

# Nordmann Omega SPA Display



## INSTALLATION AND OPERATION MANUAL

# Thank you for choosing Nordmann

Installation date (MM/DD/YYYY):

Commissioning date (MM/DD/YYYY):

Site:

Model:

Serial number:

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# 1 Introduction

## 1.1 To the very beginning

We thank you for having purchased the **Nordmann Omega SPA Display with touch-sensitive display**.

The Nordmann Omega SPA Display incorporates the latest technical advances and meets all recognized safety standards. Nevertheless, improper use of the Nordmann Omega SPA Display may result in danger to the user or third parties and/or impairment of material assets.

To ensure a safe, proper, and economical operation of the Nordmann Omega SPA Display, please observe and comply with all information and safety instructions contained in the present installation and operation manual.

If you have questions after reading this manual, please contact your Nordmann representative. They will be glad to assist you.

## 1.2 Notes on the installation and operation manual

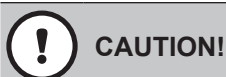
### Limitation

**The subject of this installation and operation manual is the external Nordmann Omega SPA Display.**

This installation and operation manual is restricted to the **installation, commissioning, operation, and trouble shooting** of the Nordmann Omega SPA Display and is meant for **well trained personnel being sufficiently qualified for their respective work**.

This installation and operation manual is supplemented by the operation manual for the steam generator Nordmann Omega. Where necessary, appropriate cross-references are made to this publication in this installation and operation manual.

### Symbols used in this manual



The catchword "CAUTION" designates notes in this installation and operation manual that, if neglected, may cause **damage and/or malfunction of the unit or other material assets**.



The catchword "WARNING" used in conjunction with the general caution symbol designates safety and danger notes in this installation and operation manual that, if neglected, may cause to **injury to persons**.



The catchword "DANGER" used in conjunction with the general caution symbol designates safety and danger notes in this installation and operation manual that, if neglected, may lead to **severe injury or even death of persons**.

**Safekeeping**

Please safeguard this installation and operation manual in a safe place, where it can be immediately accessed. If the steam generator with which the Nordmann Omega SPA Display is used changes hands, the documentation should be passed on to the new operator.

If the documentation gets mislaid, please contact your Nordmann representative.

**Language versions**

This installation and operation manual is available in various languages. Please contact your Nordmann representative for information.

## 2 *For your safety*

### General

Every person working with the Nordmann Omega SPA Display must have read and understood the present installation and operation manual before carrying out any work.

Knowing and understanding the contents of the Installation and operation manual is a basic requirement for protecting the personnel against any kind of danger, to prevent faulty operation, and to operate the unit safely and correctly.

All ideograms, signs and markings applied to the Nordmann Omega SPA Display must be observed and kept in readable state.

### Qualification of personnel

All actions described in the present Installation and operation manual (installation, operation, etc.) must be carried out only by **well trained and sufficiently qualified personnel authorised by the owner**.

For safety and warranty reasons any action beyond the scope of this manuals must be carried out only by qualified technical personnel authorised by your Nordmann representative.

It is assumed that all persons working with the Nordmann Omega SPA Display are familiar and comply with the appropriate regulations on work safety and the prevention of accidents.

This unit may not be used by persons (including children) with reduced physical, sensory or mental abilities or persons with lacking experience and/or knowledge, unless they are supervised by a person responsible for their safety or they received instructions on how to operate the unit.

Children must be supervised to make sure that they do not play with unit.

### Intended use

**The Nordmann Omega SPA Display is intended exclusively for the control of the steam generator Nordmann Omega within the specified operating conditions (see [chapter 8](#)).** Any other type of application without the express written consent of the manufacturer is considered as not conforming with the intended purpose and may lead to the system becoming dangerous.

Operation of the equipment in the intended manner requires **that all the information in these instructions are observed (in particular the safety instructions).**

### **Behaviour in case of danger**

If it is suspected that **safe operation is no longer possible**, then the Nordmann Omega should **immediately be set out of operation, disconnected from the mains and secured against accidental power-up (see Nordmann Omega operation manual)**. This can be the case under the following circumstances:

- if the Nordmann Omega SPA Display is damaged
- if the Nordmann Omega SPA Display is no longer operating correctly
- if the connecting cable is damaged

All persons working with the Nordmann Omega SPA Display must report any alterations to the unit that may affect safety to the owner without delay.

### **Prohibited modifications to the unit**

**No modifications must be undertaken** on the Nordmann Omega SPA Display without the express written consent of the manufacturer.

For the replacement of defective components use exclusively **original accessories and spare parts** available from your Nordmann representative.

### 3 Product Overview

Nordmann Omega SPA Display  
flush-mounted

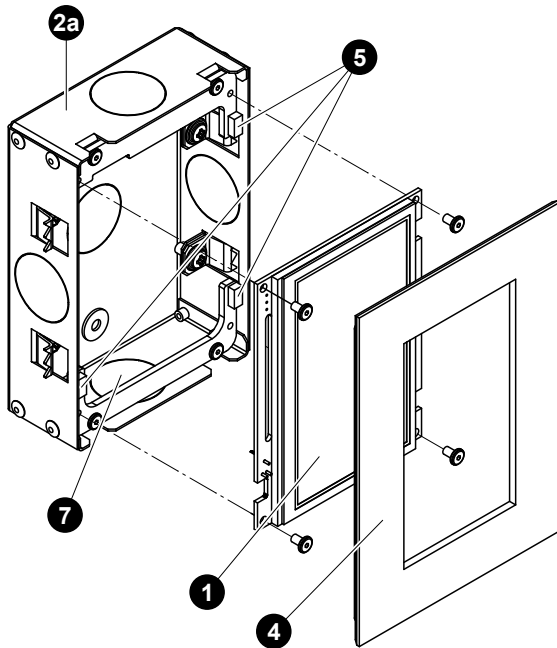


Fig. 1: Front view

Nordmann Omega SPA Display  
surface-mounted

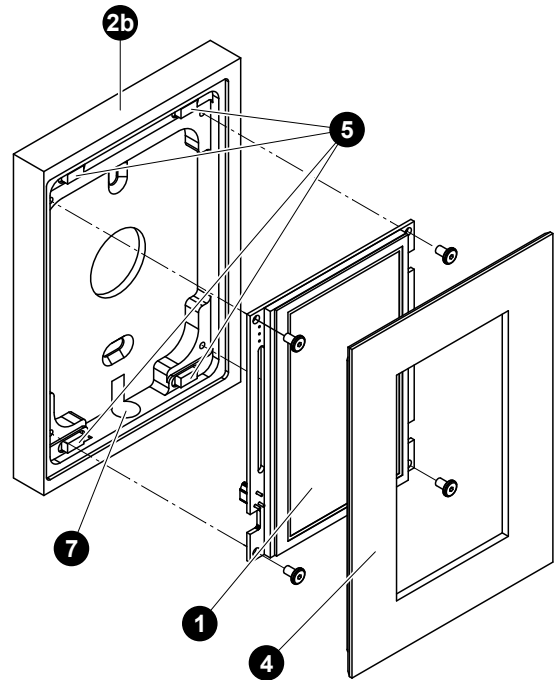


Fig. 2: Front view

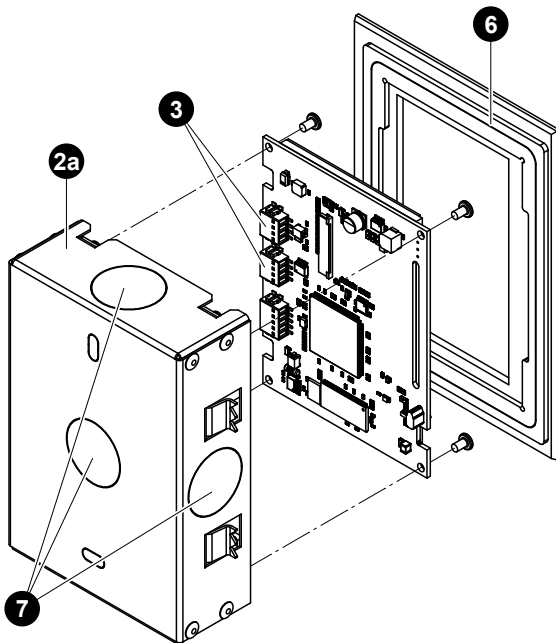


Fig. 3: Back view

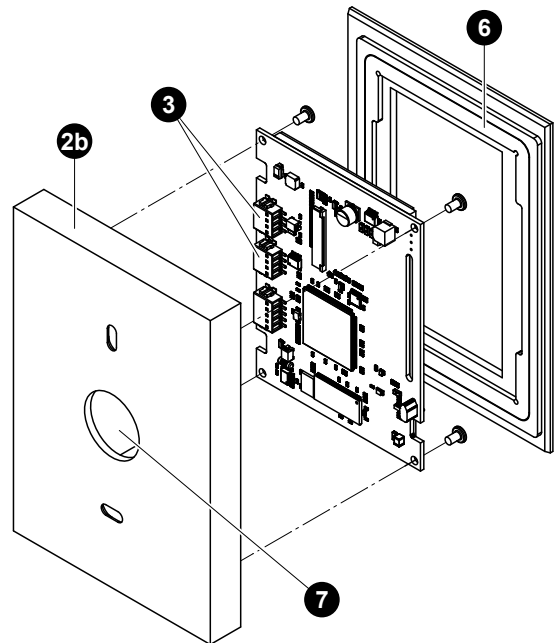


Fig. 4: Back view

- 1 Touch-sensitive display
- 2a Flush-mounted housing
- 2b Surface-mounted housing
- 3 Connecting terminals (CAN BUS)
- 4 Decorative cover

