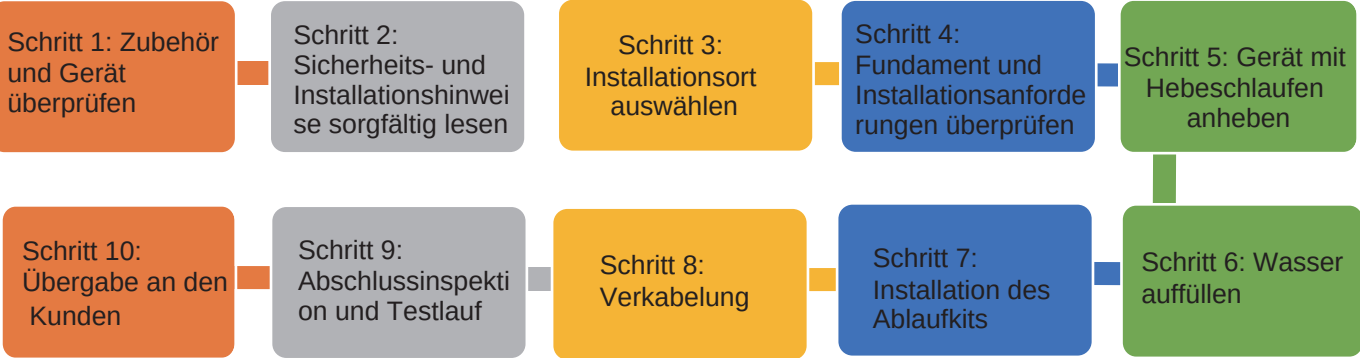


Schnellinstallationsanleitung



Schritt 1: Zubehör und Gerät überprüfen



Verdrahteter Controller x1



Y-Filter x1



Verbindungskabel des verdrahteten Controllers x1



Sensor x1



Außenabflussbogen x1



Verdrahteter Controller-Handbuch x1
Installations- und Benutzerhandbuch x1
Technische Daten x1
Energieetikett x1

Schritt 2: Sicherheits- und Installationshinweise sorgfältig lesen

! WARNUNG

- Alle in dieser Anleitung beschriebenen Aktivitäten müssen von lizenzierten Technikern durchgeführt werden. Lesen Sie vor der Installation die beigelegten Handbücher sorgfältig durch.



Gefahr: Verbrennungs-/Verbrühungsgefahr. Weist auf eine Bedingung hin, die durch extreme Hitze oder Kälte zu Verbrennungen/Verbrühungen führen kann.



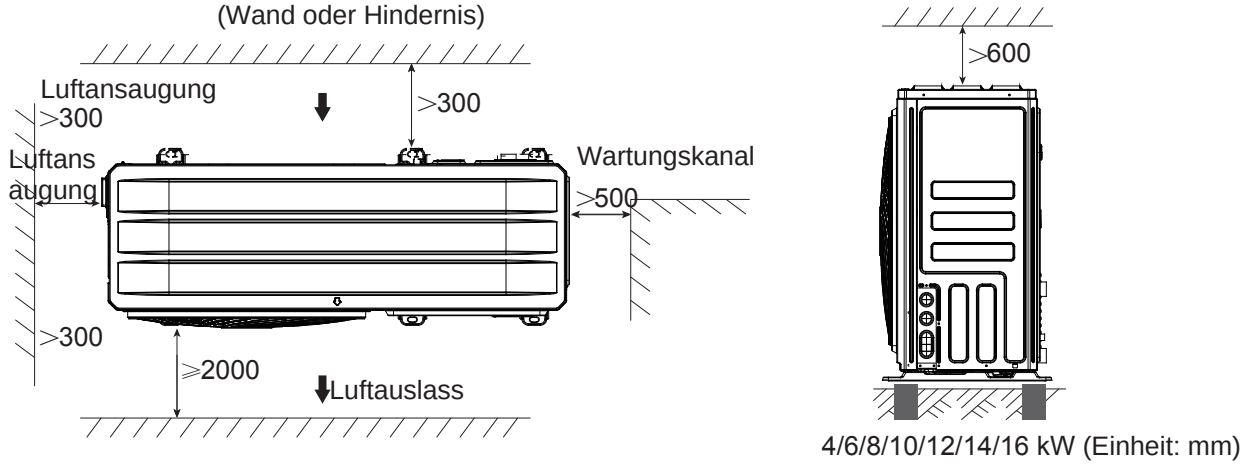
Gefahr: Elektrische Schlaggefahr Weist auf eine Bedingung hin, die zu einem elektrischen Schlag führen kann.



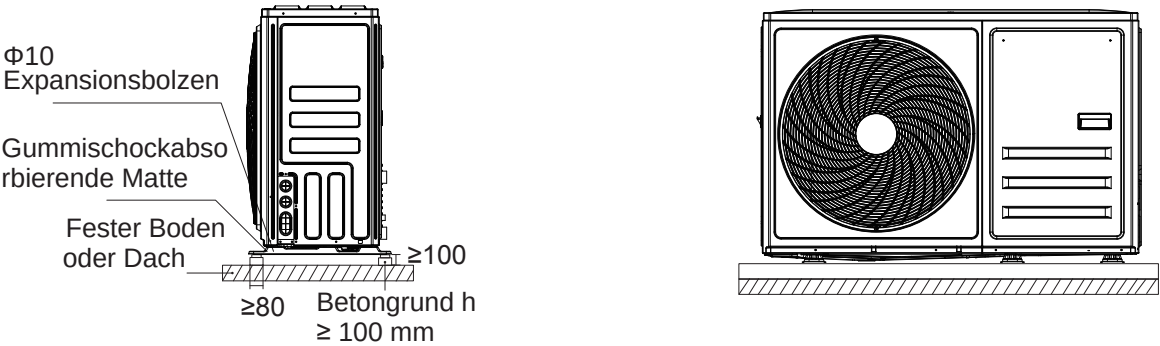
Brandgefahr entzündliche Materialien

Schritt 3: Installationsort auswählen

- Unter normalen Bedingungen beachten Sie die folgenden Abbildungen zur Installation des Geräts:
- Für kaltes Klima und detailliertere Hinweise beachten Sie bitte das Installationshandbuch.

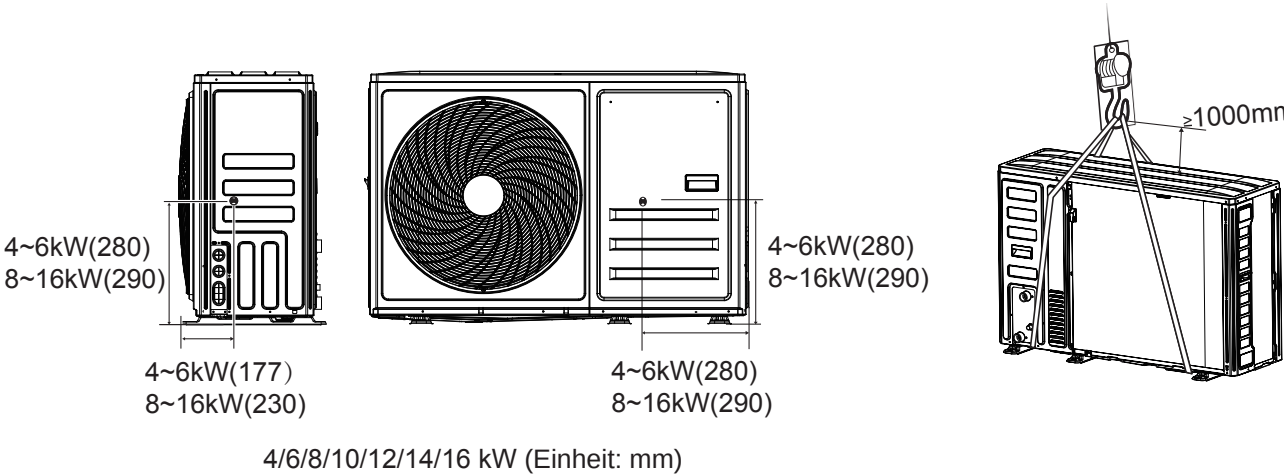


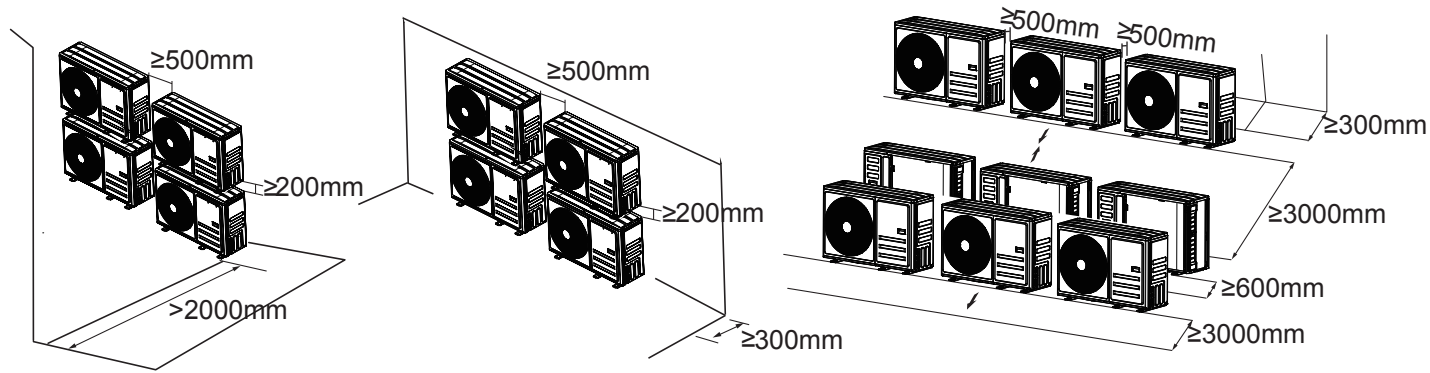
Schritt 4: Fundament und Installationsanforderungen überprüfen



- Überprüfen Sie die Stärke und Niveau des Installationsbodens, damit das Gerät während des Betriebs keine Vibrationen oder Geräusche verursacht.

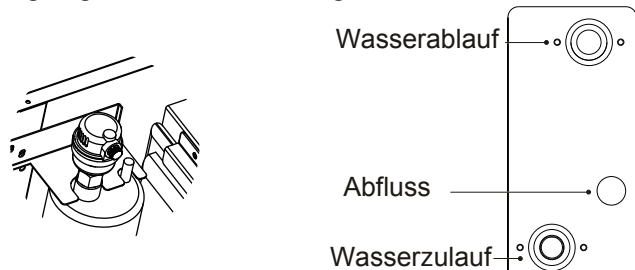
Schritt 5: Gerät mit Hebeschlaufen anheben





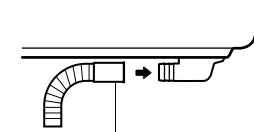
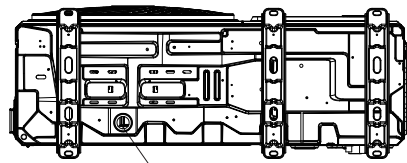
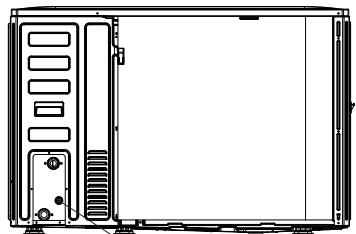
Schritt 6: Wasser auffüllen

- Öffnen Sie das automatische Entlüftungsventil, drehen Sie es gegen den Uhrzeigersinn um 1,5-2 Umdrehungen, um Luft aus dem System abzulassen.
- Verbinden Sie die Wasserleitungen gemäß dem unten angebrachten Etikett.



