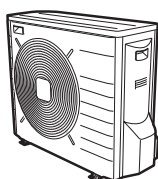


Installation manual

Daikin Altherma hybrid heat pump – outdoor unit



CE - DECLARACION DE CONFORMIDAD
CE - KONFORMITÄTSERKLÄRUNG
CE - DECLARATION DE CONFORMITE
CE - CONFORMITEITSVERKLARING

CE - DECLARACÃO DE CONFORMIDADE
CE - ЗАЯВЛЕНИЕ О СООТВЕТСТВИИ
CE - OVERENSSTEMMELSESVERKLARING
CE - FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

CE - ERKLÆRING OM SAMSVAR
CE - ЛУЧШОСЪВЪЕТСТВУЮЩАЯ
CE - PROHLÁŠENÍ SOHODĚ

CE - IZJAVA O SKLADNOSTI
CE - VASTAVUSELÄRITYSOON
CE - ДЕЯЛАМАРЪ-ЗА-СЪОТВѢТСТВІЕ
CE - DECLARAȚIE DE CONFORMITATE

CE - ATTIKTES/DEKLARACJA
CE - ATILIST/STÄS/DEKLARACJA
CE - VYHLÁŠENIE ZHODY
CE - UYGUNLUK BEYANI

Daikin Europe N.V.

- 01 ^{06a} declares under its sole responsibility that the equipment to which this declaration relates:
02 ⁰⁷ erklärt auf seine alleinige Verantwortung, dass die Ausrüstung für die diese Erklärung betrifft ist:
03 ⁰⁸ déclare sous sa seule responsabilité que l'équipement visé par la présente déclaration:
04 ⁰⁹ verklaart hierbij op eigen oorspronkelijk verantwoordelijkheid dat de apparatuur waarop deze verklaring betrekking heeft:
05 ¹⁰ declara bajo su única responsabilidad que el equipo al que hace referencia la declaración:
06 ¹¹ δηλώνει ως αποκλειστική της απόκριση ότι ο εξοπλισμός στον οποίο αναφέρεται η παρούσα δήλωση:
07 ¹² объявляет на свою исключительную ответственность, что оборудование к которому относится настоящая заявка:
08 ¹³ declara sub sua exclusiva responsabilidade que os equipamentos a que esta declaração se refere:

EVLQ05CAV3, EVLQ08CAV3,

- 01 are in conformity with the following standard(s) or other normative document(s), provided that these are used in accordance with our instructions:
02 derenden (volgende) Norm(en) en/of andere normatieve document(en), op voorwaarde dat deze gebruikt overeenkomstig onze instructies:
03 sont conformes à la(s) norme(s) et/ou autres documents normatifs, pour autant qu'ils soient utilisés conformément à nos instructions:
04 conform de volgende norm(en) d'een of meer andere bindende documenten zijn, op voorwaarde dat ze worden gebruikt overeenkomstig onze instructies:
05 están en conformidad con la(s) siguiente(s) norma(s) u otros(s) documento(s) normativo(s), siempre que sean utilizados de acuerdo con nuestras instrucciones:
06 sono conformi all(i) seguente(i) standard(s) o altro(i) document(o) a carattere normativo, a patto che vengano usati in conformità alle nostre istruzioni:
07 είναι σύμφωνα με το(α) ακόλουθο(α) πρότυπο(α) (ή/και) έγγραφο(α) κανονιστικό(α), υπό την προϋπόθεση ότι χρησιμοποιούνται σύμφωνα με τις οδηγίες μας:
08 в соответствии с нижеследующим(ими) нормативным(ыми) документом(ами), за исключением, что са используются в соответствии с нашими инструкциями:

EN60335-2-40,

- 01 following the provisions of:
02 gemäß den Vorschriften der:
03 conformément aux stipulations des:
04 overeenkomstig de bepalingen van:
05 σύμφωνα με τις διατάξεις de:
06 secondo le prescrizioni per:
07 по условиям действия нур:
08 de acordo com o preito etc.
09 в соответствии с положениями:

- 19 do upostavljanu dobrot:
20 vastavati tolele:
21 ovespeli krajevne na:
22 lakentia nusstati, palekami:
23 evagot prasitas, kas notakas:
24 orfovalu, ustanovaz:
25 bunni kusalama uigni olarak

- enligt <A> och godkants av enligt
Certificat <C>
som det i en kommit <A> og gjenom positivt
bestemelse av ifølge Certificat <C>
jotta om eslely asatvissa <A> ja jotta
on hyväksytty /Sertifikaatti <C> mukaisesti.
jak bylo uvedeno v <A> a pozitivně zjištěno
na vykazano v <A> i v obojích stran s normativním
posouzení srovnání <C> srovnání <C>
som antenit <A> og positivt vurderet af i henhold til
Certifikat <C>.

Low Voltage 2014/35/EU
Electromagnetic Compatibility 2014/30/EU

- 01 Directives as amended
02 Direktiven, med senere ændringer
03 Direktiv, med frelagna ändringar
04 Richtlijnen, teels que modifiées
05 Richtlinien, zoals geamendard
06 Directies, según lo emendado
07 Direktive, come da modifia
08 Driektyv, išnaujot įmonų patvirtėjė
09 Driektyvų, atnaujintų pagal patvirtėjė
10 Direktiv, med senere ændringer
11 Direktiv, med frelagna ändringar
12 Direktiv, med frelagna ändringar
13 Direktiv, med frelagna ändringar
14 Direktiv, med frelagna ändringar
15 Direktiv, med frelagna ändringar
16 Direktiv, med frelagna ändringar
17 Direktiv, med frelagna ändringar
18 Direktiv, med senere ændringer
19 Direktiv, med senere ændringer
20 Direktiv, med senere ændringer
21 Direktiv, med senere ændringer
22 Direktiv, med senere ændringer
23 Direktiv, med senere ændringer
24 Direktiv, med senere ændringer
25 Direktiv, med senere ændringer

- 09 ^{06a} заявляет, исключительно под свою ответственность, что оборудование, к которому относится настоящее заявление:
10 ⁰⁷ erklærer under eneansvarlig, at udstyret, som er omfattet af denne erklæring:
11 ⁰⁸ deklarerar, egenansvarigt, att utrustningen som berörs av denna deklaration innefattar att:
12 ⁰⁹ erklærer fuldstændigt ansvar for, at det udstyr, som berøres af denne deklaration, inneholder at:
13 ¹⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
14 ¹¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
15 ¹² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
16 ¹³ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
17 ¹⁴ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
18 ¹⁵ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
19 ¹⁶ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
20 ¹⁷ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
21 ¹⁸ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
22 ¹⁹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
23 ²⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
24 ²¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
25 ²² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:

- 17 ^{06a} deklaruje na własną odpowiedzialność, że urządzenie, którego ta deklaracja dotyczy:
18 ⁰⁷ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
19 ⁰⁸ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
20 ⁰⁹ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
21 ¹⁰ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
22 ¹¹ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
23 ¹² deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
24 ¹³ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
25 ¹⁴ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
26 ¹⁵ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
27 ¹⁶ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
28 ¹⁷ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
29 ¹⁸ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
30 ¹⁹ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
31 ²⁰ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
32 ²¹ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
33 ²² deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
34 ²³ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
35 ²⁴ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:
36 ²⁵ deklarije na svojo odgovornost, da je oprema, na katero se nanaša ta deklaracija:

- 16 megjelietiek ar abtibi szabvány (oktarr vagy egy éb értékről dokumentum(ok)nak, ha azokat előírás szerint használják:
17 szint in conformitate cu următoarele documente normative (sau alte documente) normative, cu condiția ca acestea să fie utilizate în conformitate cu instrucțiunile noastre:
18 skladni z naslednjimi standardi in drugimi normativni, pod pogojem, da se uporabijo v skladu z našimi navodili:
19 skladni z naslednjimi standardi in drugimi normativni, pod pogojem, da se uporabijo v skladu z našimi navodili:
20 on vastavusest järgmistele standarditele ja või teiste normatiivsete dokumentidega, kui need kasutatakse vastavalt meie ühendittele:
21 ovespeli krajevne na:
22 lakentia nusstati, palekami:
23 evagot prasitas, kas notakas:
24 orfovalu, ustanovaz:
25 bunni kusalama uigni olarak

- 01 Directives as amended
02 Direktiven, med senere ændringer
03 Direktiv, med frelagna ändringar
04 Richtlijnen, teels que modifiées
05 Richtlinien, zoals geamendard
06 Directies, según lo emendado
07 Direktive, come da modifia
08 Driektyv, išnaujot įmonų patvirtėjė
09 Driektyvų, atnaujintų pagal patvirtėjė
10 Direktiv, med senere ændringer
11 Direktiv, med frelagna ändringar
12 Direktiv, med frelagna ändringar
13 Direktiv, med frelagna ändringar
14 Direktiv, med frelagna ändringar
15 Direktiv, med frelagna ändringar
16 Direktiv, med frelagna ändringar
17 Direktiv, med frelagna ändringar
18 Direktiv, med senere ændringer
19 Direktiv, med senere ændringer
20 Direktiv, med senere ændringer
21 Direktiv, med senere ændringer
22 Direktiv, med senere ændringer
23 Direktiv, med senere ændringer
24 Direktiv, med senere ændringer
25 Direktiv, med senere ændringer

- 21 ^{06a} заявляет, исключительно под свою ответственность, что оборудование, к которому относится настоящее заявление:
22 ⁰⁷ erklærer under eneansvarlig, at udstyret, som er omfattet af denne erklæring:
23 ⁰⁸ deklarerar, egenansvarigt, att utrustningen som berörs av denna deklaration innefattar att:
24 ⁰⁹ erklærer fuldstændigt ansvar for, at det udstyr, som berøres af denne deklaration, inneholder at:
25 ¹⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
26 ¹¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
27 ¹² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
28 ¹³ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
29 ¹⁴ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
30 ¹⁵ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
31 ¹⁶ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
32 ¹⁷ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
33 ¹⁸ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
34 ¹⁹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
35 ²⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
36 ²¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
37 ²² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
38 ²³ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
39 ²⁴ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
40 ²⁵ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:

- 21 ^{06a} заявляет, исключительно под свою ответственность, что оборудование, к которому относится настоящее заявление:
22 ⁰⁷ erklærer under eneansvarlig, at udstyret, som er omfattet af denne erklæring:
23 ⁰⁸ deklarerar, egenansvarigt, att utrustningen som berörs av denna deklaration innefattar att:
24 ⁰⁹ erklærer fuldstændigt ansvar for, at det udstyr, som berøres af denne deklaration, inneholder at:
25 ¹⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
26 ¹¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
27 ¹² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
28 ¹³ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
29 ¹⁴ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
30 ¹⁵ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
31 ¹⁶ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
32 ¹⁷ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
33 ¹⁸ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
34 ¹⁹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
35 ²⁰ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
36 ²¹ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
37 ²² innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
38 ²³ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
39 ²⁴ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:
40 ²⁵ innkaller i sin egenansvar, omkalt, at udstyret, som berøres af denne deklaration, inneholder at:

DAIKIN

DAIKIN EUROPE N.V.

Zandvoordstraat 300, B-8400 Oostende, Belgium

Shigeki Morita
Director
Ostend, 1st of April 2016

DAIKIN

Table of contents

1	About the documentation	3
1.1	About this document.....	3
2	About the box	3
2.1	Outdoor unit.....	3
2.1.1	To remove the accessories from the outdoor unit.....	3
3	Preparation	3
3.1	Preparing the installation site	3
3.1.1	Installation site requirements of the outdoor unit	3
4	Installation	4
4.1	Opening the units	4
4.1.1	To open the outdoor unit.....	4
4.2	Mounting the outdoor unit.....	4
4.2.1	To provide the installation structure	4
4.2.2	To provide drainage	5
4.2.3	To install the outdoor unit.....	5
4.2.4	To prevent the outdoor unit from falling over	6
4.3	Connecting the refrigerant piping	6
4.3.1	To connect the refrigerant piping to the outdoor unit ..	6
4.4	Checking the refrigerant piping	6
4.4.1	To check for leaks.....	6
4.4.2	To perform vacuum drying	6
4.5	Charging refrigerant	7
4.5.1	To determine the additional refrigerant amount	7
4.5.2	To charge additional refrigerant	7
4.5.3	To fix the fluorinated greenhouse gases label	7
4.6	Connecting the electrical wiring.....	7
4.6.1	To connect the electrical wiring to the outdoor unit.....	7
4.7	Finishing the outdoor unit installation	7
4.7.1	To finish the outdoor unit installation	7
5	Starting up the outdoor unit	8
6	Technical data	8
6.1	Piping diagram: Outdoor unit.....	8
6.2	Wiring diagram: Outdoor unit	8

