# Quick Installation Guide

RPI H3_110

Europe

**This manual applies for solar inverters models:**

● **RPI H3_110**

**with firmware version: DSP: 2.02 / RED: 2.01 / COMM: 2.00**

If you experience deviations between the descriptions in this quick installation guide and the information on the inverter display, please check www.solar-inverter.com for a quick installation guide that matches the firmware version on the inverter. The standard manual can also be downloaded from our website.

Delta Energy Systems (Germany) GmbH

Tscheulinstrasse 21

79331 Teningen

Germany

# Table of contents

# **1** **General safety instructions**

## ⚠ DANGER

**High electrocution**
Potentially fatal voltage is applied to the solar inverter during operation. This potentially fatal voltage is still present for 15 seconds after all power sources have been disconnected.

► Never open the inverter.
► Always disconnect the inverter from power before installation, open the DC disconnection switch and make sure neither can be accidentally reconnected.
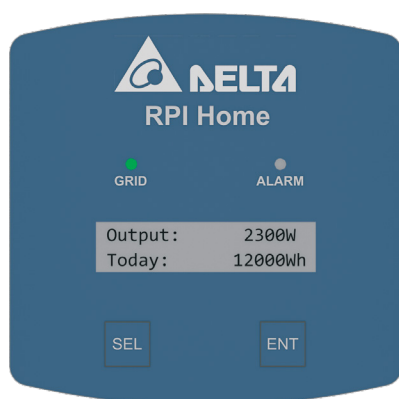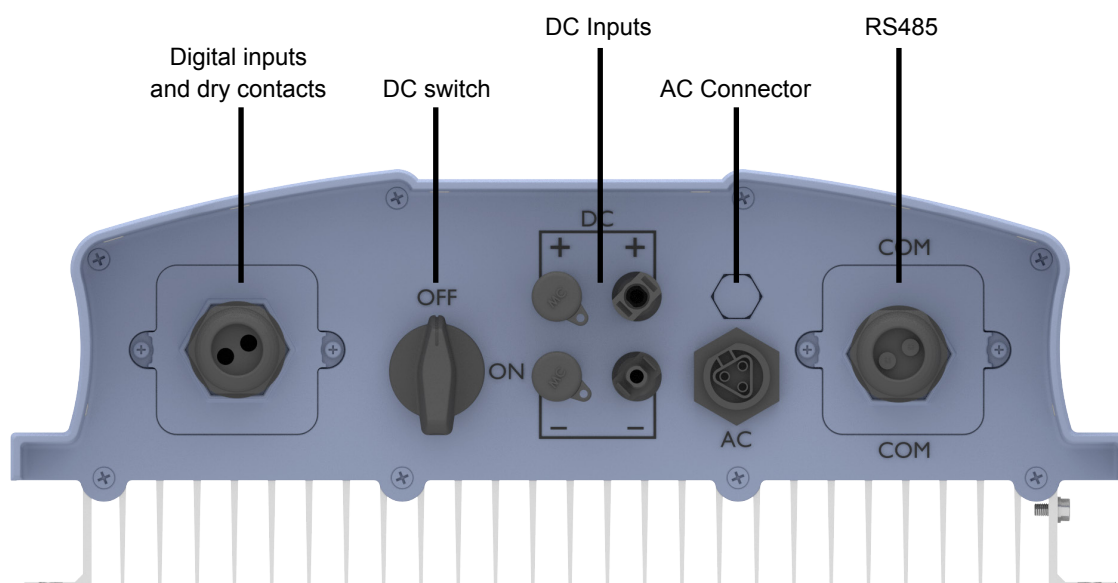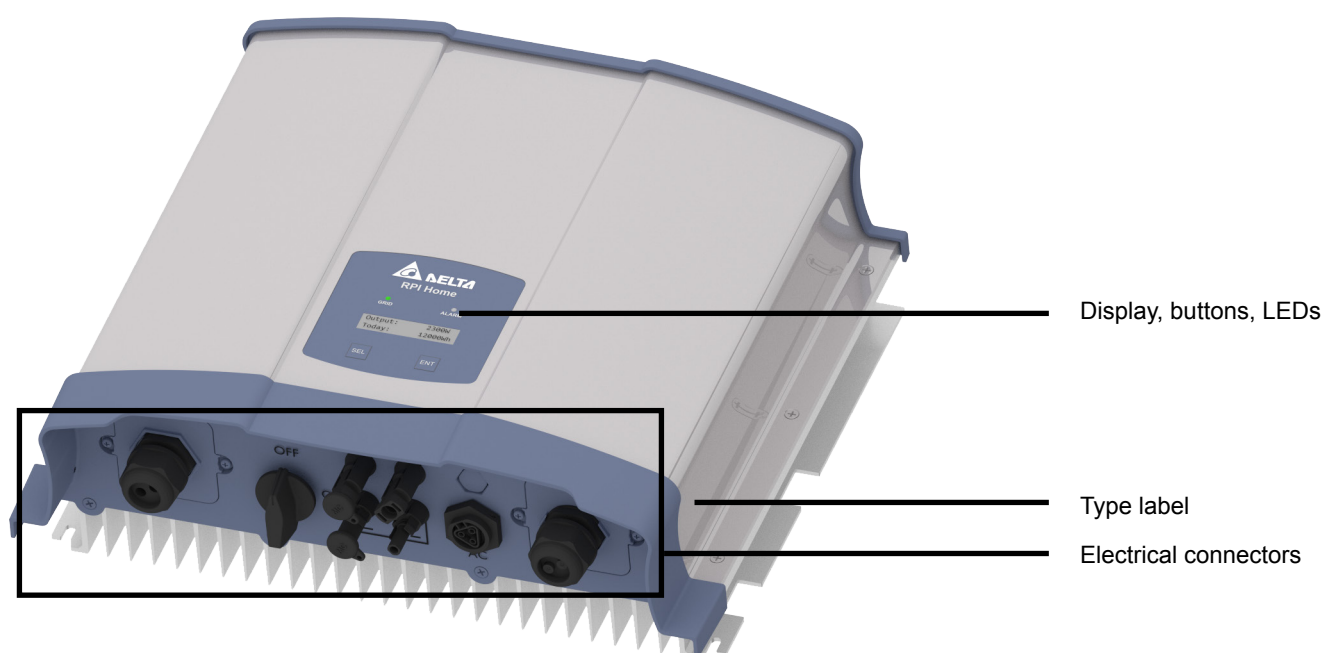► Wait at least 15 seconds until the capacitors have discharged.

## ⚠ DANGER

**High electrocution**
Potentially fatal voltage may be applied to the DC connections of the solar inverter. When light is falling on solar modules, they immediately start producing energy. They do so, even when the sun is not shining.

► Never disconnect the solar modules when the solar inverter is powered.
► First switch off the grid connection so that the solar inverter cannot feed energy into the grid.
► Turn the *DC disconnection switch* to position **OFF**.
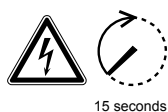► Make sure the DC connections cannot be accidentally touched.

- Read this quick installation guide **before** you start installing the inverter.
- The inverter can safely and normally be operated if installed and used in accordance with this manual (see IEC 62109-5.3.3). Delta Energy Systems is not responsible for damage incurred by failure to observe the installation and commissioning instructions in this manual. For this reason, be sure to observe and follow all instructions!
- Installation and commissioning may only be performed by qualified electricians using the installation and commissioning instructions found in this manual.
- The inverter must be disconnected from power and the solar modules before any work on it can be performed.
- The inverter has a high leakage current value. The ground wire **must** be connected before commissioning.
- Do not remove any warning signs that the manufacturer has installed on the solar inverter.
- Improper handling of the inverter may result in physical injury and damage to property. For this reason, observe and follow all general safety instructions and warnings.
- The inverter contains no components that must be maintained or repaired by the operator or installer. All repairs must be performed by Delta Energy Systems. Opening the cover will void the warranty.
- Do not disconnect any cables when the solar inverter is powered due to risk of a fault arc.
- To prevent lightning strikes, follow the relevant regulations applicable in your country.
- The surface of the solar inverter can become very hot during operation. Use safety gloves when working on the solar inverter.
- Only devices in compliance with SELV (EN 69050) may be connected to the RS485 interfaces.
- All connections must be sufficiently insulated in order to comply with the IP65 protection rating. Unused connections must be closed by placing cover caps on the solar inverter.

# 2 Components of the inverter

Display, buttons, LEDs

Type label

Electrical connectors

Digital inputs and dry contacts

DC switch

DC Inputs

AC Connector

RS485

| Label | Designation | Usage |
|---|---|---|
| **LEDs** | | |
| $G_{RID}$ | Grid | Green; lights up when the solar inverter feeds into the grid |
| $A_{LARM}$ | Alarm | Red; Indicates an error, fault, or warning |
| **Buttons** | | |
| SEL | Select | Move to the next menu entry. Change a value. Cancel value setting. |
| ENT | Enter | Select menu item. Open configurable value for editing. Finish editing (adopt set value). |

# 3 Information on the type label



| | |
|---|---|
| Model : RPI H3 | VDE AR-N 4105 |
| PART NO. : RPI302N63E0000 | VDE 0126-1-1/A1 |
| DC Input : 125-550Vdc | AS 4777.2/3 |
| MPP 320-500Vdc,10A | AS 3100 |
| AC Output : 220/230Vac,50Hz/60Hz | |
| 3kVA nom. 14.3A max. | |
| cos∅ 0.8 ind-0.8 cap | |
| *2.49kVA for Australia | |
| Safety Class : I | |
| OVC : III | Assembled in China |
| S/N: XXXXXXXXXXXX | Year & Month of Manufacturing : YYMM |

**IP65**

**Risk of death by electrocution**

Potentially fatal voltage is present when the solar inverter is in operation that remains for 15 seconds after being disconnected from power.

