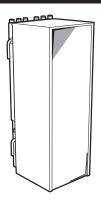


Installation manual

Daikin Altherma ground source heat pump



- KONFORMITÄTSERKLÄRUNG - DECLARATION-DE-CONFORMITE - CONFORMITEITSVERKLARING

CE - DECLARACION-DE-CONFORMIDAD CE - DICHIARAZIONE-DI-CONFORMITA CE - ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ

CE-DECLARAÇÃO-DE-CONFORMIDADE CE-3ARBIEHÚR-O-COOTBETCTBUN CE-OVERENSSTEMMEL SESERKLÆRNG CE-FÖRSÄKRAN-OM-ÖVERENSTÄMMELSE

ម៉ូម៉ូម៉ូ

ERKLÆRING OM-SAMSVAR ILMOITUS-YHDENMUKAISUUDESTA PROHLÁŠENÍ-O-SHODĚ

ម៉ូម៉ូម៉ូម៉ូ

- IZJAVA-O-USKLAĐENOSTI -- MEGFELELŐSÉGI-NYILATKOZAT -- DEKLARACJA-ZGODNOŚCI -- DECLARAŢIE-DE-CONFORMITATE

CE - IZJAVA O SKLADNOSTI CE - VASTAVUSDEKLARATSIOON CE - JEKTIAPALJAR-3A-C-BOTBETCTBME

CE - ATTÍKTIES-DEKLARACIJA CE - ATBILSTĪBAS-DEKLARĀCIJA CE - VYHLÁSENIE-ZHODY CE - UYGUNLUK-BEYANI

Daikin Europe N.V.

declares under its sole responsibility that the equipment to which this declaration relates: erklärt auf seine alleinige Verantwortung daß die Ausrüstung für die diese Erklärung bestimmt ist:

- déclare sous sa seule responsabilité que l'équipement visé par la présente déclaration:
- 80 3 0 3
- verklaart hierbij op eigen exotusieve verantwordelijkheid did de apparatuur waarop deze verklaring betrekking heeft. declara bap su uinza responsabilitäd que el exupto al que hace referente de declaración: dohian asutula propria responsabilità de gla apparencoli a un ié infrait questa dichiazarone; forhulor per remokernet mys etidiny din ostemnology, drow moto ouvelptor in mopiouro difusor; declara sob sua exotusiva responsabilitade que os equipamentos a que esta declaração se refere:
- deklareari egenskap ar huvidarsvång, attritrishingen som berörs av derina deklaration innebär att: erktærer et fullstendig ansvar for at det utslyr som benøres av denne deklarasjon innebærer at: linnottaa yksinomaan onnalla tvastuulaan, että färnän linnottuksen tarkottamat latteet 8 2 2 2 2 2 2 2 2 9 8 € € 8 8 8 8 5 € 8 6 € €
- заявляет, исилочительно под свою ответственность, что оборудование, к которому относится настоящее заявление: eiklæser under eixensisarlig, at udstyret, som er omfattet af denne erklæering:
- pohlašuje ve své prie odpovědnosti. že zařízení, k němuž se toto pohlášení vzahluje: zjavljuje pod iskljuživo vlastitom odgovomošču da oprema na koju se ova izjava odnost teljes felefossége tudatázan kljelenít, hogy a berendezések, melyekre e nyllatkozat vonatkozík:
- 17 (**) deklanije na wlasną i wylączną odpowiadzianość, że urządzenia, których la deklanaja dotyczy.
 18 (**) decizia pe proprie datychuniene de adzięnamelbe la care a deriga zasaśł decizianie.
 18 (**) z vso odpownostoj czyałną do poprena marza, na klatio se zbya narakż.
 18 (**) premappiera a caso naropowch, ve docypazenen, za wo ce o maza rzan parapajumi.
 18 (**) premappiera a caso naropowch, ve docypazenen, za wo ce o maza rzan parapajumi.
 18 (**) premappiera a caso naropowch, ve docypazenen, za wo ce o maza rzan parapajumi.
 18 (**) skaża szan waskomyte skelet, kad pangi, kuria i hakma śl ciekłanają.
 18 (**) prim u plubitu zpieroku, za lażki aprziatije kelatra, kur ami neteca śl ciekłanają.
 18 (**) wykasuje na kastu zopowednost, że zardanie, at pokie sa udzianie, bot wykasene.
 18 (**) wykasuje na kastu zopowednost, że zardanie, at pokie sa udzianie, bot wykasene.
 18 (**) maraman kandi szopowednost, że zardanie, ar pokie sa udzianie pokierojene.

EGSQH10S18AA9W

3 9 5 der/den fotgenden Norm(en) oder einem anderen Normdokument oder -dokumenten entspricht/entsprechen, unter der Voraussetzung, daß sie gemäß are in conformity with the following standard(s) or other normative document(s), provided that these are used in accordance with our instructions: unseren Anweisungen eingesetzt werden:

sont conformes à lafaux noime(s) ou autre(s) documen(s) normatif(s), pour autant qu'ils soient utilisés conformément à nos instructions: conform de volgende norm(en) of één of meer andere bindende documenten zijn, op voowaarde dat ze worden gebuikt overeenkomstig onze

están en conformidad con la(s) siguiente(s) norma(s) u otro(s) documento(s) normativo(s), siempre que sean utilizados de acuerdo con nuestras 92

sono conformi ali() seguente(i) standard(s) o altro(i) documento(i) a carattere normativo, a patib che vengano usati in conformità alle nostre istruzioni: είναι σύμφωνα με το(σ) ακόλουθο(ο) πρότυπο(σ) ή άλλο έγγραφο(σ) κατονισμών, υπό την προύπθέσση ότι χρισιμοπορώτα αύμφωνα με τις οδηγίες μας:

соответствуют стедующим стандатам или другим нодалятивым доументам, тру устовим их истолькавамя сотражно нетрумиям, очегловет figendes standardled ne entringsjewerbe dumentlen), foruds at dissea amendes i henhold it voe instrukser. essektive utusting at utgot for veerstaamees med cost fige fidende standard(e) else andra normgivande dux ment under troutsafting at 08 estão em conformidade com a(s) seguinte(s) norma(s) ou outro(s) documento(s) normativo(s), desde que estes sejam utilizados de acordo com as nossas instruções:

aménding sker l'overensstammelse med via a ristuktoner.

12. respoktive ustry et noverenssemmelse med fagande standarder eller andre normgivende dokumentide udber fourbesening av at disse brukes i henhoti til vale instruker.

13. vaskaade standarder eller el

spehiają wymogi nasiąpujących norm i innych dokumentów normalizacyjnych, pod warunkiem że używane są zgodnie z naszymi nistrukcjami: suntin conformijale cu umatorui (umatoarele) standardie) sau attie) documentie) normatiwie), cu condiția ca acestea să fie utilizate în conformitate cu megfelelnek az alábbi szabvány(ok)nak vagy egyéb irányadó dokumentum(ok)nak, ha azokat előírás szerint használják: instrucțiunile noastre: 9 1 9

Instruction transaction frankard in drugini normativi, pod pogojem, da se uporabljajo v skladu z našimi ravodili:

20. on vrastavnes grignitis (Paradizardile) ga vile sele normativese dormanitese a se podorio dormanitese d

návodom: ūrūnūn, talimatlanmiza göre kullanılması koşuluyla aşağıdaki standartlar ve norm belirten belgelerle uyumludur;

6 = 5 6 4 6 6 6 01 Directives, as amended.
02 Directives, as amended.
03 Directives, letter Achdering.
03 Directives, letter ach mordifies.
04 Richtlighen, zoals geamendeerd.
05 Directives, seguin for emmedato.
06 Directives, come da modifica.
07 Orghwis virun, sydour ropromomplei.
08 Directives, conforme alteração em.
09 Juppernia so seeum noripasseum.

Low Voltage 2014/35/EU

19 ob upošlevanju določb:
20 vastavati nobele:
21 cnepsalivu vrajevire + a:
22 lakanis nuostalu, paleikiamų:
22 lakanis nuostalu, paleikiamų:
23 lakanis nuostalu, paleikiamų:
24 odžiavajući ustanoventa:
25 burun ksyllarina uygun oleak;

Electromagnetic Compatibility 2014/30/EU

18 Directiver, med severe andringer.
19 Directiver, med severe andringer.
19 Directiver consistent andringer.
19 Directiver severe andringer.
20 Directiver severe както е изложено в <A> и оценено положително от

ako bolo uvedené v <A> a pozitívne zistené v súlade kā norādīts <A> un atbilstoši pozitīvajam vērtējumam съгласно **Сертификата <С>** kaip nustatyta **<A>** ir kaip teigiamai nuspręsta **** pagal saskaņā ar sertifikātu < s osvedčením <C>.

<A> DAIKIN.TCF.025E19/07-2013 <A>'da belirtildiği gibi ve <C> Sertifikasına göre tarafından olumlu olarak değerlendirildiği gibi.

EN60335-2-40

10 under iggitagelse af bestemmelserne i: 11 enligt villoder i. 12 girt ihenhold ibestemmelserne i: 13 noudstlaen määräyksiä: 14 za doorben kisaloven předpisu: 15 prema odreboma: 16 követa al.; 17 zgodné z postanowiemmi Dyrektyw: 18 in uma pravedeníor. 07 Σημείωση* 06 Nota* according to the Certificatie <C>.

When I AP Angelight and vor 4B positiv
beurteit gemät Zerffittet <C>.

Butteit gemät Zerffittet <C>.

Bit que défini dans <4P et évalué positivement par 08 Nota* as set out in <A> and judged positively by following the provisions of:
gemäß den Vorschriften der:
conformément aux stipulations des:
tovereenkomstig de bepalingen van: με τήρηση των διατάξεων των: de acordo com o previsto em: в cooтветствии с положениями: siguiendo las disposiciones de: secondo le prescrizioni per: 03 Remarque* 02 Hinweis* 01 Note*

11 Information* решением **КВ**> остласно **Свидетельству <С>** som anført i **<A>** og positivt vurderet af **** i henhold til **15 Napomena*** как указано в <A> и в соответствии с положительным 14 Poznámka* 12 Merk* 13 Huom* secondo il Certificatio <2>.