1 About the documentation

1.1 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)
- **Heat pump module installation manual:**
 - Installation instructions
 - Format: Paper (in the box of the indoor unit)
- **Gas boiler module installation manual:**
 - Installation and operation instructions
 - Format: Paper (in the box of the gas boiler unit)

- **Outdoor unit installation manual:**
 - Installation instructions
 - Format: Paper (in the box of the outdoor unit)
- **Installer reference guide:**
 - Preparation of the installation, reference data,...
 - Format: Digital files on <http://www.daikineurope.com/support-and-manuals/product-information/>
- **Addendum book for optional equipment:**
 - Additional info about how to install optional equipment
 - Format: Paper (in the box of the indoor unit) + Digital files on <http://www.daikineurope.com/support-and-manuals/product-information/>

Latest revisions of the supplied documentation may be available on the regional Daikin website or via your dealer.

The original documentation is written in English. All other languages are translations.

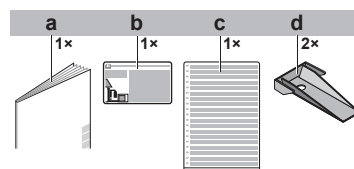
Technical engineering data

- 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).

2 About the box

2.1 Outdoor unit

2.1.1 To remove the accessories from the outdoor unit



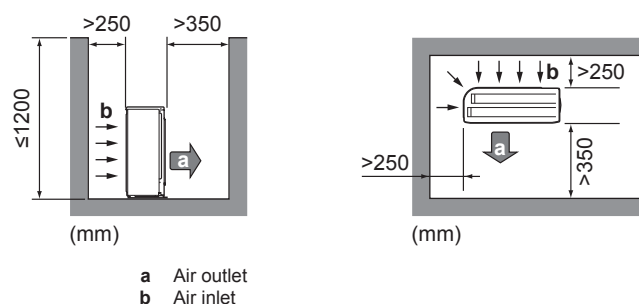
- a Outdoor unit installation manual
- b Fluorinated greenhouse gases label
- c Multilingual fluorinated greenhouse gases label
- d Unit mounting plate

3 Preparation

3.1 Preparing the installation site

3.1.1 Installation site requirements of the outdoor unit

Mind the following spacing guidelines:



4 Installation

The outdoor unit is designed for outdoor installation only, and for ambient temperatures ranging 10~43°C in cooling mode and – 25~25°C in heating mode.

4 Installation

4.1 Opening the units

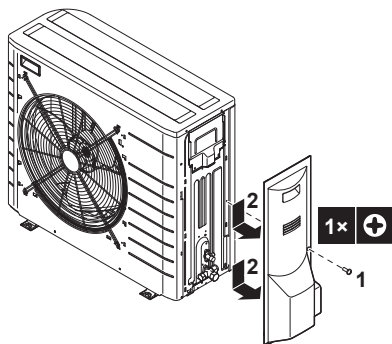
4.1.1 To open the outdoor unit



DANGER: RISK OF ELECTROCUTION



DANGER: RISK OF BURNING/SCALDING



4.2 Mounting the outdoor unit

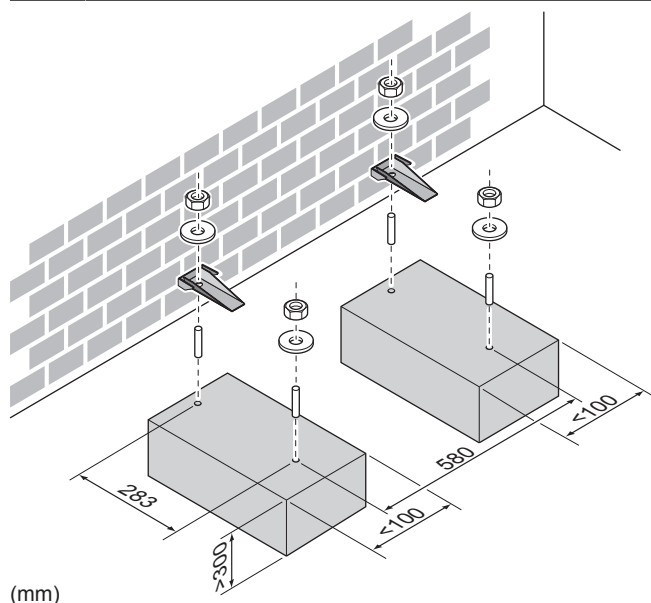
4.2.1 To provide the installation structure

If the unit is installed directly on the floor, prepare 4 sets of M8 or M10 anchor bolts, nuts and washers (field supply) as follows:

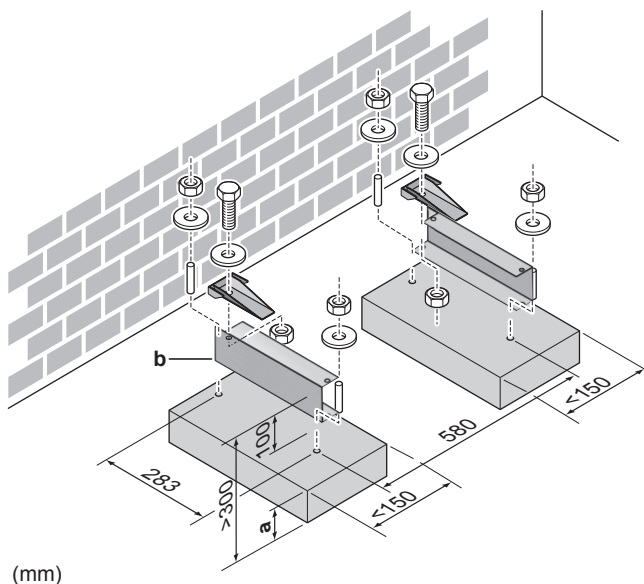


INFORMATION

The maximum height of the upper protruding part of the bolts is 15 mm.