Schritt 7: Installation des Ablaufkits

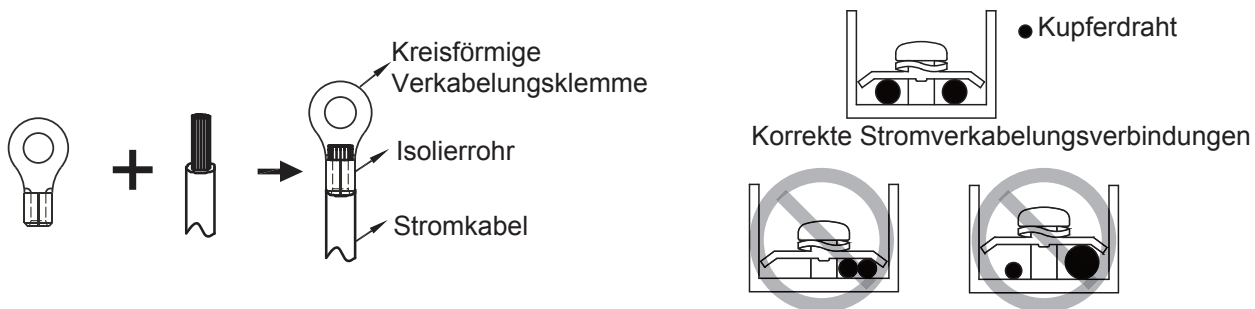
- Wenn ein Abflussrohr erforderlich ist, schließen Sie das Abflussrohr gemäß der Abbildung an das Ablaufkit an.
- Falls nicht, ist es nicht notwendig, das Ablaufkit zu installieren.



Schritt 8: Verkabelung

8.1 Vorsichtsmaßnahmen bei der Verkabelung der Stromversorgung

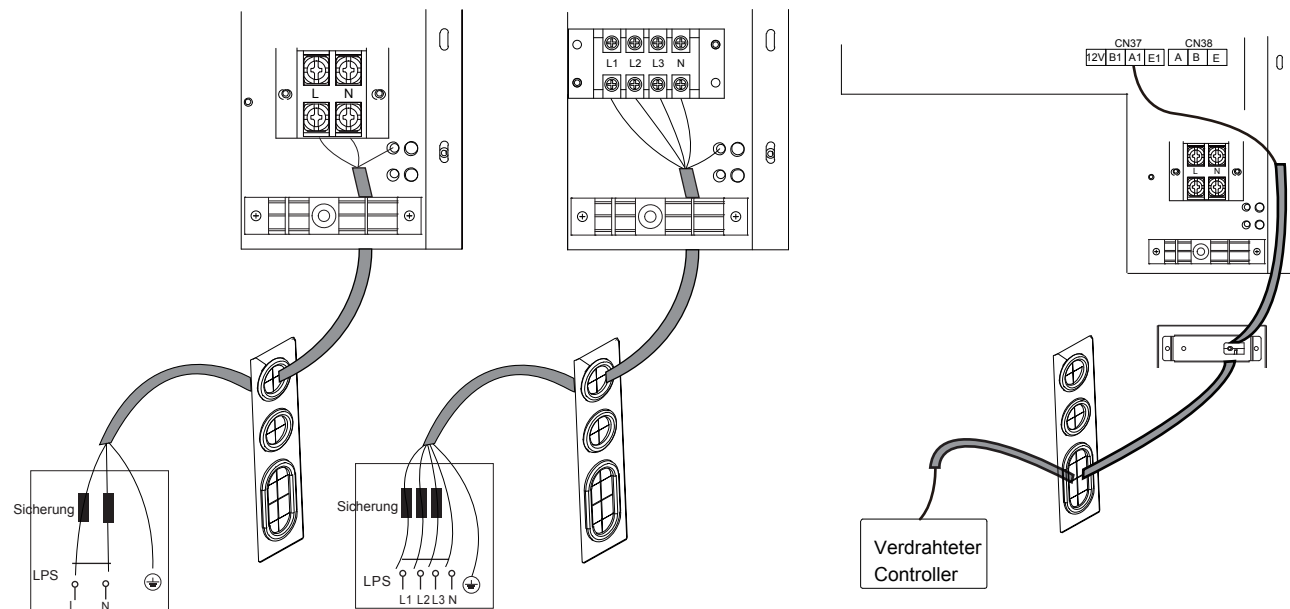
- Bei der Verbindung von Drähten mit demselben Querschnitt ist die untenstehende Abbildung zu berücksichtigen.



8.2 Auswahl der Stromleitung und des Leitungsschutzschalters

Gerät	Maximaler Überstromschutz(MOP)(A)	Verkabelungsgröße(mm2)
4-6kW 1-PH (3 kW Heizung)	25	3×4.0
8-10kW 1-PH	25	3×4.0
8-10kW 1-PH (3 kW Heizung)	40	3×6.0
12-16kW 1-PH	40	3×6.0
12-16kW 1-PH (3 kW Heizung)	50	3×10.0
12-16kW 3-PH	25	5×2.5
12-16kW 3-PH (6/9 kW Heizung)	32	5×6.0

8.3 Verkabelung der Hauptstromversorgung des Geräts



- Die Stromversorgungsverkabelung muss durch Rohre oder Wände verlegt werden.
- Die Verdrahtung der Drahtsteuerung muss durch Rohre oder Wände verlegt werden.

8.4 Anschluss für andere Komponenten

- Bitte beachten Sie die Installationsanleitung 6.1.7 für weitere Informationen.

Schritt 9: Abschlussprüfungen und Testlauf

- Vor dem Einschalten des Geräts überprüfen Sie bitte, ob die vollständige Installation und alle erforderlichen Einstellungen durchgeführt wurden.
- Falls erforderlich, kann der Installateur jederzeit einen manuellen Testlauf durchführen, um die korrekte Funktion der Entlüftung, Heizung, Kühlung und der Warmwasserbereitung zu überprüfen. Siehe "MENÜ>PARAMETER-KONFIGURATION> 3. SPEZIALFUNKTIONEN>1. TESTLAUFFUNKTION>1. ÜBERPRÜFEN UND TESTEN"

PARAMETERS CONFIG	1/1
1.CONFIG PARA-SETTING	
2.SYSTEM PARAMETERS	
3.SPECIAL FUNCTION	
4.MODIFY PASSWARD	
5.RESET	
6.RESTORE FACTORY PASSWORD	
OK	△V<>BACK

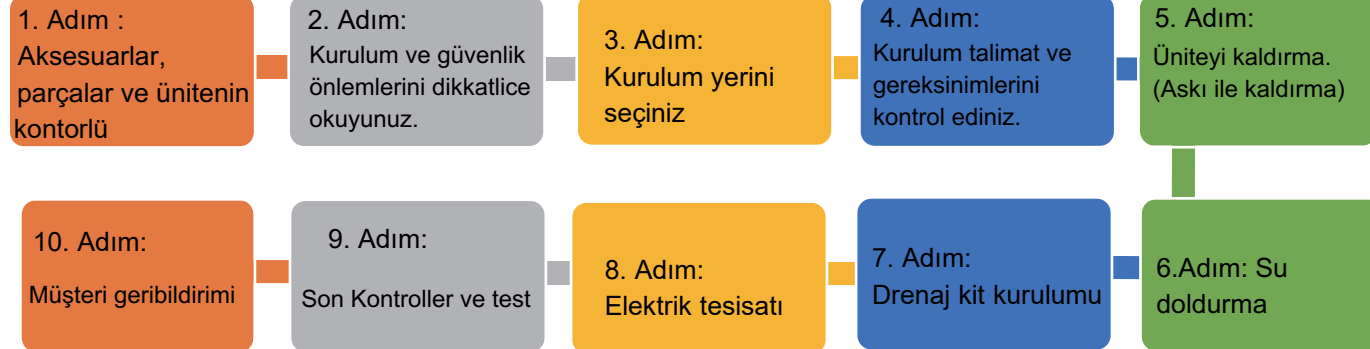
SPECIAL FUNCTION	1/1
1.TRIAL OPERATION FUNCTION	
2.FORCE DEFROST	OFF
3.RECYCLE REFRIG	OFF
OK	△V<>BACK

TRIAL OPERATION FUNCTION	1/1
1.CHECK AND TEST	
2.AIR EMPTYING TEST	OFF
3.PUMP TEST	OFF
4.COOL TEST	OFF
5.HEAT TEST	OFF
6.HOT WATER TEST	OFF
OK	△V<>BACK

Schritt 10: Übergabe an den Kunden

- Das Benutzerhandbuch des Monoblockgeräts muss dem Kunden übergeben werden. Erklären Sie dem Kunden den Inhalt des Benutzerhandbuchs im Detail.

HızlıKurulumRehberi



1.Adım: Aksesuarlar, parçalar ve adetlerinin kontrolü



Kablolu Kumanda x 1



Y-Filtre x1



Kumanda bağlantı kablosu x 1



Sensör x1



Dış Drenaj Dirseği x1

Kablolu Kumanda kılavuzu x 1
Kurulum ve son kullanıcı kılavuzu x1
Teknik özellikler kılavuzu x1
Enerji, Güç etiketi x1

2. Adım: Kurulum ve Güvenlik Önlemlerini Dikkatlice Okuyunuz



UYARI

- Tüm faaliyetler ve aktiviteler bu kılavuzda tarif edilmiş olup lisanslı teknisyenler tarafından uygulanmalıdır. Kurulumdan önce ekteki kılavuzu dikkatlice okuyunuz.



Tehlike: Yanık veya haşlanma riski aşırı sıcak ve aşırı soğuk nedeniyle yanık veya haşlanma ile sonuçlanabilecek bir durumu belirtir.



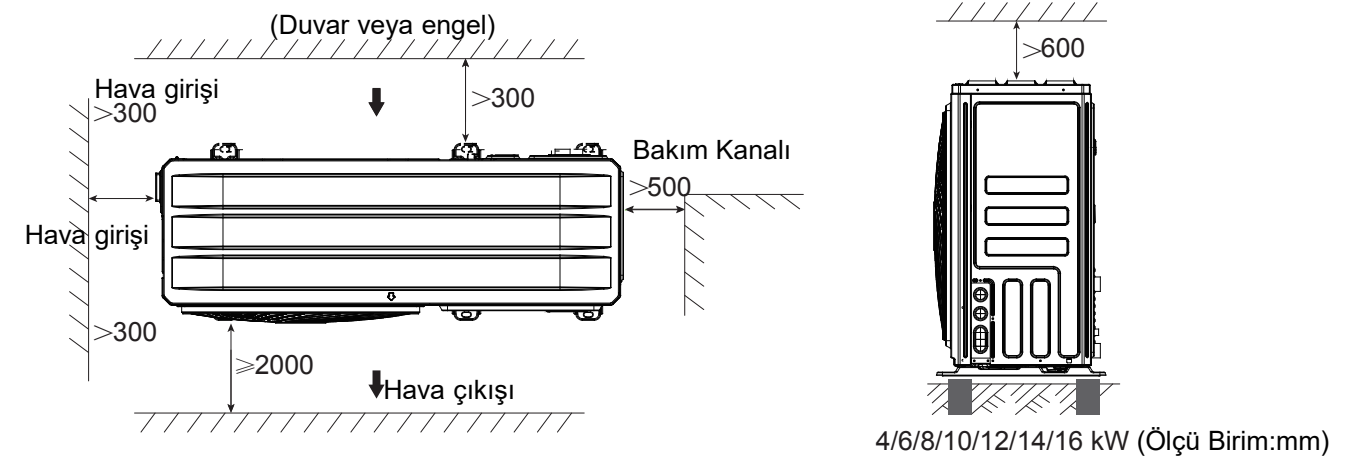
Tehlike: Elektrik çarpması tehlikesi, elektrik çarpması ile sonuçlanabilecek bir durumu belirtir.