Orimo, kelopičino oro <4> kort pokrati Brind and delineato nel <A> e giudicato positivamente da Certifikat <C> zoals vermeld in <A> en positief beoordeeld door 09 Примечание* 10 Bemærk*

como se establece en <A> y es valorado positivamente por de acuerdo con el Certificado <C>.

conformément au Certificat <C>. overeenkomstig Certificaat <C>

04 Bemerk*

05 Nota*

19 Opomba* ijsk bylo uvedeno v <A> a pozitivně zijštěno

Pb. v souladu s sevetědenim <C>.

Rako je boženo u <A> i pozitivno ocjenjeno od strane 20 Markus*

Rako je boženo u <A> i pozitivno ocjenjeno od strane 20 Markus*

Pb. prema Gerffilkatu <C>. 17 Uwaga* 18 Notă* som det fremkommer i <A> og gjennom positiv bedømmelse av ifølge Sertifikat <C> jotka on esitetty asiakiŋassa <A> ja jotka on hyväksynyt Sertifikaatin <C> mukaisesti. enligt <A> och godkänts av enligt Certifikatet <C>.

a(z) <A> alapján, a(z) igazolta a megfelelést, a(z) 21 Забележка* asa cum este stabilit în <A> și apreciat pozitiv de 23 Piezimes* în conformitate cu Certificatul <C>. 22 Pastaba* 25 Not* nagu on näidatud dokumendis <**A>** ja heaks kiidetud <**B>** järgi vastavalt sertifikaadile <**C>**. kot je določeno v < A> in odobreno s strani < B> C> tanúsítvány szennt zgodnie z dokumentacją <A>, pozytywną opinią i Świadectwem <C> v skladu s certifikatom < 16 Megjegyzés*

<C> 2082543.0551-QUA/EMC DEKRA (NB0344)

Director

Shigeki Morita

Ostend, 1st of April 2016

Zandvoordestraat 300, B-8400 Oostende, Belgium

DAIKIN EUROPE N.V.

Table of contents

1.1		nie document
Δh	out the	his document
2.1		unit
	2.1.1	To remove the accessories from the indoor unit
Pre	paratio	on
3.1	•	ng the installation site
	3.1.1	Installation site requirements of the indoor unit
3.2	Preparii	ng piping
	3.2.1	To check the water volume and flow rate of the
		space heating circuit and brine circuit
3.3		ng electrical wiring
	3.3.1	Overview of electrical connections for external and internal actuators
Ins	tallatio	n
4.1	Opening	g the units
	4.1.1	To open the indoor unit
	4.1.2	To open the switch box cover of the indoor unit
4.2	Mountin	ng the indoor unit
	4.2.1	To install the indoor unit
4.3		ting the brine piping
	4.3.1	To connect the brine piping
	4.3.2	To fill the brine circuit
	4.3.3	To insulate the brine piping
4.4		ting the water piping
	4.4.1 4.4.2	To connect the water piping
	4.4.2	To connect the recirculation piping
	4.4.4	To connect the drain nose
	4.4.5	To fill the domestic hot water tank
	4.4.6	To insulate the water piping
4.5		ting the electrical wiring
1.0	4.5.1	About electrical compliance
	4.5.2	To connect the electrical wiring on the indoor unit
	4.5.3	To connect the main power supply
	4.5.4	To connect the remote outdoor sensor
	4.5.5	To connect the user interface
	4.5.6	To connect the shut-off valve
	4.5.7	To connect the electrical meters
	4.5.8	To connect the domestic hot water pump
	4.5.9	To connect the alarm output
	4.5.10	To connect the space heating ON/OFF output
	4.5.11	To connect the changeover to external heat source
	4.5.12	To connect the power consumption digital inputs
	4.5.13	To connect the safety thermostat (normal closed
4.6	Einiohin	contact)g the indoor unit installation
4.0	4.6.1	To fix the user interface cover to the indoor unit
	4.6.2	To close the indoor unit
Co	nfigura	ition
5.1	_	w: Configuration
	5.1.1	To access the most used commands
5.2	Basic co	onfiguration
	5.2.1	Quick wizard: Language / time and date
	5.2.2	Quick wizard: Standard
	5.2.3	Quick wizard: Options
	5.2.4	Quick wizard: Capacities (energy metering)
		Space heating control
	5.2.5	
	5.2.6	Domestic hot water control
5.3	5.2.6 5.2.7	

		5.3.2	Heat source settings	18
		5.3.3	System settings	18
	5.4	Menu s	structure: Overview installer settings	19
6	Cor	mmiss	ioning	20
	6.1	Checkl	ist before commissioning	20
	6.2	Checkl	ist during commissioning	20
		6.2.1	To check the minimum flow rate	20
		6.2.2	To perform an air purge	20
		6.2.3	Air purge function on the brine circuit	20
		6.2.4	To perform a test run	21
		6.2.5	To perform an actuator test run	21
		6.2.6	To perform an underfloor heating screed dryout	22
7	Har	nd-ove	er to the user	22
	7.1	To fix t	he applicable language on the unit name plate	22
8	Tec	hnica	l data	23
	8.1	Piping	diagram: Indoor unit	23
	8.2		diagram: Indoor unit	

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)
- Indoor unit installation manual:
 - Installation instructions
 - Format: Paper (in the box of the indoor unit)
- Installer reference guide:
 - Preparation of the installation, good practices, reference data,...
 - Format: Digital files on http://www.daikineurope.com/supportand-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/productinformation/

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

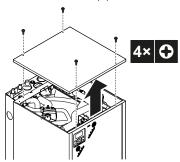
- A subset of the latest technical data is available on the regional Daikin website (publicly accessible).
- The full set of latest technical data is available on the Daikin extranet (authentication required).

2 About the box

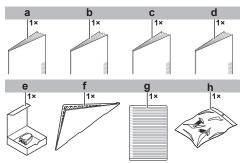
2.1 Indoor unit

2.1.1 To remove the accessories from the indoor unit

- 1 Remove the screws at the top of the unit.
- 2 Remove the top panel.



3 Remove the accessories.



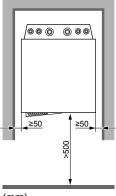
- a General safety precautions
- **b** Addendum book for optional equipment
- c Installation manual
- d Operation manual
- Remote outdoor sensor
- f User interface kit cover
- g Multilingual fluorinated greenhouse gases label
- 2 screws for fixing the user interface.
- 4 Reinstall the top panel.

3 Preparation

3.1 Preparing the installation site

3.1.1 Installation site requirements of the indoor unit

• Mind the following spacing installation guidelines:



(mm)

 The indoor unit is designed for indoor installation only and for ambient temperatures ranging from 5~30°C.

3.2 Preparing piping



NOTICE

In case of plastic pipes, make sure they are fully oxygen diffusion tight according to DIN 4726. The diffusion of oxygen into the piping can lead to excessive corrosion.

3.2.1 To check the water volume and flow rate of the space heating circuit and brine circuit

Minimum water volume

Check that the total water volume per circuit in the installation is minimum 20 litre, the internal water volume of the indoor unit NOT included.



INFORMATION

If a minimum heating load of 1 kW can be guaranteed and setting [9-04] is changed by the installer from 1 to 4°C, the minimum water volume can be lowered to 10 litre.



INFORMATION

In critical processes, or in rooms with a high heat load, extra water might be required.



NOTICE

When circulation in each space heating/cooling loop is controlled by remotely controlled valves, it is important that the minimum water volume is guaranteed, even if all of the valves are closed.

Minimum flow rate

Check that the minimum flow rate (required during defrost/backup heater operation) in the installation is guaranteed in all conditions.



NOTICE

When circulation in each or certain space heating loops is controlled by remotely controlled valves, it is important that the minimum flow rate is guaranteed, even if all valves are closed. In case the minimum flow rate cannot be reached, a flow error 7H will be generated (no heating or operation).

See the installer reference guide for more information.

Minimum required flow rate during backup heater operation

See the recommended procedure as described in "6.2 Checklist during commissioning" on page 20.