Never open the solar inverter. The solar inverter contains no components that must be maintained or repaired by the operator or installer. Opening the cover will void the warranty.

Read the manual delivered with the inverter before working with the solar inverter and follow the instructions contained in the manual.

The housing of the inverter must be grounded if this is required by local regulations.
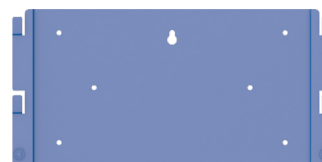
Regulatory Compliance Mark (RCM mark): The inverter is compliant with the Australian Electrical Safety and EMC standards. Applies only to Australia and New Zealand.
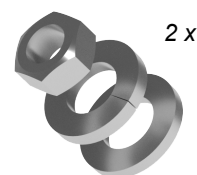
# 4 Scope of delivery



*Inverter*

*Mounting plate*

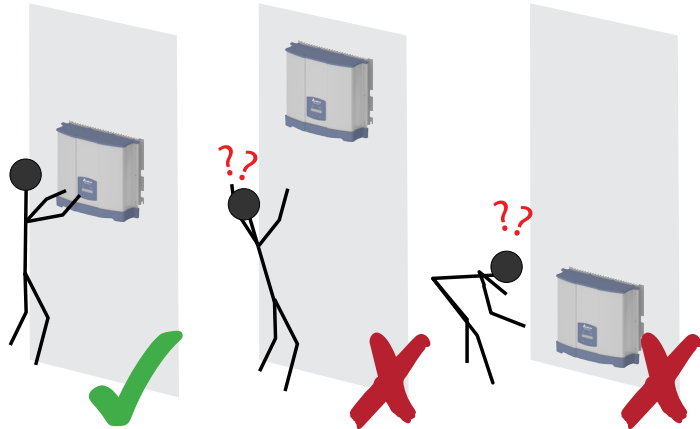*Quick Installation Guide and General Safety Instructions*
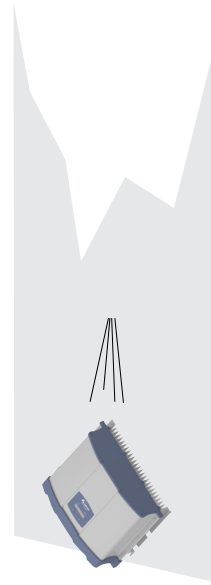
*AC Plug*

*2 mounting nuts M5 to fasten the inverter to the mounting plate*

# 5 Planning the installation

## Where to mount the inverter



► Mount the inverter so that the LEDs and display can be easily seen and that the buttons can be operated. Make sure the reading angle and installation height are sufficient.



► Always use the mounting plate supplied with the inverter.
► Check that the wall is capable of bearing the heavy weight of the inverter.
► Use dowels and screws that are suitable for the wall material and the heavy weight.
► Mount the inverter on a vibration-free wall to avoid disruptive vibrations.
► Mount the inverter on a fireproof wall.
► Mount the inverter on a flat wall only. Brick walls can cause problems if they are too bumpy.
► Possible noise emissions can be disruptive when the inverter is used in living areas or in buildings with animals. Therefore, choose your installation location carefully.

## Outdoor installations

► The inverter has protection degree IP65 and can be installed indoors or in protected outdoor areas (that means outdoor but protected by a roof against direct sun, rain or snow).
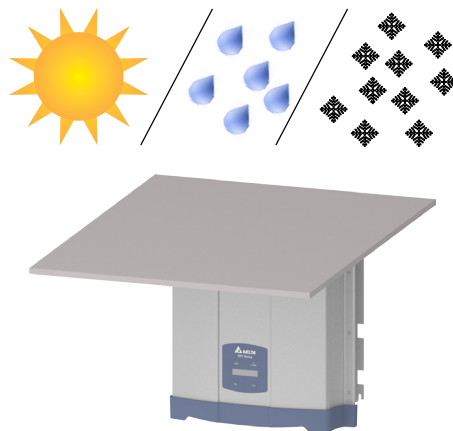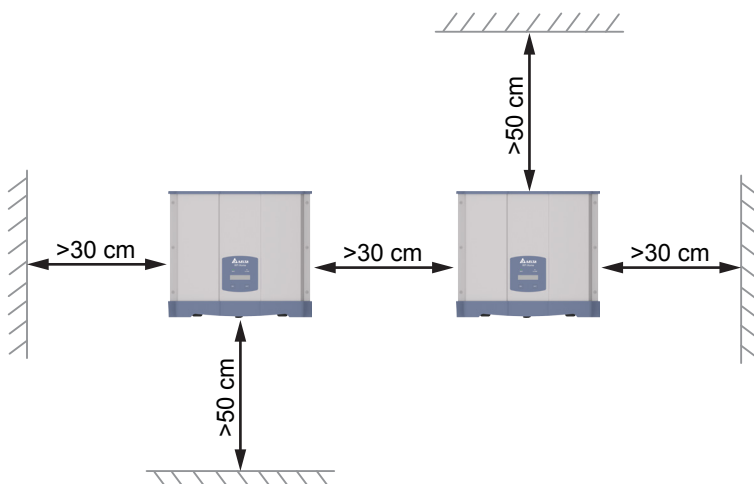


## Mounting orientation

► Mount the solar inverter vertically.



## Ambient temperature and air circulation



► Ensure adequate air circulation. Hot air must be able to dissipate upward. Keep sufficient space around each inverter.
► Do not install inverters directly above one another. Otherwise, the upper inverter is warmed up by the lower one.
► Consider the **operating temperature range** (see "Technical data", p. 22).

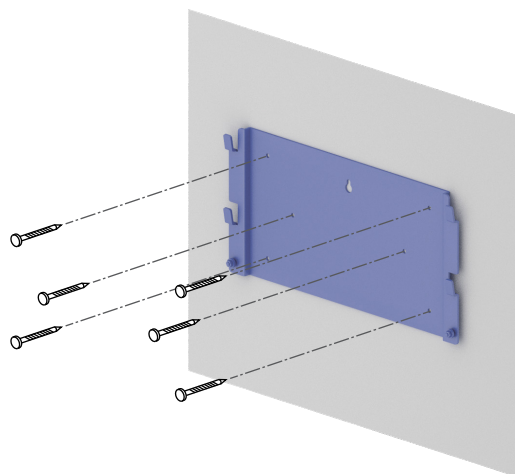When the operating temperature range is exceeded, the solar inverter reduces the amount of power generated.
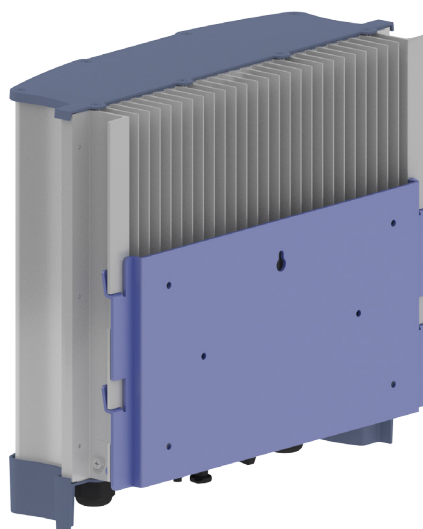
# 6   Mounting the inverter
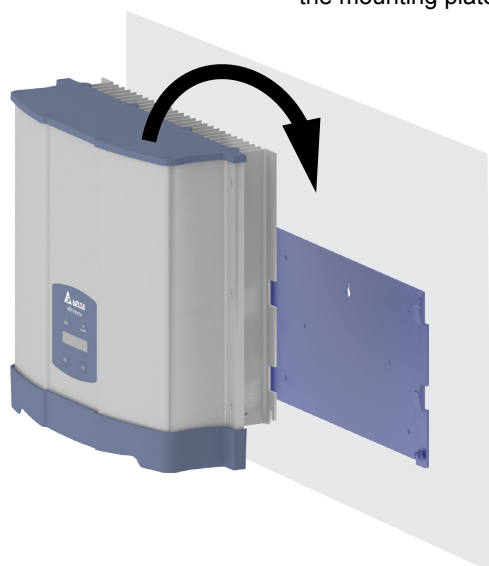
## 1
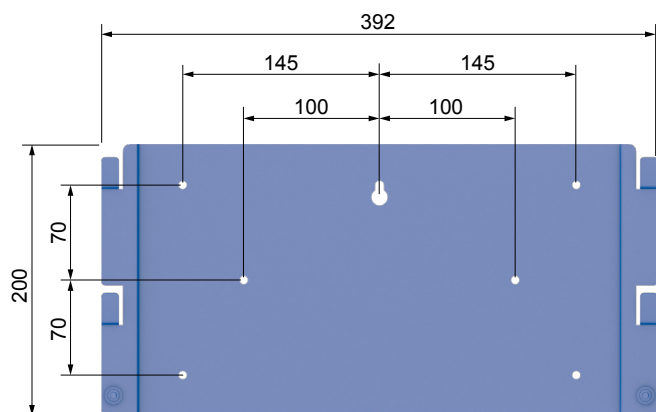