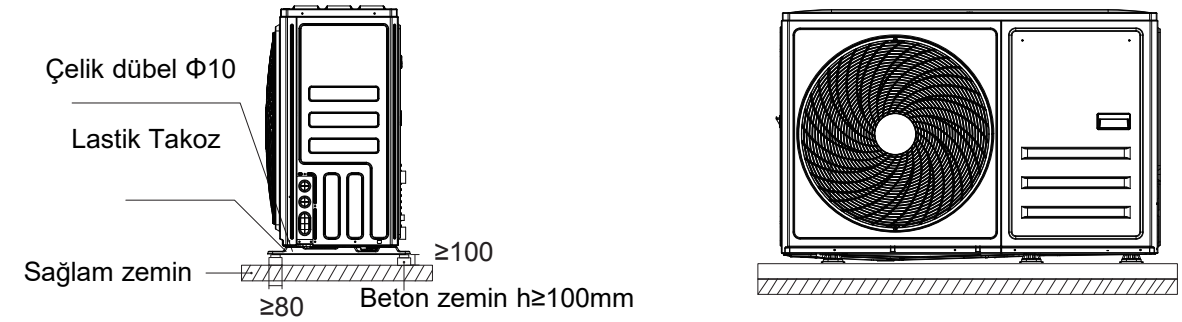
Yanıcı maddeler riski

3.Adım: Kurulum yeri seçiniz.

- Normal koşullarda, ünitelerin aşağıdaki kurulum şekillerine bakınız.
- Soğuk hava ikliminde ve daha fazla detaylar için lütfen kurulum kılavuzuna başvurun.

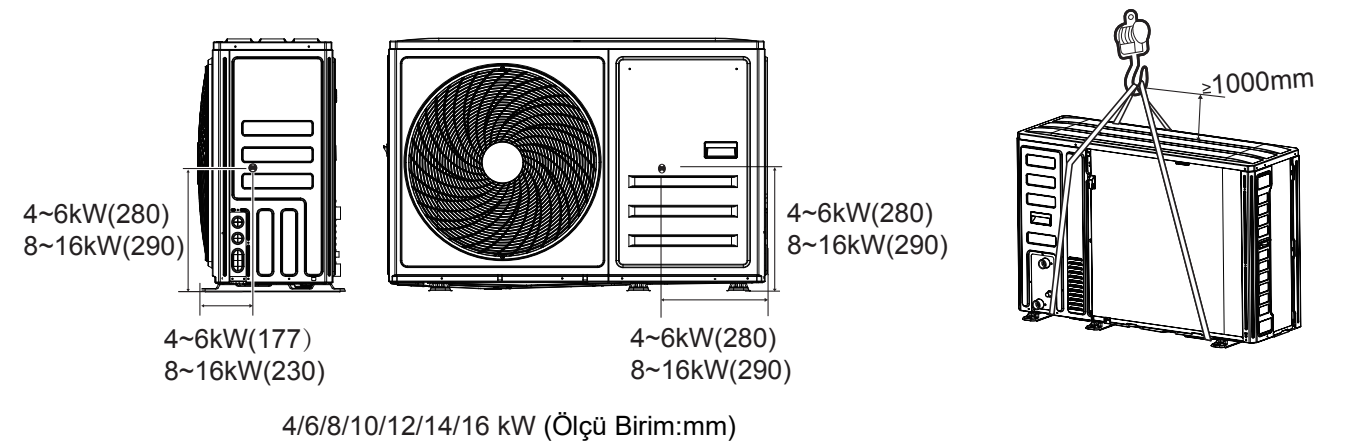


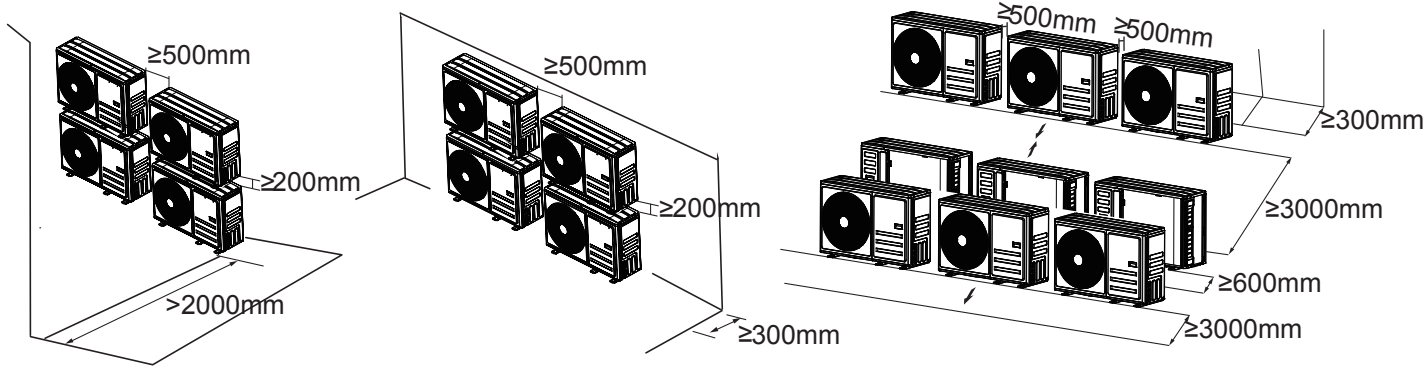
4. Adım : Kurulum talimatlarını ve gereksinimlerini kontrol ediniz



- Ünitenin çalışma sırasında herhangi bir titreşime veya gürültüye neden olmaması için montaj zemininin sağlamlığını ve düz olduğunu su terazisi ile kontrol edin.

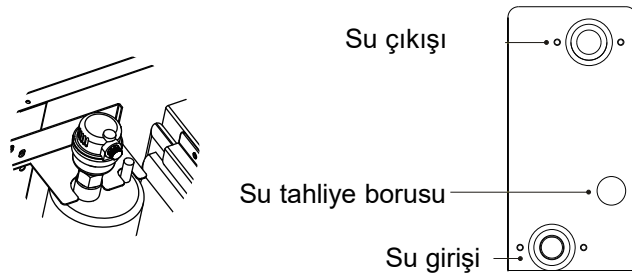
5.Adım: Ünitenin kaldırılması (kaldırma askısıyla)





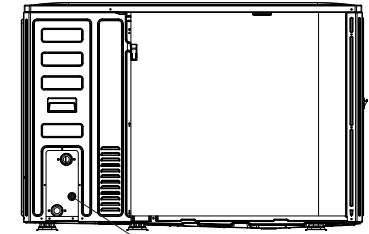
6.Adım: Su Doldurma

- Otomatik hava tahliye vanasını açın, sistemdeki havayı boşaltmak için saat yönünün tersine 1,5 - 2 tur çevirin.
- Aşağıda ekteki etiket bilgilerine göre boru bağlantısını yapınız.

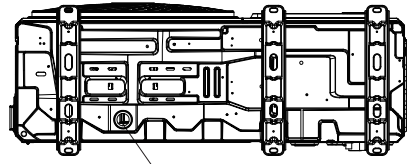


7. Adım : Drenaj kit kurulumu

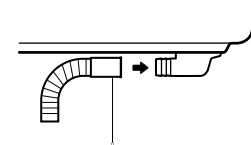
- Drenaj borusu gerekiyorsa, drenaj borusunu resimde gösterildiği gibi drenaj kitine bağlayın.
- Eğer istenmiyorsa, drenaj kit montajı yapılmasına gerek yoktur.



Su tahliye borusu No:Φ12 OD: Φ17



Su tahliye boru deliği

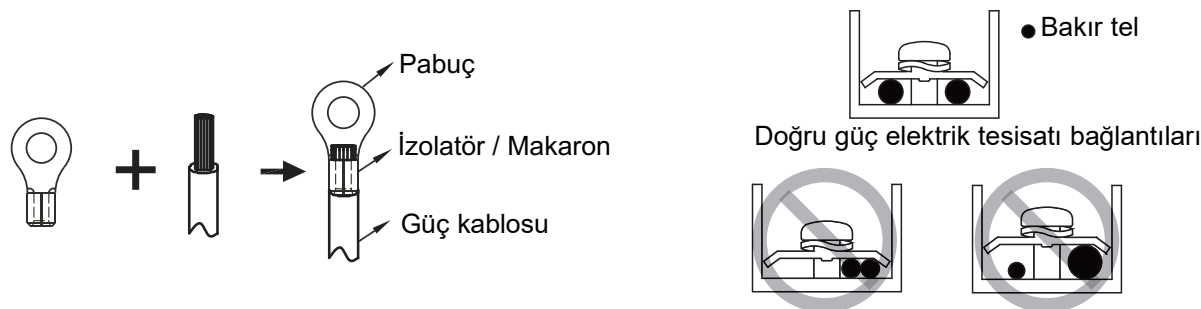


Drenaj borusu (satın alınacak)

8. Adım : Elektrik tesisatı

8.1 Güç kaynağının kablolamasına ilişkin önlemler

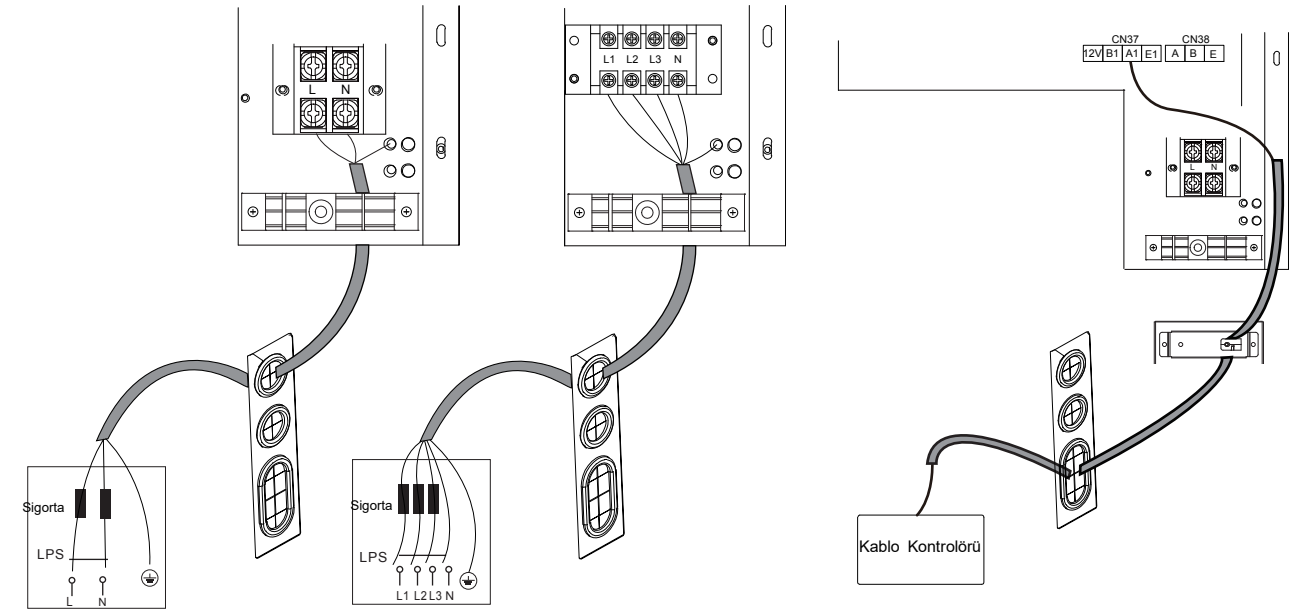
- Aynı ölçüye sahip elektrik tesisatını bağlarken aşağıdaki şekle göre bağlayın.