3.3 Preparing electrical wiring

3.3.1 Overview of electrical connections for external and internal actuators

Indoor unit power supply 1 Power supply for E1 and E3 3+N + GND (a) 2 Power supply for E2 2 (b) 4 Preferential kWh rate power supply (voltage free contact) 2 (d) 5 Normal kWh rate power supply (voltage free contact) 2 6.3 A User interface 6 User interface 2 (e) Optional equipment 12 Room thermostat 3 or 4 100 mA(b) 13 Outdoor ambient temperature sensor 2 (b) 14 Indoor ambient temperature sensor 2 (b) 15 Heat pump convector 4 100 mA(b) Field supplied components 16 Shut-off valve 2 100 mA(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 2 (b) 19 Alarm output 2 (b) 20 Changeover to external heat source control 2 (per input signal) (b) 23 Safety thermostat 2 <	Item	Description	Wires	Maximum running current
2 Power supply for E2 2 (c) 4 Preferential kWh rate power supply (voltage free contact) 5 Normal kWh rate power supply User interface 6 User interface 6 User interface 7 Power supply User interface 8 User interface 9 Power supply User interface 10 User interface 11 Room thermostat 12 Room thermostat 13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 16 Shut-off valve 17 Electricity meter 18 Domestic hot water pump 19 Alarm output 20 Changeover to external heat source control digital inputs 2 (c) (d) (d) (d) (d) (d) (d) (d)	Indoor un	it power supply		
4 Preferential kWh rate power supply (voltage free contact) 5 Normal kWh rate power supply User interface 6 User interface 6 User interface 7 Petional equipment 12 Room thermostat 13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 16 Shut-off valve 17 Electricity meter 18 Domestic hot water pump 19 Alarm output 20 (b) Changeover to external heat source control 21 (c) (d) (d) (d) (d) (d) (d) (d)	1		3+N + GND	(a)
Power supply (voltage free contact) Normal kWh rate power supply User interface User interface User interface Room thermostat Indoor ambient temperature sensor Is Heat pump convector Heat pump convector Shut-off valve Shut-off valve Changeover to external peat source control Alarm output Changeover to external digital inputs Shut-off valve Changeover consumption digital inputs Contact Alarm And Alarm output Changeover to external supplied computs Changeover consumption digital inputs Changeover consumption digital inputs Changeover consumption digital inputs Changeover consumption and contact and cont	2	Power supply for E2	2	(c)
supply User interface 6 User interface 2 (e) Optional equipment 12 Room thermostat 3 or 4 100 mA ^(b) 13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 4 100 mA ^(b) Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control digital inputs (b) 20 [Power consumption digital inputs]	4	power supply (voltage	2	(d)
Gelicition 2 (e) Optional equipment 12 Room thermostat 3 or 4 100 mA(b) 13 Outdoor ambient temperature sensor 2 (b) 14 Indoor ambient temperature sensor 2 (b) 15 Heat pump convector 4 100 mA(b) Field supplied components 16 Shut-off valve 2 100 mA(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control 2 (per input digital inputs 2 (per input signal) Changeover to external digital inputs 2 (per input signal) Changeover to external signal (b) Changeover to external signal (c) Changeover to extern	5	'	2	6.3 A
Optional equipment 12 Room thermostat 3 or 4 100 mA ^(b) 13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 4 100 mA ^(b) Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control digital inputs 10 Nord Alarm output digital inputs 11 (b) 12 (per input signal)	User inter	rface		
12 Room thermostat 3 or 4 100 mA ^(b) 13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 4 100 mA ^(b) Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control 22 Power consumption digital inputs (b)	6	User interface	2	(e)
13 Outdoor ambient temperature sensor 14 Indoor ambient temperature sensor 15 Heat pump convector 4 100 mA ^(b) Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control 22 Power consumption digital inputs (b) 2 (per input signal)	Optional	equipment		
temperature sensor 14	12	Room thermostat	3 or 4	100 mA ^(b)
temperature sensor 15 Heat pump convector 4 100 mA ^(b) Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control 21 Power consumption digital inputs (b) 22 (per input signal)	13		2	(b)
Field supplied components 16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 19 Alarm output 2 (b) 20 Changeover to external heat source control 22 Power consumption digital inputs (b)	14		2	(b)
16 Shut-off valve 2 100 mA ^(b) 17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 2 (b) 19 Alarm output 2 (b) 20 Changeover to external heat source control 2 (per input digital inputs (b)	15	Heat pump convector	4	100 mA ^(b)
17 Electricity meter 2 (per meter) (b) 18 Domestic hot water pump 2 (b) 19 Alarm output 2 (b) 20 Changeover to external heat source control 2 (per input digital inputs (b)	Field sup	plied components		
18 Domestic hot water pump 19 Alarm output 20 Changeover to external heat source control 20 Power consumption digital inputs 20 (b) 21 (b) 22 (b) 23 (b) 24 (b)	16	Shut-off valve	2	100 mA ^(b)
pump 19 Alarm output 20 Changeover to external heat source control 21 Power consumption digital inputs 22 (b) 23 (b) 24 (b) 25 (b) 26 (b)	17	Electricity meter	2 (per meter)	(b)
20 Changeover to external heat source control 22 Power consumption digital inputs 2 (b) 2 (per input signal)	18		2	(b)
heat source control 22 Power consumption digital inputs 2 (per input signal) (b)	19	Alarm output	2	(b)
digital inputs signal)	20		2	(b)
23 Safety thermostat 2 (d)	22		'' '	(b)
	23	Safety thermostat	2	(d)

- (a) Refer to name plate on unit.
- (b) Minimum cable section 0.75 mm².
- (c) Cable section 2.5 mm².
- (d) Cable section 0.75 mm² till 1.25 mm²; maximum length: 50 m. Voltage-free contact shall ensure the minimum applicable load of 15 V DC, 10 mA.
- (e) Cable section 0.75 mm² till 1.25 mm²; maximum length: 500 m. Applicable for both single user interface and dual user interface connection.



NOTICE

More technical specifications of the different connections are indicated on the inside of the indoor unit.

4 Installation

4.1 Opening the units

4.1.1 To open the indoor unit

- 1 Loosen and remove the screws at the bottom of the unit.
- 2 Push on the button at the bottom of the front plate.

<u>\(\hat{\chi} \)</u>

WARNING: Sharp edges

Take the front plate on the upper part instead of the lower part. Watch your fingers, there are sharp edges on the lower part of the front plate.

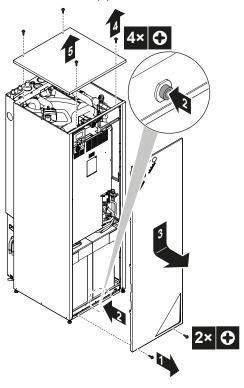
3 Slide the front panel of the unit downwards and remove it.

<u>^</u>

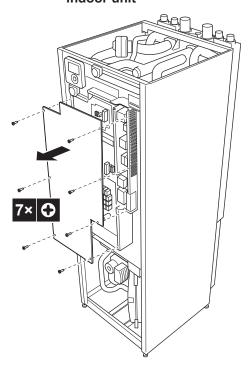
CAUTION

The front panel is heavy. Be careful NOT to jam your fingers when opening or closing the unit.

- 4 Loosen and remove the 4 screws that fix the top panel.
- 5 Remove the top panel from the unit.



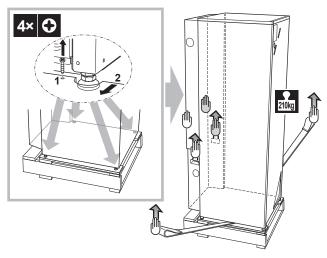
4.1.2 To open the switch box cover of the indoor unit



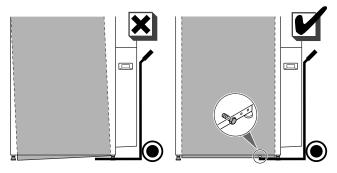
4.2 Mounting the indoor unit

4.2.1 To install the indoor unit

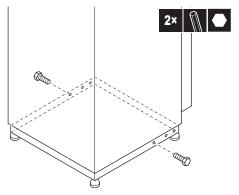
- 1 Bring the unit on the pallet as close as possible to its installation place.
- 2 Lift the indoor unit from the pallet and place it on the floor.



3 Slide the indoor unit into position. Make sure that the side support bolts are present when handling the unit.



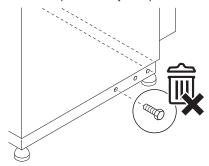
4 Unlink the heat pump module from the outer frame. ONLY remove the side support bolts!



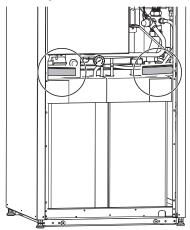


NOTICE

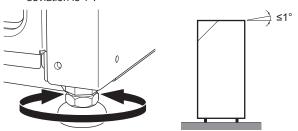
Do NOT throw away any bolts. They need to be re-inserted when transport or heavy manipulation is required.



5 Open the front plate of the unit. If needed, the nylon bands for lifting can be used.



6 Adjust the height of the 4 leveling feet of the outer frame to compensate for floor irregularities. The maximum allowed deviation is 1°.





NOTICE

To avoid structural damage on unit, ONLY move the unit when levelling feet are at their lowest position.



NOTICE

For optimum sound reduction, carefully check if there is no gap between the bottom frame and the floor.

7 Adjust the height of the 2 front leveling feet of the inner frame to compensate for irregularities.



CAUTION

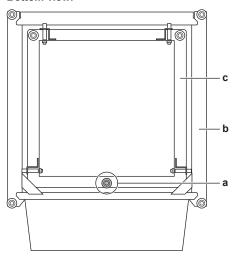
Check that the heat pump module does NOT touch the outer casing.



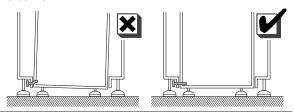
NOTICE

Check if the front support bolts remain levelled and are NOT stressed. The support feet from outer (b) and inner frame (c) MUST be adjusted so that those front bolts remain level. Do NOT adjust support foot (a)!

Bottom view:



Side view:



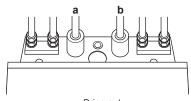


INFORMATION

To check if the front support bolts are not stressed, loosen them partly and fix them again afterwards.

4.3 Connecting the brine piping

4.3.1 To connect the brine piping



a Brine outb Brine in



NOTICE

To facilitate service and maintenance, it is recommended to install shut-off valves as close as possible to the inlet and outlet of the unit.

4.3.2 To fill the brine circuit



WARNING

Before, during and after filling carefully check the brine circuit for leakage.



WARNING

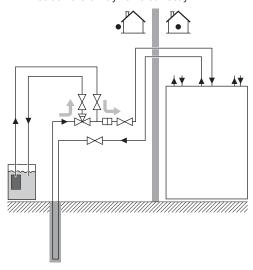
Temperature of the fluid running through the evaporator can become negative. It MUST be protected against freezing. Refer to setting [A-04] in "5.2.2 Quick wizard: Standard" on page 15.



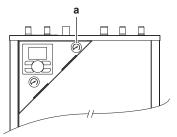
INFORMATION

The materials used in the units brine circuit are chemically resistant to the following anti-freeze fluids:

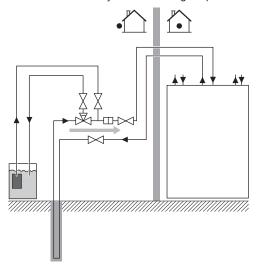
- 40 mass% propylene glycol
- 29 mass% ethanol
- 1 Connect the unit to the field supplied brine filling system.
- 2 Position the 3-way valve correctly.



3 Fill the circuit with brine until the manometer indicates a pressure of ±2.0 bar.



- a Brine manometer
- **4** Purge as much air as possible from the brine circuit. For instructions, see "6 Commissioning" on page 20.
- **5** Return the 3-way valve to its original position.



4.3.3 To insulate the brine piping

The piping in the complete brine circuit MUST be insulated to prevent reduction of the heating capacity.

Consider that the brine circuit piping inside the house can/will condensate. Foresee adequate insulation for these pipes.

4.4 Connecting the water piping

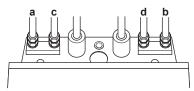
4.4.1 To connect the water piping



NOTICE

Do NOT use excessive force when connecting the piping. Deformation of the piping can cause malfunctioning of the

- Connect the domestic hot water in and out pipes to the indoor
- Connect the space heating in and out pipes to the indoor unit.



- Space heating water out
- Space heating water in b
- Domestic hot water out
- Domestic cold water in (cold water supply)



NOTICE

It is recommended to install shut-off valves to cold water in and hot water out connections. Shut-off valves are field supplied.



NOTICE

Install air purge valves at all local high points.



