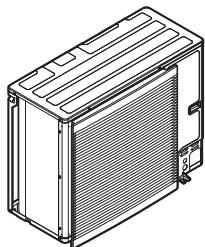




# Installation manual

**Daikin Altherma 3 R**



<https://daikintechnicaldatahub.eu>



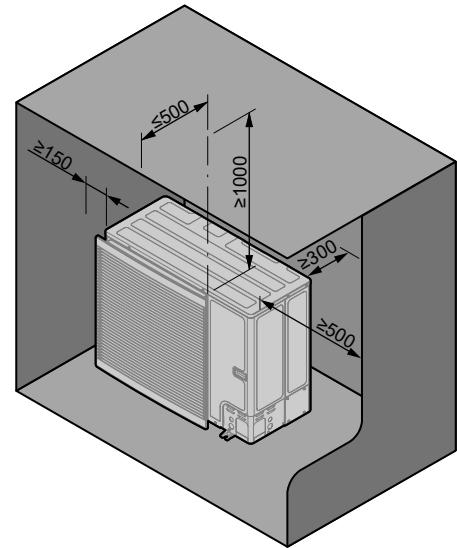
**ERLA11DAV3  
ERLA14DAV3  
ERLA16DAV3**

**ERLA11DAW1  
ERLA14DAW1  
ERLA16DAW1**

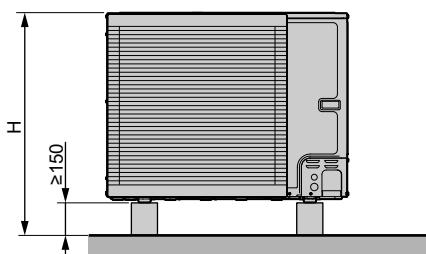
Installation manual  
Daikin Altherma 3 R

English

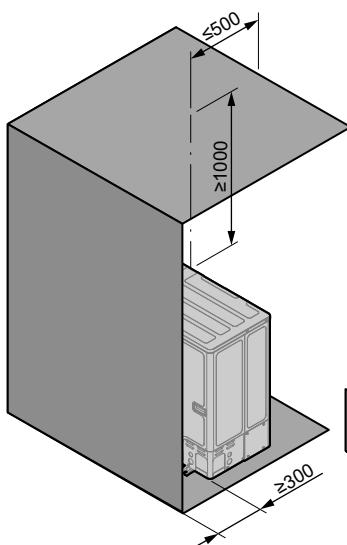
**Top-side obstacle  
Suction-side obstacle**



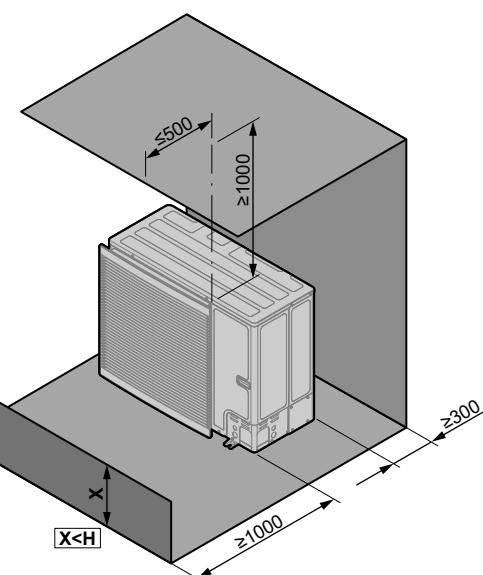
**General  
(mm)**



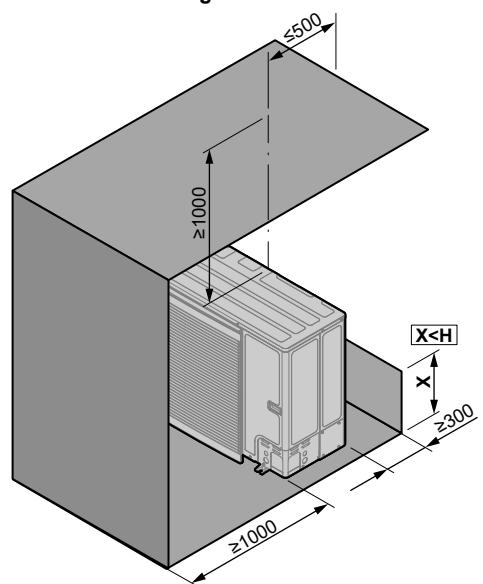
**Top-side obstacle  
Discharge-side obstacle**



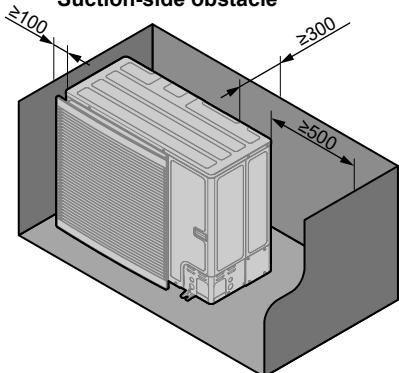
**Top-side obstacle  
Suction + discharge-side obstacle  
Wall on suction side**



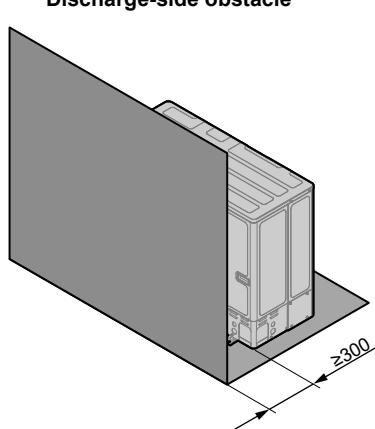
**Top-side obstacle  
Suction + discharge-side obstacle  
Wall on discharge side**



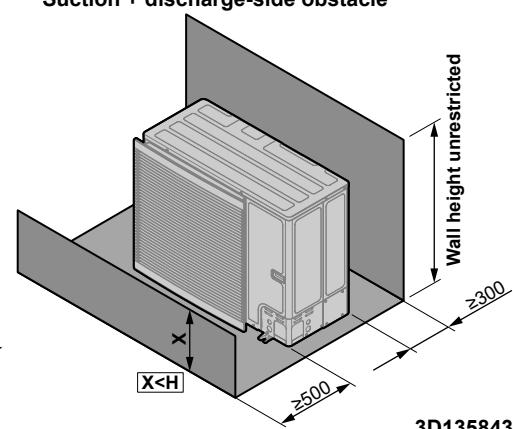
**No top-side obstacle  
Suction-side obstacle**