8.2 Güç hattı ve devre kesici seçimi

Üniteler	Maksimum aşırı akım koruyucusu (MOP)(A)	Kablo Kesidi (mm ²)
4-6kW 1-PH (3kW Isıtcı)	25	3×4.0
8-10kW 1-PH	25	3×4.0
8-10kW 1-PH (3kW Isıtcı)	40	3×6.0
12-16kW 1-PH	40	3×6.0
12-16kW 1-PH (3kW Isıtcı)	50	3×10.0
12-16kW 3-PH	25	5×2.5
12-16kW 3-PH (6/9kW Isıtcı)	32	5×6.0

8.3 Ana güç kaynağı kabloları ve ekipmanları



- Güç Kaynağı elektrik tesisatının boru hatlarından veya duvarlardan geçirilmesi gerekir.
- Kablolı kumanda hattının boru hatları veya duvardan geçirilmesi gerekir.

8.4 Diğer konponentler ve parçalar bağlantısı

- Daha ayrıntılı bilgi için lütfen kurulum kılavuzu 6.1.7'ye bakın.

9. Adım: Son test ve Kontroller

- Üniteyi açmadan önce lütfen kurulumun tamamını ve gerekli tüm ayarların yapıldığını kontrol edin.

- Gerekirse kurulumu yapan kişi, hava tahliyesi, ısıtma, soğutma ve kullanım suyu ısıtmanın doğru şekilde çalıştığını kontrol etmek için herhangi bir zamanda manuel test çalıştırması yapılabilir. ;bkz.“MENÜ > PARAMETRE

KONFIGURASYON 3.ÖZEL FONKSİYON>1.DENEME ÇALIŞTIRMA FONKSİYONU>1.KONTROL VE TEST

PARAMETERS CONFIG	1/1
1.CONFIG PARA-SETTING	
2.SYSTEM PARAMETERS	
3.SPECIAL FUNCTION	
4.MODIFY PASSWORD	
5.RESET	
6.RESTORE FACTORY PASSWORD	
OK	Λ V < > BACK

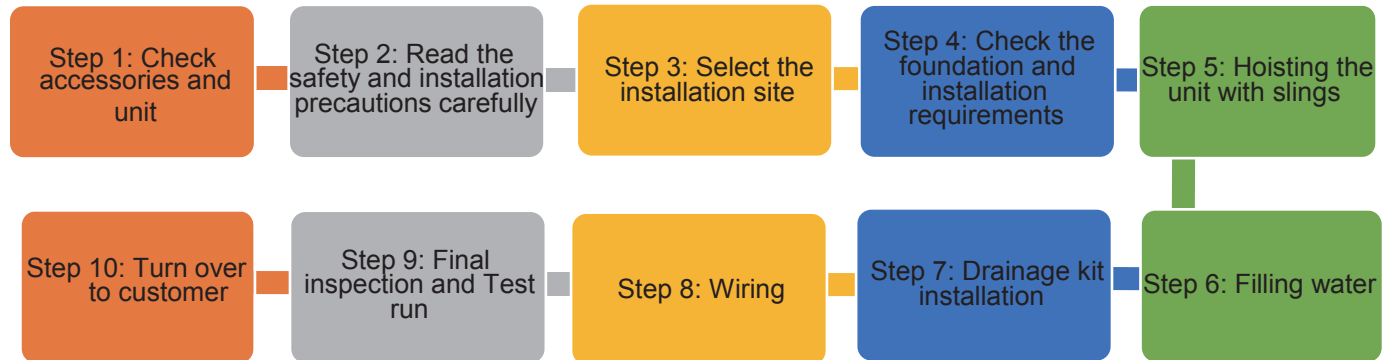
SPECIAL FUNCTION	1/1
1. TRIAL OPERATION FUNCTION	
2.FORCE DEFROST	OFF
3.RECYCLE REFRIG	OFF
OK	Λ V < > BACK

TRIAL OPERATION FUNCTION	1/1
1. CHECK AND TEST	
2.AIR EMPTYING TEST	OFF
3.PUMP TEST	OFF
4.COOL TEST	OFF
5.HEAT TEST	OFF
6.HOT WATER TEST	OFF
OK	Λ V < > BACK

10. Adım: Müşteriye geri dönüş

- Monoblok kullanım kılavuzu müşteriye teslim edilmelidir. Müşterilere kullanım kılavuzunun içeriğini detaylı bir şekilde anlatın.

Quick Installation Guide



Step 1: Check accessories and unit



Wired controller x1



Y-filter x1



Connecting wire of wired controller x1



Sensor x1



Outdoor Drainage elbow x1



Wired controller manual x1
Installation and owner's manual x1
Technical data manual x1
Energy label x1

Step 2: Read the safety and installation precautions carefully



WARNING

- All the activities described in this guide must be carried out by licensed technicians. Read the attached manuals carefully before installation.



Danger: Risk of burns/scalds
Indicates a condition that may result in burns/scalds due to extreme heat or cold.



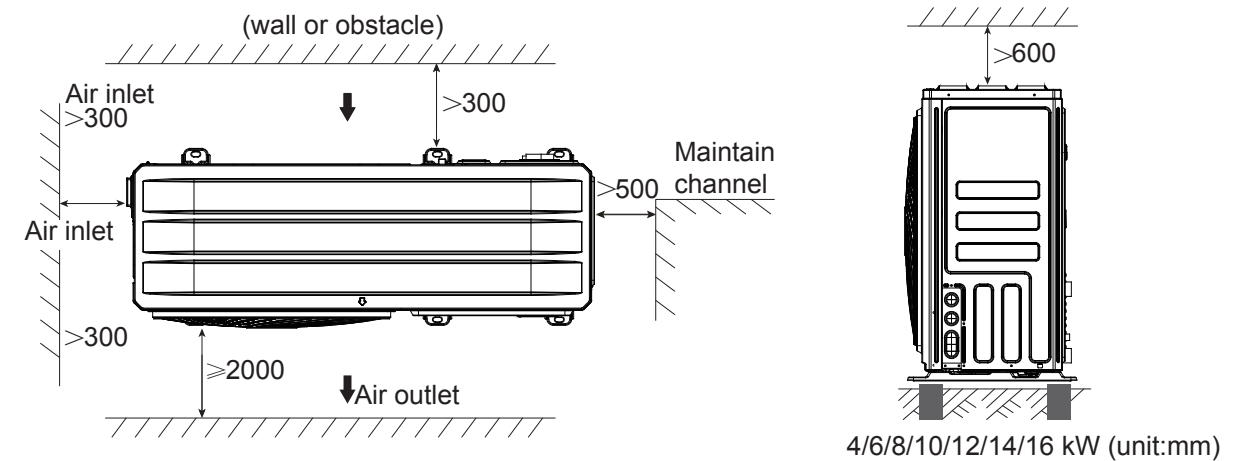
Hazard: Electric shock hazard
Indicates a condition that may result in electric shock.



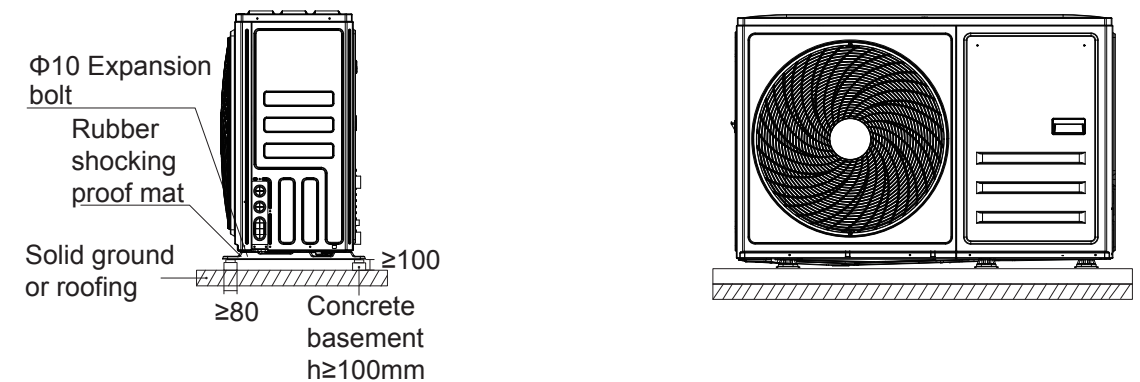
Risk of fire
flammable materials

Step 3: Select the installation site

- In normal condition, refer to the figures below for installation of the unit:
- For cold climate and more detailed notes, please refer to installation manual.

