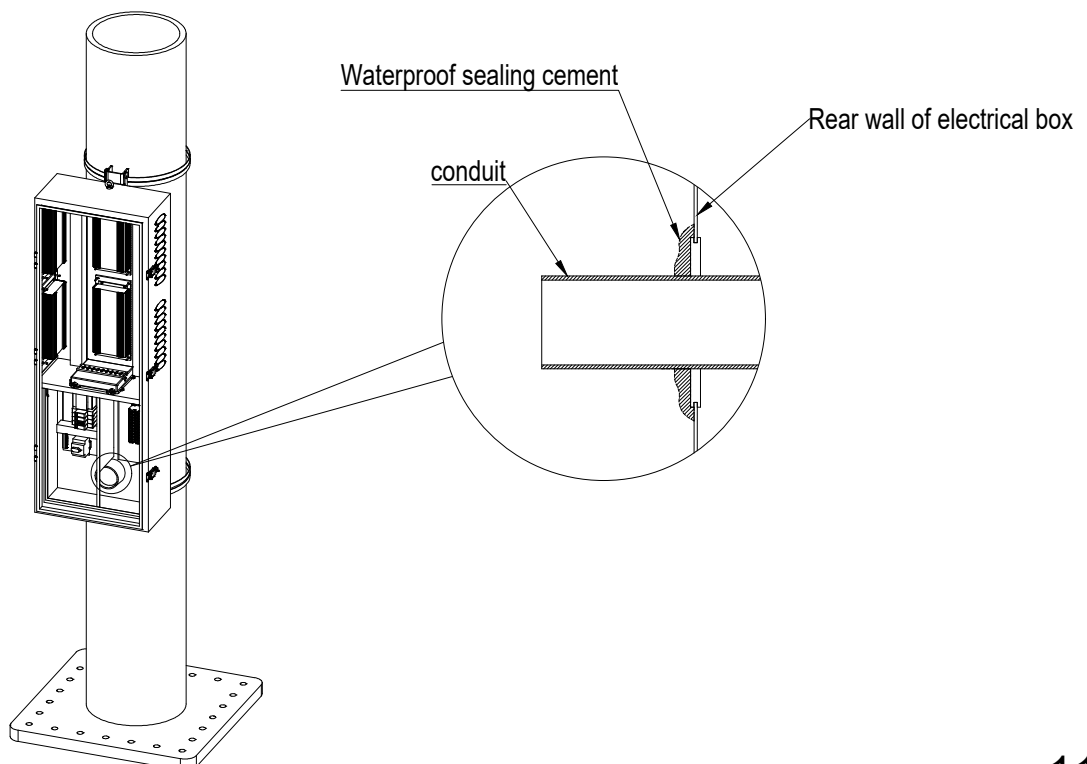
5. Fix the lower strap and hook

Note that the strap hook must be placed on the side or back of the lamp pole so that the hook is close to the lamp pole.

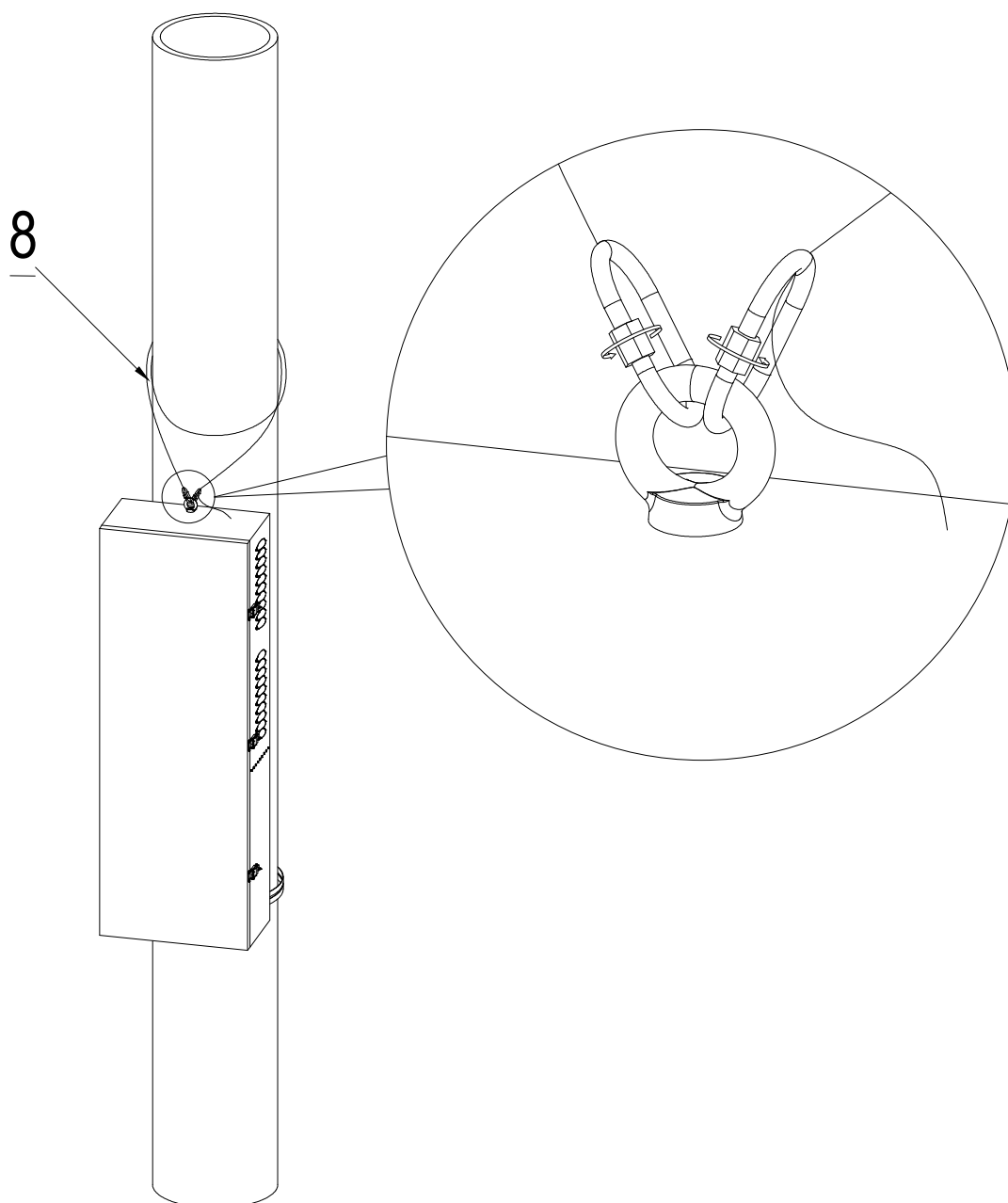


6. Sealing cable entry holes

Apply waterproof sealant or glue evenly around the entire inner wire hole to make it waterproof



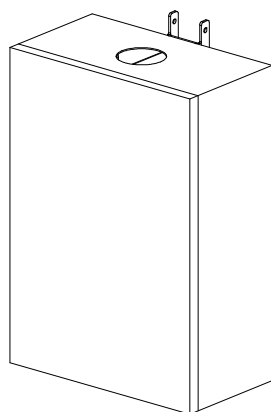
7.Install safety chains



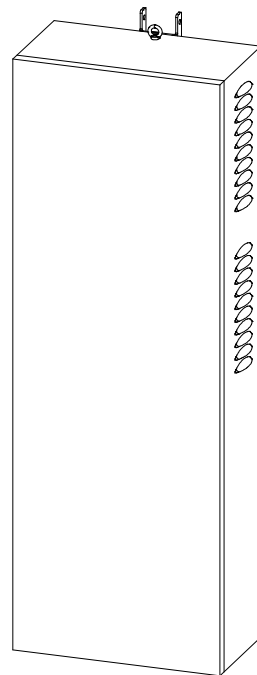
Procedure for installing a Combination electrical box