**No top-side obstacle  
Discharge-side obstacle**



**No top-side obstacle  
Suction + discharge-side obstacle**



3D135843



CE - DECLARATION-OF-CONFORMITY	CE - DECLARACION-DE-CONFORMIDAD	CE - DECLARAÇÃO-DE-CONFORMIDADE	CE - ERKLÄRING OM-SAMSVAR	CE - IZJAVA-O-USKLADENOSTI	CE - IZJAVA O SKLADNOSTI	CE - ATTITIKES-DEKLARACIJA									
CE - KONFORMITÄTSERKLÄRUNG	CE - DICHARIAZIONE-DI-CONFORMITA	CE - 3ΑΡΘΡΕΙΝΟ-Ο-CΟΟΤΒΕΤΚΙΟΥ	CE - ILMOITUS-YHDENMUKAISUDESTA	CE - MEGFELELŐSÉGI-NYILATKOZAT	CE - VASTAVUSDEKLARATSIOON	CE - ATTBILSTĀBAS-DEKLARĀCIJA									
CE - DECLARATION-DE-CONFORMITE	CE - ΔΗΛΩΣΗ ΣΥΜΜΟΦΩΣΗΣ	CE - OVERENSSTEMMELSESERKLÆRING	CE - PROHLÁŠENÍ-O-SHODE	CE - DEKLARACIJA-Z-GODNOSTI	CE - DEKLARACIJA-ZA-СОГДНОСТИ	CE - VYHLÁSENIE-Z-HODÝ									
01 (⇒) continuation of previous page: 02 (⇒) Fortsetzung der vorherigen Seite: 03 (⇒) suite de la page précédente: 04 (⇒) vervolg van vorige pagina:	05 (⇒) continuación de la página anterior: 06 (⇒) continua dalla pagina precedente: 07 (⇒) συνέχεια από την προηγούμενη σελίδα: 08 (⇒) fortsettelse fra forrige side: 09 (⇒)продолжение предыдущей страницы: 10 (⇒) fortsatt fra forrige side: 11 (⇒) förtsettning från föregående sida:	08 (⇒) continuação da página anterior: 09 (⇒) продолжение предыдущей страницы: 10 (⇒) fortsatt fra forrige side: 11 (⇒) förtsettning från föregående sida:	12 (⇒) fortsettelse fra forrige side: 13 (⇒) jatkova edellisellä sivulta: 14 (⇒) pokračování z předešlé strany:	15 (⇒) nastavak s prethodne stranice: 16 (⇒) foljatysis az előző oldalról: 17 (⇒) ciaj dalzys z poprednej strany: 18 (⇒) continuarea paginii anterioare:	19 (⇒) nadaljevanje s prejšnje strani: 20 (⇒) eemisse lehendule järg: 21 (⇒) продължение от предходната страница:	22 (⇒) anketisno posluijo ūspajlo īejšins: 23 (⇒) iepriekšķejās lappuses turpinājums: 24 (⇒) pokračovanie z predchádzajúcej strany: 25 (⇒) önceki sayfadan devam:									
01 Design Specifications of the models to which this declaration relates: 02 Konstruktionsdaten der Modelle auf die sich diese Erklärung bezieht: 03 Spécifications de conception des modèles auxquels se rapporte cette déclaration: 04 Ontwerpsspecificaties van de modellen waarop deze verklaring betrekking heeft: 05 Especificaciones de diseño de los modelos a los cuales hace referencia esta declaración: 06 Specifiche di progetto dei modelli cui fa riferimento la presente dichiarazione:	07 Προβιαράφες Σχεδιασμού των μοντέλων με τα οποία σχετίζεται η δήλωση: 08 Especificações do projeto dos modelos a que se aplica esta declaração: 09 Προβτικές χαρακτηριστικές μοδελών, κατόπιν οποίων αποτελείται το σημερινό ζητημα: 10 Typespecifikationer för de modeller, som denne erklaring vedrörer: 11 Designspezifikationer för de modeller som denna deklaration gäller: 12 Konstruksjonsspesifikasjoner for de modeller som berøres av denne deklarasjonen:	07 Προβιαράφες Σχεδιασμού των μοντέλων με τα οποία σχετίζεται η δήλωση: 08 Especificações do projeto dos modelos a que se aplica esta declaração: 09 Προβτικές χαρακτηριστικές μοδελών, κατόπιν οποίων αποτελείται το σημερινό ζητημα: 10 Typespecifikationer för de modeller, som denne erklaring vedrörer: 11 Designspezifikationer för de modeller som denna deklaration gäller: 12 Konstruksjonsspesifikasjoner for de modeller som berøres av denne deklarasjonen:	13 Tätä ilmoitusta koskevien mallien rakennemäärittely: 14 Specificație designu modelu, ke kterym se vztahuje touto prohlášení: 15 Specifikacija dizaina za modelne na koje se ova izjava odnosi: 16 A jelen nyilatkozat tártyát képező modellek tervezési jellemzői: 17 Specifikace konstrukcyjne modeli, których dotyczy deklaracja: 18 Specificație de protecție ale modelelor la care se referă această declaratie: 19 Specifikacija tehničnega načrta za modele, na katere se nanaša ta deklaracija:	20 Deklaratsiooni alla kuuluvate mudelite disainispektsioonid: 21 Projekti spetsifikatsii na modelite, za koto se otvara deklaracijata: 22 Konstruktivnes specifikacijos modelui, kurie susiję su šia deklaracija: 23 To modelu dizaina specificacijas, uz kuriam attiecas šī deklarācija: 24 Konštrukčné špecifikácie modelu, ktorého sa týka toto vyhlásenie: 25 Bu bildirilen ilgili olduğu modellerin Tasarım Özellikleri:											
01 · Maximum allowable pressure (PS): <K> (bar) · Minimum/maximum allowable temperature (TS°): * TSmín: Minimum temperature at low pressure side: <L> (°C) * TSmax: Saturated temperature corresponding with the maximum allowable pressure (PS): <M> (°C) · Refrigerant: <N> · Setting of pressure safety device: <P> (bar) · Manufacturing number and manufacturing year: refer to model nameplate 02 · Maximal zulässiger Druck (PS): <K> (bar) · Minimal/maximal zulässige Temperatur (TS°): * TSmín: Mindesttemperatur auf der Niederdruckseite: <L> (°C) * TSmax: Sättigungs temperatur die dem maximal zulässigen Druck (PS) entspricht: <M> (°C) · Kältemittel: <N> · Einstellung der Druck-Schutzvorrichtung: <P> (bar) · Herstellungsnummer und Herstellungsjahr: siehe Typenschild des Modells 03 · Pression maximale admise (PS): <K> (bar) · Température minimum/maximum admise (TS°): * TSmín: température minimum/la plus basse pression: <L> (°C) * TSmax: température saturée correspondante à la pression maximale admise (PS): <M> (°C) · Réfrigérant: <N> · Réglage du dispositif de sécurité de pression: <P> (bar) · Numéro de fabrication et année de fabrication: se reporter à la plaquette signalétique du modèle 04 · Maximale toelaatbare druk (PS): <K> (bar) · Minimale/maximale toelaatbare temperatuur (TS°): * TSmín: Minimumtemperatuur aan lagere drukzijde: <L> (°C) * TSmax: Verzadigde temperatuur die overeenstemt met de maximale toelaatbare druk (PS): <M> (°C) · Koelmedium: <N> · Instelling van drukbeveiliging: <P> (bar) · Fabricatienummer en fabricatielogo: zie naamplaat model 05 · Presión máxima admisible (PS): <K> (bar) · Temperatura mínima/máxima admisible (TS°): * TSmín: Temperatura mínima en el lado de baja presión: <L> (°C) * TSmax: Temperatura saturada correspondiente a la presión máxima admisible (PS): <M> (°C) · Refrigerante: <N> · Ajuste del preestablecido de seguridad: <P> (bar) · Número de fabricación y año de fabricación: consulte la placa de especificaciones técnicas del modelo	06 · Pressione massima consentita (PS): <K> (bar) · Temperatura minima/maxima consentita (TS°): * TSmín: temperatura minima nel lato di bassa pressione: <L> (°C) * TSmax: temperatura satira corrispondente alla pressione massima consentita (PS): <M> (°C) · Refrigerante: <N> · Impostazione del dispositivo di controllo della pressione: <P> (bar) · Numero di serie e anno di produzione: fare riferimento alla targhetta del modello 07 · Maksimal tillatt tryk (PS): <K> (bar) · Temperatur med maksimal tillatt temperatur (TS°): * TSmín: Elágostó hőmérséklet a legelso hőmérsékletnél: <L> (°C) * TSmax: Környezetbeli hőmérséklet a működési hőmérsékletnél: <M> (°C) · Kølemeddel: <N> · Inställning för trycksäkerhetsenhet: <P> (bar) · Tillverkningsnummer och tillverkningsår: se modellens namnplåt 12 · Maksimal tillatt trykk (PS): <K> (bar) · Minimalkontrollert tillatt temperatur (TS°): * TSmín: Minimumtemperatur på lavtrykksiden: <L> (°C) * TSmax: Methringstempertatur i samsvar med maksimalt tillatt trykk (PS): <M> (°C) · Kjølemedium: <N> · Innstilling av sikkerhetsanordning for trykk: <P> (bar) · Produktnummer og produktionsår: se modellens merkeplate 13 · Suurim salitut pain (PS): <K> (bar) · Pieniin/suurin salitut lämpötila (TS°): * TSmín: Alhaisin matkapallopainut lämpötila: <L> (°C) * TSmax: Suurinta salitutta painetta (PS) vastavaa kylväistylämpötila: <M> (°C) · Kylmämaine: <N> · Varmuuspiirteinaine asetus: <P> (bar) · Valmistusnumero ja valmistusvuosi: kalso mallin nimikilpi 14 · Maximální přípustný tlak (PS): <K> (bar) · Minimální/maximální přípustná teplota (TS°): * TSmín: Minimální tlak na nízkotlaké straně: <L> (°C) * TSmax: Saturovaná tlak odpovídající maximálnímu přípustnému tlaku (PS): <M> (°C) · Chladivo: <N> · Nastavení bezpečnostního tlakového zařízení: <P> (bar) · Výrobní číslo a rok výroby: viz typový štítek modelu	15 · Najvičji dopušten tlak (PS): <K> (bar) · Najnižja/najvišja dopuštena temperatura (TS°): * TSmín: Najnižja temperatura u području niskog tlaka: <L> (°C) * TSmax: Standardna temperatura koja odgovara najvećem dopuštenom tlaku (PS): <M> (°C) · Rashladivo sredstvo: <N> · Postavke sigurnosne naprave za tlak: <P> (bar) · Proizvodni broj i godina proizvodnje: pogledajte natpisnu pličicu modela 11 · Maximálni tlak (PS): <K> (bar) · Minimálna tlak (PS): <L> (°C) * TSmín: Minimálna tlak (PS): <L> (°C) * TSmax: Mäťnadtstempertur am motsvarar maximalt tillat tryck (PS): <M> (°C) · Kódmeddel: <N> · Inställning för trycksäkerhetsenhet: <P> (bar) · Tillverkningsnummer och tillverkningsår: se modellens namnplåt 12 · Maksimalt tillatt trykt (PS): <K> (bar) · Minimalkontrollert tillatt temperatur (TS°): * TSmín: Minimumtemperatur på lavtrykksiden: <L> (°C) * TSmax: Mættet temperatur svarende til maks. tillatt tryk (PS): <M> (°C) · Kølemeddel: <N> · Inställning för trycksäkerhetsenhet: <P> (bar) · Tillverkningsnummer och tillverkningsår: se modellens namnplåt 13 · Suurim salitut pain (PS): <K> (bar) · Pieniin/suurin salitut lämpötila (TS°): * TSmín: Alhaisin matkapainepuolen lämpötila: <L> (°C) * TSmax: Suurinta salitutta painetta (PS) vastavaa kylväistylämpötila: <M> (°C) · Kylmämaine: <N> · Varmuuspiirteinaine asetus: <P> (bar) · Valmistusnumero ja valmistusvuosi: kalso mallin nimikilpi 14 · Maximálni přípustný tlak (PS): <K> (bar) · Minimální/maximální přípustná teplota (TS°): * TSmín: Minimální tlak na nízkotlaké straně: <L> (°C) * TSmax: Saturovaná tlak odpovídající maximálnímu přípustnému tlaku (PS): <M> (°C) · Chladivo: <N> · Nastavení bezpečnostního tlakového zařízení: <P> (bar) · Numer fabrikacie si anul de fabricatie: consultaj placă de identificare a modelului	19 · Maksimalni dovoljeni tlak (PS): <K> (bar) · Minimalna/maksimalna dovoljena temperatura (TS°): * TSmín: Minimalna temperatura u području niskog tlaka: <L> (°C) * TSmax: Nasičena temperatura, ki ustreza maksimalnemu dovoljenemu tlaku (PS): <M> (°C) · Hladivo: <N> · Nastavljanje varnostne naprave za tlak: <P> (bar) · Proizvodni broj i godina proizvodnje: pogledajte natpisnu pličicu modela 16 · Legnayyob megengedhető nyomás (PS): <K> (bar) · Legkisebb/legnagyobb megengedhető hőmérséklet (TS°): * TSmín: Legkisebb megengedhető hőmérséklet a kis nyomásul: <L> (°C) * TSmax: A legnagyobb megengedhető nyomásnak (PS) megfelelő telítettsgép hőmérséklet: <M> (°C) · Legnayyob megengedhető nyomásnak (PS) megfelelő telítettsgép hőmérséklet: <N> (°C) · A különnyés-kapsoló belájtása: <P> (bar) · Gyártási szám és gyártási év: lásd a berendezés adaptáláján 17 · Maksymalny dopuszczalny poziom (PS): <K> (bar) · Minimalna/maksymalna dopuszczalna temperatura (TS°): * TSmín: Minimalna temperatura po stronie niskociśnieniowej: <L> (°C) * TSmax: Temperatura nasycenia odpowiadająca maksymalnemu dopuszczalnemu ciśnieniu (PS): <M> (°C) · Czynnik chłodzący: <N> · Nastawa ciśnieniowego urządzenia bezpieczeństwa: <P> (bar) · Numer fabryczny oraz rok produkcji: tablica znamionowa modelu 18 · Presiune maximă admisibilă (PS): <K> (bar) · Temperatura minimă/maximă admisibilă (TS°): * TSmín: Temperatura minimă pe partea de presiune joasă: <L> (°C) * TSmax: Temperatura de saturatie corespunzănd presiunii maxime admisibile (PS): <M> (°C) · Temperatura minimă/maximă admisibilă (TS°): * TSmín: Temperatura minimă pe partea de presiune joasă: <L> (°C) * TSmax: Temperatura de saturatie corespunzănd presiunii maxime admisibile (PS): <M> (°C) · Agent frigorific: <N> · Reglarea dispozitivului de siguranță pentru presiune: <P> (bar) · Numărul de fabricație și anul de fabricație: consultaj placă de identificare a modelului 21 · Maximálna dovoljana tlak (PS): <K> (bar) · Minimálna/maksimálna dovoljana teplota (TS°): * TSmín: Minimálna teplota na nasičanju, súhodstva na maximálno dovoljnom tlakom (PS): <L> (°C) * TSmax: Teplota na nasičanju, súhodstva na maximálno dovoljnom tlakom (PS): <M> (°C) · Označenie: <N> · Nastrčka na prednázdeleného určenstva za tlak: <P> (bar) · Fabričný číslo a rok výroby: výrobkový tabuľkový číslo 22 · Maksimalis leistungs slégis (PS): <K> (bar) · Minimal/maksimal leistungs temperatur (TS°): * TSmín: Minimali leistungs temperatur (PS): <L> (°C) * TSmax: Prisoltintia temperatúra, attihambal maksimalu leistingu slégij (PS): <M> (°C) · Saldymo skystis: <N> · Apsauginio slėgio prietaiso nustatymas: <P> (bar) · Gaminimo numeris ir pagaminiu metai: žiūrėkite modelio pavadinimo plokštėje 23 · Maksimāls pielājams spiediens (PS): <K> (bar) · Minimāls/maksimāls pielājams temperatūra (TS°): * TSmín: Minimāls temperatūra zemē slēģio pusē: <L> (°C) * TSmax: Piešķirtā temperatūra saskaņā ar maksimālu pielājumu spiedieni (PS): <M> (°C) · Dzesinātājs: <N> · Spiediena drošības ierīces iestāšanai: <P> (bar) · Izgatavošanas numurs un izgatavošanas gads: skat. modela izgatavošanuma plānkarte	24 · Maximálny povolený tlak (PS): <K> (bar) · Minimálna/maksimálna povolená teplota (TS°): * TSmín: Minimálna teplota na nízkotlakovej strane: <L> (°C) * TSmax: Nasycená teplota korešpondujúca s maximálnym povoleným tlakom (PS): <M> (°C) · Chladivo: <N> · Nastavanie tlakového poistného zariadenia: <P> (bar) · Vyrobené číslo a rok výroby: nájdete na výrobnom štítku modelu 25 · Izin verilen maksimum basınç (PS): <K> (bar) · Izin verilen minimum/maksimum sıcaklık (TS°): * TSmín: Düşük basınç tarafındaki minimum sıcaklık: <L> (°C) * TSmax: Izin verilen maksimum basınç (PS) kişi gelən deyim sıcaklığı: <M> (°C) · Sıfatlıca: <N> · Bascın enmîyet düzlenin ayarı: <P> (bar) · İmalat numarası ve imalat yılı: modelin ünite plakasına bakın											