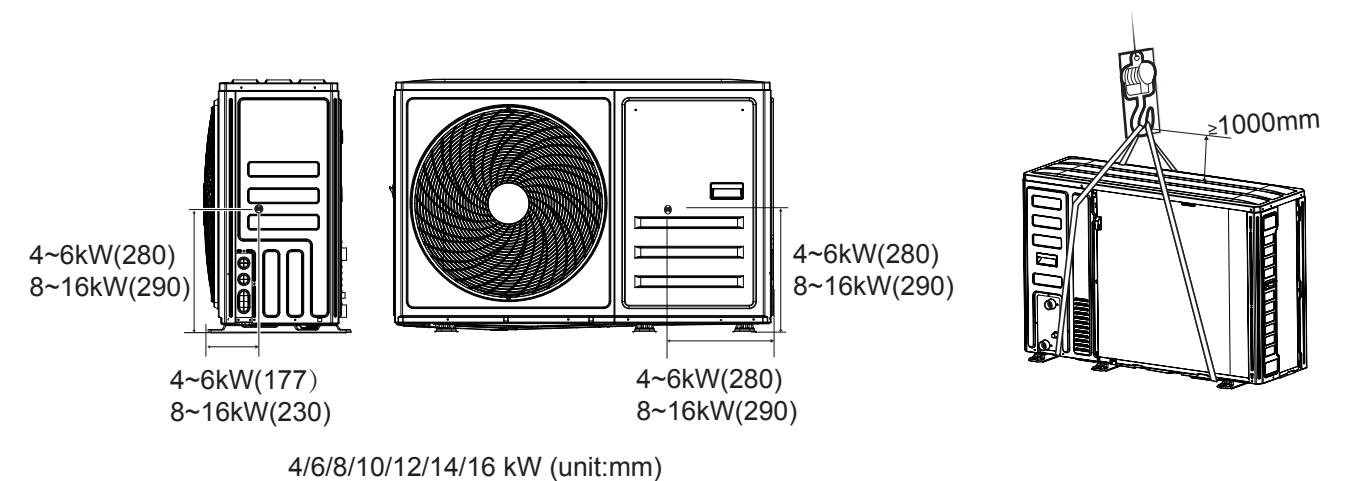


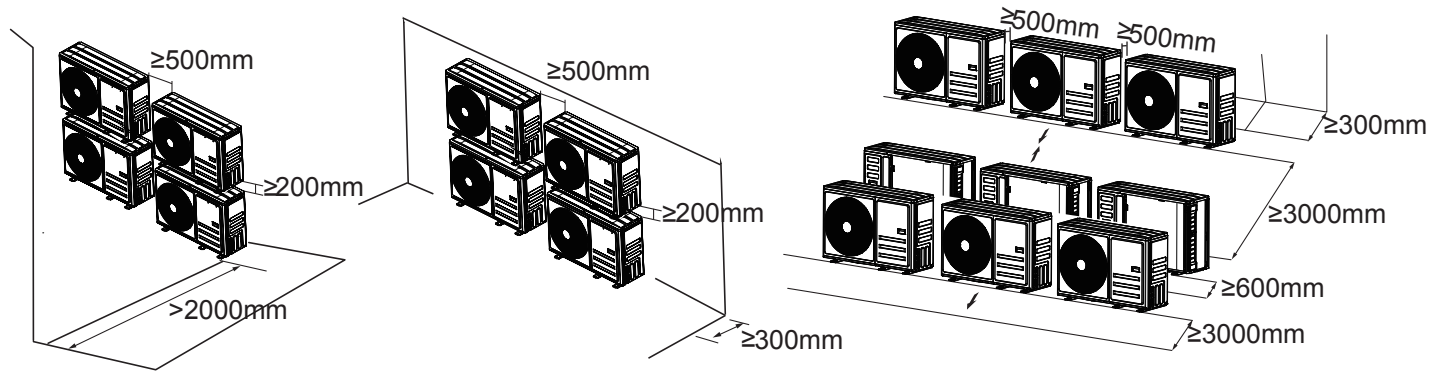
Step 4: Check the foundation and installation requirements



- Check the strength and level of the installation ground so that the unit may not cause any vibrations or noise during the operation.

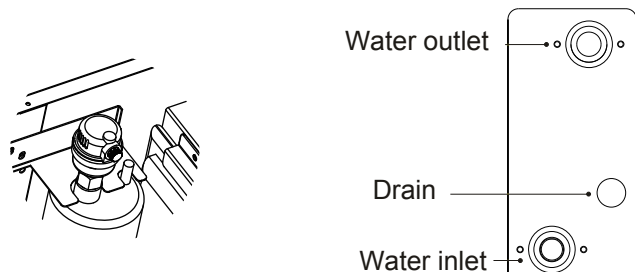
Step 5: Hoisting the unit with slings





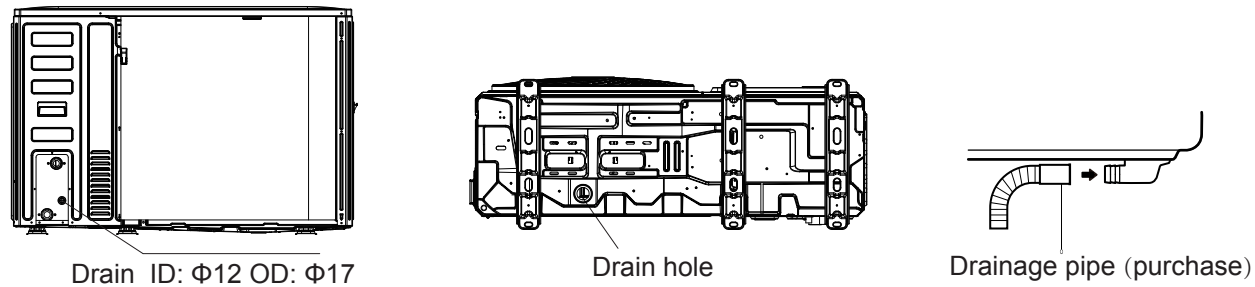
Step 6: Filling water

- Open the automatic air purge valve, turn it counterclockwise for 1.5-2 turns to release air from the system.
- Connect the water pipes according to the label attached below.



Step 7: Drainage kit installation

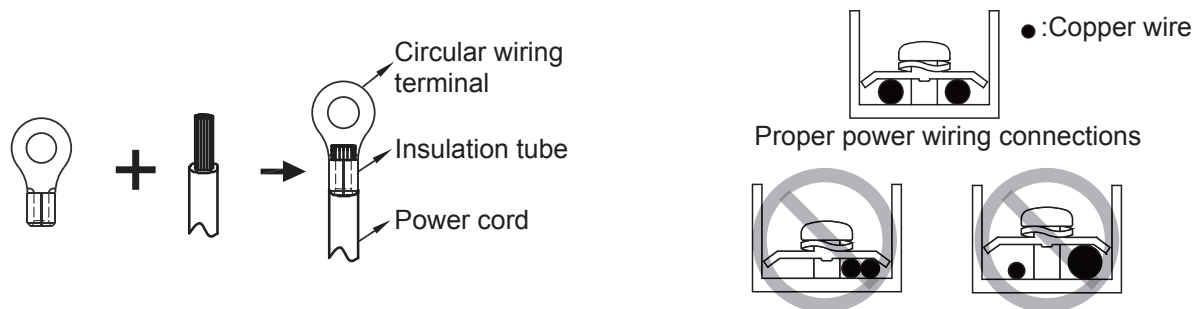
- If a drain pipe is required, connect the drain pipe to the drain kit as shown in the picture.
- If not,there is noneed to install the Drainage kit.



Step 8: Wiring

8.1 Precautions on wiring of power supply

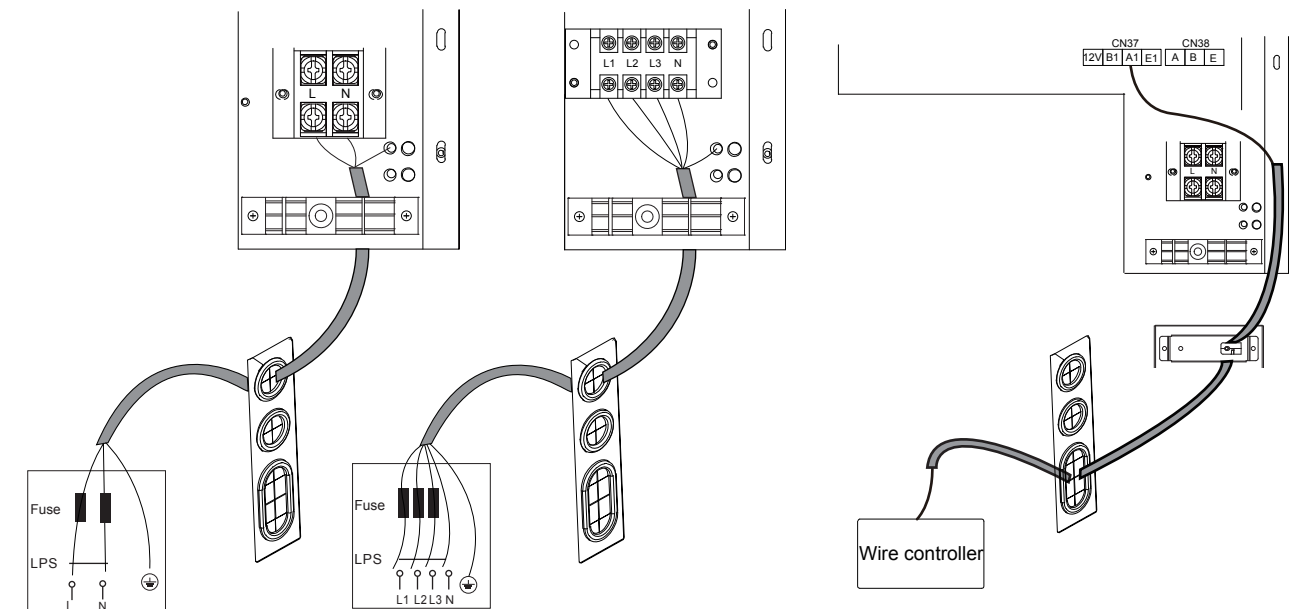
- When connecting wires of the same gauge, connect them according to the figure below.



8.2 Power line and circuit breaker selection

Unit	Maximum overcurrent protector(MOP)(A)	Wiring size(mm²)
4-6kW 1-PH (3kW heater)	25	3×4.0
8-10kW 1-PH	25	3×4.0
8-10kW 1-PH (3kW heater)	40	3×6.0
12-16kW 1-PH	40	3×6.0
12-16kW 1-PH (3kW heater)	50	3×10.0
12-16kW 3-PH	25	5×2.5
12-16kW 3-PH (6/9kW heater)	32	5×6.0

8.3 Equipment main power supply wiring



- Power Supply Wiring needs to be routed through pipelines or walls.
- The wire controller line needs to be routed through pipelines or walls.

8.4 Connection for other components

- Please refer to installation manual 6.1.7,for more detailed.

Step 9: Final checks and test run

- Before switching on the unit, please check the complete installation and all necessary settings have been carried out.
- If required, the installer can perform a manual test run operation at any time to check correct operation of air purge, heating, cooling and domestic water heating, refer to “ MENU>PARAMETERS CONFIG>3.SPECIALFUNCTION>1.TRIAL OPERATION FUNCTION>1.CHECK AND TEST

PARAMETERS CONFIG	1/1
1.CONFIG PARA-SETTING	
2.SYSTEM PARAMETERS	
3.SPECIAL FUNCTION	
4.MODIFY PASSWARD	
5.RESET	
6.RESTORE FACTORY PASSWORD	
OK	△V<> BACK

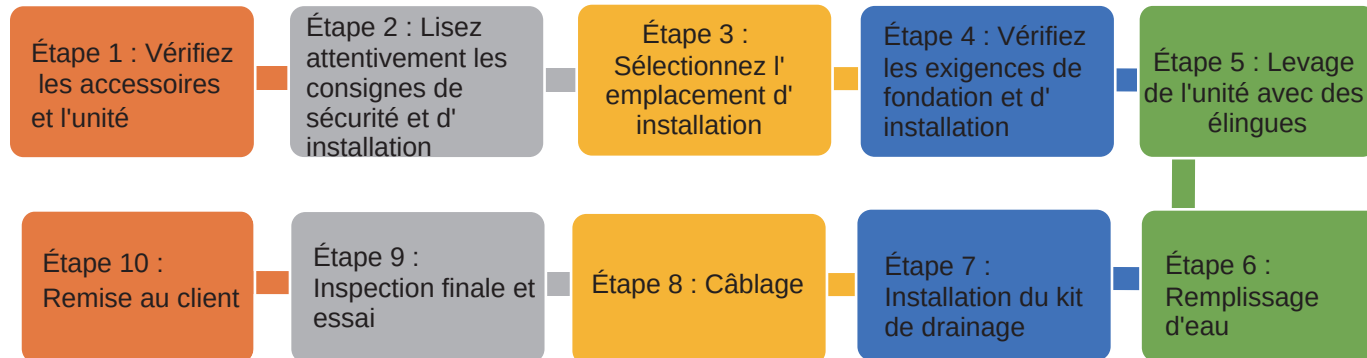
SPECIAL FUNCTION	1/1
1. TRIAL OPERATION FUNCTION	
2.FORCE DEFROST	OFF
3.RECYCLE REFRIG	OFF
OK	△V<> BACK

TRIAL OPERATION FUNCTION	1/1
1. CHECK AND TEST	
2.AIR EMPTYING TEST	OFF
3.PUMP TEST	OFF
4.COOL TEST	OFF
5.HEAT TEST	OFF
6.HOT WATER TEST	OFF
OK	△V<> BACK

Step 10: Turn over to customer

- The owner's manual of monobloc must be turned over to the customer. Explain the contents in the owner's manual to the customers in details.

