



Efka controls software update

- with interface IF232**
- or USB stick**

Brief introduction

No. 402444 English



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1 EFKA controls software update

There are 2 methods for updating the software:

1. Data transfer between a PC and the Efka control with the aid of an Efka Interface IF232.
The following Efka controls are suitable for this:
AB221A, AB321A, AB222A, AB322A,
AB425S,
AB610A, AB611A,
DA321G,
PF321A.
2. Data transfer via "Autorun" from a USB stick directly connected to the Efka control.
The following Efka controls are suitable for this:
AB610A, AB611A Program index D or higher.

NOTE

You can check the program index in your software with parameter **179** (Sr5).

2 Software update with the aid of an Interface IF232

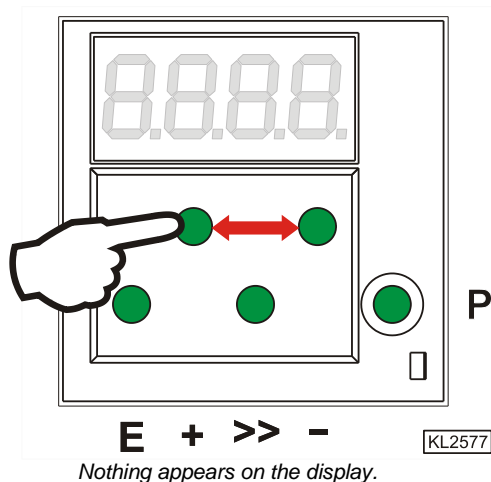
The PC and the EFKA control must be connected using an IF232 interface.

The program to be installed on the PC can be downloaded from the EFKA home page in the download area.
(> Downloads > Software > EfkaLoader)

The current program for the control model is also required.

The following procedure must be followed:

1. Create a new folder "C:\EfkaLoader".
 - Drive C is absolutely required.
2. Copy the loader file „AL_SO_---_EfkaLoader-3320_110112.zip” *¹⁾ after download from the EFKA home page into the folder „EfkaLoader”.
3. Unpack the zip file into this folder.
4. After unpacking the following files can be found in this folder:
[BOOTLOAD.hex](#)
[BootloadARM.arm](#)
[FlashInfo](#)
[FLASHPRG.hex](#)
[Loader.exe](#)
5. Connect the IF232 interface between the PC (serial interface) and the control (socket B18).
6. Any operating unit that may be connected (Variocontrol) should be disconnected.
7. Press the + and – buttons at the same time on the control and turn on the power supply.
(The power supply must have been turned off previously for about a minute).

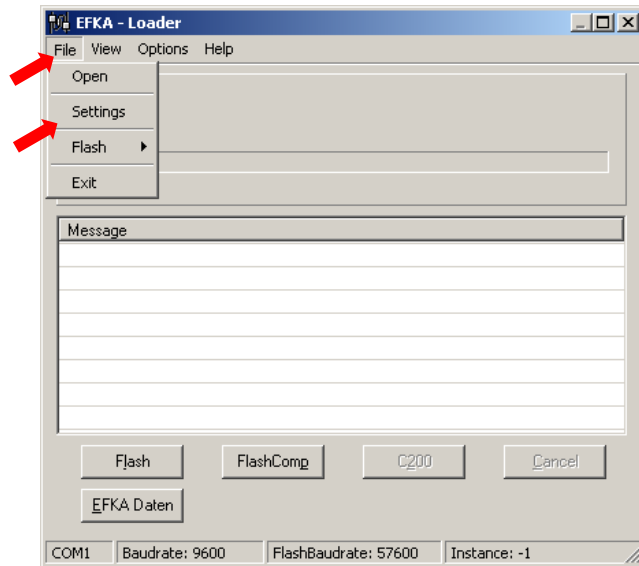


*¹⁾ The version number (3320) and date included in the file name depend on the software development level

8. Start the program "Loader.exe" in the "EfkaLoader" folder by double-clicking the file name.

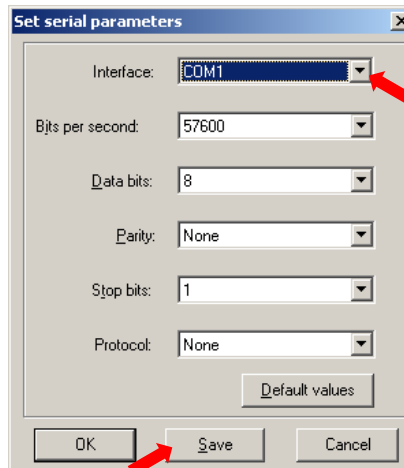
9. Select **File > Settings**.