01 Name and address of the Notified body that judged positively on compliance with the Pressure Equipment Directive: <Q> 02 Name und Adresse der benannten Stelle, die positiv unter Einhaltung der Druckanlagen-Richtlinie urteilt: <Q> 03 Nom et adresse de l'organisme notifié qui a évalué positivement la conformité à la directive sur l'équipement de pression: <Q> 04 Naam en adres van de aangemelde instantie die positief geoordeeld heeft over de conformiteit met de Richtlijn Drukapparatuur: <Q> 05 Nombre y dirección del Organismo Notificado que juzgó positivamente el cumplimiento con la Directiva en materia de Equipos de Presión: <Q>	06 Nome e indirizzo dell'Ente riconosciuto che ha riscontrato la conformità alla Direttiva sulle apparecchiature a pressione: <Q> 07 Όνομα και διεύθυνση του Κοινωνικού οργανισμού που απέφενθη θετικά για τη συμμόρφωση της Οδηγίας Εργοτιμού: <Q> 08 Nome e morada do organismo notificado, que avaliou favoravelmente a conformidade com a diretriz sobre equipamentos pressurizados: <Q> 09 Назование и адрес органа технической экспертизы, принявшего положительное решение о соответствии с соответствием Директиве об оборудовании: <Q>	10 Navn og adresse på bemyndiget organ, der har foretaget en positiv bedømmelse af, at udstryret lever op til kravene i PED (Direktiv for Trykvarer): <Q> 11 Namn och adress för det anmälda organet som godkänt uppfyllandet av tryckutrustningsdirektivet: <Q> 12 Navn på och adress till det autoriserade organet som positivt bedömt samsvar med direktivet för trykkutslip (Pressure Equipment Directive): <Q> 13 Sen ilmoitetaan elimen nimi ja osioita, joka teki myönteisen päätöksen paineilaide direktiivin noudattamisesta: <Q>	14 Název a adresa informovaného orgánu, ktorý vydal pozitívnu posouzení shody se smernicí o tlakových zařízeních: <Q> 15 Naziv i adresu prijavljenog tijela koje je donijelo pozitivnu prosudbu o usklađenosti sa Smjernicom o tlaknim opremitim: <Q> 16 A némánytőre berendezésekre vonatkozó szervizet neve és címe: <Q> 17 Nazwa i adres jednostki notyfikowanej, która wydała pozytywną opinię dotyczącą spełnienia wymogów Dyrektywy dot. Urządzeń Ciśnieniowych: <Q> 18 Denumirea și adresa organismului notificat care a apreciat pozitiv conformarea cu Directiva privind echipamentele sub presiune: <Q>	19 Ime in noslov organizacija za ugotavljanje skladnosti, ki je pozitivno ocenil združljivost z Direktivo o tlaci opremi: <Q> 20 Televitajut organ, mis hindas Sunnesedame direktiiviga ühilduvust positiivisti, nimi jaadress: <Q> 21 Наименование и адрес на уполномочия орган, който е произнесъл положително относно съвместимостта с Директива за оборудване под напрежение: <Q> 22 Atsakings institucijos, kuri davė teigiamą sprendimą pagal slėginės išangos direktyvą pavadinimas ir adresas: <Q> 23 Sertifikacijos institucijos, kuriai davė pozitivų slėdzinį paribitalių sprendimą leiktu Direktivai, nosaukums un adres: <Q>	24 Názov a adresu certifikačného úradu, ktorý kladne posúdil zhodu so smernicou pre tlakové zariadenia: <Q> 25 Basılıcı Tezhit Direktifine uygunluğunu hisseden olumlu olarak değerlendirilen Onaylanmış kuruluşun adı ve adresi: <Q>										
01 Name and address of the Notified body that judged positively on compliance with the Pressure Equipment Directive: <Q> 02 Name und Adresse der benannten Stelle, die positiv unter Einhaltung der Druckanlagen-Richtlinie urteilt: <Q> 03 Nom et adresse de l'organisme notifié qui a évalué positivement la conformité à la directive sur l'équipement de pression: <Q> 04 Naam en adres van de aangemelde instantie die positief geoordeeld heeft over de conformiteit met de Richtlijn Drukapparatuur: <Q> 05 Nombre y dirección del Organismo Notificado que juzgó positivamente el cumplimiento con la Directiva en materia de Equipos de Presión: <Q>	06 Nome e indirizzo dell'Ente riconosciuto che ha riscontrato la conformità alla Direttiva sulle apparecchiature a pressione: <Q> 07 Όνομα και διεύθυνση του Κοινωνικού οργανισμού που απέφενθη θετικά για τη συμμόρφωση της Οδηγίας Εργοτιμού: <Q> 08 Nome e morada do organismo notificado, que avaliou favoravelmente a conformidade com a diretriz sobre equipamentos pressurizados: <Q> 09 Назование и адрес органа технической экспертизы, принявшего положительное решение о соответствии с соответствием Директиве об оборудовании: <Q>	10 Navn og adresse på bemyndiget organ, der har foretaget en positiv bedømmelse af, at udstryret lever op til kravene i PED (Direktiv for Trykvarer): <Q> 11 Namn och adress för det anmälda organet som godkänt uppfyllandet av tryckutrustningsdirektivet: <Q> 12 Navn på och adress till det autoriserade organet som positivt bedömt samsvar med direktivet för trykkutslip (Pressure Equipment Directive): <Q>	13 Sen ilmoitetaan elimen nimi ja osioita, joka teki myönteisen päätöksen paineilaide direktiivin noudattamisesta: <Q>	14 Název a adresa informovaného orgánu, ktorý vydal pozitívnu posouzení shody se smernicí o tlakových zařízeních: <Q>	15 Naziv i adresu prijavljenog tijela koje je donijelo pozitivnu prosudbu o usklađenosti sa Smjernicom o tlaknim opremitim: <Q>	16 A némánytőre berendezésekre vonatkozó szervizet neve és címe: <Q>	17 Nazwa i adres jednostki notyfikowanej, która wydała pozytywną opinię dotyczącą spełnienia wymogów Dyrektywy dot. Urządzeń Ciśnieniowych: <Q>	18 Denumirea și adresa organismului notificat care a apreciat pozitiv conformarea cu Directiva privind echipamentele sub presiune: <Q>	19 Ime in noslov organizacija za ugotavljanje skladnosti, ki je pozitivno ocenil združljivost z Direktivo o tlaci opremi: <Q>	20 Televitajut organ, mis hindas Sunnesedame direktiiviga ühilduvust positiivisti, nimi jaadress: <Q>	21 Наименование и адрес на уполномочия орган, който е произнесъл положително относно съвместимостта с Директива за оборудване под напрежение: <Q>	22 Atsakings institucijos, kuri davė teigiamą sprendimą pagal slėginės išangos direktyvą pavadinimas ir adresas: <Q>	23 Sertifikacijos institucijos, kuriai davė pozitivų slėdzinį paribitalių sprendimą leiktu Direktivai, nosaukums un adres: <Q>		
01 Name and address of the Notified body that judged positively on compliance with the Pressure Equipment Directive: <Q> 02 Name und Adresse der benannten Stelle, die positiv unter Einhaltung der Druckanlagen-Richtlinie urteilt: <Q> 03 Nom et adresse de l'organisme notifié qui a évalué positivement la conformité à la directive sur l'équipement de pression: <Q> 04 Naam en adres van de aangemelde instantie die positief geoordeeld heeft over de conformiteit met de Richtlijn Drukapparatuur: <Q> 05 Nombre y dirección del Organismo Notificado que juzgó positivamente el cumplimiento con la Directiva en materia de Equipos de Presión: <Q>	06 Nome e indirizzo dell'Ente riconosciuto che ha riscontrato la conformità alla Direttiva sulle apparecchiature a pressione: <Q> 07 Όνομα και διεύθυνση του Κοινωνικού οργανισμού που απέφενθη θετικά για τη συμμόρφωση της Οδηγίας Εργοτιμού: <Q> 08 Nome e morada do organismo notificado, que avaliou favoravelmente a conformidade com a diretriz sobre equipamentos pressurizados: <Q> 09 Назование и адрес органа технической экспертизы, принявшего положительное решение о соответствии с соответствием Директиве об оборудовании: <Q>	10 Navn og adresse på bemyndiget organ, der har foretaget en positiv bedømmelse af, at udstryret lever op til kravene i PED (Direktiv for Trykvarer): <Q>	11 Namn och adress för det anmälda organet som godkänt uppfyllandet av tryckutrustningsdirektivet: <Q>	12 Navn på och adress till det autoriserade organet som positivt bedömt samsvar med direktivet för trykkutslip (Pressure Equipment Directive): <Q>	13 Sen ilmoitetaan elimen nimi ja osioita, joka teki myönteisen päätöksen paineilaide direktiivin noudattamisesta: <Q>	14 Název a adresa informovaného orgánu, ktorý vydal pozitívnu posouzení shody se smernicí o tlakových zařízeních: <Q>	15 Naziv i adresu prijavljenog tijela koje je donijelo pozitivnu prosudbu o usklađenosti sa Smjernicom o tlaknim opremitim: <Q>	16 A némánytőre berendezésekre vonatkozó szervizet neve és címe: <Q>	17 Nazwa i adres jednostki notyfikowanej, która wydała pozytywną opinię dotyczącą spełnienia wymogów Dyrektywy dot. Urządzeń Ciśnieniowych: <Q>	18 Denumirea și adresa organismului notificat care a apreciat pozitiv conformarea cu Directiva privind echipamentele sub presiune: <Q>	19 Ime in noslov organizacija za ugotavljanje skladnosti, ki je pozitivno ocenil združljivost z Direktivo o tlaci opremi: <Q>	20 Televitajut organ, mis hindas Sunnesedame direktiiviga ühilduvust positiivisti, nimi jaadress: <Q>	21 Наименование и адрес на уполномочия орган, който е произнесъл положително относно съвместимостта с Директива за оборудване под напрежение: <Q>	22 Atsakings institucijos, kuri davė teigiamą sprendimą pagal slėginės išangos direktyvą pavadinimas ir adresas: <Q>	23 Sertifikacijos institucijos, kuriai davė pozitivų slėdzinį paribitalių sprendimą leiktu Direktivai, nosaukums un adres: <Q>
01 Name and address of the Notified body that judged positively on compliance with the Pressure Equipment Directive: <Q> 02 Name und Adresse der benannten Stelle, die positiv unter Einhaltung der Druckanlagen-Richtlinie urteilt: <Q> 03 Nom et adresse de l'organisme notifié qui a évalué positivement la conformité à la directive sur l'équipement de pression: <Q> 04 Naam en adres van de aangemelde instantie die positief geoordeeld heeft over de conformiteit met de Richtlijn Drukapparatuur: <Q> 05 Nombre y dirección del Organismo Notificado que juzgó positivamente el cumplimiento con la Directiva en materia de Equipos de Presión: <Q>	06 Nome e indirizzo dell'Ente riconosciuto che ha riscontrato la conformità alla Direttiva sulle apparecchiature a pressione: <Q> 07 Όνομα και διεύθυνση του Κοινωνικού οργανισμού που απέφενθη θετικά για τη συμμόρφωση της Οδηγίας Εργοτιμού: <Q> 08 Nome e morada do organismo notificado, que avaliou favoravelmente a conformidade com a diretriz sobre equipamentos pressurizados: <Q> 09 Назование и адрес органа технической экспертизы, принявшего положительное решение о соответствии с соответствием Директиве об оборудовании: <Q>	10 Navn og adresse på bemyndiget organ, der har foretaget en positiv bedømmelse af, at udstryret lever op til kravene i PED (Direktiv for Trykvarer): <Q>	11 Namn och adress för det anmälda organet som godkänt uppfyllandet av tryckutrustningsdirektivet: <Q>	12 Navn på och adress till det autoriserade organet som positivt bedömt samsvar med direktivet för trykkutslip (Pressure Equipment Directive): <Q>	13 Sen ilmoitetaan elimen nimi ja osioita, joka teki myönteisen päätöksen paineilaide direktiivin noudattamisesta: <Q>	14 Název a adresa informovaného orgánu, ktorý vydal pozitívnu posouzení shody se smernicí o tlakových zařízeních: <Q>	15 Naziv i adresu prijavljenog tijela koje je donijelo pozitivnu prosudbu o usklađenosti sa Smjernicom o tlaknim opremitim: <Q>	16 A némánytőre berendezésekre vonatkozó szervizet neve és címe: <Q>	17 Nazwa i adres jednostki notyfikowanej, która wydała pozytywną opinię dotyczącą spełnienia wymogów Dyrektywy dot. Urządzeń Ciśnieniowych: <Q>	18 Denumirea și adresa organismului notificat care a apreciat pozitiv conformarea cu Directiva privind echipamentele sub presiune: <Q>	19 Ime in noslov organizacija za ugotavljanje skladnosti, ki je pozitivno ocenil združljivost z Direktivo o tlaci opremi: <Q>	20 Televitajut organ, mis hindas Sunnesedame direktiiviga ühilduvust positiivisti, nimi jaadress: <Q>	21 Наименование и адрес на уполномочия орган, който е произнесъл положително относно съвместимостта с Директива за оборудване под напрежение: <Q>	22 Atsakings institucijos, kuri davė teigiamą sprendimą pagal slėginės išangos direktyvą pavadinimas ir adresas: <Q>	23 Sertifikacijos institucijos, kuriai davė pozitivų slėdzinį paribitalių sprendimą leiktu Direktivai, nosaukums un adres: <Q>
01 Name and address of the Notified body that judged positively on compliance with the Pressure Equipment Directive: <Q> 02 Name und Adresse der benannten Stelle, die positiv unter Einhaltung der Druckanlagen-Richtlinie urteilt: <Q> 03 Nom et adresse de l'organisme notifié qui a évalué positivement la conformité à la directive sur l'équipement de pression: <Q> 04 Naam en adres van de aangemelde instantie die positief geoordeeld heeft over de conformiteit met de Richtlijn Drukapparatuur: <Q> 05 Nombre y dirección del Organismo Notificado que juzgó positivamente el cumplimiento con la Directiva en materia de Equipos de Presión: <Q>	06 Nome e indirizzo dell'Ente riconosciuto che ha riscontrato la conformità alla Direttiva sulle apparecchiature a pressione: <Q> 07 Όνομα και διεύθυνση του Κο														

