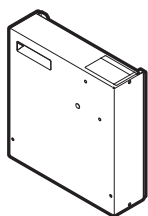


## Installation manual

### ROTEX HPSU low temperature monobloc option box



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## 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 outdoor unit)
- **Outdoor unit installation manual:**
  - Installation instructions
  - Format: Paper (in the box of the outdoor unit)
- **Control box installation manual:**
  - Installation instructions
  - Format: Paper (in the box of the control box)
- **Option box installation manual:**
  - Installation instructions
  - Format: Paper (in the box of the option box)
- **Backup heater installation manual:**
  - Installation instructions
  - Format: Paper (in the box of the backup heater)

- **Installer reference guide:**
  - Preparation of the installation, technical specifications, good practices, reference data,...
  - Format: Digital files on the ROTEX homepage
- **Addendum book for optional equipment:**
  - Additional info about how to install optional equipment
  - Format: Paper (in the box of the outdoor unit) + Digital files on the ROTEX homepage

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

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

## 2 About the box

### 2.1 Option box

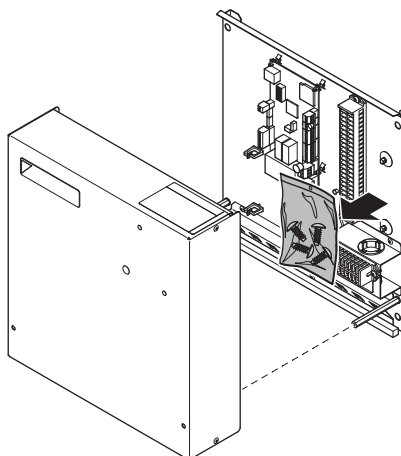


#### NOTICE

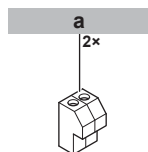
- Option box RK2CB07CAV3 is an option and can only be used in combination with outdoor units RDLQ05+07CAV3 and RBLQ05+07CAV3.
- To be able to use the option box, it is required that optional control box RKCB07CAV3 is part of the system.

#### 2.1.1 To remove the accessories from the option box

- 1 Open the option box.



- 2 Remove the accessories.



- a** Connectors for interconnection cable between the option box and control box RKCB07CAV3.

## 3 Preparation

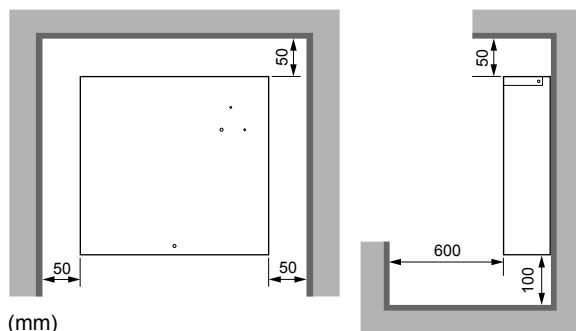
### 3.1 Preparing installation site

#### 3.1.1 Installation site requirements of the option box

- Mind the measurement guidelines:

Maximum distance between the option box and control box RKCB07CAV3	3 m
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- Mind the following spacing installation guidelines:



(mm)

- The option box is designed to be wall-mounted in indoor locations only. Make sure the installation surface is a flat and vertical non-combustible wall.
- The option box is designed to operate in ambient temperatures ranging from 5~35°C.

### 3.2 Preparing electrical wiring

#### 3.2.1 Overview of electrical connections for external and internal actuators

Item	Description	Wires	Maximum running current
<b>Power supply</b>			
1	Power supply for option box	2+GND	(a)
<b>Interconnection cable</b>			
2	Interconnection cable to control box	3 (max 3 m)	(b)
<b>Optional equipment</b>			
3	Remote indoor sensor	2	(b)
<b>Field-supplied components</b>			
4	Electric meter	2 (per meter)	(b)
5	Power consumption digital inputs	2 (per input signal)	(b)
6	Alarm output	2	(b)
7	Space cooling/heating ON/OFF output	2	(b)
8	Changeover to external heat source	2	(b)

(a) Cable section 2.5 mm<sup>2</sup>.