- 5 Magnets for the attachment of the decorative cover
- 6 Magnetic centring frame with sealing
- 7 Cable entries



## 4 *Installation*

### 4.1 *Unpacking and checking the scope of delivery*

#### **Unpacking the unit**

Open the packing and check the delivery for completeness. Please contact your Nordmann representative in case something is lacking, they will be glad to send you the missing part without delay. The standard delivery includes:

- Nordmann Omega SPA Display **flush-mounted**
  - Nordmann Omega SPA Display control PCB
  - Flush-mounted housing with pre-mounted display mounting supports, fastening claws and 3 magnets
  - Plastic bag containing mounting material
- Nordmann Omega SPA Display **surface-mounted**
  - Nordmann Omega SPA Display control PCB
  - Surface-mounted housing
  - Plastic bag containing mounting material
- Decoration cover with pre-mounted centring frame and sealing (if ordered)

Please check the equipment for damage. Please report any damage to your Nordmann representative and to the carriers, as required.

#### **Packaging**

The original packaging of the Nordmann Omega SPA Display was designed for optimum safety during transportation. Please preserve the original packing material in case you once have to return the unit for some reason.

In case you wish to dispose of the packaging, observe the local regulations on waste disposal. Never dispose of the packaging to the environment.

### 4.2 *Storing the unit*

If the external steam bath control must be stored, store it in a protected area (best in the original packaging) meeting the following requirements:

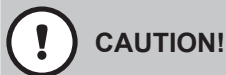
- room temperature: 1 ... 40 °C
- room humidity: 10 ... 80 %rh (non condensing)

### **4.3 Notes on positioning the Nordmann Omega SPA Displays**

Please observe the following notes for the correct positioning of the Nordmann Omega SPA Display(s):

- The Nordmann Omega SPA Display(s) must not be installed in hazardous locations and in rooms where water splashes may occur.
- Do not mount the Nordmann Omega SPA Display(s) inside the steam bath cabin, sauna, bio sauna, etc..
- If possible mount the Nordmann Omega SPA Display(s) at eye level.
- Do not mount the Nordmann Omega SPA Display(s) in exposed places.
- Do not mount the Nordmann Omega SPA Display(s) on vibrating components.
- Place the Nordmann Omega SPA Display(s) in such a way, that the total length of 50 m of the CAN BUS cables with which the Nordmann Omega and the Nordmann Omega SPA Display(s) are interconnected is not exceeded.

### **4.4 Mounting the Nordmann Omega SPA Display**



The electronic components of the Nordmann Omega SPA Display are very sensitive to electrostatic discharge. For all installation work on equipment appropriate measures must be taken to protect these components against damage caused by electrostatic discharge (ESD protection).

Note: the Nordmann Omega and the Nordmann Omega SPA Display(s) (up to a max. of 8 SPA Displays) are interconnected via a so-called CAN BUS. Use only a shielded four-wire cable with a cross section of 0.34 mm<sup>2</sup> per wire to establish the CAN BUS connections. The **total length of the CAN BUS must not exceed 50 m.**

#### 4.4.1 Flush mounting

1. At the desired location, mark mounting opening according to the size of the flush-mounted housing with the help of a spirit level, then ream out the mounting opening.  
Important: the mounting opening must be reamed out exactly since the decoration cover (broken line in Fig. 5) overlaps the mounting opening on the right side only 4 mm, on the left side only 9 mm and on the top and bottom side only 8.5 mm.

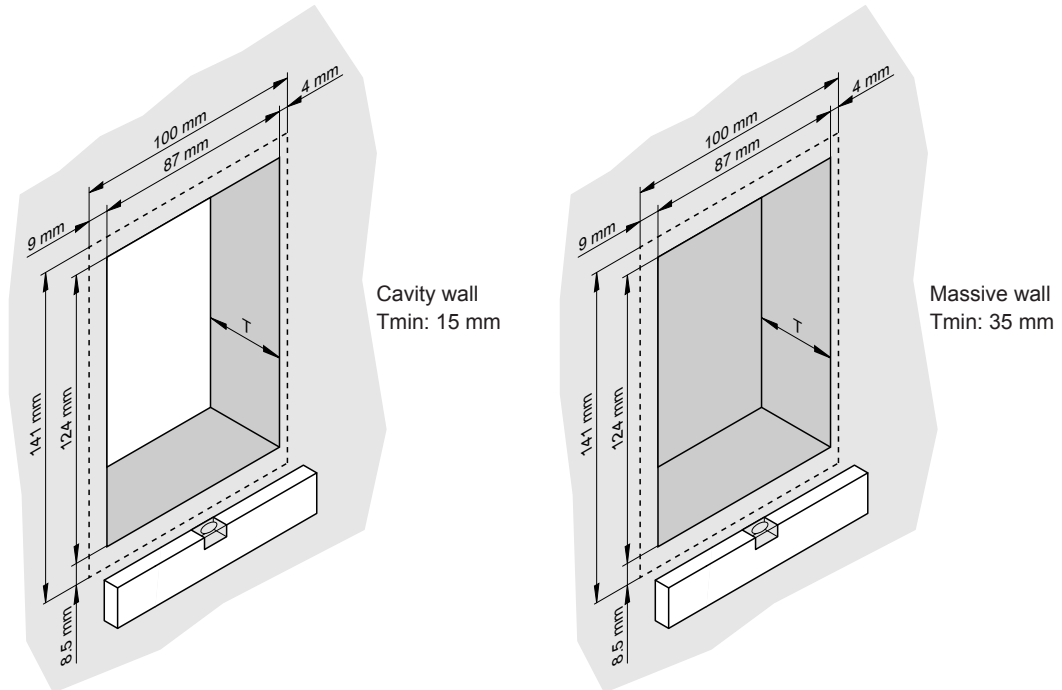


Fig. 5: Making the mounting opening for the flush-mounted housing

2. Knock out the desired cable entry of the flush-mounted housing and insert the CAN BUS cable (shielded four-wire cable, 0.34 mm<sup>2</sup> per wire) into the flush-mounted housing. Then, lead the cable through the wall opening to the steam generator.

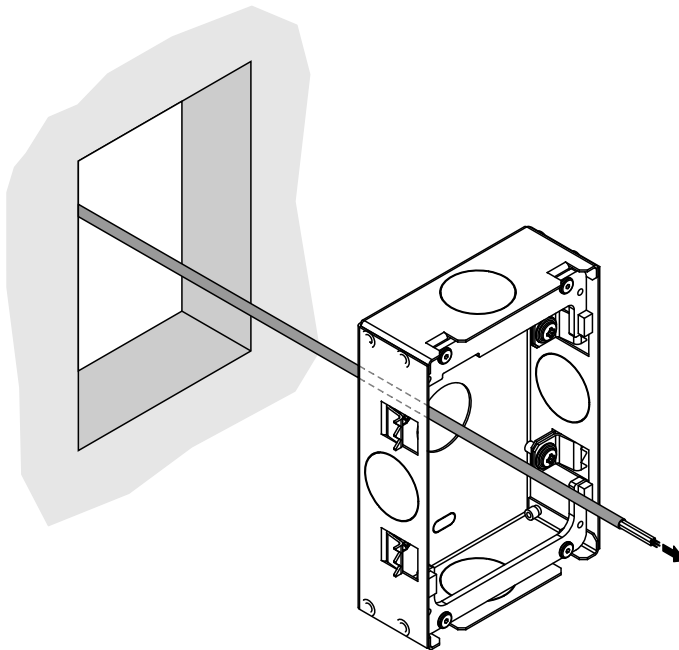


Fig. 6: Inserting the CAN BUS cable

3. Insert the flush-mounted housing into the wall opening, align it with the help of a spirit level, then fix it with the four fastening claws attached to the flush-mounted housing (only necessary with cavity walls).