**DAIKIN**

**DAIKIN EUROPE N.V.**

Zandvoordestraat 300, B-8400 Oostende, Belgium



**DAIKIN**

**DAIKIN EUROPE N.V.**

Zandvoordestraat 300, B-8400 Oostende, Belgium

## Table of contents

<b>1 About this document</b>	<b>7</b>	<b>User reference guide:</b>
▪ Safety instructions that you must read before installing		▪ Detailed step-by-step instructions and background information for basic and advanced usage
▪ Format: Paper (in the box of the indoor unit)		▪ Format: Digital files on <a href="http://www.daikineurope.com/support-and-manuals/product-information/">http://www.daikineurope.com/support-and-manuals/product-information/</a>
<b>2 Specific installer safety instructions</b>	<b>8</b>	<b>▪ Installation manual – Outdoor unit:</b>
▪ Installation instructions		▪ Installation instructions
▪ Format: Paper (in the box of the outdoor unit)		▪ Format: Paper (in the box of the outdoor unit)
<b>3 About the box</b>	<b>8</b>	<b>▪ Installation manual – Indoor unit:</b>
▪ Installation instructions		▪ Installation instructions
▪ Format: Paper (in the box of the indoor unit)		▪ Format: Paper (in the box of the indoor unit)
<b>4 Unit installation</b>	<b>9</b>	<b>▪ Installer reference guide:</b>
▪ Preparation of the installation, good practices, reference data, ...		▪ Preparation of the installation, good practices, reference data, ...
▪ Format: Digital files on <a href="http://www.daikineurope.com/support-and-manuals/product-information/">http://www.daikineurope.com/support-and-manuals/product-information/</a>		▪ Format: Digital files on <a href="http://www.daikineurope.com/support-and-manuals/product-information/">http://www.daikineurope.com/support-and-manuals/product-information/</a>
4.1 Preparing the installation site .....	9	<b>▪ Addendum book for optional equipment:</b>
4.1.1 Installation site requirements of the outdoor unit .....	9	▪ Additional info about how to install optional equipment
4.2 Mounting the outdoor unit.....	9	▪ Format: Paper (in the box of the indoor unit) + Digital files on <a href="http://www.daikineurope.com/support-and-manuals/product-information/">http://www.daikineurope.com/support-and-manuals/product-information/</a>
4.2.1 To provide the installation structure .....	9	
4.2.2 To install the outdoor unit.....	10	Latest revisions of the supplied documentation may be available on the regional Daikin website or via your dealer.
4.2.3 To provide drainage .....	10	The original documentation is written in English. All other languages are translations.
4.2.4 To install the discharge grille .....	11	
4.3 Opening and closing the unit.....	11	<b>Technical engineering data</b>
4.3.1 To open the outdoor unit.....	11	▪ A <b>subset</b> of the latest technical data is available on the regional Daikin website (publicly accessible).
4.3.2 To close the outdoor unit .....	11	▪ The <b>full set</b> of latest technical data is available on the Daikin Business Portal (authentication required).
<b>5 Piping installation</b>	<b>11</b>	<b>Online tools</b>
5.1 Connecting the refrigerant piping .....	11	In addition to the documentation set, some online tools are available for installers:
5.1.1 To connect the refrigerant piping to the outdoor unit .....	11	
5.2 Checking the refrigerant piping .....	13	▪ <b>Daikin Technical Data Hub</b>
5.2.1 To check for leaks.....	13	▪ Central hub for technical specifications of the unit, useful tools, digital resources, and more.
5.2.2 To perform vacuum drying .....	13	▪ Publicly accessible via <a href="https://daikintechnicaldatahub.eu">https://daikintechnicaldatahub.eu</a> .
5.3 Charging refrigerant .....	13	
5.3.1 To determine the additional refrigerant amount .....	13	▪ <b>Heating Solutions Navigator</b>
5.3.2 To charge additional refrigerant .....	13	▪ Digital toolbox that offers a variety of tools to facilitate the installation and configuration of heating systems.
5.3.3 To fix the fluorinated greenhouse gases label .....	13	▪ To access Heating Solutions Navigator, registration to the Stand By Me platform is required. For more information, see <a href="https://professional.standbyme.daikin.eu">https://professional.standbyme.daikin.eu</a> .
<b>6 Electrical installation</b>	<b>14</b>	
6.1 About electrical compliance.....	14	▪ <b>Daikin e-Care</b>
6.2 Specifications of standard wiring components .....	14	▪ Mobile app for installers and service technicians that allows you to register, configure and troubleshoot heating systems.
6.3 Guidelines when connecting the electrical wiring.....	14	▪ The mobile app can be downloaded for iOS and Android devices using the QR codes below. Registration to the Stand By Me platform is required to access the app.
6.4 Connections to the outdoor unit .....	14	
6.4.1 To connect the electrical wiring to the outdoor unit....	14	
<b>7 Finishing the outdoor unit installation</b>	<b>15</b>	
7.1 To check the insulation resistance of the compressor .....	15	
7.2 To finish the outdoor unit installation.....	16	
<b>8 Starting up the outdoor unit</b>	<b>16</b>	
<b>9 Technical data</b>	<b>17</b>	
9.1 Piping diagram: Outdoor unit.....	17	
9.2 Wiring diagram: Outdoor unit .....	18	

## 1 About this document

### Target audience

Authorised installers

### Documentation set

This document is part of a documentation set. The complete set consists of:

- **General safety precautions:**

- Safety instructions that you must read before installing
- Format: Paper (in the box of the indoor unit)

- **Operation manual:**

- Quick guide for basic usage
- Format: Paper (in the box of the indoor unit)

App Store



Google Play



## 2 Specific installer safety instructions

### 2 Specific installer safety instructions

Always observe the following safety instructions and regulations.

Installation site (see "4.1 Preparing the installation site" [▶ 9])



#### WARNING

Follow the service space dimensions in this manual for correct installation of the unit. See "4.1.1 Installation site requirements of the outdoor unit" [▶ 9].

Mounting the outdoor unit (see "4.2 Mounting the outdoor unit" [▶ 9])



#### WARNING

Fixing method of the outdoor unit MUST be in accordance with the instructions from this manual. See "4.2 Mounting the outdoor unit" [▶ 9].



#### CAUTION

To avoid injury, do NOT touch the air inlet or aluminium fins of the unit.

Opening and closing the unit (see "4.3 Opening and closing the unit" [▶ 11])



#### DANGER: RISK OF ELECTROCUTION



#### DANGER: RISK OF BURNING/SCALDING

Piping installation (see "5 Piping installation" [▶ 11])



#### WARNING

Field piping method MUST be in accordance with the instructions from this manual. See "5 Piping installation" [▶ 11].



#### DANGER: RISK OF BURNING/SCALDING



#### WARNING

Provide adequate measures to prevent that the unit can be used as a shelter by small animals. Small animals that make contact with electrical parts can cause malfunctions, smoke or fire.