## 2

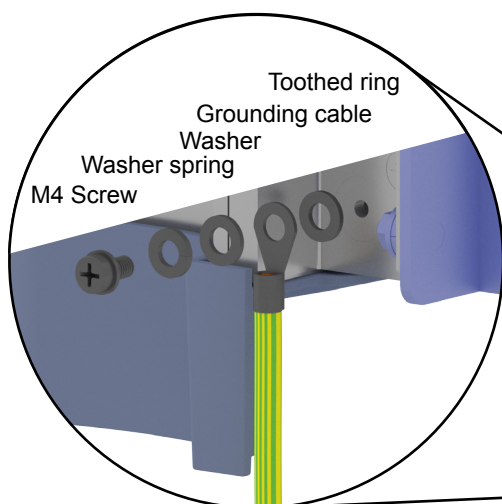► Fasten the mounting plate with 6 M5 screws to the wall.



## 3

► Hang the inverter onto the mounting plate.



► Check that the rail of the inverter hangs correctly in the mounting plate and screw the inverter to the mounting plate.

## 4

► Ground the inverter housing.

Perform a continuity check for the grounding connection. If the test fails, scratch the paint off the inverter housing below the tooth lock washer to get a better electrical connection.
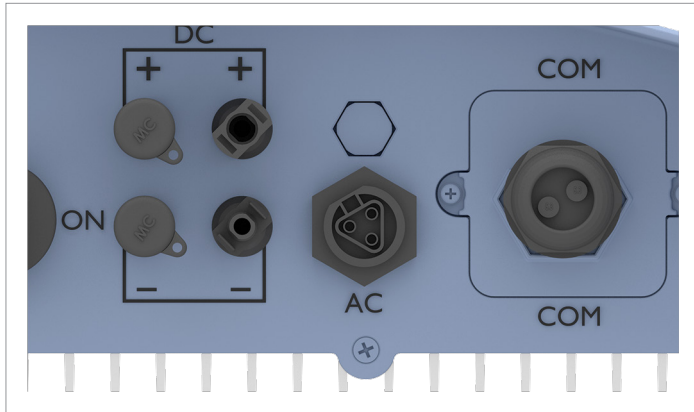
Toothed ring
Grounding cable
Washer
Washer spring
M4 Screw
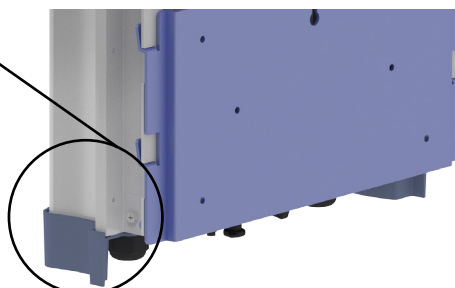
# 7 Connecting to the grid (AC)

> ## ⚠ DANGER
>
> ⚡ **High electrocution**
> ► Turn the *DC disconnection switch* to position **OFF** before you connect or disconnect the AC plug.



**Important information regarding safety**

Always adhere to the specific regulations applicable in your country or region.

Always adhere to the specific regulations defined by your grid operator.

For the safety of the user and for the security of your installation, install safety and protection devices that are required for your installation environment (example: automatic circuit breaker and/or overcurrent protection equipment).

Use the proper upstream circuit breaker to protect the inverter:

| | |
|---|---|
| Upstream circuit breaker | 16 A |
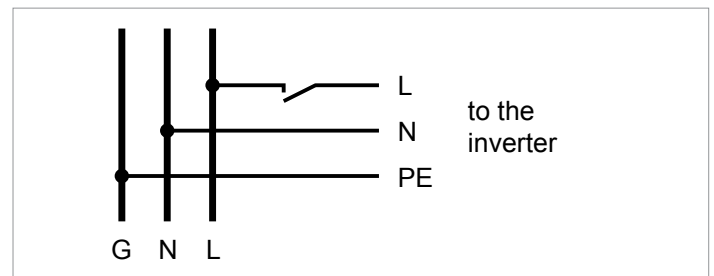


Due to its design, the inverter is not capable of feeding DC residual current back into the grid. It fulfils this requirement in accordance with DIN VDE 0100-712.

When examining these possible fault situations in terms of the currently valid installation standards, Delta has come to the conclusion that there is no danger when operating the inverter in combination with a type A upstream residual-current device (RCD).

Therefore faults that would otherwise require the use of a type B residual-current device due to the inverter can be excluded.

The integrated all-pole sensitive RCMU provides additional safety. RCD Type A can be used for this inverter, according to the following table.

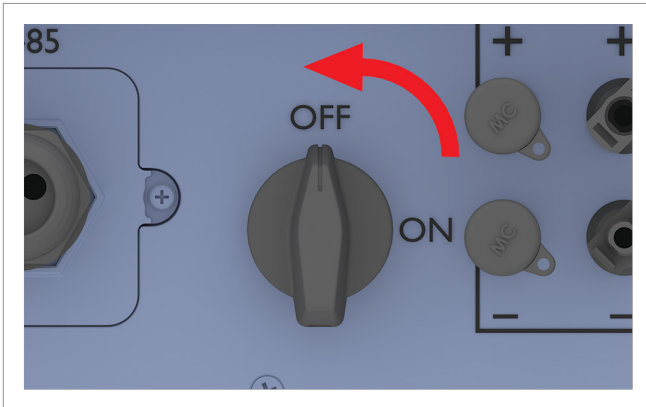| | |
|---|---|
| Minimum tripping current of the RCD | 30 mA * |

*Table:* *Recommended RCD Type A for a single inverter*
 * see description in the note below

> ⊙ The value of the tripping current mainly depends on the installation of the PV generator, the size of the PV array and environmental conditions (e.g. humidity).
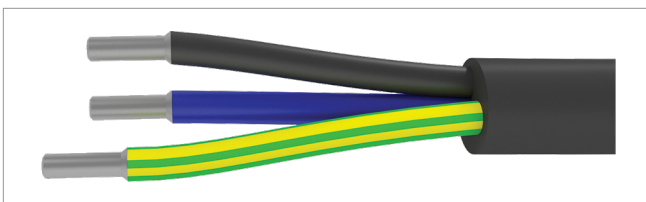
**1.** Turn the DC disconnection switch to position **OFF**.



**2.** Remove the cable sheath as shown and remove 12 mm of insulation from each wire end. Do not twist wire ends as this reduces the surface contact area with the wire end sleeve (bootlace pin).
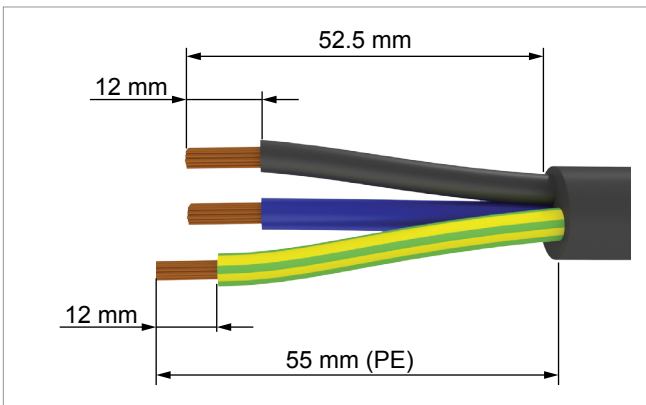


**3.** Place a wire end sleeve on each wire end and crimp them on tightly.



**4.** Connect the AC cable to the AC plug as described below.
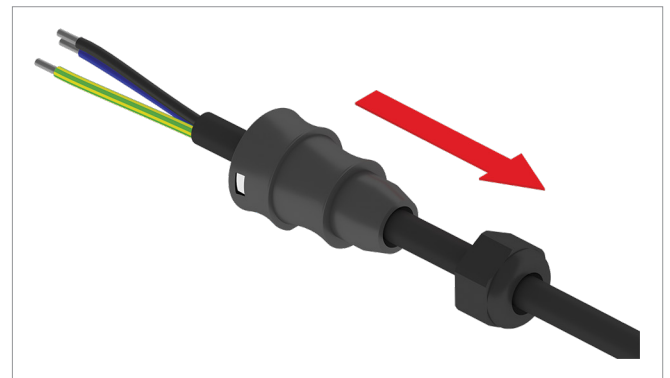
► Unscrew the cable nut from the cable housing.