Note: in massive walls the flush-mounted housing must be fixed either with the screws and dowels supplied or by using PU mounting adhesive or mortar.

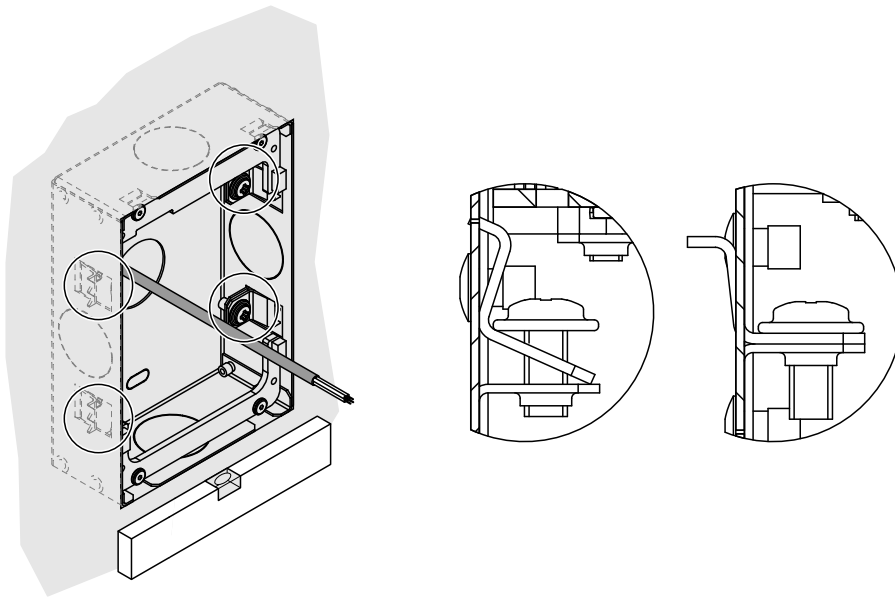


Fig. 7: Mounting the flush-mounted housing to the wall opening

4. Connect the CAN BUS cable (shielded four-wire cable, 0.34 mm<sup>2</sup> per wire) from the Nordmann Omega or from another Nordmann Omega SPA Display to terminals "X2" or "X3" of the control board of the Nordmann Omega SPA Display according to the figure below. For this purpose, the individual wires have to be stripped 6 mm and appropriate cable end sleeves have to be crimped. Then, push individual wires into the correct connection opening of the corresponding terminal until they come to a stop.

Note: The CAN BUS cable to an additional Nordmann Omega SPA Display is to be connected either to terminal "X2" or "X3" (see notes in [chapter 4.5](#)).

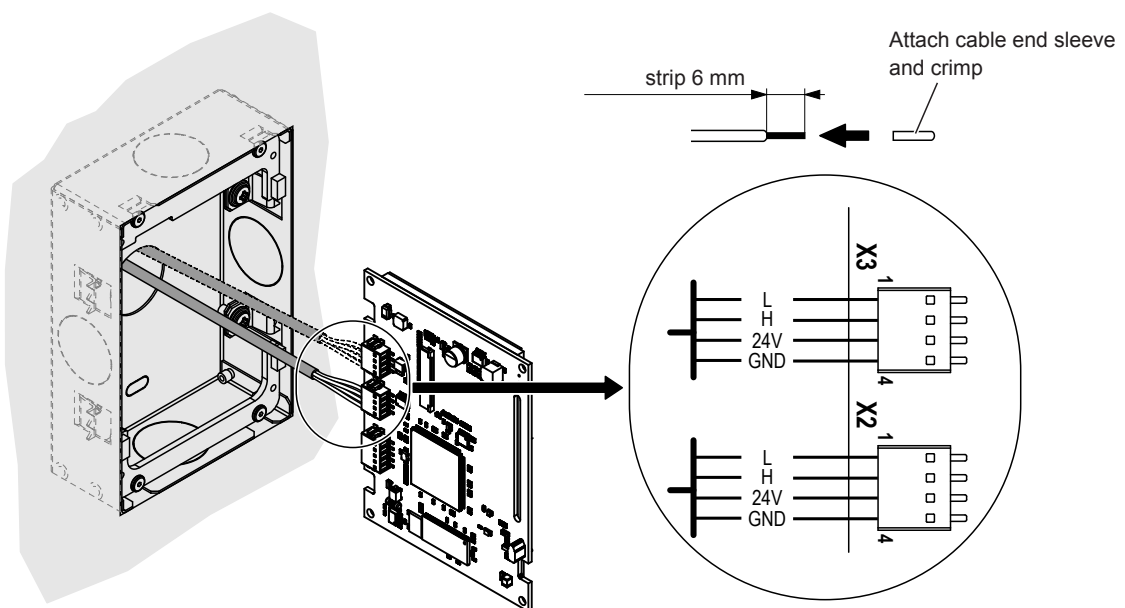
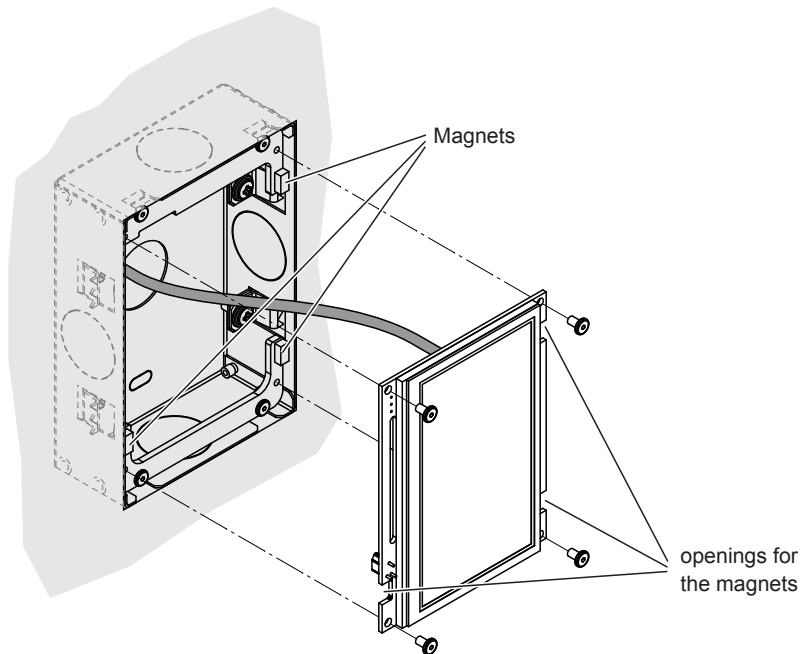


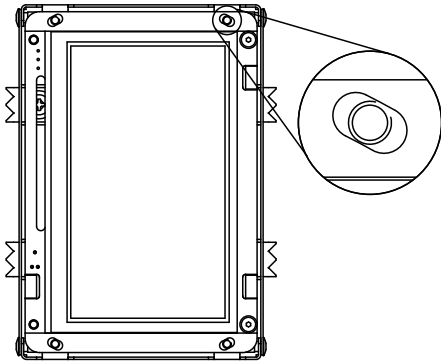
Fig. 8: Connecting the CAN BUS cable(s) to the Nordmann Omega SPA Display

5. Connect the CAN BUS cable according to the specifications in [chapter 4.5](#) to the Nordmann Omega, then perform the function tests.
6. After function tests have been passed carefully place the Nordmann Omega SPA Display onto the flush-mounted housing. Make sure the supply cable is not getting pinched and that the magnets in the housing fit into the openings of the control board. Then, fix the Nordmann Omega SPA Display to corresponding supports of the flush-mounted housing using the four screws supplied.