- The window for parameter settings for serial data transmission opens.



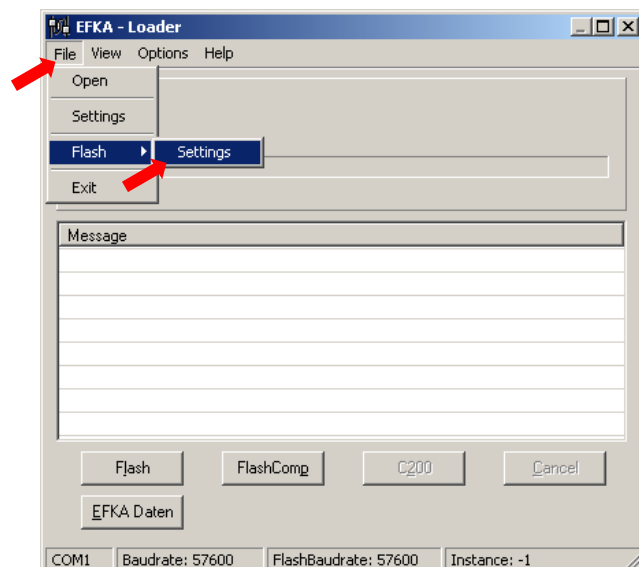
10. Select the number of the desired COM port (1 to 4 are possible).

Click **Save**.



11. Select **File > Flash > Settings**.

- The window for Flash parameter settings opens.



12. Select **Bootloader** > **open** to set up the path for the file **BootLoad.HEX**.

Select **flash program** > **open** to set up the path for the file **Flashprg.HEX**.

Select **BootloaderARM** > **open** to set up the path for the file **BootLoadARM.ARM**.

Select the desired baud rate.
Max. 57600 for IF232-3 and -4.
Max. 256000 for IF232-USB.

Click on **Save** to save the file BootLoader into the folder **C:\EfkaLoader**.

13. Click **Flash**.

14. Select program provided by EFKA for your control for the software update from the folder selected for storage.

(e. g. **C:\EfkaLoader**, or USB stick)

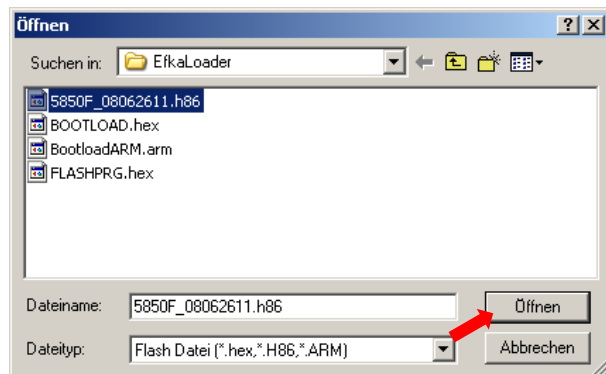
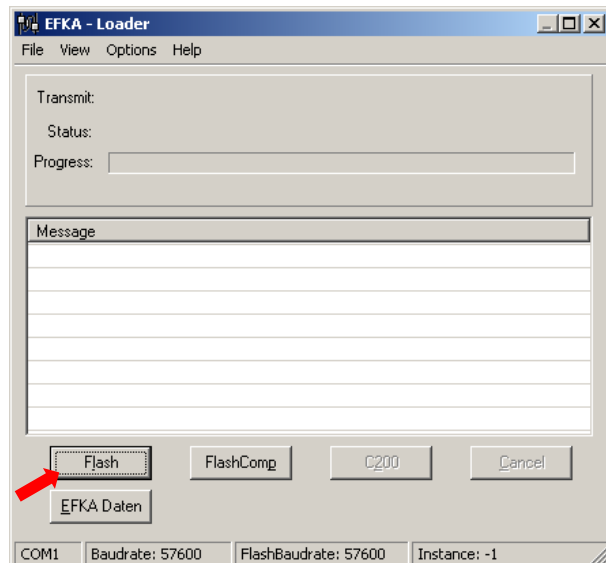
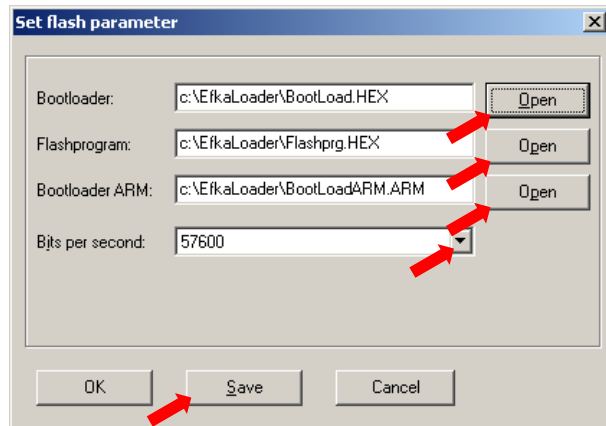
After you click on **Open**, the download starts.