► Remove the cable housing with a 3.5 mm flat end screwdriver.
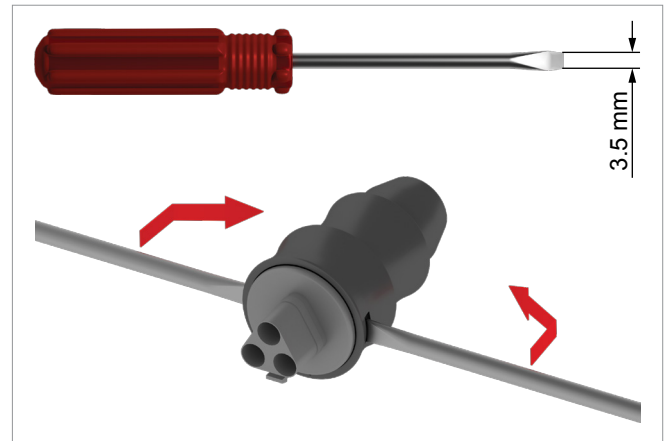


► Slide cable nut and cable housing onto the AC cable in the given order.



► Slide the wires of the AC Cable into the connections in the socket insert and screw them tightly (typical torque 0.8 to 1.0 Nm). Observe the correct phase sequence when wiring the AC plug.
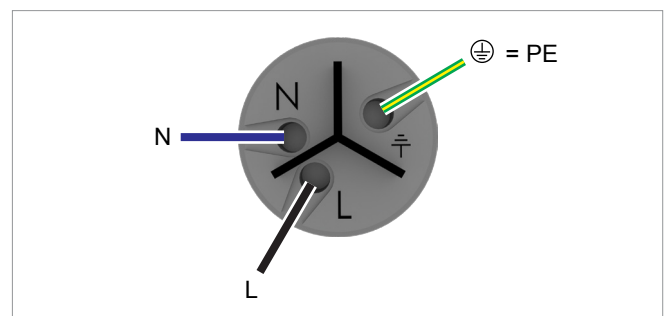
# 7 Connecting to the grid (continued)



0.8 ... 1 Nm
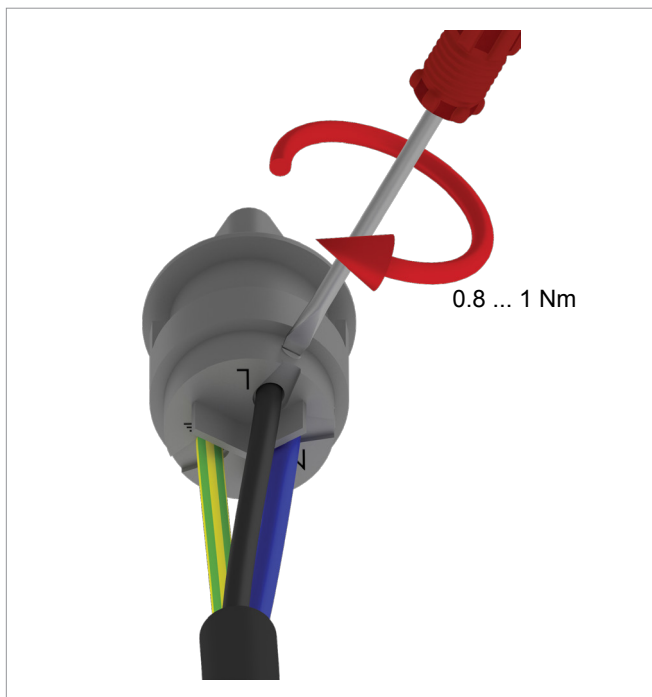
► Slide the cable housing into the socket insert until you can hear a "click" sound.



CLICK

► Fasten the cable nut to the cable housing (typical torque 4 + 1 Nm).



4 + 1 Nm

► Insert the AC plug into the AC connector on the inverter until you can hear a "click" sound.



CLICK

► We recommend using a strain-relief clamp directly behind the AC plug.

## AC cable requirements

Use properly sized wires (see table)

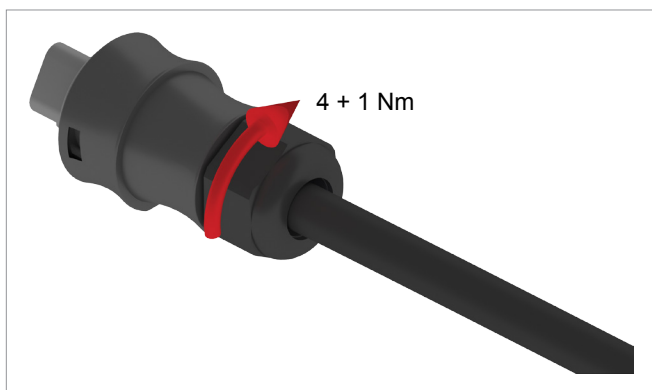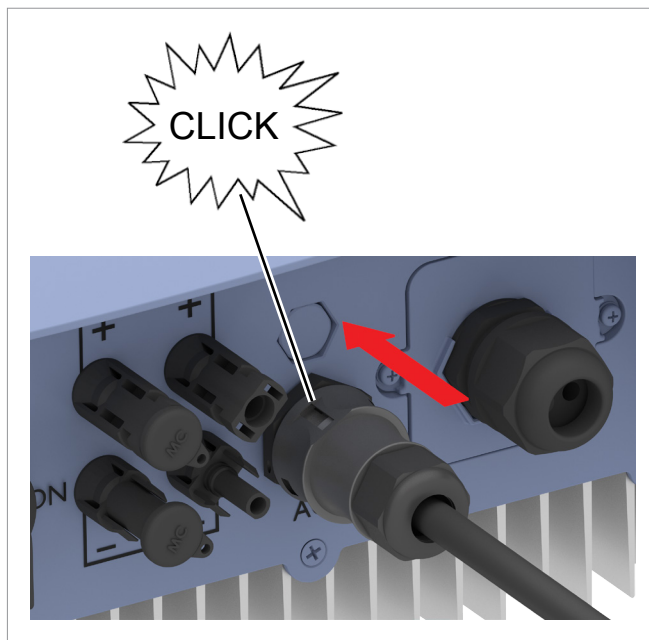| AC plug | Wieland RST25i3S S1AZR2V BG03 (96. 032.4154.3) |
| --- | --- |
| Current rating | ≤ 25 A |
| Min. / max. cable diameter | 10 ... 14 mm |
| Min. / Max. wire diameter | 0.75 ... 4 mm$^2$ |
| Recommended torque for terminal screws | 0.8 ... 1.0 Nm |

Read and follow the instructions delivered with the AC plug.

The AC plug delivered with the inverter can be used with flexible or rigid copper cable.

When calculating the cross section of the cable, consider:

● material used
● thermal conditions
● cable length
● type of installation
● AC voltage drop
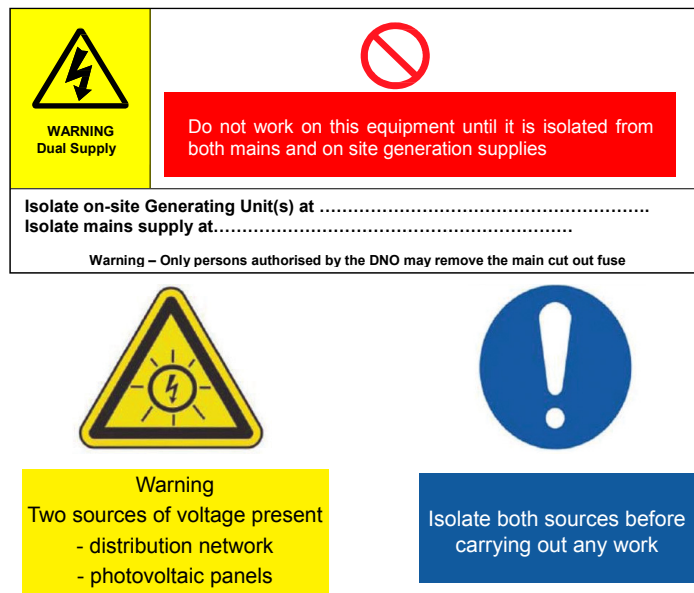● power losses in cable

Always follow the system installation requirements defined for your country!

## Grounding the inverter

The inverter must be grounded via the AC connector's PE conductor. To do this, connect the PE conductor to the designated terminal of the AC plug.

## Markings on the inverter

In some countries, the following labels have to be applied on the front of each micro inverter. Please check applicable national and local standards and regulations.

WARNING
Dual Supply

Do not work on this equipment until it is isolated from both mains and on site generation supplies

Isolate on-site Generating Unit(s) at ..........................................................
Isolate mains supply at...............................................................

**Warning – Only persons authorised by the DNO may remove the main cut out fuse**

Warning
Two sources of voltage present
- distribution network
- photovoltaic panels

Isolate both sources before carrying out any work

# 8 Connecting to the solar modules (DC)

> ## ⚠ DANGER
>
> **High electrocution**
> Potentially fatal voltage may be applied to the DC connections of the solar inverter. When light is falling on solar modules, they immediately start producing energy. They do so, even when the sun is not shining directly onto the solar modules.
>
> ► Turn the DC disconnection switch to position **OFF**.
> ► Never disconnect the solar modules when the solar inverter is powered.
> ► First switch off the grid connection so that the solar inverter cannot feed energy into the grid.
> ► Make sure the DC connections cannot be accidentally touched.