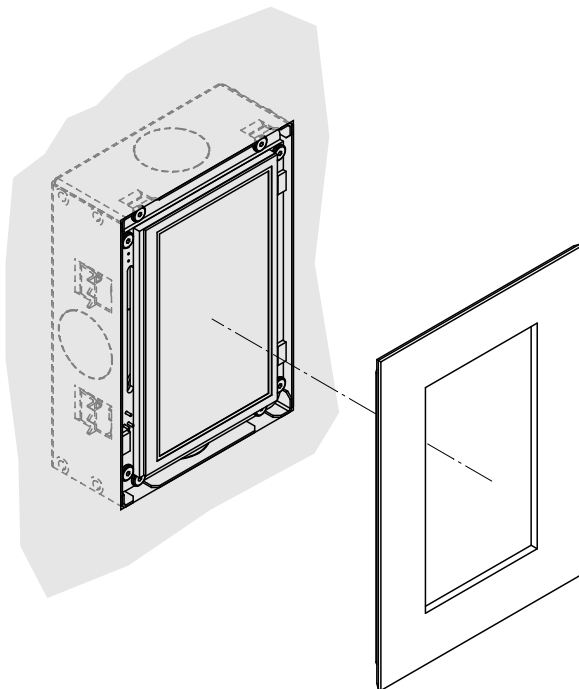
*Fig. 9: Mounting the Nordmann Omega SPA Display*

7. If necessary loosen the screws of the display supports and adjust the display.



*Fig. 10: Adjusting the supports*

8. Finally attach the decoration cover. The decoration cover is held by the magnets in the flush-mounted housing.



*Fig. 11: Attaching the decoration cover*

#### 4.4.2 Surface mounting

1. Using the aluminum surface-mounted housing as template mark the two fixing holes at the desired location, with the help of a spirit level. Then proceed as follows:
  - for the mounting on a stonework wall:
    - Drill 2 holes  $\varnothing 6$  mm, depth 35 mm.
    - Insert the supplied dowels.
    - Fix surface-mounted housing to the wall using the screws supplied, align housing with the help of a spirit level and fasten den screws.
  - for the mounting on a wooden wall:
    - Drill 2 holes  $\varnothing 3$  mm, depth 35 mm
    - Fix surface-mounted housing to the wall using the countersunk screws supplied, align housing with the help of a spirit level and fasten den screws.

Note: If the mounting location does not permit bolt mounting (e.g. on a glass wall) the aluminum surface-mounted housing can also be glued over its entire surface to the underground.

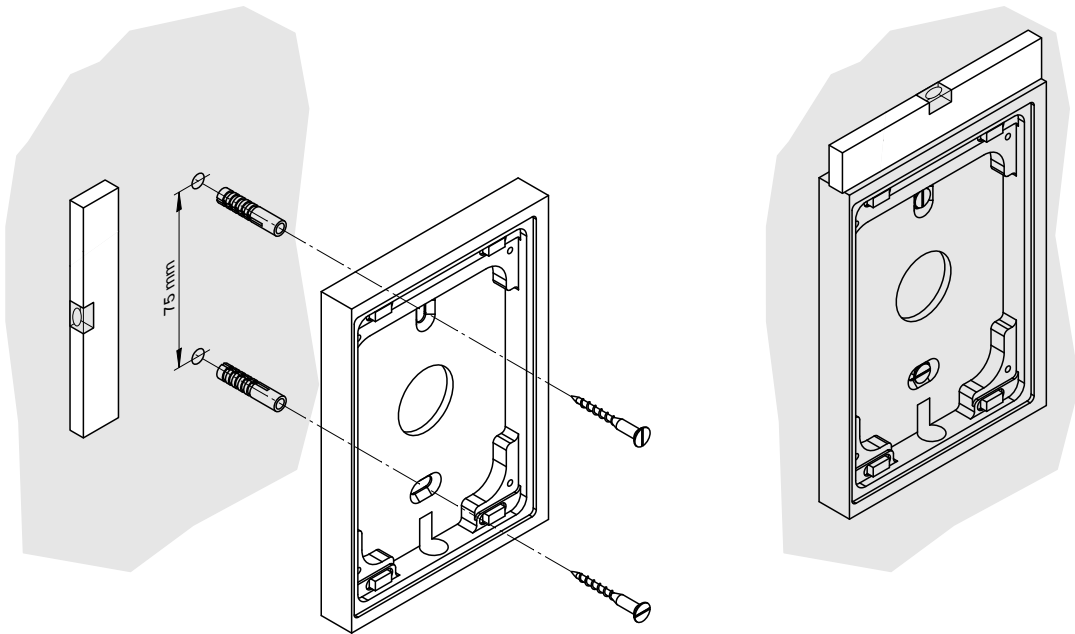


Fig. 12: Mounting the surface-mounted housing (figure shows mounting on a stonework wall)

2. Drill the hole for the cable entry at the desired location into the wall (for in-wall cable routing) or use one of the existing cable entry on the housing (for surface-mounted cable routing).

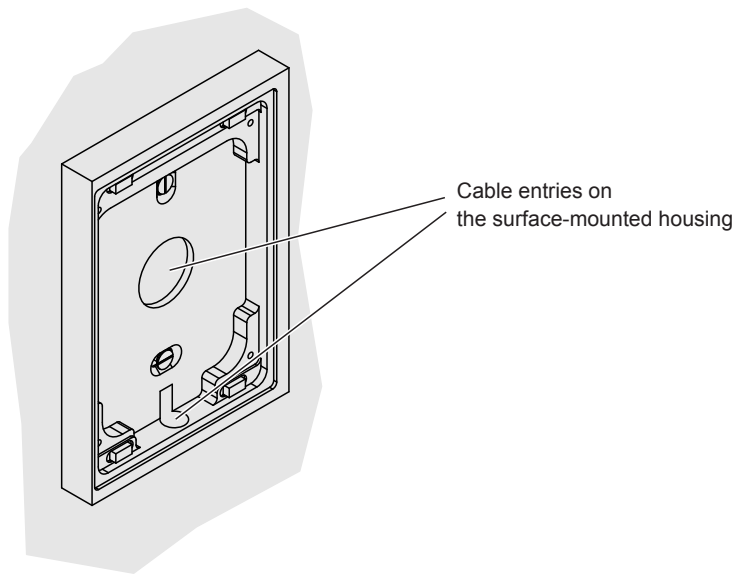


Fig. 13: Cable entries

3. Connect the CAN BUS cable (shielded four-wire cable, 0.34 mm<sup>2</sup> per wire) from the Nordmann Omega or from another Nordmann Omega SPA Display to terminals "X2" or "X3" of the control board of the Nordmann Omega SPA Display according to the figure below. For this purpose, the individual wires have to be stripped 6 mm and appropriate cable end sleeves have to be crimped. Then, push individual wires into the correct connection opening of the corresponding terminal until they come to a stop.

Note: The CAN BUS cable to an additional Nordmann Omega SPA Display is to be connected either to terminal "X2" or "X3" (see notes in [chapter 4.5](#)).

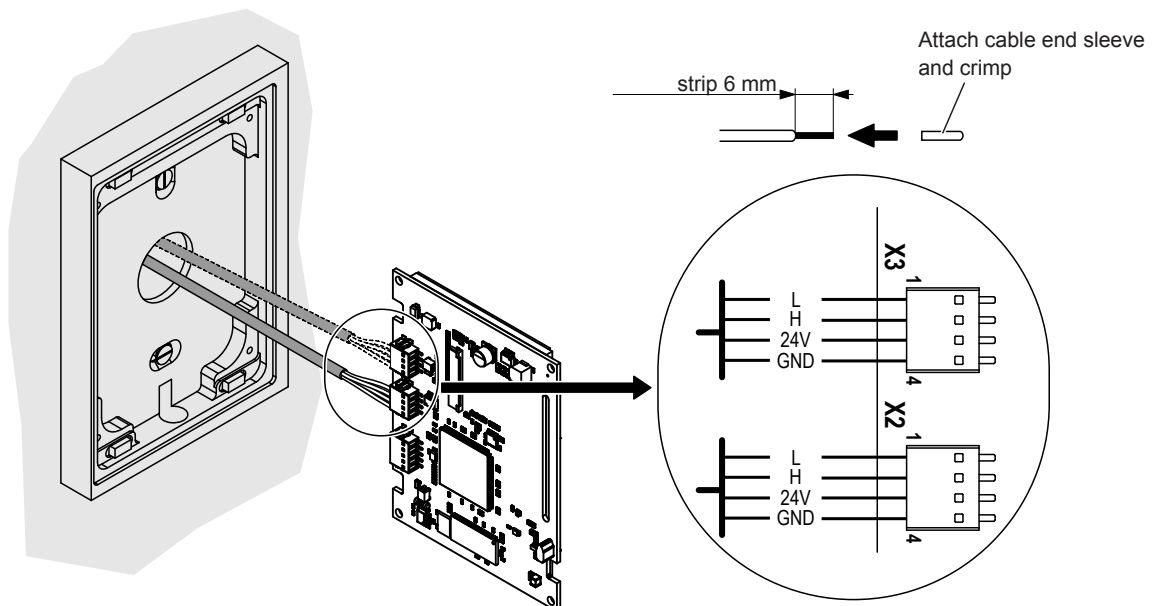
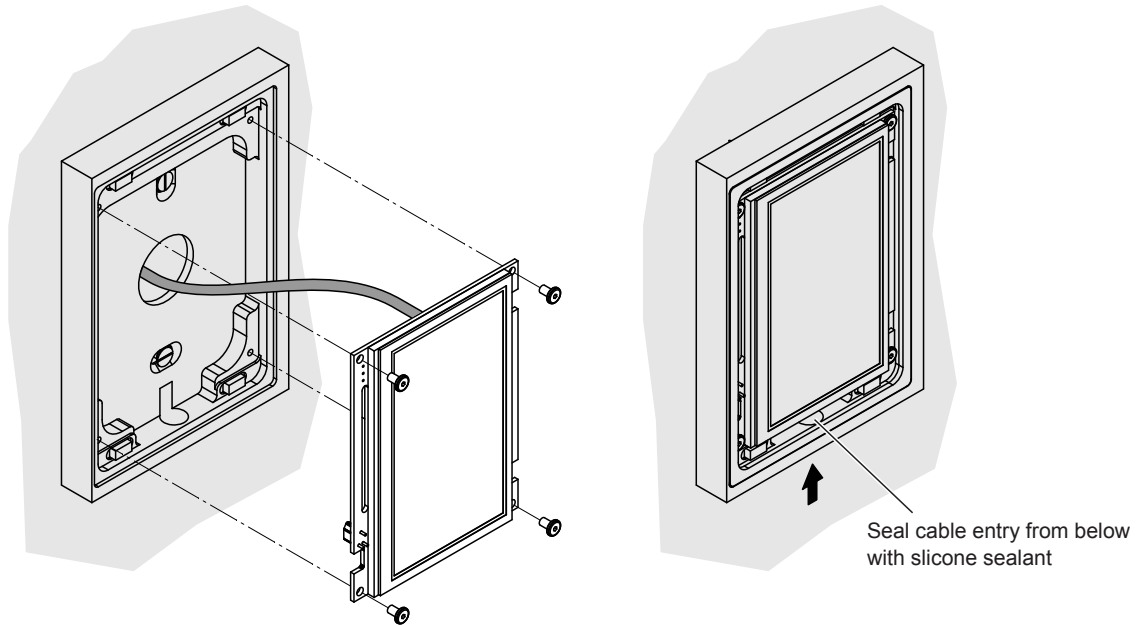