(b) Minimum cable section 0.75 mm<sup>2</sup>.



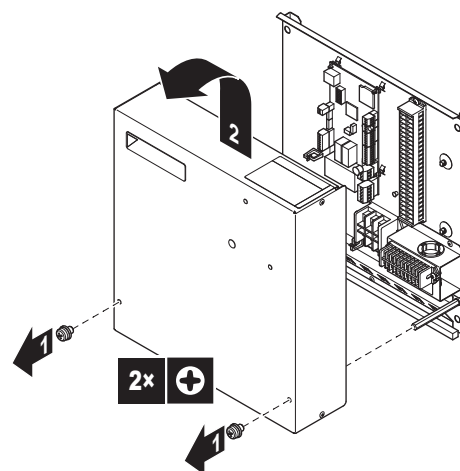
#### NOTICE

More technical specifications of the different connections are indicated on the inside of the option box.

## 4 Installation

### 4.1 Opening the units

#### 4.1.1 To open the option box



#### WARNING

The screws are delivered with toothed lock washers. ALWAYS use toothed lock washers, also when the screws need to be replaced. Failure to follow this warning may result in electric shock.



#### INFORMATION

Do NOT remove the plugs from the front plate of the option box.

### 4.2 Mounting the option box

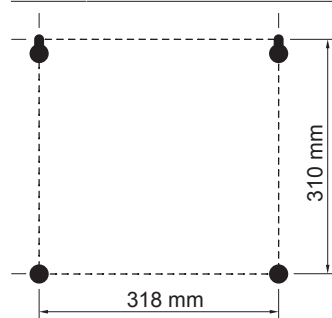
#### 4.2.1 To install the option box

- 1 Remove the front plate.
- 2 Hold the back plate against the wall and mark the fixation points (2 on the top and 2 at the bottom).



#### NOTICE

Make sure that the marks (2 by 2) are completely level and that their dimensions correspond to the figure below.



- 3 Drill 4 holes and install 4 plugs (suitable for M5).
- 4 Put the screws in the top plugs and hang the box on the screws.
- 5 Put the screws in the bottom plugs.
- 6 Fix the 4 screws firmly.

## 4 Installation

### 4.3 Connecting the electrical wiring



**DANGER: RISK OF ELECTROCUTION**

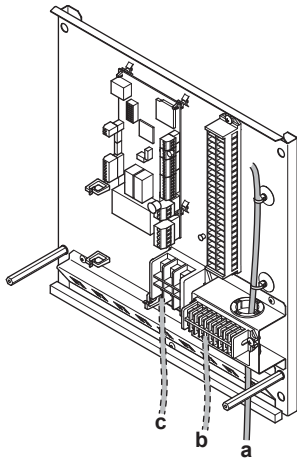


**WARNING**

ALWAYS use multicore cable for power supply cables.

#### 4.3.1 To connect the electrical wiring on the option box

- 1 Insert the wiring from the bottom of the option box.
- 2 Make sure the low voltage wiring is located on the right. Route it through the intake hole and fasten it with cable ties:



- a Low voltage wiring
- b High voltage wiring
- c Main power supply

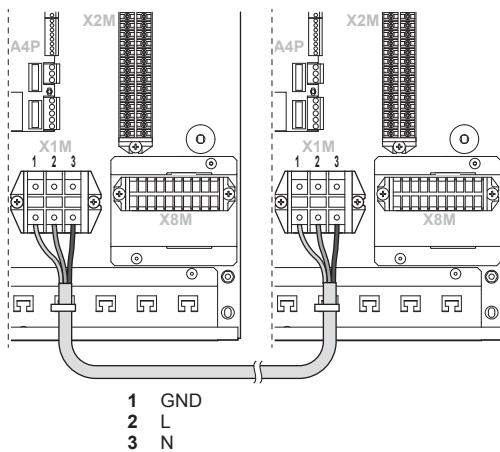


**NOTICE**

The distance between the high voltage and low voltage cables should be at least 25 mm.

#### 4.3.2 To connect the option box power supply

- 1 Connect option box terminal X1M to control box terminal X1M.



- 2 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 sharp edges.