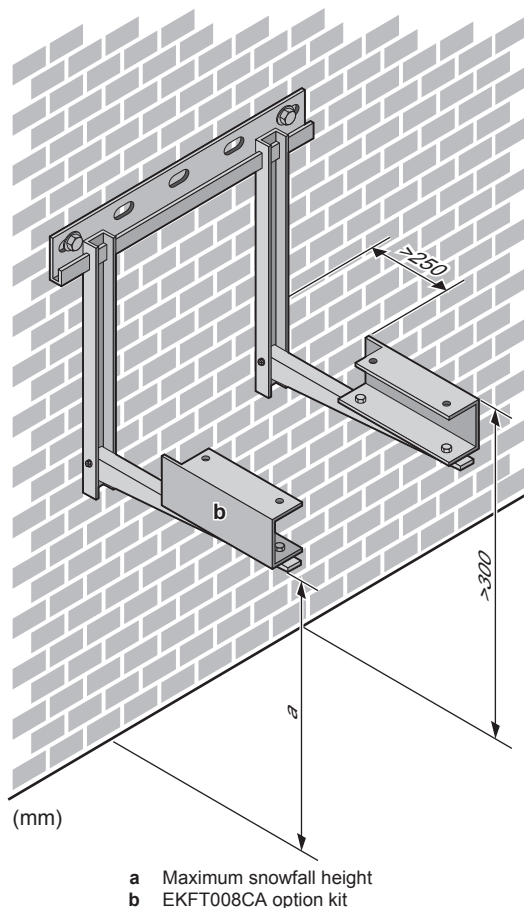


In any case, provide at least 300 mm of free space below the unit. Additionally, make sure the unit is positioned at least 100 mm above the maximum expected level of snow. In this case, it is recommended to construct a pedestal, and on this pedestal install the EKFT008CA option kit.

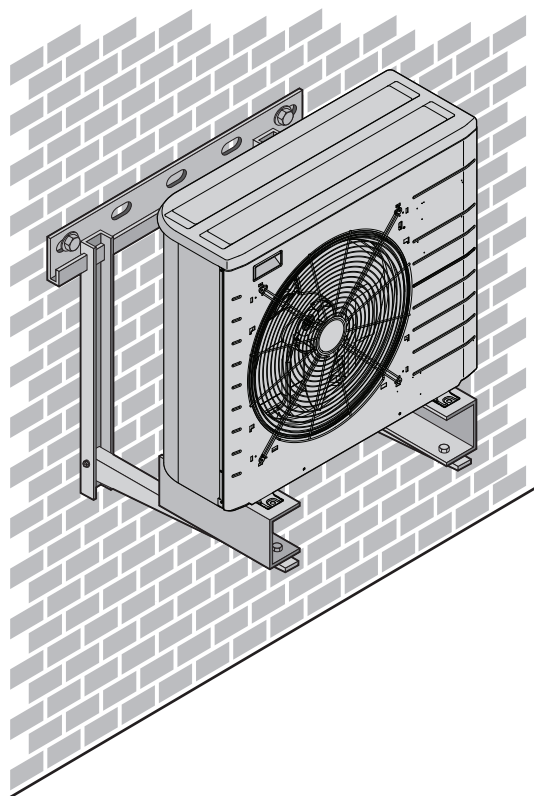


(mm)
a Maximum snowfall height
b EKFT008CA option kit

If the unit is installed on brackets to the wall, it is recommended to use the EKFT008CA option kit and to install the unit as follows:



(mm)
a Maximum snowfall height
b EKFT008CA option kit



4.2.2 To provide drainage

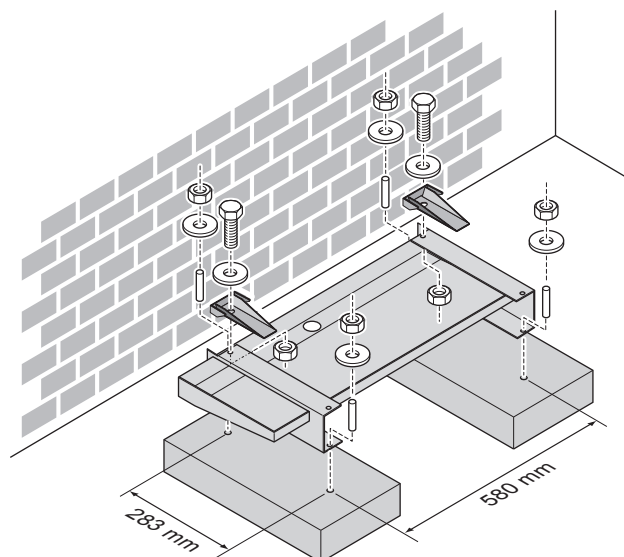
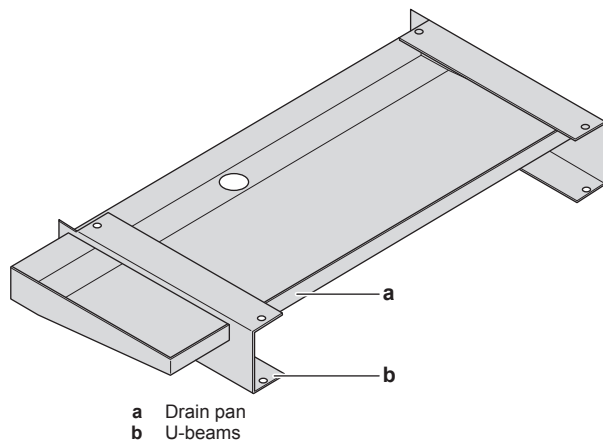
Make sure that condensation water can be evacuated properly.



NOTICE

If the drain holes of the outdoor unit are blocked up, provide space of at least 300 mm below the outdoor unit.

An additional drain pan kit (EKDP008CA) can be used to gather the drain water. The drain pan kit consists of:



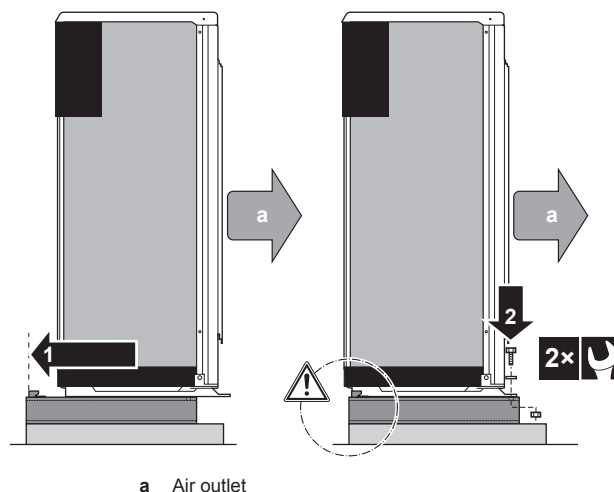
4.2.3 To install the outdoor unit



CAUTION

Do NOT remove the protective cardboard before the unit is installed properly.