RPS-SP-D-Y & RPS-SP-9S-Y

Hook installation method



RPS-SP-D-Y

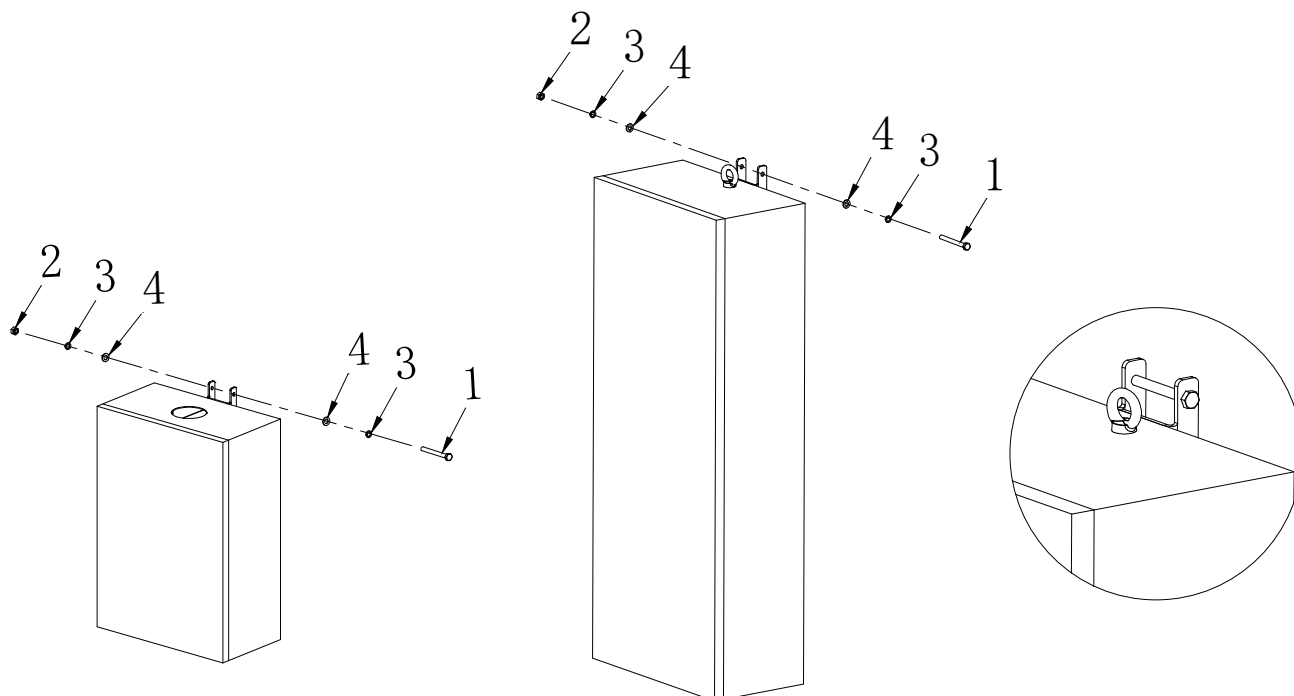


RPS-SP-9S-Y

①		M8 SCREWS	4	⑧		Connecting pipe	1
②		M8 NUT	4	⑨		SPRING WASHER	2
③		M8 SPRING WASHER	8	⑩		Waterproof washer	2
④		M8 FLAT WASHER	8	⑪		Washer for waterproof ring	2
⑤		Hoop	8	⑫		Sling chain	1
⑥		Top Hook	2	⑬		wrench	1
⑦		Bottom hook	2				

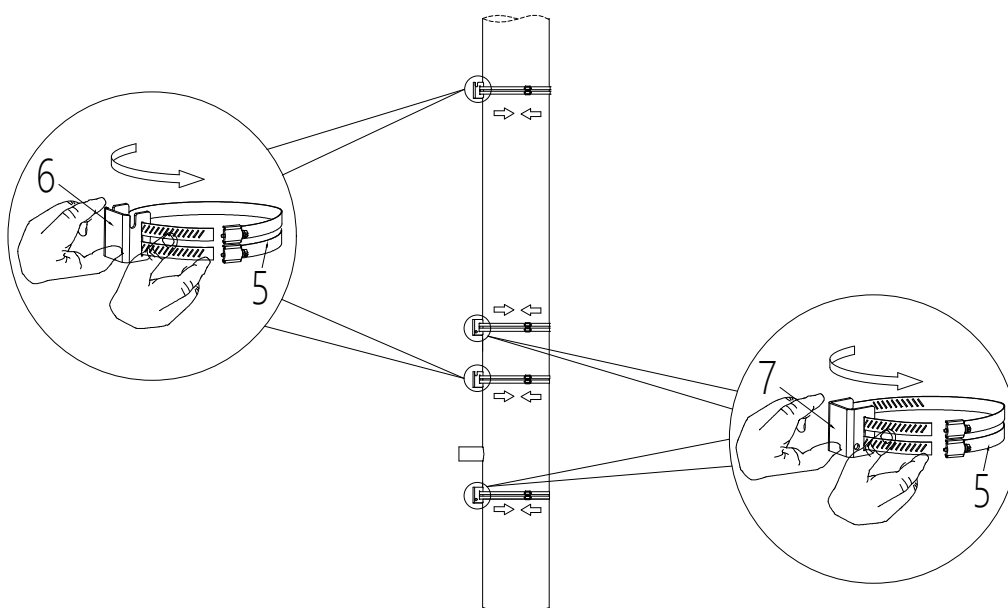
1.Install the hook screw

Attention: Tighten the screws by hand to achieve a semi-locked state.