The file name starts with the program number and index appropriate to the control type, tracked by date and time.

The file suffix depends on the processor type used and may be .hex, .h86, or .asm.

For example: 5850F_YYMMDDHH.h86

15. If an error messages should occur while downloading, go back to point 12 and select a lower data transmission rate in **"bits per second"**.
You must turn the power off and repeat point 7 before restarting the download (point 14).
16. The download takes about 2 minutes. During that time, progress is displayed on the PC and on the display on the control.
After the download is successful, you will receive a message from the EKFA loader program and the control will display the last address transmitted.
17. After turning the control off and on again, it is operationally ready.
18. **AB425S only:**
If "Prog" appears on the display after downloading, and update of the stepper motor is automatically being carried out.
When the update stops, "b4" will appear on the display. – Wait until "b4" disappears. The control is now ready to operate.



3 Software update via "Autorun" with a USB stick

NOTE

This function is only possible with Efka controls AB610A, AB611A, Program index D or higher.

The control file (Autorun.act) for the so-called Autorun function is loaded on a USB stick.

It must absolutely be in the root, i.e., not in a file folder.

It can be downloaded from the EFKA Homepage in the Downloads area.

(> Downloads > Software > EfkaLoader > AL_SO_---_Autorun.zip).

In addition, the current program (firmware) matching the control type must be present on the stick (e.g., AB610ALH.arm). The appropriate most current version will be made available to you on request from your consultant at EFKA.

NOTE

The memory size of the USB stick used must have max. 2 GB and must be formatted FAT16.

The following procedure must be followed:

1. Unpack the zip file "[AL_SO_---_Autorun.zip](#)".
2. Copy the control file "[Autorun.act](#)" after unpacking on the USB stick.
3. Copy the program file, e.g., "[AB610ALH.arm](#)" on the USB stick.
4. Insert the USB stick in the USB connection on the front of the control.
(The control should be switched off).
5. Switch on the control. – The updating process starts automatically.
During the updating process changing values are shown on the display.
At the end of the update the display "boot" shows briefly, followed by "1500" or "1550" (depending on the motor type used). Finally the segments corresponding to the functions you have selected are displayed (depending on control type, e.g., softstart, needle position, thread trimming, foot lifting, etc.)
6. It is now operationally ready. The USB stick can be removed.

Additionally, the protocol file (.ptk) and a parameter file (.par) is stored on the stick. Each serial number of the updated control is used as filename.

Example: 36200181.ptk, 36200181.par.

With the files "[Autorun.act](#)" and e. g., "[AB610ALH.arm](#)" available on the stick, the software can update more controls with out having to change any files. Then for each update carried out, the protocol file and the parameter file is saved with the serial number belonging to the control.

Info on protocol file:

All the steps which are carried out from the control file are saved in the protocol file. It enables an analysis of the process, in case that the update fails.

If there is already a protocol file on the USB stick with the serial number matching the control, even after turning on and off again, or inserting the stick again, no new update is performed.

In order to run the update again, the protocol file must first be deleted.

Info on parameter file:

Before the update all the parameter settings are secured and restored at the end of the update, so that each control maintains its individual values.

For your notes:



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