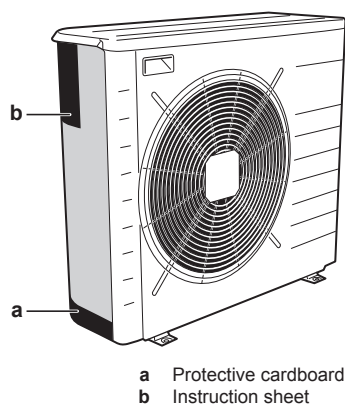
- 1 Lift the outdoor unit as described in "To remove the accessories from the outdoor unit" [p. 3].
- 2 Install the outdoor unit as follows:



NOTICE

The pedestal **MUST** be aligned with the backside of the U-beam.

- 3 Remove the protective cardboard and instruction sheet.

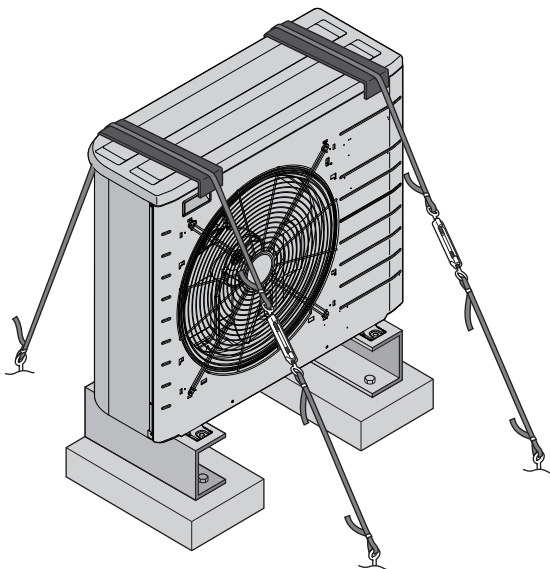


4 Installation

4.2.4 To prevent the outdoor unit from falling over

In case the unit is installed in places where strong wind can tilt the unit, take following measure:

- 1 Prepare 2 cables as indicated in the following illustration (field supply).
- 2 Place the 2 cables over the outdoor unit.
- 3 Insert a rubber sheet between the cables and the outdoor unit to prevent the cables from scratching the paint (field supply).
- 4 Attach the ends of the cables.
- 5 Tighten the cables.



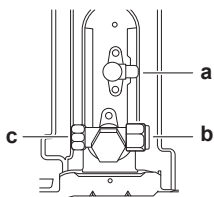
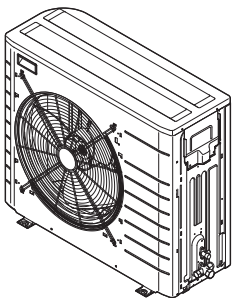
4.3 Connecting the refrigerant piping



DANGER: RISK OF BURNING/SCALDING

4.3.1 To connect the refrigerant piping to the outdoor unit

- 1 Connect the liquid refrigerant connection from the indoor unit to the liquid stop valve of the outdoor unit.



- a Liquid stop valve
- b Gas stop valve
- c Service port

- 2 Connect the gas refrigerant connection from the indoor unit to the gas stop valve of the outdoor unit.



NOTICE

It is recommended that the refrigerant piping between indoor and outdoor unit is installed in a ducting or the refrigerant piping is wrapped with finishing tape.

4.4 Checking the refrigerant piping

4.4.1 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.

4.4.2 To perform 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

Be sure to open the gas stop valve after piping installation and vacuuming. Running the system with the valve closed, the compressor may break down.

4.5 Charging refrigerant

4.5.1 To determine the additional refrigerant amount

If the total liquid piping length is...	Then...
≤10 m	Do NOT add additional refrigerant.
>10 m	$R = (\text{total length (m) of liquid piping} - 10 \text{ m}) \times 0.020$ $R = \text{Additional charge (kg) (rounded in units of 0.01 kg)}$



INFORMATION

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

4.5.2 To charge additional refrigerant



WARNING

- ONLY use R410A as refrigerant. Other substances may cause explosions and accidents.
- R410A contains fluorinated greenhouse gases. Its global warming potential (GWP) value is 2087.5. 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).

- Connect the refrigerant cylinder to the service port.
- Charge the additional refrigerant amount.
- Open the gas stop valve.

4.5.3 To fix the fluorinated greenhouse gases label

- Fill in the label as follows:

Contains fluorinated greenhouse gases

RXXX

GWP: XXX

1 = kg

2 = kg

1 + 2 = kg

GWP × kg / 1000 = tCO₂eq

f

- 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.
- Factory refrigerant charge: see unit name plate
- Additional refrigerant amount charged
- Total refrigerant charge
- Quantity of fluorinated greenhouse gases** of the total refrigerant charge expressed as tonnes CO₂ equivalent.
- GWP = Global warming potential



NOTICE

Applicable legislation on **fluorinated greenhouse gases** requires that the refrigerant charge of the unit is indicated both in weight and CO₂ equivalent.

Formula to calculate the quantity in CO₂ 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 near the gas and liquid stop valves.

4.6 Connecting the electrical wiring



DANGER: RISK OF ELECTROCUTION

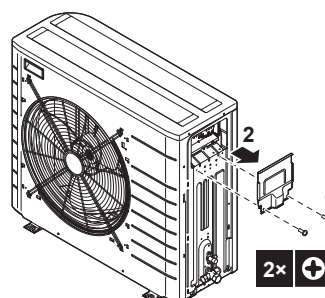


WARNING

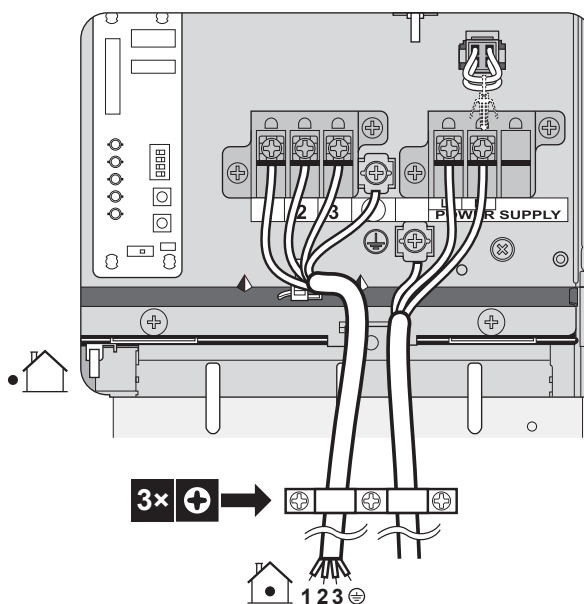
ALWAYS use multicore cable for power supply cables.