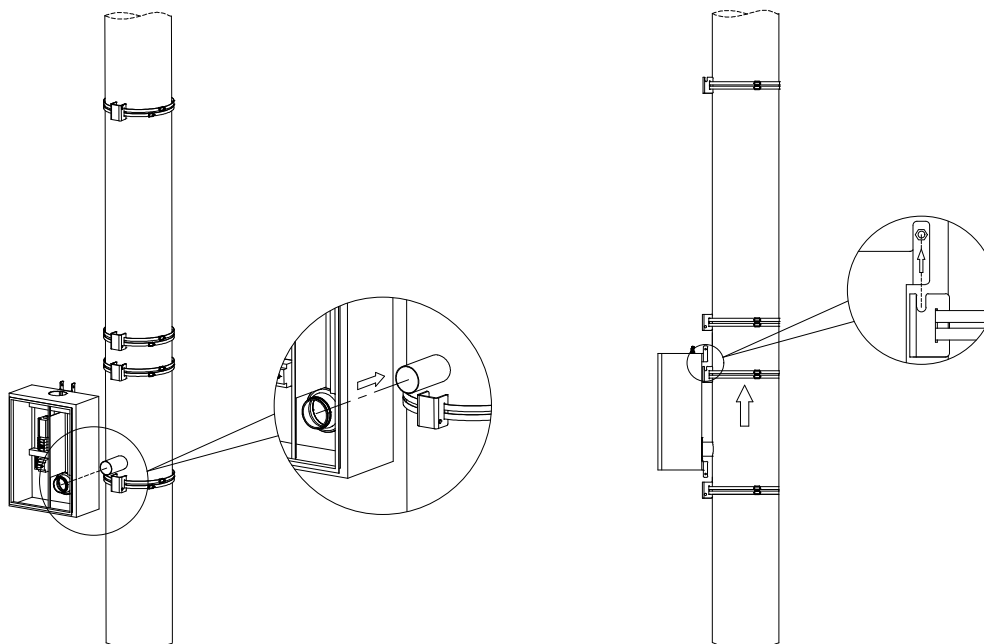


2.Install the straps

Half lock it so the strap can slide

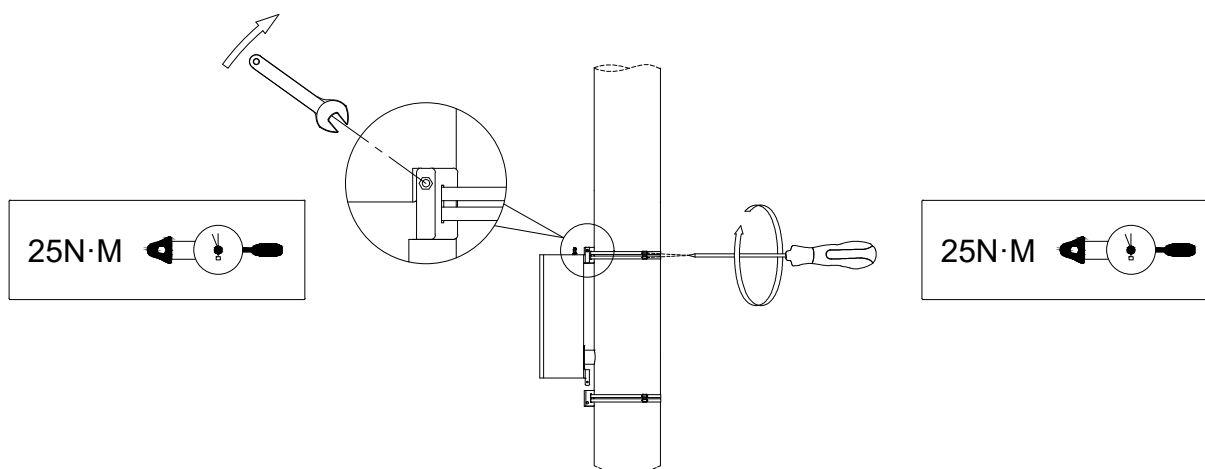


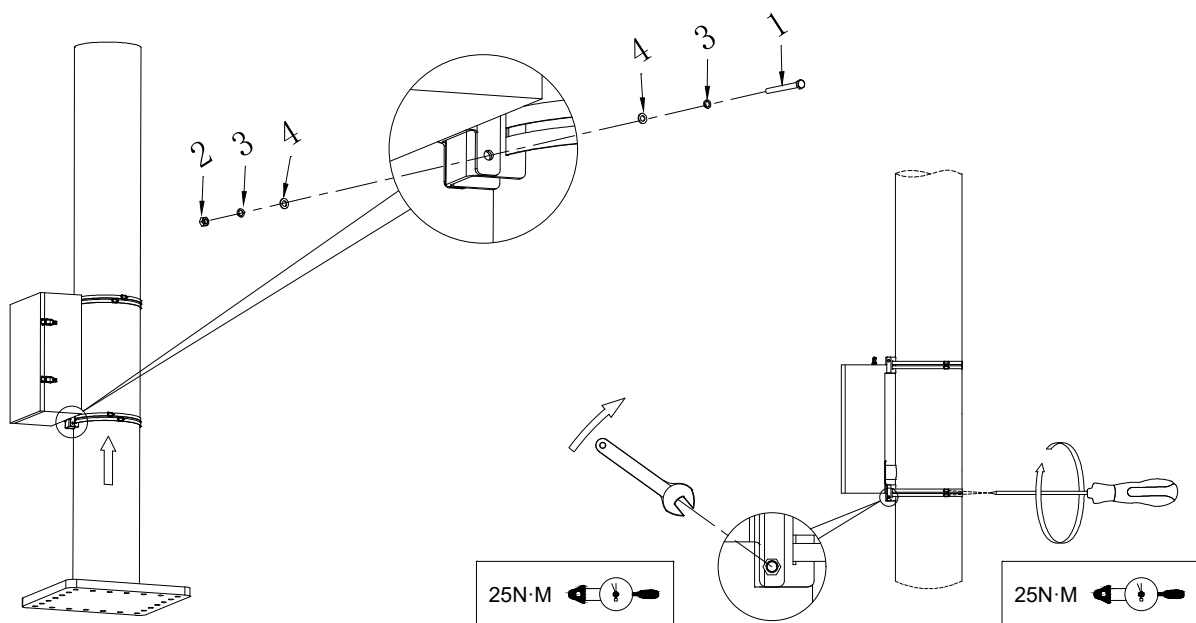
3.Install the Cabinet A



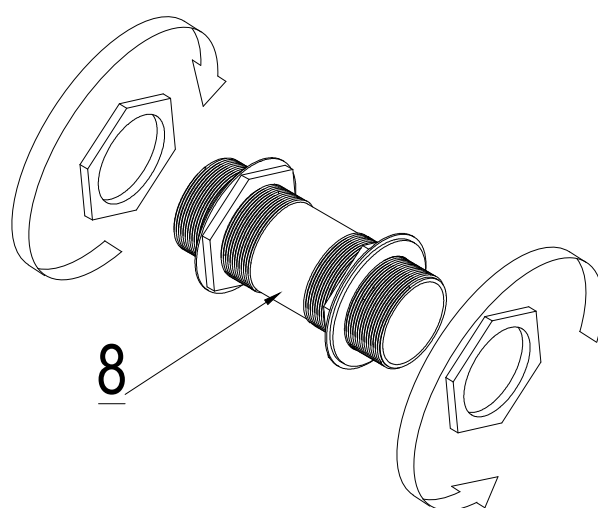
4.Fixed electrical box

Note that the strap hook must be placed on the side or back of the strap pole so that the hook is close to the lamp pole.