Fig. 14: Connecting the CAN BUS cable(s) to the Nordmann Omega SPA Display

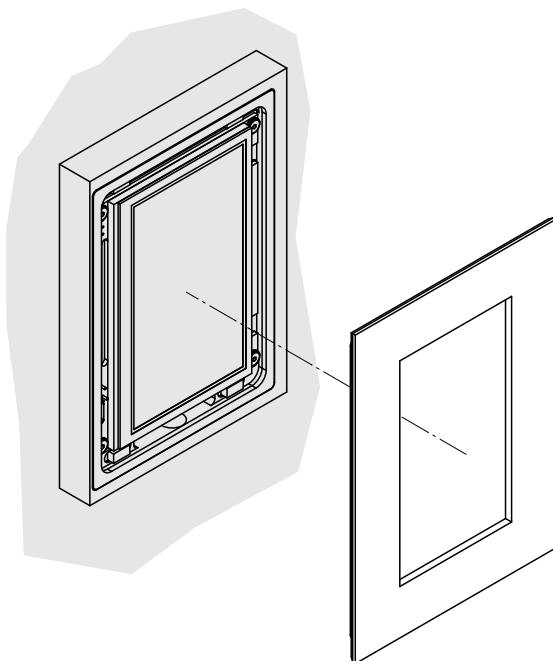


4. Connect the CAN BUS cable according to the specifications in [chapter 4.5](#) to the Nordmann Omega, then perform the function tests.
5. After function tests have been passed carefully place the Nordmann Omega SPA Display onto the surface-mounted housing (make sure the supply cable is not getting pinched). Then, fix the Nordmann Omega SPA Display to the surface-mounted housing using the four screws supplied. Seal the cable entry at the bottom of the surface-mounted housing splash-proof using silicone sealant.



*Fig. 15: Mounting the Nordmann Omega SPA Display*

6. Finally attach the decoration cover. The decoration cover is held by the magnets in the surface-mounted housing.



*Fig. 16: Attaching the decoration cover*

## 4.5 Connecting the SPA Display to the Nordmann Omega

Observe and comply with the notes in the installation and operation manual of the Nordmann Omega steam generator and the local regulation regarding electrical installation when connecting the Nordmann Omega SPA Display(s) to the Nordmann Omega steam generator!

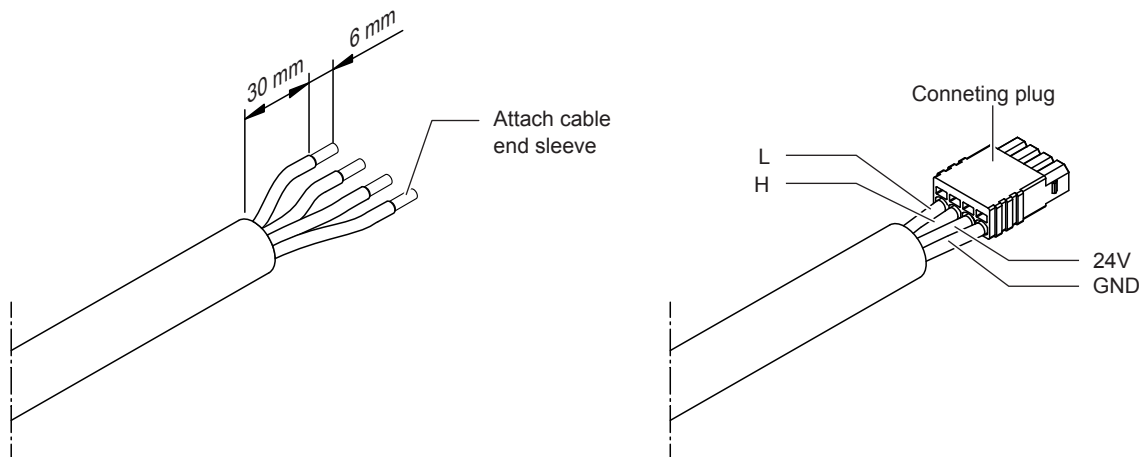
**DANGER!**  
Danger of electric hazard!

Before connecting the Nordmann Omega SPA Display(s) to the Nordmann Omega steam generator set the steam generator out of operation and disconnect it from the mains!

**CAUTION!**

The electronic components inside the Nordmann Omega are very sensitive to electrostatic discharge. When the unit is open for installation work, appropriate measures must be taken to protect these components against damage caused by electrostatic discharge (ESD protection).

1. Remove front panel of the Nordmann Omega.
2. Insert the CAN BUS cable(s) (shielded four-wire cable, 0.34 mm<sup>2</sup> per wire) from the bottom via cable glands into the control compartment.
3. Cut CAN BUS cable(s) to length. Prepare cable end(s) as shown in [Fig. 17](#) and connect plug(s) to the CAN BUS cable(s).



*Fig. 17: Preparing the CAN BUS cable for the connection on the control board*

4. Connect the CAN BUS cable(s) according to the appropriate wiring diagram (see [Fig. 18](#), [Fig. 19](#) or [Fig. 20](#)) to socket "X23" and/or "X24" on the control board of the Nordmann Omega.