4.6.1 To connect the electrical wiring to the outdoor unit

- Remove the 2 switch box cover screws.
- Remove the switch box cover.



- Open the wire clamp.
- Connect the interconnection cable and power supply as follows:

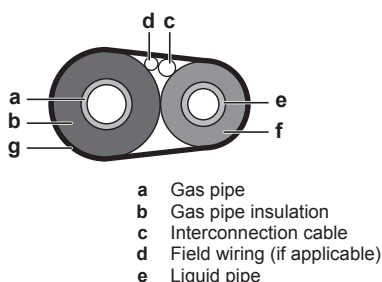


- Install the switch box cover.

4.7 Finishing the outdoor unit installation

4.7.1 To finish the outdoor unit installation

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



5 Starting up the outdoor unit

- f Liquid pipe insulation
- g Finishing tape

2 Install the service cover.

5 Starting up the outdoor unit

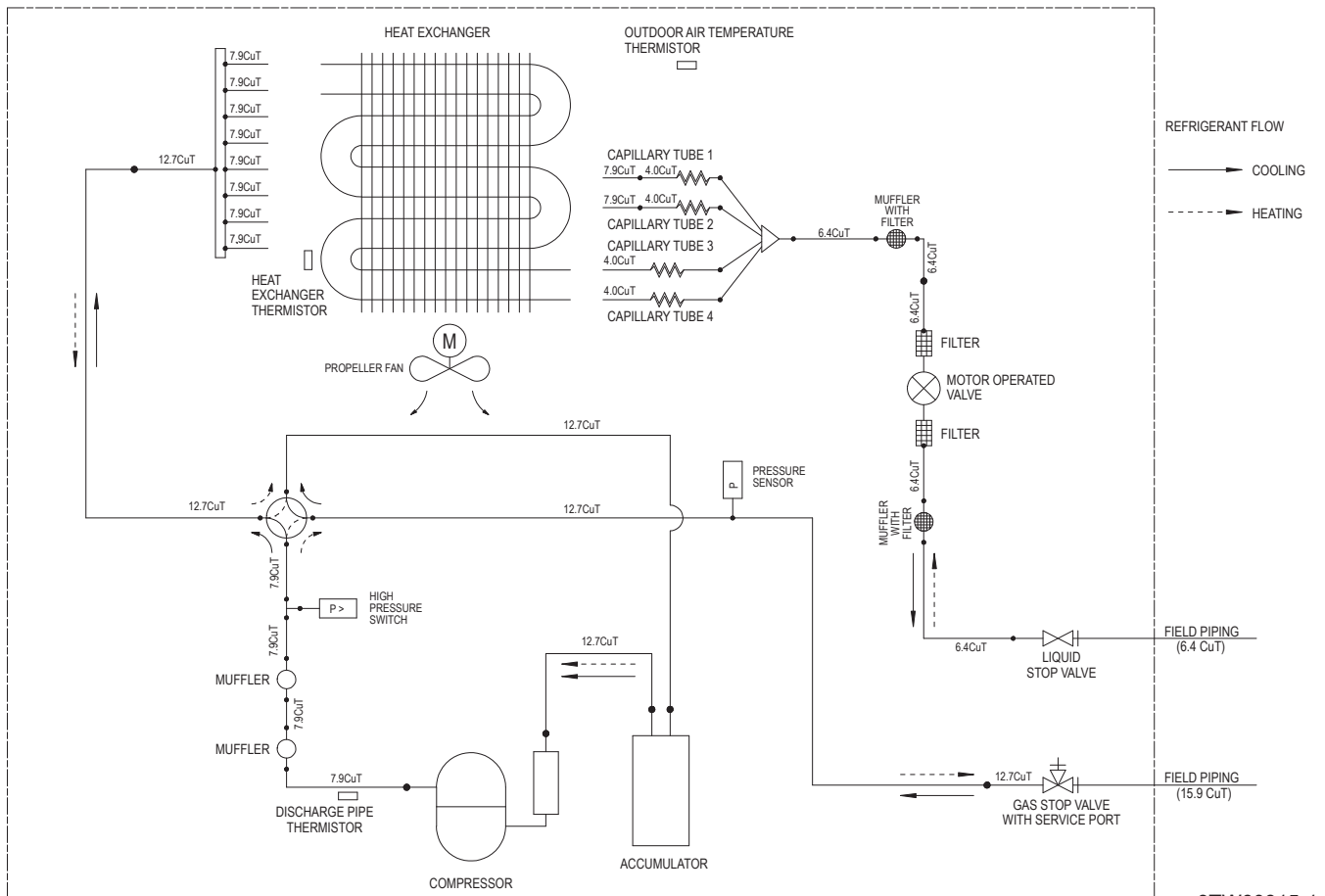
See the indoor unit installation manual for configuration and commissioning of the system.

6 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).