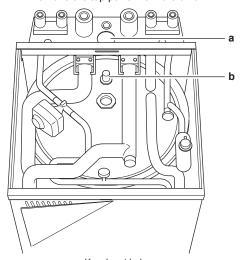
NOTICE

A pressure relief valve (field supply) with an opening pressure of maximum 10 bar must be installed on the domestic cold water inlet connection in accordance with the applicable legislation.

4.4.2 To connect the recirculation piping

Prerequisite: Only required if you need recirculation in your system.

- Loosen and remove the screws at the bottom of the unit.
- Slide the front panel of the unit downwards and remove it.
- 3 Loosen and remove the 4 screws that fix the top panel.
- Remove the top panel from the unit.



- Connection for recirculation piping

- 5 Remove the knock-out hole at the backside of the unit.
- Connect the recirculation piping to the recirculation connection and route the piping through the knock-out hole at the backside of the unit.
- Re-attach the insulation and casing.

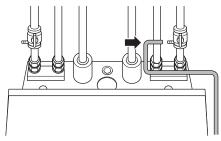
4.4.3 To connect the drain hose

Condensate can form on the brine components inside the compressor department of the unit. The unit contains a drain pan. Depending on room ambient temperature, room humidity and operation condition, the drain pan can overflow. A drain hose is supplied with the unit.

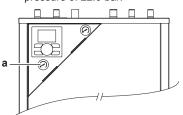
The drain hose is routed to the backside on the left, close to the bottom of the unit. A field supplied drain pump might be needed to pump the water away to the field drain.

To fill the space heating circuit 4.4.4

1 Connect the water supply hose to the fill valve (field supply).



- Open the fill valve.
- Make sure that the automatic air purge valve is open (at least 2 turns).
- Fill the circuit with water until the manometer indicates a pressure of ±2.0 bar.



- Water manometer
- Purge as much air as possible from the water circuit.



NOTICE

- Air in the water circuit can cause malfunctioning of the backup heater. During filling, it may not be possible to remove all the air from the circuit. Remaining air will be removed through the automatic air purge valves during the initial operating hours of the system. Additional filling with water afterwards may be required.
- To purge the system, use the special function as described in the chapter "6 Commissioning" on page 20. This function should be used to purge the heat exchanger coil of the domestic hot water tank.
- Close the fill valve.
- Disconnect the water supply hose from the fill valve.

4.4.5 To fill the domestic hot water tank

- Open every hot water tap in turn to purge air from the system pipe work.
- Open the cold water supply valve.
- Close all water taps after all air is purged.

- 4 Check for water leaks.
- **5** Manually operate the field-installed pressure relief valve to ensure a free water flow through the discharge pipe.

4.4.6 To insulate the water piping

The piping in the complete water circuit MUST be insulated to prevent reduction of the heating capacity.

4.5 Connecting the electrical wiring



DANGER: RISK OF ELECTROCUTION



WARNING

ALWAYS use multicore cable for power supply cables.

4.5.1 About electrical compliance

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 \leq 75 A per phase.).

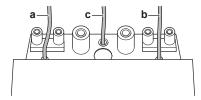
4.5.2 To connect the electrical wiring on the indoor unit



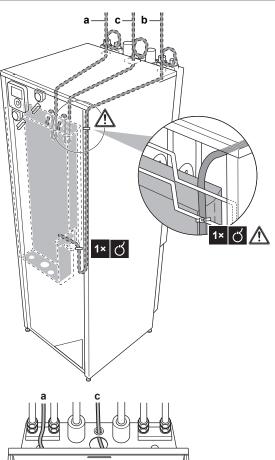
INFORMATION

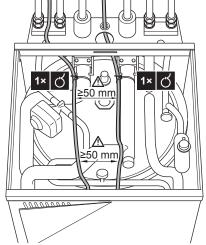
Foresee additional cable length of 35 cm for all wires which should be connected to X2M and X5M on sheet metal support above the hydro PCB. Additional wire length should be tie wrapped at the back side of the unit. Reason is to guarantee serviceability of, for example, the hydro PCB.

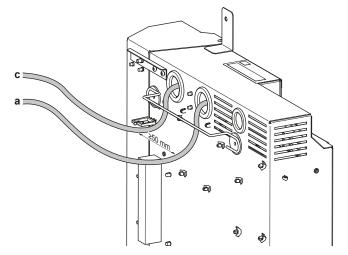
- 1 To open the indoor unit, see "4.1.1 To open the indoor unit" on page 5 and "4.1.2 To open the switch box cover of the indoor unit" on page 5.
- 2 Wiring should enter the unit from the top:

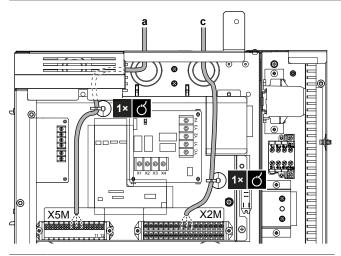


3 Routing of the wiring inside the unit should be as follows:











NOTICE

- Make sure that 50 mm is guaranteed between the low voltage (a) and high voltage (c) cables.
- Make sure that the cables (a) and (c) are routed between the wire guide and the backside of the switch box to prevent water ingress.
- 4 Fix the cable with cable ties to the cable tie mountings to ensure strain relief and to make sure that it does NOT come in contact with the piping and sharp edges.

Routing	Possible cables (depending on unit type and installed options)			
а	Preferential power supply contact			
Low voltage	User interface			
	Power consumption digital inputs (field supply)			
	Outdoor ambient temperature sensor			
	Indoor ambient temperature sensor (option)			
	Electrical meters (field supply)			
	Safety thermostat (field supply)			
b	Normal kWh rate power supply (power)			
High voltage power supply	supply for unit)			
С	Preferential kWh rate power supply			
High voltage control	Heat pump convector (option)			
signal	Room thermostat (option)			
	Shut-off valve (field supply)			
	Domestic hot water pump (field supply)			
	Alarm output			
	Changeover to external heat source control			



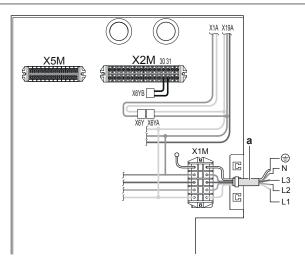
CAUTION

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

4.5.3 To connect the main power supply

1 Connect the main power supply.

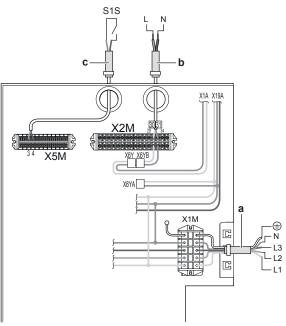
In case of normal kWh rate power supply



Legend: see illustration below.

In case of preferential kWh rate power supply

Connect X6Y to X6YB.



- a Main power supply
- **b** Normal kWh rate power supply
- c Preferential power supply contact
- 2 Fix the cables with cable ties to the cable tie mountings.



INFORMATION

In case of preferential kWh rate power supply, connect X6Y to X6YB. The necessity of separate normal kWh rate power supply to indoor unit (b) X2M/30+31 depends on the type of preferential kWh rate power supply.

Separate connection to the indoor unit is required:

- if preferential kWh rate power supply is interrupted when active, OR
- if no power consumption of the indoor unit is allowed at the preferential kWh rate power supply when active.



INFORMATION

The preferential kWh rate power supply contact is connected to the same terminals (X5M/3+4) as the safety thermostat. It is only possible for the system to have EITHER preferential kWh rate power supply OR a safety thermostat.

4.5.4 To connect the remote outdoor sensor

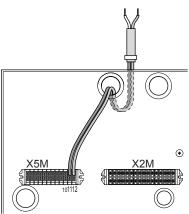
The remote outdoor sensor (delivered as accessory) measures the outdoor ambient temperature.



INFORMATION

If the desired leaving water temperature is weather dependent, the full time outdoor temperature measurement is important.

1 Connect the external temperature sensor cable to the indoor unit.



- 2 Fix the cable with cable ties to the cable tie mountings.
- 3 Install the remote outdoor sensor outside as described in the installation manual of the sensor (delivered as accessory).

4.5.5 To connect the user interface

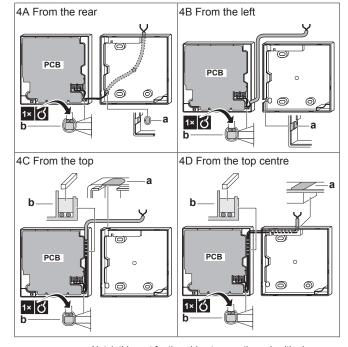
- If you use 1 user interface, you can install it at the indoor unit (for control close to the indoor unit), or in the room (when used as room thermostat).
- If you use 2 user interfaces, you can install 1 user interface at the indoor unit (for control close to the indoor unit) + 1 user interface in the room (used as room thermostat).

The procedure differs slightly depending on where you install the user interface.

#	At the indoor unit	In the room
1	Connect the user interface cable to the	e indoor unit.
	Fix the cable with cable ties to the cab	le tie mountings.
	a	b
	X5M	€2M
	a Main user interface ^(a)	
	b Optional user interface	

#	At the indoor unit	In the room	
2	Insert a screwdriver into the slots underneath the user interface and carefully separate the faceplate from the wallplate. The PCB is mounted in the faceplate of the user interface. Be careful NOT to damage it.		
		1	
3	Use the 2 screws in the accessory bag to fix the wallplate of the user interface to the sheet metal of the unit.	Fix the wallplate of the user interface to the wall.	
	Be careful NOT to distort the shape of the backside of the user interface by overtightening the mounting screws.		
4	Connect as shown in 4A.	Connect as shown in 4A, 4B, 4C or 4D.	
5	Reinstall the faceplate onto the wallpla	ite.	
	Be careful NOT to pinch the wiring whe frontplate to the unit.	en attaching the	

(a) The main user interface is required for operation, but has to be ordered separately (mandatory option).



- a Notch this part for the wiring to pass through with nippers etc.
- **b** Secure the wiring to the front part of the casing using the wiring retainer and clamp.

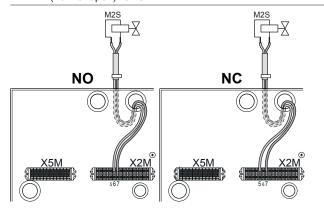
4.5.6 To connect the shut-off valve

1 Connect the valve control cable to the appropriate terminals as shown in the illustration below.



NOTICE

Wiring is different for a NC (normal closed) valve and a NO (normal open) valve.