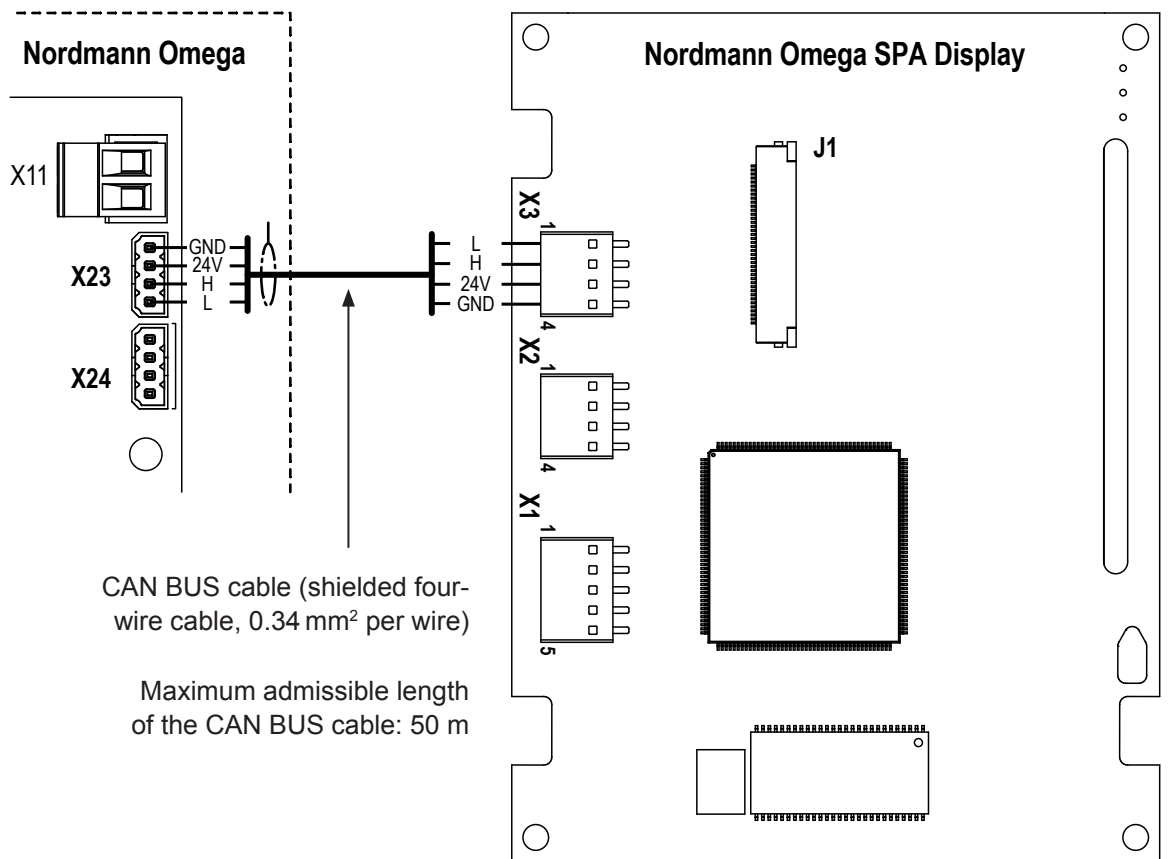


Fig. 18: Wiring diagram variant 1 with one Nordmann Omega SPA Display

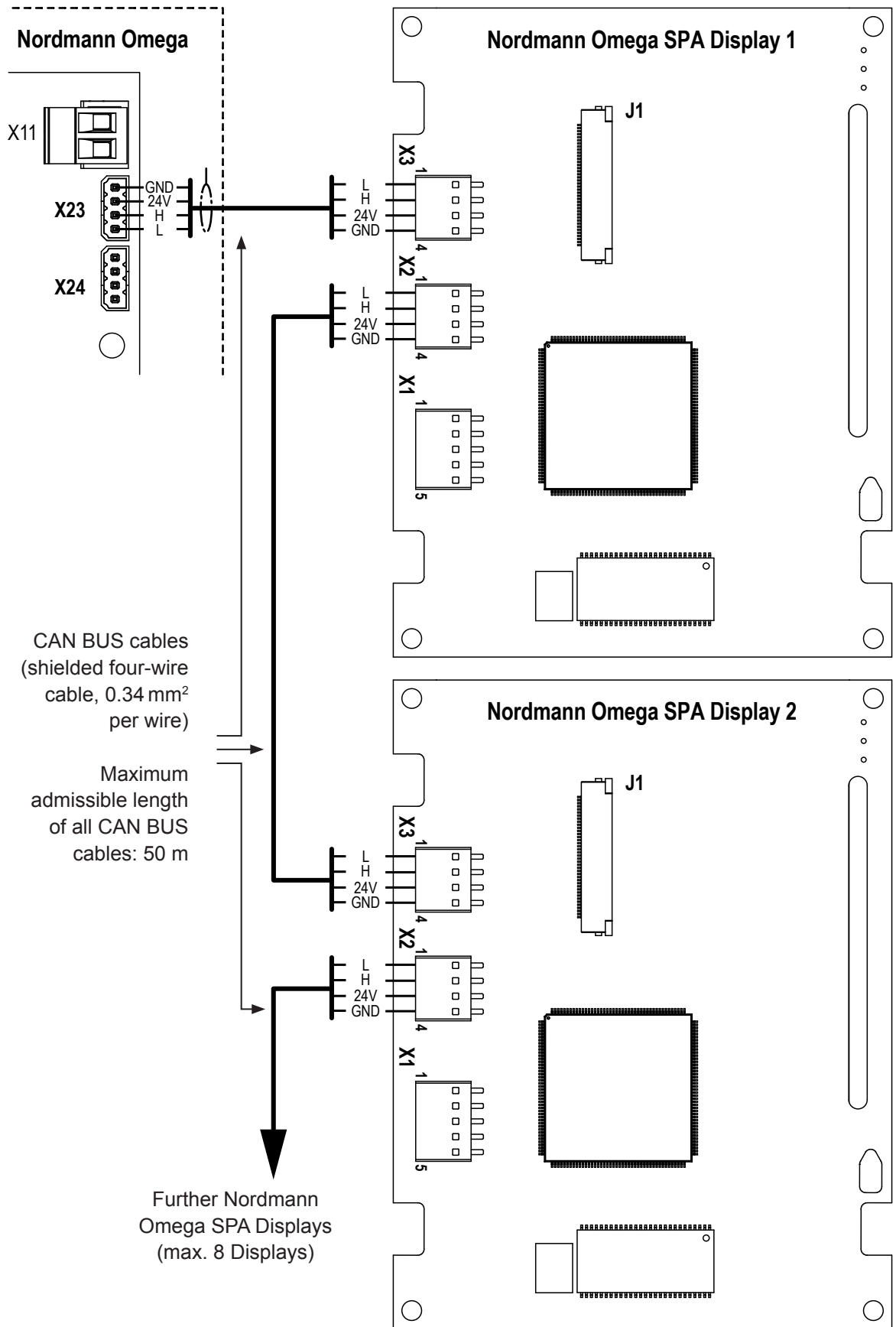


Fig. 19: Wiring diagram variant 2 with two or more Nordmann Omega SPA Displays

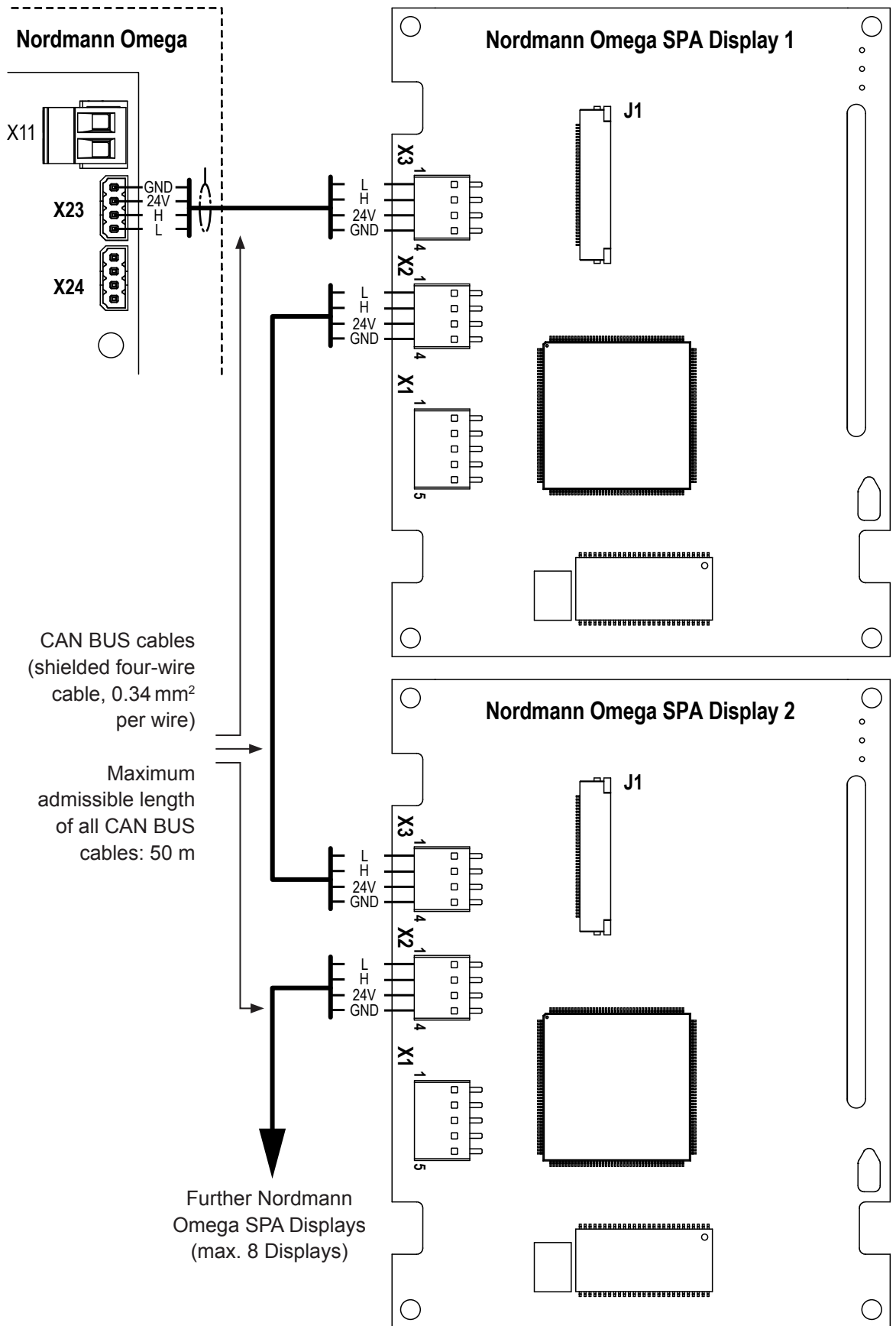
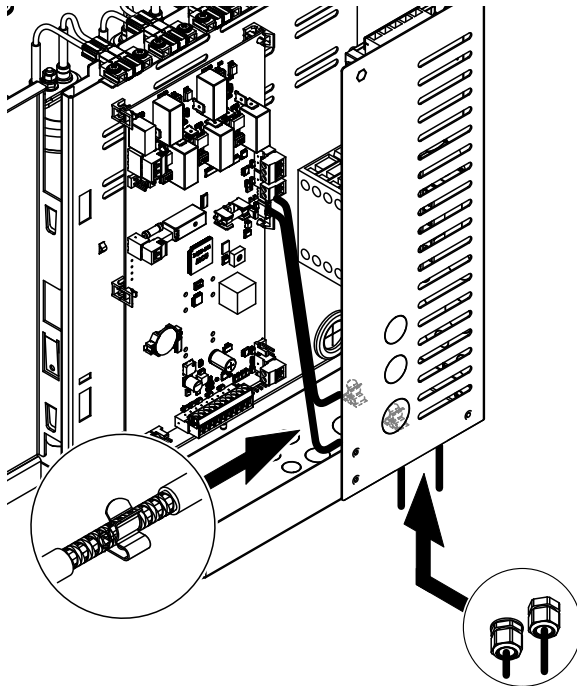