6.1 Piping diagram: Outdoor unit

OUTDOOR UNIT



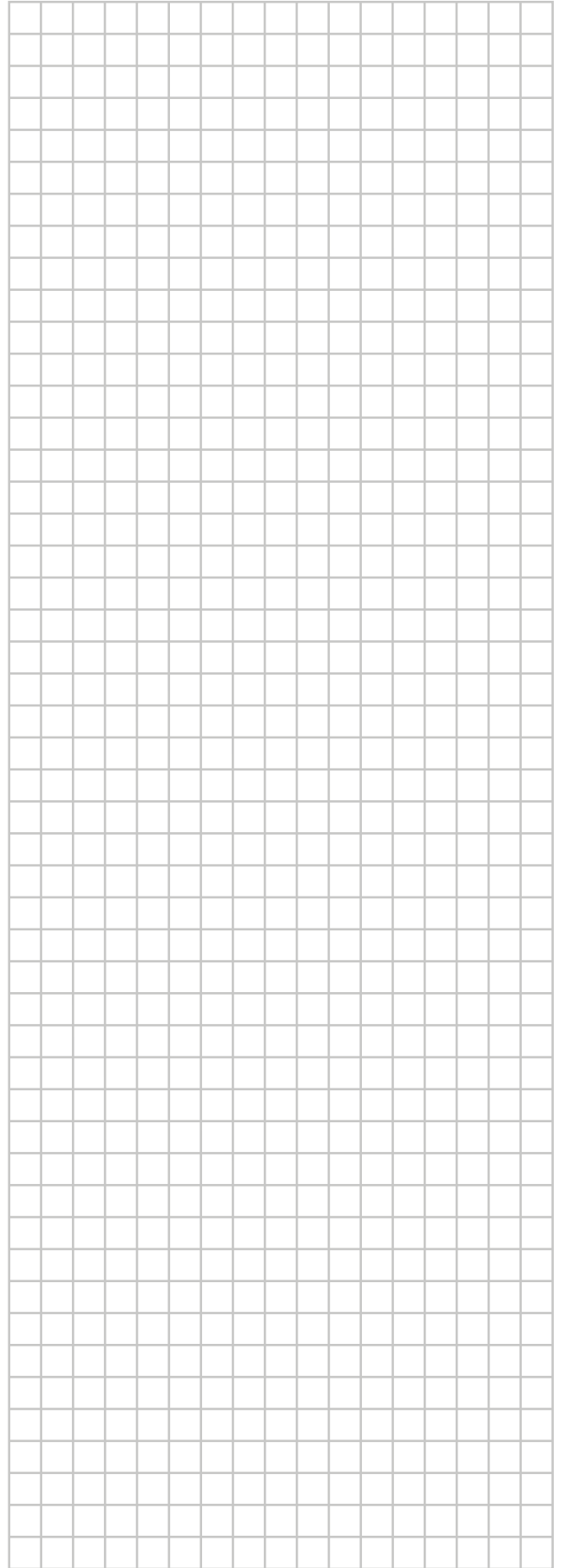
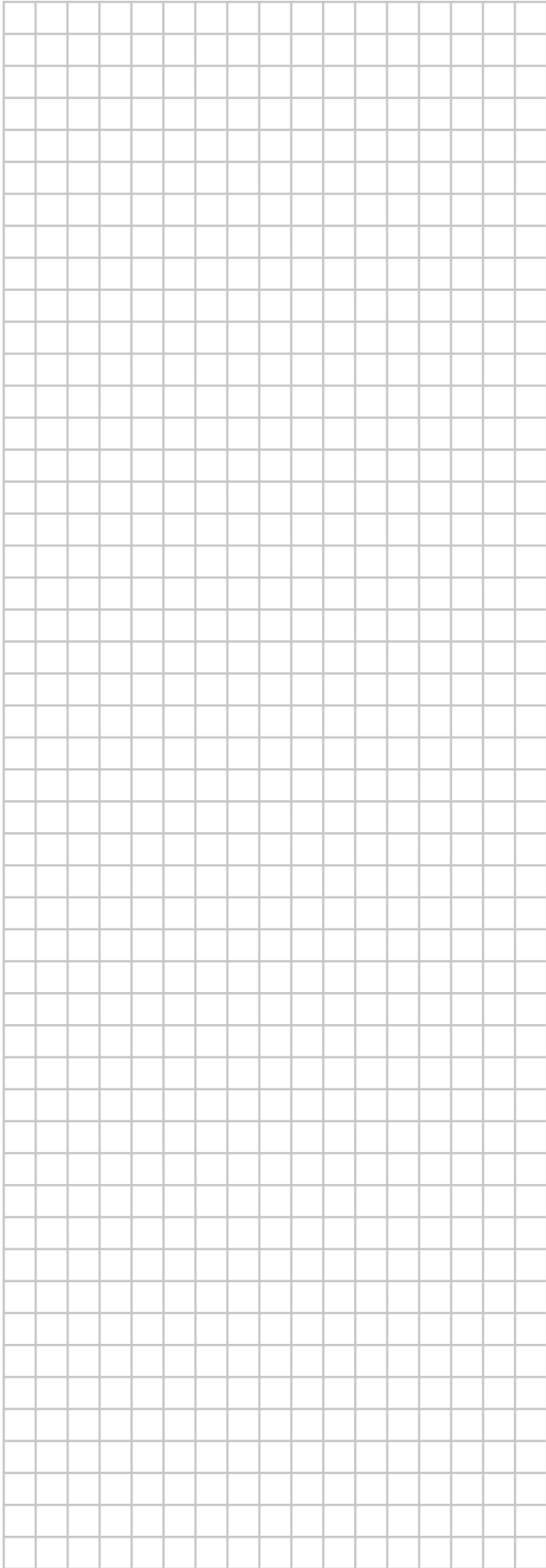
3TW60815-1