2 Fix the cable with cable ties to the cable tie mountings.

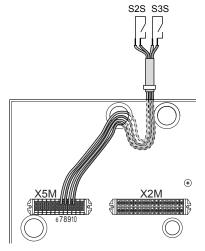
4.5.7 To connect the electrical meters



INFORMATION

In case of an electrical meter with transistor output, check the polarity. The positive polarity MUST be connected to X5M/7 and X5M/9; the negative polarity to X5M/8 and X5M/10.

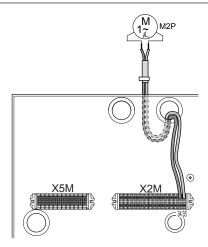
1 Connect the electrical meters cable to the appropriate terminals as shown in the illustration below.



2 Fix the cable with cable ties to the cable tie mountings.

4.5.8 To connect the domestic hot water pump

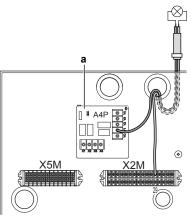
1 Connect the domestic hot water pump cable to the appropriate terminals as shown in the illustration below.



2 Fix the cable with cable ties to the cable tie mountings.

4.5.9 To connect the alarm output

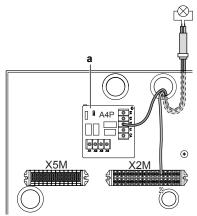
1 Connect the alarm output cable to the appropriate terminals as shown in the illustration below.



- a Installation of EKRP1HB is required.
- 2 Fix the cable with cable ties to the cable tie mountings.

4.5.10 To connect the space heating ON/OFF output

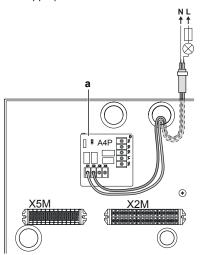
1 Connect the space heating ON/OFF output cable to the appropriate terminals as shown in the illustration below.



- a Installation of EKRP1HB is required.
- 2 Fix the cable with cable ties to the cable tie mountings.

4.5.11 To connect the changeover to external heat source

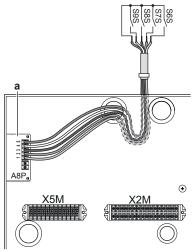
1 Connect the changeover to external heat source cable to the appropriate terminals as shown in the illustration below.



- Installation of EKRP1HB is required.
- 2 Fix the cable with cable ties to the cable tie mountings.

4.5.12 To connect the power consumption digital inputs

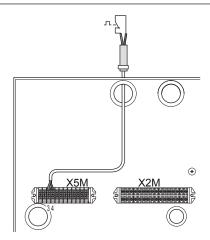
1 Connect the power consumption digital inputs cable to the appropriate terminals as shown in the illustration below.



- a Installation of EKRP1AHTA is required.
- 2 Fix the cable with cable ties to the cable tie mountings.

4.5.13 To connect the safety thermostat (normal closed contact)

1 Connect the safety thermostat (normal closed) cable to the appropriate terminals as shown in the illustration below.



2 Fix the cable with cable ties to the cable tie mountings.



NOTICE

Make sure to select and install the safety thermostat according to the applicable legislation.

In any case, to prevent unnecessary tripping of the safety thermostat, it is recommended that \dots

- ... the safety thermostat is automatically resettable.
- ... the safety thermostat has a maximum temperature variation rate of 2°C/min.
- ... there is a minimum distance of 2 m between the safety thermostat and the 3-way valve.



INFORMATION

After it is installed, do NOT forget to configure the safety thermostat. Without configuration, the indoor unit will ignore the safety thermostat contact.



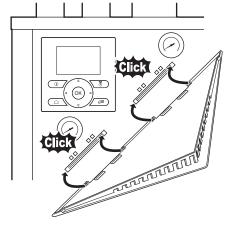
INFORMATION

The preferential kWh rate power supply contact is connected to the same terminals (X5M/3+4) as the safety thermostat. It is only possible for the system to have EITHER preferential kWh rate power supply OR a safety thermostat

4.6 Finishing the indoor unit installation

4.6.1 To fix the user interface cover to the indoor unit

- 1 Make sure that the front panel is removed from the indoor unit. See "4.1.1 To open the indoor unit" on page 5.
- 2 Plug the user interface cover into the hinges.



3 Mount the front panel to the indoor unit.

4.6.2 To close the indoor unit

- 1 Close the switch box cover.
- 2 Reinstall the top plate.
- 3 Reinstall the front panel.



NOTICE

When closing the indoor unit cover, make sure that the tightening torque does NOT exceed 4.1 N•m.

5 Configuration

5.1 Overview: Configuration

This chapter describes what you have to do and know to configure the system after it is installed.



NOTICE

The explanation about the configuration in this chapter gives you ONLY basic explanations. For more detailed explanation and background information, see the installer reference guide.

Why

If you do NOT configure the system correctly, it might NOT work as expected. The configuration influences the following:

- The calculations of the software
- What you can see on and do with the user interface

How

You can configure the system via the user interface.

- First time Quick wizard. When you turn ON the user interface for the first time (via the indoor unit), a quick wizard starts to help you configure the system.
- Afterwards. If necessary, you can make changes to the configuration afterwards.



INFORMATION

When the installer settings are changed, the user interface will request to confirm. When confirmed, the screen will shortly turn OFF and "busy" will be displayed for several seconds.

Accessing settings - Legend for tables

You can access the installer settings using two different methods. However, NOT all settings are accessible via both methods. If so, the corresponding table columns in this chapter are set to N/A (not applicable).

Method	Column in tables
Accessing settings via the breadcrumb in the menu structure.	#
Accessing settings via the code in the overview settings.	Code

See also

- "To access the installer settings" on page 14
- "5.4 Menu structure: Overview installer settings" on page 19

5.1.1 To access the most used commands

To access the installer settings

1 Set the user permission level to Installer.

2 Go to [A]: => Installer settings.

To access the overview settings

- 1 Set the user permission level to Installer.
- 2 Go to [A.8]: => Installer settings > Overview settings.

To set the user permission level to Installer

- 1 Set the user permission level to Adv. end user.
- 2 Go to [6.4]: = > Information > User permission level.
- 3 Press for more than 4 seconds.

Result: / is displayed on the home pages.

4 If you do NOT press any button for more than 1 hour or press again for more than 4 seconds, the installer permission level switches back to End user.

To set the user permission level to Advanced end user

- 1 Go to the main menu or any of its submenus: =
- 2 Press for more than 4 seconds.

Result: The user permission level switches to Adv. end user. Additional information is displayed and "+" is added to the menu title. The user permission level will stay in Adv. end user until set otherwise.

To set the user permission level to End user

1 Press for more than 4 seconds.

Result: The user permission level switches to End user. The user interface will return to the default home screen.

To modify an overview setting

Example: Modify [1-01] from 15 to 20.

- 1 Go to [A.8]: > Installer settings > Overview settings.
- 2 Go to the corresponding screen of the first part of the setting by using the and button.



INFORMATION

An additional 0-digit is added to the first part of the setting when you access the codes in the overview settings.

Example: [1-01]: "1" will result in "01".

Overview settings					
		0	1		
00	01	15	02	03	
04	05		06	07	
08	09		0a	0b	
0c	0d		0e	Of	
OK Confirm	♦ Ac	ljust	♦ Scroll		

3 Go to the corresponding second part of the setting by using the and button.

Overview settings				
		0.	1	
00	01	15	02	03
04	05		06	07
08	09		0a	0b
0c	0d		0e	Of
OK Confirm		Adj	ust	Scroll

Result: The value to be modified is now highlighted.

4 Modify the value by using the ☐ and ☐ button.

	Overview settings					
		0	1			
00	01	20	02	03		
04	05		06	07		
08	09		0a	0b		
0c	0d		0e	Of		
OKConfirm		♦ Ad	ljust	♦ Scroll		

- 5 Repeat previous steps if you have to modify other settings.
- 6 Push ox to confirm the modification of the parameter.
- 7 At installer settings menu, press ox to confirm the settings.



Result: The system will restart.

5.2 Basic configuration

5.2.1 Quick wizard: Language / time and date

#	Code	Description
[A.1]	N/A	Language
[1]	N/A	Time and date

5.2.2 Quick wizard: Standard

Backup heater configuration

#	Code	Description
[A.2.1.5]	[5-0D]	BUH type:
		 4 (3PN,(1/2)): 6 kW 3N~ 400 V

Space heating settings

#	Code	Description
[A.2.1.7]	[C-07]	Unit temperature control:
		O (LWT control)(default): Unit operation is decided based on the leaving water temperature.
		1 (Ext RT control): Unit operation is decided by the external thermostat.
		2 (RT control): Unit operation is decided based on the ambient temperature of the user interface.
[A.2.1.B]	N/A	Only if there are 2 user interfaces:
		User interface location:
		• 0 (At unit)
		1 (In room)(default)
[A.2.1.8]	[7-02]	Number of water temperature zones:
		0 (1 LWT zone): Main
		1 (2 LWT zones): Main + additional
[A.2.1.9]	[F-0D]	Pump operation:
		O (Continuous): Continuous pump operation, regardless of thermo ON or OFF condition.
		1 (Sample)(default): When thermo OFF condition occurs, the pump runs every 5 minutes and the water temperature is checked. If the water temperature is below target, unit operation can start.
		Request): Pump operation based on request. Example: Using a room thermostat and thermostat creates thermo ON/OFF condition.

Brine freezing temperature

#	Code	Description
[A.6.9]	[A-04]	Brine freezeup temp
		• 0: 0°C
		■ 1: –2°C
		■ 2: –4°C
		■ 3: -6°C
		• 4: –8°C
		• 5: –10°C
		• 6: –12°C
		■ 7 (default): -14°C

NOTICE

The setting brine freezing temperature can be modified and the read out is correct in [A.6.9] Brine freezeup temp ONLY after having accessed menu [A.8] Overview settings.

This setting can ONLY be modified and/or saved and the read out is ONLY correct if the communication between hydro module and compressor module is present. The communication between hydro module and compressor module is NOT guaranteed and/or applicable if:

- error "U4" appears on the user interface,
- the heat pump module is connected to preferential kWh rate power supply where power supply is interrupted and preferential kWh rate power supply is activated.

