

10.8 Upgrading the firmware

When upgrading the firmware, you replace the inverter firmware by a later version. Only update the firmware to a later version if you require the expanded functional scope of the newer version.

Precondition

- The firmware version of your inverter is at least V4.5.
- You have the memory card with the firmware that matches the inverter.
- Inverter and memory card have different firmware versions.

Procedure

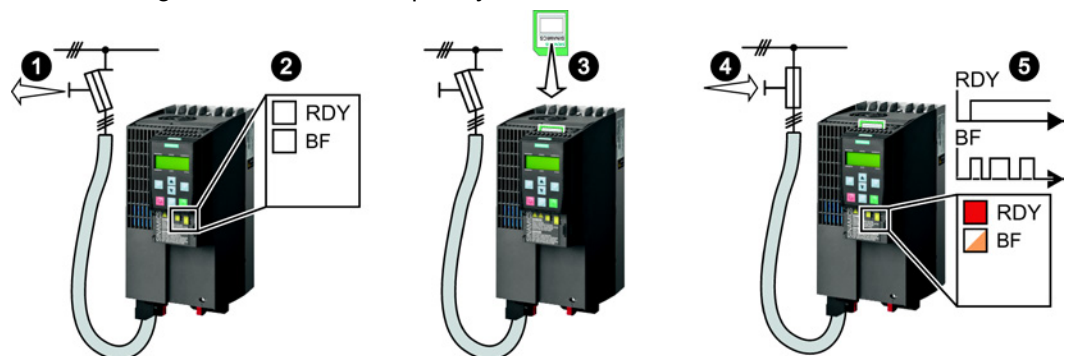
Proceed as follows to upgrade the inverter firmware to a later version:



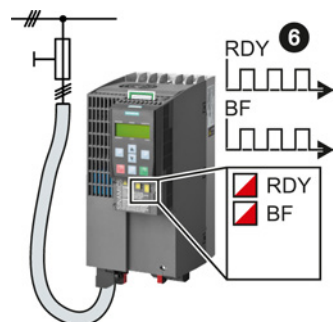
1. Switch off the inverter power supply.
2. Wait until all LEDs on the inverter go dark.
3. Insert the card with the matching firmware into the inverter slot until it latches into place.
4. Switch on the inverter power supply.
5. The inverter transfers the firmware from the memory card into its memory.

The transfer takes approximately 5 ... 10 minutes.

While data is being transferred, the LED RDY on the inverter stays red. The LED BF flashes orange with a variable frequency.



6. At the end of the transfer, the LED RDY and BF slowly flash red (0.5 Hz).



Note

Corrupted firmware if the power supply fails during the transfer

The inverter firmware can be corrupted if the power supply fails during the transfer.

- Do not switch off the inverter power supply as long as data is being transferred.
-

7. Switch off the inverter power supply.
8. Wait until all LEDs on the inverter go dark.

Decide whether you will withdraw the memory card from the inverter:

- You leave the memory card in the inverter:

When the memory card still does not contain any data backup of the inverter settings, in the next step, the inverter writes its settings to the memory card.

When the memory card already contains a data backup of the inverter settings, in the next step, the inverter takes the settings from the memory card.

Note

The inverter takes the settings from the memory card

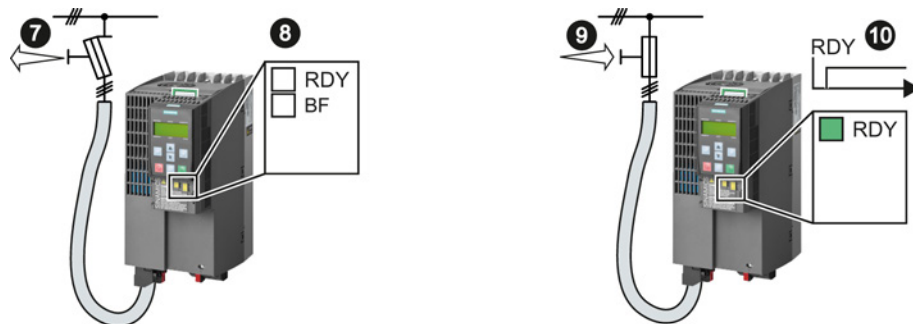
The next steps can change the inverter settings.

- If the memory card already contains settings, check as to whether these settings match the inverter.
 - Remove the memory card if these settings do not match the inverter.
-

- You remove the memory card:

The inverter keeps its settings.

9. Switch on the inverter power supply.
10. If the firmware upgrade was successful, after several seconds the inverter LED RDY turns green.



You have successfully updated the firmware to a more recent version. When upgrading, your settings in the inverter are kept.

10.9 Firmware downgrade

When downgrading the firmware, you replace the inverter firmware by an older version. Only downgrade the firmware to an older version if, after replacing an inverter, you require the same firmware in all of your inverters.

Precondition

- The firmware version of your inverter is at least V4.6.
- You have the memory card with the firmware that matches the inverter.
- Inverter and memory card have different firmware versions.
- You have backed up your settings on the memory card, in an operator panel or in a PC.