#### WARNING

- Only use R32 as refrigerant. Other substances may cause explosions and accidents.
- R32 contains fluorinated greenhouse gases. Its global warming potential (GWP) value is 675. Do NOT vent these gases into the atmosphere.
- When charging refrigerant, ALWAYS use protective gloves and safety glasses.

Electrical installation (see "6 Electrical installation" [▶ 14])



#### DANGER: RISK OF ELECTROCUTION



#### WARNING

Electrical wiring connection method MUST be in accordance with the instructions from:

- This manual. See "6 Electrical installation" [▶ 14].
- The wiring diagram, which is delivered with the unit, located at the inside of the service cover. For a translation of its legend, see "9.2 Wiring diagram: Outdoor unit" [▶ 18].



#### WARNING

- All wiring MUST be performed by an authorised electrician and MUST comply with the applicable legislation.
- Make electrical connections to the fixed wiring.
- All components procured on-site and all electrical construction MUST comply with the applicable legislation.



#### WARNING

**Rotating fan.** Before powering ON the outdoor unit, make sure that the discharge grille covers the fan as protection against a rotating fan. See "4.2.4 To install the discharge grille" [▶ 11].



#### WARNING

If the supply cord is damaged, it MUST be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



#### WARNING

ALWAYS use multicore cable for power supply cables.



#### CAUTION

Do NOT push or place redundant cable length in the unit.



#### INFORMATION

Details of type and rating of fuses, or rating of circuit breakers are described in "6 Electrical installation" [▶ 14].

## 3 About the box

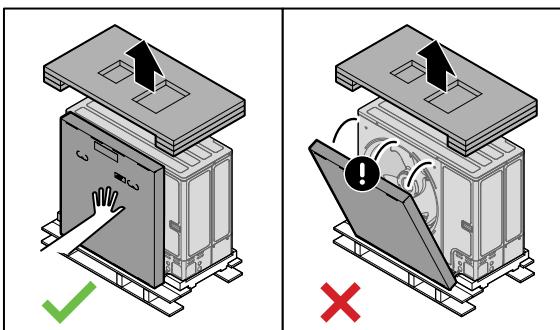
### 3.1 Outdoor unit

#### 3.1.1 To remove the accessories from the outdoor unit

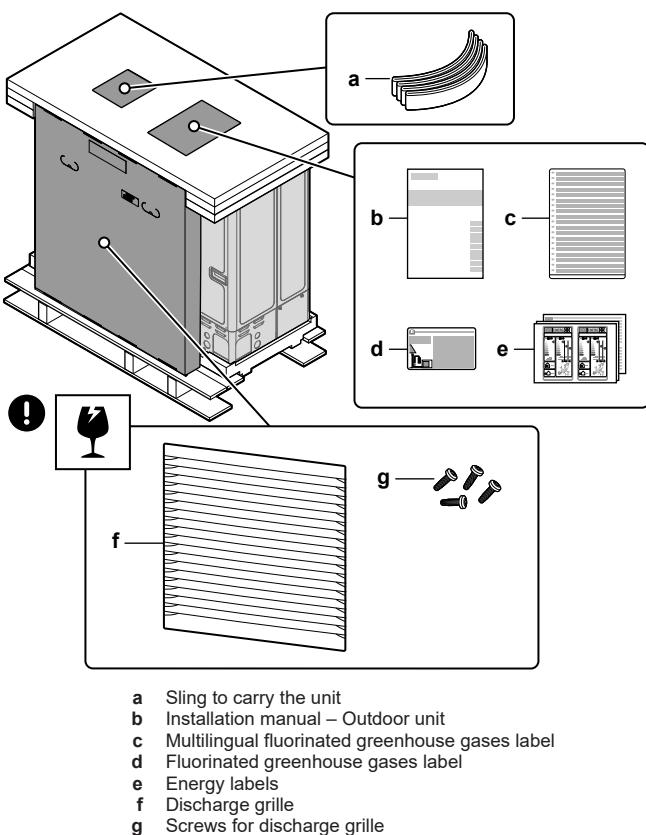


#### NOTICE

**Unpacking – Top packaging.** When you remove the top packaging, hold the box containing the discharge grille to prevent it from falling.



- Remove the accessories on top and in front of the unit.



### 3.1.2 To remove the transportation stay

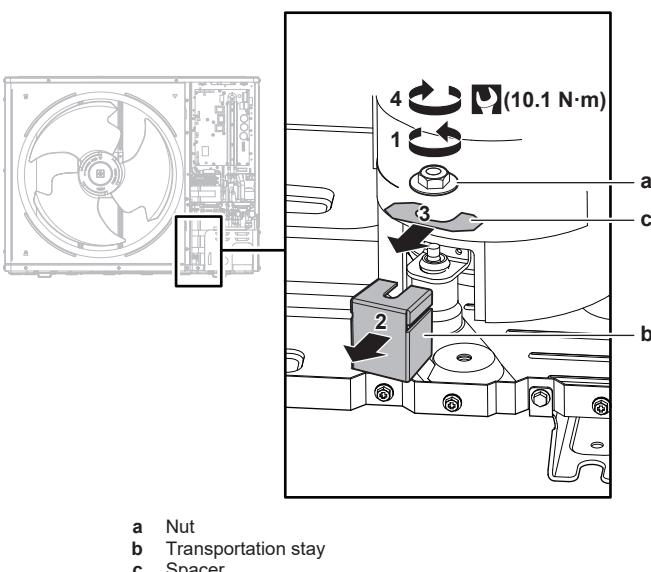


#### NOTICE

If the unit is operated with the transportation stay attached, abnormal vibration or noise may be generated.

The transportation stay protects the unit during transport. During installation it must be removed.

**Prerequisite:** Open the service cover. See "[4.3.1 To open the outdoor unit](#)" [p 11].



- 1 Remove the nut (a) of the compressor mounting bolt.
- 2 Remove and discard the transportation stay (b).
- 3 Remove and discard the spacer (c).
- 4 Reinstall the nut (a) of the compressor mounting bolt and torque to 10.1 N·m.

## 4 Unit installation

### 4.1 Preparing the installation site

#### 4.1.1 Installation site requirements of the outdoor unit

Mind the spacing guidelines. See figure 1 on the inside of the front cover.

Translation of text on figure 1:

English	Translation
Discharge-side obstacle	Discharge-side obstacle
General	General
No top-side obstacle	No top-side obstacle
Suction + discharge-side obstacle	Suction + discharge-side obstacle
Suction-side obstacle	Suction-side obstacle
Top-side obstacle	Top-side obstacle
Wall height unrestricted	Wall height unrestricted
Wall on discharge side	Wall on discharge side
Wall on suction side	Wall on suction side

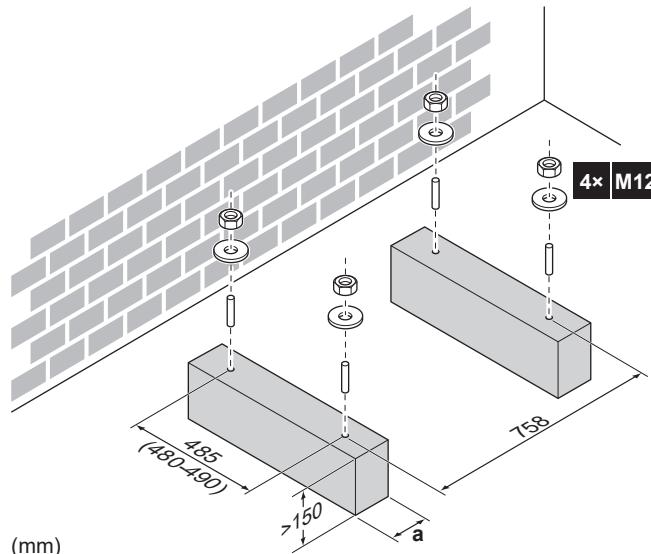
The outdoor unit is designed for outdoor installation only, and for the following ambient temperatures:

Cooling mode	10~43°C
Heating mode	-25~35°C
DHW production	-25~35°C

### 4.2 Mounting the outdoor unit

#### 4.2.1 To provide the installation structure

Use 4 sets of M12 anchor bolts, nuts and washers (field supply). Provide at least 150 mm of free space below the unit. Additionally, make sure the unit is positioned at least 100 mm above the maximum expected level of snow.



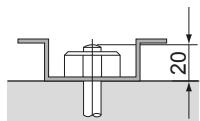
**a** Make sure not to cover the drain holes. See "["Drain holes \(dimensions in mm\)" \[p 10\]](#)".

## 4 Unit installation

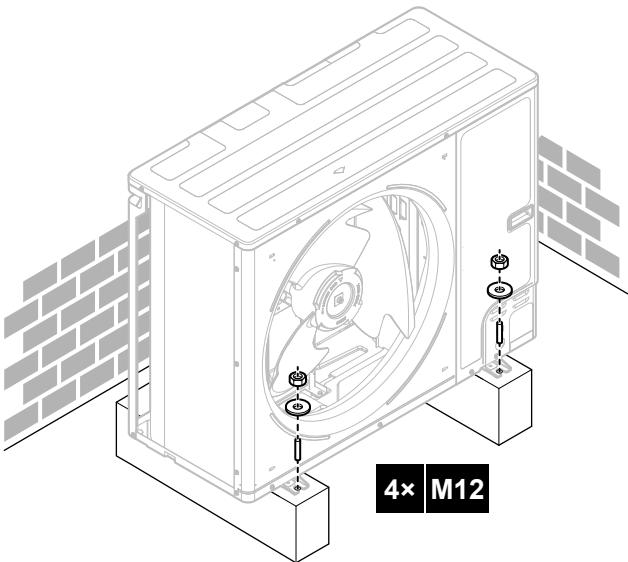


### INFORMATION

The recommended height of the upper protruding part of the bolts is 20 mm.



**NOTICE**  
Fix the outdoor unit to the foundation bolts using nuts with resin washers (a). If the coating on the fastening area is stripped off, the metal can rust easily.

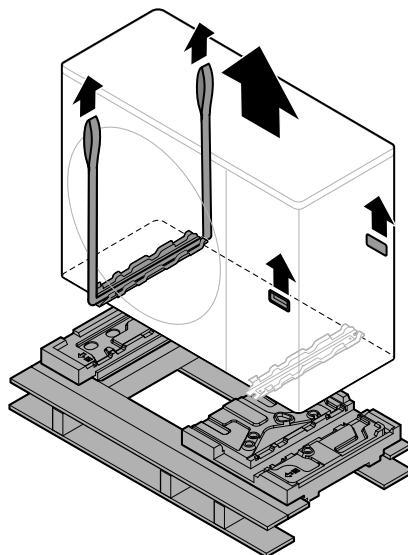


### 4.2.2 To install the outdoor unit



**CAUTION**  
To avoid injury, do NOT touch the air inlet or aluminium fins of the unit.

- 1 Put the sling (delivered as accessory) through the unit's left feet.
- 2 Carry the unit using the sling (left) and the unit's handles (right), and put it onto the installation structure.



- 3 Remove the sling, and dispose of it.
- 4 Fix the unit to the installation structure.

### 4.2.3 To provide drainage

Make sure that condensation water can be evacuated properly.