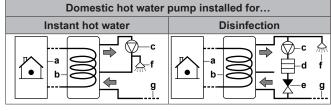
Capacity boost

#	Code	Description
N/A	[A-03]	Compressor frequency
		0 (default): normal
		1: boost

5.2.3 Quick wizard: Options

Domestic hot water settings

#	Code	Description
N/A	[E-05]	DHW operation:
		- 0: N/A
		1 (Yes): Installed
[A.2.2.A]	[D-02]	DHW pump:
		0 (No)(default): NOT installed
		1 (Secondary rtrn): Installed for instant hot water
		2 (Disinf. shunt): Installed for disinfection
		See also illustrations below.



- a Indoor unit
- **b** Tank
- Domestic hot water pump
- d Heater element
- e Non-return valve
- f Shower

g Cold water

Thermostats and external sensors



NOTICE

If an external room thermostat is used, the external room thermostat will control the room frost protection. However, the room frost protection is only possible if the leaving water temperature control on the unit's user interface is turned ON.

#	Code	Description	
[A.2.2.4]	[C-05]	External room thermostat for the main zone:	
		 1 (Thermo ON/OFF): When the used external room thermostat or heat pump convector can only send a thermo ON/OFF condition. 	
		 2 (H/C request): Because only heating is possible, the used external room thermostat can only send a thermo ON/OFF condition. 	
[A.2.2.5]	[C-06]	External room thermostat for the additional zone:	
		* 0: N/A	
		 1 (Thermo ON/OFF): When the used external room thermostat or heat pump convector can only send a thermo ON/OFF condition. 	
		 2 (H/C request): Because only heating is possible, the used external room thermostat can only send a thermo ON/OFF condition. 	
[A.2.2.B]	[C-08]	External sensor:	
		0 (No)(default): NOT installed.	
		 2 (Room sensor): Connected to PCB measuring the indoor temperature. 	

Digital I/O PCB

#	Code	Description
[A.2.2.6.1]	[C-02]	External backup heater source:
		0 (No)(default): None
		1 (Bivalent): Gas, oil boiler
[A.2.2.6.3]	[C-09]	Alarm output on optional EKRP1HB PCB:
		 0 (Normally open): The alarm output will be powered when an alarm occurs. By setting this value, a distinction is made between the detection of an alarm, and the detection of a power failure.
		 1 (Normally closed): The alarm output will NOT be powered when an alarm occurs.
		See also table below (Alarm output logic).

Alarm output logic

[C-09]	Alarm	No alarm	No power supply to unit
0 (default)	Closed output	Open output	Open output
1	Open output	Closed output	

Demand PCB

#	Code	Description
[A.2.2.7]	[D-04]	Demand PCB
		Indicates if the optional demand PCB is installed.
		• 0 (No)
		1 (Pwr consmp ctrl)

Energy metering

#	Code	Description
[A.2.2.8]	[D-08]	Optional external kWh meter 1:
		0 (No): NOT installed
		1: Installed (0.1 pulse/kWh)
		2: Installed (1 pulse/kWh)
		3: Installed (10 pulse/kWh)
		4: Installed (100 pulse/kWh)
		5: Installed (1000 pulse/kWh)
[A.2.2.9]	[D-09]	Optional external kWh meter 2:
		0 (No): NOT installed
		1: Installed (0.1 pulse/kWh)
		2: Installed (1 pulse/kWh)
		3: Installed (10 pulse/kWh)
		4: Installed (100 pulse/kWh)
		5: Installed (1000 pulse/kWh)

5.2.4 Quick wizard: Capacities (energy metering)

#	Code	Description
[A.2.3.2]	[6-03]	Capacity of the first step of the backup heater at nominal voltage [kW]
[A.2.3.3]	[6-04]	Capacity difference between the second and first step of the backup heater [kW]

5.2.5 Space heating control

Leaving water temperature: Main zone

#	Code	Description
[A.3.1.1.1]	N/A	Set point mode:
		0 (Fixed): Absolute
		1 (Weather dep.): Weather- dependent
		2 (Fixed/scheduled): Absolute + scheduled (only for leaving water temperature control)
		(WD/scheduled): Weather- dependent + scheduled (only for leaving water temperature control)

#	Code	Description
[7.7.1.1]	[1-00]	Weather-dependent curve (heating):
	[1-01]	^T t ↑
	[1-02]	
	[1-03]	[1-02]
		[1-03]
		[1-00] [1-01] T _a
		T _t : Target leaving water temperature (main)
		T _a : Outdoor temperature

Leaving water temperature: Additional zone

#	Code	Description
[A.3.1.2.1]	N/A	Set point mode:
		0 (Fixed): Absolute
		1 (Weather dep.): Weather- dependent
		 2 (Fixed/scheduled): Absolute + scheduled (only for leaving water temperature control)
		3 (WD/scheduled): Weather- dependent + scheduled (only for leaving water temperature control)
[7.7.2.1]	[0-00]	Weather-dependent curve (heating):
	[0-01]	^T t ↑
	[0-02]	10 041
	[0-03]	[0-01]
		[0-00]
		[0-03] [0-02] T _a
		 T_i: Target leaving water temperature (additional)
		T _a : Outdoor temperature

Leaving water temperature: Delta T source

#	Code	Description	
[A.3.1.3.1]	[9-09]	Heating: required temperature difference between entering and leaving water.	
		In case a minimum temperature difference is required for the good operation of the heat emitters in heating mode.	

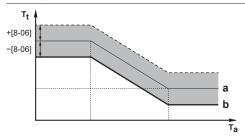
Leaving water temperature: Modulation

#	Code	Description
[A.3.1.1.5]	[8-05]	Leaving water temperature modulation:
		0 (No): Disabled
		1 (Yes): Enabled. The leaving water temperature is calculated according to the difference between desired and actual room temperature. This allows better matching of the heat pump capacity to actual required capacity and results in less start/stop cycles of the heat pump and more economic operation.
N/A	[8-06]	Leaving water temperature maximum modulation:
		0°C~10°C (default: 3°C)
		Requires modulation to be enabled.
		This is the value by which the desired leaving water temperature is increased or lowered.

i

INFORMATION

When leaving water temperature modulation is enabled, the weather-dependent curve needs to be set to a higher position than [8-06] plus the minimum leaving water temperature setpoint required to reach a stable condition on the comfort setpoint for the room. To increase efficiency, modulation can lower the leaving water setpoint. By setting the weather-dependent curve to a higher position, it cannot drop below the minimum setpoint. Refer to the illustration below.



- a Weather-dependent curve
- b Minimum leaving water temperature setpoint required to reach a stable condition on the comfort setpoint for the room.

Leaving water temperature: Emitter type

#	Code	Description	
[A.3.1.1.7]	[9-0B]	Reaction time of the system:	
		 0 (Quick)(default) Example: Small water volume and fan coils. 	
		 1 (Slow) Example: Large water volume, floor heating loops. 	
		Depending on the system water volume and the heat emitters type, the heat up of a space can take longer. This setting can compensate for a slow or a quick heating system by adjusting the unit capacity during the heat up cycle.	

5.2.6 Domestic hot water control

#	Code	Description
[A.4.1]	[6-0D]	Domestic hot water Type:
		 0 (Reheat only)(default): Only reheat operation is allowed.
		 1 (Reheat + sched.): Same as 2, but between the scheduled heatup cycles, reheat operation is allowed.
		 2 (Scheduled only): The domestic hot water tank can ONLY be heated according to a schedule.
[A.4.5]	[6-0E]	The maximum temperature that users can select for the domestic hot water. You can use this setting to limit the temperature at the hot water taps.



INFORMATION

There is a risk of space heating capacity shortage/comfort problem (in case of frequent domestic hot water operation, frequent and long space heating interruption will happen) when selecting [6-0D]=0 ([A.4.1] Domestic hot water Type=Reheat only).

5.2.7 Contact/helpdesk number

#	Code	Description
[6.3.2]		Number that users can call in case of problems.

5.3 Advanced configuration/ optimization

5.3.1 Space heating operation: advanced

Room frost protection



NOTICE

If Emergency is set to Manual ([A.6.C]=0), and the unit is triggered to start emergency operation, the user interface will ask confirmation before starting. Room frost protection is active even if the user does NOT confirm emergency operation.

5.3.2 Heat source settings

Auto emergency

When the heat pump fails to operate, the backup heater can serve as an emergency heater and either automatically or non-automatically take over the heat load.

- When auto emergency is set to Automatic and a heat pump failure occurs, the backup heater will automatically take over the heat load.
- When auto emergency is set to Manual and a heat pump failure occurs, the domestic hot water and space heating operations will stop and need to be recovered manually. The user interface will then ask you to confirm whether the backup heater can take over the heat load or not.

When the heat pump fails, $\widehat{\mathbb{U}}$ will appear on the user interface. If the house is unattended for longer periods, we recommend to set [A.6.C] Emergency to Automatic.

#	Code	Description	
[A.6.C]	N/A	Emergency:	
		0: Manual (default)	
		1: Automatic	



INFORMATION

The auto emergency setting can be set in the menu structure of the user interface only.



INFORMATION

If a heat pump failure occurs and [A.6.C] is set to Manual, the room frost protection function, the underfloor heating screed dryout function, and the water pipe antifreeze function will remain active even if the user does NOT confirm emergency operation.

5.3.3 System settings

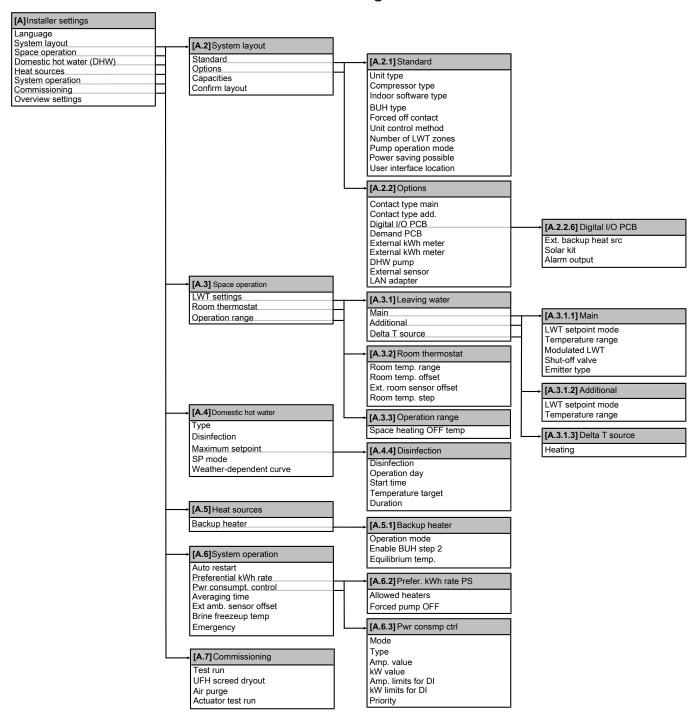
Power consumption control



NOTICE

During periods of excessive capacity demand (example: screed dryout function), the power limitation can be activated in accordance to the dimension of the brine earth collector.