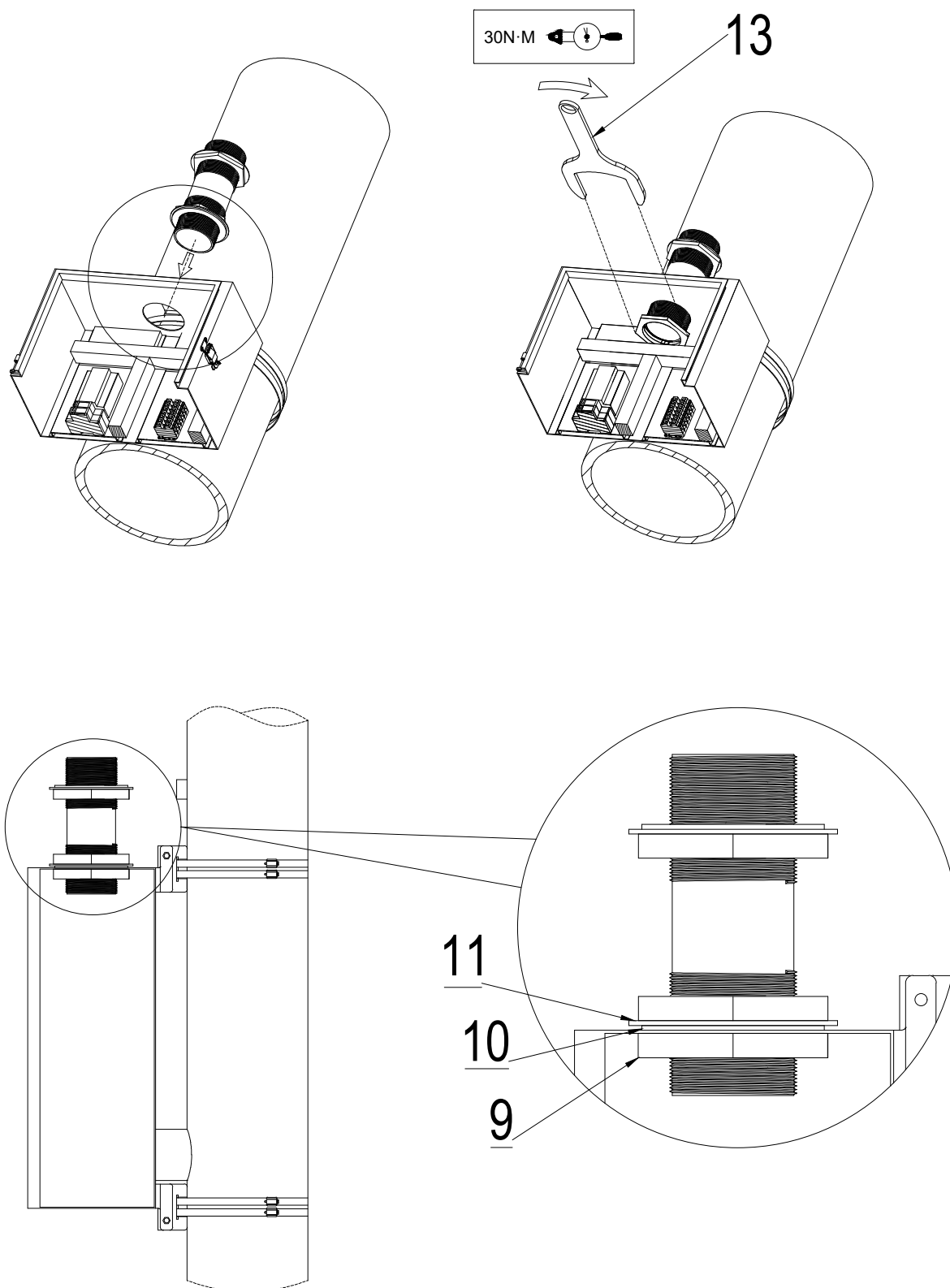




5. Unscrew the connecting pipe nut

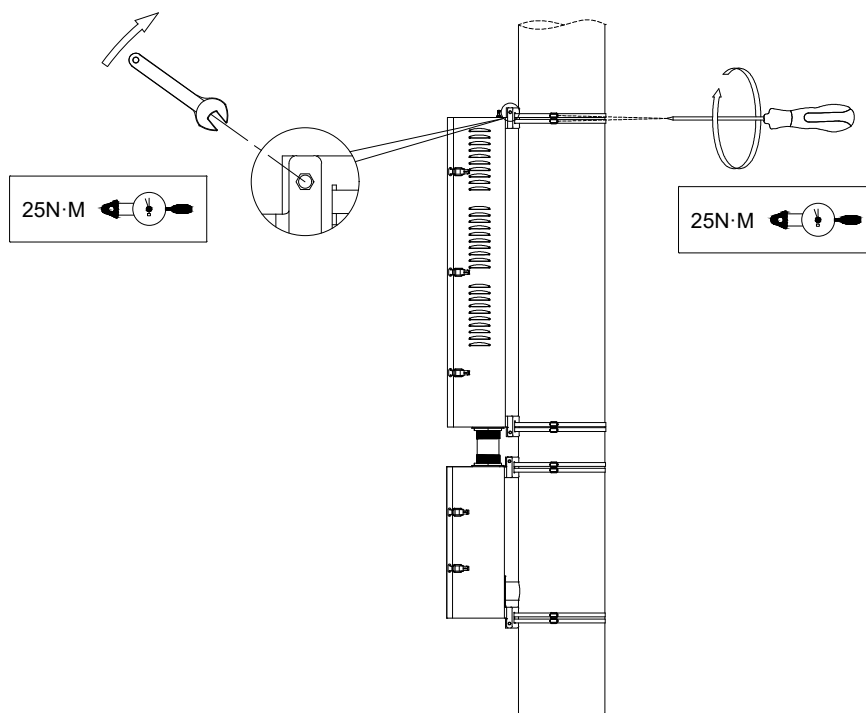
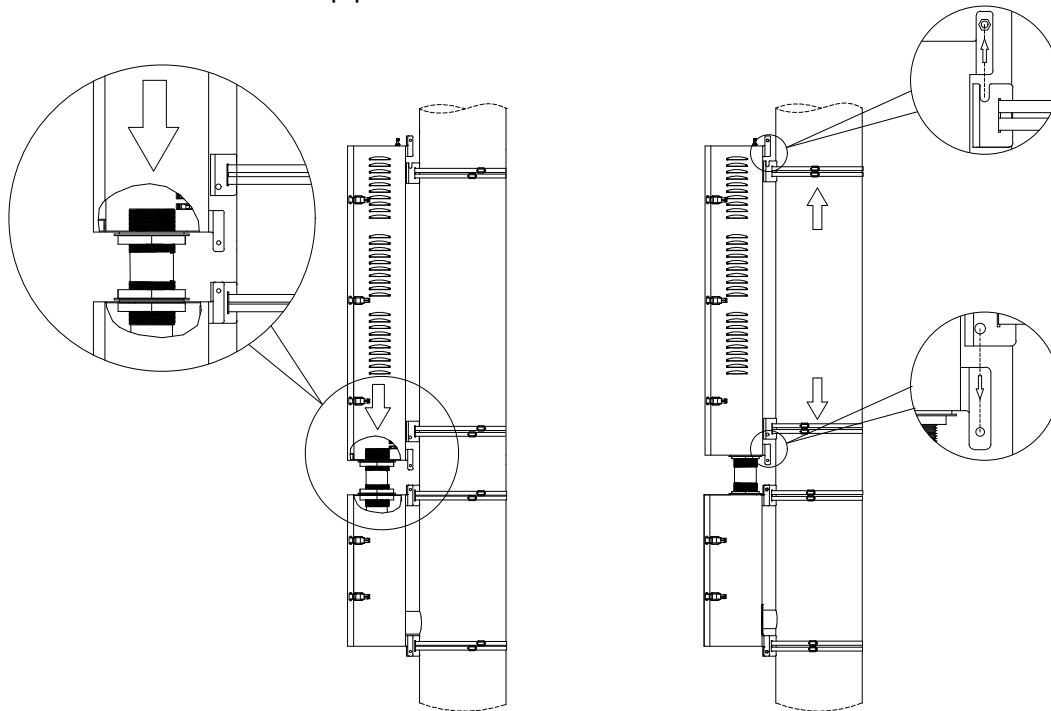