Guide d'installation rapide



Étape 1 : Vérifiez les accessoires et l'unité



Contrôleur câblé x1



Filtre en Y x1



Fil de connexion du contrôleur câblé x1



Capteur x1



Coude de drainage extérieur x1



Manuel du contrôleur câblé x1
Manuel d'installation et du propriétaire x1
Manuel de données techniques x1
Étiquette énergétique x1

Étape 2 : Lisez attentivement les consignes de sécurité et d'installation

AVERTISSEMENT

- Toutes les activités décrites dans ce guide doivent être effectuées par des techniciens agréés. Veuillez lire attentivement les manuels joints avant l'installation.



Danger : Risque de brûlures/ébouillantage
Indique une condition pouvant entraîner des brûlures/ébouillantage en raison de températures extrêmes.



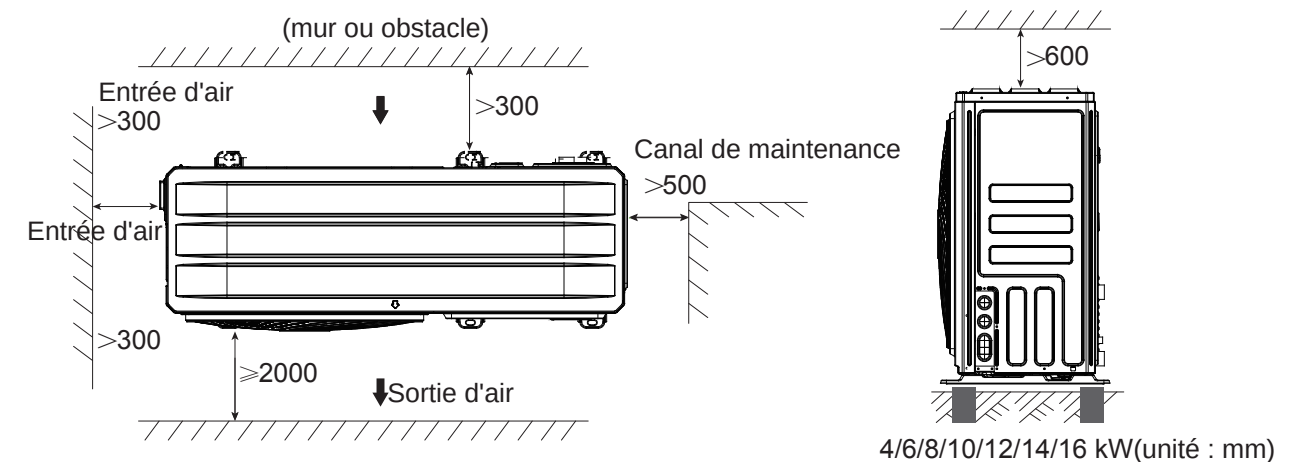
Risque : Risque de choc électrique
Indique une condition pouvant entraîner un choc électrique.



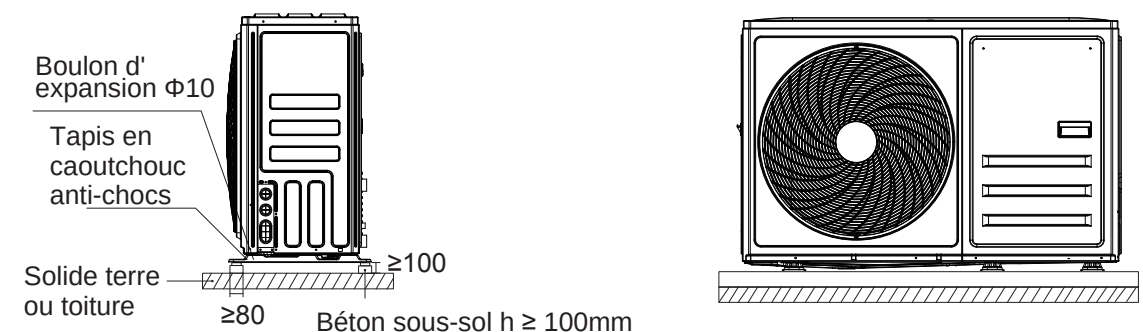
Risque d'incendie : Matériaux inflammables

Étape 3 : Sélectionnez l'emplacement d'installation

- En conditions normales, veuillez vous référer aux schémas ci-dessous pour l'installation de l'unité :
- Pour les climats froids et des notes plus détaillées, veuillez consulter le manuel d'installation.

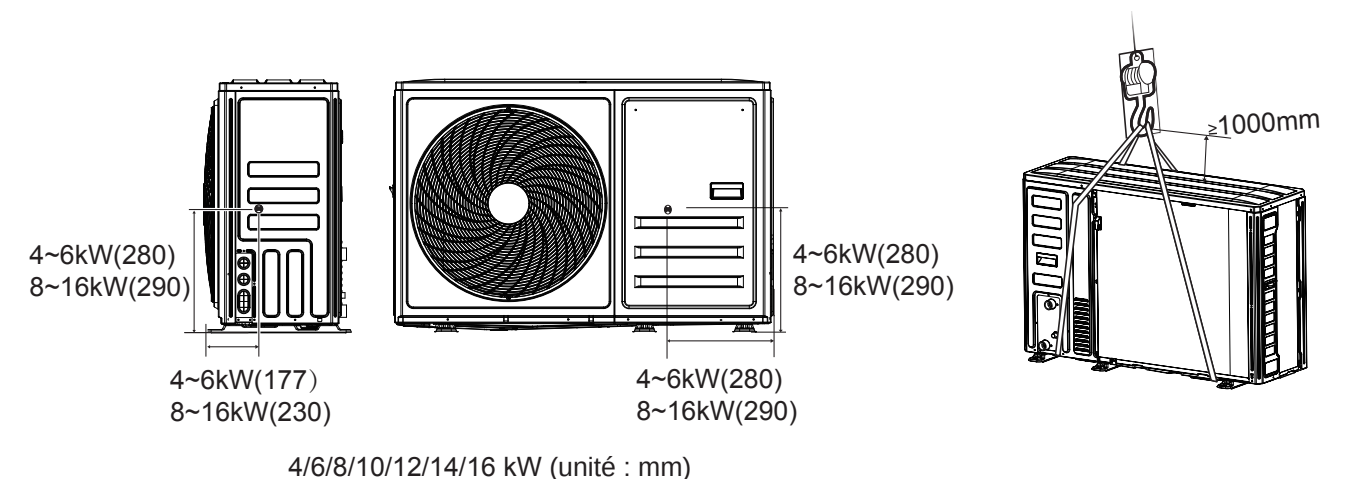


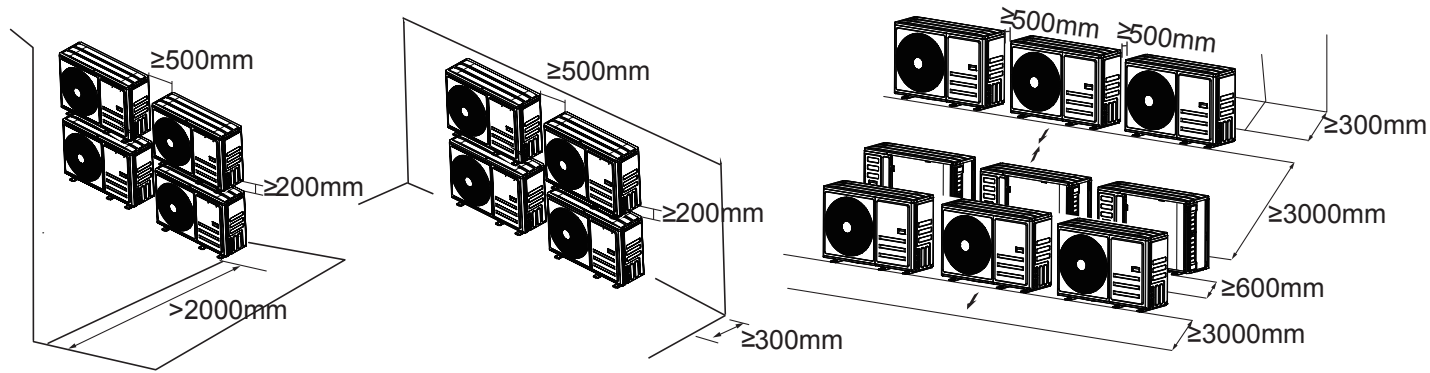
Étape 4 : Vérifiez les exigences de fondation et d'installation



- Vérifiez la résistance et le niveau du sol d'installation afin que l'unité ne cause pas de vibrations ou de bruit pendant son fonctionnement.

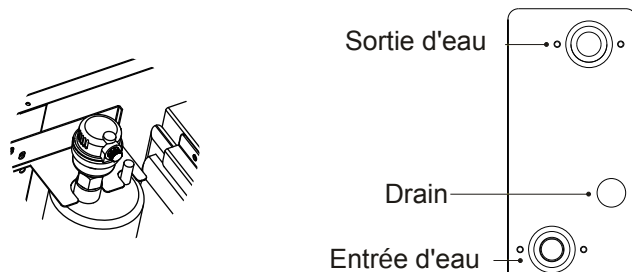
Étape 5 : Levage de l'unité avec des élingues





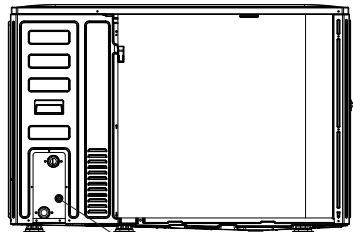
Étape 6 : Remplissage d'eau

- Ouvrez la vanne de purge automatique de l'air en la tournant dans le sens antihoraire de 1,5 à 2 tours pour libérer l'air du système.
- Connectez les tuyaux d'eau selon l'étiquette attachée ci-dessous.

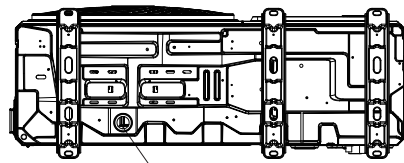


Étape 7 : Installation du kit de drainage

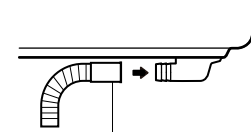
- Si un tuyau de drainage est nécessaire, connectez-le au kit de drainage comme indiqué sur l'image.
- Sinon, il n'est pas nécessaire d'installer le kit de drainage.