### INFORMATION

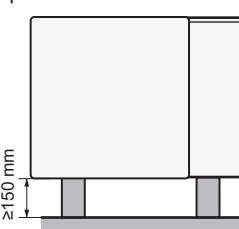
If necessary, you can use a drain pan (field supply) to prevent drain water from dripping.



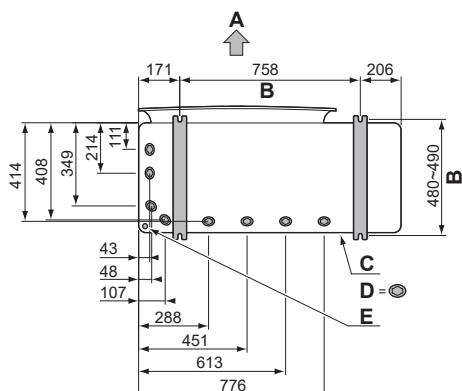
**NOTICE**  
If the unit CANNOT be installed fully level, always make sure that the inclination is towards the backside of the unit. This is required to guarantee proper drainage.



**NOTICE**  
If drain holes of the outdoor unit are covered by a mounting base or by floor surface, raise the unit to provide a free space of more than 150 mm under the outdoor unit.



Drain holes (dimensions in mm)

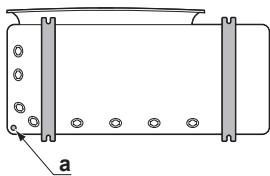


- A Discharge side
- B Distance between anchor points
- C Bottom frame
- D Drain holes
- E Knockout hole for snow

**Snow**

In regions with snowfall, snow might build up and freeze between the heat exchanger and the casing of the unit. This might decrease the operating efficiency. To prevent this:

- 1 Remove the knockout hole (a) by tapping on the attachment points with a flat head screwdriver and a hammer.



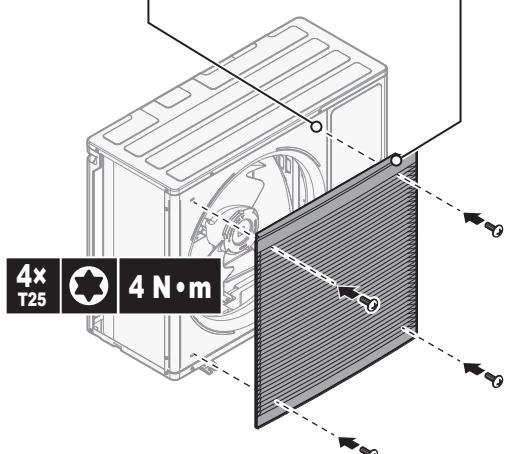
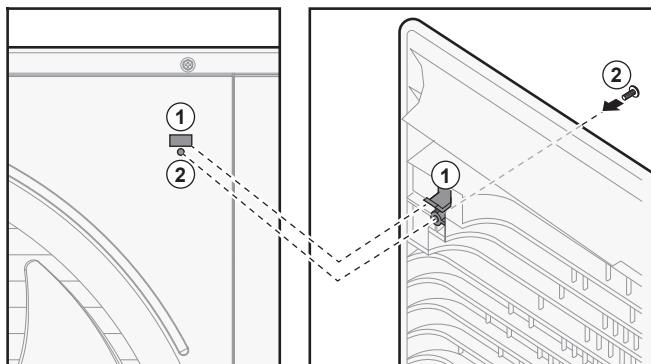
- 2 Remove the burrs, and paint the edges and areas around the edges using repair paint to prevent rusting.

**NOTICE**

When making knockout holes, do NOT damage the casing and underlying piping.

**4.2.4 To install the discharge grille**

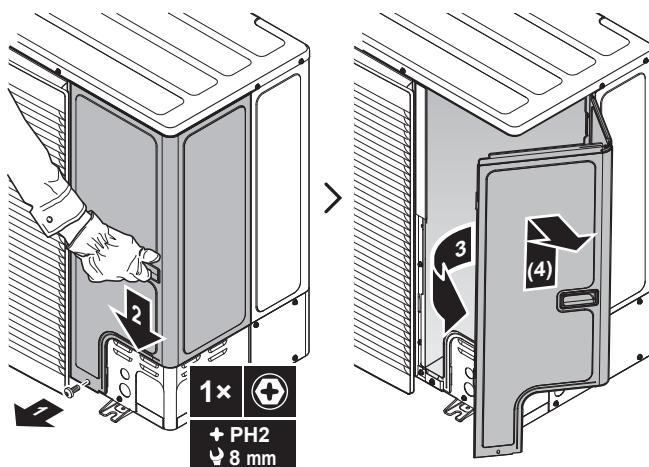
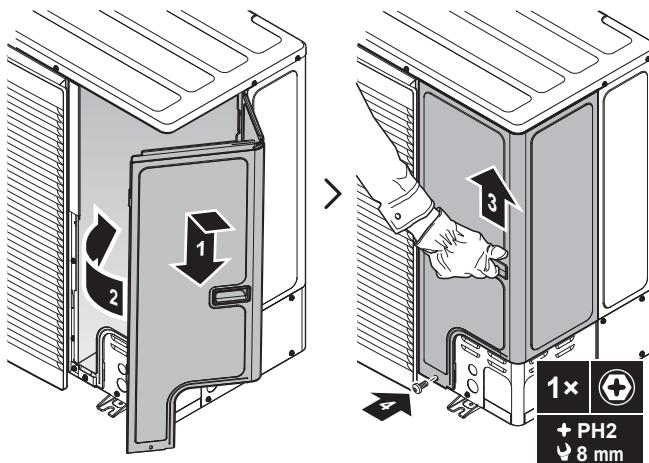
- 1 Insert the hooks. To prevent breaking the hooks:
  - First insert the bottom hooks (2x).
  - Then insert the top hooks (2x).
- 2 Insert and fix the screws (4x)(delivered as accessory).

**4.3 Opening and closing the unit****4.3.1 To open the outdoor unit**

**DANGER: RISK OF ELECTROCUTION**



**DANGER: RISK OF BURNING/SCALDING**

**4.3.2 To close the outdoor unit****5 Piping installation****5.1 Connecting the refrigerant piping**

**DANGER: RISK OF BURNING/SCALDING**

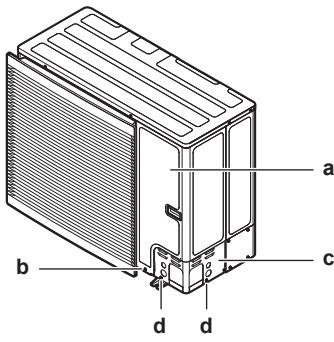
**NOTICE**

**Vibration.** To prevent vibration of the refrigerant piping during operation, fixate the piping between the outdoor and indoor unit.

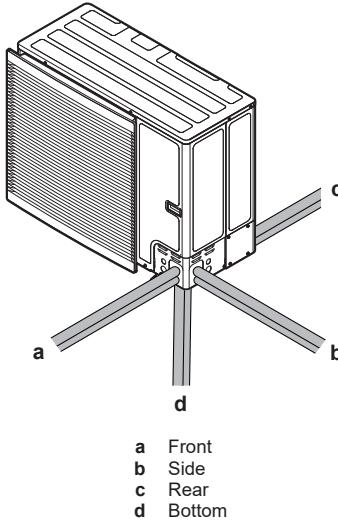
**5.1.1 To connect the refrigerant piping to the outdoor unit**

- **Piping length.** Keep field piping as short as possible.
  - **Piping protection.** Protect the field piping against physical damage.
- 1 Do the following:
    - Remove the service cover (a) with screw (b).
    - Remove the piping intake plate (c) with screws (d).

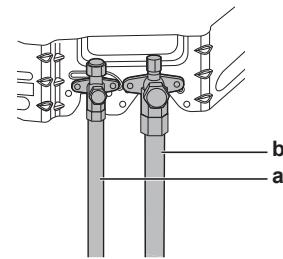
## 5 Piping installation



2 Choose a piping route (a, b, c or d).

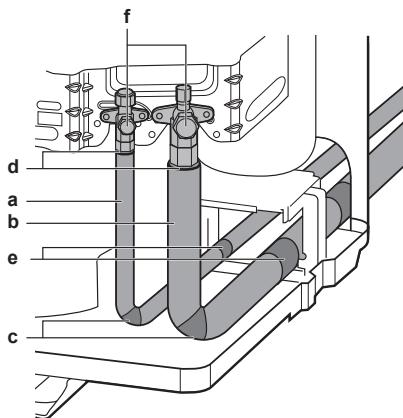


- a Front
- b Side
- c Rear
- d Bottom



4 Do the following:

- Insulate the liquid piping (a) and the gas piping (b).
- Wind heat insulation around the curves, and then cover it with vinyl tape (c).
- Make sure the field piping does not touch any compressor components.
- Seal the insulation ends (sealant etc.) (d).
- Wrap the field piping with vinyl tape (e) to protect it against sharp edges



5 If the outdoor unit is installed above the indoor unit, cover the stop valves (f, see above) with sealing material to prevent condensed water on the stop valves from moving to the indoor unit.

### NOTICE

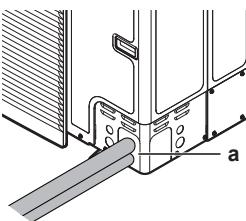
Any exposed piping might cause condensation.

- INFORMATION**
- 
- Remove the knockout hole (a) in the bottom plate or cover plate by tapping on the attachment points with a flat head screwdriver and a hammer.
  - Optionally, cut out the slits (b) with a metal saw.

### NOTICE

Precautions when making knockout holes:

- Avoid damaging the casing and underlying piping.
- After making the knockout holes, we recommend to remove the burrs and paint the edges and areas around the edges using repair paint to prevent rusting.
- When passing electrical wiring through the knockout holes, wrap the wiring with protective tape to prevent damage.

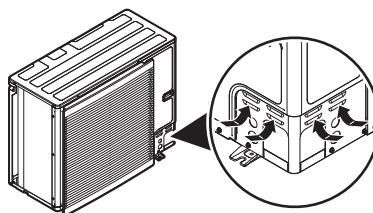


3 Do the following:

- Connect the liquid pipe (a) to the liquid stop valve.
- Connect the gas pipe (b) to the gas stop valve.

### NOTICE

Do not block the air vents. This could affect air circulation inside the unit.



**WARNING**

Provide adequate measures to prevent that the unit can be used as a shelter by small animals. Small animals that make contact with electrical parts can cause malfunctions, smoke or fire.

**NOTICE**

Make sure to open the stop valves after installing the refrigerant piping and performing vacuum drying. Running the system with the stop valves closed may break the compressor.

## 5.2 Checking the refrigerant piping

### 5.2.1 To check for leaks

**NOTICE**

Do NOT exceed the unit's maximum working pressure (see "PS High" on the unit name plate).

**NOTICE**

ALWAYS use a recommended bubble test solution from your wholesaler.

NEVER use soap water:

- Soap water may cause cracking of components, such as flare nuts or stop valve caps.
- Soap water may contain salt, which absorbs moisture that will freeze when the piping gets cold.
- Soap water contains ammonia which may lead to corrosion of flared joints (between the brass flare nut and the copper flare).

- 1 Charge the system with nitrogen gas up to a gauge pressure of at least 200 kPa (2 bar). It is recommended to pressurize to 3000 kPa (30 bar) in order to detect small leaks.
- 2 Check for leaks by applying the bubble test solution to all connections.
- 3 Discharge all nitrogen gas.