5.4 Menu structure: Overview installer settings





INFORMATION

Solar kit settings are shown but are NOT applicable for this unit. Settings shall NOT be used or changed.



INFORMATION

Power saving settings are shown but are NOT applicable for this unit. Settings shall NOT be used or changed.



INFORMATION

Depending on the selected installer settings and unit type, settings will be visible/invisible.

Commissioning



П

NEVER operate the unit without thermistors and/or pressure sensors/switches. Burning of the compressor might result.

6.1 Checklist before commissioning Do NOT operate the system before the following checks are OK:

You read the complete installation instructions, as described in the installer reference guide. The indoor unit is properly mounted. The following field wiring has been carried out according to this document and the applicable legislation: Between the local supply panel and the indoor unit

- Between the indoor unit and the valves (if applicable)
- · Between the indoor unit and the room thermostat (if applicable)

The system is properly earthed and the earth terminals are tightened.

The fuses or locally installed protection devices are installed according to this document, and have NOT been bypassed.

The power supply voltage matches the voltage on the identification label of the unit.

There are NO loose connections or damaged electrical components in the switch box.

There are NO damaged components or squeezed pipes on the inside of the indoor unit.

There are NO refrigerant leaks. П

The correct pipe size is installed and the pipes are П properly insulated.

There is NO water and/or brine leak inside the indoor unit.

There are no **odour traces** noticeable of the used brine.

The space heating air purge valve is open (at least 2 turns)

The pressure relief valves purge to a safe location when opened.

The minimum water volume is guaranteed in all conditions. See "To check the water volume and flow rate of the space heating circuit and brine circuit" in "3.2 Preparing piping" on page 4.



INFORMATION

The software is equipped with an "installer-on-site" mode ([4-0E]), that disables automatic operation by the unit. At first installation, setting [4-0E] is by default set to "1", meaning automatic operation is disabled. All protective functions are then disabled. If the user interface home pages are off, the unit will NOT operate automatically. To enable automatic operation and the protective functions, set [4-0E] to "0".

36 hours after the first power-on, the unit will automatically set [4-0E] to "0", ending "installer-on-site" mode and enabling the protective functions. If - after first installation - the installer returns to the site, the installer has to set [4-0E] to "1" manually.

6.2 Checklist during commissioning

The minimum flow rate during backup heater/defrost operation is guaranteed in all conditions. See "To check the water volume and flow rate of the space heating circuit and brine circuit" in "3.2 Preparing piping" on page 4.		
To perform an air purge .		
To perform an air purge on the brine circuit.		
To perform a test run .		
To perform an actuator test run.		
Underfloor screed dryout function		
The underfloor screed dryout function is started (if necessary).		

6.2.1 To check the minimum flow rate

- Confirm according to the hydraulic configuration which space heating loops can be closed due to mechanical, electronic, or other valves.
- Close all space heating loops that can be closed (see previous
- Start the pump test run operation (see "6.2.5 To perform an actuator test run" on page 21).
- Go to [6.1.8]: = > Information > Sensor information > Flow rate to check the flow rate. During pump test run operation, the unit can operate below this minimum required flow rate.

Bypass valve foreseen?		
Yes	No	
Modify the bypass valve setting to reach the minimum required flow rate + 2 l/min	In case the actual flow rate is below the minimum flow rate, modifications at the hydraulic configuration are required. Increase the space heating loops that can NOT be closed or install a pressure-controlled bypass valve.	

Minimum required flow rate during backup heater operation 12 I/min

6.2.2 To perform an air purge

Prerequisite: Make sure that the leaving water temperature home page, room temperature home page, and domestic hot water home page are turned OFF

- 1 Go to [A.7.3]: 🗲 > Installer settings > Commissioning > Air purge.
- Set the type.
- Select Start air purge and press OK.
- Select OK and press OK

Result: The air purge starts. It stops automatically when done. To stop it manually, press , select OK and press OK

6.2.3 Air purge function on the brine circuit

When installing and commissioning the unit, it is very important to remove all air from the brine circuit.



NOTICE

It is required that the brine circuit is filled BEFORE the brine pump test run is activated.

There are 2 ways to perform an air purge:

- with a brine filling station (field supply),
- with a brine filling station (field supply) in combination with the unit's own brine pump.

10-day brine pump operation. If a brine buffer vessel is part of the system, it may be required to let the brine pump run continuously for 10 days after the system is commissioned. If 10-day brine pump operation is:

- ON: The unit operates as normal, except that the brine pump operates continuously for 10 days, independent of compressor status.
- OFF: Brine pump operation is linked to compressor status.

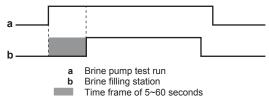
To perform an air purge with a brine filling station

Follow the instructions included with the brine filling station (field supply).

To perform an air purge with the brine pump and a brine filling station

Prerequisite: Performing an air purge on the brine circuit was NOT successful using a brine filling station only (see "To perform an air purge with a brine filling station" on page 21). In this case, use a brine filling station and the unit's own brine pump simultaneously.

- 1 Fill the brine circuit.
- 2 Start the brine pump test run.
- 3 Start the brine filling station (MUST be started within a time frame of 5~60 seconds after starting the brine pump test run).



Result: The brine pump test run starts running, starting the removal of air from the brine circuit. During the test run, the brine pump operates without actual operation of the unit.



INFORMATION

For details on starting/stopping the brine pump test run, see "6.2.5 To perform an actuator test run" on page 21.

The brine pump test run stops automatically after 2 hours.

To start or stop 10-day brine pump operation



INFORMATION

The 10-day brine pump operation procedure includes the activation of the brine pump test run. Because the procedure provides limited time for this, it is required that the brine pump test run be activated as fast as possible. For instructions, see the "Commissioning" chapter in the installer reference guide.

Prerequisite: All other commissioning tasks are finished.

1 Start the brine pump test run and leave it on for at least 3 seconds.

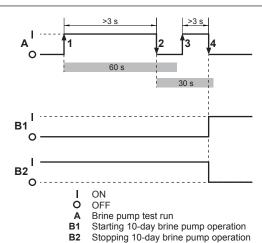
Result: A 60-second timer starts counting down.

2 Stop the brine pump test run before the timer has finished

Result: A 30-second timer starts counting down.

- 3 Start the brine pump test run again and leave it on for at least 3 seconds.
- 4 Stop it before the timer has finished.

Result: 10-day brine pump operation switches (OFF \rightarrow ON or ON \rightarrow OFF).



6.2.4 To perform a test run

Prerequisite: Make sure that the leaving water temperature home page, room temperature home page, and domestic hot water home page are turned OFF.

- 1 Set the user permission level to Installer. See "To set the user permission level to Installer" on page 14.
- 3 Select a test and press OK. Example: Heating.
- 4 Select OK and press OK.

Result: The test run starts. It stops automatically when done (±30 min). To stop it manually, press , select OK and press .



INFORMATION

If 2 user interfaces are present, you can start a test run from both user interfaces.

- The user interface used to start the test run displays a status screen.
- The other user interface displays a "busy" screen. You cannot use the user interface as long as the "busy" screen is shown.

6.2.5 To perform an actuator test run

Prerequisite: Make sure that the leaving water temperature home page, room temperature home page, and domestic hot water home page are turned OFF.

- 1 Set the user permission level to Installer. See "To set the user permission level to Installer" on page 14.
- 2 Make sure the room temperature control, the leaving water temperature control and the domestic hot water control are turned OFF via the user interface.
- 4 Select an actuator and press OK. Example: Pump.
- 5 Select OK and press ox.

Result: The actuator test run starts. It automatically stops when finished. To stop it manually, press , select OK and press ...



INFORMATION

If the brine pump test run is activated as part of the 10-day brine pump operation procedure, it is required to activate the test run as fast as possible. For instructions, see the "Commissioning" chapter in the installer reference guide.

Possible actuator test runs

Backup heater (step 1) test

7 Hand-over to the user

- Backup heater (step 2) test
- Pump test (space heating)



INFORMATION

Make sure that all air is purged before executing the test run. Also avoid disturbances in the water circuit during the test run.

- · Brine pump test
- 2-way valve test
- 3-way valve test
- Bivalent signal test
- Alarm output test
- · Circulation pump test

6.2.6 To perform an underfloor heating screed dryout

Prerequisite: Make sure there is ONLY 1 user interface connected to your system to perform an underfloor heating screed dryout.

Prerequisite: Make sure that the leaving water temperature home page, room temperature home page, and domestic hot water home page are turned OFF.

- Set a dryout program.
- 3 Select Start dryout and press OK.
- 4 Select OK and press OK.

Result: The underfloor heating screed dryout starts. It stops automatically when done. To stop it manually, press , select OK and press .



NOTICE

To perform an underfloor heating screed dryout, room frost protection needs to be disabled ([2-06]=0). By default, it is enabled ([2-06]=1). However, due to the "installer-on-site" mode (see "Checklist before commissioning"), room frost protection will be automatically disabled for 36 hours after the first power-on.

If the screed dryout still needs to be performed after the first 36 hours of power-on, manually disable room frost protection by setting [2-06] to "0", and KEEP it disabled until the screed dryout has finished. Ignoring this notice will result in cracking of the screed.



NOTICE

For the underfloor heating screed dryout to be able to start, make sure the following settings are met:

- [4-00]=1
- [C-02]=0
- [D-01]=0
- **-** [4-08]=0
- [4-01]≠1

7 Hand-over to the user

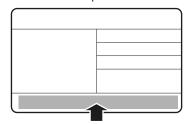
Once the test run is finished and the unit operates properly, please make sure the following is clear for the user:

Fill in the installer setting table (in the operation manual) with the actual settings.