> ## 🛈
>
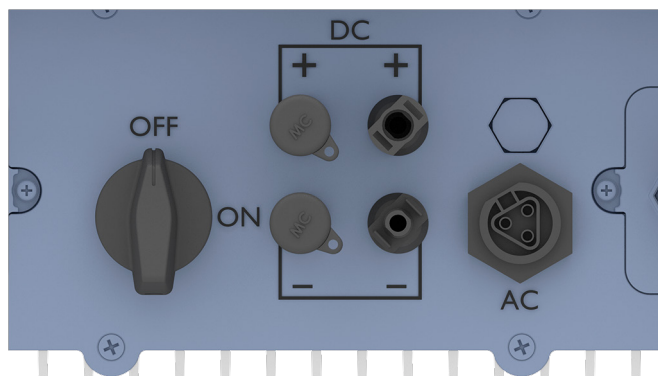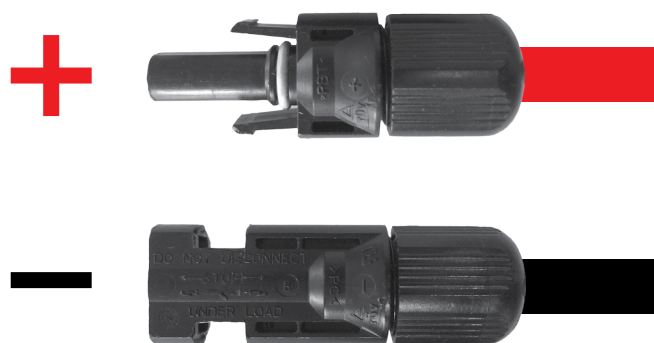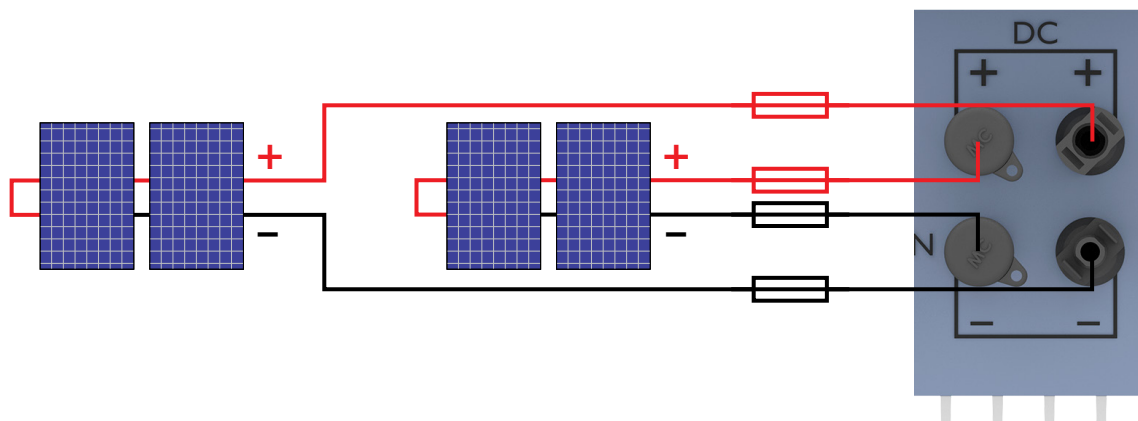> ► To ensure protection degree IP65, cap all unused connectors with the caps delivered with the inverter.



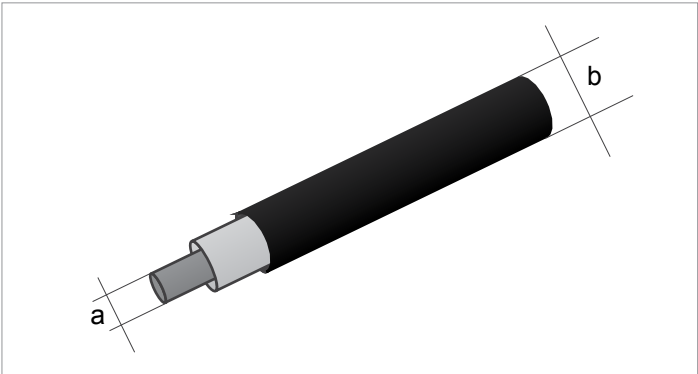► Turn the DC disconnection switch to position **OFF**, before you connect the DC cables.
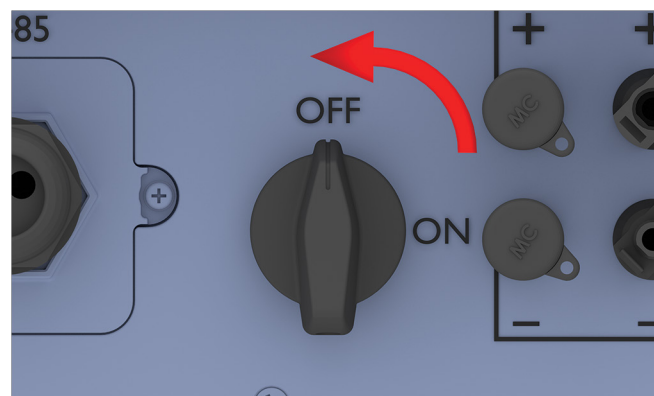


► Check the polarity of the DC voltage before you connect the solar modules.



(1) Check **Maximum Reverse Current Capability** of your modules for required safety equipment like fuses.

**DC cable specification**



| DC connectors on the inverter | Plugs for DC cable | | | |
|---|---|---|---|---|
| | | **a** | **b** | **MultiContact** |
| | | **mm²** | **mm** | |
| DC– | | 1,5 / 2,5 | 3-6 | 32.0010P0001-UR |
| | | | 5,5-9 | 32.0012P0001-UR |
| | | 4 / 6 | 3–6 | 32.0014P0001-UR |
| | | | 5,5-9 | 32.0016P0001-UR |
| DC+ | | 1,5 / 2,5 | 3-6 | 32.0011P0001-UR |
| | | | 5,5-9 | 32.0013P0001-UR |
| | | 4 / 6 | 3-6 | 32.0015P0001-UR |
| | | | 5,5-9 | 32.0017P0001-UR |

France: Safety caps are needed for each DC input that is connected to a string of solar modules. To remove the safety caps, a open-end spanner is needed.

It is recommended to use a special open-end spanner for the MC4 DC plugs if you need to disconnect MC4 DC plugs from the inverter. Otherwise you might destroy the DC plugs.
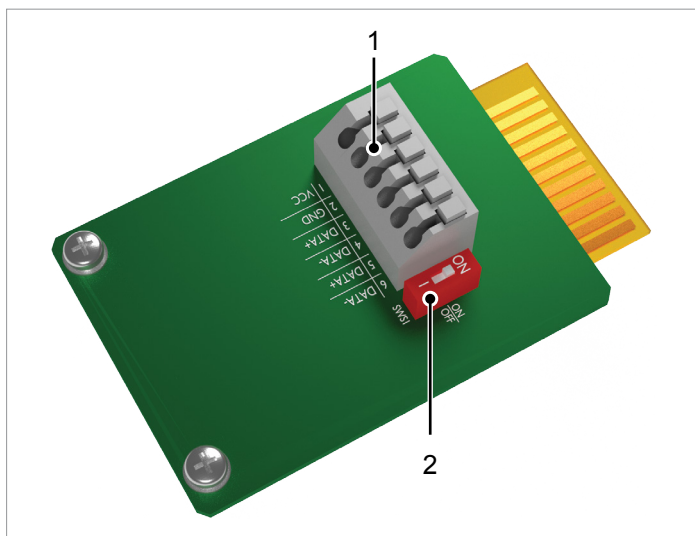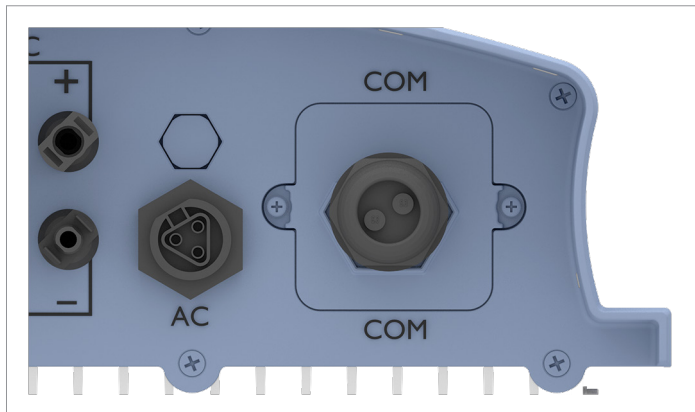
# 9 Connecting to a datalogger via RS485

> If you need to wire dry contacts, digital inputs or RS485, it is recommended to do this in a dry environment and before you hang the inverter onto the wall.
> Reasons for this are:
> ► You will have to remove the covers from the connection ports. Water could leak into the inverter.
> ► The terminal blocks inside are not easily accessible.