Procedure

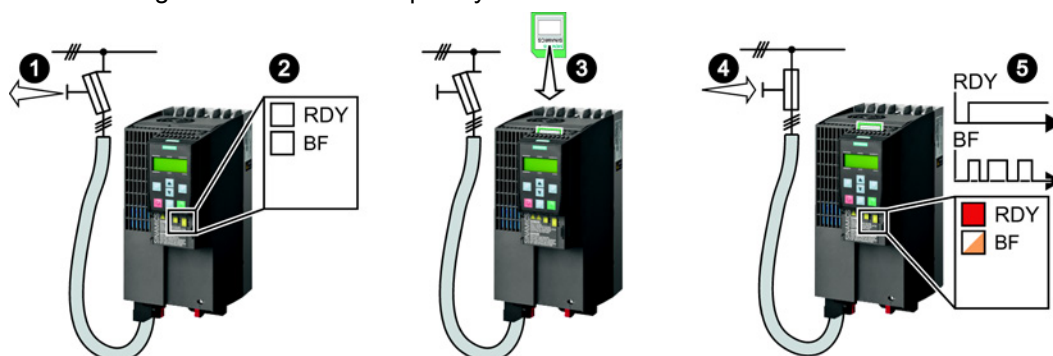


Proceed as follows to downgrade the inverter firmware to an older version:

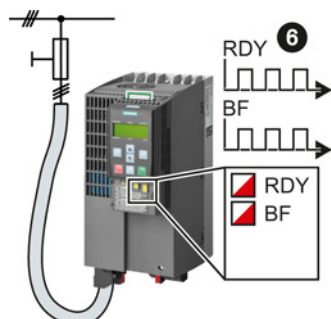
1. Switch off the inverter power supply.
2. Wait until all LEDs on the inverter go dark.
3. Insert the card with the matching firmware into the inverter slot until it latches into place.
4. Switch on the inverter power supply.
5. The inverter transfers the firmware from the memory card into its memory.

The transfer takes approximately 5 ... 10 minutes.

While data is being transferred, the LED RDY on the inverter stays red. The LED BF flashes orange with a variable frequency.



6. At the end of the transfer, the LED RDY and BF slowly flash red (0.5 Hz).



Note

Corrupted firmware if the power supply fails during the transfer

The inverter firmware can be corrupted if the power supply fails during the transfer.

- Do not switch off the inverter power supply as long as data is being transferred.
-

7. Switch off the inverter power supply.
8. Wait until all LEDs on the inverter go dark.

Decide whether you will withdraw the memory card from the inverter:

- You leave the memory card in the inverter:

When the memory card already contains a data backup of the inverter settings, in the next step, the inverter takes the settings from the memory card.

Note

The inverter takes the settings from the memory card

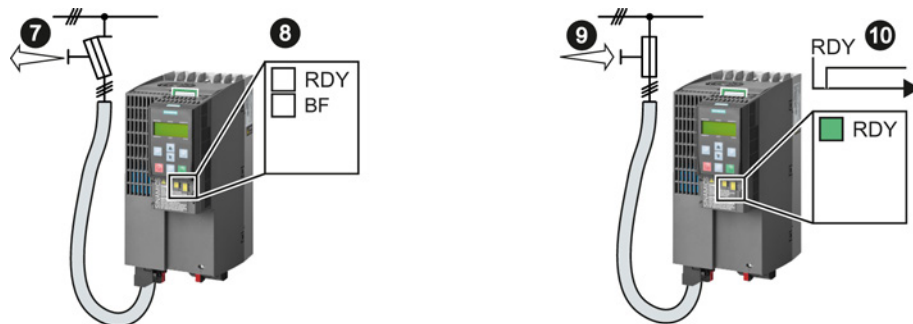
The next steps can change the inverter settings.

- If the memory card already contains settings, check as to whether these settings match the inverter.
 - Remove the memory card if these settings do not match the inverter.
-

- You remove the memory card:

The inverter is reset to the factory setting.

9. Switch on the inverter power supply.
10. If the firmware downgrade was successful, after several seconds the inverter LED RDY turns green.



After the firmware has been downgraded, the inverter has been reset to the factory settings.

11. If the memory card does not contain a data backup of the inverter settings, then you must transfer your settings to the inverter from another data backup.

See also Section: Backing up data and series commissioning (Page 243).

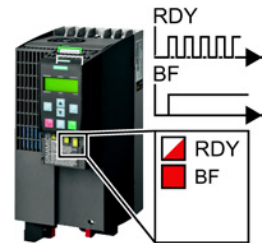


You have downgraded the firmware of the inverter to an older version and have transferred the backed up settings into the inverter.

10.10 Correcting an unsuccessful firmware upgrade or downgrade

How does the inverter signal an unsuccessful upgrade or downgrade?

The inverter signals an unsuccessful firmware upgrade or downgrade by a quickly flashing LED RDY and the lit LED BF.



Correcting an unsuccessful upgrade or downgrade

You can check the following to correct an unsuccessful firmware upgrade or downgrade:

- Does the firmware version of your inverter fulfill the preconditions?
 - For an upgrade, as a minimum V4.5.
 - For a downgrade, as a minimum V4.6.
- Have you correctly inserted the card?
- Does the card contain the correct firmware?
- Repeat the appropriate procedure.