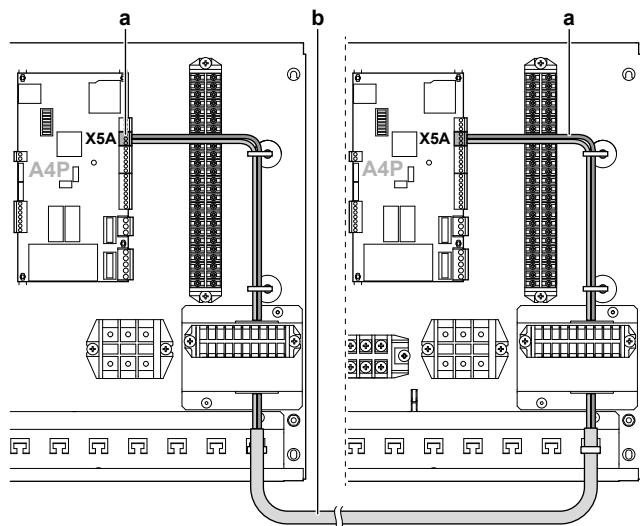


**CAUTION**

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

#### 4.3.3 To connect the interconnection cable between option box and control box

- 1 Connect the connectors from the accessory bag to X5A on A1P of both the control box and the option box PCB.
- 2 Connect the connectors by way of a field-supplied cable.



- a Connectors (accessory)
- b Interconnection cable (field supply)

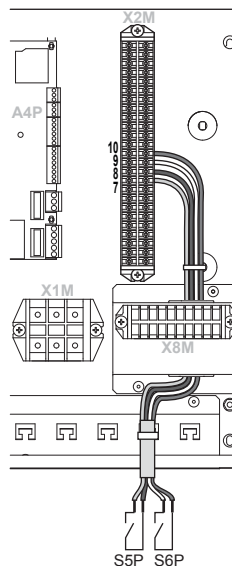
#### 4.3.4 To connect the electrical meters



**INFORMATION**

In case of an electrical meter with transistor output, check the polarity. The positive polarity MUST be connected to X2M/7 and X2M/9; the negative polarity to X2M/8 and X2M/10.

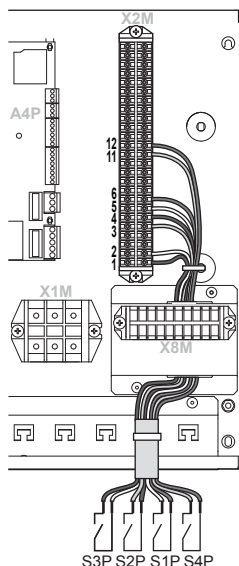
- 1 Connect the electrical meters cable to the appropriate terminals as shown in the illustration below.



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

#### 4.3.5 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.

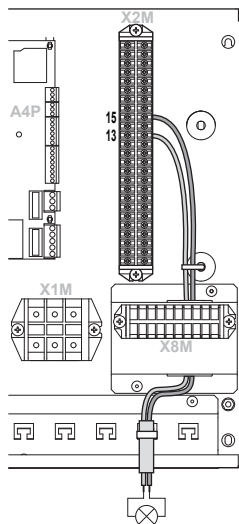


- S3P** Connect to terminals X2M/1+2
- S2P** Connect to terminals X2M/3+4
- S1P** Connect to terminals X2M/5+6
- S4P** Connect to terminals X2M/11+12

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

## 4.3.6 To connect the alarm output

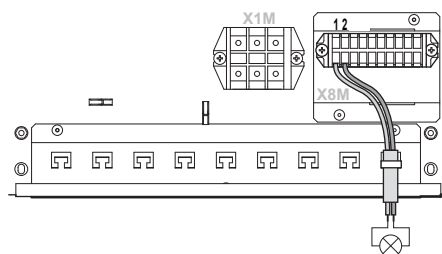
- 1 Connect the alarm output cable to the appropriate terminals as shown in the illustration below.