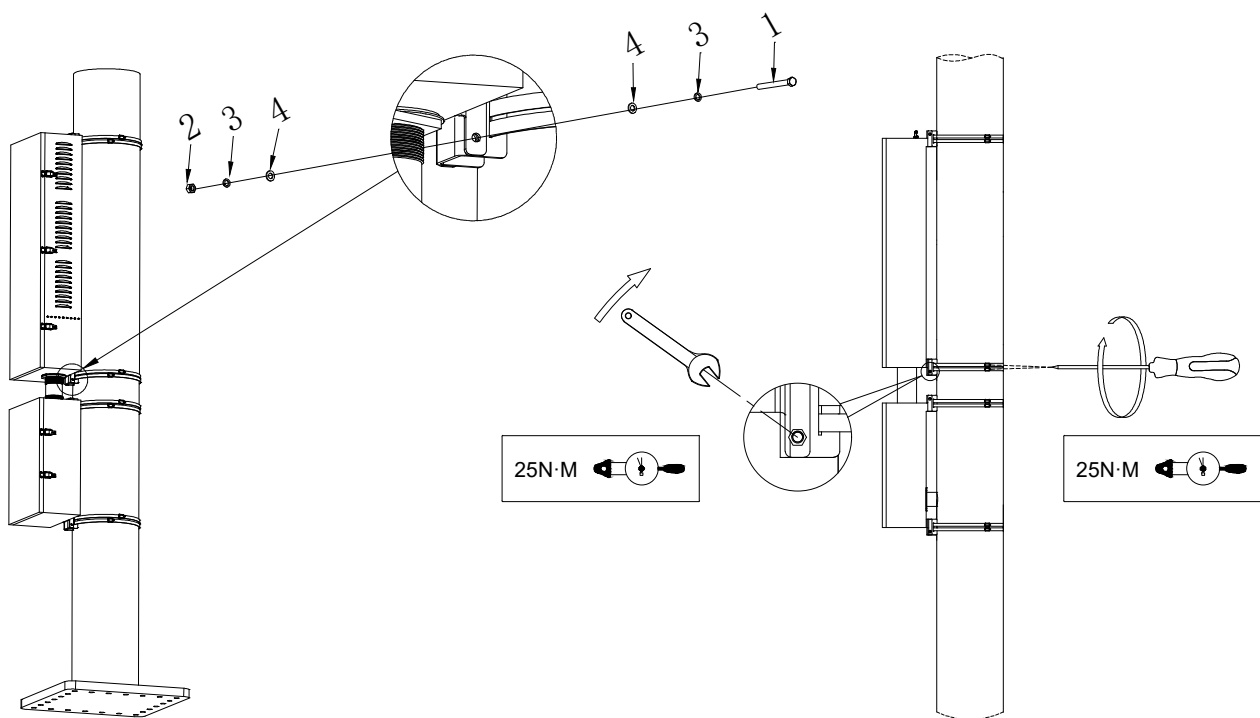
6.Connecting pipe into cabinet A



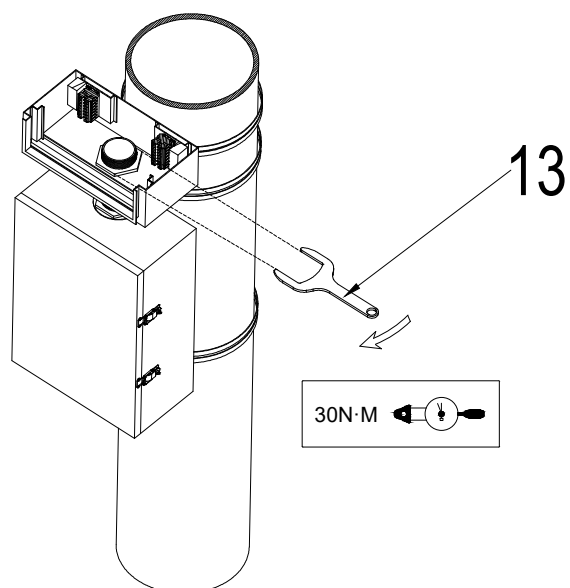
7.Cabinet B installation

Note that the strap hook must be placed on the side or back of the lamp pole so that the hook is close to the lamp pole.