- Make sure that the user has the printed documentation and ask him/her to keep it for future reference. Inform the user that he can find the complete documentation on the url as earlier described in this manual.
- Explain the user how to properly operate the system and what to do in case of problems.
- Show the user what to do in relation to maintaining the unit.
- Explain the user about energy saving tips as described in the operation manual.

7.1 To fix the applicable language on the unit name plate

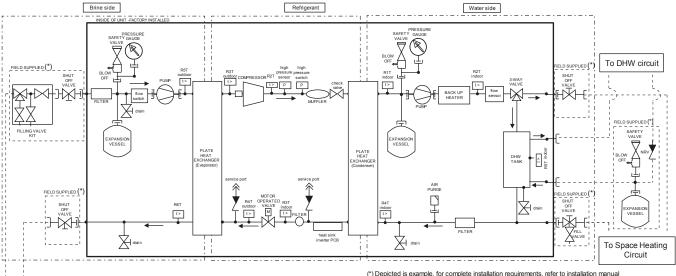
- 1 From the multilingual fluorinated greenhouse gases label peal off the applicable language.
- 2 Stick it on top of the marked area on the unit name plate.



8 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 extranet (authentication required).

8.1 Piping diagram: Indoor unit



Depicted is example, for complete installation requirements, refer to installation manual

To ground loop

LEGEND:			
~~	CHECK VALVE	1	SCREW CONN.
	FLARE CONN.	7	QUICK COUPLING
\rightarrow	SPINNED PIPE		FLANGE CONN.
×	PINCHED PIPE	-	BRAZED CONN.

Descriptio	Description sensors		
R1T in	Outlet Water Temperature Sensor (LWC)		
R2T in	After BUH Temperature Sensor		
R3T in	Refrigerant Liquid Temperature Sensor		
R4T in	Inlet Water Temperature Sensor (EWC)		
R5T in	DHW Tank Temperature Sensor		
R1T out	Ambient Air Sensor		
R2T out	discharge sensor		
R3T out	suction sensor		
R4T out	2 phase sensor (Tx)		
R5T out	brine entering water		
R6T out	brine leaving water		

3D081374-1A page 1

8.2 Wiring diagram: Indoor unit

See the internal wiring diagram supplied with the unit (on the inside of the indoor unit switch box cover). The abbreviations used are listed below.

Notes to go through before starting the unit

English	Translation
Notes to go through before starting the unit	Notes to go through before starting the unit
X1M	Main terminal
X2M	Field wiring terminal for AC
X5M	Field wiring terminal for DC
	Earth wiring
15	Wire number 15
	Field supply
—> **/12.2	Connection ** continues on page 12 column 2
1	Several wiring possibilities
	Option
<u></u>	Not mounted in switch box
	Wiring depending on model
	PCB
User installed options	User installed options
☐ Remote user interface	☐ Remote user interface
☐ Ext. indoor thermistor	☐ External indoor thermistor
☐ Digital I/O PCB	□ Digital I/O PCB
☐ Demand PCB	☐ Demand PCB
☐ Brine pressure switch connection kit	☐ Brine pressure switch connection kit
Main LWT	Main leaving water temperature
☐ On/OFF thermostat (wired)	☐ On/OFF thermostat (wired)
☐ On/OFF thermostat (wireless)	☐ On/OFF thermostat (wireless)
☐ Ext. thermistor	☐ External thermistor
☐ Heat pump convector	☐ Heat pump convector
Add LWT	Additional leaving water temperature
☐ On/OFF thermostat (wired)	☐ On/OFF thermostat (wired)
☐ On/OFF thermostat (wireless)	☐ On/OFF thermostat (wireless)
☐ Ext. thermistor	☐ External thermistor
☐ Heat pump convector	☐ Heat pump convector

Position in switch box

English	Translation
Position in switch box	Position in switch box

Legend

J		
A1P		Main PCB (hydrobox)
A2P		User interface PCB
A3P	*	On/OFF thermostat
A3P	*	Heat pump convector
A4P	*	Digital I/O PCB
A4P	*	Receiver PCB (Wireless On/OFF thermostat, PC=power circuit)
A8P	*	Demand PCB
A9P		Main PCB (refrigerant, brine)
A10P		Main PCB (inverter)
CN* (A4P)	*	Connector

DS1 (A8P)	*	DIP switch
F1U, F2U (A4P)	*	Fuse 5 A 250 V
K*R		Relay on PCB
M2P	#	Domestic hot water pump
M2S	#	Shut-off valve
Q*DI	#	Earth leakage circuit breaker
R1T (A3P)	*	Ambient sensor On/OFF thermostat
R1T (A9P)		Ambient air sensor
R2T (A3P)	*	External sensor (floor or ambient)
R6T (A1P)	*	External indoor ambient thermistor
R1H (A3P)	*	Humidity sensor
S1P	#	Water pressure switch brine side
S1S	#	Preferential kWh rate power supply contact
S2S	#	Electrical meter pulse input 1
S3S	#	Electrical meter pulse input 2
S4S	#	Safety thermostat
S6S~S9S	#	Digital power limitation inputs
SS1 (A4P)	*	Selector switch
X*M		Terminal strip
X*Y		Connector
	* =	Optional
	# =	Field supply

Translation of text on wiring diagram

English	Translation
(1) Main power connection	(1) Main power connection
For preferential kWh rate power supply	For preferential kWh rate power supply
Normal kWh rate power supply	Normal kWh rate power supply
Only for normal power supply (standard)	Only for normal power supply (standard)
Only for preferential kWh rate power supply	Only for preferential kWh rate power supply
Preferential kWh rate power supply contact: 16 V DC detection (voltage supplied by PCB)	Preferential kWh rate power supply contact: 16 V DC detection (voltage supplied by PCB)
Switch box	Switch box
Use normal kWh rate power supply for hydro PCB	Use normal kWh rate power supply for hydrobox PCB
(2) Outdoor ambient sensor	(2) Outdoor ambient sensor
Switch box	Switch box
(3) Option external indoor ambient sensor	(3) Option external indoor ambient sensor
Switch box	Switch box
(4) User interface	(4) User interface
Only for remote user interface option	Only for remote user interface option
Switch box	Switch box
(5) Option PCBs	(5) Option PCBs
Alarm output	Alarm output
Ext. heat source	External heat source
Max. load	Maximum load

English	Translation
Min. load	Minimum load
Only for demand PCB option	Only for demand PCB option
Only for digital I/O PCB option	Only for digital I/O PCB option
Options: boiler output, alarm output, On/OFF output	Options: boiler output, alarm output, On/OFF output
Power limitation digital inputs: 12 V DC / 12 mA detection (voltage supplied by PCB)	Power limitation digital inputs: 12 V DC / 12 mA detection (voltage supplied by PCB)
Space heating On/OFF output	Space heating On/OFF output
Switch box	Switch box
(6) Field supplied options	(6) Field supplied options
230 V AC supplied by PCB	230 V AC supplied by PCB
5 V DC pulse detection (voltage supplied by PCB)	5 V DC pulse detection (voltage supplied by PCB)
Continuous	Continuous current
DHW pump	Domestic hot water pump
DHW pump output	Domestic hot water pump output
Electrical meters	Electrical meters
For safety thermostat	For safety thermostat
Inrush	Inrush current
Max. load	Maximum load
Normally closed	Normally closed

English	Translation
Normally open	Normally open
Safety thermostat contact: 16 V DC detection (voltage supplied by PCB)	Safety thermostat contact: 16 V DC detection (voltage supplied by PCB)
Shut-off valve	Shut-off valve
SWB	Switch box
(7) External room thermostats and heat pump convector	(7) External room thermostats and heat pump convector
Additional LWT zone	Additional leaving water temperature zone
Main LWT zone	Main leaving water temperature zone
Only for external sensor (floor/ambient)	Only for external sensor (floor or ambient)
Only for heat pump convector	Only for heat pump convector
Only for wired thermostat	Only for wired thermostat
Only for wireless thermostat	Only for wireless thermostat
(8) Option for brine pressure switch connection kit	(8) Option for brine pressure switch connection kit
5 V DC / 0.05 mA detection (voltage supplied by PCB)	5 V DC / 0.05 mA detection (voltage supplied by PCB)
Only for brine pressure switch connection kit	Only for brine pressure switch connection kit
Switch box	Switch box

Electrical connection diagram For more details, please check the unit wiring. Power supply Standard parts (1) Only for normal power supply installation unit power supply: 400 V + earth 5 core Indoor unit Only for preferential kWh rate power supply installation unit preferential kWh rate power supply: 400 V + earth 5 core X1M: L1-L2-L3-N-earth normal kWh rate power supply for indoor unit: 230 V + earth X2M: 30-31-earth 2 core X5M: 11-12 2x0.75 Preferential kWh rate power supply contact X5M: 3-4 Field supply Field supply 2 Safety thermostat Only for *KRP1HB* A4P: Y1 X2M: 29 Alarm output alarm indication Field supply Space heating On/OFF output Only for *KGSCONBP1 X2M: 34-35 Circulation pump for DHW Pressure swith within brine side X7M:1-2 Shut-off valve NO valve: X2M: 6-7 NC valve: X2M: 5-7 main zone shut-off valve X5M: 7-8 Electricity mete pulse input 2 X5M: 9-10 Only for KRCS01-1 X5M: 5-6 230 V External room thermostat / Heat pump convector (main and/or additional zone) Optional part Only for *KRTW (wired room thermostat) 3 main: X2M: 1-4 add: X2M: 1a-4 A3P: X1M: com-H Field supply Only for *KRTR (wireless room thermostat) 3 Only for *KRP1AHTA 2 core (3m included) Only for *KRTETS A4P; X1M: H-com A3P: X1M: 1-3 main: X2M: 1-3-4 add: X2M: 1a-3-4 A8P: X801M: 1-5 signal Only for (heat pump convector) 3 main: X2M: 1-4 add: X2M: 1a-4 A8P: X801M: 3-5 X11M: 5-6 A8P: X801M: 4-5 In case user interface is relocated X5M: 1-2 A2P: P1-P2 user interface Only for *KRUCBL* Optional part 2 core 2x0.75 // A2P: P1-P2 user interface Note:

In case of signal cable; keep minimum distance to power cables >5 cm

4D081378-1B





EHE