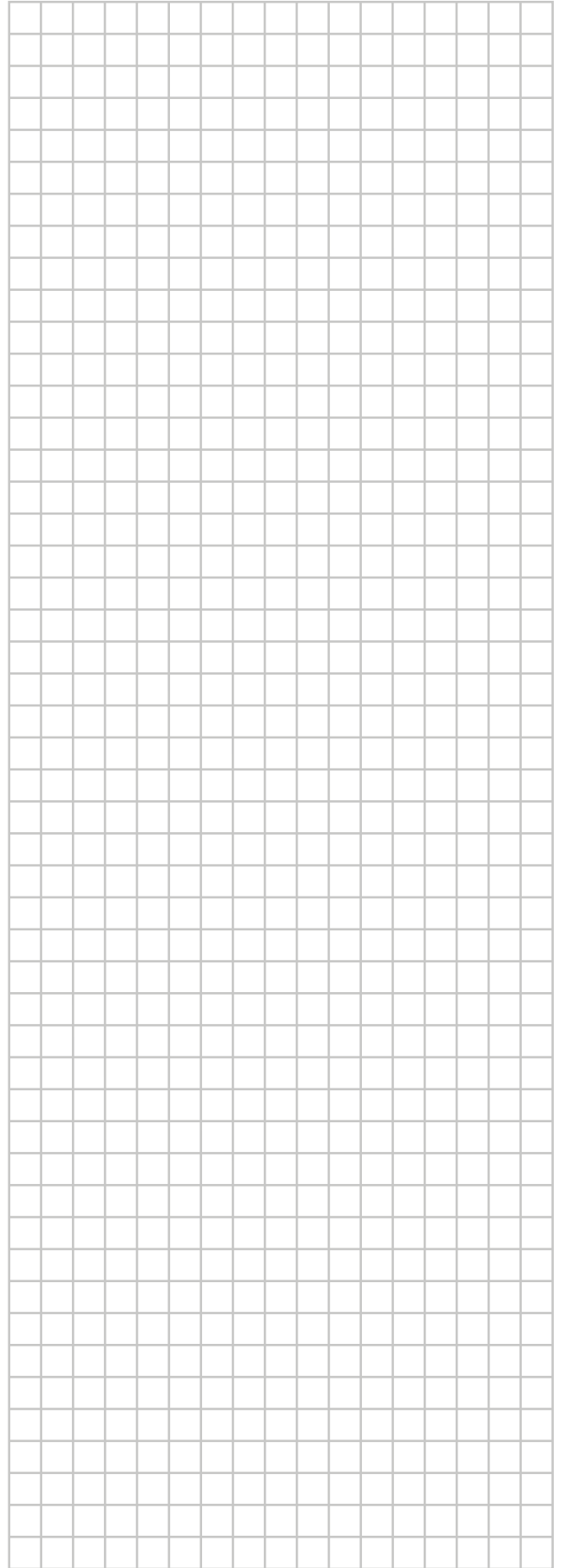
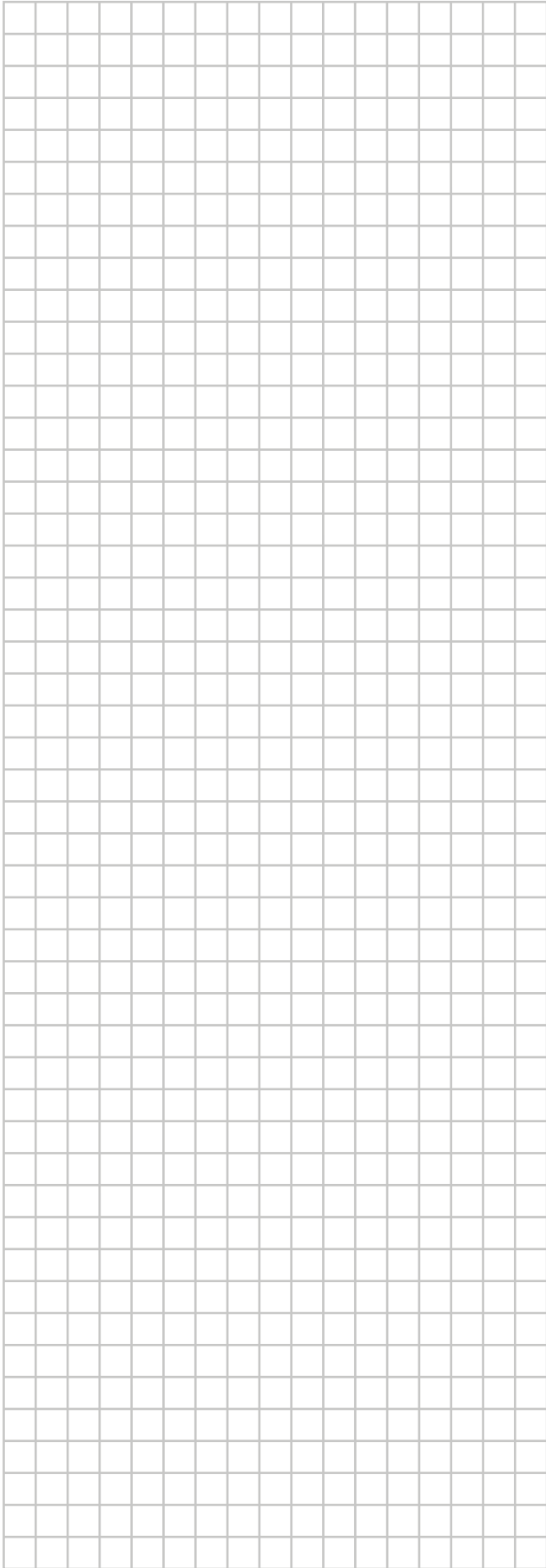
6.2 Wiring diagram: Outdoor unit

See the internal wiring diagram supplied with the unit (on the inside of the top plate). The abbreviations used are listed below.

C110~C112	Capacitor	L	Live
DB1, DB2, DB401	Rectifier bridge	LED 1~LED 4	Indication lamps
DC_N1, DC_N2	Connector	LED A, LED B	Pilot lamp
DC_P1, DC_P2	Connector	M1C	Compressor motor
DCP1, DCP2,	Connector	M1F	Fan motor
DCM1, DCM2	Connector	MR30, MR306,	Magnetic relay
DP1, DP2	Connector	MR307, MR4	
E1, E2	Connector	MRM10, MRM20	Magnetic relay
E1H	Drain pan heater	MR30_A, MR30_B	Connector
FU1~FU5	Fuse	N	Neutral
HL1, HL2, HL402	Connector	PCB1	Printed circuit board (main)
HN1, HN2, HN402	Connector	PCB2	Printed circuit board (inverter)
IPM1	Intelligent power module	PCB3	Printed circuit board (service)

Q1DI	Earth leakage circuit breaker
Q1L	Overload protector
R1T	Thermistor (discharge)
R2T	Thermistor (heat exchanger)
R3T	Thermistor (air)
S1NPH	Pressure sensor
S1PH	High pressure switch
S2~S503	Connector
SA1	Surge arrestor
SHEET METAL	Terminal strip on fixed plate
SW1, SW3	Push buttons
SW2, SW5	DIP switches
U	Connector
V	Connector
V2, V3, V401	Varistor
W	Connector
X11A, X12A	Connector
X1M, X2M	Terminal strip
Y1E	Electronic expansion valve coil
Y1R	Reversing solenoid valve coil
Z1C~Z4C	Ferrite core
	Field wiring
	Terminal strip
	Connector
	Terminal
	Protective earth
BLK	Black
BLU	Blue
BRN	Brown
GRN	Green
ORG	Orange
PPL	Purple
RED	Red
WHT	White
YLW	Yellow







Copyright 2013 Daikin

DAIKIN EUROPE N.V.

Zandvoordestraat 300, B-8400 Oostende, Belgium

4P344906-1D 2020.10