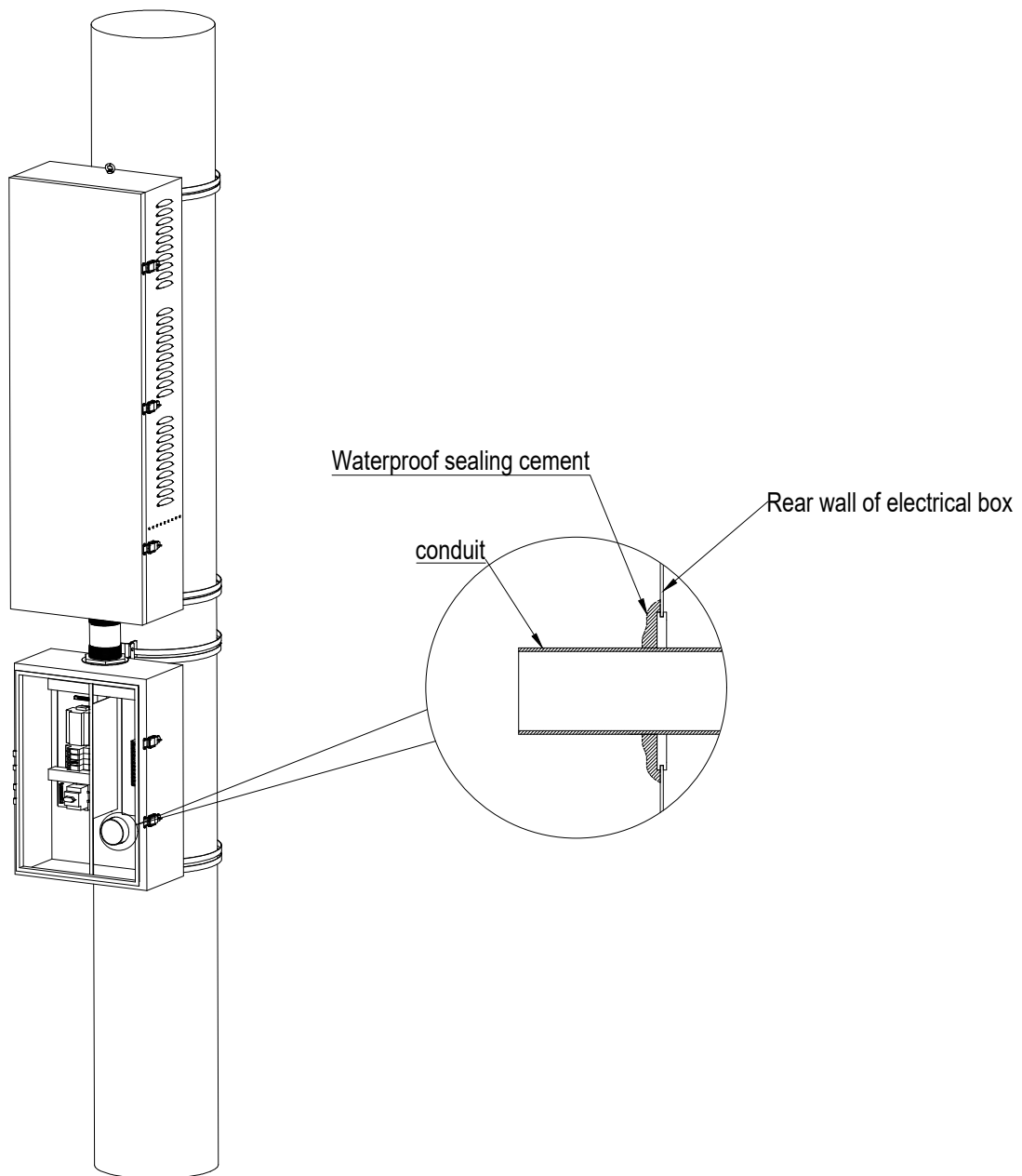


8. Tighten the nuts inside the cabinet A

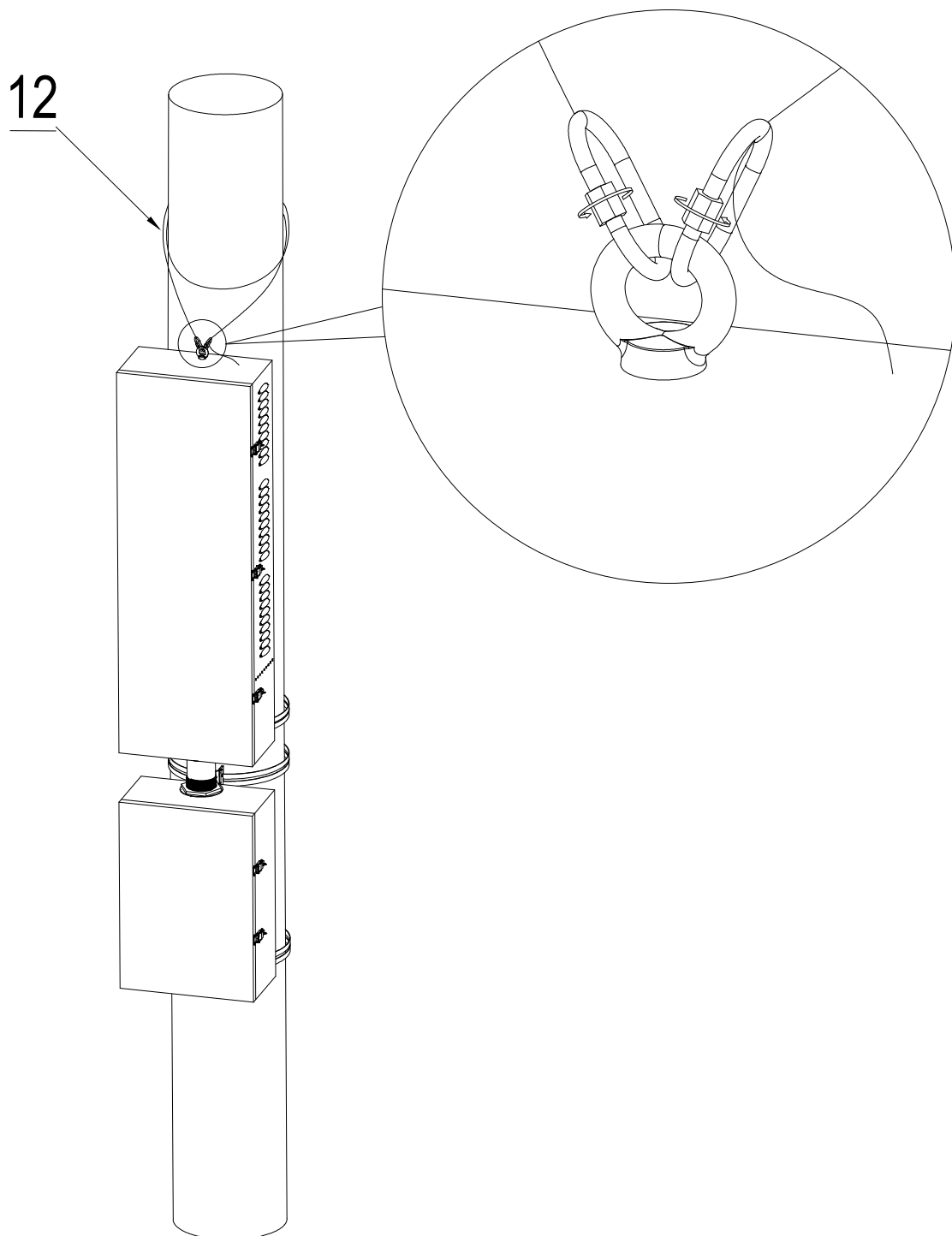


9. Sealing cable entry holes

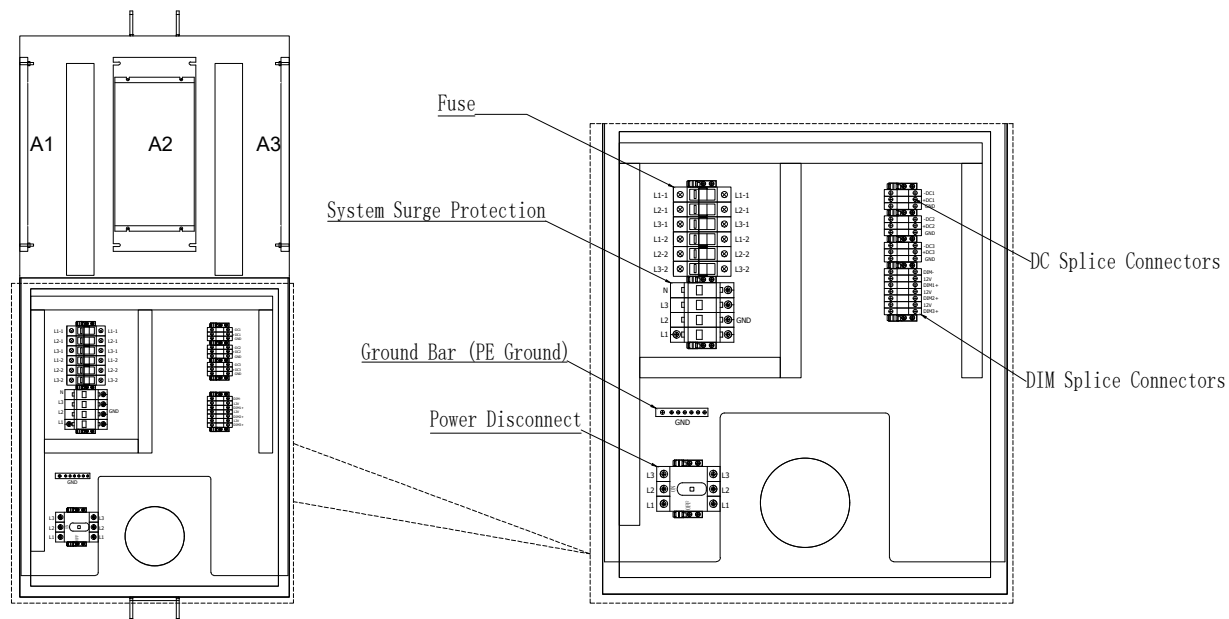
Apply waterproof sealant or glue evenly around the entire inner wire hole to make it waterproof