Drain ID: Φ12 OD: Φ17



Trou de drainage

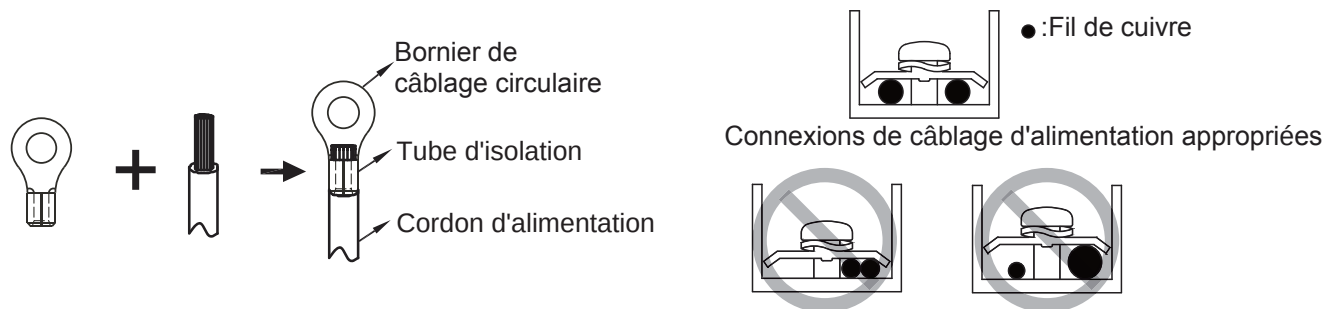


Tuyau de drainage (à acheter)

Étape 8 : Câblage

8.1 Précautions concernant le câblage de l'alimentation

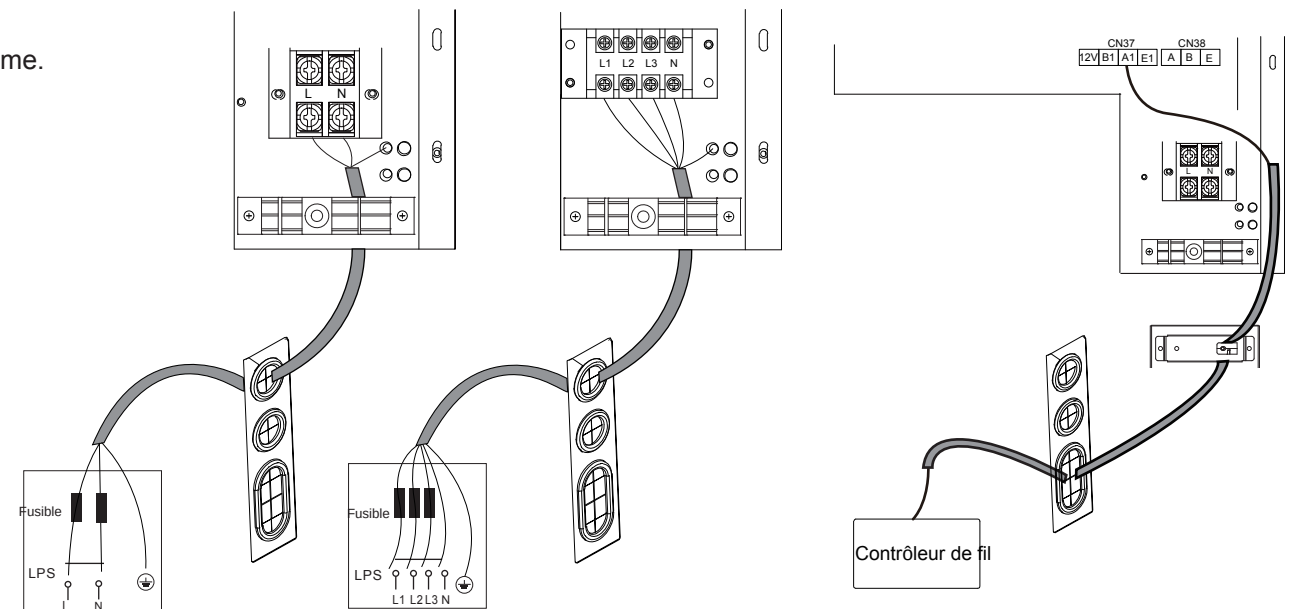
- Lors de la connexion des fils de même calibre, connectez-les selon le schéma ci-dessous.



8.2 Sélection de la ligne d'alimentation et du disjoncteur

Unité	Protecteur de surintensité maximum(MOP)(A)	Taille de câblage (mm ²)
4-6kW 1-PH (3kW chauffage)	25	3×4.0
8-10kW 1-PH	25	3×4.0
8-10kW 1-PH (3kW chauffage)	40	3×6.0
12-16kW 1-PH	40	3×6.0
12-16kW 1-PH (3kW chauffage)	50	3×10.0
12-16kW 3-PH	25	5×2.5
12-16kW 3-PH (6/9kW chauffage)	32	5×6.0

8.3 Câblage de l'alimentation principale de l'équipement



- Le câblage de l'alimentation doit être acheminé à travers des conduites ou des murs.
- La ligne de contrôleur de fil doit être acheminée à travers des conduites ou des murs.

8.4 Connexion pour d'autres composants

- Veuillez vous référer au manuel d'installation 6.1.7 pour plus de détails.

Étape 9 : Inspection finale et essai

- Avant de mettre l'unité en marche, veuillez vérifier que l'installation complète et tous les réglages nécessaires ont été effectués.
- Si nécessaire, l'installateur peut effectuer un test de fonctionnement manuel à tout moment pour vérifier le bon fonctionnement de la purge d'air, du chauffage, du refroidissement et du chauffage de l'eau domestique. Consultez "MENU>CONFIGURATION DES PARAMÈTRES> 3.FONCTION SPÉCIALE> 1.FONCTION DE TEST ET DE VÉRIFICATION".

PARAMETERS CONFIG		1/1
1.CONFIG PARA-SETTING		
2.SYSTEM PARAMETERS		
3.SPECIAL FUNCTION		
4.MODIFY PASSWARD		
5.RESET		
6.RESTORE FACTORY PASSWORD		
OK	△V<>	BACK

SPECIAL FUNCTION		1/1
1.TRIAL OPERATION FUNCTION		
2.FORCE DEFROST	OFF	
3.RECYCLE REFRIG	OFF	
OK	△V<>	BACK

TRIAL OPERATION FUNCTION		1/1
1.CHECK AND TEST		
2.AIR EMPTYING TEST	OFF	
3.PUMP TEST	OFF	
4.COOL TEST	OFF	
5.HEAT TEST	OFF	
6.HOT WATER TEST	OFF	
OK	△V<>	BACK

Étape 10 : Remise au client

- Le manuel du propriétaire du monobloc doit être remis au client. Expliquez en détail le contenu du manuel du propriétaire aux clients.

Guida rapida di installazione



1. Controllo del prodotto e degli accessori a corredo



Comando Cablato×1



Filtro Y×1



Cavo di collegamento comando cablato×1



Sensore×1



Raccordo a gomito per scarico condensa ×1



Manuale comando cablato×1
Manuale utente e di installazione×1
Dati tecnici×1
Etichetta energetica×1

2. Consultare le avvertenze e le precauzioni di sicurezza nel manuale di installazione.



AVVISO

- Tutte le attività descritte in questa guida devono essere eseguite da operatori opportunamente qualificati. Leggere il manuale allegato attentamente prima di eseguire l'installazione.



Pericolo: rischio di scottatura o ustione
Identifica una condizione in cui possono verificarsi scottature o ustioni a causa di calore o freddo eccessivi.



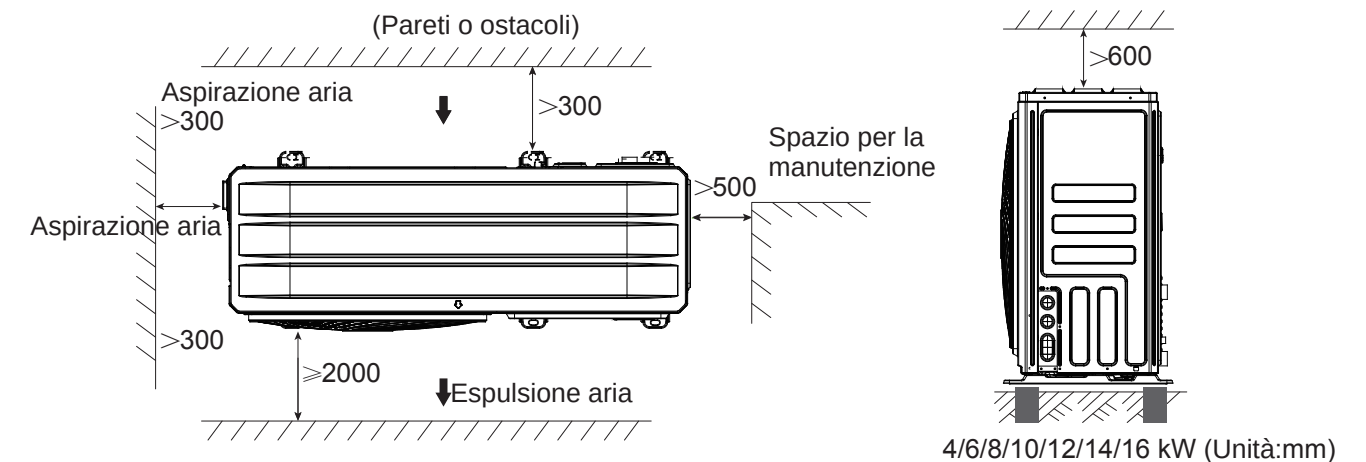
Rischio: Rischio elettrico indica una condizione in cui si può verificare folgorazione.



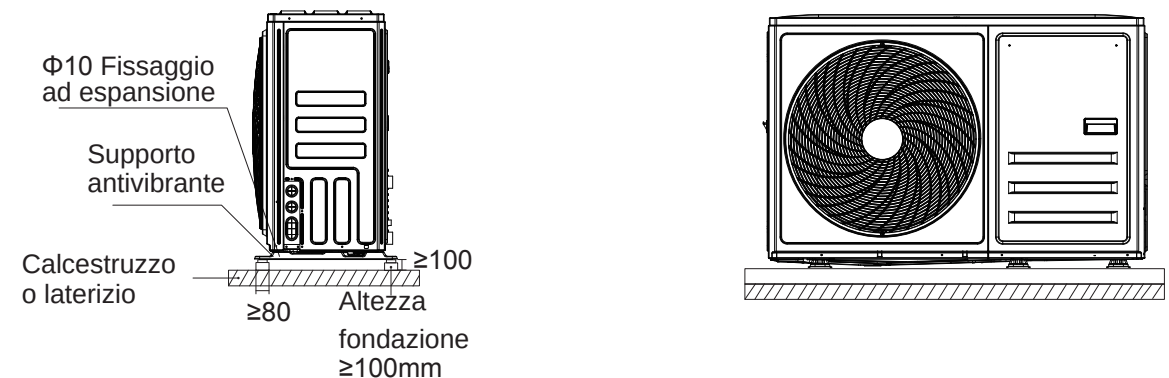
Rischio incendio
materiali infiammabili

3. Selezione del luogo di installazione

- Fare riferimento alla figura sottostante per le condizioni di installazione dell'unità.
- In caso di utilizzo in aree dal clima freddo e per ulteriori note, fare riferimento al manuale di installazione.