### 5.2.2 To perform vacuum drying

**NOTICE**

- Connect the vacuum pump to **both** the service port of the gas stop valve and the service port of the liquid stop valve to increase efficiency.
- Make sure that the gas stop valve and liquid stop valve are firmly closed before performing the leak test or vacuum drying.

- 1 Vacuum the system until the pressure on the manifold indicates -0.1 MPa (-1 bar).
- 2 Leave as is for 4-5 minutes and check the pressure:

If the pressure...	Then...
Does not change	There is no moisture in the system. This procedure is finished.
Increases	There is moisture in the system. Go to the next step.

- 3 Vacuum the system for at least 2 hours to a manifold pressure of -0.1 MPa (-1 bar).
- 4 After turning the pump OFF, check the pressure for at least 1 hour.
- 5 If you do NOT reach the target vacuum or CANNOT maintain the vacuum for 1 hour, do the following:

- Check for leaks again.
- Perform vacuum drying again.

**NOTICE**

Make sure to open the stop valves after installing the refrigerant piping and performing vacuum drying. Running the system with the stop valves closed may break the compressor.

## 5.3 Charging refrigerant

### 5.3.1 To determine the additional refrigerant amount

If the total liquid piping length is...	Then...
≤10 m	Do NOT add additional refrigerant.
>10 m	R=(total length (m) of liquid piping-10 m)×0.050 R=Additional charge (kg) (rounded in units of 0.01 kg)

**INFORMATION**

Piping length is the one-way length of liquid piping.

### 5.3.2 To charge additional refrigerant

**WARNING**

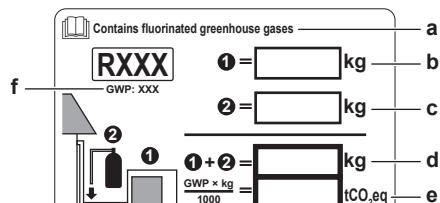
- Only use R32 as refrigerant. Other substances may cause explosions and accidents.
- R32 contains fluorinated greenhouse gases. Its global warming potential (GWP) value is 675. Do NOT vent these gases into the atmosphere.
- When charging refrigerant, ALWAYS use protective gloves and safety glasses.

**Prerequisite:** Before charging refrigerant, make sure the refrigerant piping is connected and checked (leak test and vacuum drying).

- 1 Connect the refrigerant cylinder to both the service port of the gas stop valve and the service port of the liquid stop valve.
- 2 Charge the additional refrigerant amount.
- 3 Open the stop valves.

### 5.3.3 To fix the fluorinated greenhouse gases label

- 1 Fill in the label as follows:



a If a multilingual fluorinated greenhouse gases label is delivered with the unit (see accessories), peel off the applicable language and stick it on top of a.

b Factory refrigerant charge: see unit name plate

c Additional refrigerant amount charged

d Total refrigerant charge

e Quantity of fluorinated greenhouse gases of the total refrigerant charge expressed as tonnes CO<sub>2</sub> equivalent.

f GWP = Global warming potential

## 6 Electrical installation



### NOTICE

Applicable legislation on **fluorinated greenhouse gases** requires that the refrigerant charge of the unit is indicated both in weight and CO<sub>2</sub> equivalent.

**Formula to calculate the quantity in CO<sub>2</sub> equivalent tonnes:** GWP value of the refrigerant × total refrigerant charge [in kg] / 1000

Use the GWP value mentioned on the refrigerant charge label.

- Fix the label on the inside of the outdoor unit. There is a dedicated place for it on the wiring diagram label.

## 6 Electrical installation



### DANGER: RISK OF ELECTROCUTION



### WARNING

**Rotating fan.** Before powering ON the outdoor unit, make sure that the discharge grille covers the fan as protection against a rotating fan. See "4.2.4 To install the discharge grille" [▶ 11].



### WARNING

ALWAYS use multicore cable for power supply cables.



### CAUTION

Do NOT push or place redundant cable length in the unit.



### NOTICE

The distance between the high voltage and low voltage cables should be at least 50 mm.

## 6.1 About electrical compliance

### Only for ERLA11~16DAV3

Equipment complying with EN/IEC 61000-3-12 (European International Technical Standard setting the limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤75 A per phase.).

## 6.2 Specifications of standard wiring components

Component	ERLA11~16DAV3	ERLA11~16DAW1
Power supply cable	MCA <sup>(a)</sup>	30.8 A
	Voltage range	220~240 V
	Phase	1~
	Frequency	50 Hz
	Wire sizes	Must comply with applicable legislation
Interconnection cables	Minimum cable section of 1.5 mm <sup>2</sup> and applicable for 230 V	
Recommended field fuse	32 A, C curve	16 A or 20 A, C curve
Earth leakage circuit breaker	30 mA – Must comply with applicable legislation	

<sup>(a)</sup> MCA=Minimum circuit ampacity. Stated values are maximum values (see electrical data of combination with indoor units for exact values).

## 6.3 Guidelines when connecting the electrical wiring

### Tightening torques

Item	Tightening torque (N·m)
M4 (X1M)	1.2~1.8
M4 (earth)	1.2~1.4
M5 (X1M)	2.0~3.0
M5 (earth)	2.4~2.9

## 6.4 Connections to the outdoor unit

Item	Description
Power supply cable	See "6.4.1 To connect the electrical wiring to the outdoor unit" [▶ 14].
Interconnection cable	

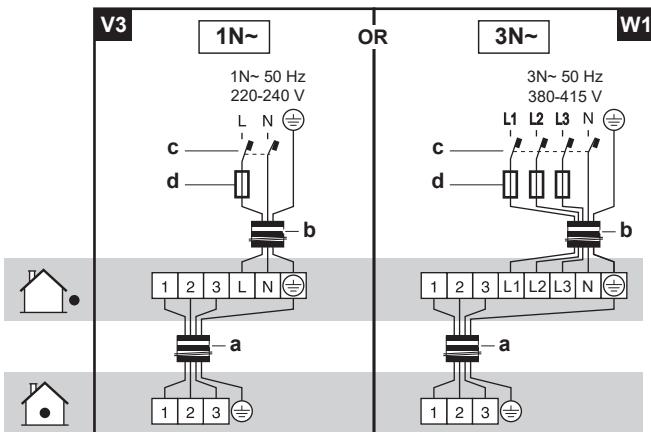
### 6.4.1 To connect the electrical wiring to the outdoor unit



### NOTICE

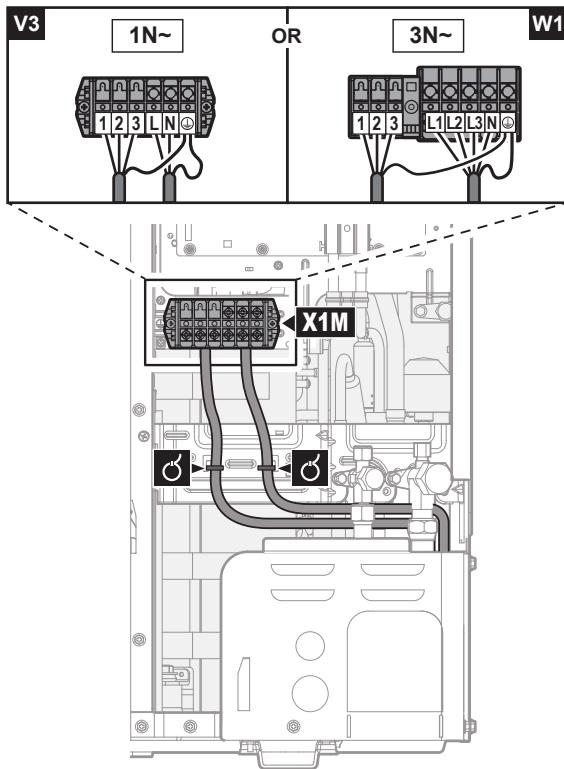
- Follow the wiring diagram (delivered with the unit, located at the inside of the service cover).
- Make sure the electrical wiring does NOT obstruct proper reattachment of the service cover.

- Remove the service cover.
- Connect the interconnection cable and power supply (1N~ or 3N~ depending on model, see name plate) as follows:

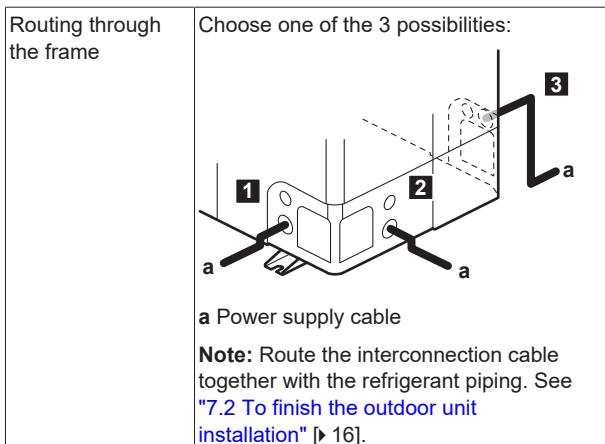


- a Interconnection cable  
b Power supply cable  
c Earth leakage circuit breaker  
d Fuse

## 7 Finishing the outdoor unit installation



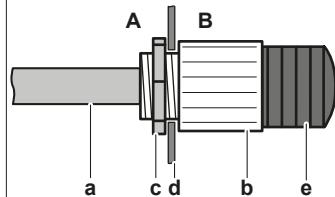
- 3 Fix the cables (power supply and interconnection cable) with a cable tie to the stop valve attachment plate and route the wiring according to the illustration above.
- 4 Choose a knockout hole and remove the knockout hole by tapping on the attachment points with a flat head screwdriver and a hammer.
- 5 Route the wiring through the frame and connect the wiring to the frame at the knockout hole.



Connecting to the frame

When cables are routed from the unit, a protection sleeve for the conduits (PG insertions) can be inserted at the knockout hole.

When you do not use a wire conduit, protect the wires with vinyl tubes to prevent the edge of the knockout hole from cutting the wires.



A Inside of the outdoor unit

B Outside of the outdoor unit

a Wire

b Bush

c Nut

d Frame

e Hose



### NOTICE

Precautions when making knockout holes:

- Avoid damaging the casing and underlying piping.
- After making the knockout holes, we recommend to remove the burrs and paint the edges and areas around the edges using repair paint to prevent rusting.
- When passing electrical wiring through the knockout holes, wrap the wiring with protective tape to prevent damage.

- 6 Reattach the service cover.

- 7 Connect an earth leakage circuit breaker and fuse to the power supply line.

## 7 Finishing the outdoor unit installation

### 7.1 To check the insulation resistance of the compressor



### NOTICE

If, after installation, refrigerant accumulates in the compressor, the insulation resistance over the poles can drop, but if it is at least  $1\text{ M}\Omega$ , then the unit will not break down.

- Use a 500 V mega-tester when measuring insulation.
- Do NOT use a mega-tester for low voltage circuits.

- 1 Measure the insulation resistance over the poles.

If	Then
$\geq 1\text{ M}\Omega$	Insulation resistance is OK. This procedure is finished.
$< 1\text{ M}\Omega$	Insulation resistance is not OK. Go to the next step.

- 2 Turn ON the power and leave it on for 6 hours.