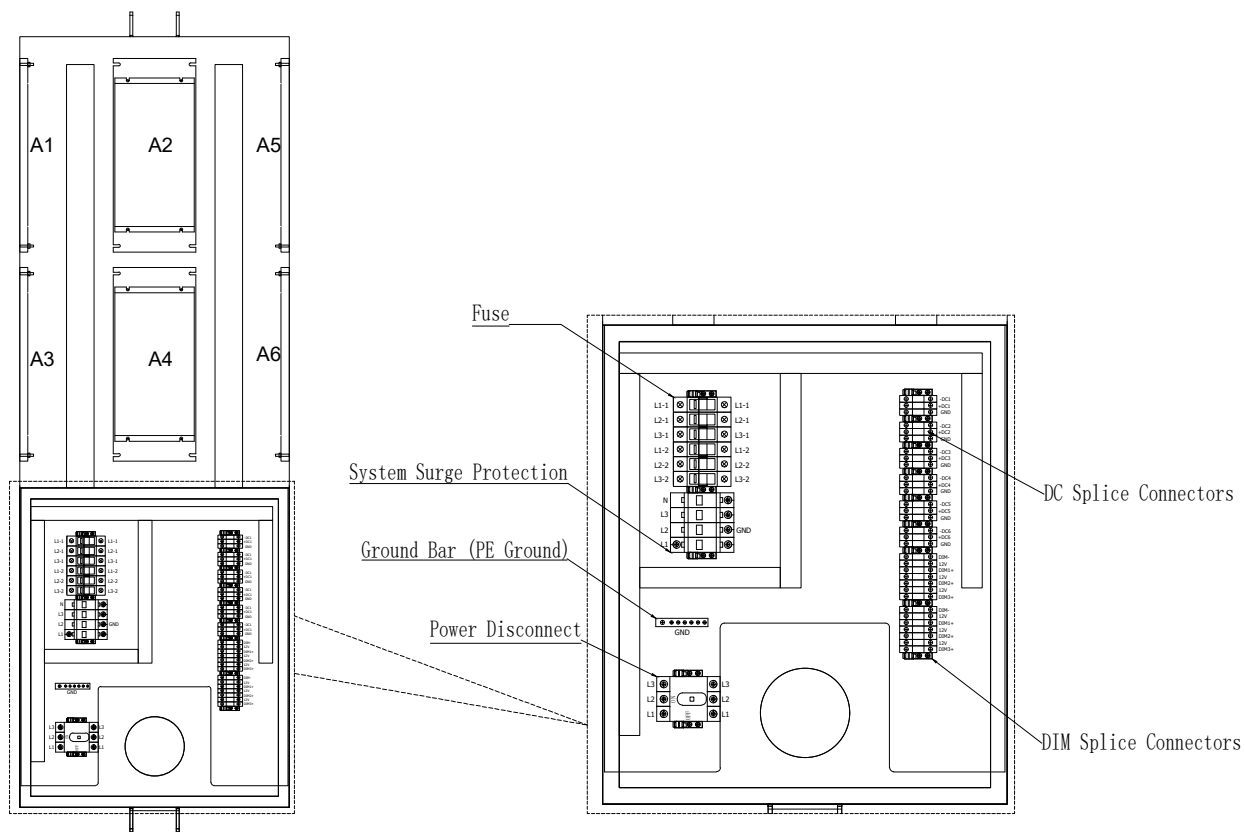
10. Install safety chains



Component layout



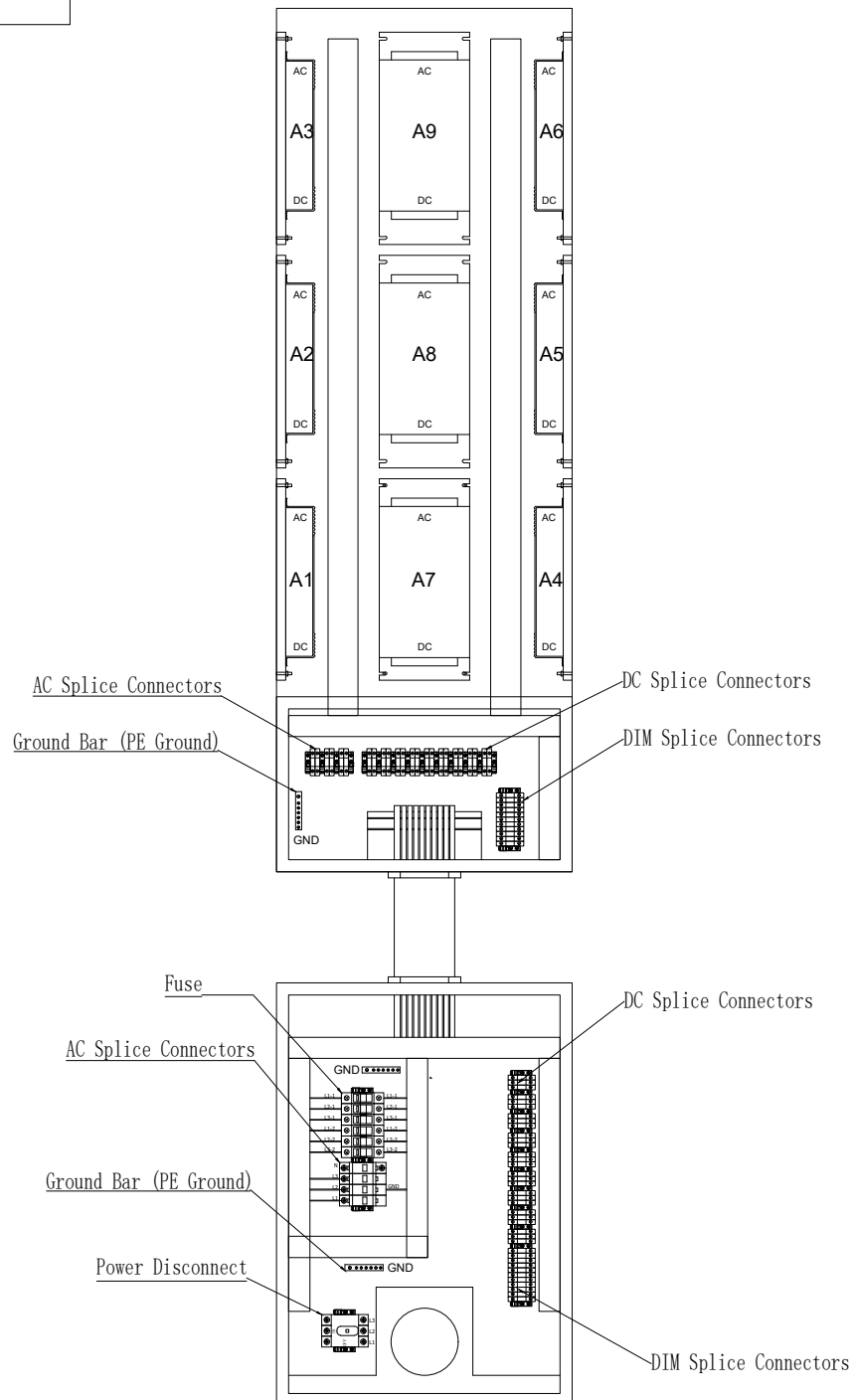
RPS-SP-3D-Y



RPS-SP-6D-Y

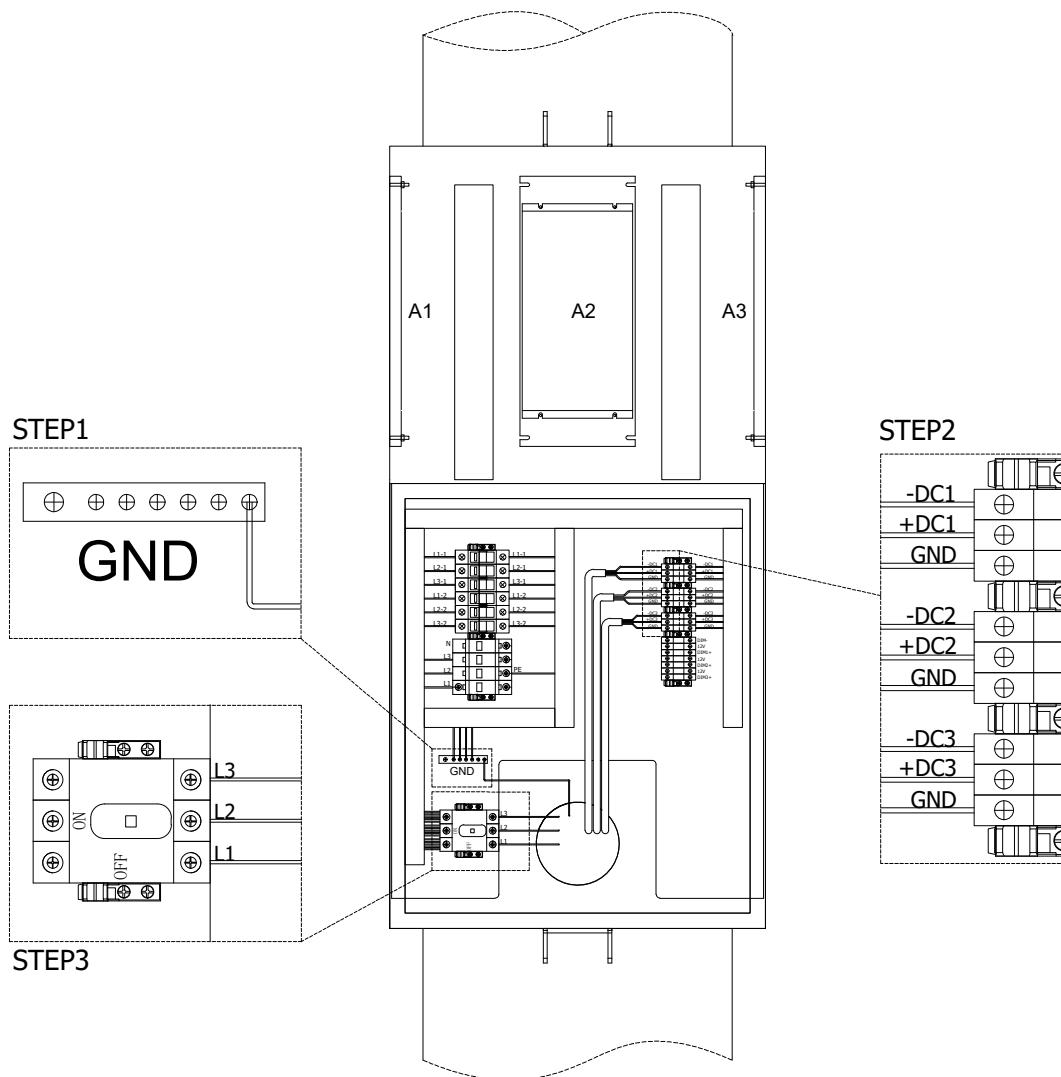
RPS-SP-9S-Y

RPS-SP-D-Y



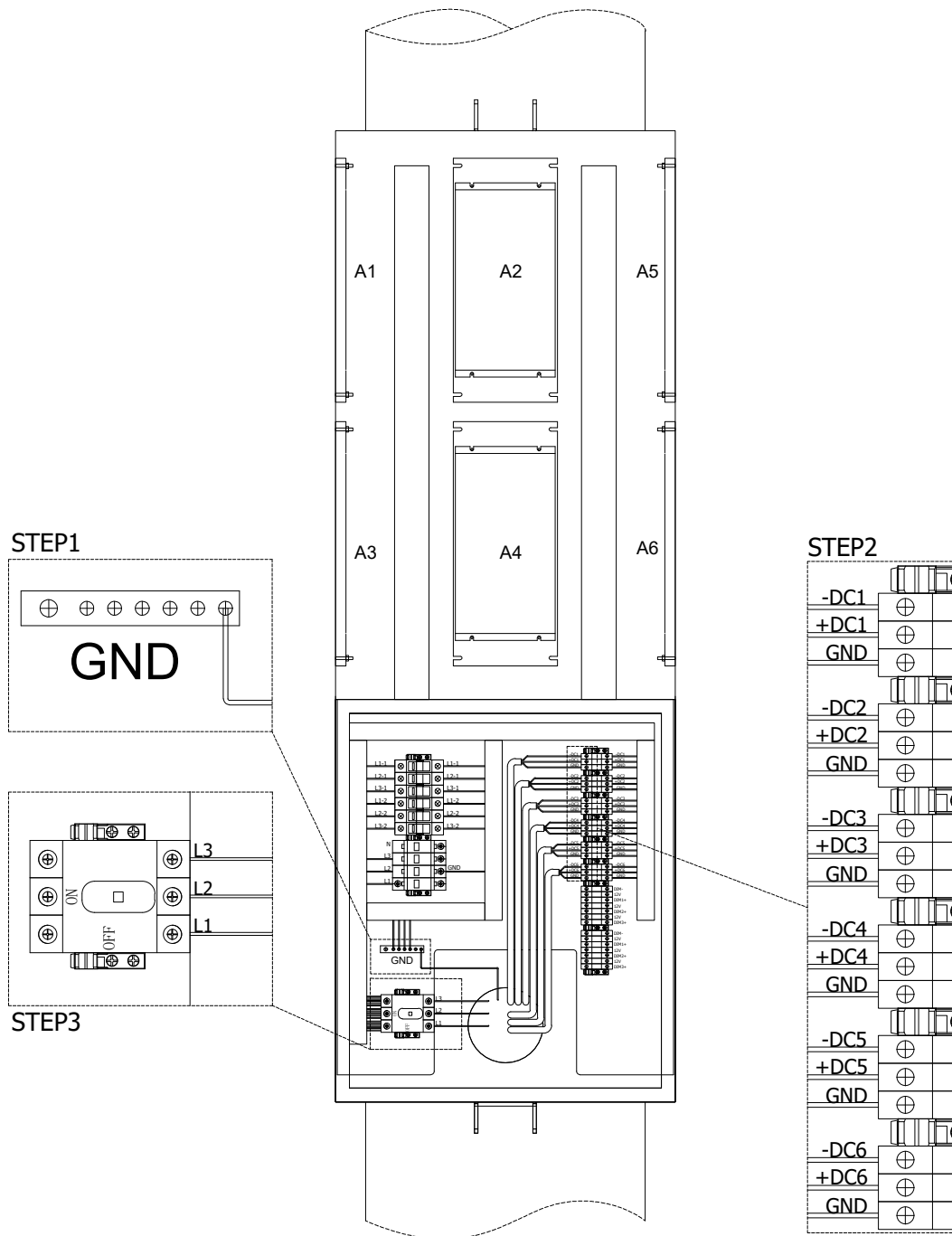
Wiring guide

RPS-SP-3D-Y



- Sept1:** Connect the ground wire to the PE terminal block, Wire diameter 14-16AWG
- Sept2:** Connect the 3 DC lines to the DC terminal block in sequence, Wire diameter 14-16AWG
- Sept3:** Connect the AC line through the cable entry hole behind the electrical,box and connect it to the main switch, Wire diameter 8-10AWG
- Sept4:** Check whether the screws of the terminal block are tightened.

RPS-SP-6D-Y



Sept1: Connect the ground wire to the GND terminal block, Wire diameter 14-16AWG

Sept2: Connect the 6 DC lines to the DC terminal block in sequence, Wire diameter 14-16AWG

Sept3: Connect the AC line through the cable entry hole behind the electrical, box and connect it to the main switch, Wire diameter 8-10AWG

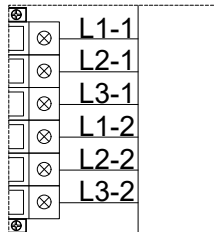
Sept4: Check whether the screws of the terminal block are tightened.