**RS485 Terminal block**



| Terminal | Designation |
|---|---|
| 1 | VCC |
| 2 | GND |
| 3 | DATA+ (RS485) |
| 4 | DATA– (RS485) |
| 5 | DATA+ (RS485) |
| 6 | DATA– (RS485) |

**Data format**

| Baud rate | 9600, 19200, 38400; Standard: 19200 |
|---|---|
| Data bits | 8 |
| Stop bit | 1 |
| Parity | not applicable |



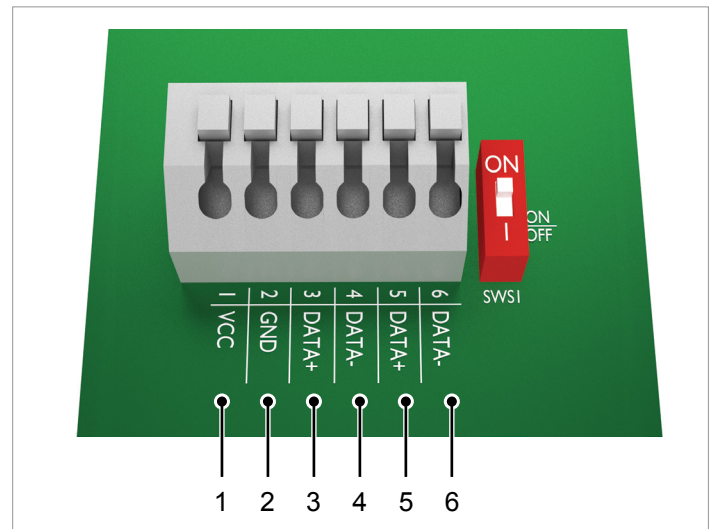| Pos. | Designation |
|---|---|
| 1 | RS485 terminal block |
| 2 | Switch for RS485 termination resistor |

RS485 is used to connect the inverters of the PV plant via a datalogger to a monitoring system.

For connecting RS485, terminals 3/4 or 5/6 are used. It does not matter which pair of terminals you use. The second pair you only need when you connect multiple inverters via RS485.

If you want to use SOLIVIA Monitor, the Internet based monitoring from Delta, you will also need a SOLIVIA M1 G2 Gateway.

Default baud rate is 19200 which can be changed on the inverter (see chapter "Setting the baud rate", p. 19).

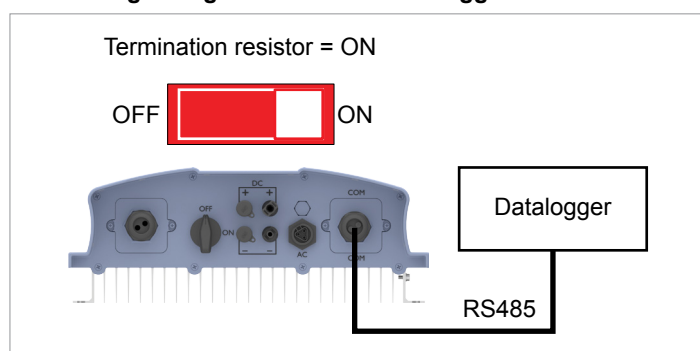## Connecting a single inverter to a datalogger

Termination resistor = ON

OFF ☐☐ ON
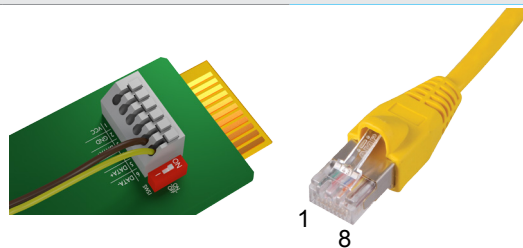


Datalogger

RS485

## Connecting to a Delta SOLIVIA Gateway M1 G2

On the inverter you connect single wires, on the gateway you have to use a RJ45 plug.

Connect inverter and gateway according to the following table:

| | **Inverter** | **SOLIVIA Gateway M1 G2** |
|---|---|---|
| |  |  1 8 |
| DATA+ | Terminal 3 or 5 | Pin 7 |
| DATA– | Terminal 4 or 6 | Pin 6 or 8 |

## Connecting multiple inverters to a datalogger

> ❗ ► If you connect multiple inverters via RS485,
> ► set a different Inverter ID for each inverter (see "Setting the inverter ID", p. 18).

If your datalogger has no integrated termination resistor, switch on the termination resistor on the first inverter in the RS485 line.

Termination resistor = ON

OFF ☐☐ ON

Termination resistor = OFF

OFF ☐☐ ON

Termination resistor = OFF

OFF ☐☐ ON



Datalogger

RS485
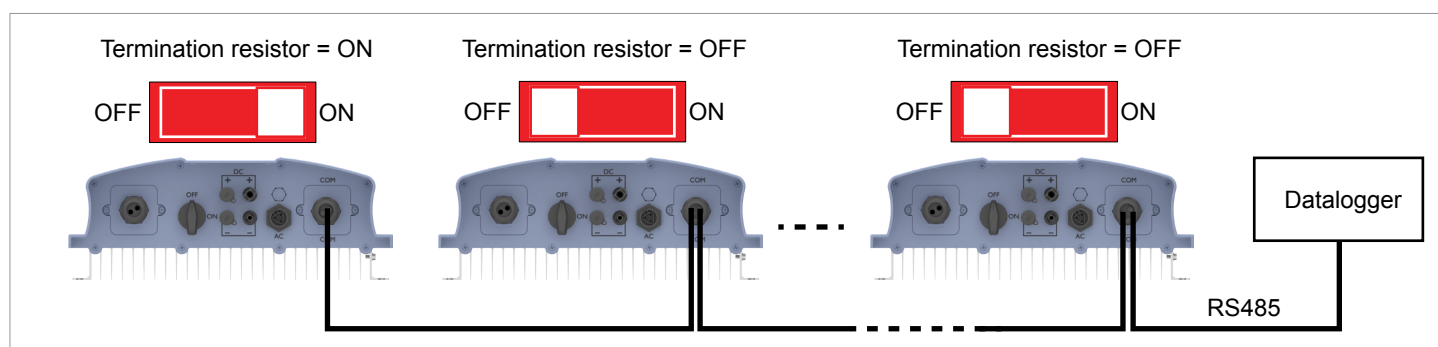
# 10 Connecting digital inputs and dry contacts (optional)

When your grid operator wants you to set a power limitation, e.g. for the 70% regulation in Germany, you need the Delta Service Software, which is available from Delta.

If you need to wire dry contacts, digital inputs or RS485, it is recommended to do this in a dry environment and before you hang the inverter onto the wall.  Reasons for this are:

► You will have to remove the covers from the connection ports. Water could leak into the inverter.

► The terminal blocks inside are not easily accessible.
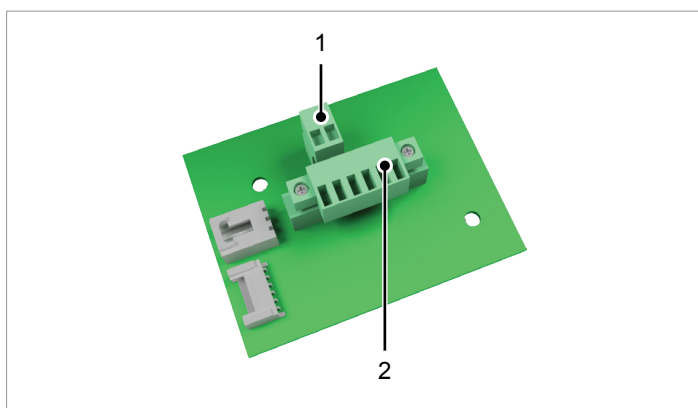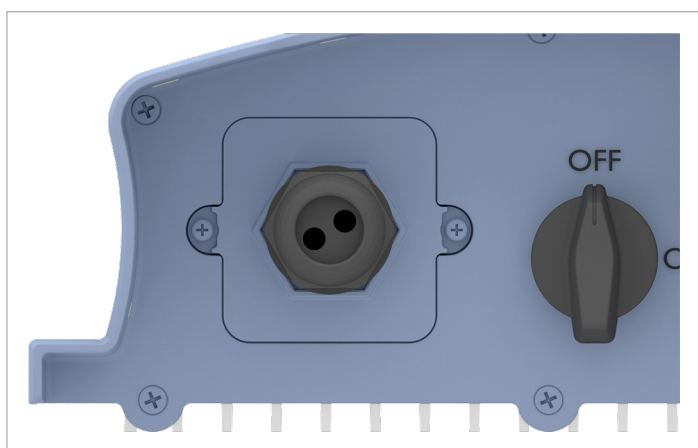




| Pos. | Designation |
|------|-------------|
| 1 | Dry contacts |
| 2 | Digital inputs and outputs |

## Digital inputs



| Pin | Designation |
|-----|-------------|
| 1 | Digital input 1 (DI1) |
| 2 | Digital input 2 (DI2) |
| 3 | Digital input 3 (DI3) |
| 4 | Digital input 4 (DI4) |
| 5 | Output 1 (DO1) |
| 6 | Output 1 (DO2) |