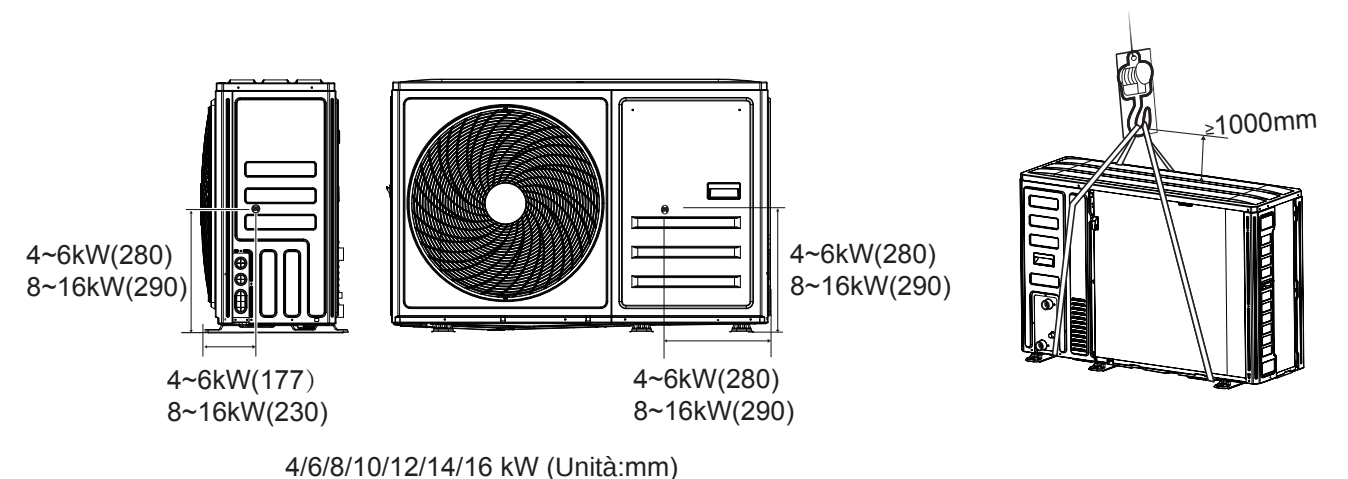


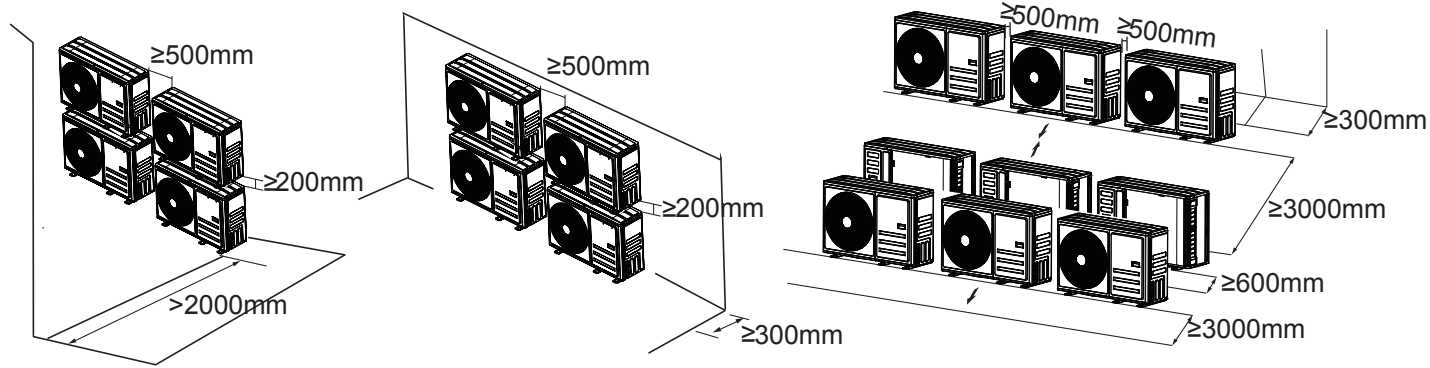
4. Basamento e requisiti per l'installazione



- Verificare la resistenza e l'orientamento orizzontale del supporto di installazione, per evitare che l'unità possa emettere rumore o vibrazioni.

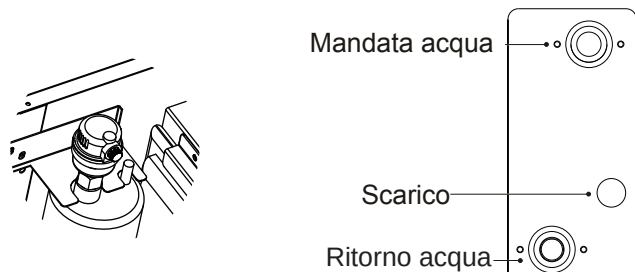
5. Sollevamento dell'unità tramite cinghie





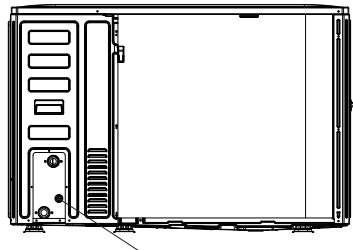
6. Riempimento circuito

- Durante il riempimento, verificare l'apertura della valvola dello sfiato automatico aria (1,5-2 giri, per espellere aria dal circuito).
- Collegare le tubazioni impianto come indicato nell'etichetta sotto.

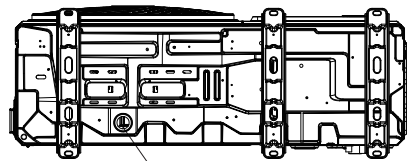


7. Scarico condensa

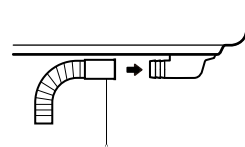
- Se necessario, collegare il raccordo per lo scarico condensa come indicato nella figura sotto.
- Se non è necessario convogliare la condensa in una tubazione di scarico, non installare il raccordo.



Tubazione DI: $\Phi 12$ OD: $\Phi 17$



Foro per raccordo di scarico

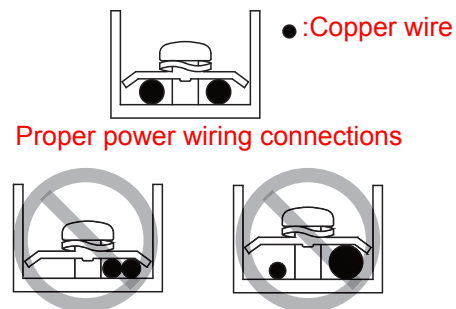
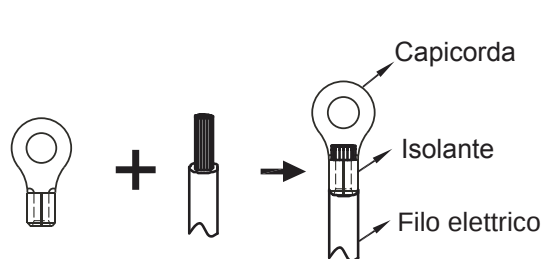


Tubazione di scarico (non fornita a corredo)

8. Cablaggio elettrico

8.1 Precauzioni per la realizzazione del cablaggio elettrico di alimentazione

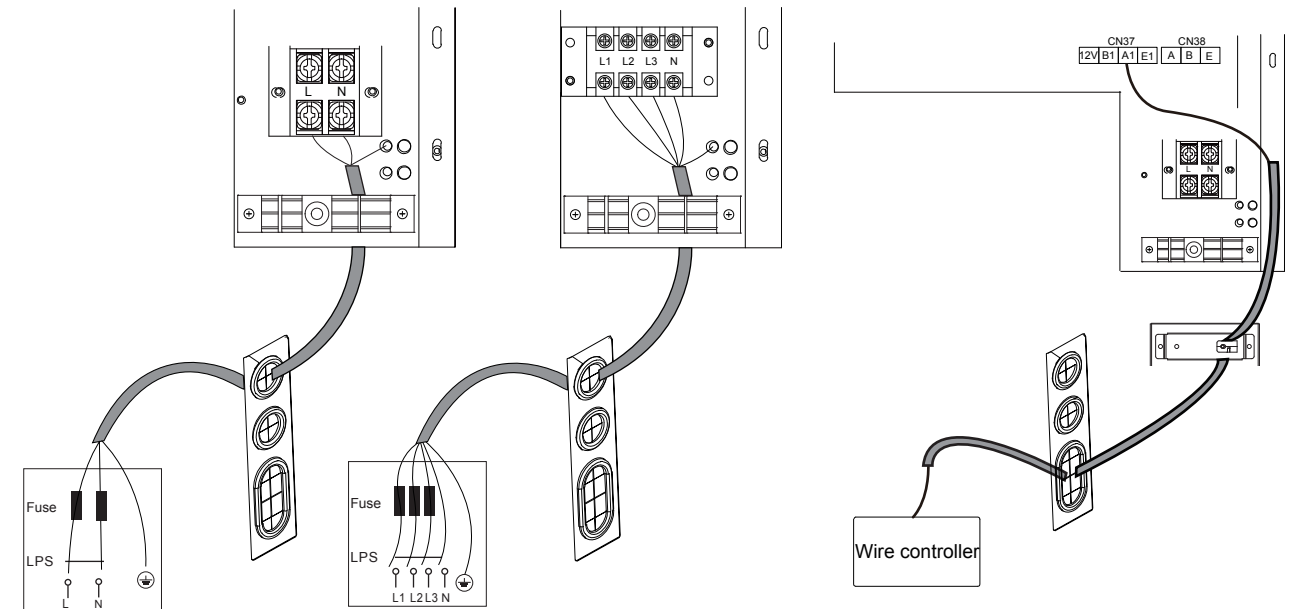
- Utilizzare conduttori della stessa sezione per il collegamento con le morsettiere; realizzare le connessioni come indicato.



8.2 Selezione cavi di alimentazione e interruttori di protezione

Unità	Interruttore magnetotermico(MOP)(A)	Sezione conduttori (mm ²)
4-6kW 1-PH (3kW Riscaldatore)	25	3×4.0
8-10kW 1-PH	25	3×4.0
8-10kW 1-PH (3kW Riscaldatore)	40	3×6.0
12-16kW 1-PH	40	3×6.0
12-16kW 1-PH (3kW Riscaldatore)	50	3×10.0
12-16kW 3-PH	25	5×2.5
12-16kW 3-PH (6/9kW Riscaldatore)	32	5×6.0

8.3 Cablaggio alimentazione elettrica



- Il cavo di alimentazione deve essere inguainato o protetto meccanicamente.
- Il cavo del comando cablato deve essere inguainato o protetto meccanicamente.

8.4 Altri collegamenti

- Fare riferimento alla sezione 6.1.7 del manuale di installazion per ulteriori informazioni.

9. Verifica finale e prova di funzionamento

- Prima di avviare il prodotto, verificare che l'installazione sia stata correttamente completata con tutti i dispositivi connessi e le corrette impostazioni applicate.
- Se necessario, è disponibile un menù per il funzionamento di prova per lo spurgo aria, e le funzioni di marcia forzata.“ MENU>PARAMETERS CONFIG>3.SPECIALFUNCTION>1.TRIAL OPERATION FUNCTION>1. CHECK AND TEST

PARAMETERS CONFIG 1/1	
1.CONFIG PARA-SETTING	
2.SYSTEM PARAMETERS	
3.SPECIAL FUNCTION	
4.MODIFY PASSWARD	
5.RESET	
6.RESTORE FACTORY PASSWORD	
OK	AV<>BACK

SPECIAL FUNCTION 1/1	
1.TRIAL OPERATION FUNCTION	
2.FORCE DEFROST	OFF
3.RECYCLE REFRIG	OFF
OK	AV<>BACK

TRIAL OPERATION FUNCTION 1/1	
1.CHECK AND TEST	
2.AIR EMPTYING TEST	OFF
3.PUMP TEST	OFF
4.COOL TEST	OFF
5.HEAT TEST	OFF
6.HOT WATER TEST	OFF
OK	AV<>BACK

10. Consegna all'utilizzatore

- Consegnare all'utilizzatore tutti i manuali a corredo con il prodotto e fornire le spiegazioni sul funzionamento dell' unità.