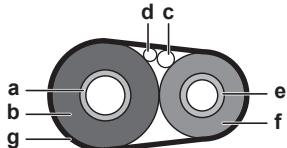
## 8 Starting up the outdoor unit

**Result:** The compressor will heat up and evaporate any refrigerant in the compressor.

- 3 Measure the insulation resistance again.

### 7.2 To finish the outdoor unit installation

- 1 Insulate and fix the refrigerant piping and cables as follows:



- a Gas pipe
- b Gas pipe insulation
- c Interconnection cable
- d Field wiring (if applicable)
- e Liquid pipe
- f Liquid pipe insulation
- g Finishing tape

- 2 Install the service cover.

## 8 Starting up the outdoor unit

See the indoor unit installation manual for configuration and commissioning of the system.



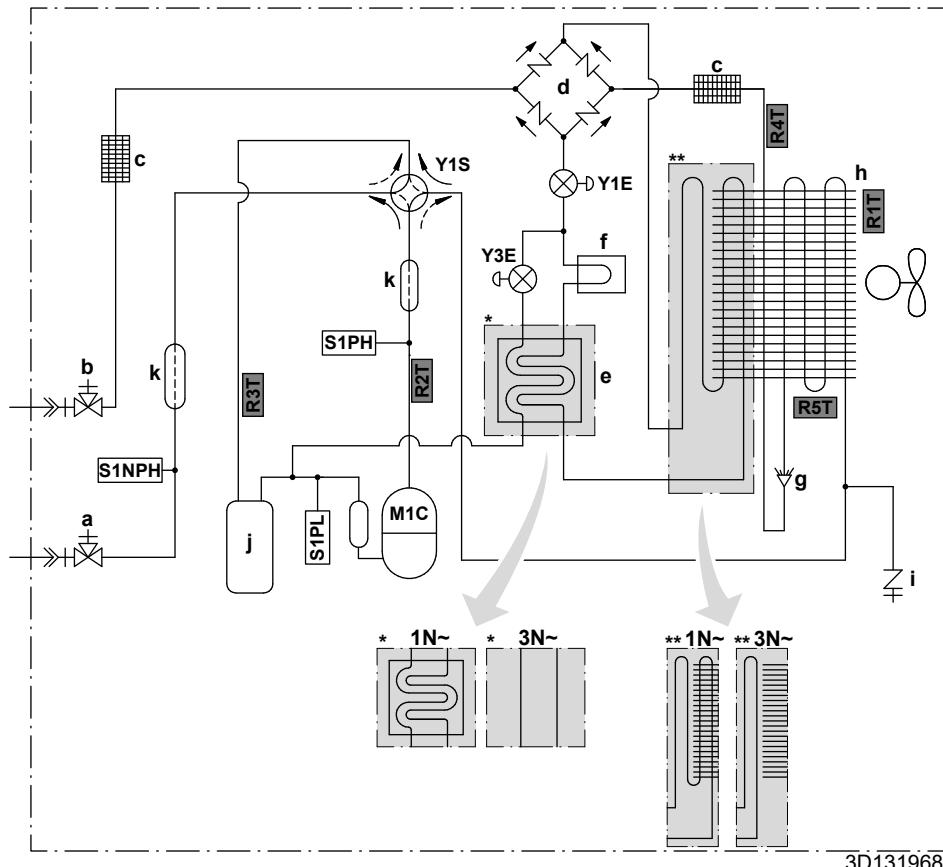
### WARNING

**Rotating fan.** Before powering ON the outdoor unit, make sure that the discharge grille covers the fan as protection against a rotating fan. See "["4.2.4 To install the discharge grille"](#) [▶ 11].

## 9 Technical data

A subset of the latest technical data is available on the regional Daikin website (publicly accessible). The full set of latest technical data is available on the Daikin Business Portal (authentication required).

### 9.1 Piping diagram: Outdoor unit



- a Gas stop valve with service port
- b Liquid stop valve with service port
- c Filter
- d Rectifier
- e Economiser
- f Heat sink
- g Distributor
- h Heat exchanger
- i Service port 5/16" flare
- j Accumulator
- k Muffler
  
- M1C Compressor
- S1PH High pressure switch
- S1PL Low pressure switch
- S1NPH Pressure sensor
- Y1E Electronic expansion valve (main)
- Y3E Electronic expansion valve (injection)
- Y1S Solenoid valve (4-way valve)

- | Thermistors: |                            |
|--------------|----------------------------|
| R1T          | Outdoor air                |
| R2T          | Compressor discharge       |
| R3T          | Compressor suction         |
| R4T          | Air heat exchanger         |
| R5T          | Air heat exchanger, middle |
- Refrigerant flow:**  
 → Heating  
 ← Cooling
- | Connections: |                   |
|--------------|-------------------|
| ⇒            | Flare connection  |
| ●            | Brazed connection |

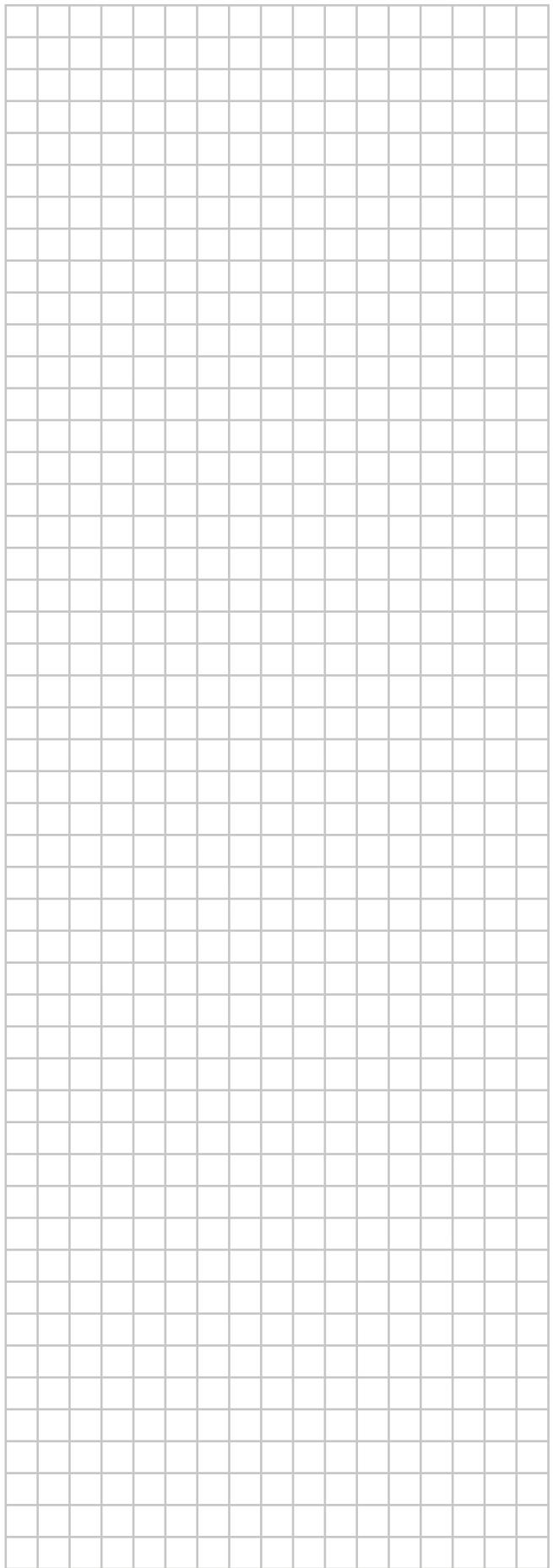
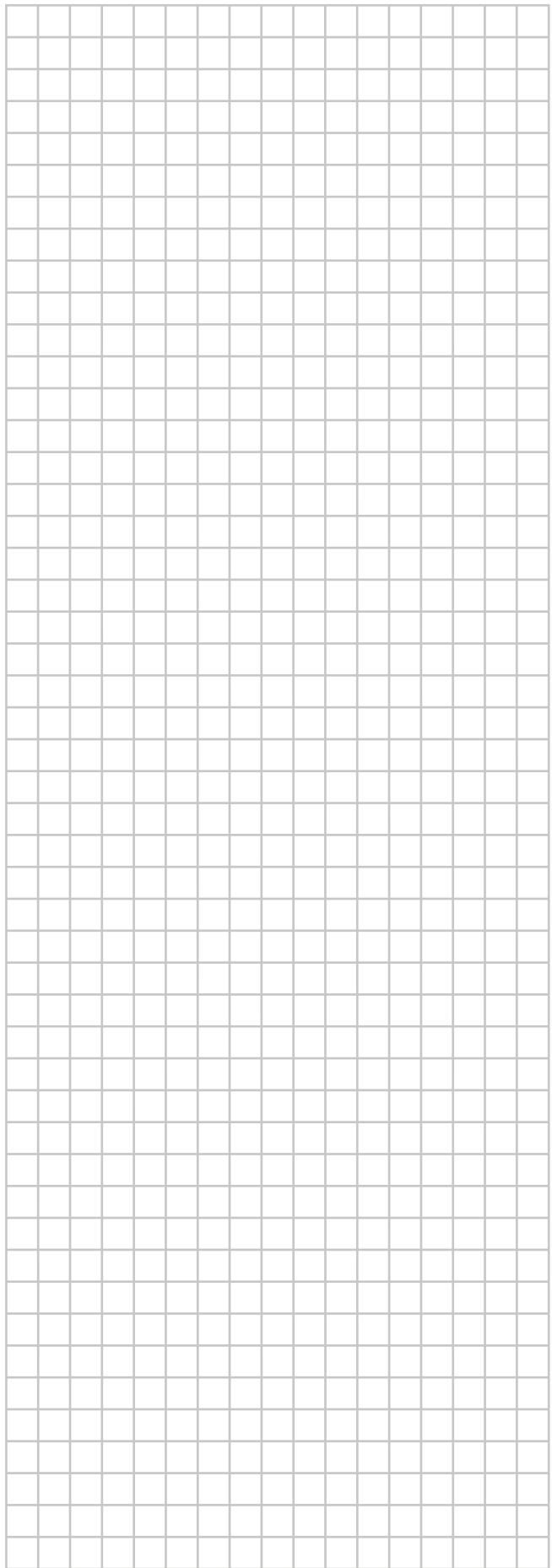
## 9 Technical data

### 9.2 Wiring diagram: Outdoor unit

The wiring diagram is delivered with the unit, located at the inside of the service cover.

Translation of text on wiring diagram:

English	Translation
(1) Connection diagram	(1) Connection diagram
Compressor SWB	Compressor switch box
Hydro SWB	Hydro switch box
Indoor	Indoor
Outdoor	Outdoor
(2) Compressor switch box layout	(2) Compressor switch box layout
Front	Front
Rear	Rear
(3) Legend	(3) Legend
	*: Optional; #: Field supply
A1P	Printed circuit board (main)
A2P	Printed circuit board (noise filter)
A3P	Printed circuit board (flash)
(only for 1N~ models)	
Q1DI	# Earth leakage circuit breaker
X1M	Terminal strip
(4) Notes	(4) Notes
X1M	Main terminal
-----	Earth wiring
-----	Field supply
①	Several wiring possibilities
	Option
	Wiring depending on model
	Switch box
	PCB



EAC



4P643598-1 0000000X

Copyright 2021 Daikin

**DAIKIN EUROPE N.V.**

Zandvoordestraat 300, B-8400 Oostende, Belgium

4P643598-1 2021.09