RPS-SP-9S-Y

RPS-SP-D-Y

STEP2 GND

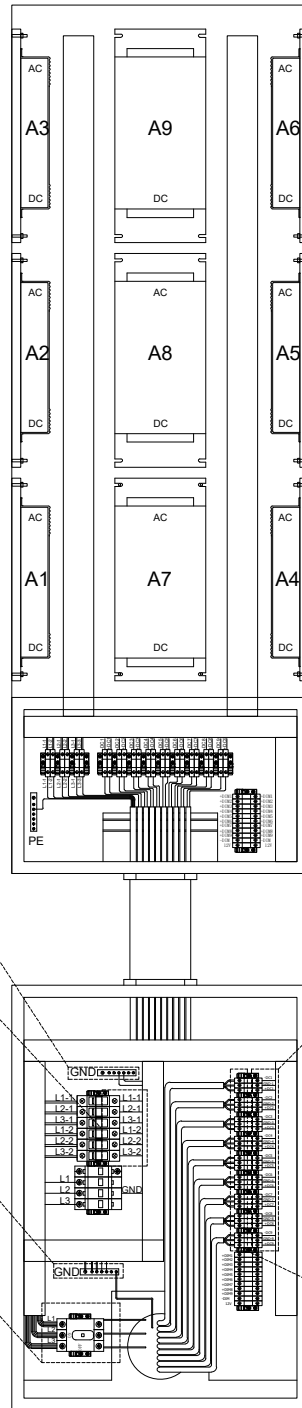
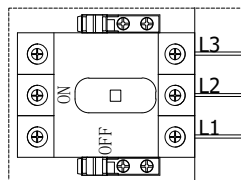
STEP3



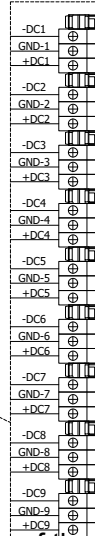
STEP5



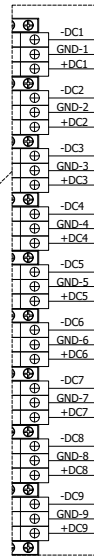
STEP6



STEP4



STEP1



Sept1: Connect the nine groups of DC cables of the lamp to the right interface of the terminal in turn according to the number, with a wire diameter of 14-16AWG

Sept2: Connect the ground wire in the 7-core cable to the nearest GND copper terminal block.

Sept3: Connect the remaining 6 wires in the 7-core cable to the right port of the safety switch according to the markings.

Sept4: Connect the nine groups of DC cables of the lamp to the left interface of the terminal in turn according to the number, with a wire diameter of 14-16AWG

Sept5: Connect the ground wire to the GND terminal block, Wire diameter 14-16AWG

Sept6: Connect the AC line through the cable entry hole behind the electrical, box and connect it to the main switch, Wire diameter 8-10AWG

Sept7: Check whether the screws of the wiring block are tightened.