Fig. 20: Wiring diagram variant 3 with two or more Nordmann Omega SPA Displays

- Free the shielding of the CAN BUS cable(s) by removing the insulation at the appropriate position. Then, pinch the freed shielding of the CAN BUS cable(s) into the clamp holder at the bottom in the housing of the Nordmann Omega.



*Fig. 21: Cable shielding*

- Remount front panel of the Nordmann Omega.
- Put the Nordmann Omega into operation.

Assumed the cabling is correct the home screen is shown on the Nordmann Omega SPA Display after start-up of the Nordmann Omega.

## **5 Configuration and operation of the Nordmann Omega SPA Display**

### **5.1 Configuration of the Nordmann Omega SPA Display**

In principle, the SPA display is ready for operation after the connection and requires no additional configuration.

However, if more than one SPA display is used in the system, a unique display address must be assigned to each connected SPA display.

For each connected SPA display, go to the menu "Menu > Engineering > Communication> Server Settings" and assign an individual address to the SPA display via the parameter "Server ID Display".

### **5.2 Operation of the Nordmann Omega SPA Display**

For the operation of the Nordmann Omega SPA Display, please refer to the instructions in chapter 6 of the Nordmann Omega operation manual.

## 6 Troubleshooting

### 6.1 *Fault indications / warning and fault list*

Detailed information on the fault indication on the Nordmann Omega SPA display as well as a list of the warning and fault messages which can occur during operation of the Nordmann Omega can be found in chapter 8 of the Nordmann Omega operation manual.

### 6.2 *Malfunctions during operation of the Nordmann Omega SPA Display*

<b>Malfunction</b>	<b>Cause</b>	<b>Remedy</b>
Message "Time Out" appears in the Nordmann Omega SPA Display.	No data connection	Check connections "L" and "H" on the SPA display and on the Nordmann Omega control board.
Keystroke is not detected in the correct location.	Display is not calibrated correctly.	If possible, access the calibration function (Path: Menu> Engineering> Administration> Display) and start the calibration function by pressing "Start". Otherwise, the display must be replaced.
Display remains dark.	Nordmann Omega steam generator is not switched on.	Switch on the Nordmann Omega.
	No supply voltage present: <ul style="list-style-type: none"><li>– Supply cable not or not correctly connected.</li><li>– Control board of the Nordmann Omega defective.</li></ul>	<ul style="list-style-type: none"><li>– Connect cable correctly.</li><li>– Check/replace control board of the Nordmann Omega.</li></ul>
No reaction when tapping on a key on the display.	SPA display defective.	Replace SPA display.
	Control board of the SPA display defective.	Replace control board.



## **7 Taking out of service/Disposal**

### **7.1 Taking out of service**

If the Nordmann Omega SPA Display must be replaced or if the Nordmann Omega SPA Display is not needed any more, proceed as follows:

1. Switch off the Nordmann Omega steam generator, separate it from the mains and secure it against inadvertent power-up.
2. Have the Nordmann Omega SPA Display (and any other system components, if necessary) unmounted by a qualified service technician.

### **7.2 Disposal/Recycling**

Components not used any more must not be disposed of in the domestic waste. Please dispose of the unit or the individual components in accordance with local regulations at the authorised collecting point.

If you have any questions, please contact the responsible authority or your local Nordmann representative.

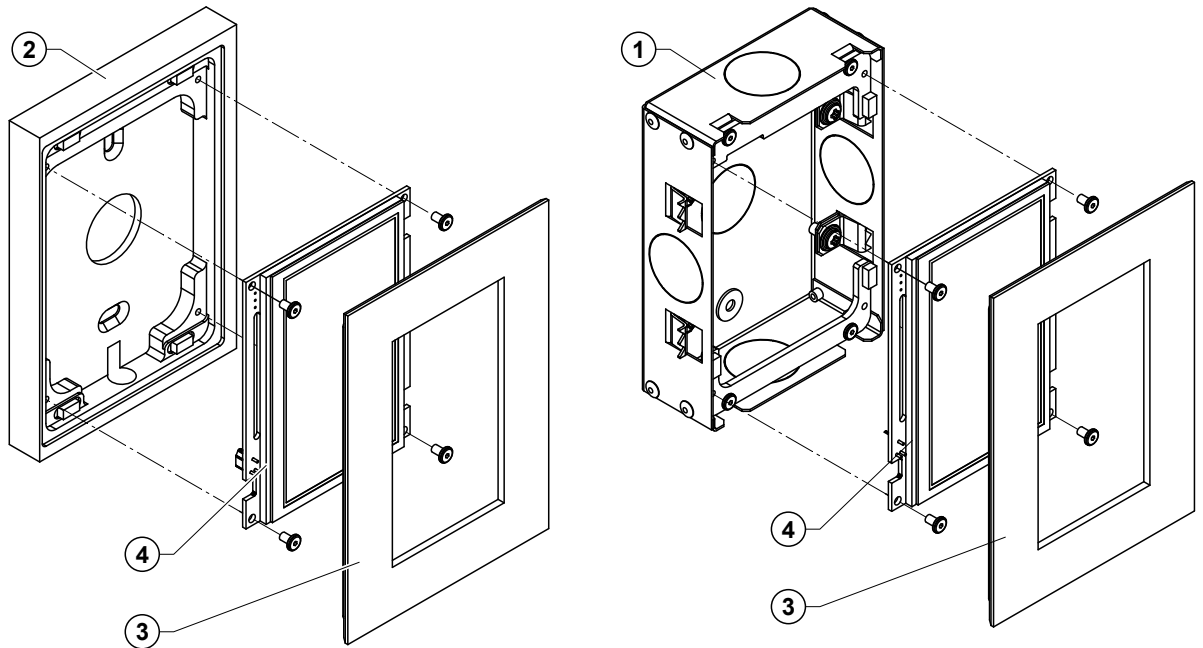
Thank you for your contribution to environmental protection.