### Dry contacts

When the inverter is feeding into the grid, the dry contact is closed.
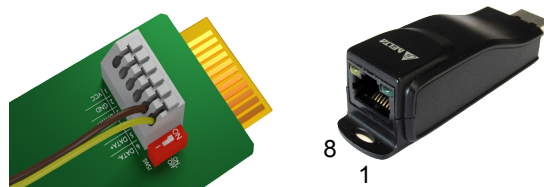
### Connecting a PC via RS485

If you want to use a PC with the Delta Service Software to set up the inverter, you need a USB/RS485 adapter to connect the PC to the RS485 terminal block of the inverter.
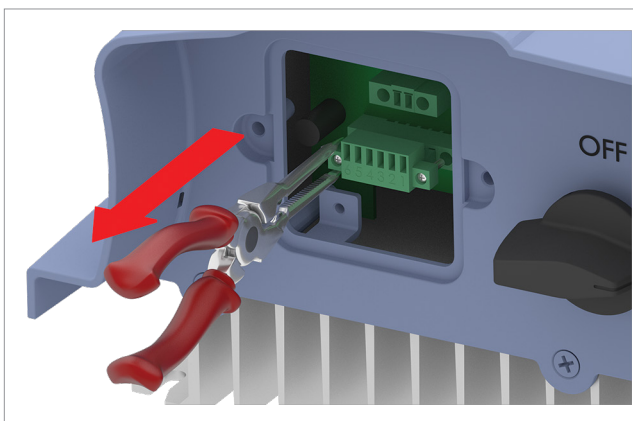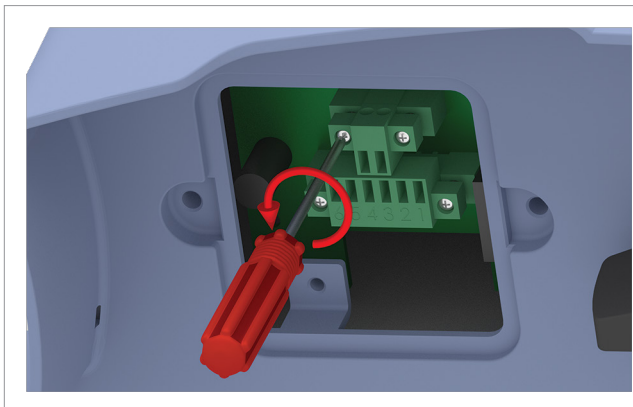
The USB/RS485 adapter is available from Delta.



Connect the pins according to the following table:

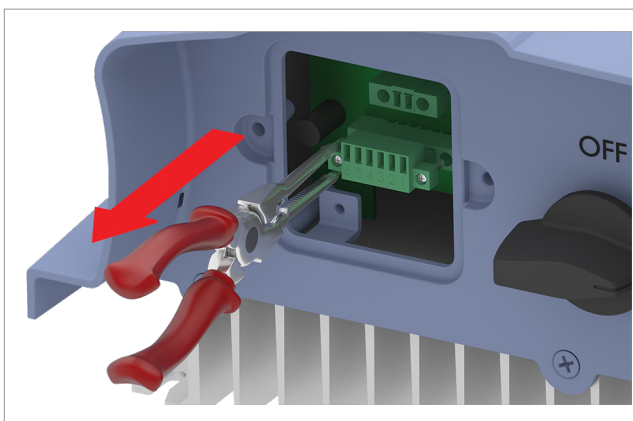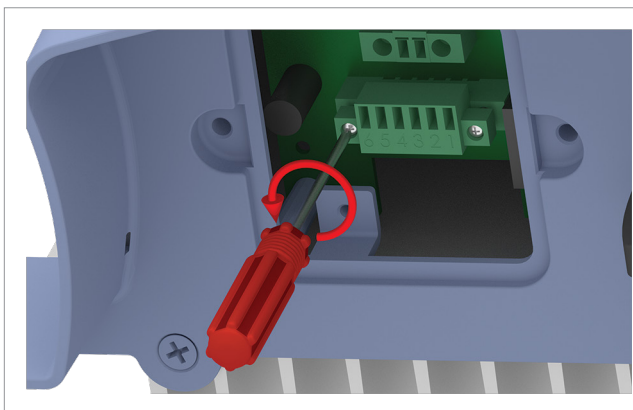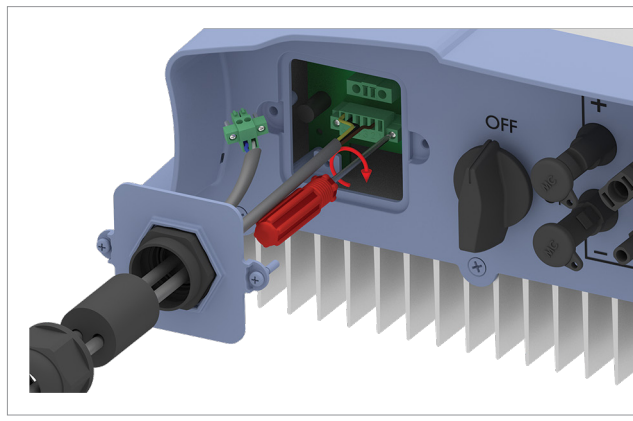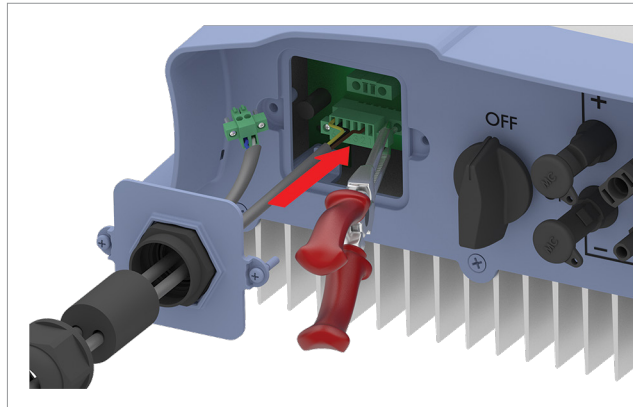| | Inverter | | USB/RS485 adapter |
|---|---|---|---|
| |  | |  |
| DATA+ | Pin 3 or 5 | | Pin 4 |
| DATA– | Pin 4 or 6 | | Pin 5 |

**Tips for wiring**

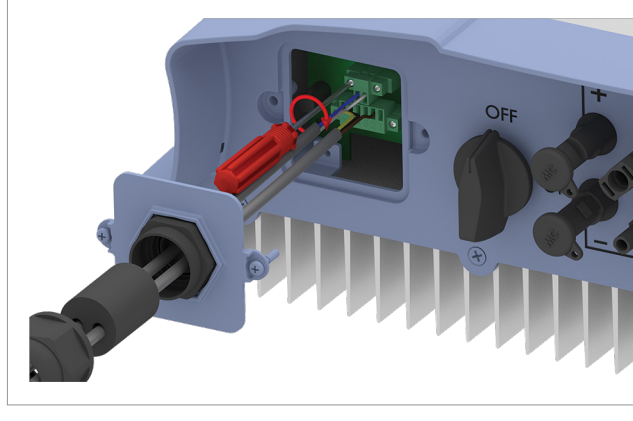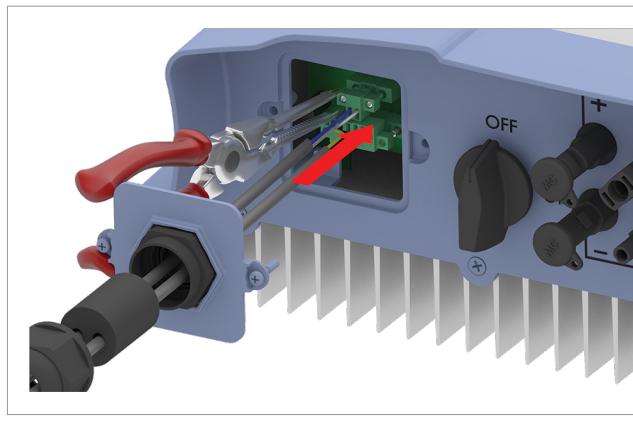► Unscrew and carefully pull out the terminal block of the dry contacts.





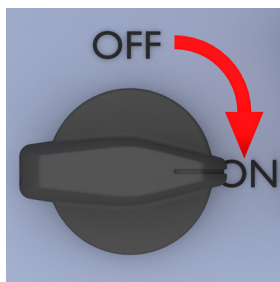► Unscrew and carefully pull out the terminal block of the digital inputs.





► Carefully put in the terminal block of the digital inputs and tighten the screws.





► Carefully put in the terminal block of the dry contacts and tighten the screws.

# 11 Commissioning - basic settings

To execute commissioning, the inverter needs to be powered either by AC (the grid) or DC (the solar modules)

```
   UK G83-2
 Next / Enter
```

**1.** Use the button [SEL] to select your country or grid.

To confirm your selection, press the button [ENT].

```
   Exit ?
   N / Y
```

**2.** To finish the country selection, press the button [ENT].

To select another country or grid, press the button [SEL] and repeat step 1.

```
   Inverter
   3.0 kVA
```

☑ The basic setup is finished. The main menu is shown.