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

## 4.3.7 To connect the space cooling/heating ON/OFF output

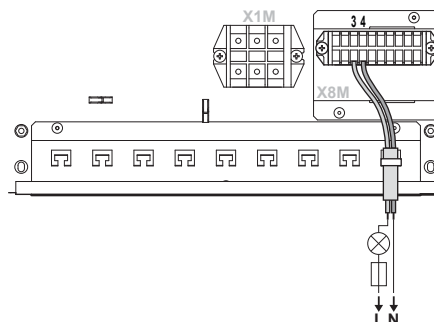
- 1 Connect the space cooling/heating ON/OFF output cable to the appropriate terminals as shown in the illustration below.



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

## 4.3.8 To connect the changeover to external heat source

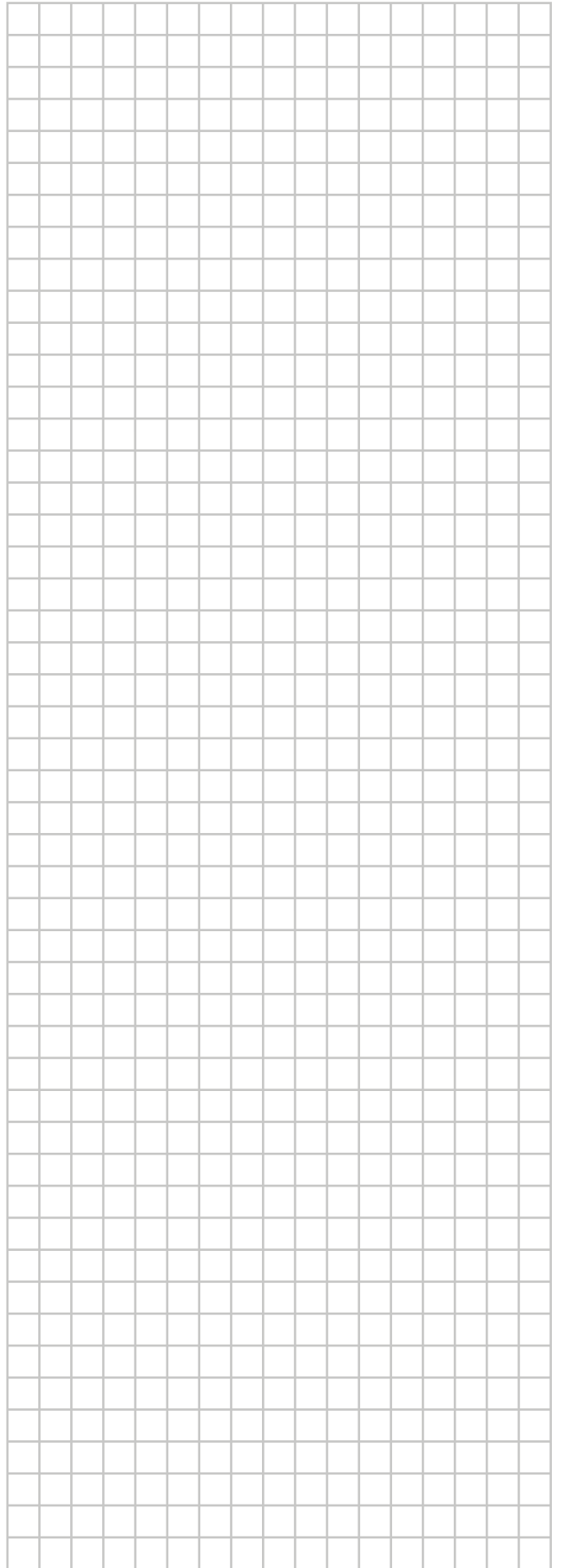
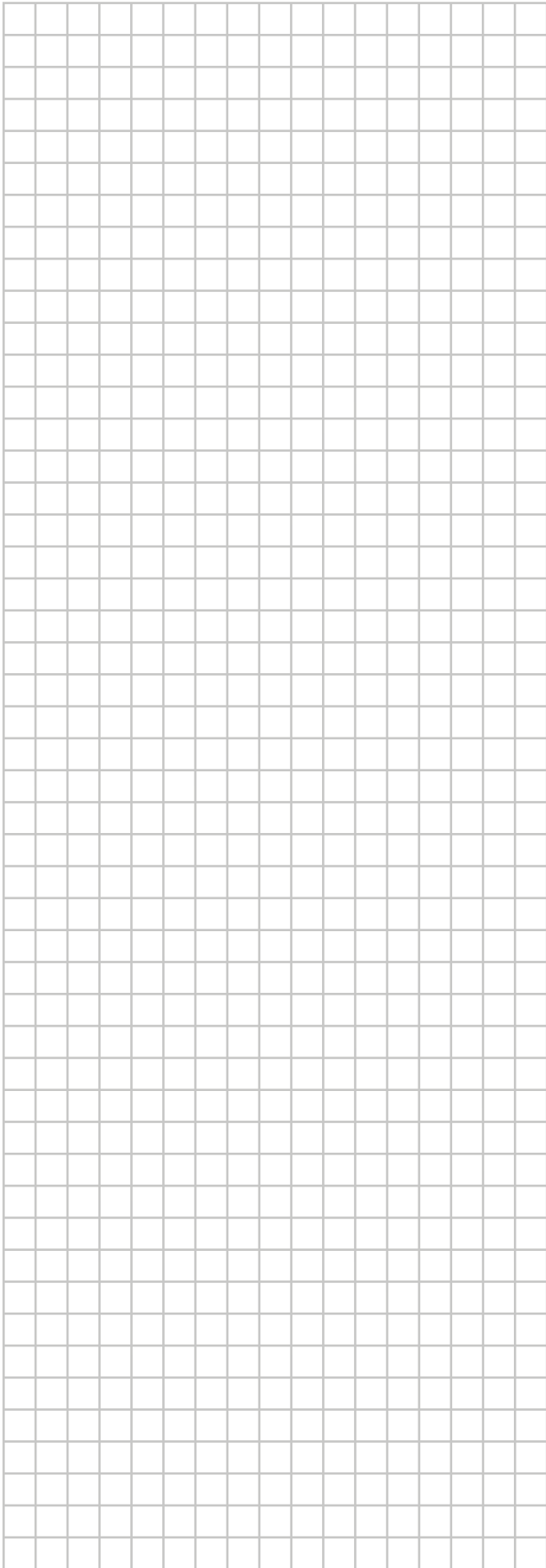
- 1 Connect the changeover to external heat source cable to the appropriate terminals as shown in the illustration below.