## 8 *Technical data*

	Nordmann Omega SPA Display	
	flush-mounted version	surface-mounted version
Touch Panel	Resistive Touch Panel with 95 x 54 mm active screen	
Display	4,3" LCD, 272 x 480 Pixel	
Interface	CAN BUS	
Supply voltage	24 VDC	
Max. rated power	2 W	
Admissible ambient temperature	-20...70°C	
Admissible ambient humidity	10... 80 %rh, non condensing	
Type of protection	IP44	IP44 (IP33 <sup>1)</sup> )
Conformity	CE	
Control	ARM Cortex M4 high-performance microcontroller 16 MB DRAM, 16 MB Flash for program & data	
Dimensions (L x W x D)	141.5 mm x 100.2 mm x 40.2 mm	141.5 mm x 100.2 mm x 19.0 mm

<sup>1)</sup> If cable entry is not sealed by the customer, see [chapter 4.4.2](#)

## 9 Spare parts

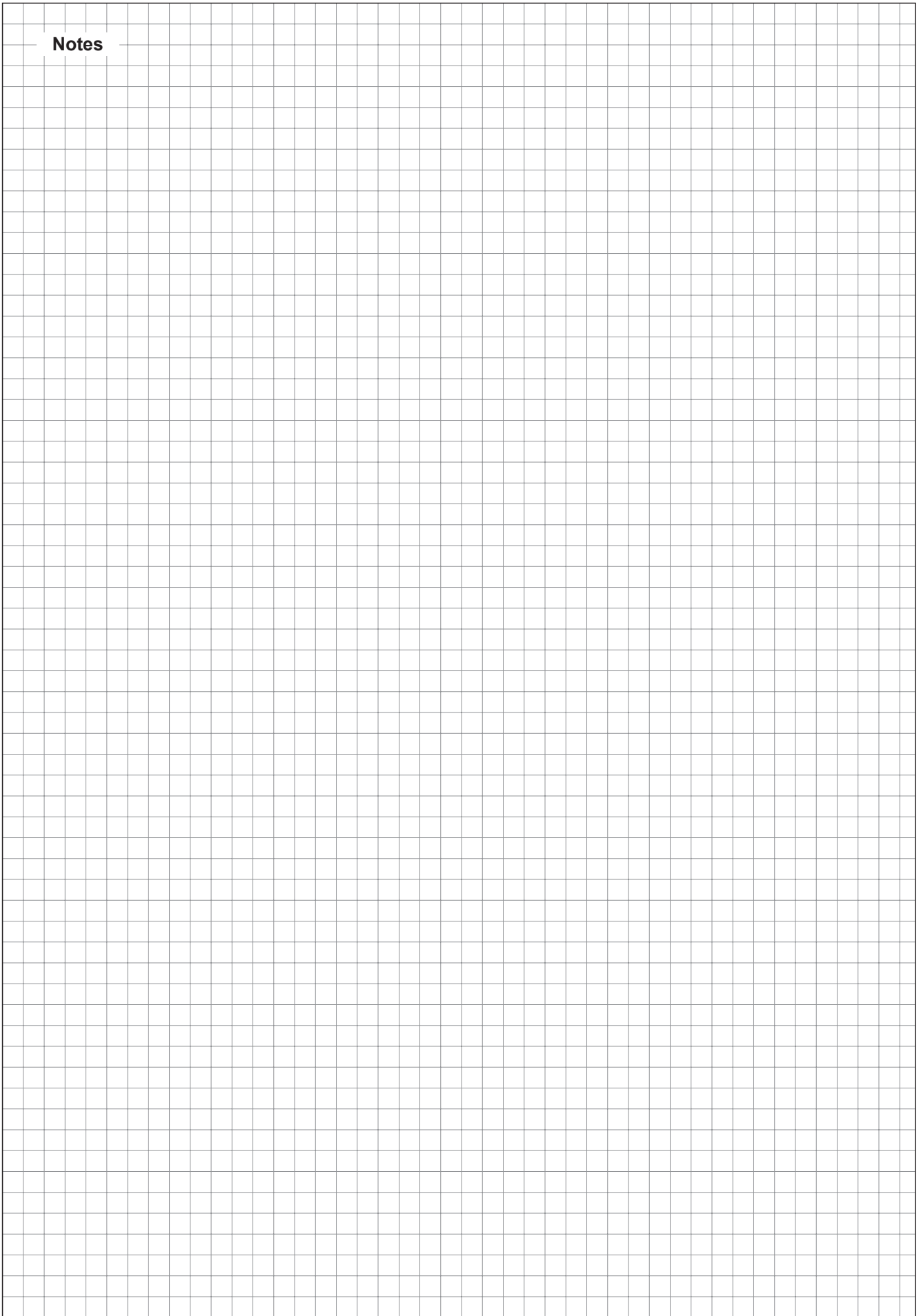


Pos.	Description	Spare part No.
1	Flush-mounted housing (incl. mounting material)	2590178
2	Surface-mounted housing (incl. mounting material)	2590179
3	Decorative cover steel	2590183
	Decorative cover glass white	2590185
	Decorative cover glass black	2590186
4	PCB Omega SPA Display	2590964
—	Plug for CAN BUS cable (5 pcs.)	2591662
—	CAN BUS cable shielded (50 m)	2591666
—	Clamp holder for shielding (5 pcs.)	2591667

If you would like to use other materials for the decorative cover, the magnetic centering frame including the seal and the appropriate glueing device can be ordered separately in consultation with your Nordmann representative:

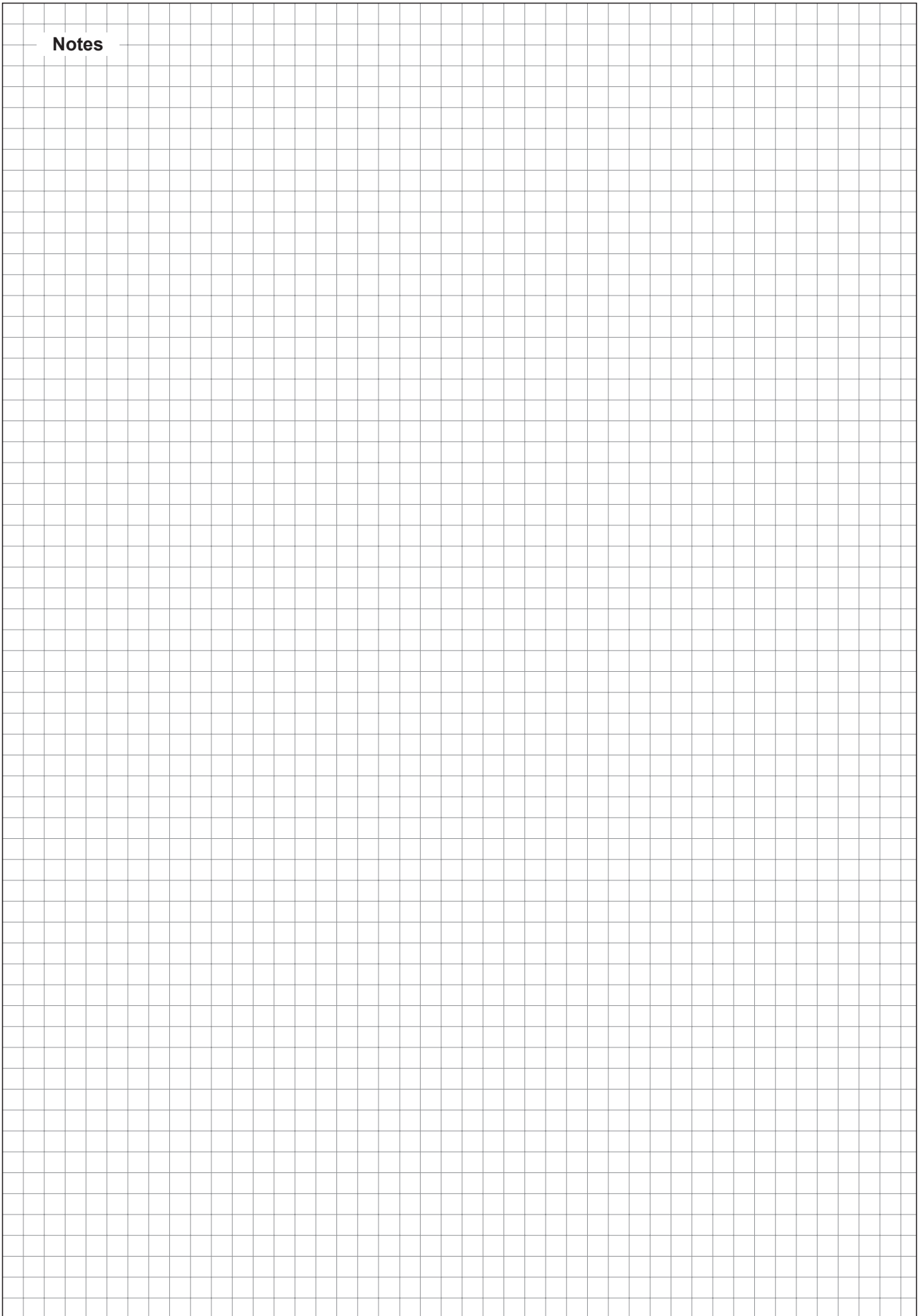
Pos.	Description	Spare part No.
—	Centering frame & sealing	2590188
—	Glueing device	2590197

**Notes**



Notes

**Notes**







CH94/0002.01

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