# 12 Commissioning - Further settings (optional)

## Setting the inverter ID

> ❗ If your PV plant contains multiple inverters, for each of the inverters a different inverter ID has to be set. The inverter ID is needed to identify each inverter via RS485. For a description of the RS485 connection, see "Connecting to a datalogger via RS485", p. 14.

```
   Inverter
   ID : 1
```

**1.** In the main menu, use the button [SEL] to select *Inverter ID*.

**2.** Press the buttons [SEL] and [ENT] at the same time and hold them for at least 3 seconds.

→ The menu to change the inverter ID is shown.

```
   Setting ID:
    ID = 1  ?
```

```
 Setting ID:
  ID = 2  ?
```

**3.** Use the button [SEL] to change the inverter ID.

**4.** To confirm the value, press the button [ENT].

→ The new inverter ID is shown in the main menu.

```
   Inverter
   ID : 2
```

# 12 Commissioning - Further settings (continued)

## Setting the baud rate

```
   Country
   UK G83-2
```

1. In the main menu, use the button `SEL` to select **Country**.

2. Press the buttons `SEL` and `ENT` at the same time and hold them for at least 10 seconds.

   → For a few seconds the following message is displayed.

   ```
      Inverter
      Shut down
   ```

```
   Baud rate
      19200
```

3. Use the button `SEL` to select **Baud rate** and press the button `ENT`.

```
      9600
   Next / Enter
```

4. Use the button `SEL` to select another baud rate.

   To accept the selection, press the button `ENT`.

```
      9600
      N / Y
```

5. To confirm your selection, press the button `ENT`.

   → The new baud rate is shown.

   ```
      Baud rate
         9600
   ```

```
   Exit ?
   N / Y
```

6. Use the button `SEL` to select **Exit ?** and press the button `ENT` to finish.

## Setting date and time

```
   Country
   UK G83-2
```

1. In the main menu, use the button `SEL` to select **Country**.

2. Press the buttons `SEL` and `ENT` at the same time and hold them for at least 10 seconds.

   → For a few seconds the following message is displayed.

   ```
      Inverter
      Shut down
   ```

```
  26/11/2014
     14:05
```

3. Use the button `SEL` to select the entry with time and date.

   To change the setting, press the button `ENT`.

   → The day is flashing.

```
  26 11/2014
     14:05
```

4. Use the button `SEL` to change the value.

   To confirm your setting, press the button `ENT`.

   → The month is flashing.

```
  26 11 2014
     14:05
```

5. Repeat step **3** and **4** for each value.

   → After changing the value for the minutes, the flashing stops.

```
   Exit ?
   N / Y
```

6. Use the button `SEL` to select **Exit ?** and press the button `ENT` to finish.

# Setting the language

```
┌─────────────────────┐
│     Country         │
│     UK  G83-2       │
└─────────────────────┘
```

**1.** In the main menu, use the button `SEL` to select **Country**.

**2.** Press the buttons `SEL` and `ENT` at the same time and hold them for at least 10 seconds.

→ For a few seconds the following message is displayed.

```
┌─────────────────────┐
│     Inverter        │
│     Shut down       │
└─────────────────────┘
```

```
┌─────────────────────┐
│     Language        │
│     English         │
└─────────────────────┘
```

**3.** Use the button `SEL` to select **Language** and press the button `ENT`.

```
┌─────────────────────┐
│     Deutsch         │
│  Next / Enter       │
└─────────────────────┘
```

**4.** Use the button `SEL` to select another language.

To accept the selection, press the button `ENT`.

```
┌─────────────────────┐
│     Deutsch         │
│      N / Y          │
└─────────────────────┘
```

**5.** To finally confirm your selection, press the button `ENT`.

→ The new language is used.

```
┌─────────────────────┐
│   Die Sprache       │
│      Deutsch        │
└─────────────────────┘
```

```
┌─────────────────────┐
│   Beenden ?         │
│   Nein/Ja           │
└─────────────────────┘
```

**6.** Use the button `SEL` to select **Beenden ?** and press the button `ENT` to finish.

# 13 Technical data

| Input (DC) | RPI H3 |
|---|---|
| Maximum recommended PV power | 3780 $W_P$ |
| Maximum input power | 3200 W |
| Nominal power | 3150 W |
| Voltage range | 125 ... 600 $V_{DC}$ |
| Maximum input voltage | 600 $V_{DC}$ [1] |
| MPP operating voltage range | 125 ... 550 $V_{DC}$ |
| MPP operating voltage range with full power | 320 ... 500 $V_{DC}$ |
| Nominal voltage | 350 $V_{DC}$ |
| Startup voltage | 150 $V_{DC}$ |
| Maximum input current | 10 A |
| Maximum short circuit current in case of a failure | 13.9 A |
| Number of MPP trackers | 1 |
| Number of DC inputs | 2 |
| Galvanic isolation | No |
| Overvoltage category [2] | II |

| Output (AC) | RPI H3 |
|---|---|
| Maximum apparent power | 3000 VA |
| Nominal apparent power | 3000 VA |
| Voltage range [3] | 230 V -20%/+22%, 1-phase (L, N, PE or  L, L, PE) |
| Nominal current | 13 A |
| Maximum current | 14.3 A |
| Inrush current | 30 A / 1 ms |
| Maximum output fault current | 16 A |
| Nominal frequency | 50 / 60 Hz |
| Frequency range [3] | 50 ± 5 Hz / 60 ± 5 Hz |
| Power factor adjustable | 0.8 cap ... 0.8 ind |
| Total harmonic distortion | <3% |
| DC current injection | <0.25% at rated current |
| Night-time consumption | <1 W |
| Overvoltage category [2] | III |

[1] Can be increased to 630 V
[2] IEC 60664-1, IEC 62109-1
[3] AC voltage and frequency range will be programmed according to the individual country requirements.

| Mechanical Design | RPI H3 |
|---|---|
| Dimensions (W x H x D) | 420 x 367 x 157 mm |
| Weight | 15 kg |
| Cooling | Natural convection |
| AC Connector type | Wieland RST25i3S B1G M01 |
| DC Connector type | Multi-Contact MC4 |
| Communication interfaces | 2 x RS485, 1 x Dry contacts, 4 x Digital inputs |

| General Specification | RPI H3 |
|---|---|
| Delta model name | RPI H3_110 |
| Delta part number | RPI302N63E0000 |
| Maximum efficiency | 97.0% |
| EU efficiency | 96.2% |
| Operating temperature range | -25 ... +60 °C |
| Operating temperature range without derating | -25 ... +40 °C |
| Storage temperature range | -25 ... +60 °C |
| Relative humidity | 0 ... 95 %, non-condensing |
| Maximum operating altitude | 2000 m above sea level |

| Standards and Directives | RPI H3 |
|---|---|
| Protection degree | IP65 |
| Safety class | I |
| Pollution degree | II |
| Overload behavior | Current limitation; power limitation |
| Safety | IEC 62109-1 / -2, CE compliance |
| EMC | EN 61000-6-2, EN 61000-6-3 |
| Immunity | IEC 61000-4-2 / -3 / -4 / -5 / -6 / -8 |
| Harmonics | EN 61000-3-2 |
| Variations and flicker | EN 61000-3-3 |
| Grid interfaces | See www.solar-inverter.com |

# Service Europe

| | | |
|---|---|---|
| Austria | service.oesterreich@solar-inverter.com | 0800 291 512 (free call) |
| Belgium | support.belgium@solar-inverter.com | 0800 711 35 (free call) |
| Bulgaria | support.bulgaria@solar-inverter.com | +421 42 4661 333 |
| Czech Republic | podpora.czechia@solar-inverter.com | 800 143 047 (free call) |
| Denmark | support.danmark@solar-inverter.com | 8025 0986 (free call) |
| France | support.france@solar-inverter.com | 0800 919 816 (free call) |
| Germany | service.deutschland@solar-inverter.com | 0800 800 9323 (free call) |
| Greece | support.greece@solar-inverter.com | +49 7641 455 549 |
| Israel | supporto.israel@solar-inverter.com | 800 787 920 (free call) |
| Italy | supporto.italia@solar-inverter.com | 800 787 920 (free call) |
| Netherlands | ondersteuning.nederland@solar-inverter.com | 0800 022 1104 (free call) |
| Poland | support.poland@solar-inverter.com | +48 22 335 26 00 |
| Portugal | suporte.portugal@solar-inverter.com | +49 7641 455 549 |
| Slovakia | podpora.slovensko@solar-inverter.com | 0800 005 193 (free call) |
| Slovenia | podpora.slovenija@solar-inverter.com | +421 42 4661 333 |
| Spain | soporto.espana@solar-inverter.com | 900 958 300 (free call) |
| Switzerland | support.switzerland@solar-inverter.com | 0800 838 173 (free call) |
| Turkey | support.turkey@solar-inverter.com | +421 42 4661 333 |
| United Kingdom | support.uk@solar-inverter.com | 0800 051 4281 (free call) |
| Other European countries | support.europe@solar-inverter.com | +49 7641 455 549 |

5013227802 02