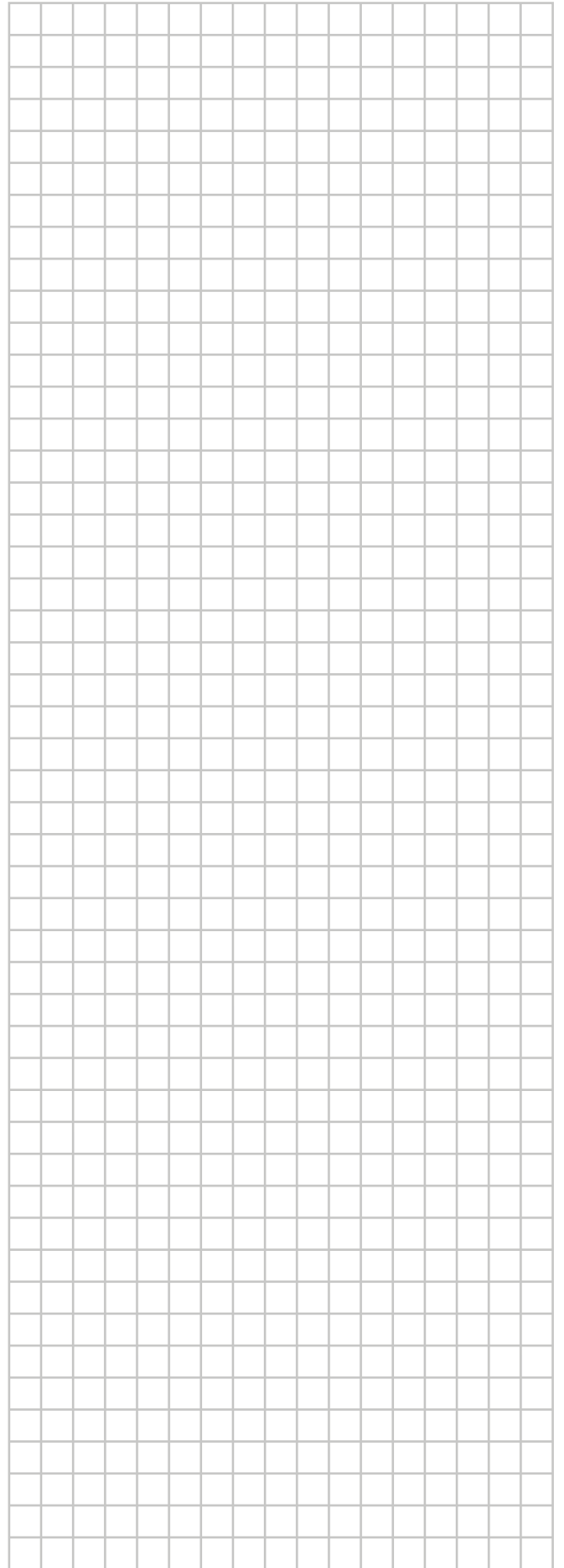
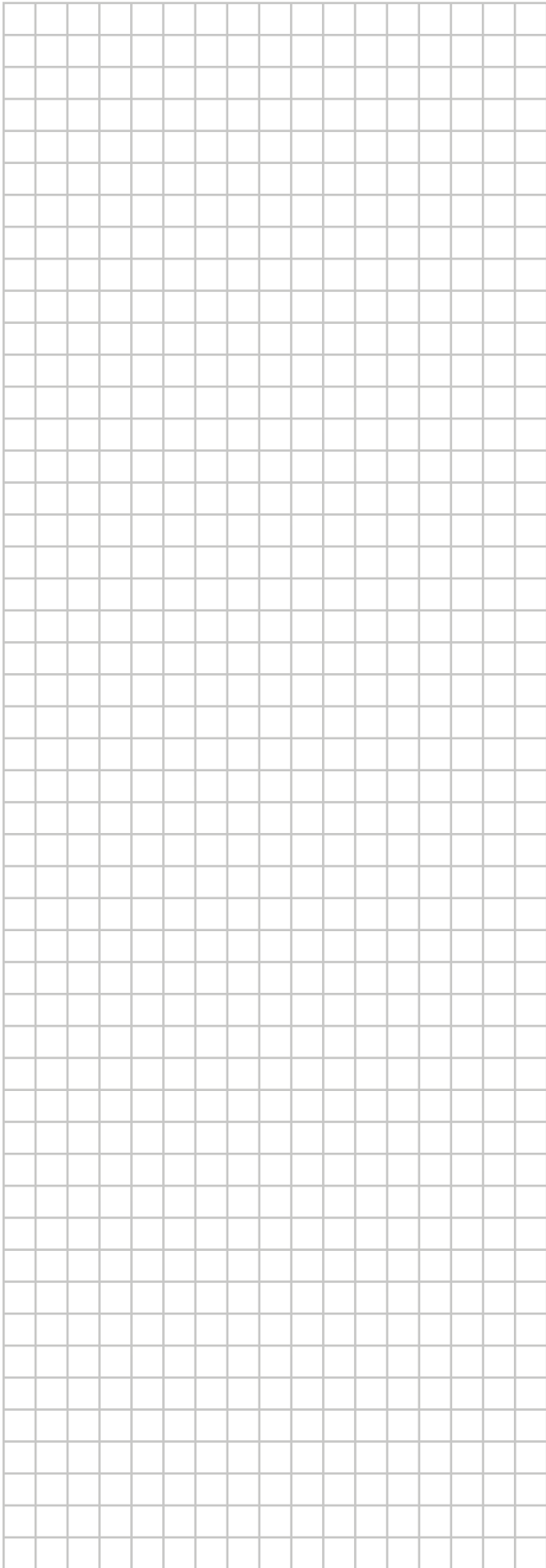
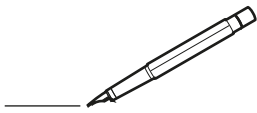


- 2 Fix the cable with cable ties to the cable tie mountings.

# 5 Starting up the system

For instructions on how to configure and commission the system, and hand it over to the user, refer to the installation manual of the outdoor unit.





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